

**When and How Business Networking Matters in Relational Bonds
Strategies and B2B Performance in Multi-channel Network**
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1. Introduction

The Multi-Channel Network industry originated from YouTube and is referred to as MCN for short. MCN combines professional production content (PGC) with the promotion of capital (Li, 2022). MCN helps collaborators to conduct online business, such as those relating to producing, programming, funding, partnering management, digital rights intellectual property, and payment management (Statista, 2022). The MCN industry in China is estimated to reach 54.4 billion yuan in 2023, with substantial growth during pandemic and post pandemic period (Statista, 2022; TOPKLOUT, 2022).

Live streaming is a burgeoning marketing model that is used to deliver online business activities and transactions through integration with various platforms (e.g., WeChat, TikTok) (Xu et al., 2020).

MCN organisations are professional live streaming agencies, acting as an important part of the live streaming industry (Li, 2021; Si, 2021). MCNs collect a commission proportional to the sales of products and a fixed link fee from their principals (e.g., manufacturers) (Li et al., 2022). In return, all the sales and profit that are generated by the MCNs need to be returned to their principals. The customers of MCNs include buying agents, retailers, and wholesalers. As such MCNs can operate in a Business-to-Business (B2B) framework, namely Principals – MCNs – MCNs customers (Chen et al., 2022; Pu et al., 2021).

Among the strategies that are used in the live streaming business, relational bonds strategy is likely to be an effective strategy (Hu & Chaudhry, 2020). Relational bonds strategy represents different levels of relationship marketing practices, including financial bonds, social bonds, and structural bonds (Berry, 1995; Hu & Chaudhry, 2020; Yu et al., 2016). There are multiple relational bonds that are employed in live streaming activities, such as distributing coupons, establishing a contractual relationship with streamers, and professional talent streamer management (Hu & Chaudhry, 2020; Mao et al., 2022; Xu et al., 2020).

Initiating and operating relational bonds has become one of the main features of the live streaming industry (Hallanan, 2019).

Despite the possible effect of relational bonds strategy in the live streaming industry, guidance regarding the specific relationship between relational bonds strategy and B2B performance is still very much lacking in the MCN research (Alagarsamy et al., 2021; Chen et al., 2019b). Researchers have not studied whether relational bonds strategy affects MCN firms' business performance (Shi et al., 2020). For instance, previous studies focusing on the strategic performance and financial performance in the MCN industry has not considered the effect of relational bonds strategy. This omission can be evident in recent MCN research. Consequently, research may need to investigate the effect of the relational bonds strategy on B2B performance, including strategic performance and financial performance, from the viewpoint of the MCN industry (Alagarsamy et al., 2021; Hu & Chaudhry, 2020).

Concomitantly, the effect of the internal mechanism of the MCN industry, such as business networking capabilities, is also not examined in extant MCN research (Mitrega et al., 2012; Shi et al., 2020). This omission is significant as firms' business networking capabilities are suggested to influence their financial performance and strategic performance (e.g., Chung et al., 2015).

This research uses the experience of 211 firms operating in the MCN industry in China to explore its research conceptualisation. The outcomes of this research aim to make two key contributions concerning the research on the MCN industry in China. First, this study fills the gap with a novel insight into the MCN industry by focusing on the effect of relational bonds strategy on strategic performance and financial performance. Second, this study can provide guidance on whether MCN firms can also use their business networking capabilities with key firms in the field of business to improve the effect of relational bonds strategy on B2B performance (Cheng & Yang, 2017; Chung, 2019; TOPKLOUT, 2022). By specifying the specific moderation role of the business networking capabilities in the relational bonds strategy and performance framework, this study may extend the research scope concerning organisational capabilities and the MCN industry (e.g., Li, 2021).

2. Literature and framework

Business performance can be classified into non-financial performance and financial performance. Researchers have viewed strategic competitiveness as an aspect of non-financial performance (e.g., gaining footholds, response to competitive challenges) (Felix et al., 2017; Kim & Kim, 2021) and have classified financial performance as the financial outcomes of business operations (e.g., sales growth, ROI, ROA) (Cavusgil & Zou, 1994; Chung & Kuo, 2018). This research will theorise the relationship between relational bonds strategy and business performance, including strategic performance and financial performance. This study will also postulate the contingent role of organisational capabilities in relational bonds strategy and B2B performance relationship.

2.1 Relational bonds strategy and strategic performance

Relational bonds strategy has interactive features, which can enhance firms' awareness and improve the competitiveness of MCN organisations (Hu & Chaudhry, 2020). It is reported that social bonds can improve the awareness of live streaming activities of MCNs by providing pre-heating strategy tagging discounts and other social interactions (Si, 2021). These interactive customers' experiences can help MCNs to generate firm attention (Hu & Chaudhry, 2020). A strong awareness can lead to a higher strategic performance (Cavusgil & Zou, 1994). Moreover, strong social bonds can offer emotional support from customers in the e-commerce environment (Dong & Wang, 2018). Research indicates that social bonds with strong emotional support would lead to customer loyalty for the MCN organisation or live streamer (TOPKLOUT, 2022). In addition, customers can be attracted by relational bonds to engage with the live streaming activities (Chen & Lin, 2018; Hu & Chaudhry, 2020; Leeraphong & Sukrat, 2018). Extant research supposes that conducting relational bonds strategy can help MCNs to expand the market scope because of higher customer engagement (Hu & Chaudhry, 2020). MCNs take the responsibility of professional talent management for live streamers (Si, 2021). Professional communication skills can enhance the efficiency of structural bonds

and influence the engaging intention of customers (Hu & Chaudhry, 2020). By increasing customer followers, MCNs would be able to receive greater cooperation from firms with higher traffic and market share (Lee et al., 2018). These advantages would help MCNs to achieve strategic performance, such as extending their business to other industries (e.g., expanding live streaming business from cosmetics to food industry) (Si, 2021).

H1: Relational bonds strategy has a positive effect on the strategic performance of MCNs.

2.2 Relational bonds strategy and financial performance

Relational bonds strategy can stimulate consumption to promote sales growth (Hu & Chaudhry, 2020). Financial bonds, such as discount bonuses and promotion activities, are widely confirmed in their role as incentives for purchase (Leeraphong & Sukrat, 2018; Lin et al., 2009; Wang, 2020). Financial bonds influence purchasing intention and decision-making (Mao et al., 2022). Therefore, financial bonds can increase sales volume by directly stimulating purchasing (Chen et al., 2017; Leeraphong & Sukrat, 2018). Moreover, a strong social bond between live streamers and customers can encourage customers to complete the order (Trainor et al., 2014). Social bonds are important for customers' positive emotions, with a high customer retention rate and increased repeat sales (Hu & Chaudhry, 2020). Social bonds of customer satisfaction, such as satisfactory after-sales service and delivery speed, can also generate repeat purchases (Si, 2021). Consequently, increased consumption may lead to sales growth, thereby improving the financial performance of MCNs (Leeraphong & Sukrat, 2018). More relational bonds strategy is also powerful in improving the profitability and promoting the financial performance of MCNs (Wang, 2020; Xu et al., n.d.). This can be seen in two aspects. First, customers are willing to pay a slightly higher price for the live streamers they like and interact with a lot more (TOPKLOUT, 2022; Wang, 2020). Such social bonds support the premium pricing strategy of MCNs because of an effective emotional connection (Hu & Chaudhry, 2020; Si, 2021; Wang, 2020). Second, structural bonds can drive customer shopping behaviour and intention (Trainor et al., 2014; Xu et al., 2020; Xu et al., n.d.), thus mitigating the impact of pricing

(Parise et al., 2016). Hence, MCNs can gain more profit by increasing the perceived value, enjoyment, and usefulness of their product to customers (Lee et al., 2018). Accordingly, we posit:

H2: Relational bonds strategy has a positive effect on the financial performance of MCNs.

2.3 Relational bonds strategy, business networking and B2B performance

Business networking refers to a series of network relationships with other business participants, including suppliers, distributors, buyers, competitors, and other related entities in the industry (Liu & Yang, 2019). According to networking capability theory, Mitrega et al. (2012) revealed that business networking helps firms to obtain external resources, skills, and information, thereby creating a virtuous circle (Ford & Mouzas, 2013; Liu & Yang, 2019). Business networking has been proven to be associated with strategic management (Bittencourt et al., 2019) and financial performance achievement (Jeong, 2016). This research postulates that business networking capability helps MCNs to better conduct relational bonds strategy and obtain their performance objectives.

Business networking benefits the cooperation model and makes it easier to collaborate (Lee, 2001; Liu & Yang, 2019). Mitrega et al. (2012) and Liu and Yang (2019) reveal that business networking capability significantly affects competitive advantage. Combining the two characteristics of business networking, a strong business network can contribute to the realisation of the relational bonds strategy (Gu & Wang, 2016; Hu & Chaudhry, 2020). In other words, establishing a good business relationship with principles can bring more authorisation and rights to an MCN and make it easier to reach a consensus (Mao et al., 2022; Shi et al., 2020). For example, MCNs can reach financial bonds by negotiating a lower price for customers in real-time (Chen et al., 2017). A competitive price can increase the competitive advantage in the MCN industry (Cavusgil & Zou, 1994). Moreover, with the support of suppliers, MCNs can obtain technologically-based structural bonds, such as augmented reality technology (Si, 2021). Once equipped with structural bonds, MCNs can maintain their competitiveness in the industry operated in, as strong bonds are difficult to imitate

(Berry, 1995). Therefore, extant research supports that strong business networking can increase the effect of relational bonds strategy on MCNs' competitiveness.

Moreover, research argues that high-quality business networking may influence the relationship between relational bonds strategy and strategic performance by improving organisational reputation. MCNs are responsible for supply chain management with the establishment of the distributor's business networking (Si, 2021). A gratifying logistics service is a valuable structural bond to strengthen customer relationships (i.e., social bonds) and e-WOM (word-of-mouth) (Hu & Chaudhry, 2020). Besides, the considerable social bonds between live streamers (e.g., famous influencers) and customers enhance MCNs' reputation (TOPKLOUT, 2022). It can make members within the business networking confident to offer complete cooperation with the MCN (Liu & Yang, 2019; TOPKLOUT, 2022). During this process, MCNs can also gain vital strategic benefits such as market share and gaining foothold in the industry operating (Cavusgil & Zou, 1994). Hence, strong business networking capability can help the effect of relational bonds and increase its influence on MCNs' reputation in the market operated in. Consequently, we postulate:

H3: The interaction of relational bonds strategy and business networking has a positive effect on strategic performance in the MCN industry.

Further, Mokhtarzadeh et al. (2021) conclude that effective selection is dependent on business networking capability. Sound business networking may be conducive to decision-making in the MCN industry (Ford & Mouzas, 2013; Mitrega et al., 2012). Specifically, the MCN industry is highly related to product selection management (Lee, 2001), live streaming channel selection (Li et al., 2022), and cooperation model selection (Mao et al., 2022). Relational bonds are embraced in these processes. It is cited that social bonds can be stressed when the live streamer introduces better quality products at a good value (Hu & Chaudhry, 2020). Structural bonds are included in the live streaming channels based on monetary payment technology (Li et al., 2022; Si, 2021). An easy-to-use payment method will make it easier for customers to complete their purchases (e.g., reducing the time for customers to hesitate) (Li et al., 2022). Business networking can also

reduce transaction costs (Dong & Wang, 2018) and increase the profitability of the MCN industry (Chung & Ho, 2021).

Likewise, MCNs can use business working capability to capture external resources and strengthen the element of the current relational bonds strategy, to gain financial returns. Lee (2001) reveals the impact of business networking quality on external knowledge sharing and organisational financial success. Consequently, MCNs can gain access to customer trends and skills through information exchange with members of the business networking (Bittencourt et al., 2019). Novel external knowledge for business networking, such as customer preference analysis data from live streaming platforms, can promote relational bonds (TOPKLOUT, 2022). MCNs can reinforce the structured relational bonds by catering to customers' trends in live streaming activities, which leads to sales growth (Hu & Chaudhry, 2020). Besides, external resources and information can also ensure organisational sensitivity of market desires (Liu & Yang, 2019; Mitrega et al., 2012). Customers are impressed by the desired product, more willing to pay, and more likely to form a social relationship with the MCN (Hu & Chaudhry, 2020). As such, business networking provides an avenue for organisations to capture business opportunities and perceive the financial benefits (Chung & Ho, 2021; Si, 2021). Thus, the following hypothesis is proposed:

H4: The interaction of relational bonds strategy and business networking has a positive effect on strategic performance in the MCN industry.

To facilitate the understanding of hypothesis postulation, our postulated conceptual framework is displayed in Figure 1.

3. Method and results

3.1 Sample and Data Collection

This research aims to focus on a wide range type of MCNs that are operating in China. This research designed a cross-sectional survey, carrying out a randomised sampling to keep the representativeness and

objectivity in the quantitative research (Bell et al., 2018). The sampling frame is formed from creditable data sources, including the State Administration of Radio MCN research report (SVA, 2020), the White paper on the development of China's MCN industry (TOPKLOUT, 2022), the China Industry and Commerce Federation, the Chinese Enterprise Yellow Pages (Chung et al., 2015), and assessable backend databases of Chinese live streaming platforms (i.e., TikTok, Taobao, and KWAI). These databases list the majority of registered MCN organisations. As the research was conducted in China, an English questionnaire was initially designed according to the guidance of extant literature (Atuahene-Gim & Murray, 2007; Cavusgil & Zou 1994; Chung, 2019; Peng & Luo, 2000). A double translation method was performed to develop the Chinese version, to ensure the original meaning and adapt to the language difference (Lee & Chen, 2021). Totally, six hundred MCNs were randomly selected and contacted via email and WeChat in late 2022. The researchers contacted the sampling firms and expressed their hope for asking them to complete the survey questionnaire. In total, 211 valid data were collected from the MCN industry. Consistent with prior research, the respondents have used three types of social media platforms (WeChat, Taobao, TikTok) to conduct their MCN businesses (Lee & Chen, 2021). Moreover, the respondents operated in a wide range of industrial sectors, including beauty, food, beverage, fashion, electronic products, education, financial services, property, construction, health care products, horticultural, skin care products, video production, and OTO (Online-To-Offline) services. The response rate is 35.2%.

3.2. Measurement Scales

The measurement scales of relational bonds is measured by a seven-point Likert scale (1=strongly disagree; 7=strongly agree) (Hu & Chaudhry, 2020; Hsieh et al., 2005; Chiu et al., 2005). The measurement items are involved with financial bonds, social bonds, and structural bonds. The business networking measurement is measured by a seven-point scale (1=very little; 7= very extensive) (Chung, 2019; Peng & Luo, 2000; Wang & Chung, 2020). The business performance of MCNs is measured by strategic performance and financial performance, following the guidance of the extant literature (e.g., Cavusgil & Zou, 1994; Chung & Kuo,

2018). The strategic performance contains two aspects (Cavusgil & Zou 1994; Chung & Kuo, 2018; Knight & Cavusgil, 2004). The first group reflects the strategic performance by measuring the foothold, awareness, and business expansion (1= not achieved at all; 7= completely achieved) (Cavusgil & Zou, 1994; Chung, 2012). The second group focuses on the strategic performance in the areas of competitive advantage (1=strongly disagree; 7=strongly agree) (Blunch, 2012; Knight & Cavusgil, 2004). These two sub-groups are integrated to form the strategic performance construct of MCNs in our study. Regarding the financial performance measurement, Galankashi and Rafiei (2021) state that actual financial performance indicators have their superiorities. Therefore, the financial performance of the MCN is measured in three dimensions, namely sales growth, ROI, and ROA. The three indicators are measured by the actual data (%).

4. Results

The relational bonds strategy is revealed to have a positive effect on the strategic performance of MCNs ($\beta=0.197$) (H1). Business networking is also confirmed to positively moderate the effect of relational bonds strategy on the strategic performance of MCN ($\beta=0.132$), suggesting a support for H3. The relational bonds strategy is suggested to positively relate to the financial performance of MCNs in terms of sales growth ($\beta=0.182$), ROI ($\beta=0.189$), and ROA ($\beta=0.163$). These results suggest that H2 is supported. Moreover, the alignment of relational bonds strategy and business networking is positively associated with the three financial performance measures (Sales growth: $\beta=0.134$; ROI: $\beta=0.143$; ROA: $\beta=0.141$) (H4). In sum, H1, H2, H3 and H4 are all supported.

5. Discussion

This research findings offer several theoretical implications for the research on live streaming business, MCN, organisational capabilities, and business performance. First, by focusing on the MCN industry as the focal industry, this study advances the theoretical development of the relational bonds strategy by revealing that the usage of relational bonds strategy can lead to superior strategic performance and financial

performance of MCNs. This new result significantly enhances existing research on the relational bonds strategy, which has shown the positive effect of relational bonds on customer engagement, purchase behaviour, and shopping intention (Alagarsamy et al., 2021; Hu & Chaudhry, 2020). As such, this study's results advance the usage of relational bonds strategy from existing B2C research to the B2B research context. This expansion is important as relational bonds between the principals and B2B customers (e.g., buyers, distributors) are considered vital in B2B operations (Chung et al., 2021; Wang & Chung, 2020; Mao et al., 2022). Future research now should consider using relational bonds strategy when conducting B2C operations as well as B2B business activities (Mao et al., 2022). Second, this study postulates that the capabilities mechanism of MCNs (i.e., business networking capabilities) can moderate the relationship between the relational bonds strategy and business performance. This research follows the theoretical conceptualisation of recent business networking capabilities research (Chung, 2019; Wang & Chung, 2020). Business networking are confirmed to have a positive moderating effect in the relational bonds strategy and B2B performance framework. For example, a good business networking relationship with B2B customers (e.g., wholesalers, buying agents) may reduce the cost and time of express delivery, leading to promoted relational bonds and business performance (Metters & Walton, 2007). Finally, this research includes both perceptual and actual performance in its research conceptualisation. As the MCN industry in China is in its infancy (Li, 2021), an examination and confirmation of both performance measurements in the research conceptualization of relational bonds strategy, business networking and business performance can provide solid guidance for further research on the MCN industry. In light of this study's results, future research should consider employing both perceptual and actual performance in its research conceptualisation and design (Blunch, 2012; Chung & Kuo, 2018; Knight & Cavusgil, 2004).

REFERENCES

Alagarsamy, S., Mehroliia, S., & Singh, B. (2021). Mediating effect of brand relationship quality on relational bonds and online grocery retailer loyalty. *Journal of Internet Commerce*, 20(2), 246–272.

- Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods*. Oxford University Press.
- Bittencourt, B. A., Zen, A. C., & Prévot, F. (2019). Innovation capability of clusters: Understanding the innovation of geographic business networks. *Revista Brasileira de Gestao de Negocios*, 21(4), 647–663.
- Blunch, N. (2012). *Introduction to structural equation modeling using IBM SPSS statistics and Amos* (Sage). Sage.
- Cavusgil, S. T., & Zou, S. (1994). Marketing strategy-performance relationship: An investigation of the empirical link in export market ventures. *Journal of Marketing*, 58(1), 1–21.
- Chen, C. C., & Lin, Y. C. (2018). What drives live-stream usage intention? The perspectives of flow, entertainment, social interaction, and endorsement. *Telematics and Informatics*, 35(1), 293–303.
- Chen, C., Lu, Y., Hu, Y., & Hong, Y. (2019). *Everyone can be a star: Quantifying grassroots online sellers' live streaming effects on product sales*.
- Chen, L., Nan, G., Li, M., Feng, B., & Liu, Q. (2022). Manufacturer's online selling strategies under spillovers from online to offline sales. *Journal of the Operational Research Society*, 1-24.
- Cheng, C., & Yang, M. (2017). Enhancing performance of cross-border mergers and acquisitions in developed markets: The role of business ties and technological innovation capability. *Journal of Business Research*, 81, 107–117.
- Chiu, H., Hsieh, Y., Li, Y. and Lee, M. (2005), "Relationship marketing and consumer switching behavior", *Journal of Business Research*, 58, 1681-1689.
- Chung, H. F. L. (2019). How guanxi networking matters in the relation between market orientation and innovation in Asian emerging economies – the case of Markor. *Journal of Business and Industrial Marketing*, 34(4), 836–849.
- Chung, H. F. L., & Ho, M. (2021). International competitive strategies, organizational learning, and export performance: A match and mis-match conceptualization. *European Journal of Marketing*.

- Chung, H. F. L., & Kuo, T. (2018). When and how managerial ties matter in international competitive strategy, export financial and strategic performance framework: A standardized or customized approach? *European Journal of Marketing*, 52(1–2), 260–278.
- Chung, H. F. L., Yang, Z., & Huang, P. H. (2015). How does organizational learning matter in strategic business performance? The contingency role of guanxi networking. *Journal of Business Research*, 68(6), 1216–1224.
- Felix, R., Rauschnabel, P. A., & Hinsch, C. (2017). Elements of strategic social media marketing: A holistic framework. *Journal of Business Research*, 70, 118–126.
- Ford, D., & Mouzas, S. (2013). The theory and practice of business networking. *Industrial Marketing Management*, 42(3), 433–442.
- Galankashi, M. R., & Rafiei, F. M. (2021). Financial performance measurement of supply chains: A review. *International Journal of Productivity and Performance Management*, 71(5), 1674–1707.
- Hallanan, L. (2019). Amazon Live is Alibaba's live-streaming without the good bits. <https://www.forbes.com/sites/laurenhallanan/2019/03/15/amazon-live-is-alibabas-live-streaming-without-the-good-bits/?sh=34c7e4e894ab>
- Hsieh, Y., Chiu, H. and Chiang, M. (2005), “Maintaining a committed online customer: a study across search-experience-credence products”, *Journal of Retailing*, 81, 75-82.
- Hu, M., & Chaudhry, S. S. (2020). Enhancing consumer engagement in e-commerce live streaming via relational bonds. *Internet Research*, 30(3), 1019–1041.
- Jeong, S. W. (2016). Types of foreign networks and internationalization performance of Korean SMEs. *Multinational Business Review*, 24(1), 47–61.
- Kim, B., & Kim, B. G. (2021). An explorative study of Korean venture companies: Do CSR and company competitiveness improve non-financial and financial performance? *Sustainability (Switzerland)*, 13(23).

- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35(2), 124–141.
- Lee, C. H., & Chen, C. W. (2021). Impulse buying behaviors in live streaming commerce based on the stimulus-organism-response framework. *Information (Switzerland)*, 12(6).
- Lee, J. N. (2001). The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success. *Information & Management*, 38(5), 323–335.
- Leeraphong, A., & Sukrat, S. (2018). How Facebook Live urge SNS users to buy impulsively on C2C social commerce? *ACM International Conference Proceeding Series*, 68–72.
- Li, E. (2022, May 8). 4 MCNs you need to know in China. *Jing Daily*. <https://jingdaily.com/4-mcn-china-influencer/>
- Li, X. (2021). *Research on brand value evaluation and promotion strategies of MCN institutions*. Zhejiang University of Media and Communications.
- Lin, W. S., Zhao, H. V., & Ray Liu, K. J. (2009). Incentive cooperation strategies for peer-to-peer live multimedia streaming social networks. *IEEE Transactions on Multimedia*, 11(3), 396–412.
- Liu, H. M., & Yang, H. F. (2019). Managing network resource and organizational capabilities to create competitive advantage for SMEs in a volatile environment. *Journal of Small Business Management*, 57, 155-171.
- Mao, Z., Du, Z., Yuan, R., & Miao, Q. (2022). Short-term or long-term cooperation between retailer and MCN? New launched products sales strategies in live streaming e-commerce. *Journal of Retailing and Consumer Services*, 67.
- Metters, R., & Walton, S. (2007). Strategic supply chain choices for multi-channel Internet retailers. *Service Business*, 1(4), 317–331.
- Mitrega, M., Forkmann, S., Ramos, C., & Henneberg, S. C. (2012). Networking capability in business relationships - Concept and scale development. *Industrial Marketing Management*, 41(5), 739–751.

- Pu, X., Zhang, S., Ji, B., & Han, G. (2021). Online channel strategies under different offline channel power structures. *Journal of Retailing and Consumer Services*, 60, 102479.
- Shi, Y., Zhang, B., Li, C., & Li, G. (2020). Research on localization strategy of MCN short video. *Open Journal of Social Sciences*, 08(05), 411–418.
- Si, R. (2021). China Livestreaming E-commerce Industry Insights. Springer Nature.
- Statista. (2022). *Multi-channel network (MCN) market size in China from 2015 to 2021 with estimates until 2023*. <https://www.statista.com/statistics/894986/china-multi-channel-network-market-size/>
- SVA. (2020). Survey report on national radio stations and frequencies in 2020. *State Administration of Radio*. http://gdj.hubei.gov.cn/ywdt/xyzx/202012/t20201207_3073227.shtml
- TOPKLOUT. (2022). *The white paper of China's content organization (MCN) industry development research returns to internal vision, iteration and reshaping*.
- Trainor, K. J., Andzulis, J., Rapp, A., & Agnihotri, R. (2014). Social media technology usage and customer relationship performance: A capabilities-based examination of social CRM. *Journal of Business Research*, 67(6), 1201–1208.
- Wang, C. L., & Chung, H. F. (2020). Business networking and innovation of Asian enterprises in Western countries: The moderation of institutional distance. *Industrial Marketing Management*, 88, 152-162.
- Wang, X. (2020). Research on the development of live streaming industry of e-business under web celebrity economy. *ACM International Conference Proceeding Series*, 16–20.
- Xu, X., Wu, J. H., & Li, Q. (2020). What drives consumer shopping behavior in live streaming commerce? *Journal of Electronic Commerce Research*, 21(3), 144–167.

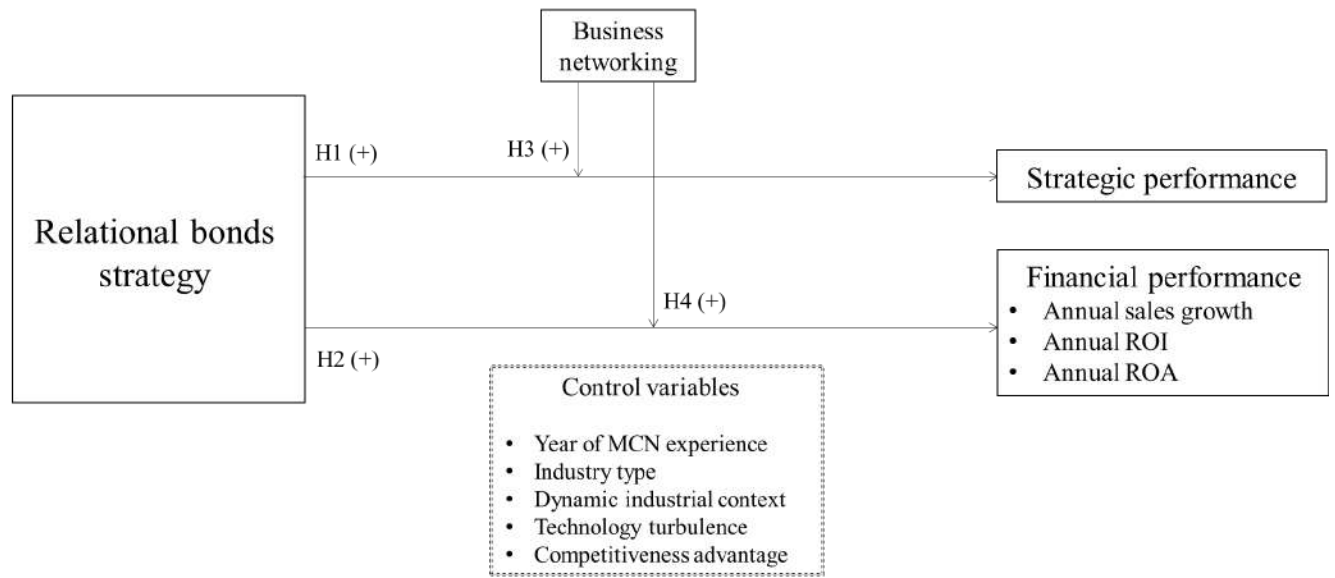


Figure 1: Conceptual Framework

The Eco-system of "Old Friend": The Definitive Business Resource in China

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The Eco-system of “Old Friend”: The Definitive Business Resource in China

Abstract

The unique business ecosystem of “old friend” exists in China which is distinctively different from the western discipline of friendship but, surprisingly, has been under-researched (Cooper 1977; Heide and Wathne 2006; Grayson 2007; Lovett, Simmons and Kali 1999). This ecosystem must be understood so as to maximize practicing managers’ business performance in the Chinese market (Leung, Chan, Lai and Ngai 2011; Brady 1997).

The Chinese Communist Party (CCP) adopted the diplomatic relational term “old friend” (老朋友) (The New York Time 2014: Jun 19) from the former Soviet Union and blended it with unique Chinese characteristics to exhibit China’s worldview and method of operations when it opened its door to the outside world in 1978 (Brady 2002). The eco-system of “old friend”, at a national level, has been managed by one of the major foreign affairs organizations, i.e., The Chinese People's Association for Friendship with Foreign Countries (CPAFFC) to help build diplomatic and business connections with the international community. The “old friend” eco-system has been repeatedly emphasized by the Chinese business community to generate commercial transactions at a business level (Leung et al 2011).

This study is a preliminary investigation on “old friend” as an idiosyncratic Chinese doctrine to inform foreign businesspeople on its potential application to generate enduring business performance. The Chinese indigenous cultural elements, i.e., guanxi, face, xinyong, loyalty etc will be systematically analysed to inform business researchers and entrepreneurs on how to enter this “old friend” eco-system to maximize business performance. Recommendations will also be given.

References:

- Brady, A. (2002). Review: The Political Meaning of Friendship: Reviewing the Life and Times of Two of China's American Friends. *China Review International*. 9(2), 307-319.
- Brady, A. (1997). Who Friend, Who Enemy? Rewi Alley and the Friends of China. *The China Quarterly* 151, 614-632.
- Cooper, J.M. (1997). Aristotle on the Forms of Friendship. *The Review of Metaphysics* 30(4), 619-648.
- Grayson, K. (2007). Friendship Versus Business in Marketing Relationships. *Journal of Marketing* 71, October, 121-139.
- Heide, J.B. and Wathne, K. (2006). Friendships, Businesspeople, and Relationship Roles: A Conceptual Framework and a Research Agenda. *Journal of Marketing* 70 (July), 90-103.
- Leung, T.K.P., Chan, R.Y.K., Lai, K.H. and Ngai, E.W.T. (2011). An examination of the influence of guanxi and xinyong (utilization of personal trust) on negotiation outcome in China: An old friend approach. *Industrial Marketing Management* 40, 1193-1206.
- Lovett, S., Simmons, L.C. and Kali, R. (1999). Guanxi Versus The Market: Ethics and Efficiency. *Journal of International Business Studies* 30(2), 231-248.
- The New York Times. (2014: Jun 19). How many old friends do the Chinese people have? Downloaded from <https://cn.nytimes.com/books/20140619/tc19friends/zh-hant/> on March 09, 2023.

From Natural Disasters, Humanitarian Aids to Casino: Humanitarian Governance Quality to Reduce Corruption

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**From Natural Disasters, Humanitarian Aids to Casino:
Humanitarian Governance Quality to Reduce Corruption**

Abstract

A natural disaster causes extensive physical damages and is perceived to have a negative impact on a country's economy, its stock market, and the stock markets nearby. Nonetheless, we hypothesize that the post-disastrous humanitarian relief funds provided by donor countries to foreign recipient countries that supposedly help save life can generate a positive return on stock market. Using a global sample of 1,778 casino firm-earthquake incidence to test this hypothesis, we find that casino stocks have extra-ordinary positive returns in terms of revenues and profits after the occurrence of earthquakes, especially in those countries with a high level of corruption. We conceive that an improvement in humanitarian governance quality could help mitigate the level of corruptions on stock returns. A good governance system with minimal corruption is urgently needed to ensure the relief funds are effectively deployed to save life.

Keywords: Natural Disasters, Humanitarian Aids, Casino, Governance Quality, Corruption, Stock Return

Overconfidence and Entrepreneurial Industry Choice: Novice vs. Habitual Entrepreneurship

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Overconfidence and Entrepreneurial Industry Choice: Novice vs. Habitual Entrepreneurship

1 Introduction

For now, literature on firm early-stage decision making has studied how experience or skills of founders or management team affect firms' early-stage product strategy (Xiao & Ramsden, 2016), venture capital investment (Patzelt, zu Knyphausen-Aufseß, & Fischer, 2009), and location choice (Fern, Cardinal, & O'Neill, 2012). However, as a key component of early-stage decisions, new firm industry choice, referring to whether entrepreneurs choose to start a business in the home industry they previously worked in or in a new industry, has received limited attention (Nikiforou, Dencker, & Gruber, 2019). And the psychological factor as an antecedent of early-stage decisions has not been considered. In this article, we fill this gap by asking: how do entrepreneurs' psychological factors affect their early-stage industry choice decisions? We draw on social cognitive theory, which argues that decisions are determined by the interplay of cognitive factors with individual experience as well as environmental factors (Bandura, 1986; Wood & Bandura, 1989). Using a unique hand-collected sample of 588 founders from 506 Chinese listed companies over a 21-year period from 1992 to 2013, we found overconfident entrepreneurs to start new firms in a new industry rather than in home industry. We further found the relationship more salient in habitual entrepreneurs who have entrepreneurial experience than in novice entrepreneurs who have no previous entrepreneurial experience. And we claimed that the positive relationship between entrepreneurial overconfidence and changing industry decision will be strengthened by new industry concentration. This research contributes to both theory and practice. It adds to the growing literature on strategic early-stage

entrepreneurial industry choice, an area that has just begun to attract scholars' attention but has a long-term effect on enterprises (Nikiforou et al., 2019). Our findings contribute to the literature comparing different types of entrepreneurs in the early-stage industry choice context by considering two types of entrepreneurs—habitual and novice entrepreneurs—given that entrepreneurial background masks important differences in entrepreneurial strategies, especially when a firm is at the early stage (Bhide, 2003). We also imply governments to promote entrepreneurship by providing diversified training and education programs for entrepreneurs, especially novices, to enhance entrepreneurial ability so that they can adapt to different contexts.

2 Literature Review

2.1 Overconfidence in entrepreneurship research

Overconfidence as a cognitive bias has been widely discussed in psychological research. It refers to the tendency that people believe their abilities, judgements and prospects of future performance are better than real (Hirshleifer, Low, & Teoh, 2012). In entrepreneurship research, one stream of literature focus on the consequences of entrepreneurial overconfidence is how overconfidence influences the performance of startups. Though yielding valuable insights, these studies, however, have generated inconsistent results, finding that overconfidence is a 'double-edged sword' (Kappes & Sharot, 2015). The mixed relationship between overconfidence and startup performance indicates inconsistent entrepreneurial behaviors caused by overconfidence. However, the impact of overconfidence on entrepreneurs' early-stage decision-making has attracted no attention from entrepreneurship scholars. Further efforts are required to fill in this research gap.

2.2 Entrepreneurial early-stage industry choice

New firm industry choice has just begun to attract scholars' attention (Nikiforou et al., 2019). If entrepreneurs make inappropriate industry choice on early stage of startup, they waste limited resources such as time and money (De Carolis & Saporito, 2006). Prior literature arbitrarily assumed that entrepreneurs would create new ventures in home industries (e.g., Campbell, Kryscynski, & Olson, 2017; Ganco, 2013). Except for Eggers and Song (2015) and Nikiforou et al. (2019), no entrepreneurship study compares the choice of staying or leaving current industry. But the two papers ignored individual psychological factors. Given that biased individuals make distinctive strategic industry choice compared with others (Cieřlik, J., Kaciak, E., & van Stel., 2018), a deeper and more comprehensive view is needed to delineate the nuances among various entrepreneurs.

3 Hypotheses

Hypothesis 1: Entrepreneurial overconfidence is positively related to the probability of entrepreneurs starting a new venture in a new industry.

Hypothesis 2: The positive relationship between entrepreneurial overconfidence and the probability of starting a new venture in a new industry is more salient for habitual entrepreneurs than novice entrepreneurs.

Hypothesis 3: Among habitual entrepreneurs, the positive relationship between entrepreneurial overconfidence and the probability of starting a new venture in other industries will be strengthened by the concentration of the new industry.

4 Method and results

4.1 Method

The entrepreneur dataset in this research is unique and collected by hand. We included firms on GEM (Growth Enterprise Market) board from 2007 to 2019 in China. Personal and stock market information are from Chinese Stock Market and Accounting Research (CSMAR) database. The industry type information was gathered from Aiqicha platform (<https://aiqicha.baidu.com/>), an authoritative and well-established online database for enterprise repositories owned by Baidu, the largest searching engine in China. Since our dependent variable was binary, hypotheses are tested by logit regression.

Following the work of Nikiforou et al. (2019), *industry choice* was coded as one if the entrepreneur set up the current firm in the same industry as the one they worked, and zero if not.

Overconfidence was measured in two steps as below referring to Zhang and Yang (2018): a) $\text{Market_return}_i > \text{Firm_stock_return}_i$; b) $\text{Sharehold}_i \geq \text{Sharehold}_{i-1}$, where Market_return_i is the market return of Growth Enterprise Market in year i , $\text{Firm_stock_return}_i$ is the stock return of a firm in year i , and Sharehold_i refers to shares held by the entrepreneur in year i . Then, the degree of overconfidence is calculated by dividing the number of overconfident times by his or her duration of tenure. This is consistent with the claim that we cannot measure overconfidence level using the absolute number of times one displayed overconfidence since founders have different length of tenure (Simon & Shrader, 2012). The measurement is based on the premise that overconfidence is a stable and continuous nature (Navis and Ozbek, 2016).

We treat one as a *habitual entrepreneur* if the entrepreneur has entrepreneurial experience before (entrepreneurial experience = 1), and one as *novice entrepreneur* if the entrepreneur does not have entrepreneurial experience (entrepreneurial experience = 0).

To measure *industry concentration*, we adopted the Herfindahl index, which can be calculated as

$\text{Herfindahl}_j = \sum_{i=1}^I s_{ij}^2$, where s_{ij} is the ratio of revenue from firm i to total revenue in industry j .

4.2 Results

All hypotheses have been supported. Consistent with H1, there is a positive relationship between entrepreneurial overconfidence and the tendency to change industry ($b = 0.913$, $p < 0.05$). To test H2, we split the data into novice entrepreneurs and habitual entrepreneurs. In the group of novice entrepreneurs, the coefficient of overconfidence was not significant; in the group of habitual entrepreneurs, the coefficient of overconfidence was positive and significant ($b = 1.815$, $p < 0.05$), supporting H2. The positive and significant coefficient of the interaction terms ($b = 10.104$, $p < 0.05$) indicated that the industrial concentration of another industry can generate a pull effect on entrepreneurs, supporting H3.

5 Discussion

This research implies both theory and practice. As an area just starting to attract scholars' attention, early-stage industry choice has critical impacts on firms in the long run (Nikiforou et al., 2019). Existing studies oversee the effect of cognitive bias on early-stage decision-making of entrepreneurs. We address this by focusing on entrepreneurial overconfidence bias, which can usually lead to various strategic decisions (Cieřlik et al., 2018). Our findings also extend the understanding of habitual and novice entrepreneurship, given that prevailing binary characteristics (habitual vs. novice entrepreneurship) masks important differences in entrepreneurial strategies especially when a firm is at the early stage (Bhide, 2003). The finer-grained view advances our understanding of the important distinction of different types of entrepreneurs (Wiklund & Shepherd, 2008). Thirdly, although many

of studies held that industry concentration as a business context may deter the new entrants, we support a bright side of industry concentration as a key moderator in attracting entrepreneurs.

Practically, entrepreneurs should be cautious about possible overconfidence bias and carefully assess their capabilities including advantages and disadvantages when choosing which industry to enter.

Governments can provide diversified training and education programs for entrepreneurs especially novices to enhance entrepreneurial ability so that they can adapt to different contexts.

7 References

- Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ, 1986*(23-28).
- Bhide, A. (2003). *The origin and evolution of new businesses*. Oxford University Press.
- Campbell, B. A., Kryscynski, D., & Olson, D. M. (2017). Bridging strategic human capital and employee entrepreneurship research: A labor market frictions approach. *Strategic Entrepreneurship Journal, 11*(3), 344-356.
- Cieřlik, J., Kaciak, E., & van Stel, A. (2018). Country-level determinants and consequences of overconfidence in the ambitious entrepreneurship segment. *International Small Business Journal, 36*(5), 473-499.
- Dabić, M., Vlačić, B., Kiessling, T., Caputo, A., & Pellegrini, M. (2021). Serial entrepreneurs: A review of literature and guidance for future research. *Journal of Small Business Management, 1*-36.
- De Carolis, D. M., & Saporito, P. (2006). Social capital, cognition, and entrepreneurial opportunities: A theoretical framework. *Entrepreneurship theory and practice, 30*(1), 41-56.
- Eggers, J. P., & Song, L. (2015). Dealing with failure: Serial entrepreneurs and the costs of changing industries between ventures. *Academy of Management Journal, 58*(6), 1785-1803.
- Fern, M. J., Cardinal, L. B., & O'Neill, H. M. (2012). The genesis of strategy in new ventures: Escaping the constraints of founder and team knowledge. *Strategic Management Journal, 33*(4), 427-447.
- Ganco, M. (2013). Cutting the Gordian knot: The effect of knowledge complexity on employee mobility and entrepreneurship. *Strategic Management Journal, 34*(6), 666-686.
- Hirshleifer, D., Low, A., & Teoh, S. H. (2012). Are overconfident CEOs better innovators?. *The journal of finance, 67*(4), 1457-1498.
- Kappes A. & Sharot T. (2015). *Optimism and Entrepreneurship: A Double-Edged Sword*. London: NESTA.
- Navis, C., & Ozbek, O. V. (2016). The right people in the wrong places: The paradox of entrepreneurial entry and successful opportunity realization. *Academy of Management Review, 41*(1), 109-129.
- Nikiforou, A., Dencker, J. C., & Gruber, M. (2019). Necessity entrepreneurship and industry choice in new firm creation. *Strategic management journal, 40*(13), 2165-2190.
- Ornstein, S. I. (1972). Concentration and profits. *The Journal of Business, 45*(4), 519-541.
- Patzelt, H., zu Knyphausen-Aufseß, D., & Fischer, H. T. (2009). Upper echelons and portfolio strategies of venture capital firms. *Journal of Business Venturing, 24*(6), 558-572.
- Simon, M., & Shrader, R. C. (2012). Entrepreneurial actions and optimistic overconfidence: The role of motivated reasoning in new product introductions. *Journal of Business Venturing, 27*(3), 291-309.
- Wiklund, J., & Shepherd, D. A. (2008). Portfolio entrepreneurship: Habitual and novice founders, new entry, and mode of organizing. *Entrepreneurship theory and practice, 32*(4), 701-725.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of management Review, 14*(3), 361-384.
- Xiao, L., & Ramsden, M. (2016). Founder expertise, strategic choices, formation, and survival of High-Tech SMEs in China: A resource-substitution approach. *Journal of Small Business Management, 54*(3), 892-911.

Zhang, T., & Acs, Z. (2018). Age and entrepreneurship: nuances from entrepreneur types and generation effects. *Small Business Economics*, 51(4), 773-809.

Disentangling the Relationship between Pandemic Uncertainty and Innovation Types: A Contingency View in the Global Context

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Disentangling the Relationship between Pandemic Uncertainty and Innovation Types:

A Contingency View in the Global Context

1 Introduction

In recent years, firms are faced with prevailing uncertainty brought by global pandemic, reconfiguring the operational environment of many enterprises. As warned by World Health Organization (WHO), there will be more worldwide pandemic threats in the future (WHO, 2022), bringing greater challenge and uncertainty to organizations. Faced with uncertain environments, firms need to adopt novel approaches to respond to such dynamics (e.g., Sharma, Leung, Kingshott, Davcik, & Cardinali, 2020). Thus, understanding and dealing with uncertainty have become major challenges for both OM researchers and practitioners (Ramasesh & Browning, 2014). Although global pandemic has brought new source of uncertainty, limited studies have addressed its impact on firms' operations. This paper will investigate how the level and the pattern of of pandemic uncertainty will influence firms' coping strategies.

OM researchers have exerted efforts to examine the relationship between uncertainty and innovation (e.g., Kim, Kumar, & Kumar, 2012); however, these studies have found a mixed relationship between uncertainty and innovation. A possible reason for this inconsistency is that most previous studies focus only on one type of innovation but fail to integrate different types of innovation. Yet studies have not taken a comprehensive view to delineate the nuances in the complicated relationship between uncertainty and various innovations (Kim et al., 2012).

This study addresses these gaps by discovering that: higher level of pandemic uncertainty encourages process innovation (H1) but discourages product innovation (H2). More irregular pattern of pandemic uncertainty leads to radical innovation (H3) rather than incremental innovation (H4). We further propose that long-term orientation facilitates four types of innovation under high level of pandemic uncertainty (H5 & H6) but only incentivizes radical innovation but not incremental innovation under highly irregular patterns of pandemic uncertainty (H7 & H8).

This study contributes to the uncertainty and innovation literature in OM. First, we provide an integrated model by specifying the diverse relationships between pandemic uncertainty and the four types of innovation, which offers an explanation for the inconsistent findings on the relationship between uncertainty and innovation (Gulen & Ion, 2016). Second, our study provides a fine-grained analysis of the two distinctive dimensions (level and pattern) of pandemic uncertainty. Third, our research uncovers the temporal impact of a long-term orientation on firm operation strategies under uncertain environments by using an international context. We thus respond to OM researchers' calls for both micro and macro perspectives in operational responses to external influences (Aksin, Armony, & Mehrotra, 2007; Pilkington & Meredith, 2009).

2 Literature and framework

Many studies have examined the relationship between environmental uncertainty and firm innovation (e.g., Kim et al., 2012). Some suggest that environmental uncertainty facilitates innovation, because firms have no choice but to make changes to adapt to the

unstable and complex external environment (Bhide, 2003). Research also suggests that firms have a greater compulsion to take innovative action under high market fluctuations (Freel, 2005). Other studies have argued that innovation is constrained as environmental uncertainty increases (e.g., Gulen & Ion, 2016), as firms may delay investing in innovation because of higher potential risks and the lack of transparent information (He & Zhang, 2020). Amid considerable uncertainty, managers become risk-averse and reluctant to invest in innovative programs to avoid possible negative outcomes; instead, they prefer waiting in uncertain environments (Panousi & Papanikolaou, 2012). In summary, research consensus on the relationship between uncertainty and innovation is absent, though some research offers clues to such inconsistency. For example, Germain (1996) found that environment uncertainty directly predicts radical innovation but not incremental innovation, suggesting that uncertainty may influence different innovation types differently. In our review of the literature, we uncovered no studies providing an integrated model on the relationship between environmental uncertainty and various types of innovations (Kim et al., 2012; Saridakis, Idris, Hansen, & Dana, 2019).

Furthermore, with pandemic uncertainty leading to major transformations in firms and various influences around the world, it may have direct and mixed effects on firm innovation. First, pandemic uncertainty has exerted deleterious impacts on global economic activities (Cai & Luo, 2020), but studies on whether economic slowdown will foster or inhibit firm innovations are still lacking. Some research has argued that an economic recession will make innovation more difficult because of the drop in market demand (Kaszowska-Mojso, 2020),

while other studies indicate that an innovation revolution always emerges during times of economic slowdown (Mokyr, 2018). Second, while pandemic uncertainty leads to a decline in consumer demand (Demiessie, 2020), which can be deleterious to innovation (Kaszowska-Mojas, 2020), the change in consumption patterns (e.g., online shopping) caused by pandemic uncertainty (Parsley, 2020) may facilitate innovation, such as online operations (Kim, 2020). Third, firms' confidence in innovation decisions can change with uncertainty about government interventions and support to combat the severe damage of the pandemic on the economy (Chakrabarty & Roy, 2021). These lead to our major hypotheses: higher level of pandemic uncertainty encourages process innovation (H1) but discourages product innovation (H2). More irregular pattern of pandemic uncertainty leads to radical innovation (H3) rather than incremental innovation (H4). Long-term orientation facilitates four types of innovation under high level of pandemic uncertainty (H5 & H6) but only incentivizes radical innovation but not incremental innovation under highly irregular patterns of pandemic uncertainty (H7 & H8). The proposed research model is shown in Figure 1.

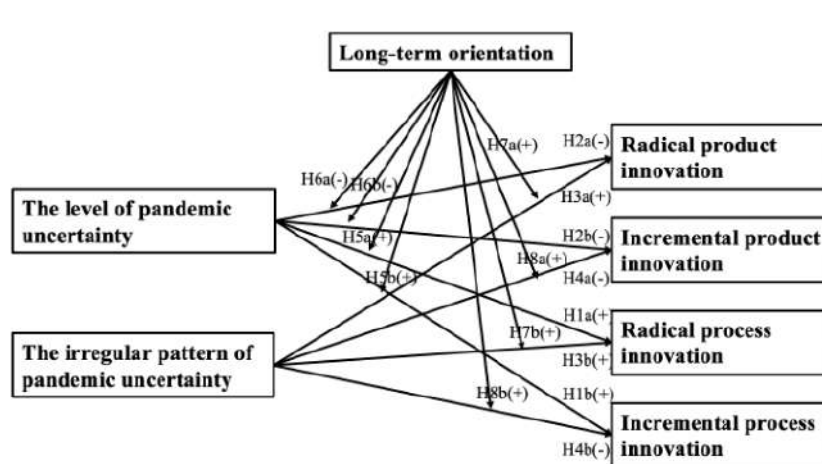


Figure 1. Research model

3 Method and results

To test our hypotheses, we merged a cross-sectional dataset from three sources, covering 8566 firm-year observations of 25 countries from 2019 to 2021. We collected country-level pandemic uncertainty data from the World Pandemic Uncertainty Index (WPUI) developed by Ahir, Bloom, and Furceri (2018), reflecting uncertainty induced by global pandemics. Firm-level innovation data were from the World Bank Enterprise Survey (WBES), which is widely used in studies on innovation (e.g., Reddy, Chundakkadan, & Sasidharan, 2021). For the moderating effect, we adopt long-term orientation dimension from the Hofstede index, which continues to be popular among management scholars and practitioners (Venaik & Brewer, 2010). Logit regressions are used to test our hypotheses since our dependent variables are dummy. Our assumptions are strongly supported by empirical tests.

4 Discussion

This study makes both theoretical and practical contributions. First, it highlights the importance of the static level and dynamic pattern of pandemic uncertainty on firm operations, one type of uncertainty that has hitherto been overlooked in research investigating the effect of uncertainty on innovation. Second, we provide an integrated model by specifying the effect of pandemic uncertainty on four types of innovation, filling a research gap in terms of the inconsistent findings on the relationship between the two by taking a multi-dimensional classification of innovations simultaneously. Third, our large sample over 25 countries allowed us to document important heterogeneities in firms' responses to pandemic uncertainty, helping to address concerns about the lack of OM research in global settings (Charpin, Powell, & Roth, 2021). Practically, managers should be conscious of both

the static level and dynamic pattern of the external prevailing pandemic uncertainty when making strategic innovation choices. Firms under a long-term-oriented culture should be more cautious when choosing innovation strategies in response to pandemic uncertainty.

5 References

Ahir, H., Bloom, N., & Furceri, D. (2018). The World Uncertainty Index. Available at SSRN, 3275033.

Aksin, Z., Armony, M., & Mehrotra, V. (2007). The modern call center: A multi-disciplinary perspective on operations management research. *Production and operations management*, 16(6), 665-688.

Bhide, A. (2003). *The origin and evolution of new businesses*. Oxford University Press.

Cai, M., & Luo, J. (2020). Influence of COVID-19 on manufacturing industry and corresponding countermeasures from supply chain perspective. *Journal of Shanghai Jiaotong University (Science)*, 25(4), 409-416.

Chakrabarty, H. S., & Roy, R. P. (2021). Pandemic uncertainties and fiscal procyclicality: a dynamic non-linear approach. *International Review of Economics & Finance*, 72, 664-671.

Charpin, R., Powell, E. E., & Roth, A. V. (2021). The influence of perceived host country political risk on foreign subunits' supplier development strategies. *Journal of Operations Management*, 67(3), 329-359.

Demiessie, H. G. (2020). COVID-19 pandemic uncertainty shock impact on macroeconomic stability in Ethiopia. *Journal of Advanced Studies in Finance (JASF)*, 11(22), 132-158.

- Freel, M. S. (2005). Perceived environmental uncertainty and innovation in small firms. *Small Business Economics*, 25(1), 49-64.
- Germain, R. (1996). The role of context and structure in radical and incremental logistics innovation adoption. *Journal of Business Research*, 35(2), 117-127.
- Gulen, H., & Ion, M. (2016). Policy uncertainty and corporate investment. *The Review of Financial Studies*, 29(3), 523-564.
- He, F., Ma, Y., & Zhang, X. (2020). How does economic policy uncertainty affect corporate Innovation?—Evidence from China listed companies. *International Review of Economics & Finance*, 67, 225-239.
- Kaszowska-Mojša, J. (2020). Innovation strategies of manufacturing companies during expansions and slowdowns. *Entrepreneurial Business and Economics Review*, 8(4), 47-66.
- Kim, D. Y., Kumar, V., & Kumar, U. (2012). Relationship between quality management practices and innovation. *Journal of operations management*, 30(4), 295-315.
- Kim, R. Y. (2020). The impact of COVID-19 on consumers: Preparing for digital sales. *IEEE Engineering Management Review*, 48(3), 212-218.
- Mokyr, J. (2018). The past and the future of innovation: Some lessons from economic history. *Explorations in Economic History*, 69, 13-26.
- Panousi, V., & Papanikolaou, D. (2012). Investment, idiosyncratic risk, and ownership. *The Journal of finance*, 67(3), 1113-1148.
- Parsley, D. (2020). Coronavirus: Global outbreak of Covid-19 could cause recession as governments urged to restore consumer confidence, available at:

<https://inews.co.uk/news/business/coronavirus-latest-financial-crisis-global-outbreak-covid-19-recession-consumer-confidence-2030808> (accessed 3rd August 2022).

Pilkington, A., & Meredith, J. (2009). The evolution of the intellectual structure of operations management—1980–2006: A citation/co-citation analysis. *Journal of operations management*, 27(3), 185-202.

Ramasesh, R. V., & Browning, T. R. (2014). A conceptual framework for tackling knowable unknown unknowns in project management. *Journal of operations management*, 32(4), 190-204.

Reddy, K., Chundakkadan, R., & Sasidharan, S. (2021). Firm innovation and global value chain participation. *Small Business Economics*, 57(4), 1995-2015.

Saridakis, G., Idris, B., Hansen, J. M., & Dana, L. P. (2019). SMEs' internationalisation: When does innovation matter?. *Journal of Business Research*, 96, 250-263.

Sharma, P., Leung, T. Y., Kingshott, R. P., Davcik, N. S., & Cardinali, S. (2020). Managing uncertainty during a global pandemic: An international business perspective. *Journal of business research*, 116, 188-192.

Venaik, S., & Brewer, P. (2010). Avoiding uncertainty in Hofstede and GLOBE. *Journal of international business studies*, 41(8), 1294-1315.

WHO coronavirus disease (COVID-19) dashboard data last updated: 2022/8/15, 4:42pm CEST Overview, available at: <https://covid19.who.int/>.

The Role of Employee as Corporate Influencer: A Study of Employee-generated Content in Crisis

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Role of the Employee as Information Influencer A Study of Employee-Generated Content in Crisis

Abstract

The penetration of social media into people's professional and personal lives has empowered employees to become information influencers. Research shows that employees' online content can cause substantial harm to their employer's reputation (Opitz et al., 2018). However, employees' potential as advocates have remained under-researched. This PhD project aims to explore how employee-generated content (EGC) on social media can influence stakeholders' perception of an organization's reputation. This study draws on a mixed-method approach. First, the qualitative component explores organizations' views, strategies, and challenges in governing employee participation on social media through a) semi-structured interviews with employers and b) focus groups with employees. As the objective is to study the role of the employee as information influencer, phase 1 of the project will aim to capture employer's experience in harnessing the potential benefits of positive employee word-of-mouth (WOM) while minimizing the risks of negative WOM. Hong Kong has been identified as a suitable choice for data collection because it is a multicultural city with a well-balanced mix of multi-national corporations (MNC) and local small and medium enterprises (SME). Despite this, Hong Kong – as, indeed, the Asian region – remains under-represented in reputation management research to date. Hence this study seeks to further address an extant gap in the literature. Access to interviewees and focus group participants will be facilitated via the Hong Kong Institute of Human Resources Management (HKIHRM). Building on the insights from the qualitative study in phase 1 and drawing on social influence theory, a series of web-based experiments will be administered, for phase 2, to test a hypothesis regarding stakeholders' responses to EGC in the second phase.

Keywords: Employee Generated Content, Information Influencer, Crisis Communications,
Corporate Reputation, Social Media, Hong Kong

Linking Work Meaningfulness to Turnover Intention: The Roles of Adaptive Career Behaviors

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**Linking Work Meaningfulness to Turnover Intention:
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Abstract

This study builds upon the Conservation of Resource (COR) theory to examine the roles of different aspects of adaptive career behaviours in the relationship between work meaningfulness and turnover intention. A three-wave questionnaire survey was utilized to collect data from working adults (N = 350) from various organizations in Malaysia. This study contributes to the career literature by demonstrating that the extent to which individuals find their work meaningful has varying effects on their adaptive career behaviours and intention to leave the organization. The theoretical and practical implications of this study are discussed.

Keywords: Work meaningfulness, turnover intention, internal career planning, external career exploration

1. Introduction

In today's rapidly evolving business landscape, organizations increasingly recognize the importance of work meaningfulness in attracting and retaining their top talent (Dhingra, 2021; Turner, 2023). Specifically, work meaningfulness pertains to the extent to which work tasks hold meaningful purpose, generate positive societal impact, and contribute to fulfilling personal values (Demirtas et al., 2017; Steger et al., 2012). In fact, prior empirical studies claim that when individuals find their work

meaningful, it not only enhances their job satisfaction and work engagement but also cultivates a deeper sense of purpose and fulfilment, which reduces their turnover intention (e.g., Arnoux-Nicolas et al., 2016; Charles-Leija et al., 2023; Haque & Khan, 2023; Humphrey et al., 2007; Steger et al., 2012). Despite the significance of work meaningfulness, little is known about the underlying behavioral mechanisms through which work meaningfulness relates to turnover intention. To address this research gap, this paper explores the role of adaptive career behaviours in the relationship between work meaningfulness and turnover intention. In this study, adaptive career behaviours involve career planning and exploration that refer to the proactive strategies and actions individuals undertake to manage and navigate their careers effectively (Klehe et al., 2011; Lent & Brown, 2013). The significance of career planning and career exploration cannot be overstated as they are considered crucial adaptive behaviors that play a pivotal role in one's future career development and help individuals make informed decisions about their career paths (Chughtai, 2019; Clements & Kamau, 2018; Klehe et al., 2011).

Thus far, career planning and career exploration have been mainly examined using composite constructs in past studies (e.g., Chughtai, 2019; Guan et al., 2017; Ireland & Lent, 2018). Such composite measures may confound the differential relationships between adaptive career behaviours, their antecedents, and respective outcomes. Hence, segregating adaptive career behaviors into distinct aspects is important as these behaviours may have unique relationships with different antecedents and outcomes. Building upon the Conservation of Resource (COR) theory, this study aims to address the research gap by drawing an explicit distinction between internal and external adaptive career behaviours, and examining how these behaviours relate to work meaningfulness and turnover intention.

2. Literature Review

2.1 The relationship between work meaningfulness and turnover intention

The COR theory is a motivational theory that suggests that individuals are motivated to actively pursue, enhance, and safeguard their resources to achieve and sustain overall well-being

(Halbesleben et al., 2014). According to the COR theory, work meaningfulness can be regarded as a psychological resource that helps maintain and enhance well-being (Hobfoll, 2001). COR theory posits that losing resources has a greater psychological impact on individuals compared to gaining an equal amount of resources (Hobfoll et al., 2018). Relating to this study, the negative impact experienced by individuals due to the loss of meaningfulness at work is significantly more salient than the positive impact caused by an equivalent gain in meaningfulness at work. Therefore, employees with meaningful work are less likely to leave the organization, as leaving may mean sacrificing their meaningful work in the organization and potentially result in significant psychological distress. Correspondingly, prior research has consistently found a negative relationship between work meaningfulness and turnover intention (Dechawatanapaisal, 2022; Heath, 2022; Steger et al., 2012). Hence, this study hypothesizes that:

Hypothesis 1: Work meaningfulness is negatively related to turnover intention.

2.2 The mediating role of internal career planning

Adaptive career behaviours can be seen as strategic resource investment behaviours that can enhance and gain resources and protect one from resource loss in the future (Hobfoll et al., 2018). This study specifically examines the “internal” aspect of career planning, which involves individuals strategically mapping out their career development within the organization to align with their envisioned career goals (Klehe et al., 2011). As mentioned earlier, individuals endowed with meaningful work are often less likely to leave the organization as they fear losing the valuable resources they currently possess (Hobfoll et al., 2018). As a result, they tend to perform internal career planning to proactively shape and advance their careers within the organization. This within-organization career planning process can serve as a means to alleviate their intention to leave. Accordingly, this study hypothesizes that:

Hypothesis 2: Internal career planning mediates the relationship between work meaningfulness and turnover intention.

Hypothesis 2a: Work meaningfulness relates positively to internal career planning.

Hypothesis 2b: Internal career planning relates negatively to turnover intention.

2.3 The mediating role of external career exploration

This study specifically examines the concept of “external” career exploration, which involves individuals actively seeking employment opportunities outside the organization (Klehe et al., 2011). According to the COR theory, individuals facing high levels of strain due to unfulfilling and monotonous work tend to employ coping strategies, such as engaging in exploratory behaviours, to safeguard their remaining resources and prevent further resource loss (Halbesleben et al., 2014). Relating to this study, individuals lacking meaningful work are likely to embark on external career exploration to seek new resources (e.g., more meaningful employment opportunities) that can restore their exhausted resources and improve their current situation (Hobfoll et al., 2018; Wang et al., 2014). Consequently, external career exploration may contribute to an increased turnover intention. Therefore, this study hypothesizes that:

Hypothesis 3: External career exploration mediates the relationship between work meaningfulness and turnover intention.

Hypothesis 3a: Work meaningfulness relates negatively to external career exploration.

Hypothesis 3b: External career exploration relates positively to turnover intention.

3. Methodology

3.1 Sample and Procedure

This study adopted a quantitative approach to collect data from working adults from various organizations in Malaysia through a three-wave questionnaire survey. After matching three waves of data, 350 questionnaires were retained for further analysis. Of these participants, 132 were male, and 218 were female. A majority (60%) of them possess over three years of work experience in their current company. Furthermore, most (84%) have completed pre-university programs, diplomas, or bachelor's degrees.

3.2 Measurement

Wave	Scale	Source	Sample items	Cronbach's Alphas
1	Work meaningfulness	Bunderson & Thompson's (2009) 5-item Work Meaningfulness Scale	What I do at work makes a difference in the world.	0.90
2	Internal career planning¹	Gould's (1979) 6-item Career Planning Scale	I have a strategy to achieve my career goals within the organization.	0.89
	External career exploration²	6-item Environment Exploration subscale of Stumpf et al.'s (1983) Career Exploration Survey	I have investigated career possibilities outside of this organization.	0.95
3	Turnover intention	Cammann et al.'s (1983) 3-item Turnover Intention Scale	I intend to leave this organization for another organization as soon as I can.	0.88

4. Results

4.1 Confirmatory factor analysis

The results indicated that the measurement model showed an acceptable fit to the data: $\chi^2/df = 2.222$, TLI = 0.961, CFI = 0.967, RMSEA = 0.059.

4.2 Descriptive Statistics

As shown in Table 1 in the appendix, the composite reliabilities, convergent validities, and discriminant validities of all study variables were established.

4.3 Hypotheses Testing

Results indicate that the hypothesized model fitted the data acceptably: $\chi^2/df = 2.456$, TLI = 0.950, CFI = 0.956, RMSEA = 0.061. The path coefficients of the model are shown in Figure 1 in the appendix. With regards to hypothesis 1, the results revealed a significant and positive relationship between work meaningfulness and turnover intention ($\beta = -0.345$, $p < 0.001$), hence providing support for hypothesis 1. For hypothesis 2, based on Hayes' approach with 5,000 bootstrapping samples (Hayes, 2022), the results of this study showed a significant mediating effect of internal career

¹ This study altered the original items to assess participants' career planning within the organization.

² This study modified the original items to assess participants' career exploration outside of the organization.

planning on the relationship between work meaningfulness and turnover intention ($\beta = -0.103$, 95% confidence interval $[-0.161$ to $-0.044]$, $p < 0.01$). Hence, hypothesis 2 was supported. Furthermore, the finding also demonstrated a significant mediating effect of external career exploration on the relationship between work meaningfulness and turnover intention ($\beta = -0.094$, 95% confidence interval $[-0.131$ to $-0.026]$, $p < 0.05$), providing support for hypothesis 3.

5. Discussion

Drawing upon the COR theory, the main objective of this study was to examine the roles of different aspects of adaptive career behaviours in the relationship between work meaningfulness and turnover intention. Consistent with prior research (Arnoux-Nicolas et al., 2016; Dechawatanapaisal, 2022; Heath, 2022; Steger et al., 2012), the findings of this study showed that work meaningfulness was negatively and significantly related to turnover intention. Furthermore, the results also demonstrated significant mediating effects of work meaningfulness on turnover intention via both internal career planning and external career exploration. From the perspective of the COR theory, meaningful work motivates employees to invest resources in the organization via engaging in internal career planning, which serves as a resource investment behaviour in this context, to acquire more resources that help achieve their envisioned career goals within the organization (Hobfoll et al., 2018). On the other hand, those who find their work tasks meaningless and insignificant may be disheartened. To counter this, they tend to proactively improve their current situation by engaging in external career exploratory behaviours to seek alternate resources elsewhere, such as more fulfilling and meaningful employment opportunities, to replenish the depleted ones (Halbesleben et al., 2014; Hobfoll et al., 2018). This, in turn, heightens their turnover intention.

5.1 Theoretical Implications

This study contributes to the existing career literature by introducing a distinction between internal and external adaptive career behaviours and examining the mediating roles of these behaviours in the relationship between work meaningfulness and turnover intention. The findings of this study clearly demonstrate that employees' distinct aspects of adaptive career behaviours are

shaped by their perceived work meaningfulness, and these distinct career behaviours relate differently to turnover intention. To elaborate, when individuals perceive their work as meaningful, they are more willing to invest effort and time in planning and crafting their careers within the organization, thereby demonstrating lower turnover intention. In contrast, work that lacks a sense of purpose is likely to prompt individuals to engage in external career exploratory behaviours as a protective measure against further resource depletion (Hobfoll et al., 2018). Consequently, these behaviours stimulate employees' intention to leave the organization.

5.2 Practical Implications

Given the importance of work meaningfulness in motivating employees to engage in internal career planning and reducing turnover intention, it is imperative for organizations first to understand what constitutes meaningful work for their employees and redesign job tasks so that they align with employees' personal values, serve meaningful purposes, and create positive societal impacts. Besides that, organizations should also clearly communicate their organizational vision and mission and articulate the important roles that employees play in contributing to the overall objectives and outcomes of the organization. These strategic approaches will enhance employees' perceived meaningfulness of work and subsequently lower their intention to leave the organization.

6. References

- Arnoux-Nicolas, C., Sovet, L., Lhotellier, L., Di Fabio, A., & Bernaud, J. L. (2016). Perceived work conditions and turnover intentions: The mediating role of meaning of work. *Frontiers in psychology*, 7, 704.
- Bunderson, J. S., & Thompson, J. A. (2009). The call of the wild: Zookeepers, callings, and the doubleedged sword of deeply meaningful work. *Administrative Science Quarterly*, 54, 32–57.
- Cammann, C., Fichman, M., Jenkins, G. D., & Klesh J. R. (1983). Assessing the attitudes and perceptions of organizational members. In S.E. Seashore, E.E. Lawler, P.H. Mirvis, & C.C. Cammann (Eds.), *Assessing organizational change* (pp. 71-138). Wiley.
- Charles-Leija, H., Castro, C. G., Toledo, M., & Ballesteros-Valdés, R. (2023). Meaningful work, happiness at work, and turnover intentions. *International Journal of Environmental Research and Public Health*, 20(4), 3565.
- Chughtai, A. (2019). Servant leadership and perceived employability: Proactive career behaviours as mediators. *Leadership & Organization Development Journal*, 40(2), 213–229.
- Clements, A. J., & Kamau, C. (2018). Understanding students’ motivation towards proactive career behaviours through goal-setting theory and the job demands–resources model. *Studies in Higher Education*, 43(12), 2279-2293.
- Dechawatanapaisal, D. (2022). Linking workplace social support to turnover intention through job embeddedness and work meaningfulness. *Journal of Management & Organization*, 1-23.
- Demirtas, O., Hannah, S. T., Gok, K., Arslan, A., & Capar, N. (2017). The moderated influence of ethical leadership, via meaningful work, on followers’ engagement, organizational identification, and envy. *Journal of Business Ethics*, 145(1), 183-199
- Dhingra, N., Samo, A., Schaninger, B., & Schrimper, M. (2021). *Help your employees find purpose—or watch them leave*. <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/help-your-employees-find-purpose-or-watch-them-leave>

- Gould, S. (1979). Characteristics of career planners in upwardly mobile occupations. *Academy of Management Journal*, 22(3), 539-550.
- Guan, Y., Zhuang, M., Cai, Z., Ding, Y., Wang, Y., Huang, Z., & Lai, X. (2017). Modeling dynamics in career construction: Reciprocal relationship between future work self and career exploration. *Journal of Vocational Behavior*, 101, 21–31.
- Halbesleben, J. R. B., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the “COR”: Understanding the role of resources in Conservation of Resources Theory. *Journal of Management*, 40(5), 1334–1364.
- Haque, A., & Khan, S. I. (2023). Promoting meaningfulness in work for higher job satisfaction: will intent to quit make trouble for business managers?. *Journal of Organizational Effectiveness: People and Performance*. Vol. ahead-of-print No. ahead-of-print.
- Heath, M. L., Williams, E. N., & Luse, W. (2022). Breaches and buffers: Can meaningful work impact turnover during COVID-19 pandemic?. *Review of Managerial Science*, 1-22.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337–421.
- Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(1), 103–128.
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92(5), 1332–1356.
- Ireland, G. W., & Lent, R. W. (2018). Career exploration and decision-making learning experiences: A test of the career self-management model. *Journal of Vocational Behavior*, 106, 37–47.
- Klehe, U. C., Zikic, J., Van Vianen, A. E. M., & De Pater, I. E. (2011). Career adaptability, turnover and loyalty during organizational downsizing. *Journal of Vocational Behavior*, 79(1), 217–229.

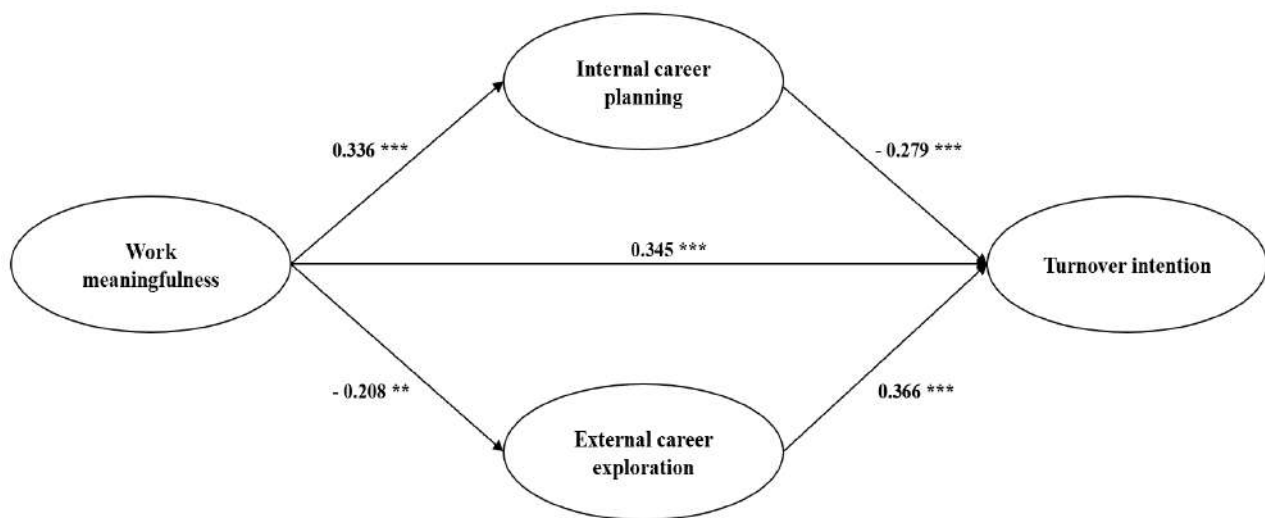
- Lent, R. W., & Brown, S. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology*, 60(4), 557-568.
- Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: the work and meaning inventory (WAMI). *Journal of Career Assessment*, 20(3), 322–337.
- Stumpf, S. A., Colarelli, S. M., & Hartman, K. (1983). Development of the career exploration survey (CES). *Journal of Vocational Behavior*, 22(2), 191-226.
- Turner, J. (2023). *Employees seek personal value and purpose at work. Be prepared to deliver.*
<https://www.gartner.com/en/articles/employees-seek-personal-value-and-purpose-at-work-be-prepared-to-deliver>

7. Appendix

Table 1. The descriptive statistics, correlations, and reliabilities of all study variables.

		CR	AVE	1	2	3	4
1	Work meaningfulness	0.890	0.623	(0.789)			
2	Internal career planning	0.906	0.662	0.418***	(0.813)		
3	External career exploration	0.949	0.757	-0.162**	-0.007	(0.870)	
4	Turnover intention	0.880	0.710	-0.439***	-0.311***	0.456***	(0.843)

Notes: CR = composite reliability; AVE = average extracted variance; bracketed values refer to the square root of the AVE; ** $p < 0.01$; *** $p < 0.001$

**Figure 1. Structural model**

**Natura Cosméticos S.A.'S Sequential Acquisition of the Aesop Brand:
Valuing Synergies with Combined Advanced Real Options**
MS0012

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Natura Cosméticos S.A.'s Sequential Acquisition of the Aesop Brand: Valuing Synergies with Combined Advanced Real Options.

Abstract. This paper aims to extend the real options theory valuing strategic collaborative synergies by joining two advanced real options, specifically, sequential compound options and options with changing volatility, and contributes to the international business literature on MNEs' sequential acquisitions of international ventures. The proposition is that collaborative synergies can be valued with advanced jointed real options when an MNE is pursuing the sequential acquisition of an international venture and the MNE's stock volatility and future market value of the collaborative partners are changing at the time of deciding on a full takeover. The paper discusses how non-recombining lattices with changing volatilities can be bundled with sequential compound real options and, thus, can be employed to solve the problem of valuation of the collaborative tacit synergies (a value in development) of sequential international acquisitions. The theoretical proposition has been justified with the explanatory case study: Natura Cosméticos S.A.'s (Brazil) sequential acquisition of the Aesop brand (Australia). In conclusion, the paper discusses its findings, contributions, limitations, and future work.

Keywords: acquisition; synergy; real options; international strategy

"So, it is incorrect to say that real options will always increase the value of a project or that only risky projects are selected. People who make these criticisms do not truly understand how real options work. However, having said that real options analysis is just another financial analysis tool, and the old axiom of garbage in, garbage out still holds."(Mun, 2010)

Introduction.

The application of real options theory to the practice of international business is still a relatively new and loosely defined field (Li 2007). Moreover, Chi et al. (2019) argued that existing empirical analyses of MNEs based on real options theory “typically focus on the perspective of a single firm, except for a few studies that examine JV formation and its alternatives” (Chi et al. 2019, p. 545). This paper aims to fill these theoretical and empirical gaps. The paper explores how advanced real options (options with changing volatilities and sequential compound options) can be joined and employed to value collaborative synergies when multinational enterprises (MNE) pursue sequential acquisitions of international ventures. Xu et al. (2010) argued that “sequential acquisitions are conceptualized as a real-option-based strategy”, whereby the sequential acquirer resolves valuation uncertainty through information gathering and learning after first purchasing blocks of the shares of a target firm (Xu et al. 2010, p. 166). When an acquirer starts collaboration in the form of an alliance or trial partial acquisition and later makes a total purchase, this strategy also reflects a real options approach to addressing uncertainty (Xu et al. 2010).

Ragozzino et al. argued that financial economics and strategy have worked in quasi-independent ways over the years and two fields of research might be brought closer together toward the development of a real-option agenda that can be fruitful to various stakeholders (Ragozzino et al. 2016, pp. 437–38). This paper has contributed to this research agenda. The paper bridges the gap between real options theory (ROT) and adopting real option application for strategic decision-making on merger and acquisition (M&A) practices. Moreover, Ragozzino et al. argued that “the real options approach holds tremendous potential for academics and practitioners. Yet, empirical work to date has not been able to bring conclusive evidence on the theory’s merits and a normative framework ...” (Ragozzino et al. 2016, p. 437).

The paper aims to fill these empirical gaps and contributes to the theory of the financial management and practice of international business two-fold: on the theory side, the paper demonstrates how to employ more realistic advanced real options models to value collaborative synergies, and, on the practical side, disseminates the knowledge of advanced real options application in the case when multinational enterprises (MNEs) pursue sequential acquisitions of international ventures. Regarding managerial implications, the management of an acquirer's firm should actively strengthen the likelihood of full acquisition of international ventures in the synch of favorable market cues (Wang and Mahoney 2022). What is more, Trigeorgis and Reuer (2017, p. 57) argue, "We would encourage the use of real option with a greater focus on the individual project level of analysis, ... on individual real option cases". The current paper contributes to this scientific quest and seeks to address such research gaps.

Li (2007) also argued that future studies can focus on a refined treatment of multiple uncertainties through real options' application in international strategy. Knowledge accumulation, new core competencies absorption, and favorable conditions in the foreign market can trigger the exercise of sequential growth options in terms of a series of sequential international acquisitions (Chi et al. 2019). What is more, Kogut (1991) viewed collaborative synergies in a new international market as the purchase of a growth option and provided evidence that favorable market conditions trigger expansion via the subsequent acquisition of the partner's stock.

Volatility change is a typical feature of sequential acquisitions of ventures when MNEs pursue integrative strategies from partial acquisition or alliance to the total acquisition of an international venture. In such circumstances, the riskiness of obtaining collaborative synergies can rise dramatically at the time of an announcement of a full takeover. Valuing collaborative synergies with the simple real options, the stock volatility of the acquirer is assumed to be relatively constant

over the option's life. However, if the stock volatility is changed during the option life (a duration of obtaining synergy), it can be accounted for by modifying the non-recombining binomial method. For example, Natura Cosméticos S.A. (Brazil) had pursued an acquisition strategy from the partial acquisition of Emeis Holdings (Australia) operated under the Aesop brand in 2012 to a total acquisition in 2016 year; however, the stock volatility of Natura Cosméticos S.A was noticeably changed at the time of deciding on a full takeover. The application of a simple real option instead of an advanced real option with changing volatility would have provided an inaccurate result of synergy valuation.

Moreover, real options, whose value depends on the successful implementation of other options, may be collectively referred to as sequential compound options (Damodaran 2005). The sequential compound option exists when a particular real option's value will be determined by the value of another real option, not an underlying asset per se (Copeland and Keenan 1998). In this vein, initiating a cross-border alliance can be also viewed as exercising the initial option to generate alliance-based synergies, which in turn leads to the creation of other real options, such as the option to merge and acquire or the option to abandon (Li et al. 2007).

Therefore, to further developed real options theory and international business disciplines, the paper provides theoretical and empirical contributions to a critical issue in international strategy: assessing prerequisites and the valuing of collaborative synergies in the sequential acquisitions process when MNEs' is initiating a cross-border alliance which in turn leads to the full acquisition (the sequential compound option) and stock volatility is changing at the time of deciding on a full takeover (the option with changing volatility).

Multinational enterprises (MNEs) research on transnational mergers and acquisitions (M&As) capabilities, which emphasizes strong cross-venture integration of core competencies (Chi et al.

2019) can shed light on the benefit of advanced real options application to explore collaborative synergies phenomena. In this vein, “case studies may be a useful research method to advance these topics...” (Raisch and Tushman 2016; Chi et al. 2019, p. 546).

Therefore, this paper contributes to this scientific request by asking the research question: *how can collaborative synergies be valued when an MNE is pursuing integrative strategies from partial acquisition to the total acquisition of an international venture, and MNE's stock volatility and future market value of collaborative partners noticeably changes at the time of deciding on a full takeover?* With the application of the combined advanced real options (compound one and with changing volatility one), this paper provides an answer to the research question and justifies the theoretical proposition.

The remaining part of the paper is organized as follows: in the Key Literature Review, the paper provides an extensive reading of the literature relating to rationales behind value collaborative synergies with real options valuation. The application of real options is discussed from the perspectives of combined advanced real options: sequential compound with changing volatility applications. The theoretical proposition has been derived from the literature review. Furthermore, the paper has answered the research question and justified the theoretical proposition with an explanatory case study: Aesop's acquisition by Natura Cosméticos S.A. within the 2012–2016 period. In conclusion, the paper discusses the Findings, Contributions, Limitations, and Future Work.

2.0 Key literature review

2.1 Tacit synergies as a value in development: Relational, network, and non-market synergies

Collaborative synergy can be defined as a combination of two firms' assets that are more valuable together than they are separate. Having researched the phenomenon of synergies, scholars have referred to a cross-disciplinary approach (e.g., strategic management and corporate finance) and employed multiple theoretical lenses (e.g., resource-based view, IO economics, and behavioral theory) (Haspeslagh and Jemison 1991; Feldman and Hernandez 2021).

The broad appeal of the concept lies in its generality: any two assets joined via a collaboration can potentially create synergistic added market value. Feldman and Hernandez (2021) found that prior works have discussed the several most common collaborative synergies: operational (47.1%), firms' market power (16.5%), and financial (7.6%) as well as agency/governance misalignments as constraints to synergy creation (16.2%). Moreover, the study of Chen et al. (2015) shows that operating synergy is a dominant factor in strategic alliances.

“But this generality has also led to a lack of systematic development and synthesis, which hinders theoretical progress and limits the usefulness of the concept for scholars and managers” (Feldman and Hernandez 2021, p. 1). In this vein, Feldman and Hernandez (2021) have uncovered three novel synergy sources (relational, network, and non-market) arising from partners' external cooperative environments. Those synergies can be analyzed and predicted as a tacit synergy. Explicit synergies or "value in exchange" are mainly analyzed by scholars concerning cost reductions and revenue increases. However, achieving tacit synergy requires creating and developing new competencies that utilize merging partners' competencies as relationships, network, and non-market capabilities and thus provide "value in development" (Hao et al. 2020)

The most immediate level beyond the firm is relational synergy, which refers to contractual cooperative partnerships with individual third parties. Relational synergy makes interactions with other firms more profitable by governing business cooperatively, not competitively (Dyer and

Singh 1998), and thus, transacting more effectively; each not only attracts more customers (an internal synergy) but also transacts more effectively with each of its customers by offering better terms for both sides (a relational synergy) (Feldman and Hernandez, 2021).

The next level is network synergy, comprising the collaborative firms' direct and indirect cooperative ties. Network synergies are driven by inheriting new ties that the partnering firms bring to each other's pre-existing network (additive) or eliminating redundant ties that the partners have in common (subtractive) (Hernandez and Shaver 2019). Moreover, by interacting with pre-existing business networks, partners interact with various institutional stakeholders in the non-market environment (Baron 1995).

Non-market synergies can result from external institutional relationships and may require dynamic political capabilities (Čirjevskis, 2022a). Whereas network synergy and relational synergies require comparatively low integration or moderate integration (e.g., strategic alliance), non-market synergies require the highest integration relative to the others (e.g., merger and acquisition). Thus, the time required to initially achieve each of those synergy types increases (on average) in that order. Damodaran (2012) defined the formula of collaborative synergy as follows: the value of collaborative synergies equals the values of the combined firms, with synergy minus the value of the separated firms without synergy. Because this specific paper's interest is the application of real options valuation to measure these collaborative synergies, the paper next discusses the traditional valuation of collaborative synergies as well as simple and advanced real options application to measure it.

2.2 Valuing collaborative synergies: discounted free cash flows, net present value, and real options.

Even though the discounted free cash flows (DFCF) technique is the most widely used approach for investment valuation, standard Net Present value (NPV) techniques do not consider the flexibility embedded in the investment process (Benninga and Mofkadi, 2022). The recognition of managerial flexibility as a real option (a right but not an obligation) is an essential extension of the NPV analysis. Strategic synergies can be considered as a real option for growth that is opened by a merger or an acquisition and can add market value. However, a sequential compound option is put in place when a specific real option's value will be stipulated by the value of the next real option (call-on-call option) (Copeland and Keenan 1998). Therefore, at each stage, the investment can be re-evaluated and (possibly) abandoned or expanded (Benninga and Mofkadi, 2022)

Respectively, investing in a cross-border strategic alliance can be considered as exercising the first real option to provide alliance-based collaborative synergies, which in turn leads to the generation of second real options, such as the option to acquire or the option to abandon (Li et al. 2007). For instance, the sequential compound option could be employed when two retail giants like Carrefour and Tesco had initiated a strategic alliance in 2018, that in turn could have gone to the merger. Two retailers had divorced choosing the option to abandon in 2021 due to the strong impact of the institutional context (Čirjevskis, 2022a). Moreover, the volatility of an acquirer's stock price at the time of an acquisition announcement is also an important feature of sequential acquisitions of ventures when MNEs pursue horizontal integration strategies from alliance to the total acquisition of an international venture.

The Black-Scholes option pricing model (BSOPM) is one of the numerically easiest models for valuing options of any kind. However, the analyst should recognize that the assumptions given in BSOPM valuation are fixed, specifically, constant volatility (σ), constant underlining value (S_0), constant risk-free rate (r), no exercise before the final option maturity, and thus, are not relevant to

the real options when MNE sequentially acquires an international venture, and when stock volatility of MNE and future market values of partners significantly change after the announcement of the full acquisition.

For instance, Natura Cosméticos S.A. (Brazil) had pursued an acquisition strategy from the partial acquisition (alliance) of Emeis Holdings (Australia) operated under the Aesop (Aesop) brand in 2012 to a total acquisition in 2016 year; the stock volatility of Natura Cosméticos S.A and the future market values were noticeably changed at the time of deciding on a full takeover (Čirjevskis, 2023). In such circumstances, the growth option is American and not a BSOPM option but can be valued as a series of Black-Scholes call options (Benninga and Mofkai, 2022).

2.3. Simple and Advanced Real Options Valuation of Collaborative Synergies with Binomial Lattices

The roots of real options theory date to 1977, when the concept was first introduced. Since then, it has attracted considerable attention, although initially academic. Nowadays, companies tend to recognize the benefits of real option application but still are reticent to apply it in practice. Real options theory recognizes the strategic value of managerial flexibility to take alternative courses of action over time. Copeland et al. (2000) argue that the fact that the options exist does not mean that they are optimally managed because managers “are usually not familiar with the methodological advances that have made real options easier to apply and to understand”(p. 416).

The value of a real option is derived from the uncertainty surrounding either the underlying asset (most commonly—FCFs) or another real option (Copeland and Keenan 1998; Mun 2003, p. 74). Real options, whose value depends on the successful implementation of other options, may be collectively referred to as sequential compound options (Damodaran 2005). Additionally, if there

is more than one source of uncertainty associated with the investment, then such options are known as rainbow options (Copeland and Keenan 1998).

Collaborative synergies can be viewed as a simple real option value (market value added) that is created in a merger or an acquisition. However, a sequential compound option exists when a particular real option's value will be determined by the value of another real option, not an underlying asset per se (Copeland and Keenan 1998). In this vein, initiating a cross-border alliance can be viewed as exercising the initial option to generate alliance-based synergies, which in turn leads to the creation of other real options, such as the option to merge and acquire or the option to abandon (Li et al. 2007).

For instance, the sequential compound option could be employed when a strategic alliance goes to acquisition as happened in 2014 with the Italian Fiat and American Chrysler companies. After nursing Chrysler to health in a strategic alliance within five years since 2009, Fiat acquired the remaining shares and owned 100% of Chrysler via a merger in 2014 and has just completed its merger with the PSA group in 2021 (Guillaume et al. 2021).

Recombining binomial lattices are one of the most flexible methods to solve a real options problem due to their (relatively) simple calculus and illustrative appeal. This has led to enduring and widespread acceptance of the recombining binomial approach. Currently, it is the most used method to solve a real options problem (Copeland et al. 2000, p. 407; Mun 2002, p. 100; Damodaran 2005; Nembhard and Aktan 2009, p. 25).

Non-recombining binomial lattices are more robust but with a higher number of periods that are also more difficult to calculate. Therefore, while such lattices are not preferred conventionally, they are needed for real options with changing volatility when volatility changes over time (Mun

2002, pp. 232–39; Brach 2003, p. 61), particularly, an option with changing volatilities (Kodukula and Papudesu 2006, p.168). When it comes to the measurement of collaborative synergies, the real option with changing volatility can be used when an acquirer pursues an acquisition strategy from partial acquisition to total acquisition and the stock volatility of the acquirer changes over time.

Volatility change is a typical feature of sequential acquisitions of ventures when MNEs pursue integrative strategies from partial acquisition or alliance to the total acquisition of an international venture. In such circumstances, the riskiness of obtaining collaborative synergies can rise dramatically at the time of an announcement of a full takeover. Valuing collaborative synergies with the simple real options, the stock volatility of the acquirer is assumed to be relatively constant over the option's life.

However, if the stock volatility is changed during the option life (a duration of obtaining synergy), it can be accounted for by modifying the non-recombining binomial method. For example, Natura Cosméticos S.A. (Brazil) had pursued an acquisition strategy from the partial acquisition of Emeis Holdings (Australia) operated under the Aesop (Aesop) brand in 2012 to a total acquisition in 2016 year; however, the stock volatility of Natura Cosméticos S.A was noticeably changed at the time of deciding on a full takeover. The application of a simple real option instead of an advanced real option with changing volatility would have provided an inaccurate result of synergy valuation.

The cumulated market value of collaborative business partners before the announced deal terms, excluding the week of the announcement (four-week average), replaces the stock price investment required to obtain the asset (So); the hypothetical future market value of the separated entities forecast by the DCF or EV-based multiples replaces the strike price (E), the expectation of management on obtaining collaborative synergy or the synergy life cycle replaces the time to expiration (T); the domestic three-month rate leading to the collaborated partner replaces the risk-

free rate of return (rf); and the annualized standard deviation of return after the deal announcement replaces the stock return variance (σ) (Dunis and Klein 2005).

The present values of the collaborated firms are dependent on synergies and collaboration happens only when the market values of collaborative partners are higher than without collaboration. Thus, summarizing the arguments regarding the real options valuation of collaborative synergies, the author formally proposes,

Proposition 1. Non-recombining lattices with changing volatilities can be bundled with sequential compound real options to value collaborative synergies when MNE is pursuing horizontal integration from partial acquisition to the total acquisition of an international venture.

3. Research design and methodology

The explanatory nature of the paper's research question ("how") prompted the author to conduct an explanatory case study (Eisenhardt and Graebner 2007). The paper employs an explanatory case study to obtain a "more robust theory because the propositions are more deeply grounded in varied empirical evidence" (Eisenhardt and Graebner 2007, p. 27). Yin argued that explanation can always occur as part of a description and the whole interpretation that is dedicated to explaining how or why events have come about (Yin 2011). Moreover, "when a study is preoccupied with an overarching explanation, the explanation drives the structure of the entire study" (Yin 2011, p. 216), as in the current paper. This paper relies on an extensive archival search that included company reports, internal documents, industry publications, and analyst dates to value the collaborative synergy of MNE's sequential acquisition of the target firm with advanced real options answering the research question.

As objects of research, the author has chosen a global player who is especially active in the global operation scope in the beauty industry: Natura Cosméticos S.A. Eisenhardt and Graebner (2007) argued that it is appropriate to use a case study if phenomenon-driven research questions ("how") are the subjects of investigation. A case study can be considered an experiment that could be repeated (Yin 2011). When it comes to the presentation of evidence, Eisenhardt and Graebner (2007) state that there is no strict norm in large-scale studies when presenting results. The conceptual model of the research is presented in Figure 1.

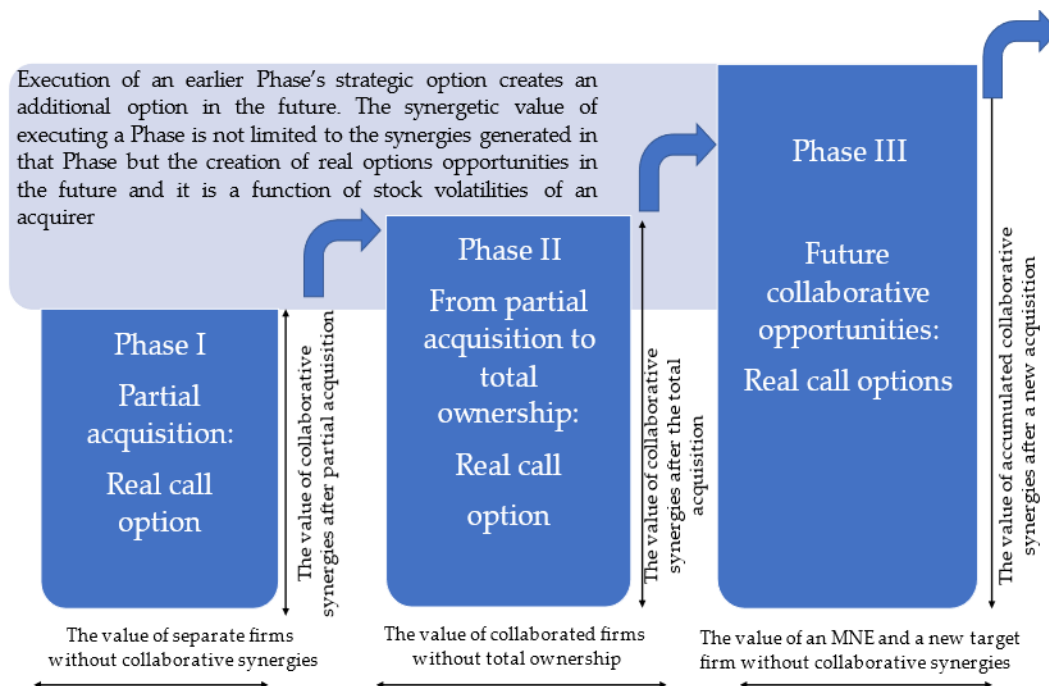


Figure 1. The conceptual model of the research (adopted from Čirjevskis (2022a) and modified).

The conceptual model's arrows correspond to the provided theoretical proposition and explain the sequences of the case study and how the research question will be answered: (1) how can value collaborative synergies be valued when an MNE is pursuing integrative strategies from partial

acquisition to the total acquisition of an international venture, and how do an MNE's stock volatility and future partners' firms value noticeably change at the time of deciding on a full takeover?

“A case study helps to explain both the process and outcome of a phenomenon through observation and analysis of the cases under investigation as it includes both quantitative and qualitative data” (Tellis 1997, p. 1). In this vein, as outlined in the literature review, first and foremost the value of the real option(s) is determined by the valuation method used in the calculations. Differing approaches will inevitably provide differing results.

In this research, the application of non-recombining lattices that integrate the application of two different advanced real options, specifically, the advanced real option with changing volatility when MNE's stock volatility is noticeably changing at the time of announcing a full takeover and the sequential compound real option (call-on-call) when future market values of partners are noticeably changing within four weeks before the announcement of the full acquisition. Having integrated two types of advanced real options in the cohesive analytical construct gives an accurate measurement tool to value the collaborative synergies of Aesop's sequential acquisition by Natura Cosméticos S.A. The collaborative synergies as the premium value of advanced real options were measured by employing an Excel spreadsheet in the Microsoft Office app.

4. Data Analysis and Interpretation: From Partial Acquisition to Total Ownership: Aesop's Acquisition by Natura Cosméticos S.A.

Based in Brazil and founded in 1969, Natura Cosméticos S.A., the seller of world-class wellness and beauty products, is the leading direct-selling company in Latin America. In December 2012

“Brazilian cosmetics company Natura Cosmeticos S.A. has agreed to buy a 65% stake in Australian high-end beauty-product retailer Emeis Holdings for USD 71.6 million, expanding its international presence” (Glazer 2012, p. 1). The stock volatility of Natura Cosméticos S.A on 20–27 December 2012 (one week after the announcement of partial acquisition) was about 24.0% (V-Lab 2022). Natura Cosméticos S.A. was expected to complete the deal by April 30, 2012. Emeis Holdings includes under the Aesop (Aesop) brand name across Australia, Asia, Europe, and North America including having a presence in Paris, Tokyo, and New York (Glazer 2012).

The partial acquisition enabled Natura Cosméticos S.A. to increase its exposure in the international markets outside of Latin America and integrated the core competencies of both firms generating strategic collaborative synergy. In December 2016 Natura Cosméticos S.A. acquired a whole 100% stake and obtained total ownership of Aesop. The stock volatility of Natura Cosméticos S.A on 20–27 December 2016 (one week after the announcement of the total acquisition) was about 40% (V-Lab 2022). The acquirer had pursued an acquisition strategy from partial acquisition to total acquisition; however, the stock volatility of Natura Cosméticos S.A. was noticeably changed (16% more) at the time of deciding on a full takeover. In this vein, first, the advanced real option with changing volatilities was applied to measure the value of the real option (synergies) within six years of this deal considering changing stock’s volatilities.

What is more, the future market values of collaborative partners had also changed within four weeks before the announcement of the full acquisition. Therefore, having extended real option with changing volatility by sequential compound real option (“call-on-call”), the paper has quantitatively measured all types of tacit synergies (the value in development) such as relational, network, and non-market that could be generated by this deal.

The duration of obtaining synergies was assumed to be six years which included the period from 2012 to 2016 (four years) when Natura Cosméticos S.A. kept 65% of Aesop stock-taking for four years and the period from 2016 to 2018 (two years) after the 100% acquisition of Aesop. The milestone year of 2018 was chosen to exclude the impact of the series of next sequential acquisitions of international ventures of Natura Cosméticos S.A., namely, the impact of competence-based synergies of USD 1.11 bn generated by Natura Cosméticos S.A.'s acquisition of The Body Shop within the years 2018–2020, and the impact of competence-based synergies was USD 2.8 bn as a result of the acquisition of Avon in the years 2019–2022 (Čirjevskis 2020a, pp. 15, 19).

Having qualitatively analyzed the secondary data (mainly open-source data) and quantitatively explored the tacit synergies with combined real options application the case studies research helped unpack both the antecedents (synergies creation) and consequences of a phenomenon (synergies valuation).

4.1. Prerequisites of Competence-Based Synergies of Natura Cosméticos S.A.'s Acquisition of the Aesop Brand of Emeis Holdings

Having assessed the potential of the synergies of the collaboration between Aesop and Natura Cosméticos S.A., it is obvious that the complementarity, compatibilities, and transferability of core competencies of Aesop and Natura Cosméticos S.A. helped them to develop their further growth. Aesop has obtained core competencies in geographic expansions in the cosmetic segment with a strong presence in department stores.

Over the years, Aesop launched in the United State market in 1990, followed by its expansion in Asia and Europe. “Their business model has been successful in various countries around the

world” (KPMG 2012, p. 10). Among other core competencies are a recognized brand and sustainable high-quality products in skin, body, and hair care as well as natural botanical ingredients used in the products for men, the household, and domestic animals (KPMG 2012).

Natura Cosméticos S.A.’s core competencies are in the research of users’ needs and behaviors, high-quality ingredients, brand management, and in e-commerce. What is more, Natura Cosméticos S.A.’s core competence is in delivering natural cosmetics and an ethical approach to producing cosmetics (Čirjevskis 2020b). The conclusion on the compatibilities and complementarities of their competencies and their impact on their global value chain is as follows: Natura’s and Aesop’s core competencies complement each other, thanks to their strong, loyal customer base all over the world, worldwide stores, brand management, and the same ethical principle of being a force for good. To measure tacit collaborative synergies (Čirjevskis 2022b), that Natura Cosméticos S.A. generated pursuing a strategy from partial acquisition to total acquisition, an advanced real option with changing volatilities and sequential compound options were used.

4.2. Measuring Collaborative Synergies with a Non-Recombining Lattice

In the simple real options valuation, the underlying volatility is assumed to be relatively constant over the option’s life. Therefore, a single volatility is employed across the binomial tree during the option duration. However, if the volatility is expected to change during the option’s life, it can be accounted for by modifying the binomial method. Start with the initial volatility factor, build the binomial tree, and calculate the asset values at each node of the tree using the corresponding “up” and “down” factors up to the time point where the volatility changes (Kodukula and Papudesu 2006). From that time point on, calculate the asset values using the new up and down factors related to the new volatility factor and the new risk-neutral probability (RNP) which will result in a non-

recombining lattice. The option value calculation method using backward induction will be the same for the entire tree (Kodukula and Papudesu 2006, p. 168).

First, to calculate and analyze the collaborative synergies of Natura Cosméticos S.A.'s acquisition of Aesop, a real option with changing volatility and sequential compound options will be used employing non-recombining lattices. The parameters of the non-recombining lattices are given in Table 1.

Parameters of Financial Options	Parameters of Real Options with Changing Volatility	Data
Stock price (So)	The cumulated market value of Aesop and Natura Cosméticos S.A. AUD 114.690 M (KPMG 2012, p. 28) or USD 110.3 (four-week average) before the announcement of the deal	The market capitalization of Natura Cosméticos S.A (NTCO) on 31 December 2012, was USD 12.287 bn (Finbox 2022a). The market value of Aesop was AUD 114.690 M (KPMG 2012, p. 28) or USD 110.3 M (Pound Sterling Live 2012). Therefore, the cumulated market value of the separated entities before the partial acquisition (So) equals USD 12.397 bn.
The strike price (alliance) (K)	The hypothetical future market value of the separate entities is forecast by the EV/EBITDA multiples of Aesop and Natura Cosméticos S.A. in 2012	In 2012, Natura Cosméticos S.A. consolidated EBITDA reached BRL 1,511 billion (Annual report Natura Cosméticos S.A. 2012, p. 6) and on 31 December 2012, the EV/EBITDA multiple was 17.4 (Finbox 2022b). Therefore, the hypothetical future

	market value of Natura Cosméticos S.A. as a separate entity was USD 12.847 bn. According to the KPMG report (KPMG 2012), Aesop's EBITDA in 2012 was AUD 6.852 M. As shown by KPMG, the median EV/EBITDA market multiples of comparable companies are equal to 12.2. (KPMG 2012, p. 30). Thus, the future value of Aesop without acquisition was AUD 83.5944 M or USD 80.4 M. Therefore, the hypothetical future market value of the separate entities was forecasted as USD 12.927 bn.
The strike price (acquisition) (K2) The hypothetical future market value of the separate entities is forecast by the EV/EBITDA multiples of Aesop and Natura Cosméticos S.A. in 2016	In 2016, Natura Cosméticos S.A.'s consolidated EBITDA was BRL 1,343.6 billion (Natura Cosméticos S.A. 2016, p. 17) and on 31 December 2016, the EV/EBITDA multiple was 9.2 (Finbox 2022b). Therefore, the hypothetical future market value of Natura Cosméticos S.A. as a separate entity was USD 3.796 bn. (Exchange rate, 2023). According to Statista(2023), Aesop's EBITDA in 2016 was BRL 115 million. As shown by KPMG, the median EV/EBITDA market multiples of comparable companies are equal to 12.2. (KPMG 2012, p. 30).

	Thus, the future value of Aesop without full acquisition was BRL 1403 million or USD 0.431 bn. Therefore, the hypothetical future market value of the separate entities in 2016 was forecasted as USD 4.227 bn
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Stock volatility of Natura Cosméticos S.A.'s an acquirer the historical volatilities within the during the time of first week after the announcement partial ownership of the partial acquisition of Aesop: of a target's shares 20 December 2012–27 December (σ1)	The stock volatility of Natura Cosméticos S.A on 20–27 December 2012 (one week after the announcement of partial acquisition) was 24.0% (V-Lab 2022).
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Stock volatility of an acquirer during Natura Cosméticos S.A.'s the time of total historical volatilities within the ownership of a first week after the target's shares in announcement of the full the next two years acquisition (σ2)	The sock volatility of Natura Cosméticos S.A on 20–27 December 2016 (one week after the announcement of the total acquisition) was 40% (V-Lab 2022).
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Risk-free rate (r1)	The annualized risk-free interest rate in Brazil in 2012	The annualized risk-free interest rate in Brazil in 2012 was 11.0% (Trading Economics 2022).
Risk-free rate (r2)	The annualized risk-free interest rate in Brazil in 2016	The annualized risk-free interest rate in Brazil in December 2016 was 16.44% (World Development Bond, 2023).

Time to maturity (T1 and T2)	The duration of gaining collaborative tacit synergy when Duration (T1) was the period from 2012 to 2016 (four years) when Natura Cosméticos S.A. kept 65% of Aesop's stock was four years	
	Aesop's stock. The time of synergy expectation (T2) (T1). The time to maturity after the by management during the period from 2016 to 2018 full acquisition was assumed to be is two years after the 100% acquisition of Aesop. two years (T2)	
Time increment (δt)	One-year time intervals for six years to account for the change in the up and down factors of the lattice-based real options method	
	1.0 year	

Source: Developed by the author.

Binomial option pricing model's parameters: Natura Cosméticos S.A. kept 65% of Aesop's stock from 2012 until 2016 as shown in Table 2.

Table 2. Binomial option pricing model's parameters: Natura Cosméticos S.A. kept 65% of Aesop's stock (2012–2016) with a volatility of 24% and a risk-free rate of 11%

Time increment (years)	$\delta t = \frac{t}{N}$	1.00
Up factor (u)	$u = e^{\sigma\sqrt{\Delta T}} = \frac{1}{d}$	1.271
Down factor (d)	$\frac{1}{u}$	0.787
Risk-neutral probability (p)	$p = \frac{e^{r\Delta T} - d}{u - d}$	0.680

Source: Developed by the author.

Second, since the up and down factors depend on the volatility factor, which changes after four years up to 40%, there will be two sets of up and down factors corresponding to the two volatility factors. They will be denoted by u , u' , d , and d' , respectively. “There will also be two risk-neutral probability factors (p and p') corresponding to the two sets of up and down factors” (Kodukula and Papudesu 2006, p. 169) as shown in Tables 3.

Table 3. Binomial option pricing model’s parameters: Natura Cosméticos S.A. kept 100% of Aesop’s stock (2017–2018) with a volatility of 40% and the risk-free rate of 16.44%

Time increment (years)	$\delta t = \frac{t}{N}$	1.00
Up jump factor (u')	$u = e^{\sigma\sqrt{\Delta T}} = \frac{1}{d}$	1.492
Down jump factor (d')	$\frac{1}{u}$	0.670
Risk-neutral probability (p')	$p = \frac{e^{r\Delta T} - d}{u - d}$	0.619

Source: Developed by the author.

Having constructed a binomial tree, one-year time intervals for six years have been used to account for the changes in the up and down factors after the first four years. After the first four years (the period 2012–2016), the volatility and risk-free rate increased, and the up and down factors changed as well. Therefore, for the next two years (the period 2017–2018), the joint firms’ market values are calculated using u' and d' , and the binominal tree will no longer be recombining starting in the fifth year as shown in Figure 2 where the top values at each node represent the joint firms’ market values.

Then, having used backward induction, the option values at each node of the binomial tree have been calculated. According to the (Koulataka and Papudesu 2006) recommendation, the value of p' as the risk-neutral probability (RNP) for nodes in years 6, 5, and 4 was used. For the nodes in years 3–1, and year 0, however, the value of p as the risk-neutral probability (NP) was used (Kodukula and Papudesu 2006, p. 172). These are the bottom italicized numbers in Figure 1. Therefore, the expected value of collaborative synergies when an MNE is pursuing integrative strategies from partial acquisition to the total acquisition of an international venture and the MNE's stock volatility is noticeably changing at the time of deciding on a full takeover is USD 7.26 bn at the bottom of node "A" as shown in Figure 2.

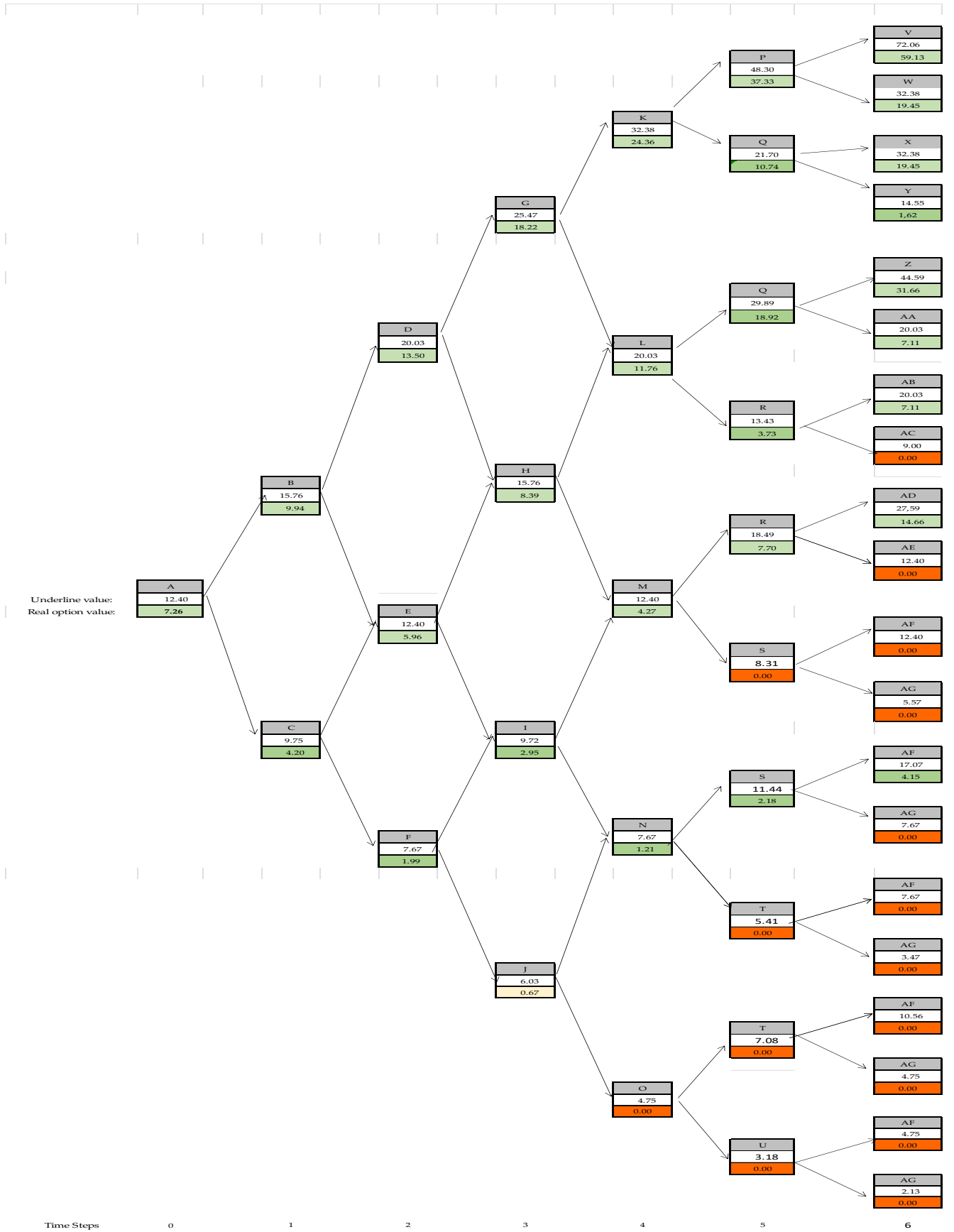


Figure 2. Non-recombining lattices measuring collaborative synergies of Aesop's sequential acquisition by Natura Cosméticos S.A by real options with changing volatility within the 2012–2018 years' period. Source: Developed by the author.

The volatility of the market capitalization of an MNE is expected to remain the same during the duration of obtaining collaborative synergy in partial acquisition deals but may change due to the announcement of a total acquisition, such as those encountered by the Natura Cosméticos S.A. case study. If the volatility (σ_1) and the risk-free rate (r_1) were assumed to be constant (24% and 11%) during the sequential acquisition of Aesop by Natura Cosméticos S.A., the collaborative synergies (as the option value) would be USD 6.23 bn (Čirjeviskis, 2023), whereas with 40% volatility (σ_2) and 16,44% risk-free rate (r_2) that augmented after four years the synergy result increases up to USD 7.26 bn. Further sensitivity analysis shows the following results regarding the volatility and synergetic value's correlations: 50%—USD 7.49 bn, 45%— USD 7.37 bn, 35%—USD 7.15 bn, 20%—USD 6.86 bn.

Therefore, consideration of volatility changes, when an MNE is pursuing integrative strategies from partial acquisition to total acquisition, provides a more accurate prediction of the collaborative synergies of the deal which partly justifies the theoretical proposition.

Third, the paper bundles real options with changing volatility with sequential compound real options. Sequential compound options are simply referred to as compound or (corporate) growth options (Copeland and Keenan 1998; Li et al. 2007). Kumar (2005) examined when terminating an alliance via acquisition or divestment creates value for partners. There are two sequential options available on the synergies of collaborative strategy. A merger and acquisition (second call

option) are dependent on an alliance (first call option). The option value calculations (synergies) are done in sequence, starting with the longest option (acquisition) and using the new strike price (K_2) and the new risk-free rate (r_2) as shown in Fig. 3.

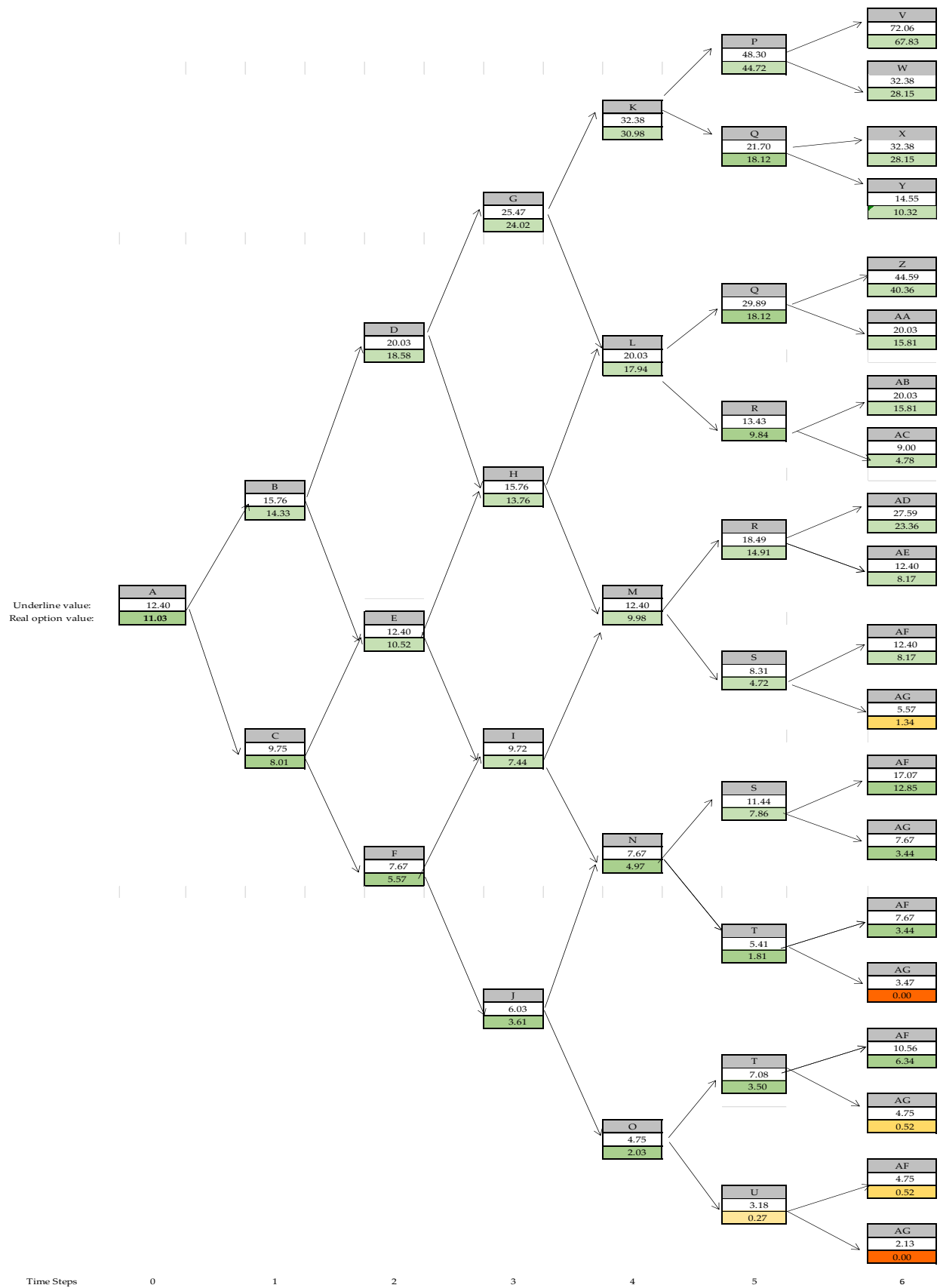


Figure 3. Binomial lattice for the acquisition (successor) option of the sequential compound option (in USD billion). Source: Developed by the author.

Because the longest option has been already done (Fig.3), to calculate the option values for the predecessor option (alliance) for its four-year lifetime, the option values of the successor (acquisition) as the underlying values were used following Kodukula and Papudesu recommendations. “As in the binomial model, the option value of the successor option becomes the asset value for the predecessor option” (Kodukula and Papudesu 2006, p. 156) as shown in Figure 4.

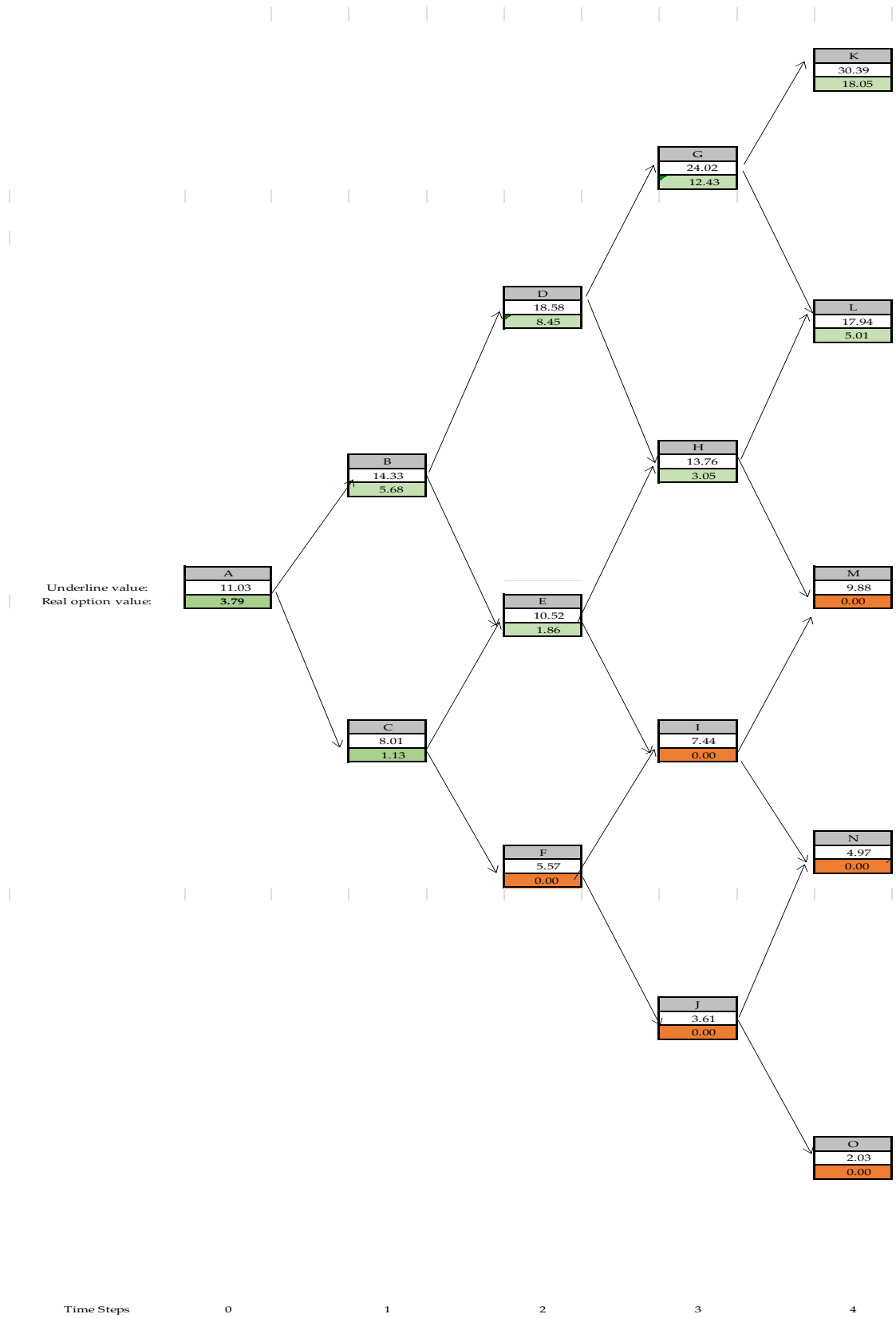


Figure 4. Binomial lattice for the alliance (predecessor) option of the sequential compound option (in USD billion). Source: Developed by the author.

In this case study, the option lives of four and six years are used for an alliance and acquisition, respectively. The individual option lives represent the expectation of management on obtaining collaborative synergy. A closer examination of the Natura and Aesop collaborative synergy's options results indicates that the real option valuation for the options to ally and the option to acquire are USD 3.79 bn and, USD 11.03 bn respectively. The combined sequential real option with changing volatility option (synergies) calculation justifies the provided theoretical proposition as shown in Figure 5.

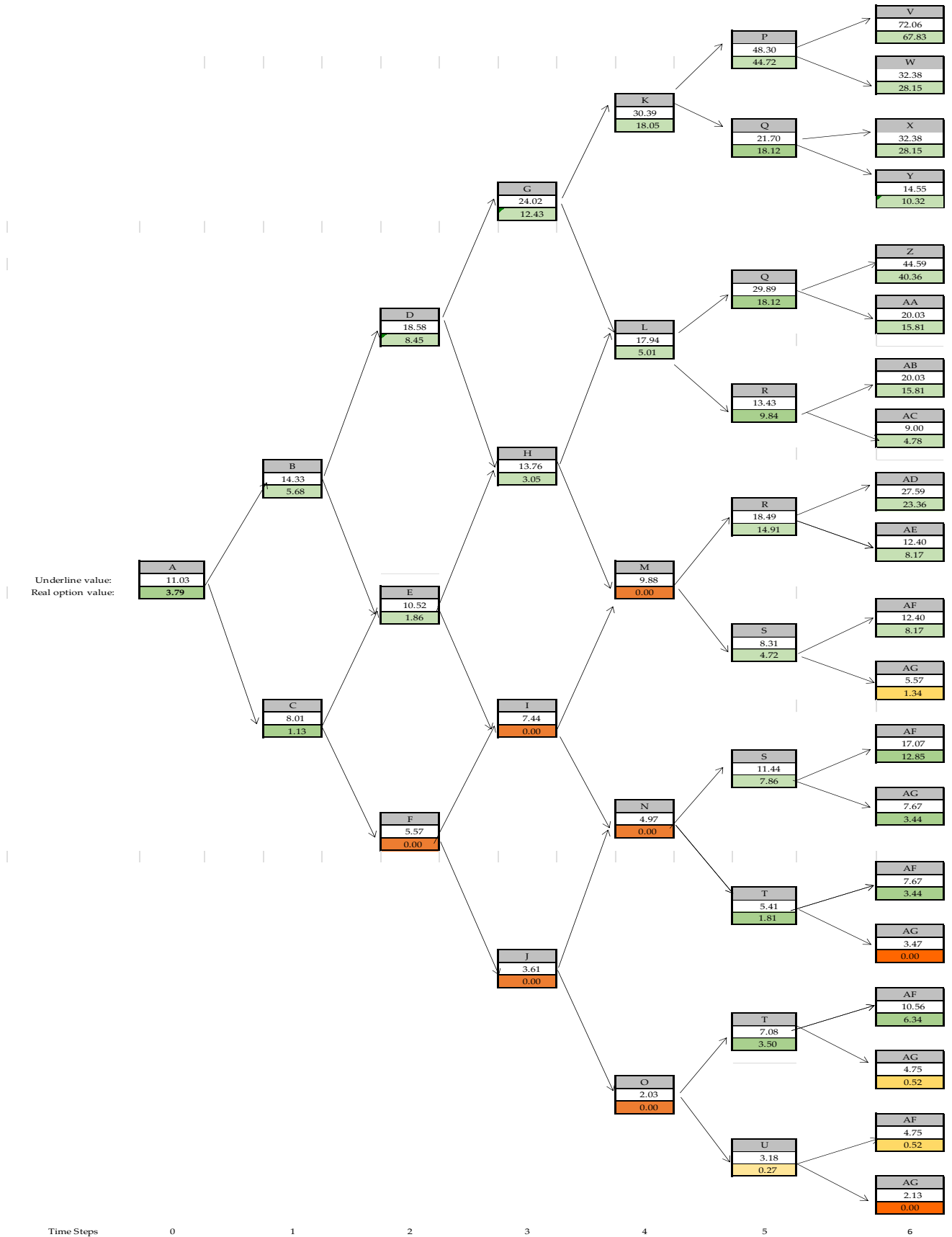


Figure 5. Non-recombining binominal lattice for the combined sequential compound option and option with changing volatilities (in € billion). Source: Developed by the author.

5. Discussions

The connection of the theoretical (forecasted) EV with real market EV largely depends on the timing of the stock prices taken and it is entirely difficult to justify very precisely not only in the current research but in practice as well. Meanwhile, having compared the calculated market value added (real options value) with Aesop's and The Body Shop's acquisition (takeover) premium paid, it can be concluded that these sequential international acquisitions have added market value to the Natura Group thanks to the generated collaborative synergies of these acquisitions. Moreover, as stated, by David Boynton (The Body Shop), João Paulo Ferreira (Natura), and Michael O'Keeffe (Aesop) in their CEOs message, "With Natura's original purpose: 'We exist to fight for a fairer and more beautiful world' that group can have a positive impact on the world, that is strengthened by synergies, gains in efficiency, and the integration of three businesses" (Natura Cosméticos S.A. 2018, Management report, p. 1).

Regarding the contribution to a real options theory (ROT), Trigeorgis and Reuer (2017, p. 59) encourage new methodologies with a greater focus on the individual project level of analysis from a strategic perspective, and the collection of more data on individual real option cases. The current paper contributes to this scientific discussion and seeks to address the research gaps. What is more, ROT acknowledges the importance of resources, knowledge, and capabilities, but it focuses its attention on new sources of competitive advantage: to acquire and exercise appropriate growth options in the right geographic location (Chi et al. 2019; Chang and Rosenzweig 2001). This paper justifies this proposition by adding fresh empirical evidence on how Natura Cosméticos S.A is creating a cosmetic powerhouse by exercising growth options on a global scale.

Thanks to collaborative synergy, Natura Cosméticos S.A. is demonstrating strong acquisition-based dynamic capabilities (Anand et al. 2005; Čirjevskis 2017) by sensing global market demand for eco-friendly cosmetic products, seizing opportunities through the acquisition of companies with the same principle of being a “force for good” and a very similar customer value proposition, and transforming their outbound logistics of the global value chain by globalizing its marketing operations as well as promoting a socially responsible business model of being “a force for good”, on a global scale.

6. Conclusions, Contributions, Limitations, and Future Work

The importance of global strategy is indisputable in international business (IB) research (Leiblein et al. 2022) “Applications of real options theory to international business research have generated considerable new insights, advancing our understanding of fundamental IB questions including market entry or exit, entry mode choice, and multinational networks” (Chi et al. 2019, p. 547). This current examination of real options theory’s key concepts and mechanisms of their application to international business strategy shows the richness and strong potential of real options theory as it extends its reach beyond a mere prediction of the fundamental relationship between uncertainty, managerial flexibilities, and valuation.

The incorporation of combined advanced real options into the synergy valuation measures managerial flexibility arising from sequential acquisitions of international ventures. This is a major theoretical and managerial contribution of the current paper to international business discipline and real options theory. Bettanti and Lanati argued that from a value-creation perspective, future studies can focus on improving the usefulness of real options logic and making it more accessible to firms and managers coping with riskiness issues (Bettanti and Lanati 2022). This paper contributes to this scientific discussion by demonstrating how combined advanced real options

approaches can help to deal with synergetic uncertainty in international business strategy development. Moreover, Chi et al. (2019) argued that future research on real options theory “might yield more precise predictions on the conditions for two MNEs” collaborators and the dynamics of their collaborative relationship across stages or over time (Chi et al. 2019, p. 545).

This paper also contributes to this scientific quest by providing fresh insights into valuations of the collaborative synergies with combined real options, specifically, with changing volatility and sequential compound options (with non-recombining binomial lattices) when an MNE is pursuing integrative strategies from partial acquisition to the total acquisition of an international venture and an MNE’s stock volatility and future market values of collaborating firms are noticeably changing at the time of deciding on a full takeover. Leiblein et al. also argues that real options models may prove to be a fruitful approach to the development and evaluation of global strategies (Leiblein et al. 2022). Having applied the theoretical lens of advanced real options theory, the paper may prove to be a fruitful approach to the development and evaluation of global strategies’ synergies.

When it comes to limitations, non-recombining binomial lattices, while not conventionally preferred, are needed for rainbow options and for an option with changing volatilities (Mun 2002, pp. 232–39; Brach 2003, p. 61; Kodukula and Papudesu 2006, p. 168). The current research has justified those arguments. Even though non-recombining binomial lattices are robust in the application of advanced real options, they are also more difficult to calculate with a higher number of periods (six years in the current paper) and that is a major limitation of the usage of this method in practice.

The research also exemplifies the limitation of the real option application to measure a collaborative synergy of sequential acquisitions of international ventures. It is difficult to validate

the synergetic effect of one isolated acquisition deal when several acquisitions happen within the anticipation of the duration of obtaining synergies such as Natura Cosméticos S.A.'s 100% acquisition of Aesop in 2016, the acquisition of The Body Shop in 2017, and the acquisition of Avon in 2019.

This research, being explanatory and interpretive, raises several opportunities for future research, both in terms of theory development and findings validation. The theoretical proposition discussed in the current research can be employed to generate several hypotheses for further empirical testing using a broader sample and quantitative research methods on MNEs' sequential acquisitions of international ventures or when an MNE pursues collaborative strategies from alliance to full ownership (e.g., the Fiat Chrysler Automobiles strategic deal within the 2009–2014 period). Certainly, the testing of the proposition presented here should help determine the applicability of real options valuation to sequential M&A deals and bring this emerging theory closer to international business research.

References

- Anand, Jaideep, Laurence Capron, and Will Mitchell. 2005. Using acquisitions to access multinational diversity: Thinking beyond the domestic versus cross-border M&A comparison. *Industrial and Corporate Change* 14: 191–224.
- Annual Report Natura Cosméticos S.A. 2012. Available online: https://www.google.com.hk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKewiU2qjykp8AhXN4DgGHRynB9cQFnoECAsQAQ&url=https%3A%2F%2Fwww.annualreports.com%2FHostedData%2FAnnualReportArchive%2Fn%2FNYSE_NTCO_2012.pdf&usg=AOvVaw1Mp1t8Y17vcA0HFMxPD429 (accessed on 24 November 2022).
- Baron, David P. 1995. Integrated strategy: Market and nonmarket components. *California Management Review* 33: 47–65.
- Bettanti, Alberto, and Antonella Lanati. 2022. A quantitative approach to risk-driven strategy formulation: A case study introducing a real-options framework. *Front Manage Bus* 3: 238–51.
- Brach, Marion. 2003. *Real Options in Practice*. Hoboken: John Wiley & Sons, Inc.
- Benninga, Simon and Mofkadi, Tal. 2022. *Financial Modeling*, Fifth Edition, The MIT Press, pp. 1048.
- Chang, Sea-Jin, and Philip M. Rosenzweig. 2001. The choice of entry mode in sequential foreign direct investment. *Strategic Management Journal* 22: 747–76.
- Chen, Jun, Tao-Hsien Dolly King, and Min-Ming Wen. 2015. Do joint ventures and strategic alliances create value for bondholders? *Journal of Banking & Finance* 58: 247–67.
- Chi, Tailan, Li Jing, Trigeorgis G Lenos, and Tsekrekos E. Andrianos. 2019. Real options theory in international business. *Journal of International Business Studies* 50: 525–53.

- Copeland, Thomas E., and Philip T. Keenan. 1998. Making Real Options Real. *McKinsey Quarterly* 3: 128–41.
- Copeland, Tom, Tim Koller, Jack Murrin, and McKinsey & Company, Inc. 2000. *Valuation Measuring and Managing the Value of Companies*, 3rd ed. New York: John Wiley & Sons, Inc.
- Čirjevskis, Andrejs. 2017. Acquisition-based dynamic capabilities and reinvention of business models: Bridging two perspectives together. *Entrepreneurship and Sustainability Issues* 4: 516–25
- Čirjevskis, Andrejs. 2020a. Valuing Reciprocal Synergies in Merger and Acquisition Deals Using the Real Options Analysis. *Administrative Sciences* 10: 27.
- Čirjevskis, Andrejs. 2020b. Brazilian Natura & Co: Creating cosmetic powerhouse. Empirical evidence of competence-based synergies in M&A processes. *Academia Revista Latinoamericana de Administración* 34: 18–42
- Čirjevskis, Andrejs. 2022a. Valuing Collaborative Synergies with Real Options Application: From Dynamic Political Capabilities Perspective. *J. Risk Financial Manag.* 15(7), 281, 1–22.
- Čirjevskis, Andrejs. 2022b. A Discourse on Foresight and the Valuation of Explicit and Tacit Synergies in Strategic Collaborations. *Journal of Risk and Financial Management* 15: 305.
- Čirjevskis, Andrejs. 2023. Measuring Collaborative Synergies with Advanced Real Options: MNEs' Sequential Acquisitions of International Ventures. *J. Risk Financial Manag.* 2023, 16(1), 11.
- Damodaran, Aswath. 2005. The Value of Synergy. Available online: <https://pages.stern.nyu.edu/~adamodar/pdfiles/papers/synergy.pdf> (accessed on 22 November 2022).
- Damodaran, Aswath. 2012. Valuation: Packet 3 Real Options, Acquisition Valuation, and Value Enhancement. Available online: <https://pages.stern.nyu.edu/~adamodar/pdfiles/eqnotes/packet3a.pdf> (accessed on 29 April 2022).
- Dunis, Christian, and Til Klein. 2005. Analyzing Mergers and Acquisitions in European Financial Services: An Application of Real Options. *European Journal of Finance* 11: 339–55.
- Dyer, Jeffrey H., and Harbir Singh. 1998. The relational view: Cooperative strategy and sources of inter-organizational competitive advantage. *Academy of Management Review* 23: 660–79.
- Eisenhardt, Kathleen M., and Melissa E. Graebner. 2007. Theory building from cases: Opportunities and challenges. *Academy of Management Journal* 50: 25–32.
- Exchange Rates UK. 2022. Brazilian Real to US Dollar Spot Exchange Rates for 2020. Available online: <https://www.exchangerates.org.uk/BRL-USD-spot-exchange-rates-history-2020.html> (accessed on 22 December 2022).
- Exchange rate. 2023. Brazilian Real to US Dollar Spot Exchange Rates for 2016. <https://www.exchangerates.org.uk/BRL-USD-spot-exchange-rates-history-2016.html> (accessed 25.06.2023)
- Feldman, Emilie R., and Exequiel Hernandez. 2021. Synergy in Mergers and Acquisitions: Typology, Lifecycles, and Value. *Academy of Management Review*, 1–57.
- Finbox. 2022a. Market Capitalization NTCO. Available online: <https://finbox.com/NYSE:NTCO/explorer/marketcap> (accessed on 8 October 2022).
- Finbox. 2022b. EV/EBITDA for Natura & Co Holding S.A. Available online: https://finbox.com/NYSE:NTCO/explorer/ev_to_ebitda_ltm (accessed on 9 October 2022).
- Glazer, Emily. 2012. Brazil's Natura Buys Aesop Majority Stake. *The Wall Street Journal*. Available online: <https://www.wsj.com/articles/BL-DJAUB-2115> (accessed on 23 November 2022).
- Guillaume, Gilles, Giulio Piovaccari, and Nick Carey. 2021. Analysis-For Peugeot and FCA Completing Their Merger Is Just the Start. *Reuter*. Available online: <https://www.reuters.com/article/us-fiat-chrysler-m-a-psa-idUKKBN2980R3> (accessed on 8 April 2022).
- Hao, Bin, Jiangfeng Ye, Yanan Feng, and Ziming Cai. 2020. Explicit and tacit synergies between alliance firms and radical innovation: The moderating roles of interfirm technological diversity and environmental technological dynamism. *R&D Management* 50: 432–46.

Haspeslagh, Philippe C., and David B. Jemison. 1991. *Managing Acquisitions: Creating Value Through Corporate Renewal*. New York: Free Press.

Hernandez, Exequiel, and Myles J. Shaver. 2019. Network synergy. *Administrative Science Quarterly* 64: 171–202.

KPMG. 2012. Natura Cosméticos S.A. Valuation Report of Emeis Holding ty Ltd. Available online: <https://docplayer.net/4158581-Natura-cosmeticos-s-a.html> (accessed on 22 November 2022).

Kogut, Bruce. 1991. Joint Ventures and the Option to Expand and Acquire. *Management Science* 37: 19–33.

Kodukula, Prasad, and Chandra Papudesu. 2006. *Project Valuation Using Real Options: A Practitioner's Guide*. Fort Lauderdale, Florida: Ross Publishing, Inc., pp. 40–48, 53–66, 72–96, 110–35.

Kumar, Shyam M. V. 2005. The value from acquiring and divesting a joint venture: A real options approach. *Strategic Management Journal* 26: 321–31.

Leiblein, Michael J., Jeffrey J. Reuer, Marcus M. Larsen, and Torben Pedersen. 2022. When are global decisions strategic? *Global Strategy Journal* 12: 714–37

Li, Jing. 2007. Real Options Theory and International Strategy: A Critical Review. *Advances in Strategic Management* 24: 67–101.

Nembhard, Harriet Black, and Mehmet Aktan. 2009. *Real Options in Engineering, Design, Management, and Operations*. Boca Raton: CRC Press, pp. 7–32, 158.

Mun, Johnathan. 2002. *Real Options Analysis, Tools and Techniques for Valuing Strategic Investments and Decisions*. Hoboken: John Wiley and Sons.

Mun, Johnathan. 2003. *Real Options Analysis Course: Business Cases and Software Applications*. Hoboken: John Wiley and Sons.

Mun, Johnathan. 2010, *Modeling Risk, Applying Monte Carlo Risk Simulation, Strategic Real Options, Stochastic Forecasting, and Portfolio Optimization*. John Wiley & Sons, Inc, Hoboken, New Jersey.

Natura Cosméticos S.A. 2016, Annual report.

https://www.annualreports.com/HostedData/AnnualReportArchive/n/NYSE_NTCO_2016.pdf (accessed 25.06.2023)

Natura Cosméticos S.A. 2018. Individual and Consolidated Financial Statements for the Year Ended 31 December 2018. Management Report. Available online: https://mz-filemanager.s3.amazonaws.com/9e61d5ff-4641-4ec3-97a5-3595f938bb75/central-de-resultadoscentral-de-downloads/228be03dc888c45517d2f0e6a5ca64218fc8fd8bbe61d42a6ed1013d3fca5c25/4q18_financial_statements_in_international_standards.pdf (accessed on 17 November 2022).

Pound Sterling Live. 2012. Available online: <https://www.poundsterlinglive.com/history/AUD-USD-2012> (accessed on 9 October 2022).

Ragozzino, Roberto, Jeffrey J. Reuer, and Lenos Trigeorgis. 2016. Real option in strategy and finance. *Current Gaps and Future Linkages. Academy of Management Perspective* 30: 428–40.

Raisch, Sebastian, and Michael L. Tushman. 2016. Growing new corporate businesses: From initiation to graduation. *Organization Science* 27: 1237–57.

Statista. 2023. EBITDA of Aesop from 2013 to 2022, <https://www.statista.com/statistics/1381657/aesop-ebitda/> (accessed 25.06.2023),

Tellis, Winston M. 1997. Introduction to Case Study. *The Qualitative Report* 3: 1–14.

Trading Economics. 2022. Brazil Interest Rate. Available online: <https://tradingeconomics.com/brazil/interest-rate> (accessed on 9 October 2022).

Trigeorgis, Lenos, and Jeffrey J. Reuer. 2017. Real options theory in strategic management. *Strategic Management Journal* 38: 42–63.

Xu, Dean, Zhou Changhui, and Phan H. Phillip. 2010. A real options perspective on sequential acquisitions in China. *Journal of International Business Studies* 41: 166–74.

Yin, Robert K. 2011. *Qualitative Research from Start to Finish*. New York: The Guilford Press a Division of Guilford Publications, Inc.

V-Lab. 2022. Natura Cosmeticos SA GARCH Volatility Analysis. Available online: <https://vlab.stern.nyu.edu/volatility/VOL.NATU3%3ABZ-R.GARCH> (accessed on 9 October 2022).

Wang, Vin, and Joseph Mahoney. 2022. An MNE's Governance Choice of Acquiring Its International Joint Venture: Extending the Real Options Lens. Available online: <https://www.strategicmanagement.net/london/tools/session-details?sessionId=2446> (accessed on 14 October 2022)

World Development Bond. 2023. Brazil 10 Years Bond - Historical Data <http://www.worldgovernmentbonds.com/bond-historical-data/brazil/10-years/> (accessed 25.06.2023)

Study on the Shopping Behavior of Taiwanese Consumers Using Cross-border E-commerce under Covid-19 - Price as an Intermediary Variable

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Study on the Shopping Behavior of Taiwanese Consumers Using Cross-border E-commerce under Covid-19—Price as an Intermediary Variable

Abstract

Global e-commerce sales in 2020 exceeded US\$4 trillion as the world entered a zero-touch economy mode due to COVID-19. Asia is expected to be the fastest growing market for global e-commerce in the future. Taiwan is located in Asia and is a maritime hub in East Asia. It has the highest smartphone penetration rate in the world. In addition, the Taiwan government is actively strengthening information infrastructure and stimulating investment. The development process and consumer behavior deserve further attention and research. In order to explore the factors that affect Taiwanese consumers' consumption behavior on cross-border platforms, this study combed through relevant literature and tried to propose a behavioral model that can integrate important variables such as innovation diffusion, CSR, sense of responsibility, price, consumer psychology and behavior. , and collected 400 valid questionnaires from all over Taiwan. According to the statistical results, some characteristics of Taiwan's cross-border e-commerce consumption behavior are similar to those of the Asian market, and some of the differences come from the differences in Taiwan's consumption patterns and culture. CSR helps to raise prices; lower prices will promote purchase behavior, and good CSR will also promote purchase behavior. The price has a partial mediating effect, and the sense of responsibility has no moderating effect.

Keywords: e-commerce; cross-border e-commerce; corporate social responsibility (CSR); price; innovation diffusion

Introduction

While people across the globe are forced to accept the zero-contact economic mode due to the COVID-19 pandemic, global cross-border e-commerce has been thriving. According to a survey by eMarketer, (2021), an international market research institution, the scale of global e-commerce has continued during the pandemic, and the total sales of global e-commerce in 2020 exceeded 4 trillion USD, which is an annual growth rate of 27.6%. It is estimated by eMarketer that this figure will reach 5 trillion USD in 2022 and even climb to 6 trillion USD by 2024. Such a substantial increase in online shopping opportunities represents changes in consumption behavior patterns and attracts enterprises to invest in the e-commerce field. Enterprises that have already invested continue to expand their layouts, while those that have not invested are actively keeping up with the pace and seizing cross-border business opportunities in the global market.

First, considering that there are such huge business opportunities and bright prospects for cross-border e-commerce, and that enterprises are competing to invest in e-commerce, it has also aroused our curiosity. From the perspective of consumers, what factors will influence consumers' use of cross-border e-commerce platforms? Are there mediating factors in the process? In this regard, Rogers suggested that the five main factors affecting the acceptance of innovation include comparative advantage, complexity, compatibility, observability, and trialability. As cross-border e-commerce enterprises are constantly making breakthroughs in information, capital flow, and logistics technology, and consumers are curious about and willing to experience cross-border e-commerce, the cross-border e-commerce platform is still regarded as an innovation for many consumers. Second, this study focused on the psychology and behavior of consumers using cross-border e-commerce platforms and applied Ajzen's theory of planned behavior (TPB), which can also be used for processes that influence behavior, such as attitude, the influence of important

opinions, and the complexity of self-evaluation. Third, given that consumers may care about the environmental responsibility of manufacturers (similar to CSR and environmental protection issues) when selecting cross-border e-commerce platforms, this study added the sense of responsibility by citing Hines' model of responsible environmental behavior, in order to discuss whether the sense of responsibility would also affect consumers' intention to use platforms. Additionally, the important influence of price on consumers' purchase intention and behavior was mentioned by Agarwal and Kenneth (2004), Chang (2006), Wu, Shiao, Lin, Ho, Huang, and Chi (2012), Wang, and Pham and Dang (2020). Specifically, Wang, Pham and Dang et al. (2020) regarded price as a moderating variable and found that price exerted an important influence on consumers' intention to buy organic products. Consequently, this study also took price as a mediating variable to explore whether price plays a mediating role when the five factors of innovation diffusion, attitude, and the sense of responsibility influence behavior.

Research Method

1. Research Structure

In the behavior models of this study, and based on the theory and literature review, it was assumed that the five factors of innovation diffusion, attitude, and the sense of responsibility would affect consumers' purchase intention. Meanwhile, in order to simplify the structure, this study adopted the views of Hartmann and Apaolaza-Ibanez (2008) regarding attitudes, meaning that cognition, emotions, and even the components of knowledge and values are included in the broad sense of attitude. Furthermore, that study applied a loose definition to take innovation diffusion, attitude, and the sense of responsibility as CSR variables, with price as a mediating variable.

The viewpoints of Ajzen (2006), Wu (2011), and Liu (2018) regarding attitude were used to design the attitude items. That is, the overall attitude of consumers towards cross-border e-

commerce was the focus of these aspects, including consumer protection, quality inspection, delivery speed, a variety of commodity choices, real-time platform systems, time saving, and easy operation.

In terms of the design of price items, in order to learn about consumers' opinions of product prices on cross-border e-commerce platforms, this study considered the views of Chuna and Kim (2005), Hinz et al. (2011), and Liu et al. (2018) and divided the price into two categories, consumer electronic products and daily necessities. Specifically, the items related to consumer electronic products focused on respondents' online and offline experience, real-time features and popularity, quality and after-sale service, and the type and amount of products previously purchased; while items related to daily necessities focused on product price, diversity of varieties, quality assurance, price preference, and the types and price of products previously purchased.

The design of the innovation diffusion items in this study mainly referred to the views of Rogers (2003), Wu (2011), Naqshbandi, and Singh (2015), and Carneiro (2005). Comparative advantage items focused on the lower price, quality assurance, simplicity, convenience, and development trend of cross-border platforms, as compared with other channels. Complexity items focused on the easy operation and product diversity of cross-border platforms. Compatibility items focused on whether cross-border platforms can meet the price comparison needs, shopping habits, and expectations of consumers. Observability items focused on whether it was easy for respondents to see others using cross-border e-commerce platforms, while trialability items focused on investigating consumers' psychology toward trying new things online.

The opinions of Hopper and Nielsen (1991), Carneiro (2005), Kuo, Wang, and Chiu (2006), and Lin, Sun, Chiang, and Hsieh (2008) regarding the sense of responsibility were used for reference. Thus, this study focused on the relevant guarantees that cross-border e-commerce can

provide to consumers, including reducing losses in transactions, faster delivery speed, zero-defect commodities, and the reduction of ecological impact.

When designing items for purchase behaviors, this study considered the methods used by Ajzen (2006), Wu (2011), Lai (2013), and Li et al. (2017), and focused on whether cross-border e-commerce was the first choice of consumers to satisfy their habits and preferred usage frequency.

2. Research subjects

Before distributing the formal questionnaires, 30 respondents on e-commerce platforms were surveyed in the form of pre-test questionnaires, and then, the questionnaires were revised according to their response results. Subsequently, in order to contact and collect the responses from respondents using cross-border e-commerce platforms, this study invited those who have used or were using cross-border e-commerce platforms (e.g., Amazon, eBay, Shopee, Alibaba, and Pinkoi) in major consumer groups or online communities in Taiwan. The survey was conducted from June to August 2021, 412 questionnaires were collected, and after excluding those with incomplete responses, a total of 400 valid questionnaires remained.

Results

1. Description of respondents' background

By gender, there were slightly more male respondents at 208 (52%) than female respondents at 192. By age, the number of respondents aged between 31 and 40 accounted for the majority, at 158 respondents (39.5%), followed by those aged between 41 and 50, at 101 (25.3%), then those aged between 21 and 30, at 87 (21.8%). By educational level, the number of respondents with a college degree accounted for the most, at 264 (66%), followed by respondents with a graduate degree or above, at 89 (22.3%), then respondents with high school education, at 43 (10.8%). By

occupation, the number of respondents in the service industry was the largest, at 119 (29.8%), followed by respondents from the technology industry, at 53 (13.3%), respondents from the conventional manufacturing industry ranked third, at 46 (11.5%), and other occupations with a large number of respondents included military personnel, civil servants, and teachers (29), finance and insurance industry (34), manufacturing (37), and commerce (27). By residential area, the number of respondents living in the south of Taiwan was the largest, with 185 (46.3%), 157 (39.3%) from the northern part, 52 (13%) from the central area, and only 6 from the eastern area. By income, 94 (23.5%) respondents said they have a monthly income of NTD 30,001-40,000, 89 (22.3%) have a monthly income of above NTD 60,001, 86 (21.5%) have a monthly income of NTD 40,001-50,000, and 85 (21.3%) have a monthly income below NTD 30,000. When the respondents were further asked whether their life was secure at the current income level, 170 (42.5%) replied they were quite worried about their life in terms of their current income. When asked about the average monthly consumption amount on cross-border e-commerce platforms, 313 (78.3%) consume less than three times, 72 (18%) consume 4-6 times, and only 13 consume 7-10 times. Finally, when asked about the main information source of cross-border platforms, 212 (53%) knew about cross-border platforms through websites, 54 (13.5%) through relatives and friends, 41 (10.3%) through communication software, 37 (9.3%) through network experts, and 35 (8.8%) were recommended by netizens.

2.AMOS test

In the purchase behavior model, the chi-square distribution was = 792.39 ($p < .05$), RMSEA = .082 ($>.06$), CFI = .912 ($>.90$), and GFI = .931 ($>.90$). Good CSR helped to raise the price ($\beta = .89$, $p < .001$) and promote the purchase behavior ($\beta = 1.38$, $p < .001$); a lower price would also promote the purchase behavior ($\beta = -.60$, $p < .001$). CI showed that none of the three effects

included 0, meaning the price had a partial mediating role and the sense of responsibility had no moderating effect.

Discussion

The sense of responsibility can positively and significantly influence purchase behavior, but no willingness to recommend. Other issues worth discussing were also found in the descriptive statistic results of this study. The top three items with the highest scores regarding the sense of responsibility were "providing safer and faster commodity delivery modes", "taking consumer rights as the main consideration", and "reducing losses in transactions". "Reducing ecological impact" was not included in the top three items about the sense of responsibility most valued by the respondents. This meant that while the respondents agreed with the importance of the sense of responsibility and believed that the sense of responsibility did influence their purchase behavior, they limited such sense of responsibility to the safety of transactions, speed, interests and rights, and quality. Though important, environmental protection and ecological and waste reduction issues are not their top priorities. Regarding this finding, it is proposed that in future research, people's concepts of environmental protection and waste reduction in e-commerce shopping can be strengthened from the perspective of manufacturers or consumers by combining ESG-related research, and then, such concepts can be implemented in the behavior of actual consumption.

Price played a mediating role in the behavior models, which is similar to the findings of Agarwal and Kenneth (2002), Wu et al. (2012), Amlani (2016), Wang, and Pham and Dang (2020), meaning that price influenced perceived quality and intention. A possible reason for such a result is that some of the price items in this study focused on the type and amount of products "once" purchased, quality and "after-sale service", and "experience". That is, some price items can only be answered appropriately by consumers who frequently use cross-border e-commerce

platforms for shopping. However, as consumers who use such platforms often use them less or are new to such platforms, they may guess price items, thus, price only played a partial mediating role.

Reference

Agarwal & Kenneth (2004). Cross-national applicability of a perceived-value model. *Journal of Product & Brand Management* 13(4):242-256. DOI:10.1108/10610420410546952

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.

Ali Research (2021). Cross-border e-commerce trends in 2021|5 major e-commerce company trends data-How brand name e-commerce websites can adjust their business strategies to grasp market opportunities.
<https://viewec.tw/%E9%97%9C%E9%8D%B5%E5%A0%B1%E5%91%8A/2021%E5%B9%B4%E8%B7%A8%E5%A2%83%E9%9B%BB%E5%95%86%E8%B6%A8%E5%8B%A2%E6%95%B8%E6%93%9A-%E5%93%81%E7%89%8C%E9%9B%BB%E5%95%86%E7%B6%B2%E7%AB%99%E5%A6%82/>

Carneiro (2005). *When leadership means more innovation and development*. Business Strategy Series.

Chang, S. C. (2006). A Study on the Drivers of Customer Loyalty-The Key Role of Customer Perceived Value and the Moderating Effects of Customer Satisfaction and Trust, *Fu Jen Management Review*, 13(1), 107-132.

- eMarketer (2021). 2021 Cross-border e-commerce Online Trends Forum: Grasp new global business opportunities post COVID-19. <https://news.cnyes.com/news/id/4567130>
- Hartmann, P., & Apaolaza-Ibanez, V. (2008). Virtual nature experiences as emotional benefits in green product consumption: The moderating role of environmental attitudes. *Environment and Behavior*, 40, 818-842.
- Hinz, Oliver, Hann, Il-Horn & Spann, Martin (2011). Price Discrimination in E-Commerce? *An Examination of Dynamic Pricing in Name-Your-Own Price Markets. MIS Quarterly* 35(1):81-98.
- Hopper, J. R., & Nielsen, J. M. (1991). Recycling as altruistic behavior: Normative and behavioral strategies to expand participation in a community recycling program. *Environment and Behavior*, 23(2), 195–220.
- Kuo, J.K., Wang, M.Y., Chiu, H.Y. (2006). The Influential Factors of Faculty That Participate in Community Public Affair. *Journal of Public Affairs Review*, 7(2), 135-165.
- Lai, Y.J. (2013). *An Investigation of Customers Behavior Intention on Online Shopping Between Taiwan and China - A Study in Northern, Middle, Southern and Eastern Taiwan*. A thesis for Graduate Program of Department of Statistics, National Cheng Kung University, Tainan city.
- Li, C.Y., Cheng, C.Y. (2017). The Antecedents and Consequences of Coproduction: An Empirical Validation of Online Games. *Journal of E-Business*, 19(2), 147-176.
- Liu, W. L. (2018). *Electronic Commerce and Internet Marketing (6th Edition)*. Taipei: Gotop Information Inc.
- Rogers, E. M. (1995). *Diffusion of innovations (4th ed.)*. New York: The Free Press.

- Wang, Pham & Dang(2020). Environmental Consciousness and Organic Food Purchase Intention: A Moderated Mediation Model of Perceived Food Quality and Price Sensitivity. *Int. J. Environ. Res. Public Health*2020,17(3), 850.
- Wu, M. F. (2011). Predicting Farmers' Behavioral Intention to Adopt Organic Agriculture. National Sun Yat-sen University (doctoral dissertation). Kaohsiung city.
- Wu, S.I., Shiao, Y.R., Lin, W.T., Ho, Y.L., Huang, S.Y., Chi, P.J. (2012). The Influence of Green Marketing on Perceived Quality, Perceived Price, Perceived Risk, Perceived Value and Purchase Intention-An Example of Organic Food. *Journal of Innovation and Business Management*, 3(1), 19 – 41.

Export Cross-border E-commerce in China: A New Entry Mode and Model of Firm Internationalization

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**Export Cross-border e-Commerce in China:
A New Entry Mode and Model of Firm Internationalization**

Abstract

In the global cross-border e-commerce (CBEC), Chinese firms have emerged as a formidable force and experienced rapid growth. A confluence of digital technologies, transnational logistics, and social media platforms have made possible for firms to adopt the “direct to consumers” (DTC) the model for overseas expansion and given rise to a great number of CBEC operators. Adopting a grounded-research approach and case studies of selected firms, this paper traces the development of export CBEC in the country, explores the business models and development strategies, and discusses the opportunities for theory development and research in international business.

Introduction

In light of the continuous development of technologies and new infrastructure including 5G networks and intelligent manufacturing, China's ex-CBEC businesses have gradually shifted from labor-intensive low tech and low value-added products to high-tech and high value-added products, such as virtual reality products, 3D printing, smart home appliances. The major destinations are the developed countries such as North America and Europe, Asia, and other countries along the “Belt and Road” (LeadLeo, 2022). While Europe and the US still dominate the market, Southeast Asia and Latin America have become emerging markets, and more than 300,000 cross-border export online shops are operating on various platforms.

The rapid development of CBEC in China have attracted much attention from industries and researchers. While their discussions mostly focus on the contributing factors and the practical applications, much less is understood regarding the fundamental changes in international business, its disruptive impact on the global trade, the ramifications for re-

conceptualizing cross-border transactions in the digital age. Adopting a grounded-research approach and case studies of selected firms, this paper reviews the development of export CBEC in the country, contemplates the business models of firms and their development strategies, explore the new paths towards internationalization, and discusses the opportunities for theory development and research in international business.

Background Literature

Development of ex-CBEC in China

Export cross-border e-commerce (ex-CBEC) refers to cross-border trading that complete transactions and electronic payment on e-commerce platforms and deliver goods to consumers, following the direct-to-consumer (DTC) model. China's ex-CBEC has undergone rapid expansion in the past thirty years traversing several critical stages of development. According to Frost & Sullivan's forecast, China's cross-border e-commerce exports will continue to grow at a CAGR of 14.4% from 2020 to 2025. The market size of self-operated websites' growth is predicted to around 17.4% CAGR, exceeding that of platform sellers. Despite the encouraging outlook, China's CBEC industry faces a number of problems and challenges. First, the CBEC industry is overly reliant on policy incentives and government support. A vibrant and healthy environment is critical for its long-term sustainable growth. Second, many CBEC firms are third-party resellers on platforms, which often have major operational problems, including a sufficient customer base, effective marketing and promotion, limited product variety and services. Omni-channel coordination, logistics and fulfillment remain challenges for many. Surface delivery results in long delays while air freight costs are high. Moreover, the lack of strict industry regulation in the cross-border e-commerce industry and the problem of counterfeit goods has plagued cross-border e-commerce since its inception and has affected its image and future potential.

Lastly, data security, consumer protection, and compliance in various countries remain as priority issues. CBEC firms need to invest in their capacity in minimize the risks of non-compliance amid the complex operations so that they can sustain the long-term health of their brands and operations. More Chinese CBEC enterprises also pay attention to sustainable development, indicating that they will integrate the concept of environmental protection and sustainable development in the process of design and production.

Opportunities for Research

IB Theory Development

According to transaction cost economics, firms choose the mode of foreign market entry which is the most economical and effective form of international governance, i.e., with the lowest transaction cost, which in turn lead to better performance. In a high transaction cost environment, they tend to internalize transactions using the equity mode of foreign investment, resulting in a vertically integrated governance structure so that the market imperfections are internalized for superior operations. Export helps to reduce the cost of establishing a local business while increasing overseas sales through the help of export intermediaries, which engage in high-value and infrequent transactions with the exporters. The disadvantages in export include high transport costs and tariffs, yet little control over its overseas agents in the host countries.

CBEC, which consists of mostly online retail orders with low value and frequent transactions, can be viewed as a new mode of entry into overseas markets. CBEC means that through e-commerce platforms, companies do not need to have any physical presence in the target market, transactions can be conducted via the Internet on their own websites or third-party platforms. The digitization of export-related services such as customs clearance, insurance, and the development of cross-border delivery services and bonded warehouse have made it possible for small businesses to engage in CBEC. Upon receiving orders, exporters

either engage in transnational logistics firms for delivery and use bonded warehouses for inventory and local delivery in the host countries. These platforms and service providers have significantly reduced the transaction costs associated with im/export and offer an open, multi-dimensional mode of foreign market entry. By allowing cross-border e-commerce platforms to act as intermediaries in the supply chain, CBEC shortens the supply chain, reduces the waiting time of customers, who want to purchase quality products at good value.

A new generation of CBEC-native enterprises such as Shein and Dewu are self-sufficient suppliers and manufacturers that provide a large number of low-cost products. They have become a driving force for CBEC and meet the growing demand of consumers in diverse markets. These firms have integrated and optimized operations of various functions, including e-commerce platforms, social media marketing, and new product development. How these firms have successfully entered the global markets warrants systematic research, especially the underlying mechanism and enabling factors for CBEC as a new entry mode vis-à-vis the conventional theories of foreign market entry and firm internationalization.

Firm Strategies

Successful CBEC operations require integration of various types of resources and capabilities, from new product development, business models, operations to marketing and logistics. The ODM strategy has been particularly successful in meeting the unique needs and preferences of different regional markets. According to a study (Kim & Lee, 2020), the use of ODM has become an increasingly popular strategy among Chinese companies looking to expand into international markets. Companies employing ODM strategies are better able to compete in the global market, as they are able to respond quickly to market demands and offer products that are specifically designed for their target markets. However, the downside of ODM is that the manufacturer has to design and execute branding and marketing campaigns themselves, which can be costly.

Second, sellers are gradually moving away from the conventional e-commerce strategy that relied solely on Amazon and other e-commerce platforms in favor of the e-commerce model of "Platform + DTC independent website". Sellers are paying more attention to social media platforms as the cost of international traffic rises. TikTok is a prominent example of a low-cost traffic platform in promoting CBEC because it integrates online shopping with short videos and live streaming in social e-commerce and the growing influencer economy.

Integrated Distribution & Logistics

The cross-border logistics sector in China is now characterized by a highly concentrated upstream and downstream operators, weak bargaining power service providers, and inefficient organizational structures. They will need to further integrate logistics and services providers. This integration has led to the one-stop service as the new e-commerce retail model enabled by cross-border logistics and e-commerce platforms.

CBEC still needs improvement in product quality and complete tracking system. Currently, most domestic CBEC companies adopt the "bonded import + overseas direct sourcing" model to ensure the reliability of product sources. Many small and medium-sized CBEC platforms do not have advantages in overseas investment or sourcing products directly from manufacturers. The digital transformation encourages cross-border logistics companies to establish new logistical hubs and deploy intelligent strategies including blockchain, big data, cloud computing, and automated warehousing. The cross-border logistics sector will further improve customer experience and lower operating costs thanks to the increased application of these technologies.

Social Media Marketing

Social media platforms are an important promotional tool for brand marketing of export cross-border e-commerce. Instagram, Snapchat, TikTok, Twitter and other social media platforms have become important portals for e-commerce enterprises going overseas.

Currently, cross-border e-commerce platforms together with social media platforms provide various DTC marketing models for e-commerce. Social media marketing enables DTC CBEC in several ways, i.e., via access, affordability, acceptance, awareness, and activation (Sheth 2021). For example, Shopify has partnered with Snapchat and Twitter to realize users' complete e-commerce processes from recommendation, browsing, AR fitting and placing orders. E-commerce brands can establish "public profiles" on Snapchat to display their own marketing content and stories and improve consumers' shopping experience. Meanwhile, KOLs and KOCs attract customers through product use, evaluation and sharing.

Conclusion

In conclusion, the rapid growth of China's ex-CBEC are complex and influenced by a range of factors and calls for innovative research innovative in the above and other areas. In light of booming interest and investment, the long-term healthy development of China's ex-CBEC requires sustainable development on many fronts. Regulatory agencies, industry associations, platforms and participating firms all have their shared responsibilities. Companies that take advantage of these opportunities and address these problems are more likely to succeed in reaching consumers overseas and continue to develop.

References

- Kim, J., & Lee, J. (2020). The Impact of ODM on Chinese Companies' Internationalization. *Journal of International Marketing*, 28(4), 60-75.
- LeadLeo. (2022). China Cross-border E-commerce Export Trends and Case Studies. <https://www.leadleo.com/report/reading?id=62872dbb635d9d4f6bf0eafa>
- Sheth, J. N. (2020). Borderless Media: Rethinking International Marketing. *Journal of International*

Time Synchronization And The Quality of Innovation: The Moderating Effect of Digitization

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Time Synchronization and the Quality of Innovation: The Moderating Effect of Digitization

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Extended Abstract

How location choice influences innovation in MNCs has been the subject of controversy, and the examination of geographic concentration or dispersion is particularly insufficient. To address this deficiency, this study introduces the concept of time synchronization, underscoring the crucial role of overlapping work time for employee interactions between parents and subsidiaries in comprehending and absorbing overseas knowledge in order to improve the innovation quality of parent firms. By analyzing a sample of internationalized Chinese listed firms, we found that time synchronization between parents and subsidiaries is positively associated with the innovation quality of parent firms, and the degree of digitization strengthens this positive relationship.

Keyword: Time Synchronization, Innovation Quality, Digitalization, MNCs Location Choice

1. Introduction

Given that innovation is essential for multinational corporations (MNCs) to accomplish substantial growth, an important research question in the international business field is where subsidiaries should be located to have the greatest impact on the quality of corporate innovation (Piperopoulos, Wu, & Wang, 2018). However, there has been a debate about the location choice of MNCs for parental innovation performance. On the one hand, by establishing subsidiaries centrally, parents and subsidiaries

are able to communicate more effectively. Geographical proximity fosters a comparable culture that enables both parents and subsidiaries to share tacit knowledge (Kapetaniou & Lee, 2018). On the other hand, decentralization allows the parent firms to avoid familiar pitfalls, and access new knowledge resources (Schulze & Brojerdi, 2012). Although previous studies have begun to develop our understanding of location choice, we still know very little about how location choice affects MNCs' innovation, and in particular, investigating the concentration and dispersion of geographic distance may be unbalanced.

To fill this research gap, this study adopts a perspective of time synchronization to MNCs' location choice decision by illustrating the size of overlapping work-time window in which employees interact between parents and subsidiaries can provide additional insight into the impact of location choice on innovation quality. By introducing the concept of time synchronization to the literature on the location choice of MNCs, we argue that one non-negligible factor in the relationship between location choice and innovation is the size of the overlapping work time windows for employee interactions between parents and subsidiaries. In the knowledge transfer and knowledge absorption stages, time synchronization expands the communication window between parents and subsidiaries, and employees can effectively communicate with each other within a limited time, which helps both parties to acquire and understand tacit knowledge and reduce the negative impact of information and knowledge misunderstanding due to long-distance distribution.

2. Literature and Framework

2.1. Time synchronization, knowledge transfer and innovation quality of parents

We argue that time synchronization is an important factor affecting knowledge transfer from subsidiaries to parents. In the knowledge transfer stage, subsidiaries absorb the knowledge resources of the host country and transfer these acquired knowledge results to the parents through various tools and channels. An important way of knowledge transfer is the synchronized communication and interaction between the parent and subsidiary employees, which can help both parties to gain tacit knowledge. Although advances in ICTs, such as email, fax, and voice mail, have enabled parents and subsidiaries to

communicate across remote geographic distance, communication is not instantaneous, leading to delays in feedback and response (Espinosa et al., 2015).

In the knowledge absorption stage, as the receiver of knowledge, parent firms also need to internalize and integrate the knowledge. More overlapping work time can help parent firms to find answers in a more effective manner when confusion arises about the information conveyed by subsidiaries. Employees in overlapping work time are able to communicate the information they want to communicate to each other in a more effective way, similar to face-to-face communication. In addition, highly overlapping work time also represents a degree of geographic proximity and similarity in culture, institution, mindset, and communication between the two parties, which facilitates parents to fully integrate and absorb knowledge from subsidiaries.

In line with these arguments, we posit that better time synchronization, that is, higher overlapping work time in MNCs, can help parents receive and internalize knowledge from subsidiaries, which has a positive effect on the innovation quality of parents. Therefore, we hypothesize that:

Hypothesis 1. Time synchronization between parents and subsidiaries is positively associated with the innovation quality of parents.

2.2. Moderating effect of digitalization

We argue that a high degree of digitization enables employees to access heterogeneous knowledge more efficiently and helps them establish more intellectual connections (Delgado-Márquez, Hurtado-Torres, Pedauga, & Cordon-Pozo, 2017). In the knowledge transfer stage, digital platforms provide broader coverage and speed for corporate communications, and increase the efficiency of coordination and collaboration among innovation participants. By creating new organizational forms, such as virtual teams and open innovation platforms, digitization will affect the level of collaboration or wealth of expertise among employees and reduce communication costs (Lyytinen, Yoo, & Boland Jr, 2015). In the knowledge absorption stage, as MNCs become more digitized, they have the potential to form a non-repetitive knowledge base based on code, data through cloud computing, big data, and digital

technologies, thus increasing work efficiency. However, increased digitalization means that employees are exposed to more advanced and complex knowledge, which is more likely to cause information overload (Tzabbar & Vestal, 2015). We argue that the greater the digitization of MNCs, the higher the ability of employees to acquire the required knowledge. When the ability is not sufficient to absorb knowledge from subsidiaries, they will rely more on time synchronization to solve problems that arise in their work through communication. In other words, the degree of digitalization strengthens the dependence of MNCs' employees on time synchronization.

In line with these arguments, we posit that the higher the degree of digitalization, the more parents are exposed to challenges posed by complex knowledge and information overload when receiving knowledge from subsidiaries, which enhances the role of overlapping work time. We then hypothesize that:

Hypothesis 2. The degree of digitalization reinforces the positive relationship between time synchronization and the innovation quality of parents.

3. Method and Results

3.1. Sample and method

We constructed a panel dataset of internationalized Chinese firms from 2011-2017 to test our hypotheses, and the final sample contains 5,061 firm-year observations. There might be systematic differences between listed firms with foreign subsidiaries and those without, which may introduce sample selection bias if we estimate directly. Therefore, we conducted the two-stage Heckman selection model to correct for such issue. In the analysis, the parameter estimates of the first-stage probit model based on information representing all firms with foreign subsidiaries in the aggregate are included in the second-stage OLS models.

3.2. Results

All the results reported in the following table support our hypotheses.

Table 3. Estimates for innovation quality.

Variables	First stage			Second stage		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Firm age	-0.007 (0.013)	-0.007 (0.013)	-0.007 (0.013)	-0.004 (0.006)	-0.008 (0.006)	-0.007 (0.006)
Debt ratio	-0.152* (0.278)	-0.228 (0.276)	-0.228 (0.276)	0.389 (0.200)	0.077 (0.204)	0.091 (0.204)
ROA	-0.170 (0.411)	-0.211 (0.441)	-0.211 (0.441)	0.219 (0.323)	-0.017 (0.321)	-0.020 (0.321)
R&D intensity	0.074* (0.035)	0.035 (0.034)	0.035 (0.034)	0.531*** (0.024)	0.541*** (0.024)	0.536*** (0.024)
Export	-0.015* (0.007)	-0.020** (0.007)	-0.020** (0.007)	0.002 (0.005)	-0.011* (0.005)	-0.011* (0.005)
International diversity	0.414*** (0.255)	0.058 (0.254)	0.058 (0.254)	0.592** (0.208)	0.567** (0.206)	0.561** (0.206)
Province GDP	0.419*** (0.117)	0.338** (0.110)	0.338** (0.110)	-0.019 (0.058)	0.130* (0.062)	0.127* (0.062)
Digitalization	0.048*** (0.040)	0.035 (0.039)	0.035 (0.039)	0.192*** (0.026)	0.208*** (0.026)	0.198*** (0.027)
Time synchronization		0.116*** (0.012)	0.116*** (0.012)		0.055*** (0.009)	0.050*** (0.009)
Industry-level average subsidiaries			-12.256* (5.997)			
Inverse Mills ratio				-0.051 (0.096)	0.995*** (0.190)	0.937*** (0.192)
Time synchronization × Digitalization						0.006* (0.003)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-3.666*** (1.466)	-2.668* (1.388)	13.129 (8.319)	-7.642*** (0.782)	-9.803*** (0.845)	-9.648*** (0.848)
Wald χ^2	53.660**	134.860***	134.860***			
F-value				85.120***	82.280***	75.300***
Adj-R ²				0.327	0.341	0.342
Observations	5,061	5,061	5,061	1,897	1,897	1,897

Note: *** p<0.001, ** p<0.01, * p<0.05; Standard errors are in parentheses.

4. Discussion

Our study contributes to the international business literature in several aspects. First, we propose a new perspective of time synchronization to enrich the literature on MNCs' location choice and innovation. We go beyond the discussion of previous studies on parent-subsidiary geographic distance and global network structure, and conceptualize geographic location as time synchronization, emphasizing the important role of synchronized communication and collaboration among employees

for external knowledge transfer and absorption, which adds detailed evidence on the temporal dimension to explain the relationship between geographic distribution characteristics and firm innovation. Second, we theoretically argue and empirically demonstrate the boundary condition of time synchronization and MNCs' innovation performance, that is, the information overload caused by the digitization of MNCs increases employees' reliance on transferring and absorbing knowledge under time synchronization, which enriches our understanding of the mechanisms inherent in the impact of digitization on MNCs' ability to acquire knowledge abroad and improve innovation.

5. References

- [1] Delgado-Márquez, B. L., Hurtado-Torres, N. E., Pedauga, L. E., & Cerdón-Pozo, E. (2017). A network view of innovation performance for multinational corporation subsidiaries. *Regional Studies*, 52(1), 47-67.
- [2] Espinosa, J. A., Nan, N., & Carmel, E. (2015). Temporal distance, communication patterns, and task performance in teams. *Journal of Management Information Systems*, 32(1), 151-191.
- [3] Kapetaniou, C., & Lee, S. H. (2018). Geographical proximity and open innovation of SMEs in Cyprus. *Small Business Economics*, 52(1), 261-276.
- [4] Lyytinen, K., Yoo, Y., & Boland Jr, R. J. (2015). Digital product innovation within four classes of innovation networks. *Information Systems Journal*, 26(1), 47-75.
- [5] Piperopoulos, P., Wu, J., & Wang, C. (2018). Outward FDI, location choices and innovation performance of emerging market enterprises. *Research Policy*, 47(1), 232-240.
- [6] Schulze, A., & Brojerdi, G. J. C. (2012). The Effect of the Distance between Partners' Knowledge Components on Collaborative Innovation. *European Management Review*, 9(2), 85-98.
- [7] Tzabbar, D., & Vestal, A. (2015). Bridging the Social Chasm in Geographically Distributed R&D Teams: The Moderating Effects of Relational Strength and Status Asymmetry on the Novelty of Team Innovation. *Organization Science*, 26(3), 811-829.

Foreign Market Selection and Entry Strategies of Born Global Firms: The Case Study of Cycraft Technology

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Foreign Market Selection and Entry Strategies of Born Global Firms: The Case Study of CyCraft Technology

Abstract

Traditional theories of internationalization focus on explaining large multinational enterprises' internationalization motives and paths, with limited research on the emerging enterprise type of born global firms (BGs). We aim to explore the growth drivers of BGs, including internationalization paths and corresponding entry strategies, and to uncover the obstacles encountered and ways to overcome them in the internationalization process. Due to the research topic's innovative nature and the lack of support and evidence in the literature, we conducted a single-case qualitative study. From in-depth interviews with senior executives of CyCraft Technology in Taiwan, our findings reveal that the motivation for the establishment of BGs aligns with the perspective of internalization theory. Because the domestic market is too small, these firms are compelled to seek opportunities to expand into overseas markets from the outset. In addition to transferring their ownership advantages to the host country market and sharing resources with local partners, they can gain location advantages in the host country to sustain the development of research and development and market-related activities. However, the choice of international markets depends on whether that market's location advantages outweigh the transaction costs of investing in it. This

study's results not only fill the gap in the international business literature but also provide new insights and practical recommendations for the study of BGs and their business development.

Introduction

An examination of Taiwan's cybersecurity industry reveals a widely acknowledged significant disadvantage: the relatively small domestic market. However, on the other hand, being located close to a formidable adversary, China, the government and private enterprises in Taiwan have faced relentless attacks from cyber armies across the strait since the emergence of internet cyberwarfare. In the first half of 2021 alone, Taiwanese companies experienced over seven million ransomware attacks (Trend Micro Research 2021). The overall number of cyberattacks by hackers exceeds one hundred million annually. Nevertheless, this unique geographical environment has also fostered a highly suitable technological landscape for the development of the cybersecurity industry in Taiwan.

Taiwan possesses favorable environmental conditions for the development of cybersecurity-related technologies. However, the market potential remains noticeably inadequate. Taking the cybersecurity software market as an example, according to the report of "Taiwan Cybersecurity Industry Status and Development Opportunities in 2021," by the IEK of Industrial Technology Research Institute, the estimated market value for Taiwan's cybersecurity industry in 2021 is around two billion U.S. dollars. However, Figure 1 shows

that pure software services in the cybersecurity sector accounted for less than two hundred million U.S. dollars in 2020 (Taiwan Directorate General of Employment and Vocational Training, 2021, 2022). In 2020, for the Taiwan cybersecurity industry, the ratio of hardware manufacturing to software development to cybersecurity services is 51.7%:9.7%:38.6%, which indicates the proportion of software development is relatively very small.

Taiwan possesses favorable environmental conditions for developing cybersecurity-related technologies. However, the market for such technologies is notably insufficient.

Looking specifically at the market for cybersecurity software, according to the report on

Taiwan's cybersecurity industry status and development opportunities in 2021, by IEK of the

Industrial Technology Research Institute, the total value of Taiwan's cybersecurity industry

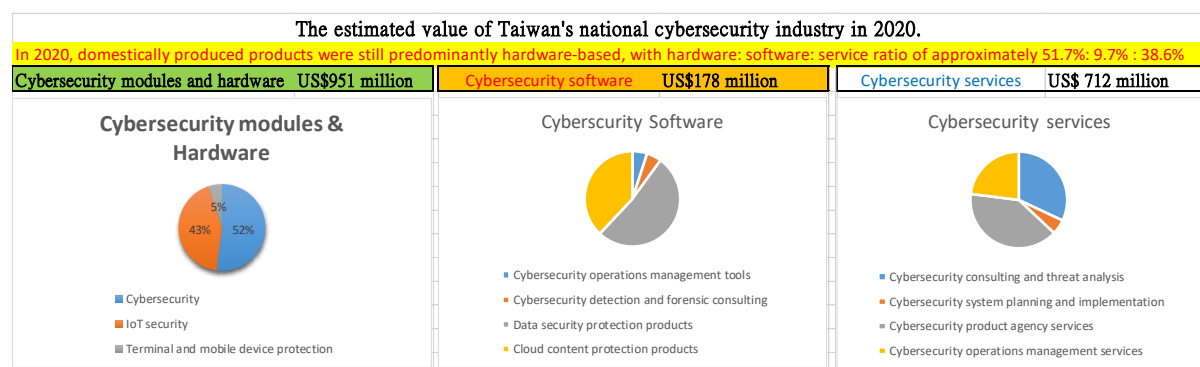
reached approximately two billion U.S. dollars in 2021. However, when we examine the pure

software services in cybersecurity for 2020, the market value was less than two hundred

million U.S. dollars (Taiwan Directorate-General of Employment and Training, 2021, 2022).

Figure 1

Distribution of Taiwan's Cybersecurity Industry Output in 2020



Note. From “Title,” by the Industrial Technology Research Institute, International Center for Technology Innovation, January 2021.

According to the data the IEK of Industrial Technology Research Institute compiled, shown in Table 1, the combined revenue of the top 10 global cybersecurity companies, including Symantec and Cisco, reached approximately \$15.6 billion U.S. in 2016. The information presented in Figures 1 and 2 shows that Taiwan’s cybersecurity industry has significant growth potential in the international market. It is highly suitable for software startups and technology companies to invest their manpower in developing cybersecurity-related software and services.

Table 1

Revenue of the Top 10 Global Cybersecurity Companies from 2014 to 2016

Revenue of the Top 10 Global Cybersecurity Companies from 2014 to 2016											
Unit: Million USD											
2014				2015				2016			
Rank	Company	Revenue	Market Share	Rank	Company	Revenue	Market Share	Rank	Company	Revenue	Market Share
1	Symantec	3663.3	11.1%	1	Symantec	3260.9	9.5%	1	Symantec	3226.3	8.7%
2	Cisco	2214	6.7%	2	Cisco	2296.5	6.7%	2	Intel	1979.4	5.3%
3	Intel	2157.8	6.6%	3	Intel	2027.6	5.9%	3	IBM	1777	4.8%
4	IBM	1669.2	5.1%	4	IBM	1724.2	5.0%	4	Check Point	1765.2	4.7%
5	Check Point	1475.7	4.5%	5	Check Point	1616.3	4.7%	5	Palo Alto Networks	1462.5	3.9%
6	EMC	1059.9	3.2%	6	Palo Alto Networks	1064	3.1%	6	DELL(EMC)	1368	3.7%
7	Trend Micro	1046.4	3.2%	7	Trend Micro	965.2	2.8%	7	Trend Micro	1234.7	3.3%
8	Fortinet	712.1	2.2%	8	EMC	913.3	2.7%	8	Cisco	1140.7	3.1%
9	HPE	708	2.2%	9	Fortinet	906.3	2.7%	9	Fortinet	1134.6	3.0%
10	Palo Alto Networks	690.9	2.1%	10	HPE	702.8	2.1%	10	HPE	534.5	1.4%
	Total	15397.3	46.9%		Total	15477.1	45.2%		Total	15622.9	41.9%

Note. “Title,” IEK of Industrial Technology Research Institute

This is a common phenomenon enterprises in Taiwan’s cybersecurity industry face: the market is too small. CyCraft Technology is a startup company operating in this

unfavorable situation with a lack of inherent advantages in terms of location. It is crucial for them to overcome these challenges by internationalizing their operation to even up scarcity and superabundance to tap into the niche markets and establish a competitive positioning to make up for the shortcomings.

Hennart (2014) pointed out that some companies began their globalization efforts from their inception. Oviatt and McDougall (year) referred to such companies as international new ventures whereas Rennie (year), followed by Knight and Cavusgil (year), referred to them as born global firms (BGs). In the field of International Business (IB), it is generally believed that international expansion requires more time than domestic expansion (Hymer, 1976). Therefore, BGs are perplexing and intriguing because it is commonly understood that selling internationally is more challenging than selling domestically. International sales involve higher costs, greater risks, and longer time frames, so what factors help a company become born global?

Hennart (2021) argued that the primary reason these companies become international new ventures/BGs is their business model. Diana et al. (2019) found that internationalization serves as a powerful driver for BGs' export performance. Fan and Phan (2018) also proposed that economic factors influence the internationalization of BGs, especially when their products cater to mass markets. Additionally, the allocation decisions regarding a company's production capacity impact the speed of internationalization.

CyCraft Technology is essentially a BG that decided to pursue internationalization almost from its inception. In the related literature on internationalization, most studies have focused on large multinational corporations as their subjects, including foreign direct investment, internationalization theory, and the OLI eclectic paradigm. CyCraft Technology, being a small to medium-sized enterprise (SME), raises the question of how it became a BG and how it relates to relevant theories and studies concerning IB.

Economic factors play a crucial role in influencing the speed of a company's internationalization. Early internationalization implies a strategy aimed at maximizing company profits, as discussed in the BG literature. However, this claim lacks empirical support, meaning that companies may turn to internationalization due to relatively fewer profitable opportunities elsewhere (Fan & Phan, 2018). The internationalization path for non-BGs typically follows the Uppsala internationalization model (Johanson & Wiedersheim-Paul, 1975) or the innovation internationalization model (Bilkey & Tesar, 1977), gradually expanding internationally. BGs have a different internationalization path (Hennart, 2014), which Dow (2017) also supported.

Since 2000, most studies on BGs have focused on their performance (Gerschewski et al., 2015; Hilmersson & Johanson, 2016; Knight & Cavusgil, 2004; Mudambi & Zahra, 2007; Zahra et al., 2000), with little discussion on market selection and entry strategies for BGs (Dow, 2017). This study is an exploration of how BGs select foreign markets and apply entry

strategies in their internationalization process. We intend to contribute to the existing knowledge about IB research by uncovering how BGs exploit global market opportunities.

Theoretical Framework

In 1976, scholars such as Peter J. Buckley, Mark Casson, and A. M. Rugman proposed the internalization theory based on R. H. Coase's theory of the firm and the assumption of market imperfections to explain why companies choose to invest overseas to achieve more favorable development for the firm. However, these internalization theories did not explain BGs' path and development strategies. Many studies have concerned the theories of the internationalization process or stage models (Johanson & Vahlne, 1997), which describe how large companies gradually enter global markets. These theories are in strong contrast to the rapid internationalization of BGs (Paul & Rosado-Serrano, 2019). These internationalization process theories do not explain BGs' market selection and entry models (Escandon-Barbosa et al., 2019; Freeman et al., 2010; Lopez et al., 2009; McDougall et al., 1994). These studies focus on explaining the speed of BGs' internationalization rather than the internationalization performance resulting from their market selection and entry strategies. There are various explanations for the rapid internationalization of BGs, primarily related to entry models into international markets (Coviello & Munro, 1997; Jones, 1999) rather than discussions of the selection models of the internationalization market. As a result, some researchers have argued that BGs do not start from their domestic markets, thus deviating from the traditional

internationalization path. These perspectives do not explain the dynamic characteristics of inherently internationalized companies. Empirical studies comparing BGs and non-BGs have shown that a global niche positioning business model is a significant factor in determining whether a company is inherently internationalized (Cannone & Ughetto, 2014). How a company sells products or services, manufactures products, delivers them, to whom they are delivered; how value is created and captured; and how value creation is assisted and controlled—these business models are the primary factors influencing the speed of internationalization (Fjelstad & Snow, 2018). Companies with a global-niche business model can rapidly expand overseas normally due to (a) transportation costs, (b) a small domestic customer base, and (c) a focus on unique products and services. These factors are crucial for becoming an inherently internationalized company (Hennart, 2014), a claim Dow (2017) supported.

Research Methodology

CyCraft Technology is a cybersecurity technology startup based in Taiwan, established in 2017. It focuses on developing cybersecurity solutions from the perspective of automated AI. By integrating advanced technologies such as cyberthreat intelligence and trajectory tracking algorithms for situation awareness, it became the first company in Taiwan's cybersecurity industry to combine artificial intelligence with endpoint monitoring for threat emergency response. Within 3 years of its establishment, CyCraft Technology

established branch offices in Singapore and Japan to develop international business, demonstrating its inherent born global nature. This study includes in-depth interviews with the CEO and CTO of CyCraft Technology to allow for empirical analysis of their internationalization strategies, market selection, and entry models. It covers various aspects, including its organizational design, marketing strategies for product services, target market selection in various countries, local market potential, and partner selection. Furthermore, it explores the company's growth potential, filling the research gap regarding market selection and entry strategy in BGs' internationalization process. This study's results can serve as a reference for enterprises and the government when they formulate international development strategies.

Research Analyses and Findings

Examining Whether CyCraft Technology Meets the Definition of a BG

According to Hennart's definition of BGs, which involves possessing unique resources, advanced technology, and a highly internationalized entrepreneurial position as well as relying on cost effective internationalization strategies, such as the internet and networks, when we interviewed CEO Benson of CyCraft Technology, we learned that CyCraft Technology is a company founded by hackers. The company's official website explicitly states that its three founders possess hacker knowledge and skills. They are long-term experts in the field of cybersecurity and frequently present related research reports at

hacker conferences. These three founders have contributed to CyCraft Technology's unique resources.

CyCraft Technology has chosen to develop its hacker alert perception system using artificial intelligence and to leverage computers' powerful machine-learning capabilities to replace the traditional manual expert system development. These technologies are industry-leading practices and a key factor in enabling CyCraft Technology to internationalize rapidly.

Motivation for CyCraft Technology's Internationalization

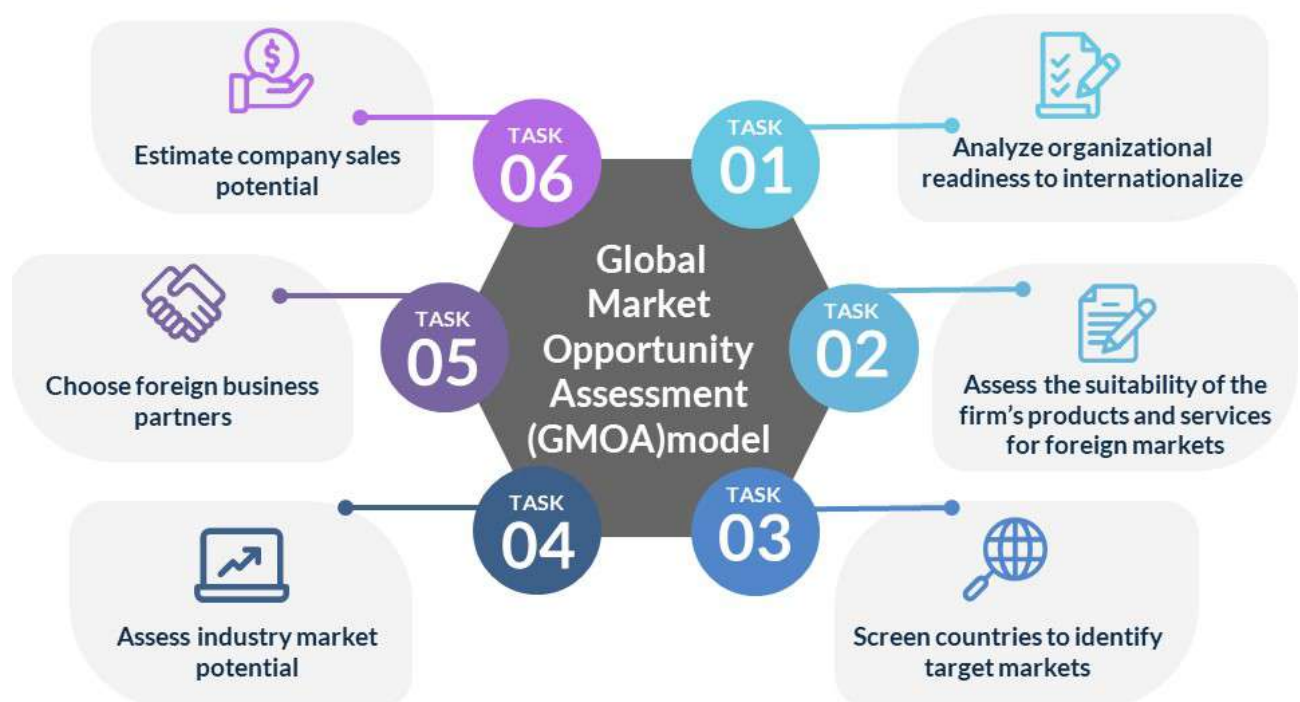
The internalization theory explains that when a company is in a disadvantageous position, it will internalize the external markets to expand its niche market and transform disadvantages into advantages. This is a crucial motivation for corporate internationalization. CyCraft Technology initially faced the same dilemma, which was the limited size of the Taiwan market. It couldn't meet the high R&D costs associated with developing niche products because it had a substantial R&D team of 50 personnel, accounting for 75% of the company's workforce, who were highly skilled technical professionals. Aligning their salaries with international standards would require a significant investment. The Taiwanese market would clearly not be able to sustain such high R&D expenses on its own. By venturing into the international market, CyCraft Technology opens itself up to larger markets and more opportunities, which mean increased revenue and greater profits. Although entering international markets presents challenges, the potential rewards outweigh the risks. Therefore,

from the very beginning, CyCraft Technology made the strategic decision to pursue internationalization as a necessary trend.

This study utilizes the global market opportunity assessment framework model Cavusgil et al. (year) proposed to determine whether CyCraft Technology meets the criteria for entering international markets. The framework consists of six tasks: (a) analyzing organizational readiness to internationalize, (b) assessing the suitability of the firm's products and services for foreign markets, (c) screening countries to identify target markets, (d) assessing industry market potential, (e) choosing foreign business partners, and (f) estimating company sales potential to assess the global market opportunities (see Figure 2).

Figure 2

Global Market Opportunity Assessment Model



Note. From *International Business: The New Realities*, 5th ed., by Cavusgil et al., p. page.

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Based on the interview with CyCraft Technology's CEOs, we obtained the following findings by examining the global market opportunity assessment model.

Analyzing the Organization's Internationalization Readiness

By objectively assessing the company's level of preparedness for engaging in international business activities and examining whether its ability meets internationalization requirements, we focused on evaluating the company's strengths and weaknesses in IB. This includes factors such as financial and tangible assets and relevant technologies and capabilities as well as senior executives' commitment to and determination in internationalization. The interviews revealed that when CyCraft Technology was established in 2017, it made the strategic decision to enter global markets. The organizational structure primarily revolves around R&D for product development, with 75% of the workforce dedicated to R&D. The remaining 25% comprises teams responsible for marketing, finance, legal affairs, business development, customer service, and administrative support. This streamlined structure is designed to adapt to the rapid changes stemming from internationalization and digitalization. To invest in internationalization, CyCraft Technology even sold a previously founded company to a publicly listed U.S. company called Weirite to learn from their internationalization experiences in terms of organizational structure, product

marketing, and team operations.

Assessing the Suitability of the Company's Products/Services for Foreign Markets

This involves a systematic analysis and evaluation of the extent to which the company's products/services are suitable for international customers. The evaluation takes into consideration factors such as the characteristics of overseas customer needs, relevant local legal regulations, characteristics and requirements of distribution systems, and characteristics of competitors' offerings. OG Intelligence adopts a cloud-based software-as-a-service model for product deployment, utilizing the CyCraft-managed security service provider platform to establish a dedicated supply chain management and international cybersecurity service framework. By employing this cloud-based application to manage products and distribution channels, CyCraft Technology can significantly reduce cross-border transportation and management costs, demonstrating its product and service orientation toward internationalization at every level.

Selecting Countries to Identify Target Markets

We identified countries where in-depth commercial investigation is not required so companies can reduce their consumption of manpower and resources while finding precise target markets. During the assessment process, they identify at least five or six countries with high growth potential and evaluate factors such as market size and growth rate, customers' purchasing power, customers' consumption capacity, acceptance of imported goods,

infrastructure capabilities, economic freedom, and country risk index. CEO Benson's experience revealed that CyCraft Technology prioritizes establishing overseas locations in countries such as Singapore and Japan when selecting target markets. In Singapore, the main clients are government agencies, primarily due to the Singaporean government's relative cleanliness and efficiency. On the other hand, the Japanese market primarily targets startups, and SMEs focus on maximizing profits. These considerations in selecting target markets are still based on the internalization of geographical locations. Therefore, the closest countries to Taiwan, namely Singapore and Japan, are the primary target markets rather than advanced markets in Europe and the United States.

Evaluating Industry Market Potential

To assess the potential and growth obstacles of the industry in each target country, we evaluated the industry sales volume over 3–5 years in each market. The main factors to consider are market size and growth rate; industry competitiveness and intensity; entry barriers, such as tariffs and nontariff barriers; customers' specific needs and preferences; and barriers to industry entry. This study showed that whether through news reports or industry research reports from industrial technology research institutes, the cybersecurity software services market in Japan is indeed over 15 times larger than the market in Taiwan.

Selecting Foreign Business Partners

Our main objectives were to determine the type of overseas business partners, identify

the desired qualities they should possess, and develop entry strategies. In the evaluation of business partners, factors such as their industry expertise, capabilities in IB, distribution channels and capabilities in the local market, financial and technical expertise, and employee quality are taken into consideration. The study showed that when CyCraft Technology entered the markets of Singapore and Japan, it first identified the target customer base and then sought out the largest or most suitable partners from that customer base. After a period of breaking in and business expansion, CyCraft Technology provided appropriate technical support and offered its local partners education and training on the frontline products and services. Finally, if both parties were deemed suitable for a long-term partnership, CyCraft Technology invited the partner to join its holding company in the Cayman Islands, forming a long-term partnership in finance and technology cooperation.

Estimating the Company's Sales Potential

We evaluated whether the company can achieve the largest market share in the target market and industry after operating for a certain period. In the assessment of factors such as business partners' capabilities, the ease of acquiring local distributors and distribution channels, the intensity of competition, the time required for market penetration, and risk tolerance need to be considered. The evaluation is based on the company's sales performance in the local market over 3–5 years. In the case of the Japanese market, Oi Intelligence experienced exponential growth in 2020, and based on the assessment, it is expected to

achieve over 50% annual revenue growth in the coming years. The interview with CyCraft Technology revealed that CyCraft Technology's internationalization aligns with the six task-oriented analyses of the international market opportunity assessment model.

Conclusion

Santos (2007) mentioned that there are numerous enterprises in nondeveloped countries globally, or innovative SMEs, such as CyCraft Technology, that differ from traditional large multinational corporations in developed countries. Examples of such large corporations include General Electric in the United States and Siemens in Germany. These traditional multinational corporations have been able to establish a global presence thanks to their inherent firm-specific advantages in the industrial sectors of their home countries. Their globalization efforts often involve replicating the parent company's successful models in other countries.

According to Hennart (2021), the business model is an important factor influencing BGs. In the empirical interviews we conducted, a startup enterprise like CyCraft Technology needs to go global from the start due to unfavorable local conditions to establish a successful business operation on a significant scale. Internalization theory has traditionally been used to explain these large multinational corporations' behavior, but this study focused on a case of a startup SME. From the motivation for internationalization to the selection of international markets as well as the process and strategies for entering international markets, it is evident

that the business model can influence the formation of inherently internationalized companies.

The insufficient domestic market in Taiwan is a prevalent industrial phenomenon. Taiwan is home to approximately 1.3 million SMEs, many of which operate in the cybersecurity industry. These companies often possess unique and competitive core technologies. How these SMEs can transform the aforementioned disadvantage of a small domestic market into a competitive advantage using various strategies is an important issue in the cybersecurity industry in Taiwan. Among these strategies, expanding the market size through internationalization based on the company's unique product technology is a topic worth researching.

When companies choose to expand their market size through internationalization, they immediately face significant challenges in choosing the internationalization path (where to go?) and the internationalization strategy model. CyCraft Technology can be considered a company born for internationalization because within less than 3 years of its establishment, from 2017 to 2019, it actively expanded into overseas markets and established subsidiaries (it established branch offices in Singapore and Japan in 2019). However, why did a startup company set internationalization as its goal from the beginning? Why did the company's founders choose the arduous path of internationalization when establishing the company's long-term goals?

In our interview with Dr. Benson, the cofounder of CyCraft Technology, he explained that the main reason was that the domestic market in Taiwan was simply too small. When the market is too small, several drawbacks arise. The first is that the market is prone to unhealthy price competition. When supply exceeds demand, price competition easily spirals into price slashing, and competitors are willing to engage in a cost-driven frenzy. Therefore, if a company's "pond" is limited to Taiwan, it will be trapped in an unfavorable environment of price wars. When the market becomes dominated by price wars, that the company cannot recover its significant investments in R&D and personnel costs from this small and single market of Taiwan.

This phenomenon aligns with the internalization theory of IB. The small size of the Taiwan market creates a locational disadvantage for CyCraft Technology. To overcome this disadvantage, entering the international market is not only necessary but also inevitable. Many companies in Taiwan, such as CyCraft Technology, possess sufficient technological advantages but lack markets where they can fully leverage their strengths. Therefore, this case study can provide practical management recommendations.

In practical practice for CyCraft Technology since its establishment in 2017, the company has successfully established cross-border operations in Singapore and Japan. Apart from examining financial performance, if there are practical management implications that can serve as evaluation indicators, should the CEO of an enterprise consider the future

expansion of the company into various countries or regions, such as Europe and the United States, and have more basis for expansion?

The majority of Taiwan's cybersecurity industry is SMEs. Of those, 66% provide independent products and professional services, and the remaining one third are product agents. In terms of business, 60.8% of them focus solely on the domestic market in Taiwan, and pure overseas sales only account for 3.3% (Ku & Hsu, 2021). Hardware exports still constitute a significant portion of these firms, with domestic cybersecurity software services accounting for only 39.6%. Therefore, from a practical perspective, the internationalization of the cybersecurity software services industry has immense market potential. Other SMEs in various industries can learn from CyCraft Technology's successful model, and this study can provide certain insights.

Since 2016, Taiwan's government has been vigorously promoting its cybersecurity policies, but it has mostly focused on cybersecurity protection in government agencies. Although these security measures can drive demand for cybersecurity, they have limited benefits for the overall industry, especially for companies seeking internationalization. Therefore, if the government could understand the enterprises' and the industry's needs through successful models of individual firms and utilize trade initiatives to help companies effectively implement internationalization strategies, it can provide substantial support. At the very least, it can prevent companies engaging in solitary battles when competing with

international industry giants.

References

Buckley & Casson (2002) A Long-run Theory Of the Multinational Enterprise

Cannone, G., & Ughetto, E. 2014. Born Globals: A cross-country survey on high-tech start-ups. *International Business Review*, 23(1): 272–283

Cavusgil, S. T., Knight, G. and Riesenberger, J. R. (2020) International Business: The New Realities (5th edition), *New Jersey, USA: Pearson, Prentice Hall*.

CYCRAFT TECHNOLOGY CO., LTD. <https://www.CyCraft.com/company>

Diana Escandon-Barbosa , Josep Rialp-Criado , Sascha Fuerst , Augusto Rodriguez-Orejuela ,Geovanny Castro-Aristizabal .(2019). Born global: the influence of international orientation on export performance. *Heliyon*. 2019 Nov; 5(11): e02688. Published online 2019 Nov 14. doi: 10.1016/j.heliyon.2019.e02688.

Dow, D. 2017. Born Global and accidental internationalists: Has Hennart (2014) opened a can of worms? *Review of International Business and Strategy*, 27(3): 286–307.

Fjelstad, O., & Snow, C. 2018. Business model and organization design. *Long Range Planning*, 51(1): 32–39.

Freeman, S., Hutchings, K., Lazaris, M., Zyngier, S., 2010. A model of rapid knowledge development: the smaller born-global firm. *Int. Bus. Rev.* 19 (1), 70–84.

Jan Johanson and Jan-Erik Vahlne.(2009). The Uppsala internationalization process model

revisited: From liability of Foreignness to Liability of Outsidership. *Journal of International Business Studies*, Vol. 40, No. 9 (Dec., 2009), pp. 1411-1431.

Jean-Francois Hennart ,Antonio Majocchi and Birgit Hagen.(2021) What's so special about born globals, their entrepreneurs or their business model ? *Journal of International Business Studies*, 52, 1665–1694.

Jean-Francois Hennart(2014), The Accidental Internationalists: A Theory of Born Globals, *SAGE Journal (Entrepreneurship Theory and Practice*, vol. 38, 1: pp. 117-135.,*First Published January 1, 2014.*

Jean-Francois Hennart ,Antonio Majocchi and Birgit Hagen.(2021) What's so special about born globals, their entrepreneurs or their business model ? *Journal of International Business Studies*, 52, 1665–1694

Johanson, J., & Vahlne, J. 1977. The internationalization process of the firm—a model of knowledge development and increasing foreign market commitment. *Journal of International Business Studies*, 8(1): 23–32.

Johanson, J., & Vahlne, J. 1990. The mechanism of internationalization. *International Marketing Review*, 7(4): 11–24.

Johanson, J., & Vahlne, J. E. 2009. The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9): 1411–1431.

- Knight, G. & Kim, D. (2009). International business competence and the contemporary firm. *Journal of International Business Studies*, 40(2), 255–273.
- Knight, G. (2000). Entrepreneurship and marketing strategy: the SME under globalization. *Journal of International Marketing*, 8(2), 12–33.
- Knight, G., & Cavusgil, S. 1996. The born global firm: A challenge to traditional internationalization theory. *Advances in International Marketing*, 8(8): 11–26.
- Knight, G., & Cavusgil, S. 2004. Innovation, organizational capabilities, and the born global firm. *Journal of International Business Studies*, 35(2): 124–141.
- Knight, G., & Liesch, P. 2016. Internationalization: from incremental to born global. *Journal of World Business*, 51(1): 93–102
- Ku, H. S., & Hsu, F. G. (2021). Current Status and Development Opportunities of Taiwan's Cybersecurity Industry in 2021. *IEK Consulting, Industrial Technology Research Institute*.
- McDougall, P.P., Shane, S., Oviatt, B.M., 1994. Explaining the formation of international new ventures: the limits of studies from international business research. *J. Bus. Ventur.* 9 (6), 469–487.
- Ministry of Labor, Workforce Development Agency, Taiwan Jobs (2021). Current Development and Future Outlook of Taiwan's Cybersecurity Industry in 2020. Retrieved from <https://job.taiwanjobs.gov.tw/Internet/Index/DocDetail.aspx?uk=2740&docid=38675>

- Ministry of Labor, Workforce Development Agency, Taiwan Jobs (2022). Current Development and Future Outlook of Taiwan's Cybersecurity Industry in 2022. Retrieved from <https://job.taiwanjobs.gov.tw/Internet/Index/DocDetail.aspx?uk=2740&docid=39039>
- Oviatt, B. & McDougall, P. (1994). Towards a theory of international new ventures. *Journal of International Business Studies*, 25(1), 45–64.
- Oviatt, B. & McDougall, P. (1995). Global start-ups: Entrepreneurs on a worldwide stage. *Academy of Management Executive*, 9(2), 30–43.
- Oviatt, B. & McDougall, P. (2005). Defining international entrepreneurship and modeling the speed of internalization. *Entrepreneurship Theory and Practice*, 29(5), 537–553.
- Oviatt, B. M., & McDougall, P. P. (1994). Toward a theory of international new ventures. *Journal of International Business Studies*, 25(1), 45–64.
- Oviatt, B. M., & McDougall, P. P. (1999). A framework for understanding accelerated international entrepreneurship. In A. M. Rugman, & R. W. Wright (Eds.), *Research in global strategic management. International entrepreneurship: Globalization of emerging businesses*. Stamford: JAI Press.
- Paul J., Rosado-Serrano A. (2019) Gradual internationalization vs Born- Global/International new venture models: a review and research agenda. *Int. Mark. Rev*
- Peter J Buckley(2003) ,The Future of the Multinational Enterprise in Retrospect and in

Prospect, *Journal of International Business Studies*.

Peter J. Buckley and Mark Casson¹ (2020) The Internalization Theory of the Multinational

Enterprise: Past, Present, and Future, *British Journal of Management*, Vol. 31, 239–252.

Rennie, M. (1993). Born global. *McKinsey Quarterly*, 4, 45–52.

Rennie, M. 1993. Global competitiveness: Born global. *McKinsey Quarterly*, 4: 45–52

Rialp, A., Rialp, J., & Knight, G. (2005). The phenomenon of early internationalizing firms:

What do we know after a decade (1993–2003) of scientific inquiry? *International Business*

Review, 14, 147–166.

Trend Micro Research(2021), Attacks From All Angles- 2021 Midyear Cybersecurity

Roundup, from <https://www.trendmicro.com/vinfo/hk/security/research-and-analysis/threat-reports>

**Preservation of Socioemotional Wealth and Restructuring of Family Firms:
Evidence from South Korea**
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Preservation of Socioemotional Wealth and Restructuring of Family Firms: Evidence from South Korea

Abstract

Socioemotional wealth (SEW) has been recognized as the underlying mechanism that leads family firms to exhibit unique behavioral patterns that are different from those of their non-family counterparts. While prior family business studies recognize that SEW is a multidimensional construct, whether and how this multidimensionality affects family firms' strategic choices has rarely been examined. Dividing family firms' SEW into inheritance- and relationship-oriented dimensions, we examine how these different SEW dimensions affect family firms' restructuring decisions and their choices of restructuring mode (layoffs versus asset reduction). We argue that family firms generally avoid restructuring to preserve both types of SEW. However, once they decide to restructure due to imminent financial distress that threatens their survival, we argue that they will choose layoffs for immediate cost reduction over permanent asset reduction to preserve inheritance-oriented SEW. Empirical tests of South Korean firms' restructuring mode decisions during a financial crisis provide support for our arguments.

Keywords: family firm, socioemotional wealth, restructuring, layoff, asset reduction

To Investigate the Perceptions of Students from Tourism Hospitality Studies in Higher Education in Macao S.A.R. towards the Concept of Global English Medium Instruction

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To investigate the perceptions of students from tourism hospitality studies in higher education in Macao S.A.R. towards the concept of Global English Medium Instruction

Abstract

In recent years, EMI (English medium instruction) has become an obvious global trend in higher education. It was proposed to look at EMI teaching and learning through the perspective of Global English Language Teaching to generate the concept of Global EMI. This paper is to use this concept to start a research study on Global EMI, including investigating students' perceptions towards it and the feasibility of implementing Global EMI in higher education in Macao S.A.R. This study used a qualitative research method to interview students in a bachelor program in tourism hospitality in the higher education setting in Macao S.A.R.

Keyword: English medium instruction, Global English medium instruction, Tourism hospitality studies

1. Introduction

Macaro (2018) coined the term English medium instruction (EMI) to refer to the practice of using the English language as the medium of instruction for academic subjects in nations or jurisdictions where English is not the dominant language. The advantages of EMI encompass a range of benefits, such as enhancing a school's international standing (Kim, Kweon, & Kim, 2017) and expanding future employment prospects (Huang, 2011). However, alongside its impact on teaching and learning, EMI also gives rise to various concerns, including issues related to linguistic imperialism (Phillipson, 1992) and the recruitment of both native and non-native English-speaking educators (Ambele & Boonsuk, 2021). To address the multifaceted nature of EMI, scholars Rose, Sahan, and Zhou (2022) propose examining EMI teaching and learning from the lens of Global English Language Teaching (GELT) in order to develop a concept known as Global EMI. This concept aims to ensure that EMI instruction is not excessively tied to specific teaching philosophies or countries, thereby fostering diversity within the classroom. Building

upon this Global EMI concept, the paper undertakes a research study investigating the perceptions of undergraduate students in the field of tourism hospitality towards Global EMI, as well as the feasibility of implementing Global EMI in higher education institutions in Macao S.A.R.

2. Literature

2.1 EMI in higher education in Macao S.A.R.

Macao has demonstrated a strong commitment to the industrialization of higher education in recent years, driven by the objectives of elevating educational standards, fostering a knowledge-based economy, and attracting a diverse range of international students and scholars to engage in educational pursuits and research within its borders. The region has prioritized research and innovation, establishing collaborative partnerships between academia, government, and industry to advance scientific inquiry and technological development. Additionally, Macao actively encourages students to participate in practical projects and entrepreneurial endeavors, aiming to cultivate a culture of innovation and entrepreneurship among its student population.

In order to achieve these goals, the Macao government has undertaken substantial efforts to advance the industrialization of higher education. Many higher education institutions in Macao have implemented EMI policies, while others offer optional EMI programs or courses as a means to attract students, promote internationalization, and enhance students' English proficiency. Each institution or university in Macao retains the autonomy to determine its preferred language policy, including the utilization of EMI.

In EMI classes in Macao, based on my understanding and experience as a teaching faculty member in higher education for approximately 10 years on both full-time and part-time basis, teaching approaches may vary. Some faculty members exclusively use English as the medium of instruction, while others occasionally employ Chinese, which is the native language of the majority of students, as a supplementary language alongside English. Furthermore, certain faculty members may teach in Chinese while utilizing

English teaching materials. These variations in EMI practices are influenced by factors such as the nature of the course content and the proficiency levels of the students.

2.2 Language imperialism

The perception of English as a pathway to success, a prerequisite for higher education, and a means of acquiring social status is prevalent among individuals in postcolonial nations (Lai, 2019). Consequently, EMI programs contribute to the enrichment of academic literature, pedagogy, and the cultural landscape of English-speaking regions. However, Shohamy (2007) argues that true globalization embraces multilingualism, despite the prevailing notion of English as the universal language. Language imperialism, in addition to reinforcing linguistic hierarchies, brings about significant transformations in the social, political, and economic fabric of societies (Pennycook, 2001). As a result, there are proponents who advocate for the equal importance of diverse languages. According to Fishman (2001), the growth of a dominant language can marginalize or even lead to the extinction of minority languages, thereby eroding linguistic diversity and cultural heritage.

2.3 Global English Medium Instruction

EMI has been identified as a means to enhance students' English language proficiency, academic literacy, and intercultural competence, thereby facilitating their integration into a globalized society (Coyle et al., 2010). In order to support multilingual pedagogies, challenge the dominance of native English speakers, and recognize the value of multilingual educators, the Global EMI concept has emerged to delineate its distinct features (Rose, Sahan, & Zhou, 2022). Consequently, research endeavors have sought to elucidate the essential components of Global EMI.

While EMI policies are typically regarded as top-down directives, instructors possess the agency to adapt or modify unsuitable policies in order to meet the evolving learning needs within their classrooms (Aizawa & Rose, 2019). These findings underscore the importance of valuing bottom-up policy-making in EMI implementation, acknowledging that local innovations on the ground can serve as valuable sources of

knowledge rather than being perceived as deviations from established pedagogical and policy norms that require rectification. It is crucial to note that these findings do not diminish the significance of institutional or national approaches to EMI provision (Rose, Sahan, & Zhou, 2022).

2.4 Global EMI was defined as follow

Item	Characteristics	Explanation
1	is owned by a global academic community;	it is not the property of the Anglosphere
2	is inclusive of diverse educational cultures;	it does not require nations to adopt foreign pedagogies
3	is flexible in its norms of practice and takes on multiple forms;	there is no one-size-fits-all model of language and content integration
4	places importance on qualified, competent teachers;	it does not place greater importance on recruitment of NESTs or teachers with degrees from Anglophone countries
5	establishes expertise in content and discipline-specific linguistic knowledge;	rather than establishing expertise in general English proficiency
6	looks to local communities and salient comparable contexts for sources of learning materials;	it does not uncritically borrow sources from hegemonic centres of knowledge
7	views the knowledge of other languages and cultures as a resource and encourages students and teachers to make use of their full linguistic repertoires;	it does not promote a monolingual, monocultural, or native-speakerist approach to education
8	defines the needs of students based on local or glocal demands;	it does not uncritically emulate foreign curricular outcomes
9	views the goal of EMI as developing multicompetent graduates;	it does not see the achievement of native-like proficiency as a central goal
10	is multilingual and translingual in orientation.	it is not monolingual or English-only in presentation

(Excerpted from Rose, Sahan & Zhou, 2022)

2.5 Research positioned in tourism hospitality studies

Macao, renowned for its extensive array of casino resorts, stands as a highly sought-after tourist destination. The region's historical and cultural roots have fostered a unique amalgamation of Chinese and Portuguese heritage. Macao is presently having a number of higher education institutions offering bachelor programs in tourism hospitality. The rationale behind selecting tourism hospitality students as the focus of this study stems from the industry's inherent nature of multicultural exchange, wherein graduates

engage with individuals from diverse nationalities within their professional sphere. This characteristic aligns closely with the fundamental tenets of the Global EMI concept, given the emphasis on diversity within job contexts.

2.6 Research questions

1. To what extent does the current EMI implementation in the tourism hospitality classroom align with the principles of the Global EMI concept? What are the similarities and differences between the EMI and Global EMI?
2. Is it possible to have the Global EMI concept be effectively applied to higher education in Macao? Is it suitable and applicable within the specific context of Macao's higher education system?

3. Method and results

According to the interpretivist perspective, this study will employ a qualitative research methodology. Qualitative research entails the construction of a comprehensive and in-depth understanding of social phenomena from a holistic standpoint. The qualitative researcher must immerse themselves in the empirical realm of the subjects under investigation and interpret the meaning of these experiences and phenomena from the perspective of the subjects themselves (Hammarberg et al., 2016). The interpretive process necessitates reflection and reproduction. In this study, a purposeful sampling technique was employed to select interviewees who are enrolled in an EMI bachelor program in tourism hospitality at a university in Macao. Purposeful sampling is a widely used method in qualitative research for identifying and choosing instances that provide abundant information while making optimal use of limited resources (Patton, 2002). The three interviewees in this study were mainland Chinese students who pursued their studies in Macao. The interviews were conducted via online Wechat voice calls, as this platform is popularly used in mainland China. During the interviews, the researcher introduced the concept of Global EMI to the participants and subsequently explored various characteristics of this concept. The students

shared their thoughts and opinions on each characteristic. Thematic analysis, employing manual coding rather than a software tool like Nvivo, was utilized to analyze the interview data. Thematic analysis is a robust approach that enables researchers to delve into the intricate fabric of human narratives, unravel the threads of meaning, and uncover the underlying themes that shape our understanding of the world. As aptly stated by Braun and Clarke (2006), thematic analysis involves the identification, analysis, and reporting of patterns or themes within the data. Through this rigorous process of exploration and interpretation, the essence of lived experiences is illuminated, providing valuable insights into the complexity and diversity of human existence. Chinese (Putonghua) was the language used for conducting the interviews, as it is the native language of the interviewees.

Participants

Interviewee	Age	Year	Gender	Interview time duration
A	19	2	Male	12:22
B	21	3	Male	11:01
C	22	4	Male	09:08

Regarding the criterion of being "1. owned by a global academic community", the perspectives of Students ABC shed light on the nature of the EMI program and expressed that the program incorporates both mainland China and Macao styles, with Student B further noting that Chinese language is also used in the classroom apart from English. On the other hand, Student C characterized the classroom environment as possessing "local (Macao) characteristics". The students highlighted that the EMI program differs from their previous Chinese secondary school education, suggesting that the current curriculum represents a fusion of Chinese and Western styles.

With respect to the aspect of being "2. inclusive of diverse educational cultures", Students A and C expressed concurrence. Student B, however, indicated that the extent of inclusivity depended on the

individual teachers. Nevertheless, Student B opined that the teachers generally adhered to the Anglo-American model as a foundation for their lessons, which was subsequently combined with a teacher-driven pedagogical approach.

The students also shared a consensus regarding the assertion that the EMI program is "3. flexible in its norms of practice", drawing from their personal experiences in EMI classes.

Based on "4. places importance on qualified, competent teachers", responses were diverse.

I would like to have more western teachers so that I can practice my spoken English. For example, if you talk to a local [teacher], you actually [subconsciously] [think] that you can communicate with him/her in Chinese. (Student A)

Anyway, if he [or she] is a good and [capable] teacher, that's fine. (Student B)

Student A expressed that having a native English-speaking teacher enhanced their motivation to engage in speaking English. During the interviews, all the students highlighted a shared observation: as they were studying in Macao, a special administrative region outside of mainland China, they found it acceptable to encounter teachers of diverse nationalities, including Chinese nationals. However, they emphasized their preference for Western teachers if they were studying in a Western country.

Concerning the aspect of "5. establishing expertise in content and discipline-specific linguistic knowledge", the students uniformly acknowledged the acquisition of the necessary subject knowledge. However, none of them explicitly addressed the development of discipline-specific linguistic knowledge. It is noteworthy that this particular layer remains relatively unexplored in their responses, suggesting either a lack of awareness or an absence of discernment regarding the distinction between discipline-specific linguistic knowledge and general English proficiency.

Regarding the aspect of "6. local communities and salient comparable contexts for sources of learning materials", both Students A and B made observations about the English language books used in their

studies. Their comments suggested that the influence of Western values could be present if the authors belonged to the Anglosphere. However, the students also noted that teachers incorporated localized examples, drawing from contexts such as mainland China, Hong Kong S.A.R., and Macao S.A.R., to supplement the learning materials. Student C expressed a sense that the teaching materials were not fixed and that teachers made adjustments from time to time. This indicates that the teachers displayed sensitivity in adapting the learning materials to provide students with the most relevant and suitable content, rather than simply adhering blindly to the language, content, and values presented in English books.

In relation to the aspect of "7. viewing the knowledge of other languages and cultures as a resource and encouraging students and teachers to make use of their full linguistic repertoires", the students primarily noted that teachers would utilize Chinese language to clarify any areas of uncertainty or lack of understanding. However, the details surrounding this practice were not elaborated upon in their responses. Consequently, the exploration of this aspect remains incomplete, as it remains unclear how the knowledge of culture would contribute to the EMI classroom environment.

In relation to the aspect of "8. defining the needs of students based on local or glocal demands", the students' perspectives were largely absent or not explicitly expressed, making it difficult to ascertain their opinions on the matter. Therefore, their views regarding the alignment of educational needs with local or glocal demands remain undisclosed or inconclusive.

As for "9. views the goal of EMI as developing multicompetent graduates",

Basically, we have presentations in English for every subject, so it's not only practicing oral English, but also our courage, and also our ability in that aspect of the speech. (Student A)

Additionally, Students B and C conveyed a sentiment that teachers exhibited a concerted effort to foster the development of students as multi-skilled individuals.

Students agreed with the statement "10. multilingual and translingual in orientation".

Furthermore, in addition to the aforementioned 10 points, the students also mentioned that certain teachers utilized questionnaires or surveys as a means of collecting students' opinions, subsequently employing this feedback to adjust the curriculum. This practice contributed to the alignment of the EMI programs with the expectations of the interviewed students.

4. Discussion

Based on the students' feedback, it is evident that while they possessed a limited understanding of the Global EMI concept, they expressed overall satisfaction with the quality of the EMI courses offered at their university. The findings of the study revealed a correspondence of approximately 70% between the existing EMI courses and the Global EMI concept, addressing Research Question 1. Further details regarding this alignment can be observed in the accompanying table.

Item	Dimension	Similar to the EMI programs in this study	Remark
1	is owned by a global academic community;	✓	/
2	is inclusive of diverse educational cultures;	✓	/
3	is flexible in its norms of practice and takes on multiple forms;	✓	/
4	places importance on qualified, competent teachers;	✓	
5	establishes expertise in content and discipline-specific linguistic knowledge;	Unknown	/
6	looks to local communities and salient comparable contexts for sources of learning materials;	✓	/
7	views the knowledge of other languages and cultures as a resource and encourages students and teachers to make use of their full linguistic repertoires;	✓	
8	defines the needs of students based on local or glocal demands;	Unknown	/
9	views the goal of EMI as developing multicompetent graduates;	✓	/
10	is multilingual and translingual in orientation.	✓	/

In relation to Research Question 2, it is argued that Macao, due to its historical influences, serves as a confluence where Eastern and Western cultures intersect. This cultural amalgamation is evident across

various domains, including the humanities, society, and education. The incorporation of diverse elements from the Global EMI concept is therefore relevant to Macao's multicultural environment. With the exception of points 5 and 8, which elicited "unknown" responses, the other conceptual aspects of Global EMI closely aligned with the EMI program under investigation in this study. The students generally expressed agreement with the dimensions of Global EMI. However, it is noteworthy that some respondents expressed a desire for a greater presence of foreign teachers when studying abroad, indicating a preference for a diverse blend of teaching staff rather than exclusively Chinese teachers. This observation highlights the influence of location or region on the implementation of Global EMI. In the case of Macao, Global EMI proves suitable for the advancement of EMI programs. Its core tenets, which challenge native-speakerism, address inequalities in teacher recruitment and center-periphery dynamics, and promote pluralistic teaching and diverse perspectives, hold significant value.

5. Conclusion

This qualitative research revealed that the EMI program at the university examined in this study closely aligns with the concept of Global EMI, with the exception of the characteristics pertaining to "establishing expertise in content and discipline-specific linguistic knowledge" and "defining the needs of students based on local or glocal demands." Notably, these aspects were not addressed by the respondents, who lacked sufficient relevant experiences and knowledge in these areas. This finding indicates that the surveyed EMI program in Macao has already incorporated the characteristics of Global EMI, drawing from the region's unique historical background and educational context. Furthermore, the satisfaction expressed by the students suggests that adopting Global EMI as a standardized teaching and learning framework is appropriate for implementation in Macao.

One of the primary limitations of this study pertains to the sample size utilized, suggesting that future investigations should consider expanding the number of participating students to yield a more

comprehensive dataset. Particularly in qualitative research, the chosen sample may prove insufficiently large and inadequately randomized to meet the requirements for subsequent quantitative studies, as highlighted by Morse and Neihaus (2009). Therefore, careful consideration should be given to the selection process. Additionally, it is recommended to broaden the study's scope by exploring the students' places of origin to determine whether such factors contribute to variations in the results. Furthermore, conducting further research across diverse disciplines or academic levels (e.g., master's and doctoral programs) in which the students are enrolled would provide valuable insights.

As the concept of Global EMI is relatively new, it is important to recognize that the presented concept does not serve as a rigid and standardized template for educators to adhere to. However, it is recommended that suggestions and regulations be established regarding the scope of application, such as the subject matter encompassed (including considerations beyond bachelor's, master's, and doctoral programs), the specific regions where it is implemented, and the availability of school resources. Furthermore, it is advisable to explore the concept from additional perspectives. For instance, investigations may delve into topics such as the construction of globalized academic communities, the significance of both Eastern and Western teachers in fostering an inclusive Global EMI environment, the development of discipline-specific linguistic knowledge, the holistic communication skills of teachers, and the potential for further refinement of the concept. Additionally, exploring the perceptions of educators and school administrators as subjects of study could provide valuable insights into their supportive views regarding the concept of Global EMI. This may involve understanding their perspectives on the concept and assessing their willingness to embrace and promote its implementation.

References

- Ambele, Eric., & Boonsuk, Yusop. (2020). Voices of learners in Thai ELT classrooms: a wake up call towards teaching English as a lingua franca. *Asian Englishes*. 23. 1-17. DOI: 10.1080/13488678.2020.1759248.
- Aizawa, I., & Rose, H. (2019) An analysis of Japan's English as medium of instruction initiatives within higher education: the gap between meso-level policy and micro-level practice. *Higher Education* 77/6: pp. 1,125–1,142.

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning (CLIL)*. Cambridge: Cambridge University Press. doi:10.1017/9781009024549
- Fishman, J. A. (2001). Can Threatened Languages Be Saved? Reversing Language Shift, Revisited: A 21st Century Perspective. *Multilingual Matters*.
- Hammarberg, K., Kirkman, M., & de Lacey, S. (2016). Qualitative research methods: when to use them and how to judge them. *Human reproduction* (Oxford, England), 31(3), 498–501.
<https://doi.org/10.1093/humrep/dev334>
- Huang, B. (2011). Economic development and the growing importance of the English language in Guangxi. In *English Language Education Across Greater China*.
- Kim, E.G., Kweon, S., & Kim, J. (2017). Korean engineering students' perceptions of English-medium instruction (EMI) and L1 use in EMI classes. *Journal of Multilingual and Multicultural Development*, 38, 130 - 145.
- Lai, M. L. (2019). English linguistic neo-imperialism – a case of Hong Kong. *J. Multiling. Multicult. Dev.* 42, 398–412.
- Macaro, E. (2018). *English medium instruction*. Oxford: Oxford University Press.
- Morse, J.M., & Niehaus, L. (2009). *Mixed method design: Principles and procedures*. Walnut Creek, CA: Left Coast Press.
- Patton, M. Q. (2002) *Qualitative Research and Evaluation Methods*, 3rd edn. Thousand Oaks, CA: Sage.
- Pennycook, A. (2001). *Critical Applied Linguistics: A critical introduction*. Routledge
- Phillipson, R. (1992) *Linguistic Imperialism*. Oxford University Press, Oxford.
- Rose, H., Sahan, K., & Zhou, S. (2022) Global English Medium Instruction: Perspectives at the crossroads of Global Englishes and EMI, *Asian Englishes*, 24:2, 160-172, DOI: 10.1080/13488678.2022.2056794
- Shohamy, E. (2007). The Power of Language Tests, The Power of the English Language and the Role of ELT. In: Cummins, J., Davison, C. (eds)

An Exploratory Study on Institutional Motivations and Challenges in Creating Meaningful Internship Experience

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An Exploratory Study on Institutional Motivations and Challenges in Creating Meaningful Internship Experience

Abstract

This study explored the association between the quality of internship experience and the motivation of organizations and managers using the Equity Theory (ET). The research objective was to identify the key factors that influence students' perception of a meaningful internship experience. Through semi-structured interviews, insights were collected from human resources managers and front-line supervisors in companies about effort required and recognition received for supporting internships as part of their work portfolio. Career counsellors in higher education institutions were also interviewed about setting up internships and matching students with internship opportunities. A follow-up focus group was conducted with students to understand the perceived benefits of their internship experience in comparison with their expectations.

The research findings suggest that an equitable tripartite relationship between the organization, the managers and the interns is key to the delivery of meaningful internship experience. Specifically, the success of any internship program depends on its alignment with the organization's corporate objectives on talent management, the fairness of its internal rewards and recognition mechanism, and congruence with the expectations of the student interns. Another key to a satisfactory internship experience is the management of expectations, through the university career counselling office, and between the organization and the interns. This study's insights not only contribute to the ET literature in the context of internships, but also provide evidence on how organizations can benefit through the application of the creating shared value (CSV) concept to their talent attraction strategy.

Key words: Internship; Equity Theory of Motivation, Creating Shared Value; Talent Attraction

The Multi-stream Management Approach on Millennial Generation Workers and Its Impact on Job Satisfaction, Employee Productivity and Organizational Commitment

MS0025

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The Multi-Stream Management Approach on Millennial Generation Workers and Its Effect on Job Satisfaction, Employee Productivity and Organizational Commitment

Abstract

This paper uncovers the elements and factors that lead to high level of multi-stream management approach that leads to effect on of job satisfaction that results on employee productivity and organizational commitment of workersto stay on their job for a long term. This study surveyed sixty-three (63) Millennial generation workers from the National Capital Region. The findings revealed the direct effect of multi-stream management approach to job satisfaction, employee productivity and organizational commitment by the use of Regression Analysis.

Keywords: Employee Productivity, Job Satisfaction, Multi-Stream Management and Organizational Commitment

1. Introduction

Multi-stream management approach is characterized by its emphasis on multiple forms of well-being for multiple stakeholders. Those groups of persons within or outside an organization that is directly affected by the organization and has a stake in its performance like owners, employees, suppliers, competitors, customers, and so on. Moreover, managerial effectiveness is all about working with these multiple stakeholders toward creating a balance among multiple forms of well-being, apart from the financial well-being of shareholders. In the Multi-stream approach, effective management is all about working with stakeholders toward creating a balance among multiple forms of well-being. Multi-stream management may hinder maximizing individual wealth and organizational growth, but it promotes concern for other stakeholders which is inherently more meaningful to the community and ecologically sustainable.

Main Body

Theoretical Framework



Figure 1: Theoretical Framework of the Study “Factors Influencing Organizational Commitment” By: (Saha, 2017)

The study adopted the model developed by Saha (2017), on the factors that influence organizational commitment that achieves higher performance and productivity, of both employees and the organization, as theoretical framework of the study. As shown in Figure 1, job satisfaction of employees is influenced by the work environment and working conditions, compensation management, promotion opportunity, job security, relationship with managers and co-workers, and management and employee relationship. Human resource managers ensured implementation and monitoring of the core factors that contributed to the achievement of high level of job satisfaction to maintain the desired organizational commitment, performance and productivity in the employee and organization level.

Regression Model:

$$\text{Multi-Stream Management} = \beta_0 + \beta_1 (\text{Job Satisfaction}) + \beta_2 (\text{Employee Productivity}) + \beta_3$$

(Organizational Commitment) ϵ

Multi-Stream Management Approach will serve as the dependent variable or the regressor and of the study, β_0 will serve as the intercept between regression line, β_1 and β_2 and β_2 will serve as the coefficient of Job Satisfaction, Employee Productivity and Organizational Commitment which will be the independent variables of the study or the regressors and lastly, ϵ will represent the error terms that will account to the factors that can affect the model.

Table 1. The Correlation of Multi-Stream Management to Job Satisfaction, Employee Productivity and Organizational Commitment to the Millennial employees in the Philippines

	MULTI_STREAM	JOB_SATISFACTION	EMPLOYEE_PRODUCTIVITY	ORGANIZATIONAL_COMMITMENT
MULTI_STREAM	1	.638	.808	.461
		.000	.000	.000
	63	63	63	63

Based on the data above, the action thereby presents normally distributed data. Contrarily, the correlation between the regressors exhibits passing values of near ± 1 , then it is said to have perfect correlation, $\pm 0.50 - \pm 1$ means Strong correlation, $\pm 0.30 - \pm 0.49$ means Moderate correlation, $\pm 0.29 -$ below means Low correlation and when the p-value is below **0.05** then there is a significant effect of multi-stream management to job satisfaction, employee productivity and organizational commitment.

Table 2. The Regression Model of Multi-Stream Management to Job Satisfaction, Employee Productivity and Organizational Commitment to the Millennial employees in the Philippines

Variable	Coefficient	Std. Error	t-Statistic	Prob.
JOB SATISFACTION	-0.212897	0.170580	-1.248074	0.2169
EMPLOYEE PRODUCTIVITY	1.022240	0.166560	6.137359	0.0000
ORGANIZATIONAL COMMITMENT	-0.029591	0.108794	-0.271992	0.7866
C	0.724746	0.308345	2.350437	0.0221
R-squared	0.661485	Mean dependent var		3.208995
Adjusted R-squared	0.644272	S.D. dependent var		0.519312
S.E. of regression	0.309733	Akaike info criterion		0.555174
Sum squared resid	5.660133	Schwarz criterion		0.691246
Log likelihood	-13.48798	Hannan-Quinn criter.		0.608692
F-statistic	38.43014	Durbin-Watson stat		2.138735
Prob(F-statistic)	0.000000			

$$\text{Multi Stream Management} = \beta_0 + \beta_1 (\text{Job Satisfaction}) + \beta_2 (\text{Employee Productivity}) + \beta_3 (\text{Organizational Commitment}) + \varepsilon$$

Since the result is in the significance level between ± 0.50 - ± 1 , it signifies that there are both strong positive correlations between the multi stream management to job satisfaction, employee productivity, and organizational commitment and by the regression p-value of 0.000 it means that multi-stream management approach has a significant effect to job satisfaction, employee productivity, and organizational commitment.

Conclusion

Since their demand is high for these employees and there are alternatives available around, it is relevantly easy for them to jump among companies and seek for other organizations that would best fit their needs. The employees are the core of the business, and the management always seeks to retain their productive employees, thus it is vital to consider the factors affecting their turnover. With the rising level of Millennial generation workers in the respondent industry, and the existence of some group of unsatisfied employees, the researcher is motivated to uncover the elements and factors that lead to multi-stream management approach that has an effect to job satisfaction, employee.

References

- Allen, N. and Meyer, J. (2017). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *The Journal of Occupational Psychology*, 63, 1-18.
- Angeles, V., Saludo, A., Virtus, L., Tun, W. (2017). "Job Satisfaction and Performance Level of employees of Ajinomoto Philippines Corporation: Lucena Branch", *LPU Laguna Business and Accountancy Journal*, Vol. 1, No. 2, pp. 61-103.
- Berry L.L& Kehoe, W. J. (2018). "How Bank Marketers View Their Jobs", *The Banker Magazine*,
U.S.A. Vol. 163, No. 6.
- Boinott. (2017). "Organizational Commitment and Job Satisfaction of Employees in a Retail Establishment", pp. 1-11, *La Consolacion College Bacolod*.
- Gillikin, J. (2017). "Measuring Productivity and Efficiency Calculation", *HEARST, Hearst Newspapers, LLC.,Chron.*
- Malata, J. (2017). "Are PH Outsourcing Workers The Happiest?", *Outsourcing Philippines Inc., WordPress Theme, Jobstreet.Cnnphilippines.com.*
- Mukulu and Sakwa (2018). Organizational commitment at a higher education institution.
International Journal of Education and Research.
- Krishna and Marquardt (2017). City managers' job satisfaction and frustration: Factors and implications. *American Review of Public Administration*, 41(6):670-685.
- Lopez (2017). "Antecedents of Job Satisfaction and Organizational Citizenship Behaviors Among Agency-Hired Blue-Collar Contractual Workers in the Philippines, *Philippine Journal of Psychology*, Vol. 8, Issue: 1, pp. 1-27, Psychological Association of the Philippines, Ateneo de Manila.
- Saha, R. (2017). "Factors Influencing Organizational Commitment: Research and Lessons", *Management Research and Practice*

A Comprehensive Review and Synthesis of Poverty Research: What Can International Business Scholars Learn and How to Chart Future Research at the Macro, Meso and Micro levels?

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**A Comprehensive Review and Synthesis of Poverty Research:
What Can International Business Scholars Learn and
How to Chart Future Research at the Macro, Meso and Micro levels?**

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Extended Abstract

The world has made significant strides in the last few decades in reducing extreme poverty. However, across the world, even the most affluent societies have not eradicated poverty fully. Given this scenario, we aim to embark on a systematic literature review to capture and synthesize poverty studies over the last 100 years. The goal is to track poverty research over time to surface its foundations; document its development and generate nuanced insights for international business scholars.

Keywords: Poverty, International Business, Literature Review, Future Research

1. Introduction

Poverty remains a tremendous socio-economic problem and its eradication continues to be a challenge for humanity (Karnani, 2007). The United Nations acknowledges that “eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development” (<https://sdgs.un.org/topics/poverty-eradication>). This is why the first sustainable development goal focuses on ending poverty everywhere and in all its forms (United Nations, 2017). The depth and breadth of poverty as an issue requires a multi-specialty and interdisciplinary approach to knowledge-building and collective action.

The world has made significant strides in the last few decades in reducing extreme poverty from more than 1/3 of the global population in 1991 to less than 10% by 2017 (Jolliffe et al., 2022). However, across the world, even the most affluent societies have not eradicated poverty fully. Many developed

countries retain pockets of relative poverty, particularly as many areas experience increasing costs of living and rising inequality. The United States, for example, still counts around 11.7% of its population as poor (Shrider, Kollar, Chen & Semega, 2021), despite many programs supporting employment and welfare. However, the brittleness of this socio-economic situation has been demonstrated by the recent Covid-19 pandemic, which pushed more than 90 million people back into poverty in 2020 (Mahler, Yonzam & Lakner, 2022). The Covid-19 pandemic has exposed the economic difficulties faced by many people around the world, despite increasing global affluence and generated calls for management scholars to be more active in research around social inequities, especially poverty (Bapuji et al., 2020).

Given the prevalence of poverty in both developing and developed countries, we aim to embark on a research project that reviews 100 years of poverty research. Our goal is to track poverty research over the last 100 years – surfacing its foundations; documenting its development and generating nuanced insights for international business scholars.

Focusing on poverty aligns well to the growing expansion of international business theory that conceptualizes organizations beyond the profit-maximizing firm. Recent reviews have shown the growing sentiment by the private sector on the need for more purposeful organizational behavior (George et al., 2021), whether through corporate social responsibility (Barnett, Henriques & Husted, 2020), social entrepreneurship (Saebi, Foss & Linder, 2019), and non-profit firms (Gee et al., 2023), many of these organizational activities include poverty alleviation in their aims. Furthermore, management has moved beyond studying firms in developed countries, requiring new theoretical extensions as the literature moves towards countries where poverty remains a substantial concern (Aguinis et al., 2020).

2. Method

Given that we were conducting a systematic literature review, we followed a set of procedures. First, we comprehensively scanned the literature from 1920 up to the present to search for articles where the term “poverty” appeared in the title and abstract. Second, we trimmed down the extensive list of papers using FT50 as the inclusion guide for the review. Third, we collected the papers that qualified and developed a coding scheme. Fourth, we completed the first round of coding and is now in the process of inter-coding.

3. Initial Findings and Observations

Our initial coding is indicating that poverty research has mainly been nested in the domain of economics, with development economics having the oldest research tradition on the topic. While this can be explained by the very nature of poverty – i.e., as an economic construct – this is somewhat limiting and at times problematic because our full understanding of poverty requires a concerted effort across all disciplines, with aspects of international business, organizational behavior, human resource management, entrepreneurship, marketing, strategy and other management fields needing to provide more insights to the global conversation (Kolk et al., 2014). In fact, most of the priority actions for poverty eradication (<https://sdgs.un.org/topics/poverty-eradication>) are related to work and organizations, with entrepreneurship and venture creation increasingly being framed as a key solution to poverty (Bruton, Ahlstrom & Steven, 2015). However, the international business field seems to be lagging behind in comprehensively understanding poverty and in bringing in relevant management theories and perspective in the study of poverty. Poverty affects organizations and people within the organization, and therefore inter-country differences in poverty levels will need to be better understood by companies wanting to do business across borders. For example, subsidiary employees do experience first-hand poverty, suppliers do get bankrupt and spiralled into poverty, customers are challenged with poverty, etc. Hence, poverty is a relevant and timely topic for international business scholars to talk about and address.

We also aim to generate insights and contributions to scholarship across three levels. First is at the micro (individual) level. Recent work has combined poverty with scarcity theory in terms of extent of access to scarce resources, particularly financial resources, in different countries. By highlighting scarcity, insights from organizational behavior, psychology and behavioral economics have pointed to the impact of poverty to the individual person's decision-making capabilities. The stress borne about by people undergoing strong financial constraints generates a cognitive load that reduces attention towards more immediate demands and reduces long-term thinking (De Bruijn & Antonides, 2022). Poverty is also highly linked to instances of depression and other mental health issues (Ridley et al., 2020). As a consequence, this

reduces the productivity of workers and make them more prone to making errors (Kaur, Mullainathan & Schillbach, 2021). Reducing poverty of employees generates a virtuous cycle of enhanced productivity and improved organizational outcomes.

Second is at the meso (team/org/industry) level. International business research has looked into the meso-level drivers of poverty across multiple fields, particularly marketing, entrepreneurship and strategy. Much of this literature has highlighted the poor consumer base as a large, underserved market that could be a source of innovation at the “bottom of the pyramid” (Prahalad, 2012). This Bottom of the Pyramid literature has spawned advances in promoting new business models, and encouraging multinational corporations to reassess the way they do business in emerging markets.

Novel business models, such as microcredit and microfinance, are the most widespread and well researched, but not necessarily the only innovation that has spread globally from companies that sought to serve the underprivileged (Gupta & Kanungo, 2022). By highlighting the poorer segments of society, BOP research has upended traditional international business research by showcasing the importance of non-traditional companies, especially small and medium enterprises, social enterprises, and non-government organizations, rather than multinational companies, in the creation of alternative business models (Kolk, Rivera-Santos & Ruffin, 2014).

Third and last is at the macro (country/world) level. Macro-level studies in the international business literature have focused on the cross-country differences between the developed countries and emerging markets, where bulk of the global poor reside. This literature highlights the presence of institutional voids in emerging markets, wherein underdeveloped capital, labor and product markets operate under imperfect government regulations and contract enforcement (Khanna & Palepu, 1997). The absence of functioning institutions to support property rights and contract enforcement generate transaction costs that impede the proper development of the

markets needed for the poor to participate in, generate income and escape poverty (North, 1990). Under such conditions, firms are required to reformulate their strategies to overcome these missing institutions, such as through the formation of large business groups (Khanna & Palepu, 2000), promotion of social entrepreneurship (Seelos & Mair, 2005), or the generation of institutional entrepreneurs that promote market creation (Onsongo, 2019). More recently, new information technologies such as platforms and ecosystems that can help reduce transaction and organizational costs have become another mechanism for promoting the inclusion of poor consumers and producers in markets (Soluk, Kammerlander & Darwin, 2021).

Combining these underlying dynamics with intercountry comparisons in international business research allow us to tease out the mechanisms by which these innovative business practices that are created by firms to overcome the institutional difficulties subsequently promote or inhibit the alleviation of poverty (Stephan, Uhlaner & Stride, 2015).

4. Conclusion

This ambitious and yet achievable research project is very timely given that Covid-19 pandemic pushed more than 90 million people back into poverty in 2020 (Mahler, Yonzam & Lakner, 2022). Through this research, we aim to generate valuable insights for international business scholars on how to do their share and contribute to the alleviation of poverty of individuals, teams, organizations and societies. There are wide ranging theoretical perspectives and conceptual frameworks that can enrich the economics field and the international business field can become bolder and play more important role in understanding and addressing poverty at different levels. It is about time that international business scholars pay more serious attention to poverty research to make a more lasting and meaningful impact to society.

References

- Aguinis, H., Villamor, I., Lazzarini, S. G., Vassolo, R. S., Amorós, J. E., Allen, D. G. 2020. Conducting management research in Latin America: why and what's in it for you?. *Journal of Management*, 46: 615-636.
- Bapuji, H., Patel, C., Ertug, G., Allen, D. G. 2020. Corona crisis and inequality: Why management research needs a societal turn. *Journal of Management*, 46: 1205-1222.
- Barnett, M. L., Henriques, I., Husted, B. W. 2020. Beyond good intentions: Designing CSR initiatives for greater social impact. *Journal of Management*, 46: 937-964.
- De Bruijn, E.J., Antonides, G. 2022. Poverty and economic decision making: a review of scarcity theory." *Theory and Decision* 92: 5-37.
- Gupta, S., Kanungo, R.P. 2022. Financial inclusion through digitalisation: Economic viability for the bottom of the pyramid (BOP) segment. *Journal of Business Research* 148: 262-276.
- Jolliffe, D.M., Mahler, D. G., Lakner, C., Atamanov, A., & Tetteh Baah, S. K. 2022. Assessing the Impact of the 2017 PPPs on the International Poverty Line and Global Poverty. WorldBank.Org
- Karnani, A. 2007. The mirage of marketing to the bottom of the pyramid: How the private sector can help alleviate poverty. *California Management Review* 49: 90-111.
- Kaur, S., Mullainathan, S., Oh, S., Schilbach, F. 2021. *Do financial concerns make workers less productive?* (No. w28338). National Bureau of Economic Research.
- Khanna, T., Palepu, K. 1997. Why focused strategies. *Harvard Business Review* 75: 41-51.
- Khanna T., Palepu K. 2000. The future of business groups in emerging markets: long-run evidence from Chile. *Academy of Management Journal*, 43: 268-285
- Kolk, A., Rivera-Santos, M, Ruffin, C. 2014. Reviewing a decade of research on the "base/bottom of the pyramid"(BOP) concept. *Business & Society*, 53: 338-377.
- Kolk, A., Rivera-Santos, M. and Ruffin, C. 2018 Multinationals, international business, and poverty: A cross-disciplinary research overview and conceptual framework. *Journal of International Business Policy* 1: 92-115.
- Mahler, D. G., Yonzan, N. Lakner, C. 2022. The impact of COVID-19 on global inequality and poverty. WorldBank.Org
- North, D. C. 1990. *Institutions, institutional change and economic performance/by Douglass C. North* (No. POS 330.1 N6.).
- Onsongo, E. 2019. Institutional entrepreneurship and social innovation at the base of the pyramid: the case of M-Pesa in Kenya. *Industry and Innovation* 26: 369-390.
- Prahalad, C. K. 2012. Bottom of the pyramid as a source of breakthrough innovations. *Journal of Product Innovation Management* 29: 6-12.
- Ridley, M., Rao, G., Schilbach, F., Patel, V. 2020. Poverty, depression, and anxiety: Causal evidence and mechanisms. *Science*, 370(6522), eaay0214.
- Saebi, T., Foss, N. J., Linder, S. 2019. Social entrepreneurship research: Past achievements and future promises. *Journal of Management*, 45: 70-95.
- Seelos C., Mair J. 2005. Entrepreneurs in service of the poor: models for business contributions to sustainable development. *Business Horizons*, 48: 241-246.
- Shrider, E. A., Kollar, M., Chen, F., Semega, J. 2021. Income and poverty in the United States: 2020. *US Census Bureau, Current Population Reports*, (P60-273).
- Soluk, J., Kammerlander, N., Solomon, D. 2021. Digital entrepreneurship in developing countries: The role of institutional voids. *Technological Forecasting and Social Change* 170: 120876.
- Stephan, U., Uhlaner, L. M., Stride, C. 2015. Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies*, 46, 308-331.

The Significance of Distance between International Joint Ventures: Investigating the Space and Place Effect on Investment Decisions

MS0028

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The Significance of Distance between International Joint Ventures: Investigating the Space and Place Effect on Investment Decisions

Extended Abstract

This study analyses how MNEs make foreign investment decisions, considering spatial (distance) and location (context) effects. Eighty-four sponsors across 97 LNG projects in 22 countries were studied using a four-stage hierarchical multiple regression analysis. This study attempts to fill two research gaps. The study first aims to test whether the distance between joint venture partners and the distance to the host country influences investment decisions. Secondly, the study aims to establish whether context effects in the host country influence investment decisions through interactions. This study contributes to IB research by integrating institutional theory and economic geography to gain deeper insights.

Keywords: Investing decision, space and place, international joint venture, institutional distance, cultural distance

1. Introduction

Different forms of foreign investment impact MNEs' control over foreign operations and outcomes (Anderson & Gatignon, 1986; Brouthers, 2002; Makino & Delios, 1996). For example, wholly owned subsidiaries offer high control, with the parent company solely bearing costs and risks. JVs allow for resource-sharing but may face alignment challenges with the parent company's strategy, making them more operationally constrained than wholly owned subsidiaries. MNEs carefully evaluate foreign investment options to determine the most suitable form. However, existing research on MNEs' overseas investment behaviour has predominantly focused on the host country relationship from the MNEs' perspective, overlooking the investment decisions of other JV partners, resulting in the two research gaps identified in our literature review (Figure 1).

(Insert Figure 1 here)

2. Literature and framework

Literature

Contemporary IB research studies suggest that distance has become obsolete as an influencing factor in foreign investment decisions (Beugelsdijk, McCann, & Mudambi, 2010; Håkanson & Dow, 2012; Kostova & Zaheer, 1999). However, in practice, its relevance remains high and has attracted the attention of researchers studying MNEs (e.g. Eden & Miller, 2004; Rugman, Verbeke, & Nguyen, 2011; Zaheer, Schomaker, & Nachum, 2012). The challenges associated with the distance between home and subsidiary host countries are characteristic of MNEs (Zaheer, 1995). Existing research has highlighted that geographical diversification allows MNEs to enter diverse markets, acquire knowledge, and seize opportunities (Rosenkopf & Almeida, 2003; Rugman et al., 2011).

Managing the distance between MNEs is difficult (Ambos & Ambos, 2009; Kostova & Zaheer, 1999). To understand why, in-depth research on distance and its underlying mechanisms, along with the practical implications, is needed (Berry, Guillén, & Zhou, 2010; Salomon & Wu, 2012). Specifically, there is a need to distinguish between the physical and contextual aspects of distance and

the difficulties managing MNEs.

Contextual differences refer to the need for MNEs to deal with different host countries (Ambos & Ambos, 2009; Brannen, 2004; Griffith & Harvey, 2001; McCann, 2011). These countries may differ from the MNE's home country in terms of cultural, administrative, and economic circumstances (Kostova & Roth, 2002). Similar to geographical distance, contextual differences may present potential coordination and communication challenges. Headquarters can easily misunderstand the regulations, customs, and values of host countries with significant contextual differences, resulting in misguided support (Bhagat, Kedia, Harveston, & Triandis, 2002; Kostova, Nell, & Hoenen, 2018; Slangen, 2011).

Henisz and Swaminathan (2008) and Berry et al. (2010) emphasise the multidimensionality of distance and the importance of integrating national institutions as country-level factors in IB research. While many studies examine the multidimensional impact of country-level factors on MNEs, some criticisms arise due to potential confusion about their effects (van Hoorn & Maseland, 2016). Research in IB often fails to distinguish between institutional distance and contextual effects (Klopf & Nell, 2018).

Drawing on institutional theory (Berry et al., 2010; Kostova, Roth, & Dacin, 2008) and recent IB and economic geography literature (Beugelsdijk et al., 2010), this study aims to address the aforementioned issue. We investigated the impact of country-level factors on the investment decisions of limited natural gas (LNG) project sponsors. These factors included geographical, contextual, and institutional distance. We also investigated the impact of the host country's financial systems, investments, financing laws, and regulations on sponsors' investment decisions. In line with existing economic geography literature, we refer to these factors as spatial and location effects (Beugelsdijk et al., 2010, McCann, 2011).

Framework

Concerning the first research gap, previous studies on direct investment by MNEs have focused only

on the MNEs' decision-making factors and not on the JV partners' investment decisions. Consequently, the distance between the JV sponsor and the JV partner has not been sufficiently examined. IB research tends to focus on the challenges MNEs face when moving into a less developed institutional environment from highly developed institutional environments (van Hoorn & Maseland, 2016). The reason for this research gap lies in the entry mode studies of MNEs, where the mainstream analysis typically employs a binary variable. It assigns a value of 1 to wholly owned subsidiaries and 0 to JVs with local firms without considering the JV partner's decision (e.g. Ang, Benischke, & Doh, 2015; Arslan, Tarba, & Larimo, 2015; Brouthers, Brouthers, & Werner, 2008; Ilhan-Nas, Okanb, Tatoglu, Demirbagd, Woode, & Glaisterf, 2018; Powell & Rhee, 2016; Xu, Pan, & Beamish, 2004). Accordingly, the following hypothesis is formulated:

Hypothesis 1. Investment decisions are affected by the distance from the host country and the distance between the JV sponsor and JV partner(s).

Second, as Klopff and Nell (2018) noted, IB research often fails to distinguish between distance and context effects, which generates a second research gap in the diagram. Henisz and Swaminathan (2008) and Berry et al. (2010) emphasise the need to integrate both distance multidimensionality and national institutions as country-level factors in IB research. While several studies claim to examine the multifaceted impact of country-level factors on MNE subsidiaries, some studies have recently been criticised for conflating outcomes (van Hoorn & Maseland, 2016). This study addresses this issue by drawing on institutional theory (Berry et al., 2010; Kostova et al., 2008) and recent IB and economic geography literature (Beugelsdijk et al., 2010). Specifically, we investigated how country-level factors influence the investment decisions of sponsors. These factors include the geographical, contextual, and institutional space (distance) between the LNG project location country (JV host country) and the sponsor's home country headquarters, as well as the location of the host country (context) in terms of financial systems and investment and financing-related legal systems. In line with existing economic geography literature, these two factors are referred to as spatial (distance) and location (context) effects (Beugelsdijk et al., 2010; McCann, 2011). Accordingly, the following hypothesis is formulated:

Hypothesis 2: Investment decisions are affected by the interaction of place (context) and space (distance) effects in the host country.

3. Method and results

Method

This study examines the investment decisions of 84 sponsors of 97 LNG project projects in 22 countries. Tables 1 and 2 show the numbers of LNG projects and JV sponsor headquarters by region and country, respectively.

(Insert Tables 1 and 2 about here)

Table 3 shows the variable descriptions for the dependent, independent, moderating, and control variables. Table 4 shows the descriptive statistics for the same. The dependent variable is the equity share of each JV sponsor of the LNG project. Data on the dependent variable were obtained from the International Gas Union (2022) and the International Group of Liquefied Natural Gas Importers (2022).

(Insert Tables 3 and 4 about here)

Five independent variables comprise three distance-related variables between the JV sponsor and the project country (geographic, institutional, and cultural) and two distance-related variables between the JV sponsor and other sponsors (institutional and cultural). We conducted a hierarchical multiple regression analysis comprising four steps.

Results

Table 5 shows the validation of direct effects for Hypotheses 1 and 2, with expected negative regression coefficients. In validating the distance between the JV sponsor and the project, both cultural and institutional distance show statistically significant effects. Of the three variables considered in validating the distance between the most important JV sponsor and other sponsors, only institutional

distance showed statistical significance. Market-based and bank-based financial systems were examined to test the location (context) effect. Both subgroups show a statistically significant negative impact on the cultural and institutional distance between the JV sponsor and the project. However, only the banking financial system subgroup supports the effect of institutional distance between the JV sponsor and other sponsors.

(Insert Table 5 here)

Table 6 summarises the results of the interaction effects of Hypothesis 2. The hypothesis suggests that the greater the participation of JV sponsors of the same nationality, the greater the negative impact of distance on investment decisions. Four coefficients are statistically supported in this context, except for the institutional distance between the JV sponsor and the project. Regarding the assumption that stronger investor protection in the project location country reduces the negative impact of distance, neither coefficient is statistically supported. However, stronger legal rights in a project-location country align with the assumption, as statistical support is obtained for the institutional distance between the JV sponsor and the project, as well as between the sponsor and other sponsors.

(Insert Table 6 here)

4. Discussion

In analysing Hypothesis 1 and verifying direct effects, only institutional distance showed statistical significance concerning the space (distance) effect in the relationship between the JV sponsor as the acting entity and other sponsors. This might be due to the JV partners' focus on contractual obligations and joint management structure within the JV, leading to a lack of awareness regarding the geographical and cultural distance from other sponsors.

Regarding Hypothesis 2, the analysis examines the variation in place (context) and the financial system of the project country. The findings confirm the negative impact of institutional and cultural distance between the JV sponsor and project location in both market- and bank-based financial

systems. However, no variables reach statistical significance in the market-based financial system regarding the impact of JV sponsors on other sponsors. In contrast, the bank-based financial system confirms the negative impact of institutional distance between the JV sponsor and other sponsors. This can be attributed to the strong perception of institutional distance by financial intermediaries—such as banks in bank-based financial systems—leading them to prefer JV sponsors with lower levels of institutional distance.

This experiential learning process prepares MNEs for international expansion. However, participation in LNG projects implies a choice over LNG reserves, and in most cases, an experiential learning process is not available in the home country. As the JV sponsor gains experience in LNG operations, they acquire insights into sensitive project operations, leading to increased awareness of distance and its negative impact on the sponsor's investment decision-making. No interaction term reaches statistical significance when examining the results of investor protection legislation, suggesting that JV sponsors may not fully grasp its extent. The LNG project company, an unlisted, newly established special-purpose JV, maintains stable equity for decades, except in cases where sponsor bankruptcy threatens business continuity. This likely downplays the importance of investor protection legislation. Testing the strength of legal rights in loan transactions reveals a statistically significant interaction effect, observed in both the institutional distance between the JV sponsor and the project location and between the JV sponsor and other sponsors. This indicates the JV sponsor's recognition of the significance of bank financing for the LNG project company, despite distance evaluations using an index with various formal institutional factors.

The study finds that the distance between the investment actor and target, as well as the characteristics of the location where the investment target is situated, influence the investor's decision. We examined the influence of contextual effects on investment behaviour by aligning institutional factors with the behavioural objectives of investment actors. We focused on the financial system, investment protection, and financing legislation. This approach allowed us to subdivide and deepen our analysis of the factors behind investors' investment decisions. Nonetheless, some areas may necessitate improvement in statistical analyses; thus, we will continue to conduct post hoc testing.

REFERENCES

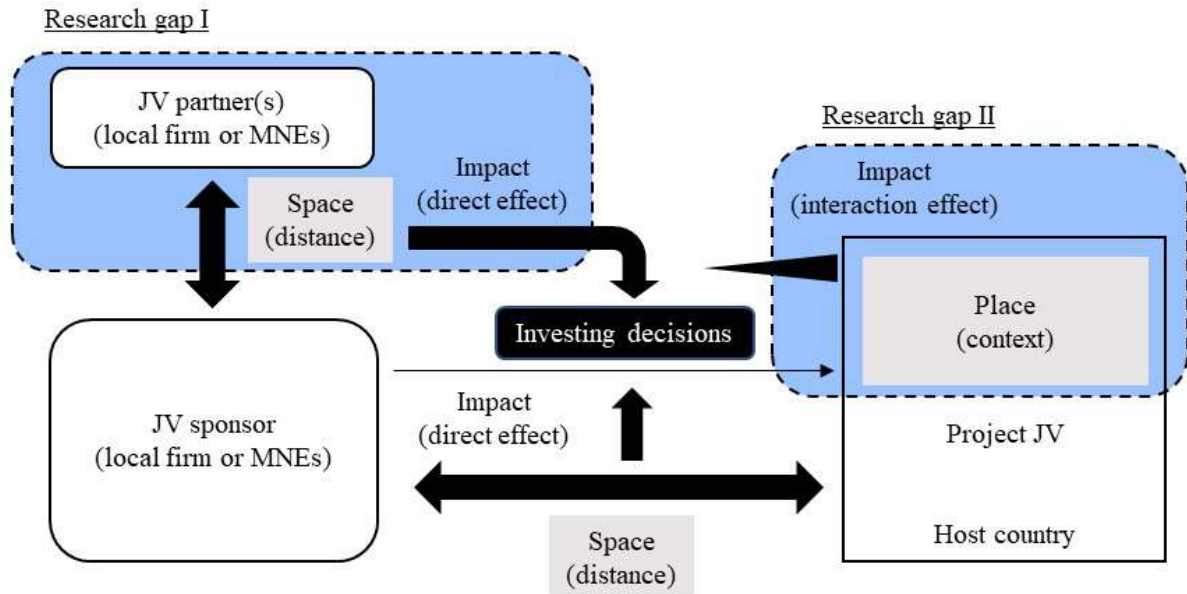
- [1] Ambos, T.C. & Ambos, B. 2009. The impact of distance on knowledge transfer effectiveness in multinational corporations. *Journal of International Management*, 15(1): 1–14.
- [2] Anderson, E. & Gatignon, H. 1986. Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies*, 17(3): 1–26.
- [3] Ang, S. H., Benischke, M. H., & Doh, J. P. 2015. The interactions of institutions on foreign market entry mode. *Strategic Management Journal*, 36(10): 1536–1553.
- [4] Arslan, A., Tarba, S. Y., & Larimo, J. 2015. FDI entry strategies and the impacts of economic freedom distance: Evidence from Nordic FDI in transitional periphery of CIS and SEE. *International Business Review*, 24(6): 997–1008.
- [5] Berry, H., Guillén, M.F., & Zhou, N. 2010. An institutional approach to cross-national distance. *Journal of International Business Studies*, 41(9): 1460–1480.
- [6] Beugelsdijk, S., McCann, P., & Mudambi, R. 2010. Introduction: Place, space and organisation - economic geography and the multinational enterprise. *Journal of Economic Geography*, 10(4): 485–493.
- [7] Bhagat, R.S., Kedia, B.L., Harveston, P.D., & Triandis, H.C. (2002). Cultural variations in the cross-border transfer of organisational knowledge: An integrative framework. *Academy of Management Review*, 27(2): 204–221.
- [8] Brannen, M.Y. 2004. When Mickey loses face: Recontextualization, semantic fit, and the semiotics of foreignness. *Academy of Management Review*, 29(4): 593–616.
- [9] Brouthers, K.D. 2002. Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies*, 33(2): 203–221.
- [10] Brouthers, K. D., Brouthers, L. E., & Werner, S. 2008. Resource-based advantages in an international context. *Journal of Management*, 34(2): 189–217.
- [11] Eden, L., & Miller, S. R. 2004. Distance matters: Liability of foreignness, institutional distance and ownership strategy. In M. A. Hitt & J. L. C. Cheng (Eds.) *The evolving theory of the multinational firm. Advances in international management*: 187–221. Bingley: Emerald

- [12] Griffith, D.A. & Harvey, M.G. 2001. Executive insights: An intercultural communication model for use in global interorganizational networks. *Journal of International Marketing*, 9(3): 87–103.
- [13] Håkanson, L. & Dow, D. 2012. Markets and networks in international trade: On the role of distances in globalisation. *Management International Review*, 52(6): 761–789.
- [14] Henisz, W., & Swaminathan, A. 2008. Institutions and international business. *Journal of International Business Studies*, 39(4): 537–539.
- [15] Ilhan-Nas, T., Okanb, T., Tatogluc, E., Demirbagd, M., Woode, G., & Glaisterf, K. W. 2018. Board composition, family ownership, institutional distance and the foreign equity ownership strategies of Turkish MNEs. *Journal of World Business*, 53(6): 862–879.
- [16] International Gas Union. 2022. *World LNG Report, 2022 edition*. Retrieved from International Gas Union website: <https://www.igu.org/resources/world-lng-report-2022/>
- [17] International Group of Liquefied Natural Gas Importers. 2022. *GIIGNL 2022 Annual Report*. Retrieved from International Group of Liquefied Natural Gas Importers website: <https://giignl.org/document/giignl-2022-annual-report/>
- [18] Klopf, P., & Nell, P. C. 2018. How "space" and "place" influence subsidiary host country political embeddedness. *International Business Review*, 27(1): 186–197.
- [19] Kostova, T. & Roth, K. (2002). Adoption of an organisational practice by subsidiaries of multinational corporations: Institutional and relational effects. *Academy of Management Journal*, 45(1): 215–233.
- [20] Kostova, T., Roth, K., & Dacin, M.T. 2008. Institutional theory in the study of multinational corporations: A critique and new directions. *Academy of Management Review*, 33(4): 994–1006.
- [21] Kostova, T. & Zaheer, S. 1999. Organisational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1): 64–81.
- [22] Makino, S. & Delios, A. 1996. Local knowledge transfer and performance: Implications for alliance formation in Asia. *Journal of International Business Studies*, 27(5): 905–927.
- [23] McCann, E. 2011. Urban policy mobilities and global circuits of knowledge: Toward a research agenda. *Annals of the Association of American Geographers*, 101(1): 107–130.
- [24] Powell, K. S., & Rhee, M. 2016. Experience in different institutional environments and foreign

- subsidiary ownership structure. *Journal of Management*, 42(6): 1434–1461.
- [25] Rosenkopf, L. & Almeida, P. 2003. Overcoming local search through alliances and mobility. *Management Science*, 49(6): 751–766.
- [26] Rugman, A.M., Verbeke, A., & Nguyen, Q.T.K. 2011. Fifty years of international business theory and beyond. *Management International Review*, 51(6): 755–786.
- [27] Salomon, R. & Wu, Z. 2012. Institutional distance and local isomorphism strategy. *Journal of International Business Studies*, 43(4): 343–367.
- [28] Slangen, A.H.L. (2011). A communication-based theory of the choice between greenfield and acquisition entry. *Journal of Management Studies*, 48(8): 1699–1726.
- [29] van Hoorn, A., & Maseland, R. 2016. How institutions matter for international business: Institutional distance effects vs institutional profile effects. *Journal of International Business Studies*, 47(3): 374–381.
- [30] Xu, D., Pan, Y., & Beamish, P. W. 2004. The effect of regulative and normative distances on MNE ownership and expatriate strategies. *Management International Review*, 44(3): 285–307.
- [31] Zaheer, S., Schomaker, M.S., & Nachum, L. 2012. Distance without direction: Restoring credibility to a much-loved construct. *Journal of International Business Studies*, 43(1): 18–27.

FIGURES

Figure 1. Conceptual diagram



TABLES

Table 1. LNG project location by region and country

Region	No. of project	Country
Asia Pacific	37	Australia (18), Brunei (3), Indonesia (9), Malaysia (6), Papua New Guinea (1)
North America	13	United States (13)
Central & South America	6	Argentina (1), Peru (1), Trinidad and Tobago (4)
Middle East	20	Libya (1), Oman (2), Qatar (13), UAE (2), Yemen (2)
Africa	14	Algeria (4), Angola (1), Cameroon (1), Egypt (2), Equatorial Guinea (1), Nigeria (5)
Western Europe	1	Norway (1)
Russian Federation	6	Russia (6)
Total	97	

Table 2. JV sponsor headquarter location by region and country

Region	No. of sponsor	Country
Asia Pacific	43	Australia (4), Brunei (1), China (5), Indonesia (4), Japan (17), Malaysia (2), Papua New Guinea (3), Singapore (1), South Korea (4), Taiwan (1), Thailand (1)
North America	12	Canada (1), United States (11)
Central & South America	1	Trinidad and Tobago (1)
Middle East	7	Kuwait (1), Libya (1), Oman (1), Qatar (1), UAE (1), Yemen (2)
Africa	6	Algeria (1), Angola (1), Egypt (2), Equatorial Guinea (1), Nigeria (1)
Western Europe	13	Belgium (1), France (1), Germany (1), Italy (1), Netherlands (1), Norway (2), Portugal (1), Spain (2), United Kingdom (3)
Russian Federation	2	Russia (2)
Total	84	

Table 3. Variable description

Variable (D): Dependent, (I): Independent, (M): Moderating, (C): Control	Proxy	Value
(D) JV sponsor's investing decision	Shareholding % in LNG project company	Continuous value of 0 to 100
(I) ID between JV sponsor and project country	World Governance Indicators' mean difference	Continuous value of -3.78 to 3.78
(I) CD between JV sponsor and project country	Kogut and Singh index's mean absolute difference	Continuous value of 0 to 5.89
(I) GD between JV sponsor and other sponsors	Latitude and longitude differences between capitals	Continuous value of 0 to 2,716
(I) ID between JV sponsor and other sponsors	Sum of World Governance Indicators' mean difference	Continuous value of -15.97 to 31.95
(I) CD between JV sponsor and other sponsors	Sum of Kogut and Singh index's mean absolute difference	Continuous value of 0 to 60.89
(M) LNG experience in the region	Number of years elapsed since the first year of investment	Integer value of 0 to 49
(M) No. of JV sponsors from the same country	Number of JV sponsors from the same country	Integer value of 0 to 7
(M) Strength of investor protection	World Bank's Index of strength of investor protection	Continuous value of 0 to 8.00
(M) Strength of legal rights	World Bank's Index of strength of legal rights	Integer value of 0 to 12
(C) GD between JV sponsor and project company	Sum of latitude and longitude differences between capitals	Continuous value of 0 to 306
(C) JV sponsor listing	Average of listed = 1 and unlisted = 0	Continuous value of 0 to 1
(C) JV sponsor credit rating	Weighted average of Moody's/S&P/Fitch ratings	Continuous value of 0 to 17.8
(C) Year dummy	Year dummies separated by decade from 1970 to 2021	Dummy
(C) Project country risk	OECD Country Risk Classification	Integer value of 0 to 7
(C) Gas liquefaction capacity (unit: mtpa)	Project's liquefaction capacity (million tons per annum)	Continuous value of 0.5 to 15.6
(C) Local government participation	Value = 1 if local government participates as JV sponsor.	Dummy
(C) JV's participation as offtaker	Value = 1 if JV sponsor participates as offtaker	Dummy

ID: Institutional Distance, CD: Cultural Distance, GD: Geographical Distance

Table 4. Descriptive statistics

Variable (I): Independent, (M): Moderating, (C): Control	Mean	Std. Dev.	Median	Min.	Max
(I) ID between JV sponsor and project country	-0.29	1.31	-0.36	-3.78	3.78
(I) CD between JV sponsor and project country	2.09	1.15	2.24	0.00	5.89
(I) GD between JV sponsor and other sponsors	490	408	388	0.00	2,716
(I) ID between JV sponsor and other sponsors	0.36	4.56	-0.38	-15.97	31.95
(I) CD between JV sponsor and other sponsors	10.12	7.67	8.93	0.00	60.89
(M) LNG Experience in the region	2.09	6.91	0.00	0.00	49
(M) No. of JV sponsor from the same country	0.15	0.65	0.00	0.00	7.00
(M) Strength of investor protection	5.32	1.73	5.80	0.00	8.00
(M) Strength of legal right	7.02	3.92	7.00	0.00	12.00
(C) GD between JV sponsor and project company	120	73	105	0.00	306
(C) JV sponsor listing	0.57	0.36	0.51	0.00	1.00
(C) JV sponsor credit rating	10.12	4.68	11.85	0.00	17.84
(C) Project country risk	2.76	2.43	3.00	0.00	7.00
(C) Gas liquefaction capacity	4.85	2.39	4.45	0.50	15.60
(C) Local government participation	0.46	0.50	0.00	0.00	1.00
(C) JV's participation as offtaker	0.04	0.19	0.00	0.00	1.00

ID: Institutional Distance, CD: Cultural Distance, GD: Geographical Distance

Table 5. Summary for verification of direct effects (corresponding to Research Question 1)

***p < 0.001; **p < 0.01; *p < 0.05

Independent variables	All projects (N=97)		Projects in market- based system country (N=39)		Projects in bank-based system country (N=58)	
GD b/w sponsor & other sponsors						
ID b/w sponsor & other sponsors	Negative	*			Negative	**
CD b/w sponsor & other sponsors						
Observation	8,148		3,276		4,872	

ID: Institutional Distance, CD: Cultural Distance, GD: Geographical Distance

Table 6. Summary for verification of interaction effects (corresponding to Research Question 2)

***p < 0.001; **p < 0.01; *p < 0.05

Independent variables	Moderating variables [expected sign]					
	No. of sponsor from the same country [-]		Strength of investor protection [+]		Strength of legal rights [+]	
GD b/w sponsor & other sponsors	Negative	**				
ID b/w sponsor & other sponsors	Negative	*			Positive	*
CD b/w sponsor & other sponsors	Negative	***				
Observation	8,148					

ID: Institutional Distance, CD: Cultural Distance, GD: Geographical Distance

Exploring the Complement of Organizational Capabilities on Internationalization: the Role of Artificial Intelligence and Dynamic Managerial Capabilities

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Exploring the Complement of Organizational Capabilities on Internationalization: the Role of Artificial Intelligence and Dynamic Managerial Capabilities

Abstract

The objective of this study is to identify the organizational capabilities that enable firm internationalization, and then to explore how artificial intelligence and dynamic managerial capabilities supplement organizational capabilities to influence internationalization results. The research framework and hypotheses were developed and empirically tested with 290 firms in Taiwan. The findings show that organizational capability is positively correlated with dependent variable international performance. Dynamic managerial capabilities and artificial intelligence (AI) capabilities positively moderated the relationship between organizational capabilities and international performance. This study makes several theoretical and managerial contributions. First, it contributes to the internationalization literature by understanding the role of organizational capabilities for internationalization. Second, it contributes to the capability perspective in an international setting by disclosing how dynamic managerial capabilities and AI capabilities complement to internationalization. Third, it enriches the scant literature on comparison of different capabilities and how AI capabilities expand the bounded rationality. Fourth, firms can foster their organizational capabilities to improve their international performance. Fifth, managers can leverage their unique capabilities to efficiently cultivate, nurture, and utilize dynamic capabilities both

within their organizations and across boundaries. Sixth, managers also need to upgrade their firm's artificial intelligence capability in order to develop more effective strategies for expanding globally and to enter new markets with greater success.

Key words: internationalization, artificial intelligence, organizational capability, dynamic managerial capability, bounded rationality

Introduction

Human decision making, problematic search, learning, and experience have long been central to organizational theory from its inception (March and Simon, 1958; Csaszar and Steinberger, 2022). Organizational capabilities, the main source of the firm's performance advantages (Grant, 1991), affect the development and execution of firm's strategy and therefore its international performance (Morgan et al., 2004; Kuivalainen et al., 2010; Bianchi and Stoian, 2022). As the business environment rapidly changes, organizations are under greater pressure to respond accurately and quickly to shifting conditions due to mass information and bounded rationality. In order to enhance the quality of decision-making process, firms have two approaches to achieve.

On the one hand, at the firm level, firms can improve decision making with the help of advanced technology, such as artificial intelligence (Shrestha and Ben-Menahem, 2019; Vincent, 2021). For example, human analysts who use an AI-based program make more

accurate stock price forecasts for financial investments than those who do not (Cao et al. 2021). AI solutions for recording patient conditions using standardized codes in medical charts also improved the productivity of medical coders who previously did the job manually (Wang et al. 2019). On the other hand, at the individual level, dynamic managerial capabilities are of great significance in managers' decision-making, since dynamic managerial capabilities allow managers to adapt their organizations to changing environmental conditions and contribute to strategic change (Adner and Helfat, 2003; Helfat et al., 2007; Teece et al., 1997). For example, Eggers (2012) found that managerial coordination of new product development was important to new product quality in the mutual fund industry and argued that this was suggestive of dynamic managerial capabilities.

According to Morgan et al. (2004), organizational capabilities affect the development and execution of firm's internationalization strategy and therefore its performance. Through the lens of the resource-based view capabilities, a firm's management skills or its organizational processes for instance, are valuable and rare (Barney, 1991). Following the knowledge-based theory, a firm's capability to co-ordinate internal competencies enables the transformation of knowledge into value creating processes (Dosi and Marengo, 1994). There is a discourse on the impact of capabilities on strategy and a firm's success. Atuahene-Gima and Murray (2004) highlight the influence of organizational capabilities in the context of the strategy development. In contrast, Lages et al. (2009) see little empirical evidence of strategic

impact of capabilities on strategy and performance in the context of internationalization.

Hence, Theodosiou and Katsikeas (2013) consider firm's capabilities as a specific field of interest for future research.

The objective of this study is to first identify the organizational capabilities that enable firm internationalization, and then to explore how artificial intelligence and dynamic managerial capabilities supplement organizational capabilities to influence internationalization results.

Overall, this study makes three contributions. First, it contributes to the internationalization literature by understanding the role of organizational capabilities for internationalization. We enhance the current knowledge by revealing two capabilities that are complementary for internationalization. Second, this study contributes to the capability perspective in an international setting by disclosing how dynamic managerial capabilities and AI capabilities complement to internationalization. It also offers a better understanding of the role of managerial and organizational capabilities in international performance. Third, this study enriches the scant literature on comparison of different capabilities and how AI capabilities expand the bounded rationality.

The rest of the study is organized as follows. We first review the literature on SME internationalization and present the theoretical background to the study followed by sections that provide the methodological aspects and the findings of our study. The final section offers

a discussion of the findings, implications, limitations, and future research directions.

Literature review and hypothesis development

Organizational capabilities and internationalization

Organizational capabilities are the main source of the firm's performance advantages (Grant, 1991). Organizational capabilities have two major aspects: (1) the shifting character of the business environment; and (2) strategic management in appropriately adapting, integrating, and re-configuring knowledge-based capabilities toward the changing environment (Knight and Cavusgil, 2004). Replication of organizational capabilities involves transferring or re-deploying capabilities from one organizational or business environmental setting to another, so as to extend the firm's performance into new markets, new product categories, and new ways of doing business (Nelson and Winter, 1982; Teece et al., 1997).

The overarching concept of organizational capabilities embraces a collection of more specific capabilities that matter to different organizations under different circumstances. For example, firms competing in fast-changing, dynamic markets need to have superior market-sensing capability (Teece, 2012); firms must build up their research and development (R&D) capabilities to gain competitive advantages in hi-tech industries (Eisenhardt and Martin, 2000); and channel management capabilities are vital to traditional retail firms

(Chopra and Sodhi, 2004). Engaging in new businesses or competing in new markets usually requires organizations to cultivate new capabilities.

The RBV framework frames much of the discussion as it focuses on identifying the resources (the firm's observable but not necessarily tangible assets) and organizational capabilities (the firm's accumulated knowledge and skills) that support the development of export strategies (Murray et al. 2011). Within the strand of the RBV literature, studies demonstrate that organizational capabilities can act as valid predictors of firms' engagement and performance in international markets. Bianchi and Wickramasekera (2016) show how the perceptions of managers regarding resources and organizational capabilities can influence their commitment to export activities. Raymond and St-Pierre (2013) identify the configurations of organizational capabilities that help French and Canadian firms in the manufacturing industry succeed abroad. Lefebvre et al. (1998) use data on Canadian firms to show that R&D-related capabilities significantly impact upon firms' export intensity in global markets.

Research has shown that the capability of shortening market development cycles can have a positive impact on a firm's internationalization. For example, Hult et al. (2005) found that firms that were able to bring new products to market more quickly had higher export sales than firms that took longer to develop and launch new products. Similarly, research by Knight and Cavusgil (2005) found that companies that were able to respond quickly to

changing market conditions and customer needs had higher export performance than companies that were slower to adapt. Another study by Du and Boateng (2015) found that shortening product development cycles was positively associated with export performance for Chinese firms. The authors suggest that this is because faster time-to-market allows firms to better respond to international market opportunities and gain a competitive advantage.

Heckler and Powell (2016) described organizational agility as an organizational capability to rapidly adapt, exploit opportunities and grow in an unpredictable competitive environment. Organizational agility assumes great significance for the firm's internationalization for two reasons. On the one hand, market capitalizing agility can transfer the explicit knowledge into an experiential one to meet the requirement of the new market. For instance, it can use the structural knowledge to build well-defined norms (e.g., trust-building) to facilitate the monitoring of internationalization, and confidently deal with the threats from host markets (Swafford et al., 2008). On the other hand, operational adjustment agility can strengthen firms' international learning feedback, and help them to successfully apply and adopt this explicit knowledge to rapidly select optimum locations in targeting market and gain competitive advantage quickly (Tallon and Pinsonneault, 2011). Johanson and Vahlne (1977) also stated that it is beneficial for the multinationals to apply explicit knowledge to extract tacit knowledge from its successive operations. Hence, given these two capabilities of organizational agility, firms are more likely to prepare for the

acquisition of the explicit knowledge to implement their international strategies (Dove, 2001; Sambamurthy et al., 2003). At the same time, some research also proposed that Chinese firms with strong organizational agility can gain experiential knowledge from external resources to promote their international strategies obviously (Tsai, 2001; Yang et al., 2009).

To sum up, firms with stronger organizational capabilities are often more agile and adaptable. By building strong organizational capabilities, firms can increase their performance when expanding into international markets. Hence, we suggest the following hypothesis:

H1: Firm's organizational capabilities are positively related to international performance.

Dynamic managerial capabilities

The theoretical view of dynamic managerial capability posits that managers leverage distinctive capabilities to effectively build, nurture and apply dynamic capabilities within and across organizational boundaries (Helfat and Peteraf, 2003). Dynamic managerial capabilities include managerial cognitive, social, and human capabilities that play critical roles in building dynamic capabilities at the organization level in sensing, seizing and reconfiguring capabilities (Teece, 2009; Helfat and Peteraf, 2003). Managerial cognitive ability refers to the

cognitive capacity of managers to accomplish tasks requiring significant cognitive engagement such as problem-solving, reasoning and perception attention to detail (Helfat and Peteraf, 2015). Managerial social capability refers to the ability to develop contacts and connections through organizational and individual social networks, allowing effective connections with critical information channels, vital resources, and opportunities to produce competitive advantages for firms (Adler and Kwon, 2002). Finally, managerial human capability is the managerial capacity to apply skills, knowledge and innovative capabilities that have been developed through past experience and educational background (Castanias and Helfat, 2001). The dynamic capability view perceives dynamic managerial capabilities as essential for effectively transforming internal resources and capabilities in accordance with changes in the external environment, through the integration of new technologies and successful innovation (Kor and Mesko, 2013; Adner and Helfat, 2003; Sirmon and Hitt, 2009; Teece, 2009; Teece, 2007).

Managers with strong cognitive abilities are better able to adapt to changing circumstances and make quick decisions in response to new challenges (Wang and Ahmed, 2007), such as changes in consumer behavior or shifts in economic conditions. They can also develop and implement effective strategies for entering new markets, such as identifying potential partners, suppliers, and customers, and building relationships with key stakeholders. This kind of flexibility can enable the organization to respond more quickly and effectively to

changes in the market or competitive landscape. This can help the organization to allocate resources effectively and adapt to changing market conditions. Managers with strong cognitive abilities can also identify the training and development needs of employees and provide them with the resources they need to enhance their skills and knowledge (Rouleau and Balogun, 2011). This can enable the organization to build a more agile workforce that is better able to adapt to changing circumstances. In short, managerial cognition plays an important role in enhancing organizational capability. By leveraging their cognitive abilities, managers can make strategic decisions, foster innovation, solve complex problems, promote learning and development, and improve communication and collaboration within the organization, thus strengthening the international performance.

By building and maintaining strong networks of relationships with the stakeholders, managers can access valuable resources and information quickly and efficiently, which can help their organization respond more quickly and effectively to changes in international markets. For example, managers with strong social capability can establish close relationships with key suppliers and customers, gaining insight into their needs and preferences, and developing customized solutions to meet their requirements. They can also collaborate effectively with other teams and departments within the organization, as well as with external partners, such as logistics providers and distributors, which can help the organization work more efficiently and effectively, even in the face of uncertainty and

ambiguity in international markets (Hult et al., 2008).

Furthermore, managers with strong human capability are committed to continuous learning and development, which is critical for success in international markets. By staying up-to-date with the latest trends and technologies, these managers can identify new opportunities and respond to changes in international markets more quickly and effectively (Moi and Cabbidu, 2021). They can also provide their employees with the resources and training they need to stay competitive in their respective fields, building a more agile workforce that is better able to adapt to changing circumstances and take advantage of new opportunities in international markets.

To sum up, stronger dynamic managerial capabilities are better able to adapt to changing market conditions and take advantage of new opportunities. Therefore, firms with strong dynamic managerial capabilities are better able to leverage their organizational capabilities to drive better international performance.

H2: Firm's dynamic managerial capabilities positively moderated the relationship between organizational capabilities and international performance.

Artificial Intelligence (AI) capabilities

We refer to AI in its broadest sense, including the vast domain of smart process automation, intelligence systems and algorithm economy (Azkan et al., 2019;

Martinez-Lopez and Casillas, 2013). This study defines an AI capability as a firm's ability to structure, bundle, and leverage its AI-based resources (Mikalef and Gupta, 2021). AI is a transformative technology that has the potential to significantly enhance various aspects of organizational capability. AI capability can help firms to overcome the challenges of internationalization by improving their ability to adapt to new markets and manage complex global customers' demands (Salam, 2019). Firms that leverage AI capabilities can achieve better performance in international markets by enhancing their organizational capabilities, including agility, market-sensing capabilities, R&D capabilities, and operational efficiency.

One of the key benefits of AI is its ability to enhance organizational agility (Fosso, 2022). In today's fast-paced business environment, firms need to be able to respond quickly to global changing market conditions. AI can help firms to be more agile by providing them with real-time insights and tools to respond to market changes in real-time (Javaid et al., 2022). This can help firms to allocate resources effectively, make strategic decisions, and adapt to changing market conditions, which is essential for success in international markets. Furthermore, AI can improve market-sensing capabilities, helping firms to identify new opportunities and develop innovative solutions to meet customer needs. Firms can gain a better understanding of their customers' needs and preferences, enabling them to develop more effective marketing strategies and improve their customer engagement (Huang and Rust, 2021). By tailoring their products and services to meet the needs of international customers,

firms can enhance their competitiveness and increase their chances of success in international markets.

By analyzing large amounts of data, AI can identify patterns and insights that can inform the development of new products and services that are better suited for specific international markets. Additionally, AI can help firms to streamline their operations and optimize their processes, resulting in significant cost savings that can be used to support their international expansion efforts (Jarrahi, 2018). With faster innovation and improved operational efficiency, firms can more effectively compete in global markets, respond to changing market conditions, and better meet the needs of customers worldwide (Chen et al., 2012).

Firms with higher AI capabilities will be better equipped to leverage their existing organizational capabilities to achieve better international performance. AI can enhance the efficiency and effectiveness of organizational processes, allowing firms to respond more quickly and accurately to changing market conditions. This can help firms to develop more effective strategies for expanding globally and to enter new markets with greater success.

H3: Firm's AI capabilities positively moderated the relationship between organizational capabilities and international performance.

Methodology

Data and Sample

This study was conducted in Taiwan. The country has a large number (98%) of export-oriented firms. In addition, compared to the percentage of individuals using the internet in developed countries worldwide (57%), Taiwan has a relatively higher rate of internet use (92.6%), ranking number three in Asia (International Telecommunication Union, 2021). This feature is suitable for firms to develop new technological usage, such as AI. This study used primary data collected in 2022. The respondents were selected according to stratified random sampling. The population was divided into strata of higher homogeneity. Samples were then extracted from each stratum based on industries and districts. The main methods of this study included an offline questionnaire supplemented by an online questionnaire. The selected respondents were 1000, and the total valid questionnaires were 290.

Dependent variable

Following the majority of previous studies (e.g., Grant, 1987; Kotabe et al., 2002), and the suggestions of Sullivan (1994) who examined the suitability of various indices, this study quantifies internationalization by using the ratio of foreign sales to total sales.

Independent variables

Dynamic managerial capability is built on three core underpinnings: managerial cognition, managerial social capital, and managerial human capital (Helfat and Martin, 2015).

Managerial cognition refers to managers' personal beliefs and mental models for decision-making (Adner and Helfat, 2003). Managerial social capital consists of “formal and informal relationships that managers have with others” (Helfat and Martin, 2015, p. 1286). Managerial human capital includes the knowledge, experience, skills, and education (Helfat and Martin, 2015) of both individual managers and teams of managers (Martin, 2011). Following Corrêa et al. (2019), we used four items to measure managerial cognition, three items to measure social capital and three items to measure human capital. All these components are measured by the five-point Likert scale questionnaire.

Organizational capability is defined as the capacity by which an organization “perform(s) a particular activity in a reliable and at least minimally satisfactory manner” (Helfat and Winter, 2011, p. 1244). For example, firms competing in fast-changing, dynamic markets need to have superior market-sensing capability (Teece, 2012); companies must build up their research and development (R&D) capabilities to gain competitive advantages in hi-tech industries (Eisenhardt and Martin, 2000); and channel management capabilities are vital to traditional retail companies (Chopra and Sodhi, 2004). Following Liu et al. (2012), we used seven items to measure organizational capability. All these components are measured by the five-point Likert scale questionnaire.

AI capabilities could be defined as the firm’s ability to create a bundle of organizational, personnel and AI resources for business value creation and capture (Abijith and Wamba,

2012; Kim et al., 2011; Liu et al., 2013). Following Chen et al. (2021), we used five items to measure AI capabilities. All these components are measured by the five-point Likert scale questionnaire.

Control variables

Older firms have more considerable resources than younger firms based on the resource-based view. This premise is based on the assumption that firms acquire resources over time due to path dependency (Liebowitz and Margolis, 1995). Because older firms generally have a more extensive stock of resources than younger firms, the resource-based view of venture internationalization predicts that they will be better able to build an international basis (Bloodgood et al., 1996). Firms may perceive the lower risk of doing business abroad with a more extensive resource stock because they will be better prepared to deal with challenges. Therefore, there may be a greater motivation to engage in international business. However, the rise in “born-globals” and “international new ventures” (McDougall and Oviatt, 1994) have raised questions about the validity of the incrementalist model of international expansion (Moen and Servias, 2002). Firms in both the high-technology and manufacturing sectors are observed going international even before operating in their domestic market (Jones and Crick, 2004). Indeed, the learning advantage derived from newness seems to be at play in these firms (Autio et al., 2000). In other words, no matter they are older firms or born-globals, both of which have an influence on internationalization. Thus,

we controlled firm age, subtracting the year when the firm started operations from when survey data was collected in 2022.

General education can provide basic knowledge and improve analytical problem-solving skills (Aidis and Mickiewicz, 2004). The educational level of entrepreneurs has a positive impact on the survival and growth of the company (Cooper et al., 1994). Brüderl and Preisendörfer (2000) clearly pointed out that entrepreneurs with a good education background, firms are more likely to grow rapidly. Furthermore, Shane and Ventakaraman (2000) stated that well-educated people look forward to creating high-growth expectation companies. Other studies have explored that education will positively affect their growth ambitions and high-growth expectations (Kolvereid, 1992; Karadeniz & Özdemir, 2009). Thus, we controlled education level in this study (1=under high school; 2=high school; 3=junior college; 4=bachelor's degree; 5=master's degree; 6= doctor's degree).

We also included industry type as control variables. Industries vary in their export intensity. Lecerf and Omrani (2020) use this variable exploring firm internationalization. We incorporated an industry-related dummy variable that distinguishes firms operating in the services category from those operating in the manufacturing category (manufacturing industry=1; service industry=0).

Analysis

In the model testing the relationship between firm internationalization and

organizational capability, we checked the possibility of the reverse causality with the Durbin–Wu–Hausman (DWH) test. The result of the DWH test indicates that there is no endogenous problem in our model ($F(1, 280) = 2.63$; $p = 0.106$), as the null hypothesis of exogenous influences on the dependent variable may not be rejected. Therefore, there was no need for an estimation of the instrumented variable regression and we report the results based on the ordinary least squares (OLS) estimation (Brown et al., 2011).

In testing hypothesis 1, we use the multivariate regression model based on the OLS estimation. Tests of hypotheses 2 and 3 involve the moderated multiple regression models, in which we introduce the two-way interaction terms between organizational capability, dynamic managerial capability and AI capability. Based on the variance inflated factor (VIF) diagnostic, we do not detect the problem of multi-collinearity in any of our MMR models testing hypotheses 2 and 3.

All regressions have been checked for the correctness of the assumptions of the classical regression model with the regression diagnostics functions of the statistical software package STATA.

Results and discussion

Table 1 reports descriptive statistics and correlations among the variables included in this study. We check the variance inflation factor (VIF) of each regression model for

multicollinearity. The maximum value of VIF is 1.91, the minimum value of VIF is 1.05, and the mean value of VIF is 1.38. This is considerably below the cutoff point of 10, indicating that multicollinearity is not a problem and does not contaminate the analyses.

Table 1 Means, standard deviations, and correlations

	Mean (SD)	Min.	Max.	Export	AGE	EDU	IND	OC	DMC	AI
Export	26.1(30.181)	0	100	1						
Firm age (AGE)	29.069(23)	0	117	0.0248	1					
Education level (EDU)	3.959(1.167)	1	6	0.0430	-0.1341*	1				
Industry type (IND)	0.476(0.500)	0	1	0.1371*	0.1574**	-0.1736**	1			
Organization capability (OC)	26.031(4.128)	7	35	0.5977**	-0.1018	0.1576**	-0.0256	1		
Dynamic managerial capability (DMC)	39.207(4.609)	24	50	0.5511**	-0.1811**	0.0592	0.0750	0.6028**	1	
AI capability (AI)	18.221(3.104)	6	25	0.5565**	-0.0573	0.1458*	-0.0812	0.7027**	0.4320**	1
VIF	1.38				1.10	1.05	1.06	1.91	1.76	1.18
N=290										
SD standard deviation. *p < 0.05. **p<0.01										

Table 2 lists the main regression results. Consistent with hypothesis 1, organizational capability is positively correlated with dependent variable international performance (β =0.429; $p<0.01$). Firms that have stronger organizational capabilities are typically more agile

and adaptable. By cultivating organizational capabilities, firms can improve their performance when entering international markets.

Consistent with hypothesis 2, firm's dynamic managerial capabilities positively moderated the relationship between organizational capabilities and international performance ($\beta=0.057$; $p<0.1$). Managers with sharp cognitive abilities excel at adapting to shifting circumstances and making prompt decisions in the face of new obstacles when internationalizing. By establishing and nurturing stakeholder networks, managers can swiftly and efficiently access valuable resources and information, facilitating their organization's agile and effective response to international market changes. Moreover, managers who possess strong human capabilities are dedicated to ongoing learning and development, which is a vital factor for achieving success in global markets. Firms that possess strong dynamic managerial capabilities are better positioned to leverage their organizational capabilities, resulting in better international performance.

Firm's AI capabilities positively moderated the relationship between organizational capabilities and international performance, supporting hypothesis 3 ($\beta=0.076$; $p<0.05$). Firms that possess advanced AI capabilities are more likely to effectively utilize their existing organizational capabilities, leading to better international performance. AI has the potential to enhance the efficiency and effectiveness of various organizational processes, enabling firms to swiftly and accurately adapt to dynamic global market conditions.

As the control variables, the coefficient on firm age is positive and significant ($\beta=0.109$; $p<0.05$), which indicates that older firms have higher internationalization degree than young firms. The coefficient on industry type is positive and significant ($\beta=0.304$; $p<0.01$), which indicates that manufacturing industry firms have higher internationalization degree than service industry firms. The coefficient on education level is not significant.

Table 2 The direct and moderating effects

	Coef.	Std. err.	t	P	95% Conf. Interval	
Education level	-.0189436	.0457179	-0.41	0.679	-.1089325	.0710454
Firm age	.1099502	.0462346	2.38	0.018	.0189442	.2009561
Industry type	.3036455	.0919906	3.30	0.001	.1225729	.484718
Organization capability (OC)	.4293898	.0642847	6.68	0.000	.3028547	.5559248
Dynamic managerial capability (DMC)	.3285914	.0567636	5.79	0.000	.2168607	.4403222
AI capability (AI)	.2870831	.064321	4.46	0.000	.1604767	.4136896
OC*DMC	.0566952	.0326174	1.74	0.083	-.0075073	.1208978
OC*AI	.0763023	.0343294	2.28	0.023	.0107298	.1458747
Constant	-.0548363	.0513191	-1.07	0.286	-.1558503	.0461777
N=290						
F (8, 281) =31.80; Prob > F= 0.0000; R-squared: 0.4752; Adj R-squared= 0.4602; Root MSE=.7347						

Robustness check

We conduct sub-sample analyses to check the robustness of our empirical results. Large firms represent more resources and capabilities, which may cause bias in the main results. We check the robustness of results by using sub-samples. We constrain our sample by excluding observations for large firms, that is employees are above 200. Among the total 290 firms, 87 firms are large firms, and the sub-sample size is 209. The results hold the same in the model; thus, the presence of firm size does not bias our main results.

Table 3 Robustness test

	Coef.	Std. err.	t	P	95% Conf. Interval	
Education level	.0032022	.0580368	0.06	0.956	-.111251	.1176555
Firm age	.1358612	.0548924	2.48	0.014	.0276089	.2441134
Industry type	.2686987	.1118506	2.40	0.017	.0481134	.489284
Organization capability (OC)	.5250891	.0736624	7.13	0.000	.3798211	.6703571
Dynamic managerial capability (DMC)	.3235553	.0719537	4.50	0.000	.1816569	.4654537
AI capability (AI)	.2693605	.0807439	3.34	0.001	.1101172	.4285837
OC*DMC	.1008612	.038713	2.61	0.010	.0245162	.1772062
OC*AI	.1110697	.043013	2.58	0.011	.0262447	.1958947
Constant	.0014879	.0581854	0.03	0.980	-.1132584	.1162341

Additional test

This study further compares the influence of AI capability and dynamic managerial capability on the main effect, and we focus on the difference to be significant using the Chow test ($F = 5.46$, $n_1 = 5$, $n_2 = 284$, $p < 0.05$). This result indicates that AI capability has stronger moderation effect than the dynamic managerial capability on the relationship between organizational capability and internationalization.

In addition to what this study highlights, there are several evidence showing the importance of AI capability. First, the global AI market size was USD 428.00 billion in 2022, and it is expected to grow exponentially to USD 2025.12 billion by 2030 (Fortune Business Insights, 2023). PWC (2018) reported that by 2030 the global GDP could rise by 14% (\$15.7 trillion) as a result of AI-enabled activities. Scholars are also paying significant attention to AI. The total number of scientific articles related to artificial intelligence published so far in the business and management fields is already more than 2500 (more than 45,000 considering all disciplines), showing a growth rate of +9.27% in 2022 compared to 2021 (source: Web of Science). By contrast, contributions addressing artificial intelligence and the international performance of firms are few. The topic has not received the same attention as other forms of digitalization, for example e-commerce (Bell and Loane, 2010; Hamill, 1997; Reuber and

Fischer, 2011; Sheth and Sharma, 2005) or additive manufacturing (Hannibal and Knight, 2018).

Expand Bounded rationality

With advances in information processing techniques, enhanced theories of auto associative machines and advances in artificial intelligence methods, it has been suggested to revise the theory of bounded rationality to flexibly-bounded rationality (Marwala and Hurwitz, 2017). Information, which is used to make decisions, is imperfect because of factors, such as measurement errors, but can be partially corrected by using advanced information analysis methods. Furthermore, some of the data that are missing and, thereby, incomplete can be partially completed using missing data estimation methods. Additionally, a human brain, influenced by other social and physiological factors, can be substituted for by recently developed artificial intelligence machines. Furthermore, the processing capabilities of decision-making machines is always improving in line with Moore's Law.

Conclusion and future research

This study makes three theoretical contributions. First, it echoes and extends previous studies (Knight and Cavusgil, 2004; Bianchi, 2022) by investigating the organizational capabilities have positive effect on international performance in emerging country. We

enhance the current knowledge by revealing two capabilities that are complementary for internationalization. Second, this study contributes to the capability perspective (Cavusgil and Knight, 2015) in an international setting by disclosing how dynamic managerial capabilities and AI capabilities complement to internationalization. It also offers a better understanding of the role of managerial and organizational capabilities in international performance. Third, this study enriches the scant literature (Marwala and Hurwitz, 2017; Chen et al., 2022) on comparison of different capabilities and how AI capabilities expand the bounded rationality.

This study highlights three managerial implications. First, firms can foster their organizational capabilities, such as market-sensing, reducing product development cycles, and enhancing organizational agility, to improve their international performance. Second, managers can leverage unique capabilities to efficiently cultivate, nurture, and utilize dynamic capabilities both within their organizations and across boundaries. For instance, managers can establish connections through organizational and individual social networks, and effectively utilize past experiences and educational backgrounds to strengthen the positive impact of the relationship between organizational capabilities and international performance. Third, executives also need to upgrade their firm's artificial intelligence capability in order to develop more effective strategies for expanding globally and to enter new markets with greater success.

This study has several limitations that can be further explored in the future research.

First, this study relies on data collected from executives of one country. This limits the generalizability of results. Future research needs to study additional emerging market firms, developed firms and make comparisons among them for more meaningful results. Second, data collected in this study are based on the perceptions of respondents. Although respondents are top executives, and thus reliable data sources, using perceptual responses carries an inherent bias effect. Future research should use multiple methods of data collection, e.g., personal interviews of top executives followed by questionnaire survey. Third, this study is cross sectional in nature and does not take into consideration the gradual process of formation of organizational capabilities. Future research may conduct longitudinal studies of organizational capabilities.

Reference

- Abijith, A., & Wamba, S. F. (2012). Business value of RFID-enabled healthcare transformation projects. *Business Process Management Journal*, 19(1).
- Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. *Academy of management review*, 27(1), 17-40.
- Adner, R., & Helfat, C. E. (2003). Corporate effects and dynamic managerial capabilities. *Strategic management journal*, 24(10), 1011-1025.
- Aidis, R., & Mickiewicz, T. (2004). Which entrepreneurs expect to expand their businesses?

Evidence from survey data in Lithuania.

Atuahene-Gima, K., & Murray, J. Y. (2004). Antecedents and outcomes of marketing strategy comprehensiveness. *Journal of Marketing*, 68(4), 33-46.

Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of management journal*, 43(5), 909-924.

Azkan, C., Spiekermann, M., & Goecke, H. (2019). Uncovering Research Streams in the Data Economy Using Text Mining Algorithms. *Technology Innovation Management Review*, 9(11).

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.

Bell, J., & Loane, S. (2010). 'New-wave' global firms: Web 2.0 and SME internationalisation. *Journal of Marketing Management*, 26(3-4), 213-229.

Bianchi, C., & Stoian, M. C. (2022). Exploring the role of managerial and organizational capabilities for the inbound internationalization of small and medium-sized enterprises. *Journal of Small Business Management*, 1-39.

Bianchi, C., & Wickramasekera, R. (2016). Antecedents of SME export intensity in a Latin American Market. *Journal of Business Research*, 69(10), 4368-4376.

Bloodgood, J. M., Sapienza, H. J., & Almeida, J. G. (1996). The internationalization of new

high-potential US ventures: Antecedents and outcomes. *Entrepreneurship theory and practice*, 20(4), 61-76.

Brown, P., Beekes, W., & Verhoeven, P. (2011). Corporate governance, accounting and finance: A review. *Accounting & finance*, 51(1), 96-172.

Brüderl, J., & Preisendörfer, P. (2000). Fast-growing businesses: empirical evidence from a German study. *International journal of sociology*, 30(3), 45-70.

Cao S, Jiang W, Wang J, Yang B (2021) *From Man vs. Machine to Man + Machine: The Art and AI of Stock Analyses* (Cambridge, MA).

Castanias, R. P., & Helfat, C. E. (2001). The managerial rents model: Theory and empirical analysis. *Journal of management*, 27(6), 661-678.

Cavusgil, S. T., & Knight, G. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of international business studies*, 46, 3-16.

Chen, H., Chiang, R. H., & Storey, V. C. (2012). Business intelligence and analytics: From big data to big impact. *MIS quarterly*, 1165-1188.

Chen, H., Li, L., & Chen, Y. (2021). Explore success factors that impact artificial intelligence adoption on telecom industry in China. *Journal of Management Analytics*, 8(1), 36-68.

Chen, L., Jiang, M., Jia, F., & Liu, G. (2022). Artificial intelligence adoption in business-to-business marketing: toward a conceptual framework. *Journal of Business &*

Industrial Marketing, 37(5), 1025-1044.

Chopra, S., & Sodhi, M. S. (2004). Supply-chain breakdown. MIT Sloan management review, 46(1), 53-61.

Cooper, A. C., Gimeno-Gascon, F. J., & Woo, C. Y. (1994). Initial human and financial capital as predictors of new venture performance. Journal of business venturing, 9(5), 371-395.

Corrêa, R. O., Bueno, E. V., Kato, H. T., & Silva, L. M. D. O. (2019). Dynamic managerial capabilities: Scale development and validation. Managerial and decision economics, 40(1), 3-15.

Csaszar, F. A., & Steinberger, T. (2022). Organizations as artificial intelligences: The use of artificial intelligence analogies in organization theory. Academy of Management Annals, 16(1), 1-37.

Dosi, G., & Marengo, L. (2000). Some elements of an evolutionary theory of organizational competences. In Innovation, Organization and Economic Dynamics (pp. 211-235). Edward Elgar Publishing.

Dove R (2001) Response Ability: The Language, Structure, and Culture of the Agile Enterprise. John Wiley & Sons Inc., New York.

Du, M., & Boateng, A. (2015). State ownership, institutional effects and value creation in cross-border mergers & acquisitions by Chinese firms. International Business Review, 24(3),

430-442.

Eggers, J. P. (2012). All experience is not created equal: Learning, adapting, and focusing in product portfolio management. *Strategic Management Journal*, 33(3), 315-335.

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they?. *Strategic management journal*, 21(10-11), 1105-1121.

Fortune Business Insights. Retrieved from: <https://www.fortunebusinessinsights.com/> (last visited 2023/6/5)

Grant, R. M. (1987). Multinationality and performance among British manufacturing companies. *Journal of international business studies*, 18, 79-89.

Grant, R.M. (1991) 'The resource-based theory of competitive advantage: implications for strategy formulation', *California Management Review* 33(3): 114–135.

Hamill, J. (1997). The Internet and international marketing. *International marketing review*, 14(5), 300-323.

Hannibal, M., & Knight, G. (2018). Additive manufacturing and the global factory:

Disruptive technologies and the location of international business. *International Business Review*, 27(6), 1116-1127.

Heckler, J., & Powell, A. (2016, May). IT and organizational agility: a review of major findings. In *The Eleventh Midwest Association for Information Systems Conference* (pp. 1-5).

- Helfat, C. E., & Martin, J. A. (2015). Dynamic managerial capabilities: Review and assessment of managerial impact on strategic change. *Journal of management*, 41(5), 1281-1312.
- Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic management journal*, 24(10), 997-1010.
- Helfat, C. E., & Peteraf, M. A. (2015). Managerial cognitive capabilities and the microfoundations of dynamic capabilities. *Strategic management journal*, 36(6), 831-850.
- Helfat, C. E., & Winter, S. G. (2011). Untangling dynamic and operational capabilities: Strategy for the (N) ever-changing world. *Strategic management journal*, 32(11), 1243-1250.
- Helfat, C., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D. and Winter, S. (2007). *Dynamic Capabilities: Understanding Strategic Change in Organizations*. Malden, MA: Blackwell.
- Huang, M. H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, 49, 30-50.
- Hult, G. T. M., Ketchen Jr, D. J., & Slater, S. F. (2005). Market orientation and performance: an integration of disparate approaches. *Strategic management journal*, 26(12), 1173-1181.
- Hult, G. T. M., Ketchen, D. J., Griffith, D. A., Chabowski, B. R., Hamman, M. K., Dykes, B. J., Pollitte, W. A. & Cavusgil, S. T. (2008). An assessment of the measurement of performance in international business research. *Journal of international business studies*, 39,

1064-1080.

Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. *Business horizons*, 61(4), 577-586.

Javaid, M., Haleem, A., Singh, R. P., & Suman, R. (2022). Artificial intelligence applications for industry 4.0: A literature-based study. *Journal of Industrial Integration and Management*, 7(01), 83-111.

Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of international business studies*, 8, 23-32.

Jones, M. V., & Crick, D. (2004). Internationalising high-technology-based UK firms' information-gathering activities. *Journal of Small Business and Enterprise Development*, 11(1), 84-94.

Karadeniz, E., & Ozdemir, O. (2009). Entrepreneurship in Turkey and developing countries: A comparison of activities, characteristics, motivation and environment for entrepreneurship. *Mibes Transactions*, 3(1), 30-45.

Kim, G., Shin, B., Kim, K. K., & Lee, H. G. (2011). IT capabilities, process-oriented dynamic capabilities, and firm financial performance. *Journal of the association for information systems*, 12(7), 1.

Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the

born-global firm. *Journal of international business studies*, 35, 124-141.

Knight, G. A., & Cavusgil, S. T. (2005). A taxonomy of born-global firms. *MIR: Management International Review*, 15-35.

Kolvereid, L. (1992). Growth aspirations among Norwegian entrepreneurs. *Journal of business venturing*, 7(3), 209-222.

Kor, Y. Y., & Mesko, A. (2013). Dynamic managerial capabilities: Configuration and orchestration of top executives' capabilities and the firm's dominant logic. *Strategic management journal*, 34(2), 233-244.

Kotabe, M., Srinivasan, S. S., & Aulakh, P. S. (2002). Multinationality and firm performance: The moderating role of R&D and marketing capabilities. *Journal of international business studies*, 79-97.

Kuivalainen, O., Puumalainen, K., Sintonen, S., & Kyläheiko, K. (2010). Organisational capabilities and internationalisation of the small and medium-sized information and communications technology firms. *Journal of International Entrepreneurship*, 8, 135-155.

Lages, L. F., Silva, G., & Styles, C. (2009). Relationship capabilities, quality, and innovation as determinants of export performance. *Journal of international Marketing*, 17(4), 47-70.

Lecerf, M., & Omrani, N. (2020). SME internationalization: The impact of information technology and innovation. *Journal of the Knowledge Economy*, 11, 805-824.

Lefebvre, E., Lefebvre, L. A., & Bourgault, M. (1998). R&D-related capabilities as

determinants of export performance. *Small Business Economics*, 10, 365-377.

Liebowitz, S. J., & Margolis, S. E. (1995). Path dependence, lock-in, and history. *The Journal of Law, Economics, and Organization*, 11(1), 205-226.

Liu, H., Ke, W., Wei, K. K., & Hua, Z. (2013). The impact of IT capabilities on firm performance: The mediating roles of absorptive capacity and supply chain agility. *Decision support systems*, 54(3), 1452-1462.

Liu, Y., Wang, L., Yuan, C., & Li, Y. (2012). Information communication, organizational capability and new product development: an empirical study of Chinese firms. *The Journal of Technology Transfer*, 37, 416-432.

March, J.G., & Simon, H.A. (1958). *Organizations*. Wiley.

Martin, M. (2011). Cutadapt removes adapter sequences from high-throughput sequencing reads. *EMBnet. journal*, 17(1), 10-12.

Martínez-López, F. J., & Casillas, J. (2013). Artificial intelligence-based systems applied in industrial marketing: An historical overview, current and future insights. *Industrial Marketing Management*, 42(4), 489-495.

Marwala, T., Hurwitz, E., Marwala, T., & Hurwitz, E. (2017). Bounded Rationality. *Artificial Intelligence and Economic Theory: Skynet in the Market*, 41-50.

McDougall, P. P., Shane, S., & Oviatt, B. M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research.

Journal of business venturing, 9(6), 469-487.

Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. *Information & Management*, 58(3), 103434.

Moen, Ø., & Servais, P. (2002). Born global or gradual global? Examining the export behavior of small and medium-sized enterprises. *Journal of international marketing*, 10(3), 49-72.

Moi, L., & Cabiddu, F. (2021). An agile marketing capability maturity framework. *Tourism management*, 86, 104347.

Morgan, N. A., Kaleka, A., & Katsikeas, C. S. (2004). Antecedents of export venture performance. *Journal of Marketing*, (68), 90-108.

Murray, J. Y., Gao, G. Y., & Kotabe, M. (2011). Market orientation and performance of export ventures: the process through marketing capabilities and competitive advantages. *Journal of the academy of marketing science*, 39, 252-269.

Nelson, R. R. and Winter, S. G. (1982). *An Evolutionary Theory of Economic Change*. Cambridge, MA: Belknap Press of Harvard University Press.

PWC. Retrieved from:

<https://www.pwc.com/gx/en/issues/data-and-analytics/publications/artificial-intelligence-study.html> (last visited 2023/6/5)

Raymond, L., & St-Pierre, J. (2013). Strategic capability configurations for the internationalization of SMEs: A study in equifinality. *International Small Business Journal*, 31(1), 82-102.

Reuber, A. R., & Fischer, E. (2011). International entrepreneurship in internet-enabled markets. *Journal of Business Venturing*, 26(6), 660-679.

Rouleau, L., & Balogun, J. (2011). Middle managers, strategic sensemaking, and discursive competence. *Journal of Management studies*, 48(5), 953-983.

Salam, M. A. (2021). Analyzing manufacturing strategies and Industry 4.0 supplier performance relationships from a resource-based perspective. *Benchmarking: An International Journal*, 28(5), 1697-1716.

Sambamurthy, V., Bharadwaj, A., & Grover, V. (2003). Shaping agility through digital options: Reconceptualizing the role of information technology in contemporary firms. *MIS quarterly*, 237-263.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of management review*, 25(1), 217-226.

Sheth, J. N., & Sharma, A. (2005). International e-marketing: opportunities and issues. *International Marketing Review*, 22(6), 611-622.

Shrestha, Y. R., Ben-Menahem, S. M., & Von Krogh, G. (2019). Organizational decision-making structures in the age of artificial intelligence. *California Management*

Review, 61(4), 66-83.

Sirmon, D. G., & Hitt, M. A. (2009). Contingencies within dynamic managerial capabilities: Interdependent effects of resource investment and deployment on firm performance. *Strategic management journal*, 30(13), 1375-1394.

Sullivan, D. (1994). Measuring the degree of internationalization of a firm. *Journal of international business studies*, 25, 325-342.

Swafford, P. M., Ghosh, S., & Murthy, N. (2008). Achieving supply chain agility through IT integration and flexibility. *International journal of production economics*, 116(2), 288-297.

Tallon, P. P., & Pinsonneault, A. (2011). Competing perspectives on the link between strategic information technology alignment and organizational agility: insights from a mediation model. *MIS quarterly*, 463-486.

Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, 28(13), 1319-1350.

Teece, D. J. (2009). *Dynamic capabilities and strategic management: Organizing for innovation and growth*. Oxford University Press on Demand.

Teece, D. J. (2012). Dynamic Capabilities: Routines versus Entrepreneurial Action. *Journal of Management Studies*, 49(8), 1395-1401. <https://doi.org/10.1111/j.1467-6486.2012.01080.x>

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533.

Theodosiou, M., & Katsikea, E. (2013). The export information system: An empirical investigation of its antecedents and performance outcomes. *Journal of International Marketing*, 21(3), 72-94.

Tsai, W. (2001). Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of management journal*, 44(5), 996-1004.

Vincent, V. U. (2021). Integrating intuition and artificial intelligence in organizational decision-making. *Business Horizons*, 64(4), 425-438.

Wamba, S. F. (2022). Impact of artificial intelligence assimilation on firm performance: The mediating effects of organizational agility and customer agility. *International Journal of Information Management*, 67, 102544.

Wang, C. L., & Ahmed, P. K. (2007). Dynamic capabilities: A review and research agenda. *International journal of management reviews*, 9(1), 31-51.

Wang, W., Gao, G. G., & Agarwal, R. (2019). Friend or Foe? The Interaction Between Human and Artificial Intelligence on Performance in Medical Chart Coding. *The Interaction Between Human and Artificial Intelligence on Performance in Medical Chart Coding* (June 18, 2019).

Web of Science. Retrieved from: <https://mjl.clarivate.com/search-results> (last visited 2023/6/5)

Yang, X., Jiang, Y., Kang, R., & Ke, Y. (2009). A comparative analysis of the internationalization of Chinese and Japanese firms. *Asia Pacific Journal of Management*, 26, 141-162.

The Impact of Board Operation on Employee Turnover - A CSR Perspective

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The Impact of Board Operation on Employee Turnover- a CSR Perspective

ABSTRACT

Corporate social responsibility can be measured in four dimensions, including corporate governance, corporate commitment, social participation, and environmental protection

Paying attention to employee-related fairness issues is an indispensable part of corporate social responsibility. Few studies pay attention to the effect of Board operation on CSR issue.

This paper explores the impact of board operation on the employee turnover rate, which echoes one of the facets of corporate social responsibility. The results indicate that the D&O insurance rate, frequency of chairman redesignation and continuing professional education hours are positively related to the employee turnover rate. The actual attendance of board meetings is negatively related to the employee turnover rate. Future research may explore more factors and moderators in contingencies.

Keywords: employee turnover, developing country, D&O insurance, CSR

INTRODUCTION

A recent increase in regulatory and corporate stakeholder focus on CSR has been a direct response to increasing international incidences of corporate actions that have been detrimental to society and the environment (Abdullah and Michael, 2021). Corporate social responsibility (CSR) means that what enterprises do is in line with social values (Bowen, 2013), it can be measured in four dimensions: corporate governance, corporate commitment, social participation, and environmental protection (Sarvaiya et al., 2018). CSR comprises consumer commitment, employee training and care, and investment in innovative research and development, so employee training, care, and safety are all important CSR-related issues (Collier and Esteban, 2007). Paying attention to employee-related fairness issues is an indispensable part of corporate social responsibility. There are many issues concerning employee fairness, among which “salary of basic staff” and “employee turnover rate” are the most concerned issues among the public. In 2014, the Stock Exchange in Taiwan published the “Taiwan High Salary 100 Index” and compiled the index to encourage enterprises to fulfil their social responsibilities in terms of employees. Moreover, prior research shows that the employee turnover is negatively associated with future financial performance (Li et al., 2021). In other words, firms with a lower employee turnover rate will have a better future financial performance.

Boards of directors are the most prominent internal governance mechanism due to their

responsibility to appoint, monitor and incentivize managers; set long-term objectives and strategies for the firm; provide input and counsel to internal stakeholders, and build and maintain relationships with key external stakeholders. Khan et al. (2013) argue that CSR engagement decisions are principally determined by the motives and choices of the board members who make firm-level strategic choices and are held accountable for their outcomes.

In addition, employees are the most important intangible assets of an enterprise. Among all kinds of stakeholders in an enterprise, employees are the group that maintains the longest relationship. Regarding the relationship between employee turnover and financial performance, the literature suggests that if a company wants to achieve long-term financial growth, it must invest more in its employees, systems, and organizational process capabilities (Kaplan and Norton, 1996). Employee turnover in the previous period might affect the corporate profitability and customer satisfaction in the next period (Koys, 2001).

The board and directors play an important role in affecting CSR and firm strategy. Prior researches focus more factors on the characteristic of the directors and the composition of the directors (Aladdin et al., 2020; Sundarasan et al., 2016). Few studies pay attention to the effect of Board operation on CSR issue. Therefore, in this study, we explore how the board operation (e.g. D&O insurance, attendance and the frequency of the chairman redesignation) influence the employee turnover rate (employee issue in CSR).

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Directors and Officers (D&O) insurance

The literature mainly focuses on how the Directors and Officers (D&O) insurance restrains the loss caused by fraud or litigation. Although some scholars have analyzed the importance of this type of insurance (Bishop, 1968; Mattar and Hilson, 1979), most studies have focused on the motivations of D&O insurance (Core, 1997 Holderness, 1990). First of all, on the premise that litigation expenses may exceed insurance premiums, enterprises tend to purchase D&O insurance. The purpose of D&O insurance is to reduce litigation costs and subsequent compensation by means of D&O insurance, so as to protect the rights and interests of shareholders and avoid the expansion of shareholder losses in litigation cases (Bhagat, Brickley and Cloes, 1987). Secondly, based on adverse selection and moral hazard, insurance companies will strengthen credit investigation and supervision of insured enterprises in underwriting (O'Sullivan, 1997). Under this premise, shareholders' rights and interests will be further protected. Furthermore, D&O insurance may be taken out to consolidate the interests of directors or insured persons and to enable them to perform their duties without further risk to enhance shareholder profits (Bhagat, Brickley and Coles, 1987). Core (1997) points out that the board of directors and the company's key executives are risk avoiders, and liability insurance may be part of the optimal compensation contract. Taking the initiative to insure directors can reduce the cost of compensation contract. If a company

decides to take out insurance after considering the risk of litigation, possible losses and the cost of insurance, it means that the insurance helps increase the value of the company.

On the other hand, D&O insurance may be designed to cover the self-interested behavior of managers or insiders (Chalmers, Dann, and Harford, 2002; Core, 2000). In cases where insiders have the advantage of information (Jensen and Meckling, 1976) and insurers may not be able to identify the advantages and disadvantages of the applicant (Baker and Griffith, 2007), such insurance may become a tool for risk transfer for self-interested reasons. Directors' liability insurance creates an incentive for insiders to profit and exploit shareholders. Chalmers, Dann and Harford (2002) found that the stock price performance of 72 IPO companies three years after issuance was negatively correlated with the amount of D&O insurance before IPO. This shows that the management of the company has a speculative behavior to insure D&O insurance. That is, if an insider has an information advantage, a company's D&O insurance may be a signal of increased risk to the company, not necessarily good news to increase the company's value.

The D&O insurance has a negative effect on the directors' behavior. For example, firms with D&O insurance experience more severe board meeting attendance problem compared to their uninsured peers (Jia and Tang, 2018). When a company purchases D&O insurance, it may also transfer part of the risk of legal liability to the insurance company, resulting in moral hazard between the board of directors and supervisors and their management. In

addition, Chen and Li (2010) believe that the purchase of D&O insurance is not a completely independent business model with corporate governance. In fact, litigation risk is a relatively direct factor between the two. However, it is difficult for investors to measure the quality of corporate governance by indirect method and observe the litigation risk of the company. The existence of a lawsuit is often not known until the company is sued. Therefore, a company taking out D&O insurance may be a sign of increased risk, so it is not necessarily good news to increase the value of the company. There may also be deregulation under the protection of D&O insurance. This affects the effectiveness of corporate governance and is not conducive to corporate governance, thus reducing corporate value.

Insurance companies must accurately assess the potential cost of each policyholder since they ultimately bear the full cost of any mistake. As a result, D&O insurance underwriters have developed specific risk assessment tools that allow them to properly select clients and their litigation risk. Underwriters use three sources of information: The written application that contains a full array of documentation, the public financial and accounting data analysis, and interviews with the prospective insured's senior management team (Baker and Griffith, 2007). The information gathered by the insurer about a potentially insured firm's internal processes and structure is not divulged to other market participants (Knepper and Bailey, 1998).

All the above statements indicate that the amount of D&O insurance may be a signal of

internal problems and increase moral hazard of directors. We consider the problems will in turn affect the employee's willingness to stay in the firm. Therefore, we consider the following hypothesis:

H1: The D&O insurance rate is positively related to the employee turnover rate.

The frequency of chairman redesignation

Studies in the literature on corporate governance stress the important role that boards of directors play in devising and influencing organizational strategies (Johnson, Daily, & Ellstrand, 1996; Zahra & Pearce, 1989). Early work on boards highlighted their core task as monitoring and control. In line with agency theory, the board is responsible for preventing opportunistic manager behavior that runs counter to shareholders' interests (Eisenhardt, 1989; Jensen & Meckling, 1976; Mizruchi, 1983). Boards therefore monitor CEO performance and compensation (Boyd, 1995; Conyon & Peck, 1998), approve or reject management initiatives, oversee strategy implementation (Hendry & Kiel, 2004; Rindova, 1999), and replace managers (Alexander, Fennell, & Halpern, 1993; Conyon & Peck, 1998; Walsh & Seward, 1990). Besides pointing to reactive monitoring and controlling, scholars building on resource dependence, social network, and stakeholder theory have emphasized that boards can take on more proactive roles in shaping strategies (Daily, Dalton, & Cannella, 2003; Desender, Aguilera, Crespi, & Garc'ia- Cestona, 2013; Hillman & Dalziel, 2003). According to these

perspectives, board members link the firm to important external stakeholders (Boyd, 1990; Hillman et al., 2000; Pfeffer, 1972), thereby facilitating access to critical organizational resources such as capital (Mizruchi & Stearns, 1988), legitimacy (Selznick, 1949), and information (Haynes & Hillman, 2010). In addition, boards provide advice and counsel to executives (Forbes & Milliken, 1999; Stevenson & Radin, 2009) and play an active part in strategy formulation by conducting analyses, suggesting strategic alternatives (Judge & Zeithaml, 1992; McNulty & Pettigrew, 1999), and selecting new members of the top management team who are in accord with the desired strategic direction (Westphal & Fredrickson, 2001).

The chairman's role includes providing effective leadership to the Board in relation to all board matters, promoting consultative, productive and successful relations between the board and management and representing the views of the board to the public. Therefore, when the firm performs poorly, the chairman will tend to be changed frequently. With the frequent redesignation of the chairman, the firm strategy may also have different directions. If employees' expectations toward the organization are not fulfilled, the consequences for job satisfaction and commitment to work result in the employees deciding to leave the organization (Muller and Price, 1990). Under this unstable situation, employees may change the tasks frequently because of a new strategy or decision from the top management team, which will make the original staff unwilling to stay or the firm needs to recruit new staff.

Thus, we consider the following hypothesis:

H2: The frequency of chairman redesignation is positively related to the employee turnover rate.

The actual attendance of board meetings

Academic studies have documented the importance of director attendance from two dimensions. First, Cai et al. (2009) show that poor attendance has a significant effect on the likelihood of director re-election. Directors receive 14 per cent fewer votes if identified as attending less than 75 per cent of meetings in their sample of elections at US firms. Second, director attendance is an important measure of corporate governance that is related to firm performance. Brown and Caylor (2006) show that director attendance is one of the seven (out of 51) most significant corporate governance measures related to firm performance in the USA. Chou et al. (2013) and Min and Verhoeven (2013) also show that outside director attendance is positively related to firm performance in Taiwan and South Korea.

The prior literature on director attendance has demonstrated that attendance at board meetings is systematically related to both director and firm characteristics. Examining the incentives of directors to attend meetings, Adams and Ferreira (2008) find that attendance is better when director compensation (e.g. board meeting fees) is higher, indicating that monetary incentives have an impact on director behavior. They also find that attendance is

worse on larger boards (more opportunity for free-riding behavior) and better in larger firms and in poor performing companies (where there is a greater reputational cost of missing meetings). Jiraporn et al. (2009) examine the impact of multiple directorships on director attendance and find a negative relationship between the number of outside directorships and attendance. Adams and Ferreira (2009) investigate differences in attendance behavior between male and female directors and find that female directors have better attendance records. In addition, Chou et al. (2013) find that director attendance is related to director qualifications and firm ownership structure.

Directors are required to undertake complex tasks, such as monitor firm operations and management, analyze merger and acquisition opportunities, evaluate capital raising options and hire and set the remuneration of top executives. Their ability to perform these tasks is hindered if they do not access information and interact with other board members at meetings. Hence, attending board meetings is to accomplish a director's responsibility and is associated with subsequent higher firm performance (Chou et al., 2013). The frequency of board meetings attended by directors themselves has a positive and significant effect on a firm's profitability (Chou et al., 2013). On the contrary, the low actual attendance rate of the board of directors, on the one hand, represents the poor performance of the company; on the other hand, it may also bring negative perception to employees, thus failing to retain talents and resulting in high employee turnover rate. Thus, we propose the following hypothesis:

H3: The actual attendance of board meetings is negatively related to the employee turnover rate.

DATA AND METHODOLOGY

We collected the data from Taiwan Economic Journal Database (TEJ). Our sample consisted the firms from manufacturing industries listed in 2020. After collecting, we did the data compilation to eliminate companies with vacant information and winsorize the data. The final valid items were 836. This study used multiple regression analytics to explore the influence of board operations on employee turnover rate.

Dependent variable

Following Lin and Zhong (2005), employee turnover rate is calculated by the below equations:

$$N_t - X_{t+1} + Y_{t+1} = N_{t+1} \quad (1)$$

$$\frac{(N_t - X_{t+1}) * (B_t + 1) + (Y_{t+1} * 0.5)}{N_{t+1}} = B_{t+1} \quad (2)$$

Combine formula 1 and formula 2 to obtain

$$X_{t+1} = \frac{2N_t B_t - 2N_{t+1} B_{t+1} + N_t + N_{t+1}}{2B_t + 1}$$

$$\frac{X_{t+1}}{N_t} =$$

N_t : Number of employees at the end of t

B_t : Average service life of employees at the end of t

X_{t+1} : the number of employees leaving the company at the end of t to $t+1$

Y_{t+1} : the number of new employees from the end of t to the end of $t+1$

L_{t+1} : employee turnover rate for the $t+1$ year

Independent variables

The actual attendance rate is calculated based on the number of meetings of the and the number of actual attendances (departures) during the period of the director's employment.

D&O insurance rate is calculated by the insured amount based on the year of the insured date divided by total assets. The frequency of chairman redesignation is calculated by the number of chairman changes in the past three years.

Control variables

Existing empirical evidence generally agrees that there is a strong negative relationship between increased age and turnover (Bassett, 1967; Farris, 1971; Fleishman & Berniger, 1960; Ley, 1966; Minor, 1958; Robinson, 1972; Stone & Athelstan, 1969). Baumgartel and Sobol (1959) found a negative relationship between increased tenure and turnover. Therefore, we include the average of employee age and the average of employee tenure as control variables.

RESULTS AND DISCUSSIONS

Descriptive Statistic and Correlations

Table 1 presents the descriptive statistic. The mean of D&O insurance rate is 6.12 and the standard deviation is 18.95, which mean the range is large compared to other variables. The mean of actual attendance rate is 93.59, which means almost all board of directors have high actual attendance. The frequency of chairman redesignation is between 0 to 4 times. The mean of employee turnover rate is 13.62. In Table 2, the correlation matrix depicts the correlation between all the possible pairs of values in a table. All variables are not highly correlated to each other. In Table 3, the variance inflation factor (VIF) of all variables are below 10, which indicates there is no serious collinearity problem (James et al., 2013).

Table 1

Descriptive statistics.

	Mean	Std. Dev.	Min	Max
D&O insurance rate	6.12	18.95	0	300.47
Actual attendance rate	93.59	7.47	48.6	100
Frequency of chairman redesignation	0.24	0.57	0	4
Employee turnover rate	13.62	12.16	0.01	98.66
Average age of employee	38.32	4.32	26	54
Average tenure of employee	7.40	3.37	1	24

Table 2

Correlation matrix.

	Employee turnover rate	Actual attendance rate	D&O insurance rate	Frequency of chairman redesignation	Average age of employee	Average tenure of employee
Employee turnover rate	1					
Actual attendance rate	-0.0936	1				
D&O insurance rate	0.1227	-0.1142	1			
Frequency of chairman redesignation	0.2215	-0.1084	0.1749	1		
Average age of employee	-0.1864	-0.0551	0.1299	0.0901	1	
Average tenure of employee	-0.3579	-0.0357	-0.0046	0.0565	0.7132	1

Table 3

Variance inflation factor (VIF).

Variable	VIF
Actual attendance rate	1.02
D&O insurance rate	1.14
Frequency of chairman redesignation	1.07
Average age of employee	2.17
Average tenure of employee	2.07
Mean VIF	1.50

Hypothesis Testing

The results of the board operation impact on employee turnover rate are presented in Table 4. The results of control variables show that average tenure of employee has a significantly positive impact on employee turnover ($\beta=-1,40$, $p < 0.05$) while average age of employee is not significantly correlated to employee turnover ($\beta=0.13$, $p > 0.05$). H1 predicts a positive direct relationship between the D&O insurance rate and the employee turnover rate, which is supported by the results ($\beta=0.22$, $p < 0.05$). The frequency of chairman redesignation significantly affects the employee turnover rate ($\beta=3.52$, $p < 0.05$), which supports H2. The actual attendance rate also significantly affects the employee turnover rate

($\beta=-0.11$, $p<0.05$), supporting H3. All the three hypotheses are supported by the results, which are presented in Table 5.

According to the results, we can conclude in the following ways. First, the D&O insurance has a negative effect on the directors' behavior. When a company purchases D&O insurance, it may transfer part of the risk of legal liability to the insurance company, resulting in moral hazard between the board of directors and supervisors and their management. The amount of D&O insurance may be a signal of internal problems and increase moral hazard of directors. This problem will in turn affect the employee's willingness to stay in the firm.

Second, with the frequent redesignation of the chairman, the firm strategy may also have different directions. Under this unstable situation, employees may change the tasks frequently because of a new strategy or decision from the top management team, which will make the original staff unwilling to stay or the firm needs to recruit new staff.

Third, directors are required to undertake complex tasks. Their ability to perform these tasks is hindered if they do not access information and interact with other board members at meetings. Hence, attending board meetings is to accomplish a director's responsibility and is associated with subsequent higher firm performance. The low actual attendance rate of the board of directors represents the poor performance of the company. In this vein, it may also bring negative perception to employees, thus failing to retain talents and resulting in high employee turnover rate.

Table 4

Hypothesis testing results.

Employee turnover rate	Coef.	Std. Err.	t	p
D&O insurance rate	0.22	0.05	4.53	0.000
Frequency of chairman redesignation	3.52	0.65	5.45	0.000
Actual attendance rate	-0.11	0.05	-2.23	0.026
Continuing professional education hours	0.27	0.13	2.18	0.03
Average age of employee	0.13	0.12	1.07	0.286
Average tenure of employee	-1.40	0.15	-9.26	0.000

Table 5

Summary.

Hypothesis	Result
H1: The D&O insurance rate is positively related to the employee turnover rate.	Support
H2: The frequency of chairman redesignation is positively related to the employee turnover rate.	Support
H3: The actual attendance of board meetings is negatively related to the employee turnover rate.	Support

ADDITIONAL TESTING

Table 6 presents our additional test, we found that continuing professional education hours of directors are positively related to the employee turnover rate ($\beta=0.27$, $p<0.05$). In other words, the more continuing professional education hours (CPE hours), the more frequently directors and supervisors are newly appointed, leading to the higher the employee turnover rate. We suggest that the reason behind this fact is according to the Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEX Listed Companies. It is advisable for a newly appointed person to complete a minimum of 12 CPE hours in the year the person is appointed, and a minimum of 6 hours per year in each following year. It is advisable for a re-appointed person to complete a minimum of 6 CPE hours per year during the term of appointment. Therefore, the results implicate that the newer the board, the higher the employee turnover rate.

Table 6

Additional testing results.

Employee turnover rate	Coef.	Std. Err.	t	p
Continuing professional education hours	0.27	0.13	2.18	0.03

CONCLUSION

Corporate social responsibility can be measured in four dimensions, including corporate governance, corporate commitment, social participation, and environmental protection. Paying attention to employee-related fairness issues is an indispensable part of corporate social responsibility. This paper explores the impact of board operation on the employee turnover rate, which echoes one of the facets of corporate social responsibility. The results indicate that the D&O insurance rate, frequency of chairman redesignation and continuing professional education hours are positively related to the employee turnover rate. The actual attendance of board meetings is negatively related to the employee turnover rate. Future research may explore more factors and moderators in contingencies.

REFERENCE

- A. Khan, M.B. Muttakin, J. Siddiqui (2013), “Corporate governance and corporate social responsibility disclosures: evidence from an emerging economy”, *J. Bus. Ethics*, 114 (2), 207-223.
- Abdullah Al-Mamun, Michael Seamer (2021), “Board of director attributes and CSR engagement in emerging economy firms: Evidence from across Asia”, *Emerging Markets Review*, 46, 100749.
- Adams, R. and Ferreira, D. (2008), “Do directors perform for pay?”, *Journal of Accounting and Economics*, 46 (1), 154-171.
- Adams, R. and Ferreira, D. (2009), “Women in the boardroom and their impact on governance and performance”, *Journal of Financial Economics*, 94(2), 291-309.
- Aladdin Dwekat, Elies Seguí-Mas & Guillermina Tormo-Carbó (2020), “The effect of the board on corporate social responsibility: bibliometric and social network analysis”, *Economic Research-Ekonomska Istraživanja*, 33:1, 3580-3603, DOI: 10.1080/1331677X.2020.1776139.
- Alexander, J. A., Fennell, M. L., & Halpern, M. T. (1993), “Leadership instability in hospitals: The influence of board–CEO relations and organizational growth and decline”, *Administrative Science Quarterly*, 38, 74-99.
- Baker, T., Griffith, S.J. (2007), “Predicting corporate governance risk: evidence from the

- directors' and officers' liability insurance market", *Univ. Chicago Law Rev*, 74, 1–58.
- Bowen, H.R. (2013). *Social Responsibilities of the Businessman*. University of Iowa Press.
- Boyd, B. K. (1995), "CEO duality and firm performance: A contingency model", *Strategic Management Journal*, 16, 301–312.
- Brown, L.D. and Caylor, M. (2006), "Corporate governance and firm valuation", *Journal of Accounting and Public Policy*, 25(4), 409-434.
- Cai, J., Garner, J. and Walkling, R. (2009), "Electing directors", *The Journal of Finance*, 64 (5), 2389-2422.
- Chou, H.I., Chung, H. and Yin, X. (2013), "Attendance of board meetings and company performance: evidence from Taiwan", *Journal of Banking and Finance*, 37 (11), 4157-4171.
- Collier, J., Esteban, R. (2007), "Corporate social responsibility and employee commitment", *Bus. Ethics A Eur. Rev*, 16, 19–33.
- Canyon, M. J., & Peck, S. I. (1998), "Board control, remuneration committees, and top management compensation", *Academy of Management Journal*, 41, 46–157.
- Daily, C. M., & Schwenk, C. (1996), "Chief executive officers, top management teams, and boards of directors: Congruent or countervailing forces?", *Journal of Management*, 22, 185–208.
- Desender, K. A., Aguilera, R. V., Crespi, R., & Garc'ia-Cestona, M. (2013), "When does

- ownership matter? Board characteristics and behavior”, *Strategic Management Journal*, 34, 823–842.
- Eisenhardt, K.M. (1989), “Agency theory: An assessment and review”, *Academy of Management Review*, 14, 57–74.
- Forbes, D. P., & Milliken, F. J. (1999), “Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups”, *Academy of Management Review*, 24, 489–505.
- Haynes, K. T., & Hillman, A. (2010), “The effect of board capital and CEO power on strategic change”, *Strategic Management Journal*, 31, 1145–1163.
- Hendry, K., & Kiel, G. C. (2004), “The role of the board in firm strategy: Integrating agency and organisational control perspectives”, *Corporate Governance*, 12, 500–520.
- Hillman, A. J., & Dalziel, T. (2003), “Boards of directors and firm performance: Integrating agency and resource dependence perspectives”, *Academy of Management Review*, 28, 383–396.
- Jensen, M. C., & Meckling, W. H. (1976), “Theory of the firm: Managerial behavior, agency costs and ownership structure.”, *Journal of Financial Economics*, 3, 305–360.
- Jia, N. and Tang, X. (2018), “Directors’ and Officers’ Liability Insurance, Independent Director Behavior, and Governance Effect”, *Journal Risk and Insurance*, 85, 1013-1054.
- Jiraporn, P., Davidson, W., Dadalt, P. and Ning, Y. (2009), “Too busy to show up? An analysis

- of directors' absences", *Quarterly Review of Economics and Finance*, 49 (3), 1159-1171.
- Johnson, J. L., Daily, C. M., & Ellstrand, A. E. (1996), "Boards of directors: A review and research agenda", *Journal of Management*, 22, 409–438.
- Judge, W. Q., & Zeithaml, C. P. (1992), "Institutional and strategic choice perspectives on board involvement in the strategic decision process", *Academy of Management Journal*, 35, 766–794.
- Kaplan, R.S.; Norton, D.P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Harvard Business School Press.
- Knepper, W., Bailey, D.A. (1998). *Liability of Corporate Officers & Directors*. Matthew Bender edition.
- Koys, D.J. (2001), "The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal study", *Pers. Psychol*, 54, 101–114.
- Li, Qin and Lourie, Ben and Nekrasov, Alexander and Shevlin, Terry J. and Shevlin, Terry J. (2021), "Employee Turnover and Firm Performance: Large-Sample Archival Evidence", *Management Science*, Available at SSRN: <https://ssrn.com/abstract=3505626>
- McNulty, T., & Pettigrew, A. (1999), Strategists on the board", *Organization Studies*, 20, 47–74.
- Min, B.S. and Verhoeven, P. (2013), "Outsider board activity, ownership structure and firm

- value: evidence from Korea”, *International Review of Finance*, 13 (2), 187-214.
- Mizruchi, M. S. (1983), “Who controls whom? An examination of the relation between management and boards of directors in large American corporations”, *Academy of Management Review*, 8, 426–435.
- Mizruchi, M. S., & Stearns, L. B. (1988), “A longitudinal study of the formation of interlocking directorates”, *Administrative Science Quarterly*, 33, 194–210.
- Mueller, C. W., & Price, J. J. (1990), “Economic, psychological, and sociological determinants of voluntary turnover”, *Journal of Behavioral Economics*, 19(3), 321–335.
- Rindova, V. P. (1999), “What corporate boards have to do with strategy: A cognitive perspective”, *Journal of Management Studies*, 36, 953–975.
- Sarvaiya, H.; Eweje, G.; Arrowsmith, J. (2018), “The roles of HRM in CSR: Strategic partnership or operational support?”, *J. Bus. Ethics*, 153, 825–837.
- Selznick, P. (1949). *TVA and the grass roots: A study of politics and organization*. University of California Press.
- Stevenson, W. B., & Radin, R. F. (2009), “Social capital and social influence on the board of directors”, *Journal of Management Studies*, 46, 16–44.
- Sundarasan, S.D.D., Je-Yen, T. and Rajangam, N. (2016), “Board composition and corporate social responsibility in an emerging market”, *Corporate Governance*, 16(1), 35-53.
- Walsh, J. P., & Seward, J. K. (1990), “On the efficiency of internal and external corporate

control mechanisms”, *Academy of Management Review*, 15, 421–458.

Westphal, J. D., & Fredrickson, J. W. (2001), “Who directs strategic change? Director experience, the selection of new CEOs, and change in corporate strategy”, *Strategic Management Journal*, 22, 1113–1137.

Zahra, S. A., & Pearce, J. A. (1989), “Boards of directors and corporate financial performance: A review and integrative model”, *Journal of Management*, 15, 291–334.

A Precarious Balance: Bangladeshi Textile Manufacturers' Response to CSR Obligations from Multinational Buyers

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A Precarious Balance: Bangladeshi Textile Manufacturers' Response to CSR Obligations from Multinational Buyers

Extended Abstract

Discussions on corporate social responsibility (CSR) have moved to center stage, particularly in the textile industry due to its environmental impact and labor practices. This paper explores how Bangladeshi textile manufacturers respond to CSR obligations imposed by multinational retail buyers. Through in-depth interviews with local stakeholders, we uncover perspectives on working conditions and environmental practices. Stakeholder Theory and Resource Dependence Theory are applied as analytical frameworks. The findings reveal progress in working conditions and environmental standards driven by buyer pressure, but cost constraints lead to compromises. Strengthening regulatory oversight and more balanced profit pressures are suggested to achieve sustainable improvements.

Keyword: Bangladesh textile manufacturers, Multinational buyers, Working conditions, Environmental standards

1. Introduction

Over the past years, corporate social responsibility (CSR) has evolved from a mere afterthought to taking center stage in business discussions (Eden, 2020). Much has been written about consumers' increasing attention to ethical and environmental standards, leading retailers to take greater responsibility for their supply chain practices (Hazaea et al., 2022; Krueger, 2008; Roberts, 2003).

The textile industry, due to its prominent visibility and significant environmental impact, has become a central point of this debate (Chen & Burns, 2006; Kant, 2012; Madhav et al., 2018;

Peters, Li, & Lenzen, 2021). Fast fashion has become synonymous with a range of environmental and ethical problems, and consumers are increasingly demanding higher environmental and ethical standards of fashion retailers (Achabou, 2020; Bögel, 2019; Currás-Pérez, Dolz-Dolz, Miquel-Romero, & Sánchez-García, 2018). Surprisingly, there is a dearth of research focusing on how manufacturers respond to CSR obligations imposed by multinational retail buyers, except for a few notable exceptions (e.g. Hossain, Momin & Dellaportas, 2023). This paper seeks to address this research gap by examining how textile manufacturers perceive the demand for more ethical and environmentally conscious production methods and whether their CSR practices are shaped by the requirements of large multinational textile buyers. To achieve this, we conducted in-depth personal interviews with 25 textile industry experts and managers in Bangladesh, the world's second most significant textile manufacturing country (World Trade Organization, 2022).

Below, we first provide some background on the Bangladeshi textile manufacturing industry and offer a theoretical framing for our investigation. Next, we elaborate our research methodology and present the findings of our interviews. The paper concludes with a discussion of the managerial and theoretical implication of our research, an acknowledgement of its limitations, and suggestions for future research avenues.

2. Literature and framework

The textile manufacturing sector in Bangladesh has a rich historical background, marked by significant developments and transformations. The industry began to take shape in the late 1970s and early 1980s (BBRD, 2022). Initially, the sector was relatively small-scale, primarily focusing on producing basic garments for the domestic market and heavily relying on imported fabrics to meet local demand. However, with the liberalization of trade policies and the emergence of export-oriented industrialization in the 1980s, the textile manufacturing sector

started to gain momentum (Garment Worker Diaries, 2023). The government of Bangladesh introduced policies to encourage foreign investment and promote the export of garments. This led to the establishment of numerous garment factories and an increase in exports. Key factors contributing to the sector's success included competitive labor costs, the availability of a large workforce, and preferential trade agreements with North America and Europe.

Today, Bangladesh has emerged as a key player in serving major global fashion brands. It boasts a vast network of more than 4,000 factories (BGMEA, 2023) that export to an array of multinational buyers in over 150 countries. While this attests the global reach and demand for its products, the Bangladeshi textile industry has been widely criticized for its poor working conditions and low pay of the country's textile workers (Uddin, Ullah & Rahman, 2021).

Tragically, around a decade ago, Bangladesh also gained said notoriety following the Rana Plaza building collapse in Dhaka in 2013. This devastating incident claimed the lives of over 1,100 textile workers, predominantly women and young girls, while leaving more than 2,500 others injured (International Labour Organization, 2023).

The textile industry is also significantly contributing to global pollution (Woodside & Fine, 2019), and Bangladesh is no exception. The production processes, including dyeing, printing, and garment washing, demand substantial water usage. Inadequate wastewater management and treatment facilities frequently result in the discharge of untreated effluents into rivers and ground water. While a number of reports on the Bangladeshi textile industry point to factories that prioritize energy efficiency, environmental sustainability, and water conservation through the use of eco-friendly technologies and practices (BGMEA, 2023) and attest to some positive developments in labor standards (Hakim, Taib, Hossain, & Naim, 2017), numerous challenges remain.

Addressing these challenges requires collaboration among industry stakeholders, like the media, government bodies, international organizations, and top management (Hossain, et al., 2023). This suggests that Stakeholder Theory can serve as a suitable analytical framework. In addition, environmental and workplace related policies and practices of Bangladeshi textile manufacturers are also likely to be shaped by the demands of their multinational buyers. In this context, the Resource Dependence Theory (Pfeffer and Salancik, 1978) can offer a theoretical lens to explore how the Bangladeshi textile manufacturers respond to CSR obligations set forth by these multinational buyers. This theory has been utilized to analyze buyer-seller relationships (Dwyer, Schurr & Oh, 1987), power-dependence in business relationships (Hallen, Johanson and Seyed-Mohamed, 1991) and the designation of specialized resources to industrial buyers (Deng, Ma, & Zhu, 2022).

3. Method

For our research, we conducted 25 one-on-one personal interviews with key stakeholders possessing extensive experience in the Bangladeshi textile industry, as well as executives from various garment factories. The interviewees comprised a diverse group, consisting of a Supreme Court lawyer, a columnist, a newspaper editor, three academics and a distributor. The remaining informants were directors, owners and managers of Bangladeshi textile factories. While most interviews lasted between 30 to 40 minutes, some extended beyond an hour, highlighting the depth and richness of the discussions. Thirteen interviewees permitted us to make audio recordings, while all other participants allowed us to take detailed notes. To facilitate efficient data management, we utilized a shared Google Drive, where we stored all interview recordings, summaries, and photographs. This allowed easy accessibility for all authors, promoting collaboration and ensuring transparency. Access to this material will be provided on request.

4. Results

To understand the present state of the Bangladeshi garments sector and its relevance to multinational buyers, we conducted interviews with a diverse group of stakeholders. Due to space limitations, we focus on only two key dimensions and provide select interview excerpts.

Workforce and Working Conditions: Our interviewees highlighted concerns related to the predominantly young female workforce in the Bangladeshi textile industry (aged 18 to 35). While their energy and adaptability empower women, it also raises issues about their vulnerability, skill development, and long-term career prospects. The workforce largely originates from rural areas, migrating to urban centers where garment factories concentrate. This rural-urban migration presents challenges like inadequate housing, social infrastructure, and strain on urban resources. Many textile workers in Bangladesh have limited educational attainment, which further affects their career prospects and upward mobility. One of our interviewees elaborated:

“There no good support from the Government to provide housing for the workers who comes from the village and need to stay near the factory. There is a need to build low-cost housing for the worker (*Sramik Palli*), which could help the worker to live safely and contribute for the development of the country.”

Our interviews uncovered that insufficient benefits for workers result in reduced commitment to a specific company, leading them to frequently switch between factories or even sectors. This creates issues of absenteeism and workforce fluctuations, adversely impacting productivity:

“Seasonal movement is common among textile manufacturing workers, particularly in the agricultural off-season”

The textile manufacturing sector in Bangladesh has faced criticism for its inadequate working conditions. However, one of our interviewees pointed out:

"We have made significant strides in improving working conditions for our employees. Our factories have implemented measures to ensure human right and provide proper training to manage working hours."

Other informants painted a more critical picture:

"Garment workers often earn minimum wages, making it challenging for them to meet their basic needs. This can lead to exploitation of labor, with long working hours and minimum benefits. There is also a problem with ... gender-based violence and harassment, including sexual harassment."

Yet another interviewee told us that despite some changes, and they are trying to eliminate child labor:

"Child labor has been a persistent problem in the Bangladesh textile industry. Due to poverty and lack of educational opportunities, many children are forced to work in textile factories under grueling conditions, denying them access to a proper childhood and education."

Environmental Challenges: Our interviewees were cognizant of environmental issues in textile manufacturing and pointed to various initiatives. Here is a typical example:

"During the last 5 years ... we started to use recyclable product in packaging. Our industry has been working towards better waste management practices such as reducing fabric waste during production, promoting recycling initiatives, and proper disposal of hazardous materials"

Although most of respondents told us that their factories are striving to be environment friendly, one interviewee revealed:

“There is no doubt that the garments industry is improving its environmental commitment but ...we are one of the biggest companies in this country and we have green factory in Bangladesh. ... [W]e have [a] full system in place for water treatment but it is expensive, and we only follow this system for 10% water treatment and the rest of the water we just drain it”

An expert in the field reiterated the problem:

“Although the buyer has requirements for water treatment, the Government lacks proper regulation or monitoring system to protect our nature water system. Companies having full water treatment use it mainly for promotional purpose for their international buyers”

5. Discussion

Our findings indicate that Stakeholder Theory and Resource Dependence Theory are potentially useful theoretical perspectives for analyzing Bangladeshi textile manufacturers' response to CSR obligations from multinational buyers. Different stakeholders often paint contradictory pictures of working conditions and the observations of environmental standards. It is also evident that the pressure of multinational buyers has resulted in some positive change, in particular since the Rana Plaza disaster. However, the very same buyers that call for improvements in working conditions and environmental standards also exert a strong price pressure on the Bangladeshi factories. Unfortunately, this often compels the firms to look for shortcuts in order to remain competitive. Using water treatment for promotional purposes to satisfy multinational buyers represents a sad example; harsh working conditions and the persistence of child labor in some factories another. Overall, there seems to be a lack of oversight, be it from the government or through the inspections of multinational buyers. The obvious polity implications for the Bangladeshi government is to strengthen the regulatory environment. Multinational buyers, on the other hand, need to be more cognizant that excessive

profit pressure prevents companies to properly implement the very improvements in working conditions and environmental measures they are demanding.

Inevitably, there are a number of limitations in our work. Notably, we did not have an opportunity to talk to all stakeholders, in particular not to the works themselves and representatives of the multinational buyers. Moreover, the qualitative nature of the research limits its generalizability. However, these limitations do point to future research avenues, namely quantitative studies that rest on representative sampling and include a wider array of stakeholders.

6. Bibliography

References are available on request. Please contact the first author.

Utilising Big-data to Examine Sustainable Development Goals and Consumption

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Utilising Big-Data to Examine Sustainable Development Goals and Consumption

Extended Abstract

In 2015, the United Nations (UN) formulated 17 Sustainable Development Goals (SDGs) with 169 associated targets for member nations to achieve by 2030. Countries and firms are now becoming increasingly committed to achieving these SDGs. They relate to three broad areas i.e., economic, social and environmental challenges. However, little is known about how this global pledge can influence consumers and their consumption. This study uses big data to establish a consumer-behavior based SDG framework for FTSE 100 companies listed on the London Stock Exchange.

Keyword: SDG, sustainable consumer behavior, big data

1. Introduction

Sustainable Development Goals (SDGs) are bold and ambitious, covering areas aimed at ending poverty and hunger, health improvements, sustainable consumption, reducing inequality, promoting economic growth and combating climate change. All 193 UN member states have pledged to achieve this goal by 2030 and as a result of the initiative, this will have a significant impact on consumer attitudes and their behavior (Minton et al., 2018). The impact of global warming, post-pandemic hyperinflation in energy along with spiraling food prices are all leading to new approaches to better understand consumers with greater focus on sustainable consumption (Chabowski et al., 2010 & Huang and Rust, 2011). This paper introduces a new consumer behavior model from the perspective of how the UN SDGs may impact sustainable consumption.

We aim to develop a sustainable consumption framework based on big data to provide a structured guidance for marketers to better understand consumer sentiment relating to SDGs (Kautish et al., 2020). Unstructured news information and algo-driven sentiment values relating to key SDGs will be studied

to explore their impact on brands and firms. The study aims to also provide a holistic view on how the media, representing the general public, view firms' authentic vs greenwashing perceptions (Szabo and Webster, 2020).

2. Methodology

This study plans to use RavenPack, a fee-based big data analytics provider that extracts and captures published content from seven news sources including the Wall Street Journal, Dow Jones News Wires, and over 40,000 web and social media sources, covering news, earnings reports, annual reports and job postings etc. Specifically, the study will use RavenPack's own Proprietary Natural Language Processing technology i.e., heuristic and machine learning methods to calculate over 20 sentiment indicators over a 20-year timeframe, covering some 13 languages of text data. The facility can provide real-time measurement of events relevant to the UN SDG activities of some 12 million entities, 7.1 million global companies and 4.5 million individuals from around the world. It uses a natural language processor to scan 25,000 news providers and press wire sources, calculating real-time news sentiment at an entity, event, and story level (RavenPack, 2023).

Using Aurora Universities network search queries (keyword extraction) to map the research output relating to the Sustainable Development Goals, it will be possible to identify both high and low performing firms and brands, based on the correlations with the types of events that lead to sentiment changes. The study aims to analyse changes in SDG sustainable consumption from 2015 to 2022 covering FTSE 100 companies listed on the London Stock Exchange.

3. Implications for theory and practice

A call for a new way to study consumer behavior is long-due and a significant research gap remains as to how UN Sustainable Development Goals impact consumer preferences. Past research on sustainable consumption using well-established cross-sectional survey-based approaches is often limited by constrained samples and data collected at one period of time. Such studies are somehow inhibited in

providing a holistic picture, especially on how SDGs impact sustainable consumption behavior over time. This study attempts to develop a new consumer behavior model using an innovative big data approach with the ability to provide both depth (millions of articles) and width (longitudinal time frame). The approach provides a sentiment value of topics surrounding the notion of sustainable consumption from FTSE 100 companies. The study also has important implications for businesses when formulating new consumer behavior patterns i.e., the use of big-data methods such as RavenPack, to determine views of sustainable consumption. Based on such data, marketers can therefore derive new trendsetting strategies to achieve first-mover advantages.

References

- [1] Chabowski, B.R., Mena, J.A. and Gonzalez-Padron, T.L. (2011), The structure of sustainability research in marketing, 1958-2008: a basis for future research opportunities, *Journal of the Academy of Marketing Science*, 39(1), 55-70.
- [2] Huang, M. H., & Rust, R. T. (2011). Sustainability and consumption. *Journal of the Academy of Marketing Science*, 39(1), 40-54.
- [3] Kautish, P., Khare, A., & Sharma, R. (2020). Values, sustainability consciousness and intentions for SDG endorsement. *Marketing Intelligence & Planning*, 38(7), 921-939.
- [4] Minton, E.A., Spielmann, N., Kahle, L.R. and Kim, C.H. (2018), The subjective norms of sustainable consumption: a cross-cultural exploration, *Journal of Business Research*, 82, 400-408.
- [5] Ravenpack (2022), News Analytics, available at: <https://www.ravenpack.com/products/edge/data/news-analytics> (accessed on July 31, 2023)
- [6] Szabo, S., Webster, J. (2021), Perceived Greenwashing: The Effects of Green Marketing on Environmental and Product Perceptions. *Journal of Business Ethics*, 171, 719–739

- [7] United Nations (2015), Sustainable Development Goals, 17 Goals to Transform Our World, available at: <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/> (accessed on July 31, 2023).
- [8] Voola, R., Bandyopadhyay, C., Azmat, F., Ray, S., & Nayak, L. (2022). How are consumer behavior and marketing strategy researchers incorporating the SDGs? A review and opportunities for future research. *Australasian Marketing Journal*, 30(2), 119-130.

The Use of Case Studies as a Valuable Teaching Tool in International Entrepreneurship

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The Use of Case Studies as a Valuable Teaching Tool in International Entrepreneurship

Abstract

This paper explores the use of case studies as a valuable teaching tool in international entrepreneurship. With the rise of entrepreneurial ventures across borders, it is crucial to equip students with the necessary knowledge and skills to navigate international markets. Case studies bridge the gap between theory and practice, allowing students to analyze real-world scenarios, make strategic decisions, and understand the challenges and opportunities in global business environments. They foster critical thinking, problem-solving, and decision-making skills, promoting active learning through discussions and collaboration.

The paper discusses the selection and design of case studies, emphasizing the importance of relevant and up-to-date cases that reflect the diversity of international markets. It also explores various teaching methods, such as role-playing and simulations, to enhance student engagement and experiential learning.

Additionally, the paper addresses potential challenges and limitations of using case studies, highlighting the need for guidance and structure from instructors. It emphasizes the balance between theory and practice, as well as considering cultural and contextual factors in case selection.

In conclusion, this paper advocates for the integration of case studies in international entrepreneurship teaching to develop students' knowledge, skills, and mindset for success in the global business landscape. Experiential learning and critical thinking are highlighted as valuable tools to prepare future entrepreneurs for the complexities and opportunities of international markets.

The Impacts of Climate Change on the Global Economy - A Computable General Equilibrium Analysis

MS0035

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The Impacts of Climate Change on the Global Economy --- A Computable General

Equilibrium Analysis

Abstract

This paper uses a computable general equilibrium model to predict the economic impacts of crop yield shocks from the biophysical models of climate change on the United States (U.S.) and rest of the world (ROW) in 2050.

In this model experiment, we compare economic variables in the U.S. and ROW in 2050 with and without climate change. The baseline scenario describes the U.S. and ROW economies in 2050 without a climate change. It includes the projected changes in values between 2007 and 2050 for five macroeconomic variables, namely, real GDP, population, and supplies of land, labor and capital. The counterfactual experiment describes the U.S. and ROW economies in 2050 with climate change. Exogenous adjustments to climate change in this experiment are the growth in land area and decline in agricultural yields. Endogenous adjustments are the changes in production, consumption, trade, and prices. The differences in results between the baseline scenario and the climate change experiment describe the effects of climate change in 2050.

When comparing the results with and without climate change, we can find the following economic impacts. In the U.S., (1) the agricultural output will increase slightly but the real

GDP will decrease slightly; (2) the agricultural consumption will decrease because of higher price of agricultural products; (3) agricultural exports and export share of agricultural production will rise slightly; (4) agricultural imports and import share of agricultural consumption will rise. In the ROW, (5) the agricultural output will decline, contributing to a fall in real GDP; (6) the agricultural producer price and consumer price will increase in response to a fall in the supply of agricultural product; (6) the agricultural exports and export share of agricultural production will rise and the agricultural imports and import share of agricultural consumption will rise. A higher agricultural price induces some countries to produce and export more agricultural products. The adverse effect of climate change on agricultural production induces some countries to buy more agricultural imports.

Feeling Economically Trapped? Let's Deal with It by Being Creative

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Feeling Economically Trapped? Let's Deal with It by Being Creative

In recent decades, an impressive body of knowledge has been built on the personal, social and organizational factors that enable or undermine employee creativity (see Shalley, Zhou, & Oldham, 2004; Zhou & Hoever, 2014 for a review). Research on employee creativity (e.g., Liu et al., 2016) has generally supported the componential model on creativity (Amabile, 1988) that intrinsic motivation (e.g., interests and joy) enhances creativity and extrinsic motivation (e.g., rewards) undermines it. However, some scholars have raised the concern that extrinsic motivation may promote creativity (e.g., Baer, Oldham, & Cummings, 2003; Byron and Khazanchi, 2012). Gerhart and Fang (2015) have called for more research to investigate the extrinsic motivation-creativity relationship. Previous studies have generally focused on compensation or extrinsic rewards such as pay (see Gerhart & Fang, 2015 for a review). In this study, we propose that perceived economic mobility (PEM) is an extrinsic motivation because of its focus on future economic outcomes (Yoon & Kim, 2016). The goal of this research is to examine how and when PEM explains employee creativity. We draw on conservation of resources (COR) theory (Hobfoll, 1989) and propose a conditional indirect relationship between PEM and employee creativity via creative process engagement. We also propose servant leadership as a boundary condition in the workplace that may influence the conditional indirect relationship. Overall, we expect this study to enrich current knowledge on the role of actor-centered economic factors on creative process and outcomes, which is under-researched area in the workplace creativity literature.

THEORY AND HYPOTHESES

COR theory (Hobfoll, 1989) suggests that individuals are motivated to build, keep, and preserve their resources, which can be personal and contextual resources that contribute to their

goal attainment and personal growth (Schaufeli & Bakker, 2004) and the reductions of adverse effects of future stressful experiences (Hobfoll, 2002). When people face potential or actual resource loss, they are motivated to invest resources to prevent the potential losses or make up the actual ones. Resource gain thus becomes more notable in the face of resource loss. Also, people with greater resource endowment have more resources for resource enhancement (Hobfoll et al., 2018). When they are exhaustive in resources, they may become defensive in guarding their residuals. Further, the COR theory suggests that individual resources may co-travel in influencing resource creation (i.e., the resource caravans).

Drawing on the resource investment principle of COR theory, we suggest that employees with higher levels of PEM may commit efforts in activities that help enhance their socioeconomic standings (e.g., work status and salary), such as engagement in creative activities to generate creative ideas (i.e., new resources) valued by their organizations. At higher levels of PEM, individuals feel more capable and hopeful to move up the socioeconomic ladder (Lee & Yoon, 2022). As the level the PEM increases, employees' psychological resources (e.g., hope) would motivate them to engage in work activities that are risky (e.g., negative judgment from others; Bonetto et al., 2020) but have potential positive returns (e.g., improvement in job performance and rewards). Previous studies have shown that hope fosters employee creativity (e.g., Rego et al., 2009). In addition, upward mobility implies change in expected future resources (Yang et al., 2019). People who perceive upward mobility may be more tolerant to future losses because they expect more future resources (Wang et al., 2012). Therefore, employees with higher levels of PEM may be more tolerant to the potential losses associated with creativity. Overall, we expect that employees with higher levels of PEM engage in more creative activities.

Following the above logics, as the level of PEM decreases, employees would be less motivated to engage in creative activities because of their fewer psychological resources and expected future resources that would help them buffer the losses if their creative acts fail. However, the gain paradox principle of COR theory (Hobfoll et al., 2018) suggest that individuals are motivated to gain resources when they are in the context of resource loss. As the level of PEM decreases, employees may perceive a threat of future resource loss. To protect themselves from losing their current socioeconomic standings, they would be motivated to retain their current resources and/or to develop new resources to buffer the future losses. COR theory posits that ecological resources may facilitate or inhibit individuals' resource investment. Because people with lower levels of PEM have fewer psychological resources, we suggest that they may engage in creative activities only when their work environment provide them with the needed resources. In this study, we propose to examine servant leadership as a boundary condition on the PEM-creative process engagement link. Drawing on COR theory, servant leadership (i.e., a contextual resource) and PEM (i.e., an employee's personal resource) may travel in caravans to influence creative process engagement.

“Servant leadership is an (1) actor-oriented approach to leadership (2) manifested through one-on-one prioritizing of follower individual needs and interests, and (3) an outward reorienting of their concern for self towards concern for others within the organization and the larger community” (Eva et al., 2019, p. 114). Eva et al. (2019) reviewed 285 articles on servant leadership and found that such a “follower-first” leadership plays a positive role in promoting employees' positive work attitudes (e.g., work engagement, thriving at work) and psychological well-beings, and in alleviating their negative work outcomes (e.g., emotion exhaustion and ego-depletion). Also, some studies have shown that servant leadership fosters employee creativity

through leadership identification (Yoshida et al., 2014), psychological safety and well-being (Wang et al., 2022), and creative process engagement (Chen et al., 2022). In general, these scholars suggested that when employees perceive their leaders to demonstrate a sustained and selfless commitment to followers' growth and development, they would be more motivated and feel safer to take risks in being creative.

For employees with higher levels of PEM (i.e., when PEM is high), a strong servant leadership (i.e., when servant leadership is high) would provide them additional resources, such as the care and support from the servant leader for growth (Liden et al., 2008), and psychological safety (Wang et al., 2022), resulting in their greater resource endowment for creative process engagement. When servant leadership is low, the high-PEM employees are still likely to engage in creative activities because of their personal resource endowment. In other words, we expect PEM and servant leadership to have an interaction (substitution) effect on creative process engagement.

In contrast, we expect PEM and servant leadership to have an interaction (compensatory) effect on creative process engagement. When PEM is low, a strong servant leadership would fuel employees with the resources that they personally lack. For example, servant leaders would communicate with individual followers to understand their personal needs and desires, encourage and assist the followers to achieve their potentials through serving as a role model, building trust with and providing resources (e.g., information and feedback) to the followers (Liden et al., 2008). Servant leadership may also induce followers' positive emotions (e.g., joy and pride) due to followers' identification with their leaders (Yoshida et al., 2014). Servant leadership has been shown to have an indirect positive relationship with optimism and subsequent commitment to change (Kool & van Dierendonck, 2012). As mentioned, employees experience greater

psychological safety in the workplace when their superiors display servant leadership (Wang et al., 2022). They are more willing to identify problems, search for information and generate novel ideas, and have less concern in being backfired by others as they challenge the status quos (Chen et al., 2020). Therefore, servant leadership may offer resources for employees with lower levels of PEM that foster their creative process engagement. A combination of low PEM and low servant leadership is likely to inhibit an employee from engage in creative activities, because they may try to losing their existing resources and thus shy away from the risky and uncertain creative activities. Because individuals would value resource gain in the context of high resource loss than in the context of resource gains, we expect the interaction effect of low-PEM and high-servant leadership on creative process engagement would be more pronounced than that of the interaction effect of high-PEM and high-servant leadership. To sum up, we suggest:

Proposition 1: Servant leadership moderates the relationship between perceived economic mobility and creative process engagement, such that the interaction effect between perceived economic mobility and servant leadership is more pronounced when perceived economic mobility is low rather than high.

Extant research has shown that creative process engagement has, in general, a positive relationship with employee creativity (e.g., Cheung et al., 2020; Zhang & Bartol, 2010).

Integrating the above arguments on the interactive effect among PEM and servant leadership on creative process engagement, we suggest:

Proposition 2: Servant leadership moderates the indirect relationship between perceived economic mobility and employee creativity via creative process engagement, such that the interaction effect among perceived economic mobility and servant leadership is more pronounced when perceived economic mobility is low rather than high.

WHAT'S NEXT

Our goal is to develop a more comprehensive understanding on the role of perceived economic mobility on employee creativity. Based on the current model linking PEM and employee creativity, we may consider other potential mechanisms. For example, we may examine the affect-based mechanisms (e.g., hope and anxiety), cognition-based mechanisms (e.g., expectation on future resource gains or losses, bisociation), or other behavioral mechanisms (e.g., proactive behaviors). Also, we may expand the theoretical model by examining the antecedents to perceived economic mobility—a topic of relatively limited current knowledge.

REFERENCES

- Baer, M., Oldham, G. R., & Cummings, A. (2003). Rewarding creativity: When does it really matter? *Leadership Quarterly*, 15, 569-586.
- Bonetto, E., Pichot, N., Pavan, J., & Adam-Troïan, J. (2020). Creative individuals are social risk-takers: Relationships between creativity, social risk-taking and fear of negative evaluations. *Creativity Theories – Research – Applications*, 7(2), 309-320.
- Byron, K. and Khazanchi, S. (2012). Rewards and creative performance: A meta-analysis. *Personnel Psychology*, 48, 587-605.
- Chen, L., Wadei, K. A., Bai, S., & Liu, J. (2020) Participative leadership and employee creativity: A sequential mediation model of psychological safety and creative process engagement. *Leadership & Organization Development Journal*, 41(6), 741-759.
- Cheung, S. Y., Huang, E. G., Chang, S., & Wei, L. (2020). Does being mindful make people more creative at work? The role of creative process engagement and perceived leader humility. *Organizational Behavior and Human Decision Processes*, 159, 39-48.
- Coggins, E. D., and Bocarnea, M. C. (2015). The impact of servant leadership to followers' psychological capital: A comparative study of Evangelical Christian leaders-follower relationships in the United States and Cambodia. *Journal of Leadership, Accountability and Ethics*, 12(4), 111-144.
- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. *The Leadership Quarterly*, 30, 111-132.

- Gerhart, B., & Fang, M. (2015). Pay, intrinsic motivation, extrinsic motivation, performance and creativity in the workplace: Revisiting long-held beliefs. *The Annual Review of Organizational Psychology and Organizational Behavior*, 2(1), 489-521.
- Hobfoll, S. E. (1989). Conservation of resource: A new attempt at conceptualizing stress. *Annual Psychology*, 44(3), 513-524.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review on General Psychology*, 6(4), 307-324.
- Hobfoll, S. E., Halbesleben, J., Nevau, J., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103-128.
- Kool, M., & van Dierendonck, D. (2012). Servant leadership and commitment to change, the mediating role of justice and optimism. *Journal of Organizational Change Management*, 25(3), 422-433.
- Lee, E., & Yoon, Y. (2022). Heading up or stuck down here? The effect of perceived economic mobility on subjective social status and brand identification. *SAGE Open*, July-September, 1-14. Doi: 10.1177/21582440221123755.
- Liu, D., Jiang, K., Shalley, C. E., Keem, S., & Zhou, J. (2016). Motivational mechanisms of employee creativity: A meta-analytic examination and theoretical extension of the creativity literature. *Organizational Behavior and Human Decision Processes*, 137, 236-263.
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30, 933-958.

- Wang, L., Liu, L., & Dai, Y. (2021). Owning your future: Entrepreneurship and the prospects of upward mobility in China. *Economic Modelling*, 104, 105637.
- Yang, X., Wen, Q., Ma, J., & Li, J. (2020). Upward mobility and the demand for children: evidence from China. *China Economic Review*, 60, 101393.
- Yoon, S., and Kim, H. C. (2016). Keeping the American dream alive: The interactive effect of perceived economic mobility and materialism on impulsive spending. *Journal of Marketing Research*, 53(5), 759-772.
- Zhang, X. and Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, 53(1), 107-128.
- Zhou, J., and Hoever, I. J. (2014). Research on workplace creativity: A review and redirection. *The Annual Review of Organizational Psychology and Organizational Behavior*, 1, 333-359.

Does Sharing the Same Auditor with Listed Affiliated Firms Affect IPO Audit Quality?

MS0037

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Does sharing the same auditor with listed affiliated firms affect IPO audit quality?

Abstract

The importance of audit quality is a consensus among regulators, practitioners, investors, and academics. The auditor's economic dependence on important clients is likely to undermine their independence, leading to compromised audit quality. This research aims to examine the impact of shared auditors within a business group on the quality of IPO audits and subsequent financial performance.

In the context of a business group, sharing an auditor can potentially adversely affect audit quality, as the significance of the client may impair the auditor's independence. However, the knowledge spillover resulting from this shared auditing arrangement might also enhance audit quality.

China, with its unique managerial incentives for obtaining a listing status, offers an intriguing backdrop to probe the effect of a shared auditor during an IPO. The study utilizes a sample of Chinese IPO firms and discovers a negative correlation between the use of a common auditor and both IPO audit quality and post-IPO performance. This suggests that an auditor shared with listed affiliate firms can undermine their independence, thereby impairing the quality of the IPO audit.

To the best of our knowledge, this is the first study exploring the influence of a shared auditor on IPO audit quality. By elucidating the role of a shared auditor in an IPO setting, our findings aim to aid stakeholders in the capital market to make more informed decisions, and to shape policies and regulations pertaining to IPOs.

Inter-firm Ties as the Boundary of Institutional Harshness and Propensity to Internationalize

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Extended Abstract

This study investigates the moderating roles of strong ties and foreign ties on the influence of institutional harshness and the propensity to internationalize. The data were collected from 10,054 firms across 23 countries, and the results indicate that both strong and foreign inter-firm ties positively moderate effect of institutional harshness on propensity to internationalize. These findings contribute further insights into the significance of social ties as a contextual factor in shaping the relationship between institutional harshness and internationalization.

Keyword: Institutional Harshness, Foreign Tie, Strong Tie, Propensity to Internationalize

1. Introduction

There are two contrasting views regarding the role of institutional quality in internationalization: the "escaping view" and the "fostering view." These differing perspectives have created a gap that requires exploration into the specific contexts that lead to different effects of institutions on internationalization. To address this contingency issue, the current study examines inter-firm ties as the boundary-setting factor. Previous literature has shown that one of the ways firms cope with institutional conditions is through networks and social ties (Doh, Rodrigues, Saka-Helmhout, & Makhija, 2017; Kim & Song, 2017). We believe that different typologies of ties provide varying values that firms can utilize for internationalization. Given that the topic of inter-firm networks is considered

understudied (Cuypers, Ertug, Cantwell, Zaheer, and Kilduff., 2020), we propose that both foreign inter-firm ties and strong inter-firm ties moderate the effects of institutional harshness and the propensity to internationalize (Ellis, 2011).

2. Literature Review and Hypothesis Development

2.1. Strong inter-firm ties as a moderator

Strong ties possess high levels of trust and emotional involvement, making them an ideal source of support for solidarity and cooperation (Kiss & Danis, 2008). Additionally, strong ties enable firms to share resources, facilitate flexible business activities, and reduce opportunistic behavior (Kwan Tang, 2006). As firms invest greater commitment and emotion into strong ties, a foundation of trust naturally develops among the participants. This trust, inherent in strong ties, encourages firms to be more receptive to international partnerships and cooperation (Melamed & Simpson, 2016). In situations of high institutional harshness, firms with strong ties enjoy advantages such as international collaborations, access to funding from trusted suppliers, and market intelligence and therefore demonstrate a heightened willingness to venture abroad. Thus, the following hypothesis is proposed:

Hypothesis 1: The inter-firm strong ties positively moderate institutional harshness and the propensity of firm to internationalize.

2.2. Foreign inter-firm ties as moderator

International ties, as opposed to domestic ties, assist entrepreneurs in identifying international trade opportunities (Ellis, 2011). Ties with foreign actors, including suppliers, customers, and competitors, have been shown to positively impact international performance (Lu, Zhou, Bruton, & Li, 2010). Additionally, the success of international expansion has been found to be influenced by firms' connections in the local target market (Stallkamp, Pinkham, Schotter, & Buchel, 2018). Foreign ties offer a broader range of foreign market intelligence compared to domestic ties. As institutional harshness increases, firms strive to expand abroad with the support of their foreign ties. Based on this

rationale, the following hypothesis is proposed:

Hypothesis 2: The inter-firm foreign ties positively moderate institutional harshness and the propensity of firm to internationalize.

3. Research Method and Results

We collected data from 10,054 firms from 23 countries through a survey from the World Bank Enterprise Survey in 2019. *Institutional harshness* is measured through a composite score of five questions regarding the condition of institutions in the home country. *Propensity to internationalize* is measured through a dummy variable whether the firm is conducting export or not. *Foreign tie* is measured by the percentage of foreign suppliers the firms have, and *strong tie* is measured through percentage of sales sold on credit. Additionally, we controlled various factors and to examine the hypotheses, we conducted a logistic moderation regression analysis. Results are presented in Table 1.

The direct effect of institutional harshness (Model 2) shows support for “escaping view” that the poorer the institutional condition of home country, the more likely firms are to escape and pursue foreign markets. The interaction effect of institutional harshness and both foreign ties and strong tie (Model 4) shows a significant result. The hypothesis testing analysis is confirmed by the interaction plot (Figure 1 and Figure 2). Both figures show that in higher institutional harshness, firms with stronger inter-firm ties and higher inter-firm foreign ties—respectively, have a higher propensity to internationalize. Based on the analysis, Hypothesis 1 and Hypothesis 2 are supported.

4. Discussion

Building on previous literature that highlighted inconsistencies in the impact of institutions on internationalization, our study sheds light on the notion that institutions wield a stronger influence on internationalization only when firms possess appropriate social ties. As not all types of ties hold equal significance for internationalization, this study demonstrates that firms operating in countries with high institutional harshness must carefully consider the strength and the source of their inter-firm ties.

5. References

- [1] Cuypers, I. R., Ertug, G., Cantwell, J., Zaheer, A., and Kilduff, M. 2020. Making Connections: Social Networks in International Business, *Journal of International Business Studies*, 51, 714-736.
- [2] Doh, J., Rodrigues, S., Saka-Helmhout, A., and Makhija, M. 2017. International Business Responses to institutional voids, *Journal of International Business Studies*, 48, 293-307.
- [3] Ellis, P. D. 2011. Social Ties and International Entrepreneurship: Opportunities and Constraints Affecting Firm Internationalization, *Journal of International Business Studies*, 42, 99-127.
- [4] Kim, H., and Song, J. 2017. Filling Institutional Voids in Emerging Economies: The Impact of Capital Market Development and Business Groups on M&A Deal Abandonment, *Journal of International Business Studies*, 48, 308-323.
- [5] Kiss, A. N., and Danis, W. M. 2008. Country Institutional Context, Social Networks, and New Venture Internationalization Speed. *European Management Journal*, 26 (6), 388-399.
- [6] Kwan Tang, Y. 2006. Managing the Strengths of Ties for Internationalization: Lessons from Four Rapidly Internationalized Chinese SMEs. *Journal of Asia Business Studies*, 1 (1), 54-63.
- [7] Lu, Y., Zhou, L., Bruton, G., and Li, W. 2010. Capabilities as a Mediator Linking Resources and The International Performance of Entrepreneurial Firms in an Emerging Economy. *Journal of international Business studies*, 41, 419-436.
- [8] Melamed, D., and Simpson, B. 2016. Strong Ties Promote the Evolution of Cooperation in Dynamic Networks. *Social Networks*, 45, 32-44.
- [9] Stallkamp, M., Pinkham, B. C., Schotter, A. P., and Buchel, O. 2018. Core or Periphery? The Effects of Country-of-Origin Agglomerations on the Within-Country Expansion of MNEs. *Journal of International Business Studies*, 49, 942-966.

Table 1. Result of hypothesis testing

<i>DV: Propensity to internationalize</i>	Model (1)	Model (2)	Model (3)	Model (4)
<i>Control variables</i>				
Firm's age	.012*** (.002)	.012*** (.002)	.01*** (.002)	.01*** (.002)
Firm's size	.003*** (0)	.003*** (0)	.002*** (0)	.002*** (0)
Manager's experience	.02*** (.002)	.02*** (.002)	.015*** (.002)	.015*** (.002)
Foreign ownership	.018*** (.001)	.018*** (.001)	.016*** (.001)	.016*** (.001)
Percentage stake held by largest owner	-.011*** (.001)	-.011*** (.001)	-.01*** (.001)	-.01*** (.001)
<i>Direct effect</i>				
Institutional harshness		.129** (.052)	.041 (.055)	-.17** (.086)
Foreign tie			.01*** (.001)	.008*** (.001)
Strong tie			.011*** (.001)	.008*** (.001)
<i>Interaction effect</i>				
Institutional harshness x foreign ties				.003* (.001)
Institutional harshness x strong ties				.004** (.002)
_cons	-1.023*** (.092)	-1.11*** (.098)	-1.627*** (.105)	-1.506*** (.111)
Observations	10045	10045	10045	10045
Pseudo R ²	.099	.099	.143	.144

p Values **<0.05; ***<0.01

Figure 1. The interaction plot of institutional harshness and foreign tie on propensity to internationalize

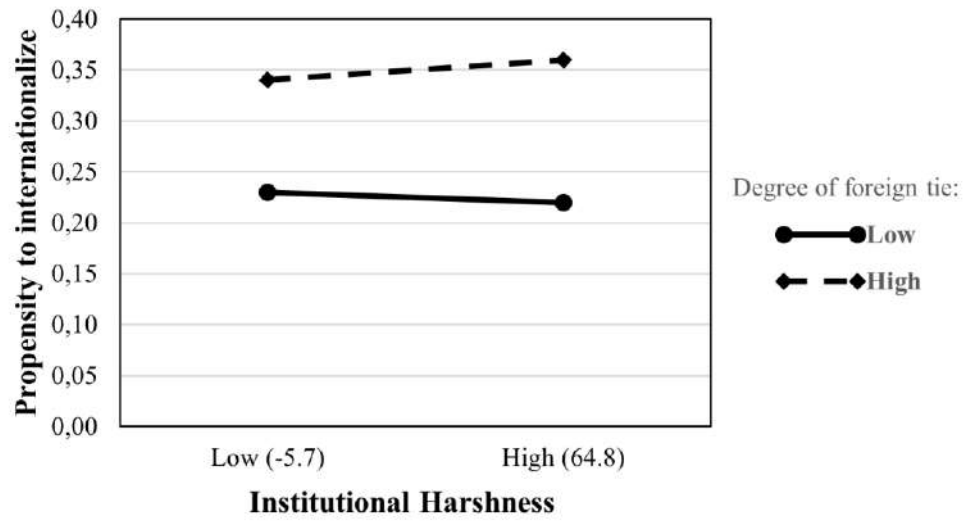
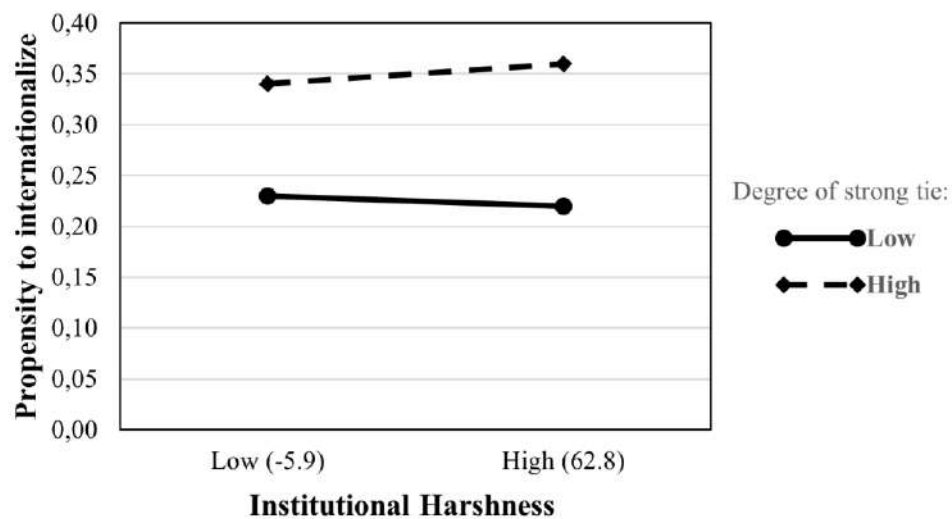


Figure 2. The interaction plot of institutional harshness and strong tie on propensity to internationalize



Contextualising Global Corporate Governance Reforms in a Developing Institutional Context

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Contextualising Global Corporate Governance Reforms in a Developing Institutional Context

Extended Abstract

Abstract

Drawing on institutional theory, this study explores the extent to which the approach to global corporate governance reforms is influenced by the institutional context and the implication for the convergence objective. To achieve this, the study investigates the regulations of global corporate governance reforms in the developing institutional context of Nigeria, using interviews and documentary analysis. The findings indicate that due to prevailing institutional voids, a mandatory approach through key economic sectors offers the only feasible administration of best practices. Overall, this study contends that institutional voids induce divergent implementations in global reforms which inevitably hinders convergence.

Keywords: Corporate Governance Reforms, Institutional Voids, Developing Country.

1. Introduction

This study seeks to understand the impact of a developing institutional context on the approach to global corporate governance reforms and its implication for the convergence of best practices. Global corporate governance reforms aim to promote similar best practices in companies worldwide (Aguilera & Cuervo-Cazurra, 2009). These best practices involve universal recommendations underscoring the protection of shareholder rights, the market for corporate control, the structure of corporate boards and corporate remuneration schemes (OECD, 1999, 2015). Debates on corporate governance reforms have questioned whether the self-regulatory or mandatory approach is the ideal for global reforms (Nakpodia, et al., 2018).

From the institutional theory perspective (Aguilera & Jackson, 2003), corporate governance is embedded within national institutions, which influences its operations. Research

has shown that several advantages would accrue from adopting an institutionally anchored business management practice. The continuous drive for universal best practices is an apparent dismissal of the contextualisation of corporate governance (Hermes et al., 2006). However, institutional voids exist (Brenes et al., 2018). Institutional voids involve the embryonic nature of infrastructures, eventually creating deficiencies (voids) in the functionality of institutions (Mair et al., 2012). Particularly, institutional voids are prevalent in developing countries (Aulakh & Kotabe, 2008). The United Nations Global Compact (UNGC), describes the developing region of Sub-Saharan Africa (SSA) as a fragile and weak governance zone, where the public sectors are unable to provide effective management and basic public services for the citizens (UNGC, 2013). Generally, in these contexts, establishing the dominant (Anglo-American) corporate governance model has produced incoherent and inconsistent outcomes.

Thus, to advance knowledge, the main research question here is: *How does the institutional context of a developing country impact the approach to global corporate governance reforms and what is the implication for convergence?* This study focuses on Nigeria, an economic reference point to the SSA (Allafrica, 2020), to provide a more relatable perspective of the developing region. As the biggest consumer market in Africa (Allafrica, 2020), Nigeria represents a prototype of the prevailing economic and contextual circumstances within the continent. Providing intrinsic knowledge of the global corporate governance regulation in this institutional context should present a reference for the SSA, and possibly the developing countries at large.

2. Main Body

2.1 Methodology

2.1.1 Research Approach

The methodological approach to this study is underpinned by the social constructivism philosophy. In this regard, the study adopted a qualitative research method involving in-depth interviews and documentary research procedures. The in-depth semi-structured interviews involved recognised relevant stakeholders in corporate governance in Nigeria (Amao & Amaeshi, 2008). To achieve triangulation by multiple data sources (Hennink et al., 2011), this study engaged three categories of key stakeholders as participants: *Corporate Governance Regulators and Policymakers; Listed Corporations and Affiliated Companies; Corporate Governance Contributors.*

2.1.2 Data Collection and Analysis

The in-depth interview process involved the selection of participants through a purposive sampling technique (Hennink et al, 2011). This procedure involved the selection of persons that are conversant with the research agenda. The interviews were within a 60-90 mins timeframe. The interview process involved inquiries about the underlying ideas of corporate governance regulations and the implementation of global reforms in Nigeria. Documentary research involved content analysis of secondary data, which included information sources related to the research inquiry. These sources included: company annual reports, regulatory parastatals' official gazette, circulars, newspaper reports; internal memos, research field/observation notes, bulletins, newspapers, articles and online archives (Yin, 2010). The fieldwork was undertaken over three months from Dec 2015 - March 2016 in Nigeria.

2.2 Findings and Analysis

2.2.1 Regulatory Interfaces in Global Reforms

In the last decade, the Financial Reporting Council of Nigeria (FRCN) was also established by the Financial Reporting Council Act (2011) and made the list as the Nigerian counterpart to the UK's FRC. Among other responsibilities, this represents the only agency legally conferred with

the authority to act as a principal administrator of corporate governance matters in Nigeria (FRCN, 2019). However, this presents complexities, as there have historically been other central regulatory authorities for corporate governance. In this regard, multiple agencies have comparable authorities in Nigerian corporate governance regulation. Essentially, as this study uncovers, this results in a differentiated corporate governance context. Against the foregoing, corporate governance reforms in Nigeria considerably mirror the influence of respective regulators. As stated by a director of a regulatory agency (R3): “---- *a single code is not going to work now. CBN is not going to change its code to align with the FRCN. I prefer one code, myself. ----- but, ---- I can't see banks wanting to comply with the FRCN code as opposed to the CBN code.*” In this regard, another implication of the Nigerian governance regulation is that it challenges the convergence of corporate governance best practices. In this regard, this analysis reveals that corporate governance reforms in Nigeria embody a highly differentiated regulatory procedure.

2.2.2 Approach to Best Practices – A Relational Framework

A code of corporate governance is usually adjudged as a non-binding attempt at the implementation of good governance principles (Aguilera & Cuervo-Cazurra, 2009). Except in contexts such as the US, most codes of corporate governance are meant to be adopted on a *self-regulatory basis* (see Aguilera & Cuervo-Cazurra, 2009). Likewise, in Nigeria, the SEC codes originally followed a self-regulatory approach (SEC code 2003, revised in 2011), whereby adoption was *advisory* (i.e., recommended). As the introductory paragraph to the original versions of the SEC code stated, “*The code is just a rule of practice this code is not intended to be a rigid rule.*” In line with this, as a regulatory agent (R3) stated: “*Because it is a code of conduct, it is meant to be persuasive. That is why it has been in question whether the code could be made compulsory or mandatory.*” However, while some sectors of the economy have very vibrant and well-developed corporate governance reforms’ procedures, others are still

at a rudimentary stage. This variability in the implementation of reforms generates lop-sidedness in compliance with best practices, among companies. Such lop-sidedness stems from the divergent commitments by each regulator to best practices, which equally challenges a uniform reform scheme in Nigeria.

In summary, insights from this study assert that the Nigerian corporate governance reform is encumbered by these major issues:

- First, there exists the need to define the boundaries of control among key agencies (regulators) - '*who regulates who?*' - i.e., the interface of authorities.
- Second, ambiguity exists among companies (regulated entities) concerning the extent of each regulator's control - '*who do I obey?*' - i.e., the lines of reporting.

Noticeably, the scheme of corporate governance reforms in Nigeria has involuntarily adapted to address this situation. Findings from this study reveal that the implementation of best practices has evolved over the last decade, from a self-regulatory to a mix (self-regulatory and mandatory) and currently a largely mandatory approach.

3. Conclusion

This study's advances in knowledge are manifold. First, theoretically, the study enriches understanding of the contextualisation/embeddedness of corporate governance reforms. Largely, this study contributes to the literature on the discussions of institutional voids in developing countries (Aulakh & Kotabe, 2008). Global regulatory agencies have usually assumed the spontaneous receptibility of national regulatory mechanisms in the diffusion of best practices. However, the acceptance and enactment of global corporate governance reforms vary among countries (Aguilera & Cuervo-Cazurra, 2009). This study reveals that such variability in the process of reforms can be linked to the dynamics or the structure of authorities and controls, within national regulations. Specifically, findings from this study expand the idea

of the contextualisation of corporate governance practices (Phiri & Guven-Uslu, 2019). In essence, the insights suggest that in instances of institutional voids, organisational reforms would be adapted to established institutional systems, as a coping mechanism. To this end, this study indicates that the global convergence of best practices may be unfeasible.

4. References

1. Aguilera, R., & Cuervo-Cazurra, A. (2009). Codes of Good Governance. *Corporate Governance: An International Review*, 17(3), 376-387.
2. Organisation for Economic Co-operation and Development (OECD) (1999). Principles of corporate governance; <[http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=C/MIN\(99\)6&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=C/MIN(99)6&docLanguage=En)> Accessed online on 18-05-2015.
3. Aguilera, R. V., & Jackson, G. (2003). The cross-national diversity of corporate governance: Dimensions and determinants. *The Academy of Management Review*, 28, 447-465.
4. Nakpodia, F., Adegbite, E., Amaeshi, K. & Owolabi, A. (2018) Neither Principles nor Rules: Making Corporate Governance Work in Sub-Saharan Africa. *Journal of Business Ethics*, vol. 151 (2), 391-408.
5. Brenes, E.R., Ciravegna, L., & Pichardo, C.A. (2018). Managing institutional voids: A configurational approach to understanding high performance antecedents. *Journal of Business Research*, doi: 10.1016/j.jbusres.2018.03.022
6. Aulakh, P. S., & Kotabe, M. (2008). Institutional changes and organizational transformation in developing economies. *Journal of International Management*, 14(3), 209–216.
7. United Nations Global Compact (UNGC), (2013). Human rights and business dilemmas forum[[pdf](http://human-rights.unglobalcompact.org/dilemmas/business-and-peace/.Uh5Vl281gcA)]<<http://human-rights.unglobalcompact.org/dilemmas/business-and-peace/.Uh5Vl281gcA>>Accessed 22- 04- 2015].

8. AllAfrica, 2020 <<https://allafrica.com/stories/201902270080.html>> Accessed on 23-04-2020
9. Amao, O. & Amaeshi, K. (2008). Galvanising Shareholder Activism: A Prerequisite for Effective Corporate Governance and Accountability in Nigeria. *Journal of Business Ethics*, 82(1), pp. 119-130.
10. Hennink, M., Hutter, I., & Bailey, A. (2011). *Qualitative research Methods*, Sage Publishing. Online at <<http://www.uk.sagepub.com/books/9781412922258>>Accessed on 02-04-15.
11. Financial Reporting Council of Nigeria (FRCN, 2019); <<https://www.financialreportingcouncil.gov.ng/>> Accessed 19.01.2019.
12. Phiri, J., & Guven-Uslu, P. (2019). Social networks, corruption and institutions of accounting, auditing and accountability. *Accounting, Auditing & Accountability Journal*, Vol. 32(2), 508-530.

Are All Auditors the Same? KAM Topic Selection and Audit Procedure Choices in the UK

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Are All Auditors the Same? KAM Topic Selection and Audit Procedure Choices in the UK

ABSTRACT

Extensive auditing literature has documented a wide variation in audit quality and the pricing of audit services across various areas such as auditor size, industry specialization, and institutional arrangements. However, the extant literature has offered little evidence on how auditors differ in their audit judgment and procedures such that audit outcomes could vary across auditors. In this study, we investigate whether and how audit partners differ in the auditing and reporting of key audit matters (KAMs) in the expanded audit reports in the United Kingdom. Using hand-collected audit-report data and manual categorization, we first present descriptive evidence of audit partners' heterogeneity on KAM topic choices and corresponding audit procedures. We then document that when an audit partner rotates within the same audit firm, the incoming audit partner tends to change the KAMs and the corresponding audit procedures. We find that male partners are less likely to include new topics and more likely to exclude audit procedures addressing the same KAM, while female partners are less likely to exclude KAM topics. This evidence suggests that female partners may be more diligent and conservative during the audit process. Partners with more expertise or larger clientele size tend to increase audit tests. It reflects that these partners care about reputation and may prefer to improve audit assurance by obtaining more audit evidence. Finally, the newly added (dropped) topics and audit procedures are more (less) likely to appear in other audit reports issued by the same partner, supporting the notion that audit partners exhibit different and persistent audit traits.

Keywords: audit report; partner style; KAM; audit procedure; reporting style

Does Management Commitment to Service Quality Matter? The Buffering Effects on Negative and Positive Display Rules, Team Engagement, and Team Effectiveness from a Prevention- and Promotion-focused Job Demands Perspective

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**DOES MANAGEMENT COMMITMENT TO SERVICE QUALITY MATTER? THE
BUFFERING EFFECTS ON NEGATIVE AND POSITIVE DISPLAY RULES, TEAM
ENGAGEMENT, AND TEAM EFFECTIVENESS FROM A PREVENTION- AND
PROMOTION-FOCUSED JOB DEMANDS PERSPECTIVE**

ABSTRACT

Team display rules, which represent shared expressive norms among frontline employees, play a pivotal role in shaping service quality and customer satisfaction. However, the implications of these rules for team engagement, team effectiveness, and the buffering effects of management commitment to service quality remain uncertain. Guided by the job demands-resources theory, we acknowledge that when team display rules are viewed as job demands, they are likely to exert a negative influence on team engagement, subsequently affecting team effectiveness. Drawing upon the team regulatory focus theory, we introduce the framework of prevention- and promotion-focused job demands. Teams perceiving display rules negatively and oppressively may experience discomfort, leading to avoidance (prevention-focused job demands). Conversely, teams viewing display rules positively and agreeably may perceive such demands as rewarding, leading to approach (promotion-focused job demands). Building on these foundations, we posit that negative team display rules are inversely associated with team engagement and effectiveness. In contrast, we hypothesize that positive team display rules are positively associated with team engagement and effectiveness. Additionally, we postulate that management commitment to service quality, as a job resource, significantly moderates the relationships between team display rules and team engagement and effectiveness. Specifically, we hypothesize that this commitment may mitigate the adverse impact of negative display rules while amplifying the favorable impact of positive display rules on team outcomes. In a sample involving 481 frontline employees across eighty-five

jewelry retail stores, our hypotheses find general support, providing theoretical insights and practical implications.

A Systematic Analysis of a Hong Kong Case and Laws and Regulations Relating to Product Placement across Countries

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A systematic analysis of a Hong Kong case and laws and regulations relating to product placement across countries

ABSTRACT

In 2016, Television Broadcast Limited (TVB), a free-to-air television licence holder in Hong Kong, was fined HK\$150,000 by the Communications Authority (CA) for showing actors giving out fried chicken during its award presentation ceremony (SCMP 2016). The CA found TVB to be in breach of paragraph 1 of Chapter 11 of the TV Programme Code and Paragraph 10(a), namely, “the brand logo of a fried chicken chain was conspicuously and blatantly shown, which was gratuitous, obtrusive to viewing pleasure, without editorial justification, and amounting to indirect advertising for the concerned brand.

TVB sought to judicially review against the CA’s decision (HKSAR High Court 2020). The Court of First Instance ruled in favour of the CA. Regulation of product placement has always been a controversial issue (Chan 2012, 2020). The key principles of Hong Kong’s regulation of product placement in free TV services appear to be in line with those of United Kingdom, Europe and Korea (Communications Authority 2017; Spielvogel, Naderer and Matthes 2020; UK Statutory Instruments 2010). This study will systematically examine the TVB case and compare the laws and regulations relating to product placement across countries. The results will have implications for future development and refinement of laws and regulations of product placement in Hong Kong and might provide policy makers and marketers with valuable insights into future product placement practices across countries.

Empirical Study of the Relationship among Emotional Intelligence, Cultural Intelligence, Adjustment, and Learning Outcomes

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Empirical Study of the Relationship among Emotional Intelligence, Cultural Intelligence, Adjustment, and Learning Outcomes

ABSTRACT

This paper explores the relationship between emotional intelligence, cultural intelligence (CQ) (including metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ), adjustment, and students' learning outcomes. Empirical surveys including online and paper questionnaires were adopted, and 977 valid returned questionnaires of respondents from different departments, schools, and nationalities were collected.

The research results show that emotional intelligence has a positive relationship with adjustment, cultural intelligence, and learning outcomes. Cultural intelligence has a positive relationship with adjustment and learning outcomes. Adjustment has a positive relationship with learning outcomes.

Keywords: Cultural Intelligence, Emotional Intelligence, Adjustment, Learning Outcomes

1. INTRODUCTION

Learning is a very important thing and refers to the process by which an individual's behavior changes over time through practice or experience. Famous theoretical works in explaining learning are such as Behavioral approach (Skinner, 1950; Thorndike, 1898), Cognitive approach (Piaget, 1971; Bruner, 1961), and Humanistic approach (Maslow, 1943; Rogers, 1969).

Learning theory outlines how students absorb, process, and memorize over the course of their education. Cognitive, emotional, contextual factors, and experience, all have impacts on how understanding or a world view is acquired or altered, and information and skills are kept (Ormrod, 2012).

From the perspective of behaviorist learning theory, the basic principle of effective learning is that an effective association between stimulus and response results in the expected occurrence of behavior.

Skinner (1950) holds that learning is a result of alteration in overt behavior. Behavior changes are the outcome of an individual's reaction to environmental events (stimuli). Thorndike (1898) thinks learning is a phenomenon that generates connections between one event and another occurrence, which is referred to as the stimulus with reaction. Stimulus is a change in the external environment that signals the organism to react and act. Thorndike's (1899) learning theory is often known as connectionism or

association theory.

Piaget (1971) thought that knowledge was actively created by learners based on their pre-existing cognitive structures. Piaget (1971) paid more attention to what was going on within the learner's thoughts rather than how they behaved. Bruner (1961) thought learners developed their own knowledge by organizing and classifying information using a coding system. Discovering a coding system rather than being informed by a teacher was the most efficient method.

Humanistic instructors think that in the process of learning, knowledge and feelings go hand in hand. Both affective learning and cognitive learning play an important role in people's learning. Courses and activities should focus on the entire learner, including their intelligence and emotions.

Experiential learning is an active process in which learners acquire knowledge via inquiry and observation (Rogers, 1969). Learning occurs as a result of both triumphs and failures, and it assists pupils in developing new abilities, attitudes, and problem-solving approaches. Rogers (1969) presented the concept of two forms of learning which were cognitive and experiential. The hierarchy of needs is Maslow's (1943) observations of humans' innate curiosity and the stages of growth. It is split between deficiency needs and growth needs.

Social learning theory (Bandura, 1977) emphasizes the importance of observing, modeling, and imitating the behaviors, attitudes, and emotional reactions of others. It emphasizes the influence of behavioral outcomes as well as the influence of individual cognitive beliefs, and believes that the individual, behavior, and environment interact and influence each other. Bandura's (1977) suggests that the individual's interest in whether he or she has the confidence in completing the learning activity is the main factor affecting motivation. Therefore, if students' self-efficacy is increased, they will be able to face each challenge with a higher level of confidence and a more proactive attitude.

Globalization occurs in business and academic fields. Foreign workers and international students can be seen everywhere. How to communicate and get along with people from different cultural backgrounds is becoming an important issue. People should have sufficient cultural intelligence to overcome misunderstandings in communication.

Cultural intelligence refers to an individual's capacity to deal with a variety of cultural contexts and adapt to a new cultural setting (Earley & Ang, 2003). Satisfaction, a feeling of meaning and purpose,

are all linked to the ability to adapt (Martin et al., 2013). Cultural intelligence can be considered as a possible factor to affect learning outcomes.

According to Salovey & Mayer (1990), emotional intelligence (EQ) is defined as an individual's ability to perceive and distinguish one's own and others' emotions, then process and use emotions, and guide the individual's thinking and actions. Goleman (1995) further regards EQ as an ability to maintain self-control, enthusiasm, persistence, and self-motivation.

People with high emotional intelligence are more aware of their own emotions, have empathy and high self-esteem, are more able to live in harmony with others, are more satisfied with their own lives, and are more able to maintain a positive attitude towards life.

Emotions have an important influence on an individual's behavioral judgment, and have an impact on an individual's cognition, motivation, and behavior (Smith & Lazarus, 1990). Emotional maturity is the specific manifestation of emotional intelligence, emphasizing the reasonable and appropriate management and control of emotional performance. The cultivation of "emotional intelligence" is an important issue in personality development.

It is beneficial to build adjustment while interacting with others in order to establish adjustment with other components of the environment. According to Berndt (2002), people who have excellent friendships exhibit more prosocial conduct, have higher self-esteem, have less emotional problems, have a better attitude, and reach higher levels of accomplishment.

Gabriela (2010) indicates that lacking the ability to adjust to school will cause the high prevalence of the school dropout. Clinciu (2012) discovered a negative correlation between college adjustment and stress. The emotional-affective component was shown to have the strongest association. Students have a difficult time adjusting to college who will have more pressure and anxiety, specifically in the emotional sector. Elias et al. (2011) found that academic achievement had negatively connected with stress. Daniel et al. (2018) found that stress had a detrimental influence on students' academic performance. Páramo et al. (2015) discovered that students with poorer academic and institutional adjustment to college performed worse in academic performance than students with greater level of adjustment.

Adjustment aids in self-directed intellectual, emotional, social, and physical growth and development.

It refers to the psychological process through which people deal with the demands and obstacles of daily life. It is concerned with how a person adjusts to his or her surroundings and life's demands. This encompasses how a person interacts with people as well as how a person manages his duties and inner emotions. Adjustment aids in managing external expectations, pressures, wants, and desires.

It is interesting to know the degree of adjustment and its influence on students' academic performance. Some empirical studies have reported on the association between adjustment and academic accomplishment in college. Rai (2009) showed that there was a positive correlation between adjustment and achievement. Children's social adjustment had a contribution to the achievement (Chen et al., 2011). Adjustment is substantially linked with accomplishment (Mathur, 2010).

Learning outcome is one of the substantial points to decide whether the company should hire university graduates or not. Students will try their best and put forth their best efforts in their academic related issues, so that they can gain better learning outcomes and prepare for future adjustment in their employment. According to Kool et al. (2016), there is a connection between learning outcomes and early employment success.

This study assumes that emotional intelligence, cultural intelligence, and adjustment can influence students' learning outcomes. However, the purpose of this research is to explore the relationship among emotional intelligence, cultural intelligence, adjustment, and learning outcomes by conducting questionnaire surveys focusing on students studying in Taiwan.

The research questions are: What are the influences of emotional intelligence on cultural intelligence, adjustment, and learning outcomes? What are the influences of cultural intelligence on adjustment, and learning outcomes? What is the influence of adjustment on learning outcomes?

2. LITERATURE REVIEW

This section examines related literature including emotional intelligence, cultural intelligence, adjustment, and learning outcomes.

2.1. Emotional Intelligence (EI)

Emotional intelligence is self-awareness, controlling emotions, inspiring oneself, sympathy, and relationship management (Salovey & Mayer, 1990). Bar-on (1997) regards emotional intelligence as a series of emotions, personality and interpersonal capabilities that influences one's capability to cope

with the stress of the need in the environment. Emotional intelligence includes an indication of an individual's mind and feeling, skills, opinion, and how to apply the moods and emotional intelligence (Wong & Law, 2002).

Emotional intelligence (EI) is a hot issue among academics and experts in the fields of psychology, education, and management (Shapiro, 1997; Weisinger, 1998). Emotional intelligence refers to the ability to recognize emotional problems and changes in oneself and others, and involves managing one's emotions, making wise decisions, developing good interpersonal relationships, dealing with different stresses, and sustaining life motivation. There are three representative perspectives on the interpretation of emotional intelligence: cognitive ability (Mayer and Salovey, 1997), focuses on performance-oriented emotional intelligence (Goleman, 1995), and mental health or personality orientation (Bar-on, 1997, 2004, 2006a, 2006b, 2007).

Mayer and Salovey's (1997) emotional intelligence framework contained three levels: correctly assessing and expressing the emotions of others, properly regulating one's own and others' emotions, and using emotions to plan creativity and motivate actions. Goleman's (1995) emotional intelligence theory explained the importance of five emotional competencies to people. Firstly, people must have the ability to recognize their own emotions, to be aware of their own inner-feelings, personalities, preferences, motivations, desires, and basic personal values. The second is to be able to effectively manage one's emotions and know how to self-regulate negative emotions. The third is to know how to self-motivate, to self-propel after facing the goals set by oneself, and to improve personal efficiency. The fourth ability is to "put yourself in the shoes" of others to understand their feelings, communication between people not only rely on words, but also through some micro-expressions and body language to understand each other. The last is to learn good social skills and build good interpersonal relationships. The concept and theoretical model of emotional intelligence proposed by Bar-on (1997) is the sum of a series of emotions, personality and interpersonal abilities that affect people's ability to cope with the pressure of environmental needs. Emotional intelligence is an important factor that determines whether a person can succeed in life, and directly affects a person's entire mental health. Bar-on (2004, 2006a, 2006b, 2007) further states that emotional intelligence is the social knowledge and ability to affect a range of emotions that effectively respond to environmental demands. To understand the Bar-on model,

firstly it's necessary to mention the Emotional Quotient Inventory (EQ-I) which is helpful to form the model. EQ-I operationalizes the Bar-On model. EQ-I includes 133 short statements and uses a 5-point scale with a written answer style that ranges from "very often true of me" (5) to "very seldom true of me" (1). In EQ-I, it consists of 5 composite scales that composite 15 sub-scales: Intrapersonal (Self-Regard, Emotional Self-Awareness, Assertiveness, Independence, and Self-Actualization); Interpersonal (Empathy, Social Responsibility, and Interpersonal Relationship); Stress Management (Stress Tolerance and Impulse Control); Adaptability (Reality-Testing, Flexibility, and Problem-Solving); and General Mood (Optimism and Happiness).

In this study, the EQ-I from Bar-On model (2004, 2006a, 2006b, 2007) is adopted, including the scale of adaptability comprising reality-testing, flexibility, and problem-solving to measure the influence of emotional intelligence on students' learning outcomes due to the fact that students who can objectively corroborate one's feelings and thoughts with reality, modify their emotions and thoughts to new conditions, and tackle challenges of a personal and interpersonal nature efficiently resulting in good learning performance. In other words, these indicators aim at how students think about adjusting to reality, and how they deal with the problems they face in their life of studying.

Prati et al. (2003) think it's possible that EI is determined in different cultures. Also, EI can cause different behavior in various cultures (Law et al., 2004; Markus & Kitayama, 1991; Elfenbein & Ambady, 2003; Marsh et al., 2003; Tsai & Chentsova-Dutton, 2003). Yet, studying the meaning of EI (Salovey & Pizarro, 2003), it is crucial to realize the utility of "accurately and adaptively". It is an ability to adapt to one's emotion and express most appropriately in cross-cultural interactions. Gorji (2018) and Putranto et al. (2018) found that EI had a positive and significant relationship with cultural intelligence. Emotionally intelligent activities are perceived as effective depending on the social and cultural settings (Kim et al., 2008; Matthews & Zeidner, 2000). Offermann and Phan (2002) indicate that intelligence-descriptive skills are culturally specific. Mayer & Geher (1996) and Mayer et al. (2000) define emotional intelligence abilities in terms of culture, which is a collectively determined social context. Furthermore, being high in CQ entails being able to modify notions, which is vital for those who have a high EI. This suggests that one can adjust to the current emotional circumstances in order to decide how to correctly identify emotions and control them effectively. Therefore, the hypothesis is:

H1: Emotional Intelligence has a positive relationship with cultural intelligence.

The metacognition CQ has the link with the feature of EI. For example, correct assessment and comprehension of others' emotions necessitates some awareness of their backgrounds, especially cultural backgrounds. These abilities also entail challenging one's own preconceptions about another's emotional expression, which may be related to the idea of "thinking about thinking," which is connected to the aspect of CQ (Earley & Peterson, 2004). However, metacognition CQ is associated with the mindfulness of CQ (Earley & Peterson, 2004; Thomas & Inkson, 2004b). The capability of the sense and understanding emotion is required because emotion detection necessitates accurate processing of emotional stimuli. Furthermore, many cross-cultural contacts include emotions, and many emotional circumstances need a knowledge of the cultural background. Hence, the hypothesis is:

H1a: Emotional Intelligence has a positive relationship with metacognitive CQ.

The cognitive aspect of CQ is also linked to EI because knowledge received via cultural experiences contains emotional rules and performance in different cultures (Ang et al., 2004). This information helps in determining people's capability to understand their emotions correctly. It seems that how to effectively interpret and categorize emotions will improve one's skills to notice and comprehend emotions (Salovey & Pizarro, 2003). On the other hand, knowledge is learned from encounters. As a result, it shows the similarity of aspects between EI and CQ. Therefore, the hypothesis is:

H1b: Emotional Intelligence has a positive relationship with cognitive CQ.

When it comes to behavioral CQ, it shows some of the capability used are the same as those used in EI, such as taking proper response and being adaptable in one's actions, both verbal and nonverbal (Ang et al., 2004, 2006; Earley & Peterson, 2004; Earley et al., 2006; Thomas, 2006). This is the same as EI ability involved in their emotion handling, which includes adequate emotion regulation (Salovey & Pizarro, 2003) and successful control of others' emotions (Mayer et al., 2002). Therefore, the hypothesis is:

H1c: Emotional Intelligence has a positive relationship with behavioral CQ.

In evaluating the motivational CQ, it was reasonable that there are some crossovers with EI. EI was substantially connected with willing to try, which is presumably a fundamental part of wishing to know more about the culture (Day & Carroll, 2004). As a result, if being willing to try new things improves

both EI and CQ, then certain correlations are likely to emerge. Therefore, the hypothesis is:

H1d: Emotional Intelligence has a positive relationship with motivational CQ.

Emotional intelligence abilities and competencies are critical to success, and there are substantial positive connections between emotional intelligence and adjustment. Emotional intelligence affects a student's social adjustment (Engelberg & Sjoberg, 2004). A statistical significance link between emotional intelligence and personal traits, and satisfaction of the social connection is discovered. Adeyemo's (2005) findings showed that emotional intelligence and general students' adjustment were correlated. Within first-year university students, Abdallah et al. (2004) discovered a significant and positive correlation between emotional intelligence and academic adjustment. Chen et al. (2006) discovered that emotional intelligence and life adjustment had a linearity. Safavi et al. (2008) found that emotional intelligence and socio-emotional adjustment had a substantial relationship. Emotional intelligence is substantially connected with social adjustment and academic adjustment (Ishak et al., 2011). Punia & Sangwan (2011) and Patel's (2013) studies discovered that there was a substantial correlation between emotional intelligence and children's adjustment. Ogoemeka (2012) demonstrated that there were substantial differences between emotional intelligence and life adjustment. In Thilagavathy's (2013) research, adjustment and emotional intelligence were proved to have a greater linear association. Therefore, the hypothesis is:

H2: Emotional Intelligence has a positive relationship with students' adjustment.

Emotional intelligence has become a significant predictor of the achievement related to the academy (Fernandez et al., 2012). Students who act better among examinations and assignments got a high degree of emotional intelligence (Chew et al., 2013). EQ is a capability to realize, to access and to create ideas, to control feelings, and to deal with emotions, and students have the passion of learning to enhance academic progress (Mayer & Salovey, 1997). According to Preeti (2013), emotional intelligence is important to education, lack of emotional intelligence implies a weak characteristic and people can't develop relationships in schools. There is a causation between emotional intelligence and the achievement of academic and professional performance (Romanelli et al., 2006). Emotional intelligence is utilized to evaluate the academic performance at various school degrees (Billings et al., 2014; Reyes et al., 2012), high school (Costa & Faria, 2015), and college (Parker et al., 2004b). The findings of Bar-

On (2007) and some studies (Bar-On, 1997, 2004, 2006a, 2006b; Bar-On et al., 2006) show a significant relationship between emotional intelligence and academic performance. Moreover, EI is linked with academic achievement (Parker et al., 2004a). In conclusion, emotional intelligence is seen as one of the most basic elements of one's personality, and it plays a necessary role in regulating people's behavior. The focal point is about emotion awareness and observation, relationship between people, academic accomplishment, and the adaptability of the study. So, the hypothesis is:

H3: Emotional Intelligence has a positive relationship with students' learning outcomes.

2.2. Cultural Intelligence (CQ)

Schmidt & Hunter (2000) think that CQ is a kind of intelligence that focuses on comprehending, thinking, and conducting in a variety of cultural situations. CQ is a construct intended to improve understanding of intercultural interactions (Earley, 2002). CQ is a person's ability to make an integration and adjustment to various environments, and that can realize and fit into unfamiliar cultural environments (Earley & Peterson, 2004; Earley & Mosakowski, 2004). A person with better CQ capability can do the correct thing and take adaptive action (Tan, 2004). CQ enables an individual to understand a diverse culture and behave appropriately (Thomas & Inkson, 2004). With higher CQ, people can work better in a plenty of cultural settings, such as national, ethnic, corporation, and generational circumstances (Livermore, 2009). CQ is a collection of skills and knowledge linked by cultural metacognition that enables people to adapt, choose, and adjust cultural elements in their environment (Thomas et al., 2008). Therefore, a person is capable of functioning and managing in various cultural settings successfully (Heppner et al., 2017).

Cultural intelligence can be regarded as how students manage, adjust, and adapt to a different cultural situation within a certain cultural circumstance. According to Thomas et al. (2008), CQ includes three facets which are cultural cognitive that are renamed to metacognition later, mindfulness, and behavior. Later, the fourth facet motivational was formed by Earley & Ang (2003), which is also recognized by other authors (Ang et al., 2007; Eisenberg et al., 2013; Heppner et al., 2017; Konanahalli et al., 2014). According to Lin et al. (2012), people get high scores on CQ and have great desire to apply their cultural knowledge to come up with a method which allows them to demonstrate verbal and nonverbal actions properly. According to the above concept; Earley and Ang (2003) had compiled four dimensions for

cultural intelligence, which are motivational CQ, Cognitive CQ, Metacognitive CQ and Behavioral CQ.

2.2.1. Motivational CQ

Motivational CQ refers to motivating individuals to adapt to the cultural differences and the environment (Earley, & Ang, 2003). That is about the individual's ability to focus and concentrate in order to learn and apply to the culture differences (Ang et al., 2007). Since, the motivations of cultural intelligence represent the effectiveness of a person's value and self-learning to adapt to a new culture. People who are adept at self-learning have a higher level of motivation CQ, as a result, they feel they can communicate with others who hold opposing perspectives. Therefore, motivation can maintain one's effort and action to explore the best way to adapt to the new cultural environment (Earley, & Ang, 2003).

2.2.2. Cognitive CQ

Cognitive CQ means that people have abilities to absorb different cultural customs, knowledge of the norms, and understand the cultural differences (Earley & Ang, 2003). Cognitive CQ stimulates people to ponder about other cultures and search the explanation for cultural context. Also, people who can realize the similarities and opposites better, the better cognitive CQ they have (Eisenberg et al., 2013).

2.2.3. Metacognitive CQ

Metacognitive CQ is an individual's cultural awareness and realized after interaction with the people from other cultures. It is the mental process after the understanding and gain of the cultural knowledge (Ang et al., 2007). Commonly, people with high metacognitive CQ know how to interact with the one who has the different cultural background during or before their interaction, also, they can easily discover others' cultural preference. However, while they interact with others, they will adjust their behavior to adopt the suitable strategy to communicate with others.

2.2.4. Behavioral CQ

Behavioral CQ refers to the one that adopts verbal or nonverbal ways to express flexibly in order to build a high efficiency of interpersonal relationship (Earley & Ang, 2003). In other words, when interacting with other cultures, they can express themselves by verbal or nonverbal methods actively (Ang et al., 2007). In this dimension, behavioral CQ allows people to enjoy the extensive experiences, to organize accurately and rapidly, and to deal with the problems (Lovvorn & Chen, 2011).

One of the crucial issues of studying abroad is multicultural adjustment (Kim et al., 2008; Kraimer &

Wayne, 2001). This brings an opportunity for cross-cultural abilities to grow. Specifically, CQ accounts for a large proportion and becomes increasingly popular in management research. (Earley & Ang, 2003; Lee & Sukoco, 2010; Rockstuhl & Ng, 2008; Thomas & Inkson, 2004). Because of the requirement of globalization, the relationship between CQ and outcomes is more established in the business situation. It will be more interesting to know cultural intelligence influences in the education field. Currently, there is some theoretical and empirical research available about cross cultural experiences (Takeuchi et al., 2005; Tarique & Takeuchi, 2008).

Cultural intelligence refers to a person's ability to adapt effectively to new cultural settings based on cognitive, metacognitive, motivational, and behavioral features (Earley, 2002). Cross-cultural contact occurs naturally around everyone everywhere (Thomas, & Inkson, 2004). Social rules, habits, and intercultural differences in values can cause conflict and misalignment in interpersonal interactions (Bennet, 1998).

The notion of cultural intelligence is closely linked to the concept of a better knowledge of culture. Cultural intelligence is becoming more important in enabling individuals to understand different cultures (Earley & Mosakowski, 2011). Cultural intelligences conclude human behavior, gestures, and communication. Cultural intelligence is also one of the significant elements in the modern world (Earley & Ang, 2003). Some studies indicate that people who go abroad for their jobs or studies possess a better CQ than people who go to foreign countries for other purposes (Crowne, 2008; Pless et al., 2011). CQ refers to a person's capability to operate and work well in a variety of cultural settings, as well as their ability to grasp and solve problems efficiently.

Expatriate managers working in a range of locations, flexibility influences both general and work adjustment (Shaffer et al., 2006). Cognition, motivation, and behavior intelligence were found to have a substantial impact on an expatriate's overall housing situations, workplace circumstances, and interactions with natives (Lee & Sukoco, 2007). Expatriates' capacity to adapt effectively to a new culture will aid their degree of adjustment. It will be interesting to know the links between Cognitive CQ and Meta-cognitive CQ and cross-cultural adjustment. Having information and/or expertise is insufficient; one must also have the capability and willingness to apply the knowledge and generate culturally appropriate responses (Earley & Peterson, 2004). Earley & Ang (2003)'s four dimensions of

CQ are seen as the competences required for conquering adjustment issues and, as a result, establishing a better cultural match. When people have the urge to absorb and the drive to constantly transform information into tactics (cognitive and metacognitive CQ), they are willing to demonstrate proper verbal or nonverbal responses in culturally varied situations (motivational and behavioral CQ). The postulated correlation to adjustment variables is further strengthened by this conceptual reasoning. CQ should have an impact on how well a person adjusts to other cultures. It's reasonable to assume that people who score better on various aspects of CQ would be able to explore and comprehend foreign cultures more readily, as well as improve their performance to act well in culturally varied environments. Therefore, the hypothesis is:

H4: Cultural Intelligence has a positive relationship with students' adjustment.

Individuals learn to adjust to other cultures through four phases (Lysgaard, 1955) in terms of honeymoon, culture shock, adjustment, and mastery. Individuals with metacognitive CQ, who have the greater mental capability to think about personal thinking patterns, expect others' cultural preferences, and adjust mental models during intercultural experiences, and would provide useful insights into understanding the process of learning cultural knowledge as they progress from one stage to the next. Therefore, the hypothesis is:

H4a: Metacognitive CQ has a positive relationship with students' adjustment.

As the knowledge element in the process of adjustment, cognitive CQ should be favorably associated with adjustment. It denotes understanding of the universals of culture and variances of culture (Ang et al., 2006). This information is applicable toward any cultural setting and involves an awareness of other cultures' economic, legal, and social systems, and geography, and provides frameworks for studying and contrasting diverse civilizations (Johnson et al., 2006). Cultural awareness is an essential factor of one's capability to reduce misunderstandings with someone from different cultures (Wiseman et al., 1989). As a result, people with high cognitive CQ are more likely to acclimatize to different cultural contexts since they understand more about specific features of foreign cultures. Therefore, the hypothesis is:

H4b: Cognitive CQ has a positive relationship with students' adjustment.

Behavioral CQ is considered to significantly link to adjustment because people with high scores in this dimension can change their actions in relation to environmental signals, particularly cultural clues.

People utilize impression management tactics to make others evaluate them favorably (Goffman, 1959). Because cultures have different social standards for suitable actions, the ability to demonstrate a diverse variety of behaviors or adaptable behaviors is crucial for making favorable impressions and developing successful intercultural connections with other actors in a multicultural context (Gudykunst et al., 1988). People that are flexible and less prone to offend others, are more likely to fit in, and are well adjusted. Behavioral flexibility has been related to a variety of multicultural results in studies. Black (1990) found that behavioral flexibility was associated with general adjustment, interaction, and job adjustment. Therefore, the hypothesis is:

H4c: Behavioral CQ has a positive relationship with students' adjustment.

Because persons with greater motivational CQ have an innate curiosity in various cultures and anticipate succeeding in culturally varied contexts, motivational CQ is likely to be positively connected to adjustment. Based on Bandura's (2002) social cognitive theory, individuals with more self-motivation will commence effort, continue in their attempts, and act much better. Other components of motivational CQ, like self-efficacy, are also significant motivating aspects in adjustment (Earley & Ang, 2003). Individuals with high self-efficacies can successfully manage their emotional reactions; they not only endure, but also set goals and aspirations, allowing them to aggressively seek out new and beneficial techniques for achieving the goals of intercultural contacts (Bandura, 1986; Earley & Ang, 2003). Stronger efficacy beliefs have been linked to higher engagement, tenacity, and adaptability in stressful conditions (Harrison et al., 1996; Epel et al., 1999; Bhaskar-Shrinivas et al., 2005; Palthe, 2004). Motivational CQ has a longer-lasting impact on how people react to employment and residency in a new culture (Templer et al., 2006). In a survey of executives with an international scope of work, Ang et al. (2004) discovered that the function of Motivational CQ was connected to general adjustment over and beyond sexuality, age, and nationality. Motivational and behavioral CQ were also found to be strongly connected to cultural adjustment (Ang et al., 2007). Therefore, the hypothesis is:

H4d: Motivational CQ has a positive relationship with students' adjustment.

It will be interesting to know the correlation between CQ and students' learning performance. Current research topics focus on the results of cultural negotiations effectiveness (Groves et al., 2014), adaptive achievement (Oolders et al., 2008), the reorganization of the work (Chen et al., 2010; Templer et al.,

2006) as well as the achievement of the sales (Chen et al., 2012), the negotiation style of the problem-solving (Engle et al., 2013), and efficiency in term of culture (Peng et al., 2014). People with higher levels of CQ could deal with the cultural problems of international situations and behave better in diverse cultural circumstances than other people (Kim et al., 2008). Some studies evaluate the correlation between CQ, and accomplishment related to commercial issues and include expatriates and their job's outcomes (Black, 1988; Moon et al., 2012). Some research (Ahn & Ettner, 2013; Ang et al., 2007; Lee & Sukoco, 2008; Rose et al., 2010) stated that there was a significant correlation among CQ and employee's behavior. In conclusion, CQ is a powerful predictor of learning outcomes in different cultural surroundings. Therefore, this study has the following hypothesis:

H5: Culture Intelligence has a positive relationship with students' learning outcomes.

The important skill of improving creative collaboration is metacognitive CQ (Chua et al., 2012). Increased metacognitive CQ increases culture awareness and decision-making while also improving task performance (Ang et al., 2007). Ng et al. (2009) stated that higher levels of metacognitive CQ were linked to higher levels of reflection, which included a larger awareness of personal assumptions and beliefs, as well as a better capability to examine their encounters from other perspectives. A person with higher metacognitive CQ is also more capable of appraising unique experiences without being influenced by previous ones. Those with higher degree of metacognitive CQ are more likely to develop strategies and tactics, and hence are more inclined to add their thoughts into context. So, the hypothesis is:

H5a: Metacognitive CQ has a positive relationship with students' learning outcomes.

Expatriates perform badly in a different cultural setting because they do not comprehend the cultural distinctions necessary to play their roles as expected, and hence do not comply with their role expectations (Stone-Romero et al., 2003). In order to satisfy role expectations, individuals must improve their cognitive knowledge, motivation, and behavioral performance. As a result, those with a high cognitive CQ would do well when working in a new culture since they are familiar with its norms, customs, and traditions. A worker may construct acceptable reactions and interactions with host nations using this knowledge and expertise. As a result, the hypothesis is:

H5b: Cognitive CQ has a positive relationship with students' learning outcomes.

A person with a high behavioral CQ uses both verbal and nonverbal actions to match expectations. In order to preserve a favorable self-image, they comply with role expectations (Goffman, 1959). People who have high behavioral CQ exhibit appropriate behaviors according to their linguistic and nonverbal talents. They display culturally appropriate language, tone, gestures, and facial expressions (Gudykunst et al., 1992). Individuals who act or behave correctly in a culturally diverse workplace have a high chance of success on the job. Ang et al. (2007) show empirically that behavioral CQ can predict task performance. Therefore, the hypothesis is:

H5c: Behavioral CQ has a positive relationship with students' learning outcomes.

Students with better cultural identification and motivational CQ are more suited for their chances of working abroad and future career (Peng et al., 2014). According to Chen et al. (2010), the impact of motivational CQ on work adaptability and performance, job adjustment modulates the relationship between motivational CQ and job achievement. As Ng et al. (2009) mention, people with high levels of motivational CQ will have more tangible experiences abroad, will be more driven to assess their thoughts and comprehension of conditions, and will persist in the face of adversity because they have higher goals and self-belief. As a result, the hypothesis is:

H5d: Motivational CQ has a positive relationship with students' learning outcomes.

2.3. Adjustment

When people need to shift from current to new environments such as overseas transfers, domestic transfers, or promotions, what is expected from them in the new job and how to meet those expectations. In addition, the first-year students in university may be both exciting and challenging (Habibah et al., 2010). As students acclimate to the academic, social, personal, and lifestyle demands that the university brings, they will get apprehensive (Abdullah et al., 2009).

There are three aspects of the adjustment, which are general adjustment, job adjustment, and interaction adjustment (Wu & Ang, 2011). Students and the laborers will face the challenges about general and interaction aspects, but in job aspects, students' adjustment is related to the learning conditions in schools, and laborers' job adjustment is about the working conditions in their company.

General adjustment consists of living conditions, facilities, and the transportation in the local environment. Adjustment is that people face the new challenge which includes climates, house living,

and shopping dimensions. Interaction adjustment refers to the interpersonal interactions between individuals and local people, including teachers, classmates, etc., that may occur due to value and language barriers. Job adjustment is about students' adjustment to the academic issue.

In the field of cross-cultural studies, adaptation and adjustment are both commonly found in the literature. Kim and Slocum (2008) found that individual-level characteristics such as characteristic trait, capability, expertise, sexuality, relationship status, previous foreign experience, and local language proficiency were strong predictors of adjustment.

Adjustment refers to a condition in which a person who is gradually able to adapt, and the conflict with the demands of the environment gradually decreases, resulting in a tendency for attitudes and behaviors (Berry et al., 1987). Adjustment is not only the psychological state of an individual, but also includes changes in cognition, attitude, and behavior; and adjustment is a long-term process. Adjustment can be seen in international adjustment, cross-cultural adjustment, and expatriate adjustment, all of which involve the level of psychological comfort when an individual enters a new environment and faces different cultural feelings. Ying (2005) categorized the stress associated with adjusting to different cultures into five major dimensions: physical, biological, social, cultural, and functional. Physical stressors include climate, unfamiliar environment, accommodation, and safety; biological stressors include food and illness; social stressors include missing home, friends, and family, feeling alienated from others, difficulty making new friends, and loneliness; cultural stressors include differences in cultural values between countries and facing racial discrimination; and functional stressors include work or schooling, finances, and transportation.

Torbiorn (1982) regarded adjustment including local transportation, climate, shopping, entertainment, and general adaptation to life. Ayman and Berry (1996) stated that adjustment abroad involved maintaining good mental and spiritual health, emphasizing different aspects of life satisfaction, having good relationships with local people, verifying effective job performance, and demonstrating positive attitudes toward the new job role. According to Searle and Ward (1990), cross-cultural adjustment includes socio-cultural adaptation and psychological well-being. When a person is in an unfamiliar environment, and the norms and behaviors used there are unfamiliar and confusing to them, the person feels stressful. If cross-cultural issues can be handled well, it will also reduce conflict and stress in work

and non-work situations and increase psychological comfort and ease in cross-cultural situations. Thus, adjustment is the degree to which an individual feels in harmony with the environment, and the intercultural adaptation is the result of the interaction between the individual's own (psychological and physiological) opinion and the social culture.

Jain (2017) found that there was a positive relationship between adjustment and academic learning outcome. Students who had the better adjustment in house living, health, social relationships, emotional issues, and school issues, had better academic learning outcomes. Parents and teachers should concentrate on students' adjustment to their new surroundings. Ease and satisfaction with one's surroundings transform into adjustment, which is beneficial to academic success. According to Burgess et al. (2009), poor college adjustment is linked with the poor academic learning outcomes, low graduation rates, and later-life failure. It's consequently perplexing that many high school graduates have intellectual and social challenges that prevent them from adjusting to their new university environment. According to Burgess et al. (2009), failure to tackle the greater issues faced by students throughout the transition from secondary to higher education has an influence on learning outcomes. Therefore, the hypothesis is:

H6: Students' adjustment has a positive relationship with students' learning outcomes.

2.4. Learning Outcomes

Learning outcomes include psychomotor adjustment. Therefore, it is necessary to build up an ability for students to gain knowledge, mindsets, and skills that are needed in learning after taking learning activities. Learning outcomes are the key criterion for evaluating a student's capabilities, as well as a method of measurement for educational development and future career (Kieti, 2017). Learning outcomes refer to students' need for specific skills and knowledge, whereas affective learning performance refers to how students' value, goals, attitudes, self-concepts, worldview, and behavior have been influenced by their university experiences (Frye, 1999).

In this study, learning outcome is defined as what a student understands, gains and is capable of the skills after finishing the learning in schools.

The most important factor in education is students' academic achievement. Ali et al. (2009) said that a country's skill and the quality of morale can be seen as a student's academic success. Performance

evaluation in higher education examines student learning and gains in order to enhance the quality of higher education (Palomba & Banta, 1999). Institutions need to know if they are effective in delivering learning outcomes in terms of students' value contributed to knowledge, skills, and personal development. There are several arrangements of learning outcomes. Frye (1999) thinks that cognitive learning outcomes are related to the student's gain of peculiar knowledge or skills; and the affective learning outcomes are related to how the higher education experience has affected the students' value, aim, notion, self-perception, worldview, and performance.

Doing an evaluation necessitates rethinking the primary goals and expected academic and non-academic achievements of higher education (Terenzini, 1989). The professional program or the institution might assess cognitive learning results in terms of academic achievements. Besterfield-Sacre et al. (2000) regarded increased capabilities as learning outcomes. The specific learning outcomes (Besterfield-Sacre et al., 2000) for engineering are including capabilities to apply knowledge; to design and conduct experiments; to analyze and interpret data; to set up process to match the desired needs; to operate in multidisciplinary teams; to identify, formulate, and solve engineering problems; to understand of professional ethics; to communicate effectively; and to comprehend the global and societal consequences of engineering solutions. The following cognitive outcomes have been set for majors in a geography department: (a) interpret maps and other geographical interpretations, (b) analyze the spatial organization of people, places, and environments on the earth's surface, (c) comprehend relations between global and local processes, (d) analyze the characteristics, distribution, and mobility patterns of the human population on the earth's surface, and (e) comprehend the complex relationships between nature and culture, (f) display understanding of qualitative and quantitative geospatial analytic tools and procedures, (g) give competing opinions and alternative hypotheses on spatial issues (Duque & Weeks, 2010). The above cognitive outcomes for geography majors are closed to common students in any other cultures' situations and can be further applied in this research. Cabrera et al. (2001) used factor analysis to find three key learning outcomes among engineering students: group skills, problem-solving abilities, and occupational awareness. As a result, cognitive results are assessed at a more detailed or broad level. Education is not only including learning facts and skills (cognitive outcomes) but also understanding how the world operates, and developing a worldview that guides behavior and shapes how individuals

need and use knowledge (Duque & Weeks, 2010). The expected academic outcomes show the more clearly cognitive goals, whereas the non-academic outcomes show the more general results (affective outcomes) of the student's complete educational experience (value, aim, notion, self-perception, worldview, and performance).

There are several techniques to assess a student's learning ability. Academic accomplishment refers to a student's ability to overcome a variety of obstacles in academic life while still meeting the academic criteria of the organization (Baker & Siryk, 1999). Academic accomplishment reflects a student's performance outcome that reveals how effectively a student has completed certain learning objectives and demonstrated skills in extracurricular activities (Ali et al., 2013; Steinmayr et al., 2014).

There are some methods to measure the quality of learning outcomes. Subjective outcome is according to the observation more than objective outcome. Other components that can be accessed to evaluate students' success are related to academics, containing things like effective or emotional states, attitude, and performance, all of which are about students' capability or skills. In contrast, objective outcome is based on the rules or tools that were designed before. Generally, the tools to evaluate student outcomes in schools are GPA, examinations, and credit. Brown (2004) indicates that the major classifications define the learning quality in high-order (such as analyzing, synthesis, and measurement) thinking ability in lower-order (such as knowledge, understanding, and application).

In this research, the measurement of students' learning outcomes is a subjective outcome, which is related to students' ideas, opinions, thoughts, and feelings related to capability or skills they have gained and enhanced from their studies in schools.

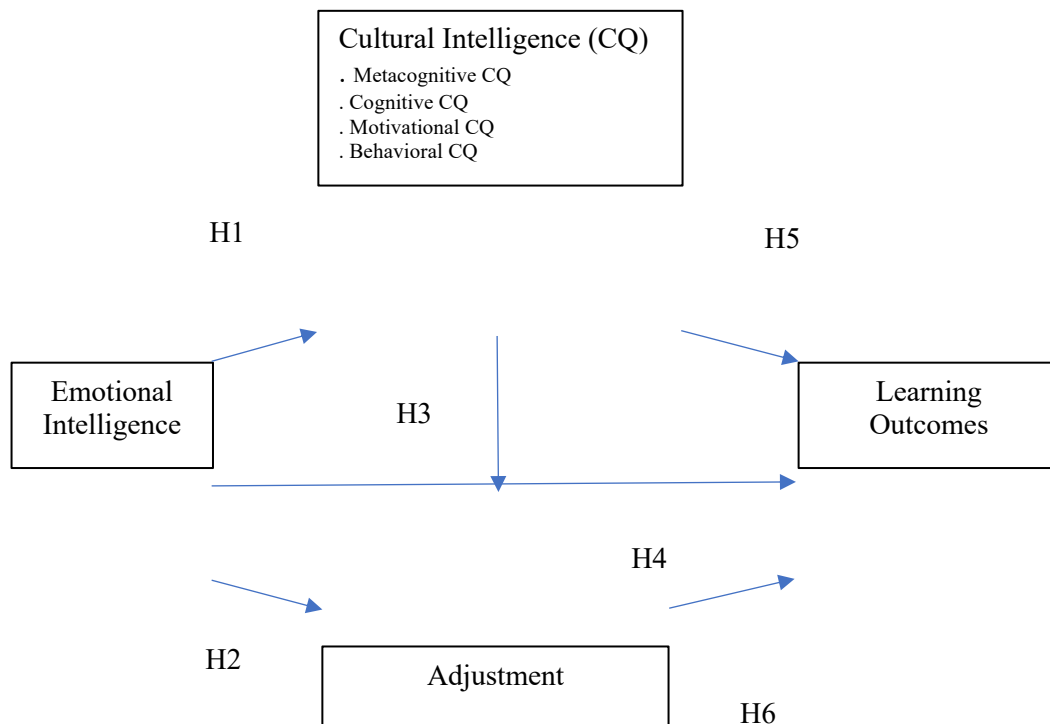
3. RESEARCH METHODS

This section shows the research framework, research method, sampling method, data collection method, variables' operational definition, variables' measurement, and data analysis method.

3.1. Research Framework

Figure 3.1 presents the research framework and the main variables' relationships.

Figure. 3.1 *Research framework*



The hypotheses are summarized as below.

H1: Emotional Intelligence has a positive relationship with cultural intelligence (CQ).

H1a: Emotional Intelligence has a positive relationship with metacognitive CQ.

H1b: Emotional Intelligence has a positive relationship with cognitive CQ.

H1c: Emotional Intelligence has a positive relationship with behavioral CQ.

H1d: Emotional Intelligence has a positive relationship with motivational CQ.

H2: Emotional Intelligence has a positive relationship with students' adjustment.

H3: Emotional Intelligence has a positive relationship with students' learning outcomes.

H4: Cultural Intelligence (CQ) has a positive relationship with students' adjustment.

H4a: Metacognitive CQ has a positive relationship with students' adjustment.

H4b: Cognitive CQ has a positive relationship with students' adjustment.

H4c: Behavioral CQ has a positive relationship with students' adjustment.

H4d: Motivational CQ has a positive relationship with students' adjustment.

H5: Cultural Intelligence has a positive relationship with students' learning outcomes.

H5a: Metacognitive CQ has a positive relationship with students' learning outcomes.

H5b: Cognitive CQ has a positive relationship with students' learning outcomes.

H5c: Behavioral CQ has a positive relationship with students' learning outcomes.

H5d: Motivational CQ has a positive relationship with students' learning outcomes.

H6: Students' adjustment has a positive relationship with students' learning outcomes.

3.2. Research Method

Quantitative research is used to address problems by providing correlations or revealing the link between research variables (Creswell, 2012). Quantitative research also assists in assessing the significance of relationships between variables. Because the research demands precise measurements, the quantitative technique is used for this investigation.

3.3. Sampling Method

The observation of the population in this research is the students who study in Taiwan currently. The samples are mainly undergraduate students, because of spreading questionnaires through Instagram, it is hard to normalize the school of the respondents. However, after the survey 1020 returned and 43 deleted invalid responses, the valid sample quantity is 977.

3.4. Data Collection Method

Online questionnaires are a great solution to the pandemic time situation. The IG influencers brought great help. They spread the questionnaire through Instagram. Also, the request letters were sent to the Office of International Affairs (OIA) of all universities. OIA officials helped to spread the questionnaire through email and Facebook to their international students. The data collection period was from April 28th to May 21st in 2022. This research has received 1020 respondents, which consists of 245 paper questionnaires and 775 online questionnaires. The invalid respondents from paper questionnaires are 9 and 34 invalid respondents from the online questionnaire.

Questionnaires were designed on a 5-point Likert scale, including indicators of emotional intelligence indicators with the criterion of very often true of me, often true of me, sometimes true of me, seldom true of me, and very seldom true of me; and cultural intelligence, adjustment, and learning outcomes with the criterion of strongly disagree, disagree, normal, agree, and strongly agree. It is a multiple

choices questionnaire, there is only one single choice for each indicator. Moreover, in order to provide the convenience for the respondents whose mother language is not Chinese, and improve the answering accuracy, the questionnaire was translated in different languages, including English, Indonesian, Vietnamese, and Thai.

3.5. Variables' Operational Definitions

In this study, variables' operational definitions are described as below. Emotional intelligence (EI) is defined as the sum of a series of emotions, personality and interpersonal abilities that affect people's ability to cope with the pressure of environmental needs (Bar-on, 1997). Cultural intelligence (CQ) is defined as a person's ability to make an integration and adjustment to various environments (Earley & Peterson, 2004). Adjustment includes local transportation, climate, shopping, entertainment, and general adaptation to life (Torbiorn, 1982). Learning outcomes are defined as statements of what a learner knows, comprehends, and can do after completion of learning (Cedefop, 2009).

3.6. Variables' Measurement

Indicators used in previous literature are applied to measure this research's variables. Emotional intelligence includes reality testing, flexibility, and problem solving (Bar-on, 1997). Reality testing is measured by three indicators: I try to see things as they really are, without fantasizing or daydreaming about them (RT1), even when upset, I am aware of what's happening to me (RT2), I can easily pull out of daydreams and tune into the reality of the immediate situation (RT3). Flexibility is measured by two indicators: it is easy for me to adjust to new conditions (FL1), and I can change old habits (FL2). Problem solving is measured by six indicators: my approach in overcoming difficulties is to move step by step (PS1), when faced with a difficult situation, I like to collect all the information about it that I can (PS2), I like to get an overview of a problem before trying to solve it (PS3), when facing a problem, the first thing I do is stop and think (PS4), when trying to solve a problem, I look at each possibility and then decide on the best way (PS5), in handling situations that arise, I try to think of as many approaches as I can (PS6).

Cultural intelligence including metacognitive, cognitive, motivational, and behavioral CQ and the measurement mainly apply 20 indicators from Ang et al. (2004, 2007). Metacognitive CQ is measured by the following indicators: I am conscious of the cultural knowledge I use when interacting with people

with different cultural backgrounds (MC1), I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me (MC2), I am conscious of the cultural knowledge I apply to cross-cultural interactions (MC3), I check the accuracy of my cultural knowledge when I interact with people from different cultures (MC4). Cognitive CQ is measured by the following indicators: I know the legal and economic systems of other culture (COG1), I know the rules (e.g., vocabulary, grammar) of other languages (COG2), I know the cultural values and religious beliefs of other cultures (COG3), I know the marriage systems of other cultures (COG4), I know the arts and crafts of other cultures (COG5), I know the rules for expressing nonverbal behaviors in other cultures (COG6). Motivational CQ is measured by the following indicators: I enjoy interacting with people from different cultures (MOT1), I am confident that I can socialize with locals in a culture that is unfamiliar to me (MOT2), I am sure I can deal with the stresses of adjusting to a culture that is new to me (MOT3), I enjoy living in cultures that are unfamiliar to me (MOT4), I am confident that I can get accustomed to the shopping conditions in a different culture (MOT5). Behavioral CQ is measured by the following indicators: I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it (BEH1), I use pause and silence differently to suit different cross-cultural situations (BEH2), I vary the rate of my speaking when a cross-cultural situation requires it (BEH3), I change my nonverbal behavior when a cross-cultural situation requires it (BEH4), I alter my facial expressions when a cross-cultural interaction requires it (BEH5).

According to Black & Stephens (1989), adjustment can be measured by general, job, and interaction related factors. General factors are measured by the following indicators: I am adjusted to the current house living conditions in general (GE1), I am adjusted to the current cost of living (GE2), I am adjusted to the current foods (GE3), I am adjusted to the current living conditions in general (weather, transportation, shopping, and entertainment facilities) (GE4), I am adjusted to the health care facilities in current environment (GE5). Job related factors can be measured by the following indicators: I am adjusted to the academic performance to reach standards and the expectations in current University (JO1), I am adjusted to complete the class specific assignment responsibility (JO2). Interaction can be measured by the following indicators: I am adjusted to interact with classmates on a day-to-day basis (INT1), I am adjusted to socialize with classmates (INT2), I am adjusted to interact with people outside

of college/university (INT3), I am adjusted to the speaking with my classmates (INT4), I am adjusted to the value, work attitude and custom in my class (INT5).

According to Frye (1999) and Duque & Weeks (2010), learning outcomes can be measured by cognitive and affective outcomes, and satisfaction. Cognitive outcome (Duque & Weeks, 2010) is measured by the following indicators: I can interpret maps and other geographical representations (LOC1), I can analyze the spatial organization of people, places, and environments on the earth's surface (LOC2), I can comprehend relations between global and local processes (LOC3), I can analyze the characteristics, distribution, and mobility patterns of human population on the earth's surface (LOC4), I can apprehend the complex relations between nature and culture/society (LOC5), I can demonstrate knowledge of geospatial analysis methods and techniques (qualitative and quantitative) (LOC6), I can present opposing viewpoints and alternative hypotheses on spatial issues (LOC7). Affective outcome (Frye, 1999) is measured by the following indicators: I have skills to manage, use, and analyze information (LOA1), I have skills to communicate effectively by comprehending, writing, and speaking (LOA2), I have planning and organizational abilities (LOA3), I have self-confidence, independence, and personal initiative (LOA4), I have worldviews, and the way I interact with people (LOA5), I have personal values and ethic (LOA6). Satisfaction is measured by the indicator: I am satisfied with my current performance in the university (LOS1).

3.7. Data Analysis Method

SPSS 25 statistical analysis software was used to do data analysis. The data analysis methods are described below.

1. Descriptive Statistics Analysis is applied to describe sample distribution.
2. Reliability Analysis: Cronbach's alpha is used to test variable's reliability.
3. Pearson Correlation Analysis is applied to see the relationship between variables.
4. Regression Analysis is applied to see the relationship between variables.
5. Common Bias Test is applied to see if there is bias occurred in the study or not. This bias is investigated using the Harman's single factor.
6. Confirmatory Factor Analysis is applied to specify a model and identify the variables that load on the various components and the relationships between those factors.

4. RESEARCH FINDINGS

This section demonstrates respondents' information, results of descriptive data analysis, results of reliability test, results of Pearson correlation analysis, results of Regression analysis, results of common bias test, results of Confirmatory Factor analysis, Summary of hypotheses testing results.

4.1. Respondents' Information

According to the results after SPSS analysis in Table 4.1, there are 652 (66.7%) female students, and 325 (33.3%) male students. In terms of nationality, most of the respondents come from Asia, 811 (83%) from Taiwan, 68 (7%) from Indonesia, 16 (1.6%) from Vietnam, 10 (1%) from Thailand, 9 (0.9%) from India, each 6 (0.6%) from Hong Kong and Philippines, 3 (0.3%) from Mainland China, 2 (0.2%) from Malaysia, 1 (0.1%) from Macau and 45 (4.6%) from others.

There are 27 (2.8%) from 15-18 years old. The big number of students is 19-22 years old with 585 (59.9%) students (the typical age for bachelor students). There are 248 (25.4%) students from 23-26 years old, 61 (6.2%) students from 27-30 years old, 32 (3.3%) students from 31-34 years old, 13 (1.3%) students from 35-38 years old and 1.1% of the student is higher than 38 years old.

Based on the Table 4.2 about university, majority of students come from Others University in Taiwan 618 (63.3%), 298 (30.5%) from National Yunlin University of Science and Technology (NYUST), 15 (1.5%) from National Taiwan University (NTU), 14 (1.4%) from National Sun Yat-sen University (NSYSU), 13 (1.3%) from National Formosa University (NFU), 13 from Chaoyang University of Technology (CYUT) and 6 (0.6%) from National Changhua University of Education (NCUE).

According to respondents' majors, 274 (28%) students took management, 176 (18%) studied engineering, 70 (7.2%) studied languages, and the rest of the students took sciences, design, arts, humanities, and others.

According to Table 4.3, data shows Bachelor 700 (71.6%), Master 188 (19.2%), PhD 45 (4.6%), and Others 44 (4.5%). In terms of studying year, 428 (43.8%) is the first-year students, 198 (20.3%) is the second-year, 159 (16.3%) is the third-year, 132 (13.5%) is the fourth year, and 60 (6.1%) is others.

4.2. Results of Descriptive Data Analysis

Table 4.4 shows that male students have better emotional intelligence, adjustment and learning outcomes.

Table 4.4 shows that the mean value between male and female students on CQ indicators are close. The

mean value of COG variables of male students is higher than female students. Table 4.5 shows that international students have higher cultural intelligence (MC, COG, MOT, and BEH) than Taiwanese students. International students have better emotional intelligence, adjustment and learning outcomes. Table 4.6 indicates that PhD students have better emotional intelligence, cultural intelligence, adjustment and learning outcome when compared to bachelor, master, and other program's students. Table 4.7 shows that the students over 38 years old have better cultural intelligence. However, students between 35-38 years old have better emotional intelligence, adjustment and learning outcomes. Table 4.8 shows that the arts major students have better emotional intelligence, cultural intelligence, and learning outcome. However, students majoring in education have better adjustment and learning outcomes.

4.3. Results of Reliability Test (Cronbach's Alpha)

Table 4.9 shows that emotional intelligence Cronbach's alpha is 0.876, cultural intelligence Cronbach's alpha is 0.931, adjustment Cronbach's alpha is 0.922, and learning outcomes Cronbach's alpha is 0.915. All variables have high reliability.

4.4. Results of Pearson Correlation Analysis

Table 4.10 shows that emotional intelligence, cultural intelligence, adjustment, and learning outcomes have positive significant relationships with each other.

4.5. Results of Regression Analysis

Table 4.11 shows the regression analysis results between independent variables (emotional intelligence, cultural intelligence, and adjustment) and dependent variables (learning outcome). From the results, the adjusted R square = .494 shows that three independent variables can affect 49% learning outcome. All variables are significant at $\alpha < 0.05$. All variables are significant at $\alpha < 0.05$. The empirical results support the following hypotheses in this study.

H3: Emotional Intelligence has a positive relationship with students' learning outcomes.

H5: Cultural Intelligence has a positive relationship with students' learning outcomes.

H6: Students' adjustment has a positive relationship with students' learning outcomes.

Table 4.12 shows the regression analysis results between independent variables (emotional intelligence)

and dependent variables (cultural intelligence). From the results, the adjusted R square = .35 shows that independent variables can affect 35% on cultural intelligence. The variables are significant at $\alpha < 0.05$. The empirical results support the H1 hypothesis in this study. Emotional Intelligence has a positive relationship with culture intelligence.

Table 4.13 shows the regression analysis results between independent variables (emotional intelligence) and dependent variables (adjustment). From the results, the adjusted R square = .395 shows that independent variables can affect 39.5% on adjustment. The variables are significant at $\alpha < 0.05$. The empirical results support the H2 hypothesis in this study. Emotional Intelligence has a positive relationship with students' adjustment.

Table 4.14 shows the regression analysis results between independent variables (cultural intelligence) and dependent variables (adjustment). From the results, the adjusted R square = .242 shows that independent variables can affect 24.2% on adjustment. The variables are significant at $\alpha < 0.05$. The empirical results support the H4 hypothesis in this study. Cultural Intelligence has a positive relationship with students' adjustment.

Table 4.15 shows the regression analysis results between independent variables (Metacognitive CQ, Cognitive CQ, Motivational CQ and Behavioral CQ) and dependent variables (learning outcome). From the results, the adjusted R square = .361 shows that independent variables can affect 36.1% on adjustment. Thus, based on the collinearity diagnosis, the condition index is all smaller than 30, which indicates that the collinearity problem is alleviated.

The variables are significant at $\alpha < 0.05$. Metacognitive CQ, Cognitive CQ, Motivational CQ and Behavioral CQ have a positive relationship with the learning outcome. The empirical results support the following hypotheses in this study.

H5a: Metacognitive CQ has a positive relationship with students' learning outcomes.

H5b: Cognitive CQ has a positive relationship with students' learning outcomes.

H5c: Behavioral CQ has a positive relationship with students' learning outcomes.

H5d: Motivational CQ has a positive relationship with learning outcomes.

Table 4.16 shows the regression analysis results between independent variables (Metacognitive CQ, Cognitive CQ, Motivational CQ and Behavioral CQ) and dependent variables (adjustment). From the

results, the adjusted R square = .277 shows that independent variables can affect 27.7% on adjustment. Thus, based on the collinearity diagnosis, the condition index is all smaller than 30, which indicates that the collinearity problem is alleviated. Metacognitive CQ, Motivational CQ and Behavioral CQ are significant at $\alpha < 0.05$. Metacognitive CQ, Motivational CQ and Behavioral CQ have positive relationships with adjustment. The empirical results support the following hypotheses in this study.

H4a: Metacognitive CQ has a positive relationship with students' adjustment.

H4c: Behavioral CQ has a positive relationship with students' adjustment.

H4d: Motivational CQ has a positive relationship with students' adjustment.

However, Cognitive CQ are significant at $\alpha > 0.05$. This indicates that there are no relationships between cognitive CQ and adjustment. The empirical results do not support the following H4b hypothesis: Cognitive CQ has a positive relationship with students' adjustment.

Table 4.17 shows the regression analysis results between emotional intelligence, metacognitive CQ, cognitive CQ, behavioral CQ and motivational CQ. From the results, adjusted R square is 0.29, 0.168, 0.26 and 0.238 shows that emotional intelligence can affect 29% on metacognitive CQ, 16.8% on cognitive CQ, 26% on behavioral CQ, 23.8% on motivational CQ. All variables are significant at $\alpha < 0.05$. Emotional intelligence has a positive relationship with metacognitive CQ, cognitive CQ, behavioral CQ and motivational CQ. The empirical results support the following hypotheses in this study.

H1a: Emotional Intelligence has a positive relationship with metacognitive CQ.

H1b: Emotional Intelligence has a positive relationship with cognitive CQ.

H1c: Emotional Intelligence has a positive relationship with behavioral CQ.

H1d: Emotional Intelligence has a positive relationship with motivational CQ.

4.6. Results of Common Bias Test

There is no bias in this study if the percentage of variance for a single factor is less than 50%. Table 4.18 shows that this study has no bias; the percentage of variance is 31.357%, which is less than 50%.

Table 4.18

Harman's Single Factor Score

Total	% of Variance	Cumulative %
17.976	31.537	31.537

4.7. Results of Confirmatory Factor Analysis

This analysis is conducted to show the correlation between variables. Three sets of variables in terms of emotional intelligence, adjustment, and learning outcomes, which are often applied in past research. Therefore, it is reasonable to apply confirmatory factor analysis to test these three variables emotional intelligence, adjustment, and learning outcomes to see their representativeness. As a result, the goal of confirmatory factor analysis is to see if the data fits a postulated measurement model. This proposed model is founded on theory and/or prior analytic studies.

According to the results of Table 4.19-21, it shows the correlation between each variable. There is no collinearity if the squared multiple correlations are lower than 0.9. The estimates of squared multiple correlations are all lower than 0.9. The critical ratio values that are more than 1.96 were regarded as significant at the range of $p < .05$. As indicated in Tale 4.20, the critical ratio (C.R) indicates that all indicators can represent a significant variable and predictor of the latent variables when applying the standardized regression weight and weight regression. Regression Weights in the Table 4.21 shows that all indicators have a significant P value being smaller than 0.05 (mark *** indicates figures that are much smaller than 0.05). Figure 4.1 shows that the standardized regression weights all have factor loading bigger than 0.5 which means that there is a strong influence of independent value and dependent value. A strong positive linear relationship has shown. The correlation between two variables is all over 0.5 which are all regarded as significant. The results of confirmatory factor analysis show there three sets of variables in terms of emotional intelligence, adjustment, and learning outcomes have their valid representativeness in the research framework.

4.8. Summary of the Hypotheses Testing Results

All hypotheses have found empirical support except for H4b. There is no empirical support for cognitive CQ's relationship with students' adjustment.

5. DISCUSSION AND CONCLUSION

This section explains research summary, empirical findings and discussion, limitations, implications, and suggestions for future research.

5.1. Summary of this Research

The empirical results show that emotional intelligence has a positive relationship with cultural intelligence, adjustment, and learning outcomes. Cultural intelligence has a positive relationship with adjustment and learning outcomes. Adjustment has a positive relationship with learning outcomes. The empirical findings support that there are positive relationships among emotional intelligence, cultural intelligence, adjustment, and learning outcomes. Three sets of variables in terms of emotional intelligence, adjustment, and learning outcomes have their valid representativeness in the research framework.

5.2. Empirical Findings and Discussion

The empirical evidence shows that learning outcomes (Duque & Weeks, 2010) can be successfully measured by cognitive and affective outcomes, and satisfaction. The empirical evidence supports that Black & Stephens' (1989) adjustment measurements are applicable including general, job, and interaction related factors. Emotional intelligence in terms of adaptability (including reality-testing, flexibility, and problem-solving) from the Bar-on model (2004, 2006a, 2006b, 2007) can influence students' cultural intelligence, adjustment and learning outcomes. The empirical evidence shows that cultural intelligence including metacognitive, cognitive, motivational, and behavioral CQ (Ang et al., 2004, 2007) can influence adjustment and learning outcomes.

The empirical results show that emotional intelligence affects cultural intelligence, adjustment and learning outcome positively. The increase in emotional intelligence will increase in cultural intelligence, adjustment, and learning outcome. The empirical evidence supports that success of the academic is strongly linked with several dimensions of emotional intelligence (Ang. et al, 2004; Engelberg & Sjoberg, 2004; and Parker et al., 2004b). EI and CQ have a positive and significant relationship (Crowne, 2009). Elevated EI makes one more receptive to new experiences, which are related to the motivational features of CQ, suggesting a person's willingness to engage with others from different cultural backgrounds. The empirical results show the impact of emotional intelligence on student achievement (Matthews et al., 2004; Vela, 2003). Accordingly, effective learning must have an effective thinking with EI and CQ consciously involved in between stimulus and response results in the expected behavior. Cultural intelligence shows a favorable link with adjustment and learning outcomes. There are

significant positive correlations between cultural intelligence, especially motivational and behavioral cultural intelligence (Ang et al., 2004, 2007), and key aspects of outcome such as achievement and cultural adaptation (Chen et al., 2010; Chen et al., 2012; Templer et al., 2006).

The empirical results don't prove the relationship between cognitive CQ and learning outcome. This may be because the cognitive cultural intelligence concept is more difficult for students to learn comprehensively. Cognitive CQ is involved in knowing the legal and economic systems of other culture, the rules (e.g., vocabulary, grammar) of other languages, the cultural values and religious beliefs of other cultures, the marriage systems of other cultures, the arts and crafts of other cultures, and the rules for expressing nonverbal behaviors in other cultures.

Adjustment has a positive influence on learning outcomes. The better adjustment, the greater students' learning outcome. There is a positive link with adjustment and academic learning outcome (Jain, 2017). Students who have better adjustment will result in a better learning outcome. Teachers may build more comprehensive learning techniques and assist students in achieving academic achievement by utilizing various learning approaches.

Emotional intelligence (EI) is the capacity to recognize, use, comprehend, manage, and handle emotions. Emotional intelligence can influence the students' learning condition. Emotional intelligence assists people in developing stronger connections, succeeding in school and at work, and achieving their professional and personal objectives. It can assist people in connecting with their feelings, translating purpose into action, and making educated judgments about what is most important to them. Therefore, emotional intelligence is still a powerful variable in explaining the process of adjustment and learning.

5.3. Limitations of this Research

Because the questionnaire was spread by the IG influencers through the Internet, the respondents were all from different places in Taiwan and hard to limit the schools, major or studying year of them. It's difficult to focus on one school or gather the same quantity of the sample sizes in every school or major. Therefore, it's impossible for the research to concentrate and collect more valuable data.

The sample size in this study is 977, but Taiwanese students' respondents account for 83%. It would be better if the international students' respondents also have the same sample size as Taiwanese students. The lack of the international students' samples which cause the sample sizes are not good enough to

depict and represent the real learning situations of them.

Under Covid-19 circumstances, the majority courses were online. Students didn't need to show up on the campus in order to socialize with each other. It decreased interaction and communication opportunities between local students and overseas students. This may influence their emotional intelligence, cultural intelligence, and adjustment situations.

5.4. Implications of this Research

Many issues still arise in students' lives, which have effects on their learning outcomes. Students are very concerned about day-to-day problems solving and the uncertainty of the future, therefore the institutions and the governments must properly consider the circumstances of students and provide them with support.

Based on the research results, emotional intelligence is found to have a positive relationship with students' learning outcomes. One key psychological aspect in describing human behavior and specific behaviors is EQ. Interaction and relationships with people improve a person's capacity to comprehend both oneself and others. Higher level EQ students might feel at ease, coherent, and in control over their own emotions as well as those of others. This gives them a sense of calm and psychological comfort, which will enhance their mental health and motivate them to do better in school. By offering guidance and providing instruction through courses, activities, or other means, educational institutions can help students understand their emotional intelligence, how to improve it, and encourage students to express their actual emotions.

Cultural intelligence is also positively correlated with students' learning outcome and adjustment. CQ assists students in comprehending and adjusting to a new cultural context, and CQ is a significant predictor of adjustment. It's crucial to understand a student's degree of cultural intelligence, which is why a pre-test on an overseas student's capacity for cultural intelligence should be administered before they enroll in college. This finding can assist schools understand how well their students can adjust to other cultures and provide solutions.

Adjustment is found to have a positive relationship with students' learning outcomes. Students that are more adaptable fare better academically. Learning outcomes are improved in those who have stronger family, social, health body, and emotional coping skills. The adjustment of the student to the

surroundings should be the emphasis of parents and instructors. Comfort and satisfaction in one's surroundings lead to adjustment, which is beneficial for achieving academic success. By aiding students' adjustment conditions, instructors may actively care for students.

Foreigners may overcome obstacles and achieve their goals with encouragement. Good adaptation of students can help them become more competent, literate, and knowledgeable. Additionally, a good adaptation process involves looking up information available in the host country, including its culture, characteristics of domestic and overseas students' situations, and its educational system.

5.5. Suggestion for Future Research

There are still many dimensions that can impact a student's learning outcomes. Future research can consider more variables such as motivations of students, and institution's role and support, to observe their influences on students' learning.

Future research can apply the Bar-on model's Emotional Quotient Inventory (EQ-I) including 15 sub-scales: Intrapersonal (Self-Regard, Emotional Self-Awareness, Assertiveness, Independence, and Self-Actualization); Interpersonal (Empathy, Social Responsibility, and Interpersonal Relationship); Stress Management (Stress Tolerance and Impulse Control); Adaptability (Reality-Testing, Flexibility, and Problem-Solving); and General Mood (Optimism and Happiness), to test their influences on students' learning processes and results.

Future research can gather more samples of the international students from different universities and countries to see the differences of students' emotional and cultural intelligence, learning and adaptability among different nationalities.

REFERENCES

- [1] Abdallah, M., Elias, H., Mahyuddin, R. and Uli. J. (2004). Emotional Intelligence and Academic Achievement among Malaysia Secondary Students. *Pakistan Journal of Psychology Research*, 19(3-4), 105.
- [2] Abdullah, M.C., Elias, H., Mahyuddin, R. & Uli, J. (2009). Adjustment among First Year Students in a Malaysian University. *European Journal of Social Sciences*, 8(3), 496-505.

- [3] Adeyemo, D. A. (2005). The Buffering Effect of Emotional Intelligence Adjustment on the Adjustment of Secondary School Students in Transition. *Electronic Journal of Research in Educational Psychology*, 6(2), 79-90.
- [4] Ahn, M. J., & Ettner, L. (2013). Cultural Intelligence (CQ) in MBA Curriculum. *Multicultural Education & Technology Journal*, 7, 4-16.
- [5] Ali, N., Jusoff, K., Ali, S., Mokhtar, N., & Salamat, A. S. A. (2009). The Factors Influencing Students' Performance at Universiti Teknologi MARA Kedah, Malaysia. *Management Science and Engineering*, 3(4), 81.
- [6] Ali, S., Haider, Z., Munir, F., Khan, H., & Ahmed, A. (2013). Factors Contributing to the Students' Academic Performance: A Case Study of Islamia University Sub-Campus, *American Journal of Educational Research*, 1(8), 283–289.
- [7] Ang, S., Van Dyne, L., Koh, C., & Ng, K. Y. (2004). The Measurement of Cultural Intelligence. Paper Presentation at the 2004 August Annual Meeting of the Academy of Management. New Orleans, LA.
- [8] Ang, S., Dyne, L.V., Koh, C., Ng, K.Y., Templer, K.J., Tay, C., & Chandrasekar, N.A. (2007) Cultural Intelligence: Its Measurement and Effects on Cultural Judgment and Decision Making, Cultural Adaptation, Task Performance. *Management and Organization Review*, 3(3), 335-371.
- [9] Aycan, Z., & Berry, J.W. (1996). Impact of Employment-Related Experiences on Immigrants' Psychological Well-Being and Adaptation to Canada. *Canadian Journal of Behavioral Science*, 28(3), 240-251.
- [10] Baker, R. W., & Siryk, B. (1999). *SACQ Student Adaptation to College Questionnaire* (2nd Ed.). Los Angeles: Western Psychological Services.
- [11] Bandura, A. (1977). Self-Efficacy: Toward A Unifying Theory of Behavioral Change. *Psychological Review*, 84(2), 191-215.
- [12] Bandura, A., & National Inst of Mental Health. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Prentice-Hall, Inc.
- [13] Bandura, A. (2002). Social Cognitive Theory in Cultural Context. *Applied Psychology: an International Review*, 51, 269–290.

- [14] Bar-On, R. (1997). The Emotional Quotient Inventory (EQ-I): Technical manual. Toronto, Canada: Multi-Health Systems, Inc.
- [15] Bar-On, R. (2004). The Bar-On Emotional Quotient Inventory (EQ-I): Rationale, description, and summary of psychometric properties. In Glenn Geher (Ed.), *Measuring emotional intelligence: Common ground and controversy*. Hauppauge, NY: Nova Science Publishers, pp. 111-142.
- [16] Bar-On, R. (2006a). EQ-I leadership user's guide. Toronto, Canada: Multi-Health Systems.
- [17] Bar-On, R. (2006b). The Bar-On Model of Emotional-Social Intelligence (ESI). *Psicothema*, 18, 13-25.
- [18] Bar-On, R. (2007). How Important Is It To Educate People To Be Emotionally Intelligent, And Can It Be Done? In R. Bar-On, J.G. Maree, & M. Elias (Eds), *Educating People to Be Emotionally Intelligent*. Westport, CT: Praeger, 1-14.
- [19] Bar-On, R., Handley, R., & Fund, S. (2006). The Impact of Emotional and Social Intelligence on Performance. In Vanessa Druskat, Fabio Sala, & Gerald Mount (Eds), *Linking Emotional Intelligence and Performance at Work: Current Research Evidence*. Mahwah, NJ: Lawrence Erlbaum, 3-19.
- [20] Bennett, M. J. (1998). *Intercultural Communication: A Current Perspective*. Basic Concepts of Intercultural Communication: Selected Readings. Yarmouth, ME: Intercultural Press.
- [21] Berndt, T. (2002). Friendship Quality and Social Development. *Current Directions in Psychological Science - Curr Directions Psychol Sci*. 11. 7-10. 10.1111/1467-8721.00157.
- [22] Berry, J. W., Kim, U., Minde, T., Mok, D., 1987, Comparative Studies of Acculturative Stress, *International Migration Review*, 21(3): 491-511.
- [23] Besterfield-Sacre, M., Shuman, L.J., Wolfe, H., Atman, C.J., McGourty, J., Miller, R.L., Rogers, G. (2000). Defining Outcomes: A Framework for EC-2000. *IEEE Transactions on Education*, 42(2), 100–110.
- [24] Bhaskar-Shrinivas, P., Harrison, D. A., Shaffer, M. A., & Luk, D. M. (2005). Input-Based and Time-Based Models of International Adjustment: Meta-Analytic Evidence and Theoretical Extensions. *Academy Of Management Journal*, 48,259–281.
- [25] Billings, C. E. W., Downey, L. A., Lomas, J. E., Lloyd, J., & Stough, C. (2014). Emotional

- Intelligence and Scholastic Achievement in Pre-Adolescent Children. *Personality and Individual Differences*, 65, 14–18.
- [26] Black, J. S. (1988). Work Role Transitions: A Study of American Expatriate Management. *Journal of International Business Studies*, 19(2), 277–294.
- [27] Black, J.S., & Stephens G.K. (1989). The Influence of the Spouses on American Expatriate Adjustment and Intent to Stay in Pacific Rim Overseas Assignments. *Journal of Management*, 15(4), 529-544.
- [28] Black, J.S. (1990). The Relationship of Personal Characteristics with the Adjustment of Japanese Expatriate Managers. *Management International Review*, 30(2), 119-134.
- [29] Brown, T. (2004). Bloom’s Taxonomy, In Kincheloe, J.L. And Weil, D. (Eds): *Critical Thinking and Learning: An Encyclopedia for Parents and Teachers*, Greenwood Press, London, 77–82.
- [30] Bruner, J. S. (1961). The Act of Discovery. *Harvard Educational Review*, 31, 21-32.
- [31] Burgess T, Crocombe L, Kelly J, Seet, P. S. (2009). The Effect of Cultural Background on the Academic Adjustment of First Year Dental Students. *Ergo*, 1(2): 5-24.
- [32] Cabrera, A.F., Colbeck, C.L., & Terenzini, P.T. (2001). Developing Performance Indicators for Assessing Classroom Teaching Practices and Student Learning: The Case of Engineering. *Research in Higher Education*, 42(3), 327–352.
- [33] Cedefop. (2009). The Shift to Learning Outcomes, Policies, and Practices in Europe. Cedefop Reference Series 72. Luxembourg: Office for Official Publications of the European Communities.
- [34] Chen, F. S., Lin, Y. M. And Tu, C. A. (2006). A Study of the Emotional Intelligence and Life Adjustment of Senior High School Students, *World Transactions on Engineering and Technology Education* Vol.5, No.3,473-476.
- [35] Chen, G., Kirkman, B. L., Kim, K., Farh, C. I. C., & Tangirala, S. (2010). When Does Cross Cultural Motivation Enhance Expatriate Effectiveness? A Multilevel Investigation of the Moderating Roles of Subsidiary Support and Cultural Distance. *Academy of Management Journal*, 53(5), 1110-1130.
- [36] Chen. X., Rubin, Kenneth H. Li, Dan, (2011). Relation Between Academic Achievement and Social adjustment: Evidence from Chinese Children. *Journal of Developmental Psychology*.

Canada: May Vol. 33(3), 518-525.

- [37] Chen, X., Liu, D., & Portnoy, R. (2012). A Multilevel Investigation of Motivational Cultural Intelligence, Organizational Diversity Climate, and Cultural Sales: Evidence from U.S. Real Estate Firms. *Journal of Applied Psychology*, 97(1), 93-106.
- [38] Chew, B., Zain, A., & Hassan, F. (2013). Emotional Intelligence and Academic Performance in First and Final Year Medical Students: A Cross-Sectional Study. *BMC Medical Education*, 13(44), 1-10.
- [39] Chua, R. Y. J., Morris, M. W., & Mor, S. (2012). Collaborating Across Cultures: Cultural Metacognition and Affect-Based Trust in Creative Collaboration. *Organizational Behavior and Human Decision Processes*, 118(2), 116–131.
- [40] Clinciu, A. I. (2012). Adaptation and Stress for the First Year University Students *Procedia-Social and Behavioral Sciences*, 78, 718-722.
- [41] Costa, A., & Faria, L. (2015). The Impact of Emotional Intelligence on Academic Achievement: A Longitudinal Study in Portuguese Secondary School. *Learning and Individual Differences*, 37, 38–47.
- [42] Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Educational Research 4.
- [43] Crowne, K. A. (2008). What Leads to Cultural Intelligence? *Business Horizons*, 51, 391–399.
- [44] Crowne, Kerri A. (2009) The Relationships among Social Intelligence, Emotional Intelligence and Cultural Intelligence, *Organization Management Journal*: Vol. 6: Iss. 3, Article 5.
- [45] Daniel, C., Ajayi, A., Ogunyewo, O., Ajio, D., Andy, E., Oyedele, E., Gusen, N. (2018). Perceived Impact of Academic Stress on Academic Performance among Undergraduate Nursing Students of University of Jos. *New Nigerian Journal of Clinical Research*, 7(11), 8-15.
- [46] Day, A.L. & Carroll, S.A. (2004). Using an Ability-Based Measure of Emotional Intelligence to Predict Individual Performance, Group Performance, and Group Citizenship Behaviors. *Personality & Individual Differences*, 36(6): 1443–1458.
- [47] Duque, L.C., & Weeks, J.R. (2010). Towards A Model And Methodology For Assessing Student Learning Outcomes And Satisfaction. *Quality Assurance in Education*, 18(2), 84–105.

- [48] Earley, P. C., & Ang, S. (2003). *Cultural Intelligence: Individual Interactions across Cultures*. Stanford, CA: Stanford University Press.
- [49] Earley, P.C., Ang, S. & Tan, J.-S. (2006). *CQ: Developing Cultural Intelligence at Work*. Stanford, Ca: Stanford Business Books.
- [50] Earley, P. C., & Mosakowski, E. (2011). Cultural Intelligence. *Harvard Business Review*, 16(1), 582–602.
- [51] Earley, P. C. (2002). Redefining Interactions across Cultures and Organizations: Moving Forward with Cultural Intelligence. *Research in Organizational Behavior*, 24, 271-299.
- [52] Earley, P. C., & Peterson, R. S. (2004). The Elusive Cultural Chameleon: Cultural Intelligence as a New Approach to Intercultural Training for the Global Manager, *Academy of Management Learning and Education*, 3(1), 100-115.
- [53] Earley, P. & Mosakowski, E. (2004). Cultural Intelligence. *Harvard Business Review*. 82. 139-46.
- [54] Eisenberg, J., Lee, H.-J., Bruck, F., Brenne, B., Claes, M.-T., Mironski, J., & Bell, R. (2013). Can Business Schools Make Students Culturally Competent? Effects of Cross-Cultural Management Courses on Cultural Intelligence. *Learning and Education*, 12(4), 603–621.
- [55] Elfenbein, H.A. & Ambady, N. (2003). When Familiarity Breeds Accuracy: Cultural Exposure and Facial Emotion Recognition. *Journal of Personality & Social Psychology*, 85(2): 276–290.
- [56] Elias, H., Ping, W. S., & Abdullah, M. C. (2011). Stress and Academic Achievement among Undergraduate Students in University Putra Malaysia. *Procedia – Social and Behavioral Sciences*, 29, 646-655.
- [57] Engle, R. L., Elahee, M. N., & Tatoglu, E. (2013). Antecedents of Problem-Solving Cross Cultural Negotiation Style: Some Preliminary Evidence. *The Journal of Applied Management and Entrepreneurship*, 18(2), 83-102.
- [58] Engelberg, E. And Sjoberg, L. (2004). Emotional Intelligence, Affect Intensity, and Social Adjustment. *Personality and Individual Differences*, 37, 533-542.
- [59] Epel, E. S., Bandura, A., & Zimbardo, P. G. (1999). Escaping Homelessness: The Influences of Self-Efficacy and Time Perspective on Coping with Homelessness. *Journal of Applied Social Psychology*, 29, 575–596.

- [60] Fernandez, R., Salamonson, Y., & Griffiths, R. (2012). Emotional Intelligence as a Predictor of Academic Performance in First Year Accelerated Graduate Entry Nursing Students. *Journal of Clinical Nursing*, 21-24, 3485-3492.
- [61] Frye, R. (1999). Assessment, Accountability, and Student Learning Outcomes. *Dialogue*, 2, 2–11.
- [62] Gabriela, C. (2010). A Case Study into The Causes of School Dropout. *Acta Didactica Napocensia*.
- [63] Goffman, E. (1959). *The Presentation of Self in Everyday Life*. Harmondsworth: Penguin.
- [64] Goleman, D. (1995). *Emotional Intelligence*. New York: Bantam Books.
- [65] Gorji, M. (2018). The Survey of Relationship between Cultural Intelligence and Emotional Intelligence with Employee's Performance.
- [66] Groves, K. S., Feyerherm, A., & Gu, M. (2014). Examining Cultural Intelligence and Cross-Cultural Negotiation Effectiveness, *Journal of Management Education*, 39(2), 209–243.
- [67] Gudykunst, W. B., Ting-Toomey, S., & Chua, E. (1988). *Culture and Interpersonal Communication*. Newbury Park, California: Sage.
- [68] Gudykunst, W. B., Gao, G., Schmidt, K. L., Nishida, T., Bond, M. H., Leung, K., Et Al. (1992). The Influence of Individualism, Collectivism, Self-Monitoring, and Predicted-Outcome Value on Communication in Ingroup and Outgroup Relationships. *Journal of Cross-Cultural Psychology*, 23(2), 196–213.
- [69] Habibah E, Noordin N, Mahyuddin RH 2010. Achievement Motivation and Self- Efficacy in Relation to Adjustment among University Students. *Journal of Social Sciences*, 6(3): 333-339.
- [70] Harrison, J. K., Chadwick, M., & Scales, M. (1996). The Relationship between Cross-Cultural Adjustment and the Personality Variables of Self-Efficacy and Self-Monitoring. *International Journal of Intercultural Relations*, 20(2), 167–188.
- [71] Heppner, P. P., Chuang, C.-C., Wang, L., & Wang, K. T. (2017). Cross-National Cultural Competency among Taiwanese International Students. *Journal of Diversity in Higher Education*, 10(3), 271–287.
- [72] Ishak, N., Jdaitawi, M. T. and Ibrahim, Y. S. (2011). Moderating Effect of Gender and Age on the Relationship between Emotional Intelligence with Social and Academic Adjustment among First Year University Students, *International Journal of Psychological Studies*, Vol. 3, No. 1.

- [73] Jain, P. (2017). A Study of Correlation between Adjustment and Academic Achievement. *International Journal of Social Relevance & Concern*, 5(6).
- [74] Johnson, J.P., Lenartowicz, T., & Apud, S. (2006). Cross-Cultural Competence in International Business: Towards a Definition and A Model. *Journal of International Business Studies*, 37, 525-543.
- [75] Kieti, J. (2017). An Investigation into Factors Influencing Student's Academic Performance in Public Secondary Schools and Matungulu Sub-County, Machakos County. Unpublished Thesis.
- [76] Kim, K., Kirkman, B. L., & Chen, G. (2008). Cultural Intelligence and International Assignment Effectiveness. *Handbook of Cultural Intelligence: Theory, Measurement, and Applications*, 71–90. New York, NY: M.E. Sharpe.
- [77] Kim, K., & Slocum, J.W. (2008). Individual Differences and Expatriate Assignment Effectiveness: The Case of U.S.-Based Korean Expatriates. *Journal of World Business*, 43, 109-126.
- [78] Konanahalli, A., Oyedele, L. O., Spillane, J., Coates, R., Von Meding, J., & Ebohon, J. (2014). Cross- Cultural Intelligence (CQ): It's Impact on Expatriate Adjustment on International Construction Projects. *International Journal of Managing Projects in Business*, 7(3), 423–448.
- [79] Kool, A., Mainhard, M., Jaarsma, A. D. C., Brekelmans, M., & Van Beukelen, P. (2016). Academic Success and Early Career Outcomes: Can Honors Alumni Be Dis- Tinguished from Non-Honors Alumni? *High Ability Studies*, 27(2), 179–192.
- [80] Kraimer, M. L., Wayne, S. J., & Jaworski, R. A. (2001). Sources of Support and Expatriate Performance: The Mediating Role of Expatriate Adjustment. *Personnel Psychology*, 54, 71-99.
- [81] Law, K.S., Wong, C.-S. & Song, L.J. (2004). The Construct and Criterion Validity of Emotional Intelligence and Its Potential Utility for Management Studies. *Journal of Applied Psychology*, 89(3): 483–496.
- [82] Lee, L., & Sukoco, B. M. (2007). The Effects of Expatriate Personality and Cultural Intelligence on the Expatriate Adjustment: The Moderating Role of Expatriate. Paper's Presentation at the 13th Asia Pacific Management Conference. Melbourne, Australia.
- [83] Lee, L. Y., & Sukoco, B. M. (2008). The Mediating Effects of Operating Capability on the Success of Expatriation. *Social Behavior and Personality*, 36(9), 1191–1204.

- [84] Lin, L. C. (2012). Measuring Adult Learners' Foreign Language Anxiety, Motivational Factors, and Achievement Expectations: A Comparative Study between Chinese as a Second Language Students and English as a Second Language Students (Unpublished Doctoral Dissertation). Cleveland State University.
- [85] Livermore, D. A. (2009). Cultural Intelligence (Youth, Family, and Culture): Improving Your CQ to Engage Our Multicultural World, Baker Academic, Ada Township.
- [86] Lovvorn, A. S., & Chen, J. S. (2011). Developing a Global Mindset: The Relationship between an International Assignment and Cultural Intelligence. *International Journal of Business and Social Science*, 2(9), 275–283.
- [87] Lysgaard, S. (1955). Adjustment in a Foreign Society: Norwegian Fulbright Grantees Visiting the United States. *International Social Science Bulletin*, 7, 45-51.
- [88] Markus, H.R. & Kitayama, S. (1991). Culture and the Self: Implications for Cognition, Emotion, and Motivation. *Psychological Review*, 98(2): 224–253.
- [89] Marsh, A.A., Elfenbein, H.A. & Ambady, N. (2003). Nonverbal “Accents”: Cultural Differences in Facial Expressions of Emotion. *Psychological Science*, 14(4): 373–376.
- [90] Martin, A. J., Nejad, H. G., Colmar, S., & Liem, G. A. D. (2013) Adaptability: How Students' Responses to Uncertainty and Novelty Predict Their Academic and Non-Academic Outcomes. *Journal of Educational Psychology*, 105(3), 728-746.
- [91] Maslow, A.H. (1943) A Theory of Human Motivation. *Psychological Review*, 50, 370-396.
- [92] Mathur. K. (2010). Effects of Socio-Economic Status on the Achievement and Behavior of Higher Secondary School Students. Unpublished Ph.D. Thesis. Agra Univ
- [93] Matthews, G., Zeidner, M., & Roberts, R. (2004). Emotional Intelligence in the Workplace: A Critical Review. *Applied Psychology*, 33, 371-399.
- [94] Matthews, G., & Zeidner, M. (2000). Emotional Intelligence, Adaptation to Stressful Encounters, And Health Outcomes. In R. Bar-On & J. D. A. Parker (Eds.), *the Handbook of Emotional Intelligence: Theory, Development, Assessment, and Application at Home, School, and In the Workplace* (pp. 459-489). San Francisco: Jossey-Bass.
- [95] Mayer, J. D., Salovey, P., & Caruso, D. R. (2000). Emotional Intelligence as Zeitgeist, As

- Personality, And as a Mental Ability. In R. Bar-On & J. D. A. Parker (Eds.), the Handbook of Emotional Intelligence: Theory, Development, Assessment, and Application at Home, School, and In the Workplace (Pp. 92-117). San Francisco: Jossey-Bass.
- [96] Mayer, J. D., & Geher, G. (1996). Emotional Intelligence and the Identification of Emotion. *Intelligence*, 22, 89-113.
- [97] Mayer, J.D., Salovey, P. & Caruso, D. (2002). Mayer-Salovey Caruso Emotional Intelligence Test (MSCEIT) User's Manual. North Tonawanda: Multi-Health Systems Inc.
- [98] Mayer, J. D., & Salovey, P. (1997). What Is Emotional Intelligence? Emotional Development and Emotional Intelligence: Educational Implications (3–34). New York, NY: Basic.
- [99] Moon, H., Kwon Choi, B., & Shik Jung, J. (2012). Previous International Experience, Cross Cultural Training, And Expatriates' Cross-Cultural Adjustment: Effects of Cultural Intelligence and Goal Orientation. *Human Resource Development Quarterly*, 23, 285–330.
- [100] Ng, K., Van Dyne, L., & Ang, S. (2009). From Experience to Experiential Learning: Cultural Intelligence as a Learning Capability for Global Leader Development. *Academy of Management Learning and Education*, 8(4), 511-526.
- [101] Offermann, L. R., & Phan L. U. (2002). Culturally Intelligent Leadership for a Diverse World. In R. E. Riggio, S. E. Murphy & F. J. Pirozzolo (Eds.), *Multiple Intelligences and Leadership* (Pp. 187-214). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- [102] Ogoemeka, O. H. (2012). A Study of the Emotional Intelligence and Life Adjustment of Senior Secondary School Students in Nigeria, The 2012 Orlando International Academic Conference Orlando, Florida, USA 59.
- [103] Oolders, T., Chernyshenko, O. S., & Stark, S. (2008). Cultural Intelligence as a Mediator of Relationships between Openness to Experience and Adaptive Performance. *Handbook of Cultural Intelligence: Theory, Measurement, and Applications* (145-158). Armonk, NY: M. E. Sharpe.
- [104] Ormrod, J. (2012). *Human Learning* (6th Ed.). Boston: Pearson.
- [105] Palomba, C.A., & Banta, T.W. (1999). *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*. San Francisco, CA: Jossey-Bass.
- [106] Palthe, J. (2004). The Relative Importance of Antecedents to Cross-Cultural Adjustment:

- Implications for Managing a Global Workforce. *International Journal of Intercultural Relations*, 28, 37-59.
- [107]Páramo, F., Vacas, C., & Rodriguez, S. (2015). Levels of Adjustment to College, Gender, and Academic Achievement in First-Year Spanish Students.
- [108]Parker, J. D. A., Creque, R. E., Sr., Barnhart, D. L., Harris, J. I., Majeski, S. A., Wood, L. M., Bond, B. J., & Hogan, M. J. (2004a). Academic Achievement in High School: Does Emotional Intelligence Matter? *Personality And Individual Differences*, 37(7), 1321–1330.
- [109]Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2004b). Emotional Intelligence and Academic Success: Examining the Transition from High School to University. *Personality and Individual Differences*, 36(1), 163–172.
- [110]Patel, H. T (2013). A Study of Emotional Intelligence and Adjustment of 9th Standard Students, *International Journal for Research in Education*, Vol 2, No. 6, Pp 24-25.
- [111]Peng, A. C., Van Dyne, L., & Oh, K. (2014). The Influence of Motivational Cultural Intelligence on Cultural Effectiveness Based on Study Abroad: The Moderating Role of Participant’s Cultural Identity, *Journal of Management Education*, 39(5), 572–596.
- [112]Piaget, J. (1971). The Theory of Stages in Cognitive Development. In D. R. Green, M. P. Ford, & G. B. Flamer, *Measurement and Piaget*. McGraw-Hill.
- [113]Pless, N. M., Maak, T., & Stahl, G. K. (2011). Developing Responsible Global Leaders through International Service-Learning Programs: The Ulysses Experience. *Academy Of Management Learning and Education*, 10(2), 237–260.
- [114]Prati, L.M., Douglas, C., Ferris, G.R., Ammeter, A.P. & Buckley, M.R. (2003). The Role of Emotional Intelligence in Team Leadership: Reply to the Critique by Antonakis. *International Journal of Organizational Analysis*, 11(4): 363–369.
- [115]Preeti, B. (2013). Role of Emotional Intelligence for Academic Achievement for Students. *Research Journal of Educational Sciences*, 1(2), 8-12.
- [116]Punia, S. & Sangwan, S. (2011). Emotional Intelligence and Social Adaptation of School Children, *Journal of Psychology*, 2(2), 83-87.
- [117]Putranto, Nur & Nuraeni, Shimaditya & Gustomo, Aurik & Ghazali, Achmad. (2018). The

- Relationship Between Cultural Intelligence, Emotional Intelligence, And Student Performance. *International Journal of Business*. 23. 17-25.
- [118]Rai, P. N. (2009). A Comparative Study of A Few Differential Personality Correlates of Low and High Achievers. Unpublished Ph.D. Thesis, Agra Univ.
- [119]Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom Emotional Climate, Student Engagement, and Academic Achievement. *Journal of Educational Psychology*, 104, 700–712.
- [120]Rockstuhl, T. & Ng, K.Y. (2008). The Effects of Cultural Intelligence on Interpersonal Trust in Multicultural Teams. *Handbook of Cultural Intelligence: Theory Measurement and Application*. 206-220.
- [121]Rogers, C. R. (1969). *Freedom To Learn: A View of What Education Might Become*.
- [122]Romanelli, F., Cain, J., & Smith, K. M. (2006). Emotional Intelligence as A Predictor of Academic and/ or Professional Success. *American Journal of Pharmaceutical Education*, 70(3), 1-10.
- [123]Rose, R. C., Ramalu, S. S., Uli, J., & Kumar, N. (2010). Expatriate Performance in International Assignments: The Role of Cultural Intelligence as Dynamic Intercultural Competency. *International Journal of Business and Management*, 5(8), 76–85.
- [124]Safavi M, Mousavi L. & Lotfi, R. (2008). Correlation between Emotional Intelligence and Socio-Emotional Adjustment in Pre-University Girl Students in Tehran. *Pajoohandeh Journal*, 1(5): 255-261.
- [125]Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. Imagination, Cognition and Personality, *Journal of Educational Psychology*, 9 (3), 185 – 211.
- [126]Salovey, P. & Pizarro, D. (2003). Chapter 16: The Value of Emotional Intelligence. In R.J. Sternberg, J. Lautrey and T.I. Lubart (Eds), *Models of Intelligence: International Perspectives*, 263–278. Washington, Dc: American Psychological Association.
- [127]Schmidt, F. L., & Hunter, J. E. (2000), *Select on Intelligence*. The Blackwell Handbook of Organizational Principles, 3-14. Oxford: Blackwell.
- [128]Searle, W., & Ward, C. (1990). The Prediction of Psychological and Socio-Cultural Adjustment during Cross-Cultural Transitions. *International Journal of Intercultural Relations*, 14(4), 449-464.

- [129]Shaffer, M. A., Harrison, D. A., Gregersen, H., Black, J. S., & Ferzandi, FL. A. (2006). You Can Take It with You: Individual Differences and Expatriate Effectiveness. *Journal of Applied Psychology*, 91(1), 109–125.
- [130]Shapiro, L. E. (1997). *How To Raise A Child With A High Eq: A Parent's Guide to Emotional Intelligence*. New York: HarperCollins.
- [131]Skinner, B. F. (1950). Are Theories of Learning Necessary? *Psychological Review*, 57(4), 193–216.
- [132]Smith, C. A., & Lazarus, R. S. (1990). Emotion and Adaptation. In L. A. Pervin (Ed.). *Handbook of Personality: Theory and Research, Research* (Pp.609-637). Oxford University Press.
- [133]Steinmayr, R., Meißner, A., Weidinger, A. F., & Wirthwein, L. (2014). *Academic Achievement*, Oxford Bibliographies.
- [134]Stone-Romero, E., Stone, D. L., & Salas, E. (2003). The Influence of Culture on Role Conceptions and Role Behavior in Organizations. *Applied Psychology: An International Review*, 52, 328–362.
- [135]Tan, Joo-Seng. (2004). *Issues & Observations: Cultural Intelligence and the Global Economy. Leadership in Action*. 24. 19 – 21.
- [136]Takeuchi, R., Tesluk., P.E., Yun, S., & Lepak, D.P. (2005). An Integrative View of International Experience. *Academy Of Management Journal*, 48(1), 85-100.
- [137]Tarique, Ibraiz & Takeuchi, Riki. (2008). Developing Cultural Intelligence: The Roles of International Non-Work Experiences. *Handbook of Cultural Intelligence: Theory, Measurement, and Applications*. 56-70.
- [138]Templer, K. J., Tay, C., & Chandrasekar, N. A. (2006). Motivational Cultural Intelligence, Realistic Job Preview, Realistic Living Conditions Preview, and Cross-Cultural Adjustment. *Group and Organization Management*, 31(1), 154-173.
- [139]Terenzini, P.T. (1989). Assessment with Open Eyes: Pitfalls in Studying Outcomes. *The Journal of Higher Education*, 60(6), 644–664.
- [140]Thilagavathy, T. (2013). Adjustment and Emotional Intelligence of High School Teachers in Tiruvarur District, *International Journal of Teacher Educational Research*, Vol. 2No.5.
- [141]Thomas, D.C. (2006). Domain and Development of Cultural Intelligence: The Importance of

- Mindfulness. *Group & Organization Management*, 31(1): 78–99.
- [142]Thomas, D. C., Elron, E., Stahl, G., Ekelund, B. Z., Ravelin, E. C., Cerdin, J.-L., Poelmans, S., Brislin, R., Pekerti, R., Aycan, Z., Maznevski, M., Au, K., & Lazarova, M. B. (2008). Cultural Intelligence: Domain and Assessment, *International Journal of Cross-Cultural Management*, 8, 123–143.
- [143]Thomas, D.C., & Inkson, K. (2004). *Cultural Intelligence: People Skills for Global Business*. San Francisco: Berrett-Koehler Publishers.
- [144]Thomas, D.C. & Inkson, K. (2004b). *Cultural Intelligence: People Skills for Global Business*. San Francisco: Berrett Koehler.
- [145]Thorndike, E. L. (1898). Animal Intelligence: An Experimental Study of the Associative Processes in Animals. *Psychological Monographs: General and Applied*, 2(4), I-109.
- [146]Torbiorn, I. (1982). *Living Abroad: Personal Adjustment and Personal Policy in the Overseas Setting*. New York: Wiley.
- [147]Tsai, J.L. & Chentsova-Dutton, Y. (2003). Variation among European Americans in Emotional Facial Expression. *Journal of Cross-Cultural Psychology*, 34(6): 650–657.
- [148]Vela Jr, R. H. (2003). *The Role of Emotional Intelligences in the Academic Achievement of First Year College Students*. Doctoral Dissertation. Kingsville, TX: Texas A&M University.
- [149]Weisinger, H. (1998). *Emotional Intelligence at Work: The Untapped Edge for Success*. San Francisco: Jossey-Bass.
- [150]Wiseman, R. L., Hammer, M. R., & Nishida, H. (1989). Predictors of Intercultural Communication Competence. *International Journal of Intercultural Relations*, 13(3), 349–370.
- [151]Wong, C. S., & Law, K. S. (2002). The Effects of Leader and Follower Emotional Intelligence on Performance and Attitude: An Exploratory Study. *The Leadership Quarterly*, 13(3), 243-274.
- [152]Wu, P.-C., & Ang, S.-W. (2011). The Impact of Expatriate Supporting Practices and Cultural Intelligence on Cross-Cultural Adjustment and Performance of Expatriates in Singapore. *The International Journal of Human Resource Management*, 22(13), 2683–2702.
- [153]Ying, Y. W., 2005, Variation in Acculturative Stressors over Time: A Study of Taiwanese Students in the United States, *International Journal of Intercultural Relations*, 29: 59 -71.

Appendix

Table 4.1 *Respondent Information (Gender/ Nation/ Born)*

demographic N=977		Frequency	Percent (%)
Gender	female	652	66.7
	male	325	33.3
	Total	977	100
Nation	Hong Kong	6	0.6
	India	9	0.9
	Indonesia	68	7.0
	Macao	1	0.1
	Malaysia	2	0.2
	Mainland China	3	0.3
	Philippines	6	0.6
	Taiwan	811	83.0
	Thailand	10	1.0
	Vietnam	16	1.6
	Others	45	4.6
	Total	977	100
Born	15-18	27	2.8
	19-22	585	59.9
	23-26	248	25.4
	27-30	61	6.2
	31-34	32	3.3
	35-38	13	1.3
	Above 38	11	1.1
	Total	977	100

Table 4.2 *Respondent Information (University/ Stay Duration/ Major)*

demographic N=977		Frequency	Percent (%)
University	NYUST	298	30.5
	NTU	15	1.5
	NFU	13	1.3
	NSYSU	14	1.4
	CYUT	13	1.3
	NCUE	6	0.6
	Others	618	63.3
Total		977	100
Stay Duration	1-12 months	435	44.5
	13-24 months	170	17.4
	25-36 months	151	15.5
	37-48 months	154	15.8
	49-60 months	44	4.5
	61-72 months	14	1.4
	73-84 months	6	0.6
	Above 84 months	3	0.3
Total		977	100
Major	Management	274	28.0
	Science	33	3.4
	Education	51	5.2
	Engineering	176	18.0
	Medical	50	5.1
	Languages	70	7.2
	Arts	17	1.7
	Humanities	39	4.0
	Design	29	3.0
	Others	238	24.4
Total		977	100

Table 4.3 *Respondents' Program and University Year*

		Year University					Total
		First Year	Second Year	Third Year	Fourth Year	Others	
Program	Bachelor	327	98	125	120	30	700
	Master	84	75	11	7	11	188
	Phd	10	17	11	4	3	45
	Other	7	8	12	1	16	44
	Total	428	198	159	132	60	977

Table 4.4 *Mean Value and Standard Deviations of Variables Based on Gender*

		MC	COG	MOT	BEH	EI	ADJ	LO
female	Mean Value	4.0207	3.1641	3.3064	3.8055	3.751	4.0702	3.6147
	N	652	652	652	652	652	652	652
	Std. Deviation	0.6019	0.72043	0.87049	0.66224	0.58154	0.62932	0.61769
male	Mean Value	3.9985	3.241	3.4498	3.8043	3.8979	4.0992	3.7653
	N	325	325	325	325	325	325	325
	Std. Deviation	0.69166	0.82663	0.89765	0.71118	0.61394	0.63167	0.64122
Total	Mean Value	4.0133	3.1897	3.3541	3.8051	3.7999	4.0798	3.6648
	N	977	977	977	977	977	977	977
	Std. Deviation	0.6329	0.75786	0.88175	0.67855	0.59624	0.62993	0.6293

Table 4.5 *Mean Value and Standard Deviations of Variables Based on Students' Nation*

		MC	COG	MOT	BEH	EI	ADJ	LO
Taiwanese Students	Mean Value	3.983	3.1706	3.2252	3.7827	3.77	4.0748	3.6407
	N	811	811	811	811	811	811	811
	Std. Deviation	0.62406	0.75324	0.84214	0.65757	0.57896	0.61511	0.62101
International Students	Mean Value	4.1611	3.2831	3.9843	3.9145	3.9458	4.1044	3.7823
	N	166	166	166	166	166	166	166
	Std. Deviation	0.65656	0.77557	0.79757	0.76573	0.65693	0.69931	0.65771
Total	Mean Value	4.0133	3.1897	3.3541	3.8051	3.7999	4.0798	3.6648
	N	977	977	977	977	977	977	977
	Std. Deviation	0.6329	0.75786	0.88175	0.67855	0.59624	0.62993	0.6293

Table 4.6 *Mean Value and Standard Deviations of Variables Based on Program*

		MC	COG	MOT	BEH	EI	ADJ	LO
Bachelor	Mean Value	3.9754	3.176	3.2483	3.8049	3.7752	4.0371	3.6096
	N	700	700	700	700	700	700	700
	Std. Deviation	0.61019	0.74003	0.82223	0.63798	0.56549	0.60875	0.6104
Master	Mean Value	4.1436	3.2278	3.5766	3.8362	3.8849	4.191	3.8191
	N	188	188	188	188	188	188	188
	Std. Deviation	0.61508	0.79246	0.9516	0.75344	0.63538	0.64639	0.63962
Phd	Mean Value	4.1611	3.3667	4.1422	3.7511	4.0424	4.25	3.9365
	N	45	45	45	45	45	45	45
	Std. Deviation	0.67873	0.78785	0.68837	0.78062	0.57711	0.65279	0.5739
Other	Mean Value	3.9091	3.0644	3.2818	3.7318	3.5806	4.1098	3.6055
	N	44	44	44	44	44	44	44
	Std. Deviation	0.88936	0.84237	1.08634	0.85393	0.78869	0.78396	0.76241
Total	Mean Value	4.0133	3.1897	3.3541	3.8051	3.7999	4.0798	3.6648
	N	977	977	977	977	977	977	977
	Std. Deviation	0.6329	0.75786	0.88175	0.67855	0.59624	0.62993	0.6293

Table 4.7 *Mean Value and Standard Deviations of Variables Based on Age*

		MC	COG	MOT	BEH	EI	ADJ	LO
15-18	Mean Value	4.1111	3.1852	3.1704	3.8444	3.6498	4.0741	3.5238
	N	27	27	27	27	27	27	27
	Std. Deviation	0.86417	0.8799	1.07804	0.77128	0.83954	0.89046	0.83252
19-22	Mean Value	3.9402	3.1499	3.1894	3.7829	3.7574	4.0168	3.6111
	N	585	585	585	585	585	585	585
	Std. Deviation	0.62675	0.73141	0.81297	0.65958	0.56638	0.61185	0.61032
23-26	Mean Value	4.0746	3.2171	3.4637	3.8218	3.8098	4.1838	3.7105
	N	248	248	248	248	248	248	248
	Std. Deviation	0.61194	0.79573	0.91641	0.69609	0.61925	0.60467	0.64227
27-30	Mean Value	4.2582	3.2678	3.8754	3.8459	3.9881	4.1885	3.829
	N	61	61	61	61	61	61	61
	Std. Deviation	0.52035	0.81325	0.815	0.7628	0.58269	0.65421	0.62885
31-34	Mean Value	4.2578	3.3021	4.2438	3.9813	4.0256	4.1354	3.8594
	N	32	32	32	32	32	32	32
	Std. Deviation	0.61724	0.72393	0.71974	0.71185	0.64168	0.75484	0.55343
35-38	Mean Value	4.0385	3.4103	3.8	3.6615	4.2028	4.2628	4.0769
	N	13	13	13	13	13	13	13
	Std. Deviation	0.79612	0.6477	0.72111	0.66023	0.29957	0.42471	0.34927
Above 38	Mean Value	4.1818	3.6818	4.0909	3.9455	4.0248	4.1212	3.8701
	N	11	11	11	11	11	11	11
	Std. Deviation	0.6133	0.73957	0.53189	0.48242	0.65061	0.77133	0.78234
Total	Mean Value	4.0133	3.1897	3.3541	3.8051	3.7999	4.0798	3.6648
	N	977	977	977	977	977	977	977
	Std. Deviation	0.6329	0.75786	0.88175	0.67855	0.59624	0.62993	0.6293

Table 4.8 Mean Value and Standard Deviations of Variables Based on Major

		MC	COG	MOT	BEH	EI	ADJ	LO
Management	Mean Value	3.9562	3.1545	3.3686	3.8343	3.7853	4.0252	3.6642
	N	274	274	274	274	274	274	274
	Std. Deviation	0.66979	0.7806	0.9519	0.7119	0.58981	0.6156	0.63455
Science	Mean Value	3.8485	2.8838	3.3212	3.5697	3.5152	3.904	3.5152
	N	33	33	33	33	33	33	33
	Std. Deviation	0.69299	0.73773	0.83358	0.76831	0.72573	0.78343	0.73035
Education	Mean Value	4.1569	3.1993	3.702	3.8824	3.9501	4.2974	3.8936
	N	51	51	51	51	51	51	51
	Std. Deviation	0.68732	0.86475	0.89297	0.74959	0.49236	0.55158	0.57736
Engineering	Mean Value	3.9219	3.0985	3.2341	3.692	3.8466	4.0005	3.6153
	N	176	176	176	176	176	176	176
	Std. Deviation	0.60939	0.72753	0.84999	0.66551	0.5724	0.65371	0.60791
Medical	Mean Value	4.03	3.2867	3.236	3.848	3.7891	4.165	3.6214
	N	50	50	50	50	50	50	50
	Std. Deviation	0.54548	0.86834	0.85685	0.65098	0.62566	0.60714	0.70906
Languages	Mean Value	4.0857	3.2476	3.4314	3.8314	3.7753	4.0452	3.6102
	N	70	70	70	70	70	70	70
	Std. Deviation	0.66877	0.72883	0.75345	0.72842	0.67157	0.7624	0.71208
Arts	Mean Value	4.1324	3.5784	3.3176	3.9765	3.9679	4.1961	3.9286
	N	17	17	17	17	17	17	17
	Std. Deviation	0.70222	0.85415	1.01503	0.57394	0.62979	0.74997	0.71918
Humanities	Mean Value	4.0385	3.2607	3.1128	3.7333	3.7203	4.1004	3.6886
	N	39	39	39	39	39	39	39
	Std. Deviation	0.58641	0.76261	0.86911	0.64291	0.57245	0.63958	0.70435
Design	Mean Value	4.2241	3.1092	3.4276	3.8966	3.9624	4.2902	3.7315
	N	29	29	29	29	29	29	29
	Std. Deviation	0.56436	0.82168	0.89718	0.64503	0.54411	0.54855	0.57227
Others	Mean Value	4.0756	3.271	3.3916	3.8429	3.78	4.1341	3.6681
	N	238	238	238	238	238	238	238
	Std. Deviation	0.58826	0.68245	0.84029	0.61789	0.58963	0.56261	0.56921
Total	Mean Value	4.0133	3.1897	3.3541	3.8051	3.7999	4.0798	3.6648
	N	977	977	977	977	977	977	977
	Std. Deviation	0.6329	0.75786	0.88175	0.67855	0.59624	0.62993	0.6293

Table 4.9 *Reliability Test Results*

Variables	Cronbach's Alpha
Cultural Intelligence	0.931
Emotional Intelligence	0.876
Adjustment	0.922
Learning Outcome	0.915

Variables	Cronbach's Alpha
CQ-MC	0.931
CQ-COG	0.888
CQ-MOT	0.899
CQ-BEH	0.867
EI-RT	0.746
EI-FLE	0.631
EI-PS	0.854
ADJ-GE	0.873
ADJ-JO	0.814
ADJ-WO	0.888
LO-LOC	0.883
LO-LOA	0.864

Table 4.10 Pearson Correlation Analysis Results

	MC	COG	MOT	BEH	EI	ADJ	LO
MC	1						
COG	.575**	1					
MOT	.536**	.575**	1				
BEH	.570**	.430**	.502**	1			
EI	.539**	.411**	.488**	.511**	1		
ADJ	.473**	.321**	.410**	.430**	.629**	1	
LO	.483**	.510**	.516**	.409**	.606**	.576**	1

** Correlation is significant at the 0.01 level (2 – tailed).

Table 4.11 Regression Analysis Results of Cultural Intelligence, Emotional Intelligence, Adjustment and Learning Outcome

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.704 ^a	0.495	0.494	0.44783

a. Predictors: (Constant), Cultural Intelligence, Emotional Intelligence, Adjustment

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	191.385	3	63.795	318.1	.000b
	Residual	195.135	973	0.201		
	Total	386.52	976			

a. Dependent Variable: LO

b. Predictors: (Constant) : ADJ, CQ, EI

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	β	T	
1	(Constant)	.400	.107		3.732	.000
	CQ	.337	.030	.322	11.176	.000
	EI	.268	.034	.253	7.861	.000
	ADJ	.258	.030	.258	8.636	.000

a. Dependent Variable: LO

Table 4.12 Regression Analysis Results of Emotional Intelligence and Cultural Intelligence

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.593 ^a	0.351	0.35	0.48421

a. Predictors: (Constant), Emotional Intelligence

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	β	
1	(Constant)	1.28	0.1		12.806
	EI	0.597	0.026	0.593	22.97

a. Dependent Variable: CQ

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	123.71	1	123.71	527.634	.000b
	Residual	228.6	975	0.234		
	Total	352.31	976			

a. Dependent Variable: CQ

b. Predictors: (Constant) : EI

Table 4.13 Regression Analysis Results of Emotional Intelligence and Adjustment

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.629 ^a	0.395	0.395	0.49003

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	153.164	1	153.164	637.851	.000b
	Residual	234.122	975	0.24		
	Total	387.287	976			

a. Dependent Variable: ADJ

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	β	
1	(Constant)	1.555	0.101		15.37
	EI	0.664	0.026	0.629	25.256

a. Dependent Variable: ADJ

Table 4.14 Regression Analysis Results of Cultural Intelligence and Adjustment

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.493 ^a	0.243	0.242	0.54839

a. Predictors: (Constant), Catural intelligence

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	94.073	1	94.073	312.815	.000b
	Residual	293.213	975	0.301		
	Total	387.287	976			

a. Dependent Variable: ADJ

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	β	T	
1	(Constant)	2.246	0.105		21.353	.000
	CQ	0.517	0.029	0.493	17.687	.000

a. Dependent Variable: ADJ

Table 4.15 Regression Analysis Results of Metacognitive CQ, Cognitive CQ, Motivational CQ, Behavioral CQ and Learning Outcome

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.603 ^a	0.363	0.361	0.50324

a. Predictors: (Constant), BEH, COG, MOT, MC

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	140.36	4	35.09	138.558	.000b
	Residual	246.16	972	0.253		
	Total	386.52	976			

a. Dependent Variable: LO

b. Predictors: (Constant) : BEH, COG, MOT, MC

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	β			Tolerance	VIF
1	(Constant)	1.479	0.111		13.346	0.000		
	MC	0.163	0.035	0.163	4.620	0.000	0.523	1.911
	COG	0.195	0.028	0.235	6.909	0.000	0.568	1.760
	MOT	0.177	0.024	0.247	7.292	0.000	0.569	1.757
	BEH	0.084	0.030	0.091	2.788	0.005	0.619	1.616

a. Dependent Variable: LO

Collinearity Diagnostics ^a								
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				Constant	MC	COG	MOT	BEH
1	1	4.913	1.000	0.000	0.000	0.000	0.000	0.000
	2	0.037	11.463	0.170	0.010	0.090	0.470	0.040
	3	0.025	14.023	0.000	0.000	0.790	0.400	0.050
	4	0.014	18.416	0.540	0.000	0.010	0.110	0.760
	5	0.010	22.481	0.290	0.980	0.110	0.010	0.140

a. Dependent Variable: LO

Table 4.16 Regression Analysis Results of Metacognitive CQ, Cognitive CQ, Motivational CQ and Behavioral CQ and Adjustment

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.529 ^a	0.28	0.277	0.53551

a. Predictors: (Constant), BEH, COG, MOT, MC

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	108.546	4	27.137	94.628	.000b
	Residual	278.74	972	0.287		
	Total	387.287	976			

a. Dependent Variable: ADJ

b. Predictors: (Constant) : BEH, COG, MOT, MC

Collinearity Diagnostics ^a								
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	MC	COG	MOT	BEH
1	1	4.913	1.000	0.000	0.000	0.000	0.000	0.000
	2	0.037	11.463	0.170	0.010	0.090	0.470	0.040
	3	0.025	14.023	0.000	0.000	0.790	0.400	0.050
	4	0.014	18.416	0.540	0.000	0.010	0.110	0.760
	5	0.010	22.481	0.290	0.980	0.110	0.010	0.140

a. Dependent Variable: ADJ

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	β			Tolerance	VIF
1	(Constant)	1.917	0.118		16.259	0.000		
	MC	0.283	0.037	0.284	7.548	0.000	0.523	1.911
	COG	-0.021	0.03	-0.026	-0.707	0.480	0.568	1.76
	MOT	0.126	0.026	0.176	4.89	0.000	0.569	1.757
	BEH	0.177	0.032	0.191	5.512	0.000	0.619	1.616

a. Dependent Variable: ADJ

Table 4.17 Regression Analysis Results of Emotional Intelligence, Metacognitive CQ, Cognitive CQ, Motivational CQ and Behavioral CQ

(MC)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.539 ^a	0.291	0.29	0.5333

a. Predictors: (Constant), EI

(COG)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.411 ^a	0.169	0.168	0.69113

a. Predictors: (Constant), EI

(BEH)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	113.652	1	113.652	399.605	.000b
	Residual	277.3	975	0.284		
	Total	390.952	976			

a. Dependent Variable: MC

b. Predictors: (Constant) : EI

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	94.851	1	94.851	198.577	.000b
	Residual	465.714	975	0.478		
	Total	560.565	976			

a. Dependent Variable: COG

b. Predictors: (Constant) : EI

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	117.137	1	117.137	343.755	.000b
	Residual	332.238	975	0.341		
	Total	449.374	976			

a. Dependent Variable: BEH

b. Predictors: (Constant) : EI

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	180.94	1	180.94	305.279	.000b
	Residual	577.886	975	0.593		
	Total	758.826	976			

a. Dependent Variable: MOT

b. Predictors: (Constant) : EI

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	β	
1	(Constant)	1.839	0.11		16.696
	EI	0.572	0.029	0.539	19.99

a. Dependent Variable: MC

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	β	
1	(Constant)	1.203	0.143		8.429
	EI	0.523	0.037	0.411	14.092

a. Dependent Variable: COG

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	β	
1	(Constant)	1.597	0.121		13.251
	EI	0.581	0.031	0.511	18.541

a. Dependent Variable: BEH

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	β	
1	(Constant)	0.61	0.159		3.838
	EI	0.722	0.041	0.488	17.472

a. Dependent Variable: MOT

Table. 4.19 CFA Output (Squared Multiple Correlations)

(N=977)

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	PLabel
Adjustment	.406	.026	15.832	***
LearningOutcome	.261	.022	11.694	***
EmotionalIntelligence	.237	.018	12.915	***
e5	.143	.011	12.909	***
e6	.194	.014	14.293	***
e7	.224	.012	19.076	***
e8	.256	.015	17.344	***
e9	.071	.014	5.218	***
e10	.172	.011	16.053	***
e11	.420	.023	18.450	***
e12	.225	.014	16.180	***

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
RT	.574
FLE	.459
PS	.579
LOA	.841
LOC	.504
GEE	.493
JO	.703
INT	.739

Table. 4.20 *CFA Output (Regression Weights and Standard Regression Weights)*

(N=977)

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	PLabel
INT	<---	Adjustment	1.000			
JO	<---	Adjustment	1.063	.036	29.380	***
GEE	<---	Adjustment	.731	.031	23.693	***
LOC	<---	LearningOutcome	1.000			
LOA	<---	LearningOutcome	1.205	.057	21.112	***
PS	<---	EmotionalIntelligence	1.000			
FLE	<---	EmotionalIntelligence	1.227	.062	19.718	***
RT	<---	EmotionalIntelligence	1.132	.052	21.908	***

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
INT	<---	Adjustment	.860
JO	<---	Adjustment	.839
GEE	<---	Adjustment	.702
LOC	<---	LearningOutcome	.710
LOA	<---	LearningOutcome	.917
PS	<---	EmotionalIntelligence	.761
FLE	<---	EmotionalIntelligence	.677
RT	<---	EmotionalIntelligence	.758

Figure 4.1. Results of Standardized Confirmatory Factor Analysis in AMOS

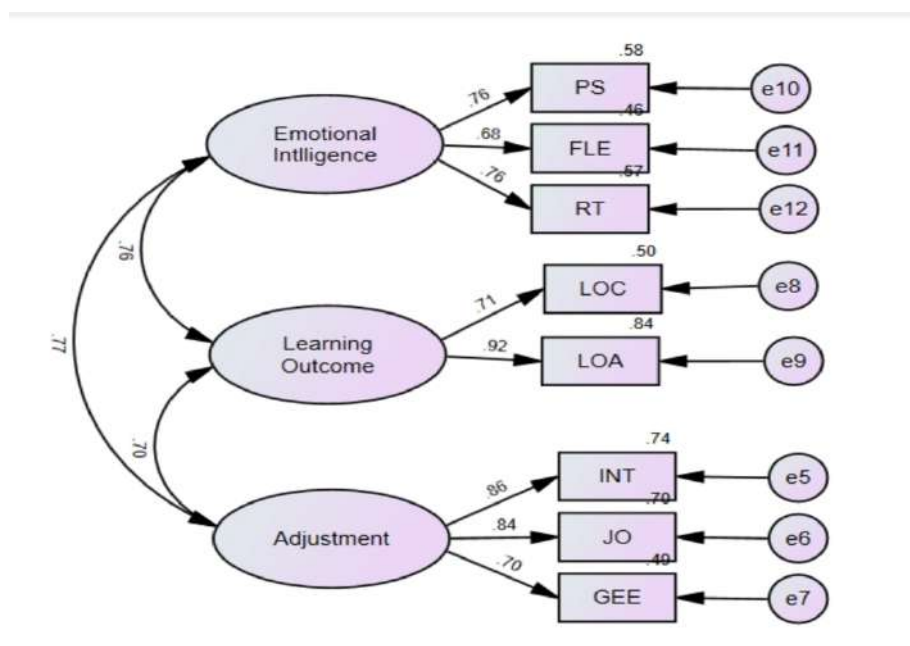


Table. 4.21 CFA Output (Covariances and Correlations)

(N=977)

Intercepts: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	PLabel
INT	3.997	.024	168.426	***
JO	3.997	.026	154.572	***
GEE	4.196	.021	197.446	***
LOC	3.531	.023	153.426	***
LOA	3.828	.021	178.371	***
PS	3.974	.020	194.220	***
FLE	3.214	.028	113.948	***
RT	3.841	.023	165.102	***

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	PLabel
Adjustment	<-->	LearningOutcome	.227	.017	13.217	***
EmotionalIntelligence	<-->	Adjustment	.240	.016	14.947	***
EmotionalIntelligence	<-->	LearningOutcome	.190	.014	13.089	***

Correlations: (Group number 1 - Default model)

			Estimate
Adjustment	<-->	LearningOutcome	.697
EmotionalIntelligence	<-->	Adjustment	.774
EmotionalIntelligence	<-->	LearningOutcome	.763

The Relationships between Endorser of Traveling Product and Consumer's Purchase Intention: Curiosity as a Mediating Role

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The Relationships between Endorser of Traveling Product and Consumer's Purchase Intention: Curiosity as a Mediating Role

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ABSTRACT

Based on limited budgets of endorsement, it is important how companies select the best endorser to create the greatest advertising benefits. The attribute congruence of endorser and products is one of the subjects studied. A total of 700 surveys were sent and 510 (262 male consumers, 248 female consumers, $M_{age} = 34$ yr.) were returned and valid (73%). The results of this research show that when the endorser-travel product congruence and the endorser-nontravel product incongruence have a positive impact on consumer's purchase intentions, and consumer's curiosity is also related to purchase intentions.

Keywords: match-up hypothesis, endorser, curiosity, purchase intention

1. Introduction

This study has focused on three key points. First, the researchers aim to explore whether the alignment and misalignment between celebrity endorsers' characteristics and product attributes have a significant impact on consumers' purchase intentions. Second, the study seeks to investigate whether the interaction between celebrity endorsement and product alignment, based on varying levels of product involvement,

triggers consumers' curiosity and subsequently influences their purchase intentions. In other words, does both the consistent alignment of celebrity endorsements with travel products and the inconsistent alignment with non-travel products evoke consumers' curiosity? Third, considering the current global economic uncertainty caused by the COVID-19 pandemic, businesses are facing challenges in allocating limited endorsement budgets effectively. Hence, this study contributes insights into how businesses can select the optimal celebrity endorsers to maximize advertising effectiveness.

2. Literature and framework

This study employs the concepts of Schema Congruity Theory, the Elaboration Likelihood Model (ELM), and the Match-Up Hypothesis to examine the impact of perceived congruence and incongruence between celebrity endorsers and product attributes on consumer purchase intentions. The main objective is to validate the relationship between message value, involving dissimilar celebrity endorser-product attribute categories, and consumer purchase intentions. Given the significance of both research and practical implications, this study aims to investigate whether curiosity serves as a mediating mechanism to explore whether it mediates the effects between the relationship of celebrity endorsers and product attributes and consumers' purchase intentions for the product.

2.1. Relationship between Endorser-Product Attributes Consistency and Purchase Intention

Based on the concept of the alignment hypothesis, when there is consistency between the image of a celebrity endorser and the endorsed product, endorsement is most effective (Kahle & Homer, 1985;

Kamins, 1990; Ohanian, 1990; Till & Busler, 2000). Therefore, selecting an appropriate brand endorser can deepen consumers' impression of the brand and increase purchase intention. Increasing the attractiveness and expertise of celebrities has a positive impact on corporate value (Kang, Choi, & Choi, 2019). This study hypothesizes:

Hypothesis 1: There is a positive correlation between celebrity endorser-product attribute consistency and purchase intention.

2.2. Relationship between Endorser-Product Attributes Inconsistency and Purchase Intention

Lee and Thorson (2008) proposed that moderate incongruence between a celebrity endorser and product attributes can influence consumers to form or change their attitudes, leading to purchase intentions.

When there is a moderate incongruence in the alignment between a celebrity endorser and product attributes, it creates novel and unique qualities that enhance people's interest and curiosity in advertisements, thus making the persuasive impact on consumers' purchase attitudes more effective (Mandler, 2014). Therefore, even in cases of moderate incongruence between celebrity endorsers and product attributes, it's possible to stimulate consumers' purchase intentions (Chang & Wildt, 1994). This study hypothesizes:

Hypothesis 2: There is a positive correlation between celebrity endorser-product attribute incongruence and purchase intention.

2.3. Relationship between Endorser-Product Attributes Consistency and Consumer Curiosity

Consumer curiosity can generate a powerful attraction. When consumers' motivation and ability to

process information involve careful and thoughtful evaluation of the suitability of products and endorsers, there is a higher level of interest in the product (Kanungo & Pang, 1973). Therefore, when consumers individually perceive the relevant information in these product advertisements to be persuasive and engage in curious behavior, it positively affects their attitudes toward the product. Based on this, the study hypothesizes:

Hypothesis 3: There is a positive correlation between celebrity endorser-product attribute congruence and consumer curiosity.

Relationship between Endorser-Product Attributes Inconsistency and Consumer Curiosity

Mildly incongruent stimuli are pleasurable in cognitive psychology literature (Berlyne, 1960), aligning with the concept of an optimal level of stimulation (Steenkamp & Baumgartner, 1992). Curiosity is stimulated by various sensory inputs, making individuals with high levels of curiosity more susceptible to complex sensory stimuli (e.g., visual or auditory) and more inclined to seek new information (Collins, Litman, & Spielberger, 2004), thereby generating curiosity-driven intentions to purchase products. Based on this, the study hypothesizes:

Hypothesis 4: There is a positive correlation between celebrity endorser-product attribute incongruence and consumer curiosity.

2.5. Consumer Curiosity as a Mediating Effect

The reason people experience curiosity is due to a motivation to explore stimulating stimuli related to the unknown (people, events), generating an interest in exploring the unknown. The credibility of

endorsers in advertisements affects consumers' willingness to purchase a brand (Lafferty & Goldsmith, 1999). When consumers perceive alignment between the endorser's image and product attributes, curiosity is aroused, leading to a willingness to buy the product. This study postulates:

Hypothesis 5: Consumer curiosity mediates the relationship between endorser-product attributes consistency and purchase intention.

When consumers purchase a product and perceive inconsistency between the product and endorser's image, they are initially drawn by the external attractiveness of the advertising endorser, leading to internalized curiosity as a behavioral motive (Loewenstein, 1994). This curiosity enables businesses to establish a new connection with consumers, significantly impacting consumers' internalization of curiosity towards the product. This internalization then leads to a psychological state where the perceived effort aligns proportionally with the anticipated gains in future purchase, influencing purchase intention.

Hypothesis 6: Consumer curiosity mediates the relationship between endorser-product attributes inconsistency and purchase intention.

2.6. Figures and Tables

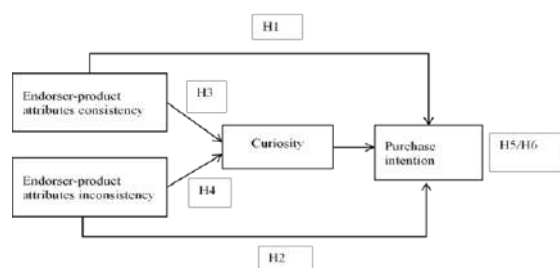


Figure 1. Structural Equation Modeling on the Theoretical Model.

Note. H: hypothesis; H5/H6: mediating effect

3. Method and results

3.1. Procedures and Participants

This study was designed to investigate the relationship between celebrity endorsements with consistent attributes in the context of travel products and celebrity endorsements with inconsistent attributes in the context of non-travel products as two independent variables. The formal questionnaire was distributed to working individuals in the northern, central, and southern regions of the country. Data collection was carried out through both paper-based surveys and online distribution of questionnaires. Additionally, to encourage participation, a nominal gift of approximately 20 New Taiwan Dollars was offered to respondents upon completing the survey. A total of 700 formal questionnaires were distributed. Out of these, 510 valid questionnaires were collected, resulting in a valid response rate of 73%. In terms of gender distribution, there were 262 male respondents, constituting approximately 51.4% of the total sample, and 248 female respondents, making up approximately 48.6% of the total sample. The average age of respondents was approximately 34 years. The average monthly salary ranged from above 20,000 New Taiwan Dollars to 40,000 New Taiwan Dollars (inclusive), and the average annual expenditure on leisure and entertainment was around 46,000 New Taiwan Dollars.

3.2. Measures

Endorsers -Product Consistency. The scale was validated by White et al. (2009) and was adapted for this study. Cronbach's α of endorsers -product consistency is 0.98.

Endorsers. The scale was adapted from Ohanian (1990) study. Cronbach's α of Endorsers is 0.94.

Curiosity. Based on the Melbourne Curiosity Inventory (MCI) developed by Naylor (1981), items related to situational curiosity were adapted. Cronbach's α of Curiosity is 0.93.

Purchase Intention. The items for measuring purchase intention were adapted and modified based on Petty et al. (1983). Cronbach's α of purchase intention is 0.86.

Control variables. The included control variables are gender, age, marital status, monthly income, education level, occupation, and annual spending on leisure and entertainment.

3.3. Results

3.3.1 Process Analysis

This study primarily aimed to examine the relationship between the alignment of celebrity endorsers with product attributes and purchase intentions, as well as to investigate whether curiosity acts as a mediating factor in influencing the effects of consistent and inconsistent celebrity endorsement with product attributes on purchase intentions. Additionally, the study aimed to validate the rationality of the research framework, further comprehend the causal relationships and mediating effects between variables, and examine differences in the consistency and inconsistency of alignment patterns. The mediating effects were verified using correlation coefficients and the (Baron & Kenny, 1986) method. Furthermore, the study employed the Sobel test and bootstrapping to comprehensively examine the mediating effects.

3.3.2 Hypothesis Testing

There is a positive correlation between the alignment of celebrity endorsers with travel product attributes

and consumers' "purchase intention." ($r = 0.67, p < 0.01$). Similarly, a positive correlation also exists between the consistency of celebrity endorsers with travel product attributes and consumers' "curiosity" ($r = 0.74, p < 0.01$). when celebrity endorsers are consistent with product attributes, there is a positive correlation with "purchase intention" ($t = 16.97, p < 0.01$). Moreover, there is a significant influence between celebrity endorsers' consistency with product attributes and consumers' curiosity ($t = 21.06, p < 0.01$). Therefore, the hypotheses H1 and H3 of this study are supported.

The alignment of celebrity endorsers with product attributes directly influences consumers' curiosity, subsequently leading to a significant increase in purchase intention ($z = 17.75, p < 0.01$, 95% confidence interval: 0.62 to 0.77). Therefore, this study demonstrates a fully mediated effect of consumers' curiosity on the relationship between celebrity endorsers' product attribute alignment and purchase intention, supporting hypothesis H5.

There is a positive correlation between the inconsistency of celebrity endorsers with non-travel product attributes and consumers' "purchase intention" ($r = 0.75, p < 0.01$). Similarly, there is a positive correlation between the inconsistency of celebrity endorsers with non-travel product attributes and consumers' "curiosity" ($r = 0.78, p < 0.01$). Furthermore, when celebrity endorsers are inconsistent with product attributes, there is a positive correlation with "purchase intention" ($t = 26.85, p < 0.01$) as well as an influence on consumers' curiosity ($t = 29.77, p < 0.01$). The results of this study support hypotheses H2 and H4.

The indirect relationship between consumers' curiosity driven by celebrity endorsers' inconsistency with

product attributes and consumers' purchase intention is significant ($z = 22.35, p < 0.01$, 95% confidence interval: 0.66 to 0.78), supporting the establishment of hypothesis H6.

4. Discussion

This study aims to investigate the impact of the alignment between celebrity endorsers and travel product attributes, as well as inconsistencies, on consumers' purchase intentions. Additionally, it explores whether the interaction between celebrity endorsement and product alignment triggers curiosity-driven consumers to influence their attitudes towards product purchases. The results demonstrate that both consistent and inconsistent alignments between celebrity endorsers and product attributes enhance consumers' purchase intentions. These findings align with previous research, which indicates that consistent celebrity endorsement with product attributes positively influences consumer attitudes (Koernig & Boyd, 2009; Lafferty & Goldsmith, 1999; Liu et al., 2007; Monroe, 2003; Ohanian, 1990).

In cases where there is inconsistency between celebrity endorsers and product attributes, the theory of cognitive dissonance suggests that such incongruity might arise due to prior knowledge assimilation or accommodation, leading consumers to identify that the product's value still aligns with their ideal needs (Lee & Thorson, 2008). This discourse resonates with the findings of this study, demonstrating a parallel alignment. This suggests that as long as the attributes of the celebrity endorser can attract and gain consumer recognition, even for non-travel products incongruent with the endorser's traits, it can still alter consumer attitudes and enhance purchase intentions.

This study also confirmed that under the interaction of celebrity endorsement and product alignment,

consumers' curiosity serves as a mediating factor between both the consistent and inconsistent alignments of celebrity endorsers with product attributes and consumers' purchase intentions.

5. References

- [1] Baron, R. M., and Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations, *Journal of personality and social psychology*, 51(6), 1173-1182.
- [2] Berlyne, D. E. 1960. *Conflict, arousal, and curiosity*: New York: McGraw-Hill.
- [3] Chang, T. Z., and Wildt, A. R. 1994. Price, Product Information, and Purchase Intention: An Empirical Study, *Journal of the Academy of Marketing Science*, 22, 16-27.
- [4] Collins, R. P., Litman, J. A., and Spielberger, C. D. 2004. The measurement of perceptual curiosity, *Personality and Individual differences*, 36(5), 1127-1141.
- [5] Kahle, L. R., and Homer, P. M. 1985 . Physical attractiveness of the celebrity endorser: A social adaptation perspective, *Journal of consumer research*, 11(4), 954-961.
- [6] Kamins, M. A. 1990. An investigation into the match-up hypothesis in celebrity advertising: When beauty may only be skin-deep, *Journal of Advertising*, 19, 4-13.
- [7] Kang, M. Y., Choi, Y., and Choi, J. 2019. The effect of celebrity endorsement on sustainable firm value: evidence from the Korean telecommunications industry, *International Journal of Advertising*, 38(4), 563-576.
- [8] Kanungo, R. N., and Pang, S. 1973. Effects of Human Models on Perceived Product Quality, *Journal of Applied Psychology*, 57, 172-178.
- [9] Koernig, S. K., and Boyd, T. C. 2009. To catch a tiger or let him go: The match-up effect and athlete endorsers for sport and non-sport brands, *Sport Marketing Quarterly*, 18, 25-37.
- [10] Lafferty, B. A., and Goldsmith, R. E. 1999. Corporate credibility's role in consumers' attitudes and purchase intentions when a high versus a low credibility endorser is used in the ad, *Journal of Business Research*, 44, 109-116.

- [11] Lee, J. G., and Thorson, E. 2008. The Impact of Celebrity-Product Incongruence on the Effectiveness of Product Endorsement, *Journal of Advertising Research*, 48, 433-449.
- [12] Liu, M. T., Huang, Y. Y., and Fiang, M. 2007. Relations among attractiveness of endorsers, match-up, and purchase intention in sport marketing in China, *Journal of Consumer Marketing*, 24(6), 358-365.
- [13] Loewenstein, G. 1994. The psychology of curiosity: A review and reinterpretation, *Psychological Bulletin*, 116(1), 75-98.
- [14] Mandler, G. The structure of value: Accounting for taste. In: Affect and cognition. Psychology Press, p. 3-36. 2014.
- [15] Monroe, K. B. 2003. Pricing: *Making Profitable Decisions*. IL: McGraw-Hill/Irwin.
- [16] Naylor, F. D. 1981. A state-trait curiosity inventory, *Australian Psychologist*, 16(2), 172-183.
- [17] Ohanian, R. 1990. Construction and validation of a scale to measure celebrity endorsers perceived expertise, trustworthiness, and attractiveness, *Journal of Advertising*, 19, 39-52.
- [18] Petty, R. E., Cacioppo, J. T., and Schumann, D. 1983. Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement, *Journal of Consumer Research*, 10, 135-146.
- [19] Till, B.D., and Busler, M. 2000. The match-up hypothesis: physical attractiveness, expertise, and the role of fit on brand attitude, purchase intent and brand beliefs, *Journal of Advertising*, 29,1-13.
- [20] White, D. W., Goddard, L., and Wilbur, N. 2009. The effects of negative information transference in the celebrity endorsement relationship, *International Journal of Retail & Distribution Management*, 37, 322-335.
- [21] Steenkamp, J. B. E. M., and Baumgartner, H. 1992. The Role of Optimum Stimulation Level in Exploratory Consumer Behavior, *Journal of Consumer Research*, 19(3), 434-448.

Differences in personal values and perceptions of job characteristics: A comparative study of Germany and Vietnam

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Abstract

Understanding personal values and perceptions of job characteristics among job seekers is crucial for organizations seeking to attract, motivate, and retain local employees in different countries. Drawing on person–organization (P-O) fit theory, we conducted a comparative study to investigate how job applicants from different countries differ in personal values and perceived job characteristics of prospective employers when making job choices. We analyzed data from 517 participants in Germany and Vietnam. Our findings indicate significant differences in personal values and perceptions of job characteristics among job applicants across countries. Specifically, job seekers in Germany exhibit a stronger work orientation than those in Vietnam, while no significant difference is observed in risk aversion. Job applicants in Vietnam prioritize work atmosphere and career advancement when selecting prospective employers compared to those in Germany. Furthermore, our findings have found significant gender differences in perceived job characteristics while observing insignificant gender differences in personal values among male-female applicants in these countries. Notably, female applicants in Vietnam rate career advancement as a more critical job characteristic compared to male-female applicants in Germany and male applicants in Vietnam. These findings offer valuable insights for multinational enterprises seeking to develop strategies to compete in the global talent war, particularly in dynamic emerging markets in Southeast Asia, such as Vietnam.

KEYWORDS

personal values, job characteristics, Asia-Pacific region, Western, job applicants, MANCOVA, comparative study, person-organization fit theory.

1. INTRODUCTION

Multinational enterprises (MNEs) have increasingly focused on and made substantial investments in Asia–Pacific region due to its rapid economic development and burgeoning trade activity (McKinsey, 2021; UNCTA, 2020). However, MNEs often find it hard to implement their human resource management (HRM) practices and policies in the Asia Pacific region. For instance, due to insufficient knowledge of local markets and the lack of fit with the host country settings, MNEs have faced additional challenges in recruiting and managing the local workforce in Asian countries (Cooke, Schuler & Varma, 2020; Froese, 2013; Froese, Shen, Sekiguchi & Davies, 2020; Froese & Kishi, 2013; Han & Froese, 2010; Malik, Pereira, Budhwar, Froese, Minbaeva, Nguyen & Xue, 2022). Thus, scholars in international human resource management raised questions about how MNEs should address these difficulties in the Asian Pacific context (Budhwar, Varma & Patel, 2016; Cooke et al., 2020; Do, Patel, Budhwar, Katou, Arora & Dao, 2020; Froese, Vo & Garrett, 2010; Froese, 2013; Froese & Xiao, 2012).

Western MNEs have often transferred their HRM practices and policies to their Asian subsidiaries (Budhwar et al., 2016; Do et al., 2020; Froese et al., 2020). However, applying Western theories and business models to Asia can be challenging. This leads to increased research interest in international human resource management, focusing more on the attitudes and beliefs of the local workforce. The aim is to customize or adjust HRM practices and policies from Western countries to fit the Asian context (Budhwar & Debrah, 2009; Cooke et al., 2020; Do et al., 2020; Dowling & Donnelly, 2013; Froese et al., 2020; Meyer, 2006). In this regard, the comparative analyses between Western and Asian countries can serve as an effective tool for evaluating HRM systems (e.g., HRM practices and policies) and for understanding the implications of adopting the HRM systems of one country in the context of another. Comparative research can also aid in determining whether divergent conditions between countries render their HRM systems largely incompatible (Budhwar & Debrah, 2009).

Building on the above considerations, this study investigates differences in job applicants' perceptions regarding their personal values and perceived job characteristics of prospective employers across countries. Multinational enterprises can effectively compete in the global talent war by

understanding job seekers' preferences for job characteristics and personal values. Personal values play a critical role in shaping job applicants' perceptions of organizational attractiveness as they strive to find a suitable match between job characteristics and their personal values (Arieli, Sagiv & Roccas, 2020; Chapman, Uggerslev, Carroll, Piasentin & Jones, 2005; Ehrhart & Ziegert, 2005; Sagiv & Schwartz, 2022). Furthermore, personal values serve not only as general aspirations but also as guiding principles in individuals' lives (Arieli, Sagiv & Roccas, 2020; Parks-Leduc, Feldman & Bardi, 2015). Personal values also vary among individuals from countries with different cultures. Therefore, this can potentially influence the efficacy of transferring MNEs' HRM practices and policies to their subsidiaries in host countries (Budhwar et al., 2016; Budhwar & Debrah, 2009; Meyer, 2006). Our choice to focus on job seekers in Germany and Vietnam is motivated by the fact that these countries have different economic systems while having strong economic links and strategic partnerships. For instance, Vietnam is one of the largest Germany's trading partners from Southeast Asia (EUROPA, 2020), while Germany is one of the largest foreign investors in Vietnam (FIA Vietnam, 2020). Additionally, the free trade agreement between the EU and Vietnam (EVFTA) offers more opportunities for European enterprises to do business in Vietnam (EUROPA, 2020).

Our study aims to contribute to international human resource management literature in two ways. First, this study contributes to research on organizational attractiveness in international settings (Arieli et al., 2020; Froese et al., 2010; Froese & Kishi, 2013; Newburry, Gardberg & Sanchez, 2014; Peltokorpi, Bader & Froese, 2019; Tenhiälä, Giluk, Kepes, Simón, Oh & Kim, 2016) by investigating how job applicants from different countries report their personal values and the importance they place on job characteristics when making job choices. Drawing on person–organization (P–O) fit theory (Kristof, 1996), we expect that job applicants from Western countries, such as Germany, and Asian countries, such as Vietnam, will differ in their personal values, which will lead to varying perceptions of organizational attractiveness and preferences towards job characteristics. Previous studies in this research stream have primarily been undertaken in developed economies or Western cultures (Arieli et al., 2020; Elizur & Sagie, 1999; Harpaz et al., 2002; Ladhari et al., 2011; Roe & Ester, 1999; Warr, 2008), and have focused on large and technologically advanced countries in Asia–Pacific region, such as Japan, Korea (Froese, 2013; Froese & Xiao, 2012; Pereira, Malik & Froese, 2017). However, fewer

studies have investigated Southeast Asia's emerging and rapidly growing economies (Froese et al., 2010; Smith Jr. & Pham, 1996). Therefore, this study seeks to address this research gap and contribute to the literature by examining the differences in personal values and job characteristics preferences among job applicants in the fastest-growing emerging markets, such as Vietnam.

Second, our study contributes to research on the gender gap in the international recruitment context (Heilman & Alcott, 2001; Konrad, Ritchie, Lieb & Corrigan, 2000; Martins & Parsons, 2007) by testing how personal values and perceived job characteristics of prospective employers vary by gender among job applicants across countries. Specifically, we propose that male and female applicants from Germany and Vietnam differ in terms of their personal values and perceived job characteristics. While prior studies have extensively investigated gender differences across various cultures and societies (McCrae & Terracciano, 2005; Rubel-Lifschitz, Benish-Weisman, Torres & McDonald, 2021; Vilar, Liu & Gouveia, 2020; Weisberg, Deyoung & Hirsh, 2011), scholars emphasize the need for research that looks beyond gender differences in individual characteristics in developing countries and within Asian culture (Harrison, Kravitz, Mayer, Leslie & Lev-Arey, 2006; Martins & Parsons, 2007; Weisberg et al., 2011). Therefore, our study extends this research stream by comparing personal values and perceived job characteristics among male and female applicants within and between two countries, namely, Germany, a developed country in European with more advanced gender equality, and Vietnam, a developing country. By doing so, our study provides insights into gender differences in job seekers' personal values and preferences in different socio-cultural contexts.

2. THEORETICAL FRAMEWORK

Person–Organization (P–O) fit theory (Kristof, 1996) explains why individuals are attracted to organizations through interactionist metatheory processing. This theory proposes that individuals seek a good match between their characteristics and certain environmental characteristics in organizations. Specifically, job seekers look for a fit between their values and organizational characteristics (e.g., job characteristics) of future employers (Chapman et al., 2005; Froese et al., 2010; Turban, Lau, Ngo, Chow & Si, 2001). In other words, job applicants consider the compatibility or similarity between themselves and companies and make job choice decisions based on the fit between their personal values and organizational characteristics. The implication of P–O fit theory is commonly used in

recruitment studies. However, most studies apply it by focusing on job applicants in developed, large, and technologically advanced countries from the Western or Asian perspective (Firfiray & Mayo, 2017; Peltokorpi et al., 2019; Turban & Keon, 1993). In this study, we extend previous studies by testing how job applicants from emerging, small, and rapidly growing countries in Southeast Asia report on their personal values and preferences towards job characteristics of future employers compared to job applicants from a developed European country.

Personal values play a central and essential role in guiding individuals' choices and behavior, influencing individuals' perceptions and behavior across circumstances (Arieli et al., 2020; Ladhari, Pons, Bressolles & Zins, 2011; Sagiv & Schwartz, 2022). The values can differ significantly among individuals and countries (Arieli et al., 2020). Thus, understanding personal values is crucial in human resource management, especially for MNEs when transferring their HRM policies and practices, such as recruitment and selection, to subsidiaries in host countries, including those in Asia. In this study, we focused on two key personal values, namely, work orientation and risk aversion, as they significantly influence individuals' behavior in the workplace and their decision-making related to job choices (Arieli et al., 2020; Roe & Ester, 1999). Specifically, work orientation refers to how individuals perceive work and job orientation. Work orientation offers a valuable concept for understanding the meaning of work in individuals' life or the purpose for doing work (Jiang & Wrzesniewski, 2022; Rawat & Nadavulakere, 2015). In the context of organizational attractiveness, job applicants who are high work-oriented pay more attention to the content of their work and future career (Jiang & Wrzesniewski, 2022; Yi & Wang, 2015). Risk aversion, on the other hand, is a significant driver of individuals' behaviors and attitudes towards an actual environment. For instance, risk-averse individuals tend to prefer a comfortable environment that provides security and safety (Kim et al., 2012; Peltokorpi et al., 2019; Turban et al., 2001). In the recruitment context, job seekers who are high risk aversion prefer to work for companies that provide formal rules and stable jobs (Froese & Xiao, 2012).

Certain job characteristics are critical in determining the attractiveness of an organization to potential applicants. Previous research in recruitment has demonstrated that job applicants are attracted to organizations that fit with their values and offer desirable job characteristics, namely task

complexity, working hour, compensation and advancement, flexible working, and autonomy (Acikgoz, 2019; Chapman et al., 2005; Stich, 2021; Thompson, Payne & Taylor, 2015; Turban, Forret & Hendrickson, 1998). Additionally, dimensions of job characteristics vary by job environment and organizational settings (Djurdjevic, Rosen, Conroy, Rawski & Sosna, 2019; Holman & Hughes, 2021). The focus of this study is on the relevant dimensions of job characteristics consisting of work atmosphere, career advancement, and autonomy, that reflect generalized perceptions of how good a job is among job applicants' perceptions (Daniels, 2006). Consistent with prior studies (Boswell, Roehling, Lepine & Moynihan, 2003; Chapman et al., 2005; Lievens & Highhouse, 2003; Manhardt, 1972; Thompson et al., 2015), this study defines work atmosphere as a working environment that is comfortable and supportive as well as characterized by positive interpersonal relationships. Career advancement relates to the pursuit of long-term professional goals and achieving success in job seekers' chosen career paths. Autonomy refers to the ability to self-actualize and work independently in the workplace.

In addition to the differences in personal values and perceived job characteristics between job applicants, we also expect that gender may moderate the interactions between the country context and personal values and between the country context and job characteristics. This is due to the differences in expectations, values (e.g., personal values), and orientations (e.g., job orientations) between males and females across countries (Arieli et al., 2020; Roe & Ester, 1999; Warr, 2008). Specifically, our study investigates differences in personal values and perceived job characteristics among male and female applicants within and between Germany and Vietnam.

3. HYPOTHESIS DEVELOPMENT

3.1 The differences in personal values between job applicants from Germany and Vietnam

As suggested by P–O fit theory (Kristof, 1996), values influence the recruitment process of a company as job seekers are attracted to organizations by perceiving the fit between their personal values and job characteristics (Boswell et al., 2003; Cable & Judge, 1994; Froese et al., 2010; Kim et al., 2012; Turban et al., 2001). Moreover, personal values are generated and determined by social factors, namely social and cultural environment, which vary across countries (Arieli et al., 2020). As a result, individuals from different countries may vary in personal values, which influence their evaluations of

job characteristics in the context of occupational structures and job aspirations (Konrad et al., 2000; Warr, 2008). Accordingly, we examine how differences in personal values between job applicants from different countries affect their evaluations of the importance of job characteristics when they consider organizations as potential employers.

More specifically, we argue that personal values are influenced by and vary with social experiences, which in turn are influenced by economic development. Therefore, job applicants from countries with different economic indicators may differ in their personal values. For instance, Froese (2013) has demonstrated that economic indicators affect the development of work values among the next generation of leaders in China, Japan, and Korea, leading to differences in their values. This study focuses on the differences in personal values between job applicants in Germany and Vietnam. These countries differ in their economic development. While Germany is a developed economy, Vietnam is a developing country, which may result in differences in personal values (e.g., risk aversion and work orientation) among job applicants between these countries.

In addition to economic factors, cultural values may also contribute to differences in personal values (e.g., risk aversion and work orientation) between job seekers from Germany and Vietnam. Considering cultural value dimensions (Hofstede, 2001; Hofstede & Hofstede, 2005), we argue that uncertainty avoidance is relevant in this study's context. Uncertainty avoidance dictates how individuals deal with ambiguity and anxiety when confronting the unknown future. In the recruitment context, job choice decisions symbolize unknown situations because job seekers know little about future employers and would go into new, uncertain jobs. Individuals in countries with high uncertainty avoidance are less willing to take risks, prefer creating detailed plans, and seek feedback to avoid uncertain situations. On the other hand, individuals from countries with low uncertainty avoidance are more likely to accept change and are less concerned about unknown future events (Fischer, 2008; Harpaz, Honig & Coetsier, 2002; Hofstede, Hofstede & Minkov, 2010; House, 2004; Smale, Bagdadli, Cotton, Dello Russo, Dickmann, Dysvik, Gianecchini, Kaše, Lazarova, Reichel, Rozo & Verbruggen, 2019). Therefore, we propose that job applicants from countries with a high level of uncertainty avoidance may place a greater value on risk aversion and work orientation than those from countries with a low level of uncertainty avoidance. According to Hofstede (2020) Insights Studies, Germany

has higher uncertainty avoidance score than Vietnam (namely, Germany: 65, Vietnam: 20). Thus, it is reasonable to propose the following:

Hypotheses 1 (a/b): Job applicants in Germany and Vietnam differ in risk aversion and work orientation in that job applicants in Germany tend to evaluate (a) risk aversion and (b) work orientation more highly than those in Vietnam.

3.2 The differences in perceived job characteristics of future employers between job applicants from Germany and Vietnam

According to P–O fit theory (Kristof, 1996), job applicants seek out a similarity or match between job attributes and their values and needs, leading to the interaction between individuals and organizations (Boswell et al., 2003; Ehrhart & Ziegert, 2005; Kim et al., 2012). Moreover, cultural attributes are known to influence individuals' behavior, perceptions, and decisions (Cialdini & Goldstein, 2004; He & Lee, 2020), as well as related to evaluations of job attributes (Warr, 2008; Yi & Wang, 2015). Consequently, we argue that due to different cultures, job applicants may perceive the importance of job characteristics differently when considering prospective employers. Specifically, our study focuses on job applicants from two different cultural backgrounds, namely, Germany, representing Western culture, and Vietnam, representing Asian culture. Thus, job applicants from these two cultures may perceive the importance of job characteristics (e.g., work atmosphere, career advancement, and autonomy) in different ways.

More specifically, we propose that job applicants from Germany and Vietnam evaluate the importance of job characteristics of prospective employers differently. Our argument is based on cultural value dimensions suggested by Hofstede (2001), emphasizing the relevance of masculine and feminine cultures in this study's context. Notably, individuals from masculine culture tend to prioritize high earnings, challenge, and career advancement over the security of their employment or the cooperativeness of their colleagues. Thus, they often adopt a “live to work” approach. In contrast, individuals in feminine culture tend to prioritize the quality of life and tend to “work to live.” As a result, they place greater value on job security, a good working relationship, and flexibility as incentives provided by employers (Hofstede et al., 2010). Applying the concept of these cultural values, we propose that job applicants from masculine societies place a greater emphasis on job characteristics such as

career advancement and autonomy. In contrast, job applicants from feminine societies are more concerned with work atmosphere. In our case study, Germany represents masculine culture while Vietnam belongs to feminine culture: indeed, the masculinity index of those countries differs significantly, being 66 and 40 for Germany and Vietnam, respectively. Consequently, we propose the following hypotheses:

Hypotheses 2 (a/b): Job applicants in Germany would rate (a) career advancement and (b) autonomy as more important job characteristics than those in Vietnam.

Hypothesis 2c: Job applicants in Vietnam would rate work atmosphere as a more crucial job characteristic than those in Germany.

3.3 The moderating effects of gender on personal values and perceived job characteristics across countries

Understanding the influence of job seekers' gender on their personal values and evaluations of job characteristics is crucial for job choice decisions across countries. Prior research has shown that personal values and perceived job characteristics, varying across countries, influence job choices (Cable & Judge, 1996; Elster & Gelfand, 2021; Schwartz & Rubel, 2005). The literature also indicates that females and males perceive organizational attractiveness differently due to varying preferences (Chapman et al., 2005; Held & Bader, 2018; Martins & Parsons, 2007). Accordingly, gender differences in personal values and perceived job characteristics may explain gender differences in job choice decisions across countries. Thus, this study investigates how gender influences the differences in personal values and perceived job characteristics of prospective employers among job seekers in Germany and Vietnam.

Drawing on prior studies (Schwartz, 1994; Schwartz & Rubel, 2005; Vilar et al., 2020) and among human values suggested by Schwartz (1994), we argue that security, achievement, and self-direction values account for the variations in personal values and perceived job characteristics between male and female applicants in these countries. The security value emphasizes the importance of safety, harmony, and stability in a relationship. The achievement value relates to the pursuit of personal success by demonstrating competence regarding social standards. The self-direction value reflects independent thinking and the ability to make choices and take actions accordingly (Schwartz, 1994;

Schwartz & Rubel, 2005). Additionally, prior studies have indicated that females tend to score higher on security value but lower on achievement and self-direction values (Gouveia, Vione, Milfront & Fischer, 2015; Vilar et al., 2020). Therefore, we expect that female applicants may exhibit higher risk aversion and lower work orientation than male applicants in both countries. Furthermore, we propose that female applicants prioritize work atmosphere and are less concerned with career advancement and autonomy compared to male applicants, both in Germany and Vietnam.

In addition, we argue that societal factors (e.g., gender issues) account for gender differences in personal values and perceived job characteristics in Germany and Vietnam. While Germany and Vietnam have made progress in promoting gender equality, Germany is more advanced in that regard than Vietnam, especially in the workplace (WEF, 2022). This suggests that there may be less of a gender gap in personal values towards risk aversion and work orientation, as well as preference for work atmosphere, career advancement, and autonomy in the workplace in Germany compared to Vietnam. Furthermore, the traditional gender roles and patriarchal attitudes persist in Vietnamese society, resulting in men having more opportunities and socio-economic advantages than women at work and in the family (ILO, 2021; McKinsey, 2019). Moreover, despite high participation in the labor force, women in Vietnam still face discrimination and limited opportunities for career advancement, as well as limited access to technology, productive resources, and skill development (ILO, 2021; McKinsey, 2019). Therefore, we expect that differences in personal values and perceived job characteristics of prospective employers between male and female job applicants in Vietnam would be stronger than in Germany. Consequently, we hypothesize:

Hypotheses 3 (a/b): Gender moderates the interactions between the country context and personal values (e.g., risk aversion, work orientation), such that gender differences in risk aversion (a) and work orientation (b) are stronger in Vietnam compared to Germany.

Hypotheses 4 (a/b/c): Gender moderates the interactions between the country context and perceived job characteristics of prospective employers (e.g., work atmosphere, career advancement, autonomy), such that gender differences in the importance of perceived work atmosphere (a), career advancement (b), and autonomy (c) are stronger in Vietnam compared to Germany.

4. METHODS

4.1 Sample and procedure

We collected data from university students from the University of Goettingen in Germany (in 2018) and from the University of Economic Ho Chi Minh city in Vietnam (in 2019). These universities are considered among the highly prestigious universities in Germany and Vietnam. Most of the university students in our study were at the end of their studies and would enter the labor market after graduation. Thus, the student sample in this study allows us to understand job seekers' values and expectations when making job choice decisions across countries. We selected to compare Germany and Vietnam as they differ in several significant aspects. Specifically, Vietnam is an emerging country and one of the fastest-growing economies. At the same time, Germany is a developed country and one of the most prominent foreign investors in Vietnam (ADB, 2022; FIA Vietnam, 2020). In addition, these countries have different socio-economy systems. Namely, Germany has a mixed economy, while Vietnam has a mixed socialist-oriented market economy. Furthermore, despite progress in reducing gender gaps, Vietnam still has gender inequality issues (Gender gap index: 0.705) compared to Germany, which has a narrow gender gap (Gender gap index: 0.801) (WEF, 2022). In addition to differences in socio-economy systems, Germany and Vietnam differ in cultural values dimension (Hofstede, 2001; Hofstede & Hofstede, 2005). For example, Germany is a masculine country and has a high uncertainty avoidance score (e.g., the score is 65). In contrast, Vietnam is a feminine country and has a low uncertainty avoidance score of 30. Additionally, among cultural clusters, Germany is considered an example of Western culture, and Vietnam represents the archetype of Asian culture, especially in Southeast Asia.

The original questionnaire was developed in English and translated into German and Vietnamese. This process followed the back-translation method recommended by Brislin (1980). The instructors would come to classrooms and lecture halls and introduce the survey. Then, the paper-based set of questionnaires was distributed randomly to students. After completing their answers, students would return the questionnaires to the instructors. In total, our study analyzed the respondents of 259 students (50.1%) in Germany and 258 students (49.9%) in Vietnam. In that, we had 321 female students (62.1%). The average age of respondents was 22.

Table 1 shows the descriptive overview of the sample of Germany and Vietnam.

Table 1: The descriptive overview of the sample of Germany and Vietnam

	Germany	Vietnam
Sample size	259	258
<i>Demographic information</i>		
Gender		
Male	130	66
Female	129	192
Working experience		
With working experience	160	158
Without working experience	99	100
Age (in years)	23	21
<i>Personal values: mean</i>		
Risk aversion	3.608	3.457
Work orientation	5.345	5.195
<i>Job characteristics: mean</i>		
Work atmosphere	3.153	3.904
Career advancement	4.739	4.907
Autonomy	4.936	4.605

4.2 Measures

All items and scales in our study were taken from established scales and measured on a 6-point Likert scale (e.g., Job characteristics: 1 = not important, 6 = very important; Personal values: 1 = strongly disagree, 6 = strongly agree) (see Appendix A), except for the demographic information consisting of age, gender and work experience.

Job characteristics: We adapted the scale from Manhardt (1972) to measure job characteristics. The scale consisted of three dimensions, namely work atmosphere, career advancement, and autonomy. We measured each dimension with five items by asking the potential

applicants how important these items were to them. An example of work atmosphere is “I have nice colleagues.”, career advancement is “I can make a career there.”, and autonomy is “I can bring in new and creative ideas.”.

Personal values: Personal values were measured by two multiple-item scales consisting of risk aversion and work orientation. In that, each sub-scale had six items. Risk aversion was taken from Cable and Judge (1994). For example, “I think that risks must be avoided as much as possible.”. Work orientation was taken from Spence and Helmreich (1983). An example of work orientation is “I am satisfied when I perform particularly well on tasks.”

Country: Participants in this study are from Germany and Vietnam. We created a dummy variable with Germany being coded as 1 and Vietnam being coded as 0.

In line with prior studies, we also used demographic information, namely gender, age, and work experience, as control variables (Harpaz et al., 2002; Hauswald et al., 2016; Kim et al., 2012; Peltokorpi et al., 2019). In particular, the gender of participants was coded 1 for female and 0 for male. Work experience was coded 1 for participants who had work experience and 0 for other participants. The age of participants was measured in years.

5. RESULTS

Before testing our hypotheses, we validated our multi-item scales and tested cross-cultural measurement equivalence of variables (e.g., personal values, job characteristics). Particularly, to test the reliability of the scales, we applied Cronbach’s alpha test. The results of Cronbach’s alpha test showed that “corrected item–Total correlation” values of some items were below 0.3. Thus, we removed these items from the scales, after which we obtained acceptable reliability scores.

In the next step, we tested cross-cultural measurement equivalence of personal values and job characteristics of future employers. In order to validate the scales, we applied the split-half approach by randomly selecting half of the sample size. On the one hand, we used the exploratory factor analysis (EFA) with Varimax rotation on half of the sample size for three factors of job characteristics and two factors of personal values, respectively. As a result, three factors of job characteristics (e.g., work atmosphere, career advancement, and autonomy) emerged, and the loading value of all items was high (>0.5). At the same time, two factors of personal values (e.g., risk aversion and work

orientation) appeared, and all items had a high loading value (>0.5). On the other hand, we used a confirmation factor analysis for the other half of the sample size. The model fit was satisfactory (CMIN=389.248, $df=178$, $p<0.001$; GFI=0.874; CFI=0.835; RMSEA=0.067, RSMR=0.078). Adding to that, we also conducted a confirmation factor analysis for participants in Germany and Vietnam separately (e.g., Germany, Vietnam). The model fit of each country was satisfactory. The results of these testing are presented in Table 2.

Table 2: The results of confirmation factor analysis for each country and the whole sample

	Germany	Vietnam	Total
Scales (Cronbach's alpha)			
<i>Personal values</i>			
Risk aversion	0.761	0.747	0.738
Work orientation	0.699	0.69	0.695
<i>Job characteristic</i>			
Work atmosphere	0.654	0.609	0.675
Career advancement	0.734	0.686	0.696
Autonomy	0.705	0.759	0.743
CFA fit indices			
CMIN	310.74	310.26	543.436
Degree of freedom	179	179	179
p	<0.001	<0.001	<0.001
GFI	0.901	0.9	0.901
CFI	0.896	0.894	0.856
RMSEA	0.053	0.053	0.063
SRMR	0.0664	0.068	0.0689

In addition to employing split-half approach, we conducted multi-group confirmation analysis to test the measurement equivalence of these variables with three hierarchically ordered levels, namely

configural equivalence, metric equivalence, and scalar equivalence (Byrne, 2009; Fischer & Karl, 2019; Milfont & Fischer, 2010). First, we tested for configural variance by constraining the basic factor model to equality across two groups (e.g., Germany and Vietnam). The results showed that the model presented an acceptable fit to the data (CMIN=621, df=178, $p<0.001$; GFI=0.9; CFI=0.895; RMSEA=0.038, RSMR=0.0689) (Hair et al., 2010; Hu & Bentler, 1999). Second, we used equality constraints on the factor loading in equality to test for metric invariance. Then, we compared CFI value of configural model and CFI value of metric model ($\Delta\text{CFI}=\text{CFI}(\text{configural})-\text{CFI}(\text{metric})=0.895-0.886=0.009$). This value was smaller than 0.01 (Cheung & Rensvold, 2002). Likewise, the value of $\Delta\text{McDonald's NCI}$ values (e.g., $\Delta\text{McDonald's NCI}=0.775-0.759=0.016$) were smaller than 0.02 (Cheung & Rensvold, 2002). Taken together, the current results suggested that the reduction in model fit would not be considerable with the imposition of the equality constraints. Thus, the study variables would have proof of metric invariance. Third, to test scalar invariance, we tested that the item intercepts would be invariant across Germany and Vietnam. The differences in CFI value and McDonald's NCI value between the metric invariance model and scalar invariance model were higher than 0.01 and 0.02 respectively (e.g., $\Delta\text{CFI}=0.886-0.739=0.147$; $\Delta\text{McDonald's NCI}=0.759-0.531=0.228$) (Cheung & Rensvold, 2002). Hence, the results suggested that the assumption of full scalar invariance was not tenable (Table 3). As a consequence, the measures used in this study were invariant, thereby enabling cross-country comparisons.

Table 3: The results of measurement equivalence of the study variables

Model description	Chi – square	df	CFI	McDonal's NCI	ΔCFI	$\Delta\text{Mc NCI}$
Configural invariance	621	358	0.895	0.775	-	-
Metric invariance	656.338	372	0.886	0.759	0.009	0.016
Scalar invariance	1026.478	374	0.739	0.531	0.147	0.228

Furthermore, to minimize common method variance, this study applied several procedural techniques (Podsakoff, Mackenzie, Lee & Podsakoff, 2003; Podsakoff, Mackenzie & Podsakoff, 2012). First, participants were informed that their answers were anonymous and that there were no

wrong or right answers. Thus, participants felt safe and were able to answer the questions as honestly as possible. Second, the measurement of study variables (e.g., personal values, job characteristics, demographic information) was separated into distinct pages on the questionnaire. In addition, we also used two post-hoc statistical tests to examine whether the results were vulnerable to common method bias. First, Harman's single factor test was conducted. It could be a common method bias issue if all of the variables were loaded into an exploratory factor analysis and unrotated exploratory factor solution determined the majority of variance in the variables (Iverson & Maguire, 2000; Podsakoff et al., 2003). We found that a single factor merged from the factor analysis accounted for 16.44 percent of the variance among the measures (less than 50%). Second, we used the unmeasured latent factor to test common method bias (Podsakoff et al., 2012). We conducted CFAs to analyze measures with a common latent factor and those without a common latent factor. Then, we compared the standardized regression weight of all items with and without a common latent factor. We found that the difference between them was lower than 0.2 (Cohen, 1992; MacKenzie & Podsakoff, 2012). This suggests that the data has no common method bias issue. Moreover, our study compared scores across countries, which is not susceptible to common method bias.

Table 4 presents the descriptive statistics and intercorrelations for the study variables for each country.

Table 4: Mean (M), standard deviation (SD), and correlations for the study variables for each country.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
Germany										
1. Gender	0.5	0.5	1							
2. Age	23	2.57	-0.09	1						
3. Work experience	0.62	0.49	-0.09	0.181**	1					
<i>Personal values</i>										
4. Risk aversion	3.62	0.75	0.016	0.006	-0.044	1				
5. Work orientation	5.31	0.54	0.222**	0.046	-0.097	0.073	1			
<i>Job characteristics</i>										
6. Work atmosphere	3.15	0.81	0.085	-0.034	0.080	0.507**	-0.116	1		
7. Career advancement	4.68	0.63	-0.08	-0.211**	0.021	-0.096	0.174**	0.013	1	
8. Autonomy	4.92	0.52	0.199**	-0.035	0.061	-0.102	0.296**	-0.120	0.512**	1
Vietnam										
1. Gender	0.74	0.44	1							
2. Age	21	0.96	-0.155*	1						
3. Work experience	0.61	0.49	-0.011	0.106	1					
<i>Personal values</i>										
4. Risk aversion	3.46	0.79	0.016	-0.068	-0.248**	1				
5. Work orientation	5.23	0.66	0.289**	-0.146*	0.032	0.142*	1			
<i>Job characteristics</i>										
6. Work atmosphere	3.9	0.82	0.033	0.166**	-0.158*	0.473**	0.159*	1		
7. Career advancement	4.96	0.59	0.207**	-0.002	0.087	0.132*	0.36**	0.214**	1	
8. Autonomy	4.63	0.69	0.014	0.049	0.159*	-0.012	0.195**	0.05	0.316**	1

N(Germany)=259, *N*(Vietnam)=258 *. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

5.1 Differences in personal values

Hypotheses 1 (a/b) propose that job applicants in Germany and Vietnam may differ in personal values consisting of work orientation and risk aversion. We conducted MANCOVA to test Hypotheses 1 (a/b). The result of Wilk's Lambda test statistics shows that there is a statistically significant difference in job applicants' personal values between Germany and Vietnam after controlling for gender, age, and work experience ($F(2,511)=4.548$, $p<0.05$, Wilks' $\Lambda=0.983$, partial $\eta^2=0.017$).

Furthermore, hypotheses 1(a/b) also suggest that job applicants in Germany tend to score higher on values of risk aversion and work orientation than those in Vietnam. To test these hypotheses, we used pairwise comparisons among the results of MANCOVA. Before examining these hypotheses, we also tested the homogeneity of covariance of dimensions of personal values with Levene's test. The results of Levene's test show that variables, such as risk aversion and work orientation, are insignificant (Risk aversion: $F(1,515)=0.157$, $p>0.05$; Work orientation: $F(1,515)=3.587$, $p>0.05$). Thus, personal values have met the assumption of the homogeneity of covariance. Then, we could interpret the outputs of comparisons further.

The results of pairwise comparisons reveal that the mean difference in work orientation between job applicants in Germany and Vietnam is significant at 0.05 level. At the same time, the difference in risk aversion between Germany and Vietnam is insignificant (Table 5). In particular, job applicants in Germany scored higher on work orientation than those in Vietnam. Taken together, these results support H1b but provide no support H1a.

Table 5: The results of Pairwise comparisons of personal values

Personal values	95% Confidence						
	Mean		Difference (I-J)	SD	Sig.	Interval for	
	Difference						
	Germany (I)	Vietnam (J)				Lower Bound	Upper Bound
Risk aversion	3.608	3.457	0.14	0.078	0.074	-0.013	0.294
Work orientation	5.345	5.195	0.145*	0.06	0.017	0.026	0.263

*N = 517, *. The mean difference is significant at the 0.05 level.*

5.2 Differences in perceived job characteristics

Hypothesis 2 suggests that job applicants in Germany and Vietnam may evaluate the importance of job characteristics, namely, work atmosphere, career advancement, and autonomy, in different ways. To test this hypothesis, we conducted MANCOVA. The result of Wilk's Lambda test shows that there is a statistically significant difference in perceived job characteristics between job applicants in Germany and Vietnam after controlling for gender, age, and work experience ($F(3,510)=41.672$, $p<0.001$, Wilks' $\Lambda=0.803$, partial $\eta^2=0.197$).

More specifically, Hypotheses 2 (a/b) suggest that job applicants in Germany may score higher in job characteristics such as career advancement (a) and autonomy (b) compared to those in Vietnam. At the same time, Hypothesis 2c suggests that job applicants in Vietnam are more concerned with work atmosphere of future employers compared to those in Germany. To test these Hypotheses, we also used pairwise comparisons among MANCOVA. Before testing the differences in perceived job characteristics between job applicants from Germany and Vietnam, we test the homogeneity of covariance of the variables by using Levene's test. The results of Levene's test show that work atmosphere and career advancement meet the assumption of the homogeneity of covariance (work atmosphere: $F(1,515)=0.14$; $p>0.05$; career advancement: $F(1,515)=2.87$, $p>0.05$). Thus, we can interpret the outputs of these comparisons. However, the results for autonomy violate the homogeneity of covariance ($F(1,515)=16.028$, $p<0.001$). Thus, we cannot interpret the outputs of autonomous characteristic of the job offered by potential employers. Accordingly, the results of this test do not support Hypothesis 2b.

Furthermore, the results of pairwise comparisons show that the mean differences in job characteristics (e.g., work atmosphere, career advancement) are significant at the 0.05 level (Table 6). Specifically, job applicants in Vietnam place higher importance on job characteristics such as work atmosphere and career advancement than those in Germany. This suggests that job applicants in Vietnam prefer organizations that provide high work atmosphere and career advancement. Surprisingly, the perceptions of job applicants in Germany towards career advancement provided by future employers are not consistent with the behavioral norms typically associated with individuals

from a masculine culture (Hofstede, 2001; Singh, 1990). These results do not support H2a but nevertheless support H2c.

Table 6: The results of Pairwise comparisons of Job characteristics

Job characteristics	Mean		Mean Difference (I-J)	SD	Sig.	95% Confidence Interval for Difference	
	Germany	Vietnam				Lower	Upper
	(I)	(J)				Bound	Bound
Work atmosphere	3.153	3.904	-0.743*	0.083	0.000	-0.907	-0.579
Career advancement	4.739	4.907	-0.172*	0.062	0.006	-0.294	-0.05

*N = 517, *. The mean difference is significant at the 0.05 level.*

5.3 Moderating effects of gender on personal values and perceived job characteristics across countries

Hypotheses 3 (a/b) propose that gender may moderate the interactions between the country context and personal values, such as risk aversion (a) and work orientation (b). To test this hypothesis, we conducted two-way MANCOVA. The result of Wilk's Lambda test shows that there is no statistically significant interaction effect between gender and the country context on personal values, namely risk aversion and work orientation ($F(2,510)=1.57$, $p>0.05$, Wilks' $\Lambda=0.994$, partial $\eta^2=0.006$). This result does not support Hypotheses 3 (a/b).

Hypotheses 4 (a/b/c) suggest that gender may moderate the interactions between the country context and perceived job characteristics of future employers, namely work atmosphere (a), career advancement (b), and autonomy (c). To test these hypotheses, we used two-way MANOVA. The result of Wilk's Lambda test shows that there is a statistically significant interaction effect between gender and the country context on perceived job characteristics ($F(3,509)=8.015$, $p<0.001$, Wilks' $\Lambda=0.955$, partial $\eta^2=0.045$). This suggests that gender differences in perceived job characteristics vary among job applicants across Germany and Vietnam. Additionally, Hypotheses 4 (a/b/c) also expect that gender differences in work atmosphere (a), career advancement (b), and

autonomy (c) are stronger in Vietnam than in Germany. To know which aspects of job characteristics are more important for female applicants across countries, especially in Vietnam, we used the simple slop analysis recommended by Aiken and West (1991). Figure 1–3 illustrate the interaction effects between the country context and gender on perceived job characteristics. In particular, in Germany and Vietnam, female applicants are more concerned with work atmosphere than male applicants. However, the gender gap in work atmosphere concerns among male and female applicants in Vietnam is smaller than those in Germany (Figure 1). This does not support Hypothesis 4a. Figure 2, meanwhile, shows that career advancement is more important for female applicants in Vietnam, while this characteristic is less critical for female applicants in Germany. Additionally, the gender gap in such concerns is wider in Vietnam than in Germany. Accordingly, these results partially support Hypothesis 4b. At the same time, Figure 3 also shows that female applicants in Vietnam and Germany scored higher on autonomy than male applicants. Additionally, gender differences in perceived autonomy as an essential job characteristic are smaller in Vietnam than in Germany. These results do not support Hypothesis 4c.

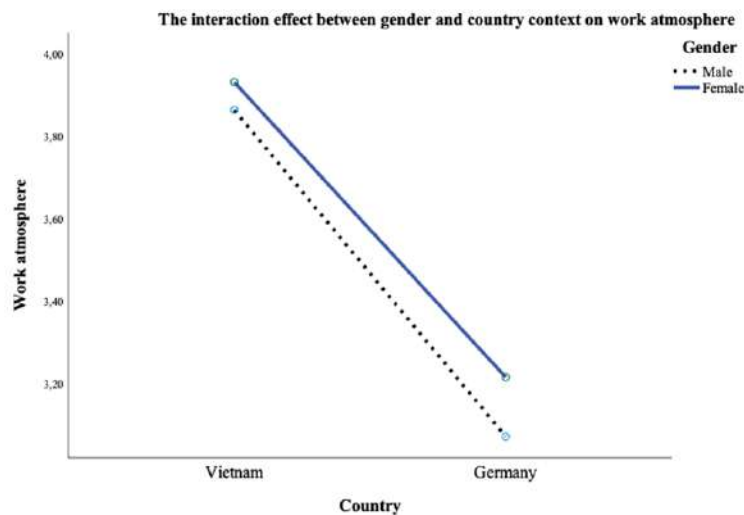


Figure 1: The interaction effect between gender and the country context on work atmosphere

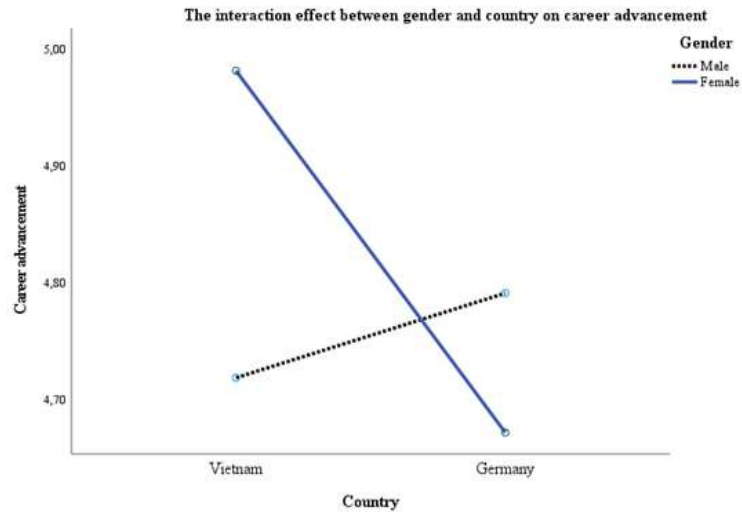


Figure 2: The interaction effect between gender and the country context on career advancement

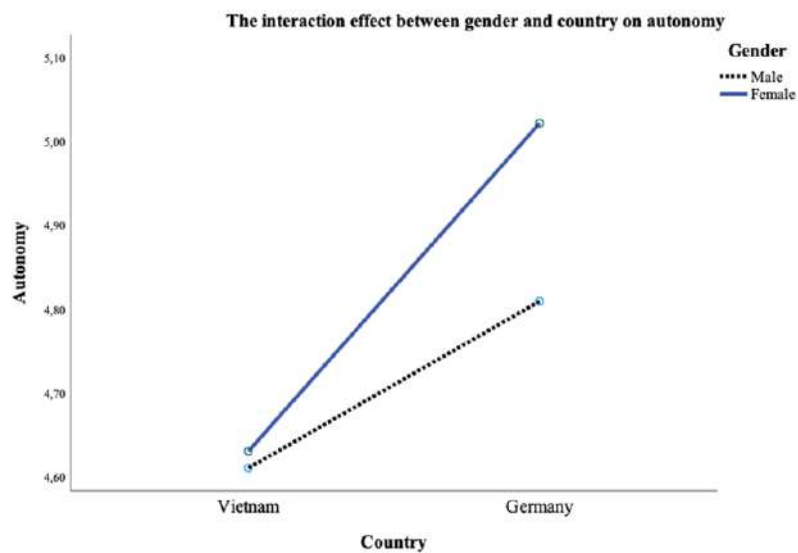


Figure 3: The interaction effect between gender and the country context on autonomy

6. DISCUSSION

Based on Person–Organization (P–O) fit theory (Kristof, 1996) and Hofstede’s cultural dimensions (2001), this study investigates how job applicants from different countries (namely, Germany vs. Vietnam) differ in their personal values and the way they evaluate the importance of job characteristics in the recruitment context. This study also investigates gender differences in personal values and perceptions of the importance of job characteristics. In particular, our findings show that job applicants in Germany and Vietnam differ in personal values. These findings align with previous

studies that have indicated cross-cultural differences in personal and work values (Warr, 2008). For instance, job applicants in Germany tend to have a stronger work orientation compared to those in Vietnam. However, the level of risk aversion does not differ significantly between job seekers from Germany and Vietnam.

In addition to the differences in personal values, job applicants (e.g., Germany vs. Vietnam) evaluate the importance of job characteristics of future employers differently. Specifically, among job characteristics offered by an organization, both work atmosphere and career advancement are more important to job applicants in Vietnam. Surprisingly, our study has found that job applicants in Vietnam place greater importance on career advancement offered by prospective employers than those in Germany. This finding contradicts the commonly held notion of individuals' behavior from feminine culture (Hofstede, 2001; Hofstede & Hofstede, 2005). Vietnam, like many other Asian countries, is a highly structured and conformist society where individuals' actions are strongly influenced by social pressures from their families and other social groups (Milliman et al., 1993). Moreover, in Vietnam, the public image of an individual, such as a successful career or a high job position, carries significant weight (Smith Jr. & Pham, 1996). Accordingly, due to social pressure and the importance placed on public image, individuals in Vietnam strive to attain high positions along their career paths, leading them to prefer organizations that offer the best career advancement opportunities. It is reasonable to expect that possibilities for career advancement are more critical in the eyes of job applicants in Vietnam, a feminine society, compared to applicants in Germany, a masculine society.

Furthermore, despite insignificant gender differences in personal values, this study has found significant gender differences in perceived job characteristics. Specifically, in Germany and Vietnam, female applicants rate work atmosphere and autonomy as more important job characteristics than male applicants. These findings are consistent with prior studies (Carvalho et al., 2018; Konrad et al., 2000). Moreover, work atmosphere is more important for female applicants in Vietnam, while female applicants in Germany place great importance on autonomy when making job choices. Interestingly, the gender gaps in work atmosphere and autonomy concerns among job applicants in Vietnam are smaller compared to those in Germany. This suggests that male and female applicants in Vietnam

perceive work atmosphere and autonomy as important job characteristics in similar ways. This can be attributed to Vietnam's progress in reducing the gender gap through improvements in education and legal frameworks that promote gender equality and non-discrimination, especially in the workplace. Additionally, Vietnam is characterized as a feminine and Asian culture where individuals focus on a good working relationship and flexibility offered by organizations when seeking prospective employers. However, the study's most surprising finding is the opposite gender differences in perceived career advancement as an important job characteristic among job applicants in Germany and Vietnam. In Germany, male applicants place more importance on career advancement, while the opposite is true for female applicants in Vietnam. This discrepancy could be attributed to cultural norms and social expectations regarding social roles (Matsumoto et al., 2008; Vilar et al., 2020). Specifically, Vietnam's cultural and social contexts are complex. Additionally, Vietnam is still a developing country where traditional gender roles are deeply ingrained in society. As a result, women in Vietnam often face significant challenges in career advancement due to cultural expectations and gender inequalities. Therefore, career advancement opportunities may hold greater significance for female job applicants in Vietnam as it represents a means to challenge traditional gender roles and achieve equal opportunities in the workplace.

6.1 Theoretical implications

This study contributes to international human resource management literature in two ways. First, our findings contribute to research on organizational attractiveness in the international context (Froese et al., 2010; Lievens et al., 2001; Newburry et al., 2014; Peltokorpi et al., 2019; Turban et al., 2001) by investigating differences in personal values and perceived job characteristics of future employers among job applicants from different countries (e.g., Germany, Vietnam) when making their job choices. Prior studies have aimed to understand individuals' expectations and personal values in the recruitment context, especially in applicant attraction (Egri & Ralston, 2004; Froese, 2013; Froese & Kishi, 2013; Harpaz et al., 2002; Tenhiälä et al., 2016), by investigating job applicants from both Western and Asian countries. However, most of these studies have primarily focused on large, developed, and technologically advanced countries, with limited attention given to emerging or fastest-growing economies in Southeast Asia, such as Vietnam. Our study builds upon this research

stream by providing empirical evidence that job applicants from Germany and Vietnam report on their personal values and preferences towards job characteristics in different ways when seeking prospective employers. Notably, job applicants from Germany score higher on work orientation and are less concerned with work atmosphere compared to applicants from Vietnam. Meanwhile, our findings indicate that career advancement opportunities are more important for job applicants from Vietnam when making their job choices. This result is surprising as Vietnam is typically considered a feminine society. These findings challenge the conventional understanding of individuals' behavior in feminine societies and suggest that traditional expectations may not always reflect individuals' actual experiences in such societies.

Second, our findings contribute to research on the gender gap in the international recruitment context (Heilman & Alcott, 2001; Konrad et al., 2000; Martins & Parsons, 2007) by investigating how male and female job applicants perceive and report on their personal values, as well as which job characteristics are important when they consider organizations as future employers across countries, namely Germany and Vietnam. Specifically, responding to the need for research on gender differences in individual characteristics and developing countries or Asian cultures (Harrison et al., 2006; Martins & Parsons, 2007; Weisberg et al., 2011), this study tested how gender enhances differences in personal values and perceived job characteristics of potential employers among job applicants within and between Germany and Vietnam. The current findings have found no significant gender differences in job applicants' personal values in Germany and Vietnam. Additionally, our findings have demonstrated that perceived job characteristics vary by gender among job applicants within and between these countries. For example, our findings show that in the eyes of female applicants in both Germany and Vietnam, work atmosphere and autonomy are more critical when making their job choice decisions. Moreover, female applicants in Vietnam prioritize work atmosphere and career advancement more than male-female applicants in Germany and male applicants in Vietnam.

6.2 Practical implications

Our findings are expected to be of practical value for multinational enterprises, mainly European enterprises, intending to do business in emerging and dynamic markets in Southeast Asia, e.g., Vietnam. More specifically, the current findings shed light on how personal values differ between job

applicants from Germany, an example of a developed country with Western culture, and Vietnam, a case of a rapidly growing emerging country with Asian culture. This may lead to differences in host country national applicants' perceptions and expectations. Notably, compared to job applicants in Germany, job applicants in Vietnam demonstrated a lower work orientation value. One can observe that job applicants in Germany and Vietnam will likely be attracted to organizations based on different organizational attributes that match their respective values (Ehrhart & Ziegert, 2005; Stevens, 1998; Wöhrmann, Fasbender & Deller, 2016). Thus, MNEs can leverage these insights to develop HRM practices and policies that are compatible with the Asian context and thereby attract and retain the right talent in Asian countries.

In addition, this study also provides an understanding of the importance of job characteristics for job seekers in international settings by comparing the perceived job characteristics of prospective employers among job applicants from Germany and Vietnam. The comparative findings indicate that job applicants in Germany and Vietnam place different levels of importance on certain job characteristics when considering prospective employers. Notably, despite belonging to a feminine society, job applicants from Vietnam are more concerned with career advancement opportunities offered by potential employers than those in Germany. Thus, we suggest that MNEs align their organizational characteristics or benefits systems with attributes valued by job applicants in Asia countries, such as Vietnam (Kim et al., 2012; Schneider, Goldstiein & Smith, 1995). Moreover, to leverage job characteristics effectively, MNEs can attract the target group of talent in Asia countries (e.g., Vietnam) by increasing the awareness of potential employees through job advertisements about the companies or company visits (Kim et al., 2012). Furthermore, the current findings also highlight differences in the perceived importance of job characteristics among male and female applicants across countries when making job choices. For instance, the perception of career advancement shows the opposite trends when comparing male and female applicants in Germany and Vietnam. As a result, organizations can leverage this finding to attract more female talent and enhance gender balance in their workforce (Kochan, Bezrukova, Ely, Jackson, Joshi, Jehn, Leonard, Levine & Thomas, 2003; Martins & Parsons, 2007).

6.3 Limitations and suggestions for future research

To better understand our findings, it is important to acknowledge the limitations of this study. First, our study only focuses on a comparison of job applicants from Germany and Vietnam, which limits the generalizability of our findings to the wider Asian context. We selected to study Germany and Vietnam because of their close historical and trading ties, but future research should examine personal values and job characteristics preferences across a broader range of Asian countries (Budhwar et al., 2016; Froese & Kishi, 2013; Jin & Rounds, 2012). Second, our study collected data from students who have yet to gain workforce experience and, thus, may have different perceptions compared to experienced job applicants (Froese et al., 2010; Froese, 2013). Therefore, future research could investigate how job seekers with different levels of experience perceive personal values and job characteristics (Peltokorpi et al., 2019; Turban et al., 2001). Third, this study involves a comparative analysis that aids in obtaining a better understanding of the perceptions of job applicants from different countries (Collins et al., 2011; Collins et al., 2013). However, this study has not investigated the effects of personal values on job decisions and employer attractiveness. Therefore, we suggest that future research should investigate these relationships. It would also be interesting to study the mechanism of personal values driving job candidates to match the job characteristics by investigating the moderating effects of cultural and individual differences (Brenner & Tomkiewicz, 1979; Elster & Gelfand, 2021; Johnson & Jackson, 2009). Fourth, digital transactions are booming in Asian countries such as China, Japan, Singapore, and Vietnam. The age of digitalization, with its technological innovation, will impact the high-skilled jobs and change the nature of work (OECD, 2019). Accordingly, acquiring the right new skills, such as coding skills, computing skills, etc., would help individuals to navigate the changing world of work successfully. Thus, it would be interesting to investigate the effects of technological skills on the personal values of job seekers and their evaluations of job characteristics.

Appendix A

Table A1: Items measuring personal values and job characteristics

Dimensions	Items
<i>Personal values</i>	
Risk aversion	When I choose an employer, I think carefully and do not take any risks.
	I prefer a secure job with a fixed salary rather than an insecure job where I earn a lot.
	I think that risks must be avoided as much as possible.
	I always play it safe, even if occasionally I miss a great opportunity.
	I am a cautious person who generally avoids risks.
Work orientation	I usually wait until the right opportunity comes, although sometimes it takes a long time.
	It is important for me to be the best, even if this makes me unpopular with other students.
	When I give everything in my study program, I am satisfied with myself.
	I am satisfied when I perform particularly well on tasks.
	It makes me satisfied when I get better solving a certain task.
	I like to work hard.
<i>Job characteristics</i>	I am happy when I get better.
	The work is pleasant and easy.
	I always do similar activities.
	I have enough free time.
	There are clear rules on how to do my job.
Work atmosphere	I have nice colleagues.
	I can make a career there.
	I can take over management duties later.
	I can work on important topics.
	I get an above-average salary.
Career Advancement	I can take responsibility and take risks.
	I can choose my own way of working.
	My work is interesting and challenging.
	I can bring in new and creative ideas.
Autonomy	I can work independently.
	I work on diverse tasks.

The Substitution Effect of International Experience for Firm Learning Sources in Internationalization: Does Country-level Social Connectedness Matter?

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The substitution effect of international experience for firm learning sources in internationalization: Does country-level social connectedness matter?

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Extended Abstract

This study investigates the substitution effect of international experience as a form of experiential learning for other firm learning sources in determining internationalization, including foreign ownership as congenital learning, manager experience as grafting, relationship with suppliers as vicarious learning, and R&D activity as searching. Additionally, we explore whether this substitution effect is contingent on social connectedness at the country level. Our analysis of 4992 firms across 41 countries demonstrates substantial support for most of our hypotheses. In the subsequent sections, we provide brief discussions concerning our findings.

Keywords: internationalization; firm learning; country social connectedness

1. Introduction

Built upon organizational learning theory, recent studies in international business (e.g., Bruneel et al., 2010; Casillas et al., 2015; Lafuente et al., 2021) have focused their attention on the interplay among firm learning sources, as conceptualized by Huber (1991), and how this interplay influences firm internationalization. On a related note, another research stream has highlighted that institutions may establish knowledge pools from which local firms can take advantage, thereby facilitating their internationalization (e.g., Kunczer et al., 2019; Yoo and Reimann, 2017).

As Lu et al. (2014) argue that the relationship between firm learning sources and internationalization is contingent upon certain country-level factors, we posit that the interplay between firm learning sources in influencing internationalization may also be contingent on country-level factors. However, our understanding of this issue remains limited. Therefore, this study addresses this gap by investigating the interplay between firm learning sources and how these interactions influence firm internationalization. Specifically, we theorize that firm international experience, as experiential learning, substitutes for foreign ownership as congenital learning, manager experience as grafting, relationships with suppliers as vicarious learning, and R&D activity as searching in determining firm internationalization.

Furthermore, our study proposes country-level social connectedness as an institutional factor that may influence the substitute effect of international experience. Social connectedness, referring to the collective ties linking individuals in one region with those in other regions, stimulates the formation of knowledge pools within institutions that firms can draw upon for benefits (Bailey et al., 2018; Diemer and Regan, 2021). The higher the country-level social connectedness, the more knowledge pools the country has, which may become the source of knowledge spillover for firms in internationalization. In this situation, the substitutive role of international experience become less important. Consequently, we postulate that the substitution effect of international experience is more pronounced in countries with lower levels of social connectedness.

2. Hypotheses development

2.1. The substitution effect of international experience for foreign ownership, manager experience, relationship with supplier, and R&D activity in determining firm internationalization

H1: International experience substitutes the roles of foreign ownership (H1a), manager experience (H1b), relationship with supplier (H1c), and R&D activity (H1d); such that the higher firm's level of international experience, the positive effect of foreign ownership (H1a), manager experience (H1b), relationship with supplier (H1c), and R&D activity (H1d) on firm internationalization diminish, vice

versa.

2.2. The role of country-level social connectedness as a contextual factor for the substitutive role of international experience

H2: Compared to a country with a higher level of social connectedness, the substitution effect of international experience for foreign ownership (H2a), manager experience (H2b), relationship with supplier (H2c), and R&D activity (H2d) is higher in a country with a lower level of social connectedness.

3. Methods and results

Regarding firm-level data, this study utilized the dataset sourced from the 2013 World Bank Enterprise Surveys (WBES). For the country-level data, two datasets were employed. The Facebook Social Connectedness Index (FSCI) was utilized to derive country-level social connectedness, while World Development Indicators (WDI) were employed to access GDP growth data. The final dataset for this study comprises 4992 firms spanning 41 countries. To measure export performance, this paper employed data from WBES, utilizing the ratio between export sales and total sales. The firm's international experience was computed by subtracting the year of the firm's first export, obtained from WBES data, from 2014. For foreign ownership, a binary variable was constructed from the WBES database; coded as 1 if private foreign individuals, companies, or organizations held a share in the firms and coded as 0 otherwise. Relationship with suppliers was quantified as the percentage of working capital financed through credit from suppliers. A dummy variable was employed for R&D activities; coded as 1 if firms allocated funds for research and development activities within the last three years, whether in-house or outsourced to other companies, and coded as 0 otherwise. At the country level, social connectedness was measured by aggregating the FSCI score across countries while excluding the within-country FSCI score. This study also incorporated various control variables, including firm size, firm age, firm location (where 1 represents firms in the capital city), industry dummies (where 1 represents firms in the manufacturing industry), and country GDP growth.

To test our hypotheses, a hierarchical regression model was employed. To account for heteroskedasticity, robust standard errors were utilized. For the comprehensive assessment of H1a-H1d, all interaction effects were incorporated into the full model (Model 4). To test H2a-H2d, Model 5 was introduced to present the full model in the subsample characterized by low country-level social connectedness, while Model 6 exhibited the full model in the subsample characterized by high country-level social connectedness. The results, as shown in Table 1 (Model 4) and our additional analysis (Figure 1a-1c), indicate that our findings suggested empirical support for H1a, H1b, and H1d, while no evidence supports H1c.

Additionally, the outcomes presented in Table 1 (Models 5 and 6) reveal that the substitutive effects of international experience, as hypothesized within H1a-H1d, are present only within the subsample characterized by low levels of country-level social connectedness. A Chow test was conducted to check the statistical significance of the differences between coefficients in the low and high country-level social connectedness subsamples. The outcomes of this test lend more substantial support for H2a, H2b, H2c, and H2d.

4. Discussion

This study contributes to the literature in two significant ways. Firstly, it enhances the understanding of organizational learning and institutional theory in international business literature. Previous studies have been focused on investigating the relationship between firm learning interactions and firm internationalization (e.g., Bruneel et al., 2010; Casillas et al., 2015; Lafuente et al., 2021), as well as how institutions provide knowledge pools to facilitate firm internationalization (e.g., Kunczer et al., 2019; Yoo and Reimann, 2017). Nevertheless, to the best of our knowledge, this study stands as the pioneer in examining the role of institutions as contingent factors that determine the nexus between firm learning interactions and firm internationalization. Secondly, our work extends the emerging research stream on social connectedness (Bailey et al., 2018; Diewer and Regan, 2021) by introducing a nuanced perspective on how country-level social connectedness might create knowledge pools that prove advantageous for firms engaged in internationalization.

5. References

- [1] Bailey, M., Cao, R., Kuchler, T., Stroebe, J., & Wong, A. (2018). Social connectedness: Measurement, determinants, and effects. *Journal of Economic Perspectives*, 32(3), 259-280.
- [2] Bruneel, J., Yli-Renko, H., & Clarysse, B. (2010). Learning from experience and learning from others: How congenital and interorganizational learning substitute for experiential learning in young firm internationalization. *Strategic entrepreneurship journal*, 4(2), 164-182.
- [3] Casillas, J. C., Barbero, J. L., & Sapienza, H. J. (2015). Knowledge acquisition, learning, and the initial pace of internationalization. *International Business Review*, 24(1), 102-114.
- [4] Diemer, A., & Regan, T. (2022). No inventor is an island: social connectedness and the geography of knowledge flows in the US. *Research Policy*, 51(2), 104416.
- [5] Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization science*, 2(1), 88-115.
- [6] Kunczer, V., Lindner, T., & Puck, J. (2019). Benefitting from immigration: The value of immigrants' country knowledge for firm internationalization. *Journal of International Business Policy*, 2, 356-375.
- [7] Lafuente, E., Vaillant, Y., Alvarado, M., Mora-Esquivel, R., & Vendrell-Herrero, F. (2021). Experience as a catalyst of export destinations: the ambidextrous connection between international experience and past entrepreneurial experience. *International Business Review*, 30(1), 101765.
- [8] Lu, J., Liu, X., Wright, M., & Filatotchev, I. (2014). International experience and FDI location choices of Chinese firms: The moderating effects of home country government support and host country institutions. *Journal of International Business Studies*, 45, 428-449.
- [9] Yoo, D., & Reimann, F. (2017). Internationalization of developing country firms into developed countries: The role of host country knowledge-based assets and IPR protection in FDI location choice. *Journal of International Management*, 23(3), 242-254.

Appendix

Table 1. Hierarchical regression estimates of firm internationalization

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Full sample	Full sample	Full sample	Full sample	Low country-level social connectedness	High country-level social connectedness
Age	-.125*** (.03)	-.129*** (.032)	-.532*** (.042)	-.536*** (.042)	-.657*** (.056)	-.24*** (.056)
Size	.012*** (.001)	.011*** (.001)	.01*** (.001)	.01*** (.001)	.009*** (.001)	.008*** (.002)
Location	-2.088* (1.117)	-2.172* (1.126)	-2.771** (1.094)	-2.808** (1.094)	-2.053 (1.388)	-2.693 (1.692)
Industry	6.84*** (1.106)	6.809*** (1.101)	6.74*** (1.073)	6.695*** (1.073)	6.786*** (1.376)	3.543** (1.708)
Country GDP growth	-.343** (.173)	-.35** (.172)	-.319* (.169)	-.292* (.169)	.124 (.197)	-2.05*** (.346)
Foreign ownership (FO)		8.469*** (1.441)	8.194*** (1.41)	12.383*** (2.477)	17.73*** (3.382)	4.561 (3.276)
Manager experience (ME)		.089* (.049)	.007 (.049)	.122 (.078)	.177* (.098)	-.003 (.117)
Relationship with supplier (RS)		-.085*** (.024)	-.076*** (.024)	-.02 (.041)	.041 (.056)	-.098* (.052)
R&D activity (RND)		-1.053 (1.098)	-.988 (1.074)	2.746 (1.852)	7.313*** (2.653)	1.784 (2.552)
International experience (IE)			1.008*** (.068)	1.377*** (.146)	1.875*** (.183)	.494*** (.175)
FO*IE				-.307** (.153)	-.375* (.217)	-.052 (.188)
ME*IE				-.008* (.004)	-.016*** (.006)	.005 (.005)
RS*IE				-.004 (.003)	-.007* (.004)	.002 (.004)
RND*IE				-.257** (.114)	-.351** (.162)	-.18 (.147)
Constant	32.256*** (1.257)	30.505*** (1.509)	26.454*** (1.526)	21.481*** (2.179)	17.511*** (2.694)	28.817*** (3.315)
Observations	4992	4992	4992	4992	3526	1466
R-squared	.042	.052	.099	.102	.125	.069

Robust standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$



Figure 1. Interaction effects of international experience and foreign ownership (a), manager experience (b), and R&D activity (c) on firm internationalization

Exploring the Dark Side of Trust: The Role of Cognitive and Affective Trust

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Exploring the Dark Side of Trust: The Role of Cognitive and Affective Trust

ABSTRACT

Previous research has predominantly focused on the positive benefits of trust, although it is acknowledged that trust can also lead to risks from misattributed trust. The main aim of this study is to explore the impact of cognitive and affective trust and investigate whether these two dimensions of trust exhibit distinct effects on promoting unethical behaviors that benefit the organization. This study uses multiple regression analysis to test the hypotheses in a sample of 333 employees from Taiwanese hospitality industry. The findings indicate that a high level of cognitive trust is positively and insignificantly associated with the intention of engaging in unethical pro-organizational behavior. Cognitive trust is based on a rational assessment of supervisors' abilities and integrity, which in turn leads to a rejection of unethical behaviors. In contrast, affective trust is found to be more likely to promote unethical pro-organization behavior. The study reveals that building affective trust fosters a strong emotional attachment to the supervisor/organization and reduces defensiveness against engaging in unethical pro-organizational behavior compared to cognitive trust. In essence, when trust becomes entrenched in employee-supervisor relationships, social exchanges and deep bonds of affective indebtedness may give rise to the dark side of trust, ultimately supporting unethical pro-organizational behavior.

Keyword: Social Exchange Theory, Cognitive Trust, Affective Trust, Misattributed Trust, Unethical Pro-organization Behavior.

1. Introduction

Trust has been shown to be a valuable element for reducing uncertainty in unfamiliar environments and yielding positive outcomes, such as cooperation (e.g., Jones & George, 1998; McAllister, 1995; Chen, Waseen, Xia, Tran, Li, & Yao, 2021), effective leadership (e.g., Boies, Fiset, & Gill, 2015; Islam, Furuoka, & Idris, 2021), and coordinated organizational behavior (e.g., Thompson, 2018; McEvily, Perrone & Zaheer, 2003). However, it is important to recognize that excessive trust can become a target for exploitation by individuals who opportunistically or strategically take advantage of trust (Schoorman, Wood, & Breuer, 2015; Yip & Schweitaer, 2015). Extensive literature not only highlights the benefits of trust but also underscores its potential for enabling exploitation and predation (Skinner, Dietz, & Weibel, 2014; Yip & Schweitaer, 2015). When trust takes a darker turn, the risks associated with misattributed trust may lead to exploitation (Cropanzano, Anthony, Daniels, & Hall, 2017; Skinner et al., 2017) and amoral manipulation (Dahling et al., 2009; Greenbaum, Hill, & Mawritz, 2017).

The ethical decision-making process within organizations is influenced by both individual and organizational factors. This is particularly relevant when examining the intentions behind ethical or unethical behavior (Dennerlein & Kirkman, 2022; Ferrell et al., 2011). In organizational settings, individuals often lack the freedom to make ethical decisions independently due to various pressures, as they rely on others to achieve personal and organizational goals (Lee, Schwarz, Newman, & Legood, 2017). Umphress et al. (2010) found that highly identified employees who strongly believe in reciprocity may engage in unethical pro-organizational behavior. For instance, employees may be asked to knowingly sell an inferior product, deceive customers to make sales for the company, or falsify reports to portray the organization as more financially stable than it actually is. These behaviors involve disregarding moral standards and are committed with the purpose of benefiting the organization's goals (Lee et al., 2017; Thompson, 2018; Umphress & Bingham, 2011). Viewed through the lens of social exchange theory, when one party provides a benefit, the other party is motivated to reciprocate by providing a benefit in return (Blau, 1964). Therefore, when employees trust their supervisors or organization, they may be more inclined to behave unethically for the benefit of the supervisor or organization. Umphress et al. (2010) demonstrated that individuals or organizations may exploit positive reciprocal relationships

and organizational identification to request employees' cooperation in benefiting the organization. As a result, the risk of trust-driven unethical behavior increases, especially in the process of ethical judgment (Skinner et al., 2014). Prior research has extensively investigated how positive social exchange relationships motivate ethical behavior, such as job performance and extra-role behavior (Cohen-Charash & Spector, 2001). However, there are limited conceptual models presented in the organizational literature that illustrate how social exchange relationships and trust can motivate unethical behaviors intended to benefit the organization.

Trust is a crucial factor for fostering stable working relationships and enhancing organizational performance. Previous research has primarily focused on the benefits of trust, but some studies have also pointed out the potential risks associated with misattributed trust (Xu & Wang, 2020). However, there seems to be a significant gap in understanding the connection between trust relationships and unethical pro-organizational behaviors, which has been somewhat neglected in the literature. Lewicks et al. (2006) have emphasized that both cognitive and affective elements of trust should be considered together in the trust development process. In light of this perspective, our study aims to explore and ascertain the potential influence of psychological aspects of trust on unethical pro-organizational behaviors. Building on the foundation provided by previous studies (Chen et al., 2021; Yip & Schweitaer, 2015), we propose that examining both cognitive and affective elements in the trust development is crucial. It is worth noting that many authors have not explicitly specified the dimensionality of trust or how trust may facilitate unethical pro-organizational behaviors over time. Therefore, our study seeks to address this gap and investigate whether cognitive and affective trust indeed play significant roles in promoting unethical pro-organizational behaviors. By delving into these aspects, we aim to contribute valuable insights to the understanding of the complex relationship between trust and unethical behaviors within organizational contexts.

2. Theory and hypotheses development

The social exchange theory emphasizes the pivotal role of trust in developing and strengthening exchange relationships by reducing uncertainty about reciprocity and fostering a sense of obligation (Blau, 1964). According to Morgan and Hunt (1994), trust arises from

the reliability of exchange partners, with no opportunistic behavior present between them. Additionally, Lewis and Weigert (1985) offer a sociological perspective of trust as a property of collective units rather than isolated individuals, highlighting its association with social relationships. From a psychological aspect, trust is defined as the willingness to accept vulnerability and positive expectations regarding the intentions, motivations, and behavior of another party (Lewick et al., 2006; Mayer et al., 1995; McAllister, 1995; Rousseau et al., 1998). Mayer et al. (1995) elaborate on trust as the willingness of a party to be vulnerable to the actions of another, based on the expectation that the other party will act in a way important to the trustor, regardless of monitoring or control. This notion of trust involves assessments of high ability, benevolence, and integrity in the trusted party (Mayer et al., 1995). In summary, trust encompasses two essential concepts: vulnerability and positive expectations, leading to a feeling of security based on the belief that the behavior of one party is guided by favorable and positive intentions toward the other (Lewick et al., 2006).

Existing literature provides at least three approaches to define and conceptualize trust: (1) trust as a unidimensional concept of confident, positive expectations (Blau, 1964); (2) trust as a multidimensional concept of confident, positive expectations (e.g., Lewicki & Bunker, 1995; Lewis & Weigert, 1985; McAllister, 1995); and (3) trust as the willingness to be vulnerable (e.g., Mayer et al., 1995; Rousseau et al., 1998). McAllister (1995) introduces two dimensions of trust: cognitive and affective. Similarly, Lewicki and Bunker (1996) distinguish identification-based trust (affective) and knowledge-based trust (cognitive). Affect-based trust is rooted in emotional investments, genuine care, and an understanding of reciprocated sentiments, while cognition-based trust is built on a track record of dependability, reliability, and professionalism. Applying Mayer et al.'s (1995) definition of trust, we summarize the trustworthiness of supervisors into three factors: ability, integrity, and benevolence. Ability refers to supervisors possessing skills and competencies in a specific domain. Integrity implies a belief in a supervisor's adherence to acceptable principles. Benevolence involves the perception of a supervisor's positive orientation toward others. Cognitive trust encompasses beliefs in the supervisor's competence and reliability (McAllister, 1995), with ability and integrity falling within its domain. On the other hand, benevolence belongs to the affective dimension, reflecting beliefs about the supervisor's care and concern for employees (McAllister, 1995).

2.1 Cognitive and Affective trust

Lewis and Weigert (1985) defined cognitive trust as a trust based on a cognitive process, where individuals make rational assessments of the trustworthiness of a person or institution. It reflects a customer's confidence in relying on another party's competence and reliability (Moorman et al., 1992; Chen et al., 2021). Cognitive trust is built on accumulated knowledge that allows individuals to predict with some level of confidence whether the other party will meet their expectations. This form of trust is performance-based and relies on rationality as the basis for trusting the other party (Chen et al., 2021; Erdem & Ozen, 2003). Being objective in nature, cognitive trust is determined through a rational process that assesses whether the other party in the relationship can be trusted (McAllister, 1995). In this study, we argue that cognitive trust represents the confidence to rely on another party's ability and integrity.

From a sociological perspective of trust, affective trust is seen as emotional attachment to all individuals involved in the relationship (Lewis & Weigert, 1985). It reflects the confidence one places in a partner based on the feelings generated by the level of care and concern demonstrated by the partner (McAllister, 1995). Affective trust is emotionally based and characterized by the perceived strength of the relationship and the sense of security felt within it (Lewis & Weigert, 1985; McAllister, 1995). The essence of affective trust lies in reliance on a partner based on emotions. As emotional connections deepen, trust in a partner may go beyond what can be justified by accumulated knowledge (Chen et al., 2014). This emotional aspect of trust makes the relationship less transparent to objective risk assessments prescribed by economists. Lewicki et al. (2006) emphasize the importance of affective trust in the mature phase of a relationship, while cognitive trust is crucial in the early stages of the relationship lifecycle. Affective trust is present in all relationships but is more pronounced in close interpersonal relationships (Lewis & Weigert, 1985). In this study, we define affective trust as an emotion-driven element of trust closely related to psychological safety, emotional connections, and genuine care and concern.

2.2 Unethical pro-organizational behavior

Unethical behavior is a prevalent and costly issue within work organizations (Jones & Kavanagh, 1996; Umphress & Bingham, 2011; Zhang, 2020). Extensive documentation

shows that individuals at all levels of organizations engage in activities such as stealing company property, deceiving customers, defrauding the government, and violating psychological contracts (Vardi & Weiner, 2005), encompassing a wide range of minor to major transgressions. Kish-Gephart, Harrison, & Trevino (2010) identify three key factors contributing to unethical behavior: individual characteristics, the nature of the ethical issue, and the organizational environment. Ebrahimi (2017) further explores individual differences and moral disengagement to understand why employees may exhibit unethical behavior within an organizational context. The findings highlight the significance of considering individual personality traits, reasoning skills, and emotional disposition when examining undesirable workplace behaviors. Additionally, research indicates that employees may engage in unethical actions to benefit themselves, retaliate against the organization, or harm coworkers (Umphress et al., 2010).

Vardi and Weitz (2005) proposed a model of unethical behavior centered around the intention of deviant actions, which they term "organization misbehavior." Within this model, they identify three facets of organizational misbehavior: (1) acts intended to benefit oneself, (2) acts intended to be destructive to others or the organization, and (3) acts intended to benefit the organization, referred to as "unethical pro-organizational behavior" (Umphress et al., 2010). According to Hoyk and Hersey (2009), organizations may either overlook or accept unethical behavior, effectively endorsing the viewpoint of unethical pro-organizational behavior. Drawing on behavioral ethics (Brief et al., 2001; Vardi & Weitz, 2005), individuals may engage in unethical pro-organizational behavior as a means to assist the organization in some way. From the perspective of trust in new venture teams, entrepreneurs' greed may be more likely to be linked to unethical pro-organizational behavior (Tacke, Knockaert, Patzelt, & Breugst, 2022). Consistent with theoretical work, this study focuses on how unethical pro-organizational behavior is intertwined with self-interested views of unethical behavior (Vardi & Weitz, 2005). Thus, our conceptualization of unethical pro-organizational behavior differs from work-related actions involving errors, mistakes, or unconscious negligence, as employees may engage in unethical behavior without a specific aim to benefit or harm. Tang, Yam, and Koopman (2020) argue that unethical pro-organizational behavior has a paradoxical nature that can evoke ambivalent emotional reactions, with implications for subsequent behavior. On one hand, because it benefits one's organization, employees may experience

feelings of pride. However, due to its unethical nature, it may also trigger feelings of guilt. Although employees may intend to assist organizations by engaging in unethical behaviors, the final results of their actions may deviate from their original intentions. Unethical pro-organizational behaviors in this study encompass acts of deception (e.g., manipulating numbers to boost analyst projections or sales, altering expiration dates to reduce food costs), lying to customers (e.g., promoting pre-sell meal tickets before revealing company finance crises), and omission (e.g., withholding information about the hazards of food and beverage products). Furthermore, these behaviors are neither specified in formal job descriptions nor ordered by superiors but are undertaken to benefit or assist the organization. This study is distinctive in its focus on how positive exchange expectations between employees and supervisors can foster unethical behavior intended to benefit the organization (Umphress & Bingham, 2011; Umphress et al., 2010; Vardi & Weitz, 2005; Wang, Long, Zhang, & He, 2019). By exploring the dimension of trust and its connection to unethical behaviors, we aim to gain valuable insights into the dynamics of unethical pro-organizational behavior within organizational settings.

Based on Mayer et al.'s (1995) definition, employees tend to trust their supervisors more when they perceive them to possess high ability, benevolence, and integrity. Employees are more likely to place trust in supervisors who demonstrate the ability to effectively execute important projects, exhibit benevolent behaviors, and maintain a track record of integrity. It can be observed that the conditions fostering cognitive trust, such as an individual's competence and reliability, align with the ability and integrity components of trustworthiness as described by Mayer et al. (1995). Cognitive trust involves a rational inference made by employees based on their assessment of the supervisors' behavior in terms of ability and integrity. In interpersonal trust relationships, people are not eager to be vulnerable, especially in situations where behavior is purposeful, active, intentional, and reasoned. Vulnerability arises when the trustor faces external threats that could potentially lead to adverse effects, giving rise to and comprising "risk" (Mayer et al., 1995; Haimes, 2006; Schoorman et al., 2015). However, the supervisor-employee relationship is characterized by certain asymmetries, with the supervisor having higher status, more power, information, and control. Considering the risks stemming from misattributed trust, McAllister (1997) found that supervisors may exploit the susceptibility of trust relationships and abuse employees.

Employees with high cognitive trust make the decision to trust based on a knowledgeable assessment of the supervisor's trustworthiness. Cognitive trust implies an endorsement of the supervisor's ability and integrity, whether in general terms or within a specific social network (Cropanzano & Mitchell, 2005). It represents a psychological contract of reciprocal obligations between the employee and supervisor in a relationship (Lee et al., 2017; Rousseau et al., 1998). A surprising implication of examining unethical behavior within the context of social exchange, as we do here, is that employees may reciprocate positive exchange relationships with their employers by engaging in unethical pro-organizational behaviors (Umphress & Bingham, 2011; Umphress et al., 2010; Wang et al., 2019). Employees may view unethical pro-organizational behaviors, such as protecting the organization by deceiving customers, withholding refunds, or promoting unsafe products, as a way to reciprocate positive social exchange relationships with their employer. This leads us to propose the following hypothesis:

H 1: There is a positive relationship between cognitive trust and unethical pro-organizational behavior.

Affective trust is characterized by a deep emotional bond that arises from one's own feelings and understanding of the other person's emotions and intentions. In the context of supervisors and employees, affective trust is nurtured when supervisors express genuine care and concern for the well-being and career development of their employees. Experiencing affective trust provides a sense of reassurance and comfort, fostering positive emotions and a feeling of security in trusting someone (Lewicki et al., 1998). The conditions that lead to affective trust are rooted in employees' perceptions of their supervisors' genuine care and concern, which aligns with the benevolence component of trust. When employees feel that their supervisors sincerely care for them, this benevolence can offer a sense of comfort that helps alleviate unrelated uncertainties (Mayer et al., 1995). In situations where employees have no specific goals at stake, there is a reduced risk of negative outcomes (Haimes, 2006). Moreover, trust, whether being trusted or trusting others, can alleviate feelings of anxiety, fear, embarrassment, and even shame and humiliation (Lewicki et al., 1998). However, when supervisors need to take actions that may benefit the organization but contradict the intentions of employees, such as engaging in unethical pro-organizational behavior (Ebrahimi, 2017; Shaw & Liao, 2021), the affective bond between employees and supervisors may lead to a

reduced sense of defensiveness against participating in such actions (Chen et al., 2014; Tacke et al., 2022; Xu & Wang, 2020). Therefore, we propose the following hypothesis:

H2: There is a positive relationship between affective trust and unethical pro-organizational behavior.

3. Methodology

3.1. Data collection and sample

The questionnaire consisted of several variables, including background information, cognitive trust, affective trust, and unethical pro-organizational behavior. Participants responded to the items using a seven-point Likert scale, ranging from "strongly disagree" to "strongly agree." To gather data, we selected a sample of employees from 28 hotels and restaurants in Taiwan. The participants received the questionnaires and were instructed to complete them in a self-administered manner. They were then asked to return the completed questionnaires directly to the research team. Out of the 398 questionnaires received, 65 were found to be incomplete, leaving us with 333 valid questionnaires, representing an impressive response rate of 83.7%. It is important to note that the survey was originally prepared in English and later translated into Chinese to ensure the understanding and accuracy of responses.

3.2. Measurement

Unethical pro-organizational behavior was assessed with six-item measures developed by Umphress et al. (2010), with small adjustment made to indicate hotel and restaurant as the target organization. Items assessed respondents' agreement of their willingness to perform unethical pro-organizational behaviors. These measures demonstrate the acceptable levels of reliability (refer Table 1).

Cognitive and affective trusts were borrowed from McAllister (1995) scale items into restaurant industry to measure cognitive and affective trust. Five items were used to measure cognitive trust. Five items were used to measure affective trust, including one reversed item. The measures of cognitive and affective trust demonstrate acceptable levels of reliability, with alphas of 0.901 and 0.865, respectively.

Control variable Although many variables may help explain unethical pro-organizational behavior, it is not possible to include them all. This study includes six control variables of demographic that relate to unethical pro-organizational behaviors at the organizational level in the model. Based on the literature, gender (1= male, 2= female), age (1= up to 25 years; 2= more than 25 and up to 40; 3= more than 40 and up to 55; 4= more than 55 and up to 70; 5= 70 and older), tenure (1= up to 1 year; 2= more than 1 and up to 3 years; 3= more than 3 and up to 5 years; 4= more than 5 and up to 10 years; 5= 10 years and above) and social characteristics (e.g., income class, job position, education) could convey with our dependent variables (Buccioli et al., 2013; Kish-Gephart et al. 2010).

Insert Table 1 here

3.3. Validity and reliability of measures

We analyzed the data using a two-step approach (Anderson & Gerbing, 1988). First, we conducted a confirmatory factor analysis (CFA) to determine whether the measured variables reliably reflected the hypothesized latent variables. Second, we performed path analyses to determine the overall model fit, significance of the path coefficients, and explanatory power (R^2). Following Anderson and Gerbing's (1988) work, this study assesses the usefulness of its measures by assessing their reliability and validity. Reliability was evaluated using Cronbach's alpha; an inspection of the alpha coefficients revealed that all items are greater than 0.70 (see Table 1). CFA was used to verify the validity of the measures. Convergent validity concerns whether multiple measures of the same construct are in agreement. In CFA, convergent validity is evaluated by the significance of each standardized coefficient loading and squared multiple correlations (SMC). According to Anderson and Gerbing's (1988) study, CFA revealed that all standardized factor loadings passed the significance test; however, those that had standardized factor loadings less than 0.5 were eliminated from the measurement model. Consequently, no scale item needed to be deleted in order to improve the model fit. The convergent validity of the scales was supported because the standardized factor loadings and SMC were significant ($t > 7.348$, $p < 0.001$). To assess discriminant validity, the square root of the average variance extracted (AVE) in each construct is compared to the correlation coefficients between two constructs. The AVE estimates for all scales were between 0.773 and 0.797, indicating adequate discriminant validity (see Table 1).

4. Results

Respondents were asked to use the scale to rate the extent to which they agreed with each item on the questionnaire. The demographic profile showed that 48.3% of respondents were males and 51.7% were females. Approximately 75.2% were aged between 20 and 40 years. The majority of the respondents (73.4%) were highly educated, holding at least a college degree. The average monthly income per person was \$30,000 NT (approximately \$1,000 US). In terms of job position, the largest group in the distribution (51.7%) was service job, 7.5% manager, 9.4% bar tender and 10.0% were chefs. The average tenure was more than 1 year and up to 3 years (31.7%) and 15.4% were over 5 years.

4.1. *The structural model*

The χ^2 fit was 286.04, with 116 degrees of freedom ($p < 0.000$). The goodness-of-fit index (GFI) was 0.91 (>0.9), the root mean square residual (RMSR) was 0.08 (<0.08), and the comparative fit index (CFI) was 0.95 (>0.9). Given the sample size and the number of indicators, all of these statistics confirm the overall measurement quality (Hair *et al.*, 2006). All structural path estimates were significant at the 0.01 level, where the signs of all structural paths were consistent with the hypothesized relationships among the latent constructs (see Table 1).

4.2. *Hypotheses testing*

To consistently test the presented hypotheses, a confirmatory forced entry multiple regression analysis approach was used to identify statistically significant models at the 0.05 level of significance. We tested two regression models. The first included the unethical behavior for direct effects and then entered control variables, followed by cognitive and affective trust in the second model. Table 2 presents means, standard deviations, and zero-order correlations. Variance inflation factors (VIFs) were used to examine the effect of multicollinearity. The lowest observed VIF equaled 1.07 and the highest equaled 2.08, both of which fall within acceptable limits (Hair, Anderson, Tatham, & Black, 2006). The correlations suggest that multicollinearity is not a serious concern, and thus permit the use of multiple regression analysis to test the hypotheses.

Insert Table 2 here

Table 3 presents the results of the multiple regression analysis. To assess the

hypothesized relationships, we tested two models. In Model 1, we employed gender, age, tenure, income, education and job position as control variables. Although the gender effect was weakly significant ($\beta = 0.144, p < 0.001$), age, tenure, income ($\beta = -0.232, p < 0.001$), education, and job position did not affect unethical behavior. Model 2, in Table 3, examined the effect of cognitive and affective trust on unethical pro-organizational behavior. The coefficient for cognitive trust was positive and significant ($\beta = 0.166, t = 1.956, p > 0.05$), indicating that cognitive trust has a positively but non-significantly impact on unethical pro-organizational behavior. This result indicates that the hypothesis 1 linking cognitive trust to unethical pro-organizational behavior is not supported. Model 2 also presents the effects of affective trust on unethical pro-organizational behavior. This model is significant ($\beta = 0.257, t = 3.046, p < 0.001$) and yields an R^2 of 0.38. The positive and significant coefficient of affective trust indicates that supervisors are able to pay sincerely care and concern on employees, which in turn gain supporting on unethical pro-organizational behaviors. Accordingly, this result strongly supports hypothesis 2.

Insert Table 3 here

5. Discussions and managerial implications

5.1. Discussions

Using a survey approach, we conducted an empirical investigation to explore the potential relationship between employees' cognitive and affective trusts and unethical pro-organizational behavior. However, our regression analysis results regarding cognitive trust were unexpected, as we found that a high level of cognitive trust was positively but not significantly related to the intention of engaging in unethical pro-organizational behavior. Consequently, Hypothesis 1 was not supported, suggesting that strong cognitive trust alone does not drive employees to endorse unethical practices within the organization. Cognitive trust, being a rational assessment of supervisors' ability and integrity, may prompt employees to consider ethical aspects more consciously in their decision-making process. It is worth noting that integrity is a crucial determinant of cognitive trust, and when supervisors promote unethical pro-organizational behavior that violates integrity, employees with high cognitive

trust may face an ethical dilemma and strengthen their intrinsic defenses to protect themselves from potential psychological risks associated with trusting supervisors (McAllister, 1995).

In contrast, our study revealed a significant relationship between affective trust and unethical pro-organizational behavior. The results indicate that emotional attachment provides a powerful social context in which individuals, motivated by positive reciprocity principles, may feel compelled to help their organization through unethical behavior. Thus, building affective trust may lead to a stronger emotional attachment to supervisors/organization and a reduced sense of defensiveness towards unethical pro-organizational behavior compared to cognitive trust (McAllister, 1995; Umphress & Bingham, 2011). Accordingly, affection-based trust appears to unlock the potential for unethical behavior by instilling employees with greater confidence in the benevolence and genuine care of their supervisors. In such situations, when trust becomes locked into the relationships of authority, and the use of social exchanges and deep bonds of affective indebtedness may contribute to the dark side of trust, further supporting unethical pro-organizational behavior (McAllister, 2007; Skinner et al., 2017; Tacke et al., 2022). These findings underscore the complex nature of trust and its implications for organizational behavior, especially in the context of unethical actions.

This research contributes significantly to the existing literature by expanding our understanding of unethical behavior in organizational settings. While prior studies have predominantly focused on unethical behavior being driven by self-serving motives (Kish-Gephart et al., 2010; Tacke et al., 2022), our research highlights that employees may also engage in unethical actions to benefit their organization (Umphress & Bingham, 2011; Umphress et al., 2010). Moreover, our study emphasizes the pivotal role of affective trust relationship between employees and supervisors as a powerful catalyst for pro-organizational unethical behavior. Unlike previous research, which primarily relied on one-dimensional trust constructs (Graham et al., 2015; Umphress & Bingham, 2011), our study adopts a novel approach by quantitatively examining both cognitive and affective measures of trust. By doing so, we provide a more comprehensive understanding of how trust operates in influencing unethical behavior. Despite the literature advocating the consideration of both affective and cognitive trust, only limited attention has been given to how cognitive trust can impact employees' ethical decision-making process. Our research fills this gap and sheds light

on the intricate interplay of trust dimensions in the context of unethical pro-organizational behavior.

5.2. Managerial implications

This article presents a unique perspective on trust, viewing it not only as a driver of performance through cooperation but also as a crucial factor influencing unethical behavior. By adopting McAllister's (1995) differentiation of trust into cognitive and affective components, this study delves deeper into the trust dynamics between employees and supervisors. Drawing from social exchange theory, we define trust development as a result of the benefits and reciprocal behaviors arising from social exchange relationships (Blau, 1964). Our findings emphasize that the trust relationship between employees and supervisors significantly impacts employees' inclination towards engaging in unethical behavior, particularly when trust fosters social exchange benefits and reciprocation. However, it is important to recognize that unethical activities involve risk, uncertainty, and potential failures on the path to success. Most individuals tend to be risk-averse and hesitant to participate in unethical conduct (Kish-Gephart et al., 2010; Tang, Chen, & Sutarso, 2008; Xu, Wang, Zhu, 2019). Yet, our study demonstrates that when supervisors genuinely care for their employees and display benevolence, it becomes challenging for employees to reject engaging in unethical pro-organizational behavior. Consequently, while such trust dynamics may seem advantageous to the organization in the short term, they could pose a significant threat to long-term competitive advantage.

Furthermore, it is worth noting that affective trust plays a crucial role in shaping the nature and strength of high-quality *guanxi*, especially in the context of Chinese workplace relationships (Chen et al., 2009). In Taiwan, our findings suggest that fostering affective trust may help employees avoid the risk of exclusion and strengthen their organizational identification (Umphress & Bingham, 2011). As proposed by Thau et al. (2015), the risk of exclusion from one's group can motivate individuals to engage in unethical behaviors that enhance their interpersonal relationships and social exchange outcomes. This effect is driven by those at risk of exclusion seeking to improve their inclusionary status by resorting to unethical actions that benefit organizational identification (Thau et al., 2015). In light of these insights, organizations should be cautious in leveraging trust dynamics between supervisors

and employees to encourage pro-organizational behavior. While trust can foster cooperation and performance, it can also inadvertently lead to unethical conduct if not managed carefully. Encouraging affective trust should be balanced with promoting ethical decision-making and integrity within the organization. Leaders should establish clear ethical guidelines and emphasize the importance of upholding ethical principles to avoid potential ethical dilemmas in the long run. By maintaining a focus on ethical behavior and fostering a positive organizational culture, organizations can navigate the delicate balance between trust and unethical pro-organizational behavior, thus securing their long-term success and reputation.

This study highlights that the limited impact of cognitive trust on unethical behavior suggests that when employees harbor doubts about their supervisors' ability and integrity, they may be hesitant to trust them, fearing that doing so might be detrimental to their own interests. This finding underscores the importance of instilling a sense of vigilance in employees by encouraging them to voice their suspicions before making decisions. By promoting a culture of open communication and transparency, organizations can empower employees to notice and address unethical behavior. Organizational decision-makers should not overlook the significance of monitoring and addressing unethical acts and their potential consequences. Understanding the underlying motivations behind employees' engagement in unethical behavior is crucial for devising effective strategies to reduce and eliminate such behavior. Managers play a pivotal role in shaping the organizational culture, and they should strive to cultivate an environment that discourages employees from engaging in unethical actions even if they believe they are doing so for valid reasons (Umphress & Bingham, 2011). Ensuring that their own behavior aligns with ethical standards sends a powerful message to employees and reinforces the importance of ethical conduct within the organization.

5.2. Conclusions

In conclusion, this research emphasizes the need for organizations to be proactive in fostering a culture that values ethical behavior and encourages employees to voice their concerns. By promoting trust and transparency, and by holding themselves to high ethical standards, managers can create an environment where unethical behavior is less likely to occur. Addressing unethical behavior and promoting ethical conduct will ultimately contribute to a more ethical and successful organization.

Reference

- Anderson, J. C. & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103 (3), 411-423.
- Blau, P. M. (1964), *Exchange and power in social life*, Wiley, New York, NY.
- Brief, A. P., Buttram, R. T., & Dukerich, J. M. (2001). Collective corruption in the corporate world: Toward a process model. In M. E. Turner (Ed.), *Groups at work: Theory and research: Applied social research* (pp. 471–499). Mahwah, NJ: Erlbaum.
- Bisel, R. S., Kelley, K. M., Ploeger, N. A., & Messersmith, J. (2011). Workers' moral mum effect: On facework and unethical behavior in the workplace. *Communication Studies*, 62(2), 153-170.
- Boies, K., Fiset, J., & Gill, H. (2015). Communication and trust are key: Unlocking the relationship between leadership and team performance and creativity. *The Leadership Quarterly*, 26(6), 1080-1094.
- Buccioli, A., Landini, F., & Piovesan, M. (2013). Unethical behavior in the field: Demographic characteristics and beliefs of the cheater. *Journal of Economics Behavior and Organization*, 93, 248-257.
- Chen, X. P., Eberly, M. B., Chiang, T. J., Farh, J. L. & Cheng, B. S. (2014). Affective trust in Chinese leader linking paternalistic leadership to employee performance. *Journal of Management*, 40 (3), 796-819.
- Chen, Y., Friedman, R., Yu, E., Fang, W., & Lu, X. (2009). Supervisor-subordinate *Guanxi*: Developing a three-dimensional model and scale. *Management and Organization Review*, 5: 375-400.
- Chen, S., Waseen, D., Xia, Z. R., Tran, K. T., Li, Y., & Yao, J. (2021). To disclose or to falsify: The effects of cognitive trust and affective trust on customer cooperation in contact tracing. *International Journal of Hospitality Management*, 94, 102867. <https://doi.org/10.1016/j.ijhm.2021.102867>
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31, 874-900.
- Cropanzano, R., Anthony, E. L., Daniels, A. S., & Hall, A. V. (2017). Social Exchange Theory: A Critical Review with Theoretical Remedies. *Academy of Management Annals*, 11(1), 1-38.
- Dahling, J. J., Whitaker, B. G., & Levy, P. E. (2009). The development and validation of a new Machiavellianism Scale. *Journal of Management*, 35, 219-257.
- Dennerlein, T., & Kirkman, B. L. (2022). The Hidden Dark Side of Empowering Leadership: The Moderating Role of Hindrance Stressors in Explaining When Empowering Employees Can Promote Moral Disengagement and Unethical Pro- Organizational Behavior. *Journal of Applied Psychology*. , March 14. <http://dx.doi.org/10.1037/apl0001013>.
- Doney, P. M. & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, 61 (2), 35-51.
- Ebrahimi, N. (2017). The relationship between affective commitment and unethical pro-organizational behavior: the role of moral disengagement. *Research Journal of Business and Management*, 4 (3), 287 - 295.

- Graham, K. A., Ziegert, J. C., & Capitano, J. (2015). The effect of leadership style, framing, and promotion regulatory focus on unethical pro-organization behavior. *Journal of Business Ethics*, 126, 423-436.
- Greenbaum, R. L., Hill, A., & Mawritz, M. B. (2017). Employee Machiavellianism to Unethical Behavior: The Role of Abusive Supervision as a Trait Activator. *Journal of Management*, 43(2), 585-609.
- Hair, J. F., Black, W. C., Barbin, B. J., Anderson, R. E. & Tatham, R. L. (2006). *Multivariate Data Analysis*^{6th}, Prentice-Hall International Inc, USA.
- Haimes, Y. Y. (2006). On the definition of vulnerabilities in measuring risks to infrastructures. *Risk Analysis*, 26, 293-296.
- Hoyk, R., & Hersey, P. (2009). The root causes of unethical behavior. *Graziadio Business Report*, 12(2), 1-5.
- Islam, M. N., Furuoka, F., & Idris, A. (2021). Mapping the relationship between transformational leadership, trust in leadership and employee championing behavior during organizational change. *Asia Pacific Management Review*, 26(2), 95-102. <https://doi.org/10.1016/j.apmr.2020.09.002>
- Johnson, D. & Grayson, K. (2005). Cognitive and affective trust in service relationships. *Journal of Business Research*, 58 (4), 500-507.
- Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review*, 16, 366-395.
- Jones, G. E. & Kavanagh, M.L. (1996). An experimental examination of the effect of individual and situational factors on unethical behavioral intentions in the workplace. *Journal of Business Ethics*, 15(5), 511-523.
- Jones, G. R. & Goerge, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review*, 23(3), 531-549.
- Kish-Gephart, J. J., Harrison, D. A., & Trevino, L. K. (2010). Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical decisions at work. *Journal of Applied Psychology*, 95(1), 1.
- Lewicki, R. J. & Bunker, B. B. (1996). Developing and maintaining trust in work relationships", In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research*, Sage, Thousand Oaks, CA, 114-139.
- Lewicki, R. J., Tomlinson, E. C., & Gillespie, N. (2006). Model of interpersonal trust development: Theoretical approach, empirical evidence, and future directions. *Journal of Management*, 32 (6), 991-1022.
- Lewicki, R. J., McAllister, D. J. & Bies, R. J. (1998). Trust or distrust: new relationship and realities. *Academy of Management Review*, 23 (3), 438-458.
- Lewicki, R. J., Weithoff, C. & Tomlinson, E. C. (2005). *What is the role of trust in organization justice?*, Sage, Thousand Oaks, CA, 247-270.
- Lewis, J. D. & Weigert, A. (1985). Trust as a social reality. *Social Forces*, 63, 967-985.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734.
- McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for inter-personal co-operation in organizations. *Academy of Management Journal*, 38 (1), 24-59.
- McAllister, D. J. (1997). The Second Face of Trust: Reflections on the Dark Side of Interpersonal Trust in Organizations. *Research on Negotiation in Organizations*, (6), 87-111.

- McEvily, B., Perrone, V., & Zaheer, A. (2003). Trust as an Organizing Principle. *Organization Science*, 14(1), 91-103.
- Morgan, R. M. & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58 (July), 20-38.
- Moorman, C., Zaltman, G. & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, 29 (Aug), 314-328.
- Newman, A., Kiazad, K., Miao, Q. & Cooper, B. (2014). Examining the cognitive and affective-based mechanisms underlying the relationship between ethical leadership and organizational citizenship: A case of the head leading the heart? *Journal of Business Ethics*, 123(1), 113-123.
- Schoorman, F. D., Wood, M. M., & Breuer, C. (2015). Would trust by any other name smell as sweet? Reflections on the meanings and uses of trust across disciplines and context. In B. H. Bornstein & A. J. Tomkins (Eds.), *Motivating cooperation and compliance with authority: The role of institutional trust* (Vol. 62nd Nebraska Symposium on Motivation, pp. 13-35). New York: Springer.
- Thompson, C. S. (2018). Leadership behaviours that nurture organizational trust: Re-examining the fundamentals. *Journal of Human Resource Management*, 21(1), 28-42.
- Lee, A., Schwarz, G., Newman, A., & Legood, A. (2017). Investigating when and why psychological entitlement predicts unethical pro-organizational behavior. *Journal of Business Ethics*, 154 , 109-216.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3): 393-404.
- Shaw, K. H. & Liao, H. Y. (2021). Does Benevolent Leadership Promote Follower Unethical Pro-Organizational Behavior? A Social Identity Perspective. *Journal of Leadership and Organizational Studies*, 28 (1), 31-44.
- Skinner, D., Dietz, G., & Weibel, A. (2014). The dark side of trust: When trust becomes a ‘poisoned chalice. *Organization*, 21(2), 206-224.
- Tacke, F., knockeraert, M., Patzelt, H., & Breugst, N. (2022). When Do Greedy Entrepreneurs Exhibit Unethical Pro-Organizational Behavior? The Role of New Venture Team Trust. *Journal of Management*, Jan 24, 1-30.
- Thau, S., Derfler-Rozin, R., Pitesa, M., & Mitchell, M. S. (2015). Unethical for the sake of the group: Risk of social exclusion and pro-group unethical behavior. *Journal of Applied Psychology*, 100(1), 98-113.
- Umphress, E. E., & Bingham, J. B. (2011). When employees do bad things for good reasons: Examining unethical pro-organizational behaviors. *Organization Science*, 22, 621–640.
- Umphress, E. E., Bingham, J. B., & Mitchell, M. S. (2010). Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. *Journal of Applied Psychology*, 95(4), 769-780.
- Vardi, Y. & Weitz, E. (2005). *Misbehavior in organizations: Theory, research, and management*. Mahwah, NJ: Erlbaum.
- Wang, T., Long, L., Zhang, Y., & He, W. (2019). A Social Exchange Perspective of Employee–Organization Relationships and Employee Unethical Pro-organizational Behavior: The Moderating Role of Individual Moral Identity. *Journal of Business Ethics*, 159(2), 473-489.

- Xu, L. & Wang, J. (2020). Influence of Challenge–Hindrane Stressors on Unethical Pro-Organizational Behavior: Mediating Role of Emotions. *Sustainability*, 12, 1-17.
- Xu, Z., Wang, Y., Zhu, M., Ma, H.K. (2019). Is risk-taking propensity associated with unethical behaviors? An experimental study. *Ethics and Behavior*, 29(7), 557-571. <https://doi.org/10.1080/10508422.2019.1585854>
- Yip, J. A., & Schweitzer, M. E. (2015). Trust Promotes Unethical Behavior: Excessive Trust, Opportunistic Exploitation, and Strategic Exploitation. *Current Opinion in Psychology*, 6, 216-220. *Journal of Business Ethics*, 159, 473–489.
- Zhnag, S. (2020). Workplace Spirituality and Unethical Pro-organizational Behavior: The Mediating Effect of Job Satisfaction. *Journal of Business Ethics*, 161, 687–705.

Table 1. Measurement model from confirmatory factor analysis^a

Construct and variables	SL ^d	SMC ^e
Unethical Pro-organizational behavior (CCR ^b =0.816, AVE ^c =0.773)		
If it would help my organization, I would misrepresent the truth to make my organization look good.	0.886	0.685
If it would help my organization, I would exaggerate the truth about my company's products or services to customers and clients.	0.877	0.570
If it would benefit my organization, I would withhold negative information about my company or its products from customers and clients.	0.898	0.606
If needed, I would conceal information from the public that could be damaging to my organization.	0.855	0.731
I would do whatever it takes to help my organization.	0.747	0.532
Cognitive trust (CCR ^b =0.901, AVE ^c =0.797)		
My supervisor approaches his/her job with professionalism and dedication.	0.849	0.645
Given my supervisor track record, I see no reason to doubt his/her competence and preparation for the job.	0.900	0.563
I can rely on my supervisor not to make my job more difficult by careless work.	0.904	0.509
Most people, even those who aren't close friends of my supervisor, trust and respect him/her as a coworker. *	0.888	0.726
Other work associates of mine who must interact with my supervisor consider him/her to be trustworthy.	0.887	0.743
Affective trust (CCR ^b =0.865, AVE ^c =0.794)		
We have a sharing relationship. We can both freely share our ideas, feelings, and hopes.	0.887	0.747
I can talk freely to my supervisor about difficulties I am having at work and know that (s)he will want to listen.	0.889	0.722
We would both feel a sense of loss if one of us was transferred and we could no longer work together.	0.709	0.420

If I shared my problems with my supervisor, I know (s)he would respond constructively and caringly.	0.883	0.765
I would have to say that we have both made considerable emotional investments in our working relationship.	0.886	0.697

^a $\chi^2=286.04$, $df=116$, $\chi^2/df=2.44$ ($p<0.001$), GFI=0.91, CFI=0.95, and RMSEA=0.08,

^b Composite construct reliability.

^c Average variance extracted.

^d Standardized loading.

^e Squared multiple correlations (R^2).

* The items were reverse scored.

Table 2. Descriptive statistics and correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8
1. Gender	--	--	1							
2. Age	--	--	0.07	1						
3. Tenure	--	--	0.01	0.35	1					
4. Income	--	--	-0.22	0.50	0.38	1				
5. Education	--	--	0.04	0.11	0.18	0.15	1			
6. Job position	--	--	0.08	0.15	0.11	0.22	0.06	1		
7. UPB	4.66	1.59	0.15	-0.06	-0.05	-0.15	0.08	-0.07	1	
8. Cognitive trust	4.82	1.18	0.05	-0.15	-0.10	-0.28	-0.24	-0.06	0.16	1
9. Affective trust	5.11	1.15	-0.03	-0.02	0.04	-0.13	0.05	0.00	0.25	0.72

$N = 333$

Correlations with absolute values above 0.10 are significant at $p < 0.05$.

Table 3. Results of multiple regression analysis

	UPB			
	Model 1		Model 2	
	β	t	β	t
Control Variables				
Gender	0.158***	4.505	0.144***	4.139
Age	0.068	1.073	0.023	0.400
Tenure	0.188**	3.158	0.079	1.426
Income	-0.337***	-5.432	-0.232***	-3.965
Education	-0.097	1.236	-0.116	1.378
Job position	-0.078	-1.276	-0.073	-1.153
Independent Variable				
Cognitive trust			0.166	1.956
Affective trust			0.257**	3.046
R^2	0.235		0.379	
R^2 (adjusted)	0.216		0.361	
F	2.147*		21.504***	
ΔR^2			0.144***	
N	333		333	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

The Dynamic Effects of Perceived Audience in eWOM Generation: A Dual Process Model

MS0051

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The Dynamic Effects of Perceived Audience in eWOM Generation:

A Dual Process Model

Online retailing is increasingly pivotal to international markets in the post-pandemic era. It is a consumer norm to rely on electronic word-of-mouth (eWOM), such as consumer-generated product reviews, to make purchase decisions (Babić Rosario et al., 2016). To generate high-quantity and high-quality eWOM, digital WOM platforms increasingly heighten the interactive presence of the eWOM communication audience to the potential eWOM senders. For example, many platforms use following function to increase the connection between users and encourage users to give feedback to product reviews. However, previous literature is inconsistent in terms of the effects of the interactive communication audience in eWOM generation, such as intention to share eWOM (Liu et al., 2021), valence of eWOM (Goes et al., 2014; Lee et al., 2015), and persuasive tendencies in eWOM (Berger, 2014).

The present research proposes an integrative framework to account for the possible dynamic effects of perceived communication audience across time and situations. Based on the diffused responsibility hypothesis and impression management theory, we predict that the perception of interactive communication audience may either encourage or inhibit consumers from sharing eWOM, and also shape up the content of eWOM. Specifically, when the potential eWOM information is considered not directly influencing other consumers' purchase decisions (e.g., there is already a large volume of existing reviews), interactive communication audience may heighten consumers' self-enhancement motives, and in turn motivate them to share more self-presenting and emotional content. In contrast, when the eWOM information is perceived to more directly influence others' purchase decisions (e.g., there is a scarcity of available reviews), people tend to share longer and more objective content, due to elevated altruistic motives. The research contributes to the literature on social motives of eWOM communication and highlights the dynamic nature of eWOM content evolution on UGC platforms. Initial evidence for the theory based on web-scraped data from TripAdvisor is presented.

References

- Babić Rosario, A., Sotgiu, F., De Valck, K., & Bijmolt, T. H. (2016). The effect of electronic word of mouth on sales: A meta-analytic review of platform, product, and metric factors. *Journal of Marketing Research*, 53(3), 297-318.
- Liu, H., Jayawardhena, C., Osburg, V. S., Yoganathan, V., & Cartwright, S. (2021). Social sharing of consumption emotion in electronic word of mouth (eWOM): A cross-media perspective. *Journal of Business Research*, 132, 208-220.
- Goes, P. B., Lin, M., & Au Yeung, C. M. (2014). "Popularity effect" in user-generated content: Evidence from online product reviews. *Information Systems Research*, 25(2), 222-238.
- Lee, Y. J., Hosanagar, K., & Tan, Y. (2015). Do I follow my friends or the crowd? Information cascades in online movie ratings. *Management Science*, 61(9), 2241-2258.
- Berger, J. (2014). Word of mouth and interpersonal communication: A review and directions for future research. *Journal of Consumer Psychology*, 24(4), 586-607.

Employment and Entrepreneurship of Hong Kong Youths in the Greater Bay Area (GBA): A Study on Potential Difficulties and Concerns for Relevant Stakeholders

MS0052

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Employment and Entrepreneurship of Hong Kong Youths in the Greater Bay Area (GBA): A Study on Potential Difficulties and Concerns for Relevant Stakeholders

Abstract

In 2018, Mainland China issued the outline of the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) Development Plan, emphasizing the need to facilitate the free flow of logistics, capital, and workforce within the region. Hong Kong's internationally recognized education system and high-performing graduates rated by employers make them valuable human capital source for the GBA's growth. However, there are several deficiencies in the current literature and research regarding the employment and entrepreneurship of Hong Kong youths in the GBA. These include a lack of investigation into the situation and perspectives of Hong Kong graduates who finish their studies in Hong Kong or other non-GBA cities, limited attention to the entrepreneurship situation of Hong Kong youths in the GBA, and little focus on the demands and potential difficulties faced by firms in the GBA when recruiting Hong Kong youths. Additionally, there is a lack of understanding of the attitudes and opinions of both firms in the GBA and Hong Kong youths towards government policies that facilitate employment and entrepreneurship for Hong Kong youths. This proposed study aims to investigate the attitudes and opinions of Hong Kong youths towards employment and entrepreneurship in the GBA, as well as the perspectives of GBA firms on the employment and entrepreneurship of Hong Kong youths. The study also aims to provide individual, organizational, and policy suggestions to stakeholders (Hong Kong youths, GBA firms, and governments) to facilitate the employment and entrepreneurship of Hong Kong youth in the GBA.

Does the Definition of ESG Reflect Its Core Value? The Revolutionary Reform of Replacing the “Social” Domain With “Stakeholders” in ESG Model

MS0053

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ABSTRACT

Since the 1980s, the shareholder theory advocating maximisation of shareholders' values (MSV) has been influencing the global economy until the occurrence of accounting scandals and financial crisis in early 2000s triggered by companies' MSV misdeeds. The stakeholder theory supporting long-term shareholders' sustainable values was adopted by then. ESG becomes a proxy for stakeholder theory and capital market players have paid high attention to companies' ESG initiatives to determine their performance.

However, the well-recognized ESG lacks a robust theoretical framework and shows little awareness for business ethics and responsibilities to each of the different stakeholders. We propose an integrated ESG model based on the umbrella concept of social contracting and a governance system that emphasises the value creation to different stakeholders, sustainability, and business ethics. In this paper, we argue (1) the need to replace the "Social" domain in the ESG model with "Stakeholders" because it is too broad with a few loose reporting elements, (2) The E, S, and G components in the ESG model should also be analysed separately and jointly respectively, and (3) Regulators like the Hong Kong Stock Exchange should also consider improving the ESG disclosure requirements and KPIs for ESG reporting.

Keywords: Shareholder theory, stakeholder theory, maximisation of shareholders' values (MSV), ESG model, responsible management, sustainability, business ethics

Is There Space for a ‘Hidden Champion’ in Hong Kong’s Crowded Banking Sector? The Case of Hang Seng

MS0054

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Is there space for a ‘Hidden Champion’ in Hong Kong’s crowded banking sector? The case of Hang Seng

ABSTRACT

Drawing on the pioneering research of Hermann Simon and the lessons learnt from some 500 leading medium-sized German companies, a case is presented here for including the Hang Seng Bank as a ‘Hidden Champion’. Operating in Hong Kong, one of the World’s most fiercely competitive markets, the study provides evidence that the bank shares many of the core values and traits associated with these German companies in becoming a humble leader. In particular, it is evident that active leadership and the role of the founders play a significant part in the bank’s capacity to succeed. Its ability to carve out a niche in this market, i.e., among the indigenous Chinese people and provide added value to them has allowed the bank to thrive and leverage its well-established market position. In addition, innovating in other areas, such as establishing the Hang Seng Index and creating the Hang Seng School of Commerce (now the Hang Seng University of Hong Kong) represent novel and unique solutions that extends the bank’s brand equity. Also, in-line with other ‘Hidden Champions’, it is evident that the founders and the current senior management to-date have a strong affinity with their staff, creating an ideal work environment so they can nurture their skills and innovation, which at the same time generates employee loyalty, and thus allowing the bank to maintain low staff turnover. The study presents Hang Seng Bank as truly a ‘Hidden Champion’, as very little is known regarding the bank outside of Hong Kong.

Keywords: RBV, Dynamic Capabilities, Hidden Champions

Quantitative Relationships between the Property's Prices in Hong Kong and the Macroeconomic Factors

MS0055

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Quantitative Relationships between the Property's Prices in Hong Kong and the Macroeconomic Factors

Abstract

Post covid economic situations in global economies are not good particularly in Hong Kong, the property's prices and Hang Seng Index keep falling. This situation has been intensified not only by the poor economic growth in global economies, but also added fuel with the tightening monetary policies by different central banks - Federal Reserves Funds, European Central Bank and those from other emerging countries. Property assets are one of the important wealth-saving instruments that most of Hong Kong people are holding. Undoubtedly speaking, they carry a significant wealth effect on the recovery of Hong Kong economy. On the other hand, most of young couples would like to purchase properties for their own uses, they will ask: is it a right time to buy a residential property? Will it's prices fall further?

In the following paper, I would try to collect data on macroeconomic variables and study the relationship between those variables and property's prices. They are unemployment rate, rental indices, saving deposit interest rate, best lending rate (prime rate), interest rate spread between HIBOR and USD LIBOR, Hong Kong dollar exchange rate and Hang Seng Stock index. I would run a regression model with those variables as explanatory variables and Hong Kong property's prices as dependent variable.

WIP: Time Series Forecasting of Post Pandemic China GDP Growth Using Machine Learning

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Time Series Forecasting of Post Pandemic China GDP Growth Using Machine Learning

Extended Abstract

This paper aims to explore the self-predictive ability of a time series. STL decomposition based features engineering is integrated with machine learning (ML) approaches to construct the proposed novel hybrid model (STL-ML). The experimental results from the case in China demonstrate that feature engineering with STL decomposition combined with deep neural network or ensemble models produce the best MAPE and RMSE values indicating high prediction accuracy. A one-period ahead forecast shows that China's real GDP growth will slow down in the upcoming quarter.

Keyword: GDP Prediction, Time Series Forecasting, STL Decomposition, Machine Learning,

1. Introduction

China has emerged as a major contributor to global economic development in recent decades. It is of great significance for policymakers and researchers to assess accurately China's growth trajectory as a reflection of global economic development situation, particularly the global recovery after a massive slowdown due to the COVID-19 pandemic. In this paper, based on datasets of quarterly China real GDP growth rates, we propose an alternative machine learning approach for time series forecasting. Instead of adopting a plethora of macroeconomic variables in features engineering, we rely on the unique features of time series: trend, seasonality and lags. The key time series components of the data itself are used to engineer the features of the model inputs. The hypothesis of this paper is that parsimonious ML models based on the data's own series structure and characteristics as features input are able to improve the prediction accuracy of GDP growth forecasts. A novel hybrid modelling approach combining STL decomposition and ML models (STL-ML) is proposed in this paper to establish a GDP prediction framework with high accuracy.

2. Literature Review and Framework

There are currently three popular frameworks prevailing in time series forecasting of GDP: statistical methods, machine learning methods and hybrid methods (Li, Yan & Yu, 2022). Statistical models include the classical linear regression models, like ARIMA or SARIMA models and VAR models. Although they are simple, intuitive and highly explanatory, the assumption of linearity of data is often questionable for real-life applications. Machine learning models include a diverse range of methods. In the literature, GDP forecasting is explored with decision trees, artificial neural network, recurrent neural network (RNN), CNN, LSTM and so on. Many research studies have shown that neural network modelling outperforms the traditional statistical methods in forecasting accuracy (such as Maccarrone, Morelli & Spadaccini, 2021). To further improve performance, machine learning models are integrated sequentially with statistical models and other techniques to form hybrid models. They are shown to have higher accuracy than individual ML models (for example Longo, Riccaboni & Rungi, 2022). Neural network based models are generally more prevailing in time series forecasting literature because they can fit any linear and nonlinear data. However, most ML algorithms performance depends on the quality of the data used to train the models. Variable selection and feature engineering is a crucial step in ML model building. Many researchers tried to employ a plethora of exogenous variables (from tens to several hundreds) as the model inputs. Although increasing dimensions can theoretically add more information to the data, practically this also adds noise and redundancy to the analysis. Moreover, an exhaustive list of predictor variables that correctly represent GDP growth may be unknown, or data may not be available or subject to measurement error. To this end, researchers try to focus on a few strong predictor variables through feature extraction techniques. Recent studies in time series analysis apply decomposition methods to preprocess and extract significant periodic features of datasets. Mao, Yang, Peng & Shang (2020) applied ensemble Empirical Mode Decomposition (EEMD) to analyze GDP time series for ten major countries. Lin (2022) combined EMD and LSTM to forecast US GDP. The EEMD method has high computation cost, and it is not easy to choose the optimal parameters. Another more widely used decomposition technique is the classical seasonal-trend decomposition with loess (STL) method. STL is easy to implement and

enables neural networks to learn better the other patterns in time series. We consider that GDP growth rates have seasonality, randomness, instability and cyclical pattern which can be well represented by the trend, season and irregular feature sub-series extracted by the STL method. Theodosiou (2011) combined STL decomposition and other statistical methods (ARIMA, Theta, Holt-Winters) to predict economic time series. In the existing literature, hybrid model integrating STL decomposition method and other ML modelling has not been explored extensively in GDP forecasting applications.

3. Method and Results

3.1 Data Preprocessing

The dataset consists of 122 observations of quarterly real GDP growth rates of China spanning from 1993:Q1 to 2023:Q2. Wide fluctuations of GDP growth rates during the COVID-19 pandemic period from 2020:Q1 to 2022:Q2 are observed. To improve prediction accuracy, four outlier points are removed and replaced by interpolated values.

3.2 Feature Engineering

First, lags analysis is applied to determine serial dependence. Results show that the series has the strongest correlation relationship with its lag 1 and lag 2. The STL decomposition that disaggregates the series into three additive components (trend, seasonal and remainder) also shows strong seasonal patterns (Figure 1). Therefore, we decided to lag the sub-series by 1 and 2 periods. To fully extract and utilize the series information in every regard, we further engineer new features from existing sub-series. Firstly, we generate a polynomial feature by squaring the lagged series to capture non-linear patterns. Secondly, interaction feature is accounted for by taking product of two components. Furthermore, the series appears to have a structural break at 2007:Q2. A categorical variable is assigned to engineer a structural break feature. To model the seasonality pattern, a quarter dummy categorical variable is also created. Lastly, we run a stepwise sequential forward selection process over all the engineered features. We finally come up with eight key structural decomposition features (capturing trend, seasonal, random components and series correlation) which are used as inputs for the various ML algorithms.

3.3 Model Building

The whole dataset is partitioned into a training set with 100 observations and a test set with 20 observations. Both the features and target are standardized before training and testing. The H2O package in R language is used to train the proposed STL-ML forecasting models. Several supervised algorithms are applied for model selection. They include distributed random forest, deep neural network, gradient boosting machine, generalized linear model and ensemble models. They are selected for study because they provided considerably good results in GDP prediction (Laygo-Matsumoto & Samonte, 2021). All the models are evaluated on Root Mean Squared Error (RMSE) and Mean Absolute Percentage Error (MAPE) scores. A univariate linear SARIMA model is trained as the baseline model for comparison.

3.4 Results

The results are shown in Table 1. STL decomposition coupled with deep neural network model (STL-DNN) can produce the lowest MAPE (7.2213%) and the second lowest RMSE (0.4418%).

Unsurprisingly, all other STL-based ML models outperform the baseline classical linear ARIMA (1,0,0) (0,1,1)₄ model by a large margin, STL-ensemble (GBM, DNN and GLM) model is the next best model in terms of MAPE (8.0491%). H2O's AutoML function suggests another automatically tuned stacked ensemble model that largely minimizes the RMSE score (0.2038%). The three selected models are trained to generate one-period ahead forecasts of China's GDP in 2023 Q3 (ranges from 5.925% to 6.166%) showing that it will decrease slightly from 6.3% of the previous quarter.

4. Discussion and Conclusion

The proposed STL-ML hybrid model can completely capture the self-predictive ability of the China GDP and performs better than traditional time series analysis. The obtained MAPE values of 7 – 8% of the final models indicate high prediction accuracy. It is noted that the above results are based on models trained with their default setting values. Further tuning of hyperparameters certainly will improve performance. One limitation of the study is that the training dataset is not large enough (less than 200-300 observations) for ML models to generalize properly. To conclude, this study

demonstrates that a parsimonious ML model based on the data's own structural characteristics can be competitive to an individual complex ML model that relies on the selection and collection of a large number of high-quality predictor variables.

5. References

- [1] Laygo-Matsumoto, S. and Samonte, M.J., 2021, November. Philippine economic growth: GDP prediction using machine learning algorithms. In *2021 4th International Conference on Computing and Big Data* (pp. 15-20).
- [2] Li, Q., Yan, G. and Yu, C., 2022. A novel multi-factor three-step feature selection and deep learning framework for regional GDP prediction: Evidence from China. *Sustainability*, 14(8), p.4408.
- [4] Lin, S.L., 2022. Application of empirical mode decomposition to improve deep learning for US GDP data forecasting. *Heliyon*, 8(1).
- [5] Longo, L., Riccaboni, M. and Rungi, A., 2022. A neural network ensemble approach for GDP forecasting. *Journal of Economic Dynamics and Control*, 134, p.104278.
- [6] Maccarrone, G., Morelli, G. and Spadaccini, S., 2021. GDP forecasting: machine learning, linear or autoregression?. *Frontiers in Artificial Intelligence*, 4, p.757864.
- [7] Mao, X., Yang, A.C., Peng, C.K. and Shang, P., 2020. Analysis of economic growth fluctuations based on EEMD and causal decomposition. *Physica A: Statistical Mechanics and its Applications*, 553, p.124661.
- [8] Theodosiou, M., 2011. Forecasting monthly and quarterly time series using STL decomposition. *International Journal of Forecasting*, 27(4), pp.1178-1195.

6. Appendices

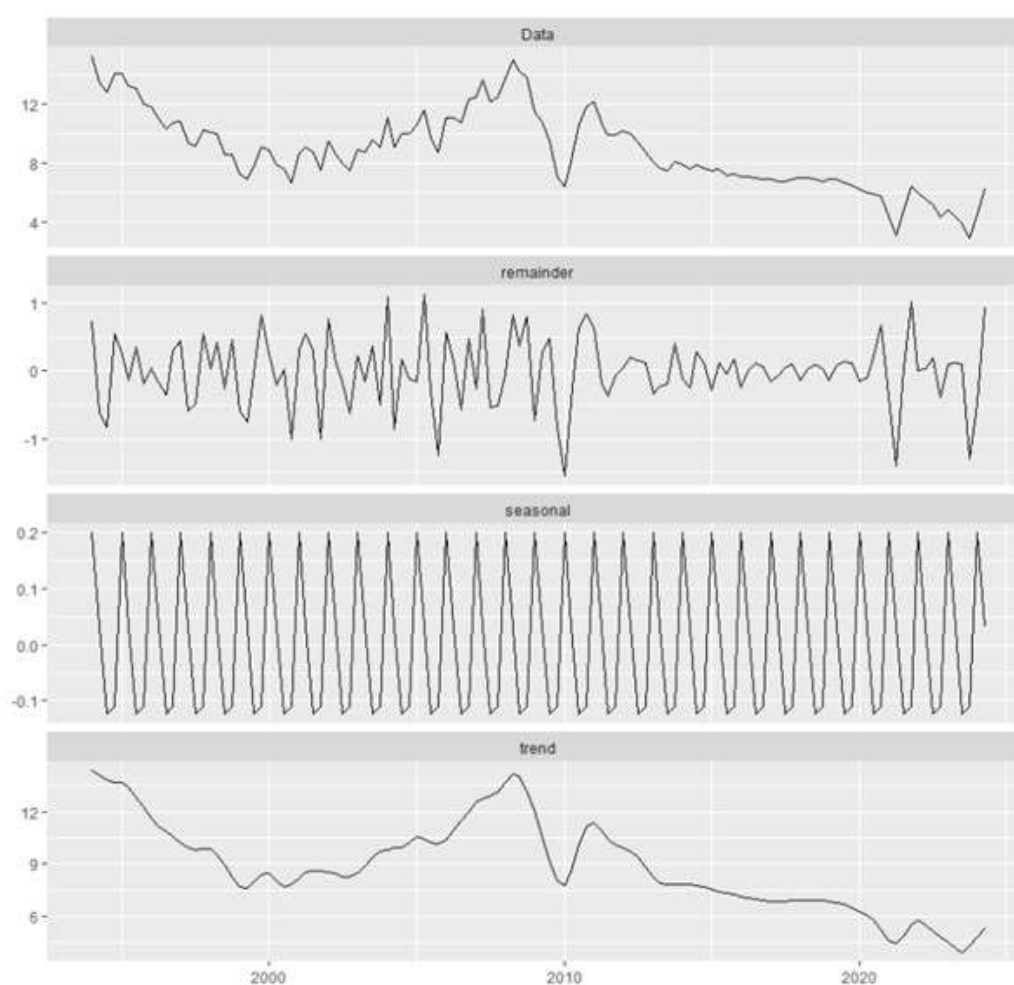


Figure 1. STL decomposition results (Source of data: OECD, IMF)

Table 1. Comparison of performance results

Model	RMSE %	MAPE %
Deep Neural Network	0.4418	7.2213
Ensemble (GBM, DNN, GLM)	0.4657	8.0491
Ensemble (DNN, GLM)	0.4676	8.0931
Ensemble (GBM, DNN, DRF, GLM)	0.4683	8.2988
AutoML – Stacked Ensemble	0.2038	8.4491
Gradient Boosting Machine	0.5336	9.6397
Distributed Random Forest	0.6263	9.7490
Generalized Linear Model	0.6302	10.7660
ARIMA (1,0,0) (0,1,1) ₄	2.4203	48.7183

Note: Bold text indicates the best results

Corporate Social Responsibility, Family Control and Tax Avoidance: Evidence from China

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Abstract

We examine the relationship between corporate social responsibility (CSR) and tax avoidance in family-controlled firms. By employing the socioemotional wealth (SEW) theory, we analyze how various combinations of family control over ownership, strategy, and operations affect the CSR and tax avoidance activities of family firms. Following prior literature, we classify family firms into four types: (1) family firms with ownership control (FC), (2) family firms with ownership and operational control (FOC, i.e., family members serving as CEOs), (3) family firms with ownership and strategic control (FSC, i.e., family members serving as chairmen); (4) family firms with ownership, operational, and strategic control (FOSC, i.e., family members serving as CEOs and chairmen). Using data on Chinese listed firms from 2010 to 2020, we expect to find that socially responsible firms are less aggressive in tax avoidance in family firms with ownership and strategic control (FSC), suggesting that family leaders tend to preserve SEW and family chairmen and outside CEOs can constrain each other to avoid unethical activities in CSR and tax avoidance.

Keyword: Corporate Social Responsibility (CSR), Tax Avoidance, Family Firms, Socioemotional Wealth (SEW), Agency Problems

Data Mining of Airbnb: Consumer Viewpoints Generated from Taiwanese Listings

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Data Mining of Airbnb: Consumer Viewpoints Generated from Taiwanese Listings

Abstract

Airbnb holds significant influence, leading hosts and practitioners to investigate the precise factors driving customer preferences in accommodation searches. Among the available information, guest-generated online reviews stand out as a crucial resource, prominently displayed on the platform and wielding considerable sway over customer choices. This research model neatly aligns with the 7Ps marketing model that forms the basis of the star rating system. The central aim of this inquiry is to unearth strategies for hosts to optimize their listings. Through a comprehensive review analysis, this study demonstrates that in the context of Taiwan, consumers place paramount importance on the product, price, place, and participants. These findings offer valuable insights for professionals in the lodging industry. These insights can serve as a practical guidepost when making enhancements, effectively heightening customer satisfaction levels and garnering higher star ratings.

Keyword: 7 Ps Marketing Mix, Sharing Economy, Text Mining, Airbnb

1. Introduction

With regards to the fast-growing business Airbnb which was established in the year 2007 and has gradually grown in popularity, it has accumulated an enormous number of hosts which now exceeds 4 million, while also offering roughly 6 million listings worldwide (Airbnb, 2022). Statista (2023) indicates that even during the pandemic Airbnb still worked its way out to maintain its competitiveness, and up through to the year 2022 the numbers of nights and experiences booked on Airbnb have surpassed the previous years. Thus, Airbnb is a great example to study since its review system enables every customer to write about their genuine experiences of staying at the listing. Most importantly, both positive and negative reviews can

be seen by the public, which should be highly taken into consideration by hosts with a view towards enhancing the overall performance, while also allowing for improvements to be made in order to ensure that the next stay for their guests will be better. Additionally, the marketing mix framework of the 4Ps (product, price, place, and promotion) has been widely used in the field of marketing from its origin to the present, with several scholars even extending the concept of the unstructured basic elements of the 4P model to a more complex 7 Perspectives (product, price, place, promotion, physical evidence, people and process).

2. Literature Review

2.1 The Evolution of 7 Ps marketing mix

The 4Ps model is a well-known marketing concept originating from the perspective of the scholar Borden (1964), who increased the marketing mix framework to include 12 elements: product planning, pricing, branding, channels of distribution, personal selling, advertising, promotions, packaging, display, servicing, physical handling, and finally fact findings and analysis; with a view towards educating people through marketing knowledge, the solving of problems encountered in business, and a structural method for pondering marketing. McCarthy (1964) contended that “marketing mix is a combination of all of the factors at the command of a marketing manager to satisfy the target market.” He further extended Borden’s notion through the introduction of the 4Ps model, which involved product, price, promotion and place, which has since been put into practice and widely used in the marketing field. Booms and Bitner (1981) also extended the 4Ps model into a 7Ps model by complementing it with process, people and physical evidence.

By adding three additional elements, physical evidence, participants/people, and process, the newly introduced 7Ps model can categorize objects and events with higher precision.

2.2 Airbnb online reviews and purchase intention

Nilashi et al. indicate in their study in 2022 that using online reviews of customers can better evaluate their purchase intention. In addition, this study adopts the star ratings used in the listings as indicators for purchase intention because the star ratings score is based on customers' lodging experience. According to Airbnb (2022), star ratings are evaluated from 7 perspectives, including overall experience, value, accuracy, location, cleanliness, check-in, and communication, which match the 7Ps marketing mix, thus making it all the more suitable for analyzing the online reviews seen on Airbnb. Additionally, online reviews are beneficial in helping potential consumers during the process of purchase decisions (Tien et al., 2019), with purchase intention being affected due to the valence of online reviews, according to Park et al. in 2007.

This study hopes to take reference from past research to see whether online reviews can have a positive impact on purchase intention. Consequently, this study attempts to use the 7Ps model to analyze online reviews on Airbnb, thereby raising our first hypothesis:

H1: The 7Ps of marketing mix, including (a) product, (b) price, (c) place, (d) promotion, (e) participants, (f) physical evidence, and (g) process, all have a positive impact on purchase intention.

3. Research Methodology

This study uses SPSS and Wordstat to conduct the research. Firstly, SPSS, which stands for Statistical Package for the Social Sciences, is used to forecast future trends (Meraj et al, 2022). In addition, SPSS is a program package aiming to implement analysis and data presentation (Devi et al., 2013). According to Provalis Research (2023), Wordstat is text analysis software that is easy to use and flexible when analyzing quantitative content. Besides, extracting data

swiftly by anyone from the immense amount of data is the characteristic of Wordstat. Hence, this study adopts SPSS to analyze the relationship between online reviews and purchase intention while using Wordstat to produce the word cloud and obtain the most frequently appearing words.

3.1 Data collection and editing

Taipei has a reputation for its beautiful scenery and is well-known for its local people's warm and welcoming nature. This study downloads 116,777 reviews from 3,714 Airbnb listings in Taipei in December of 2022. The time period of these reviews, which are written by customers on Airbnb starts from 2012 to 2022. This study eliminates those listings without photos and non-English reviews and extracts data from Taipei, Taiwan, with 100 listings and 1,110 online reviews.

3.2 Data annotation

From the selected 200 listings, this study will manually annotate the online reviews from these listings using 0 (not covered) and 1 (covered) in order to distinguish whether the online review covers the 7 perspectives of product, price, place, promotion, participants, physical evidence and process. The data annotating process will adopt the definition of 7Ps marketing mix proposed by Kwok et al. in 2020.

3.3 Data analysis

As mentioned earlier in Section 2.4, the 7 perspectives of star ratings perfectly correspond to the 7Ps model. Therefore, this study will first add up the scores of the 7 perspectives, including overall experience, value, accuracy, location, cleanliness, check-in and communication in each listing, and also run a regression test by means of SPSS, using each of the perspectives toward

the arithmetic mean of the 7 perspectives attempting to see whether the more times the elements of the 7Ps model are mentioned, the higher the purchase intention will be generated.

4. Online Review Analysis in Taiwan

Among 1,110 online reviews out of 100 listings, 1,002 online reviews cover product, 99 online reviews cover price, 700 online reviews cover place, 83 online reviews cover promotion, 711 online reviews cover participants, 389 online reviews cover physical evidence and 380 online reviews cover process. The p-value of the Model 1 is less than 0.001, representing that the relationship between participants, price, product and place, and star rating exists significantly. The standardized coefficients for participants ($\beta=0.229$, $p < 0.001$), price ($\beta= -0.154$, $p < 0.001$), product ($\beta=0.116$, $p < 0.001$) and place ($\beta= -0.063$, $p < 0.05$) are very significant. This explains that participants, price, product and place are vital factors to the star rating. The most frequently appearing words when customers illustrate their notions regarding Airbnb listing experiences. If the words account for the larger proportion in the word cloud, the words are mentioned more in the online reviews.

The research results indicate that product (0.101^{**}), price (-0.14^{**}), place (-0.034^{**}), and participants (0.123^{**}) have a significant impact on purchase intention. Product and participants significantly positively impact purchase intention, while price and place significantly negatively impact purchase intention. On the other hand, price is usually stated in the online reviews with budget-related terms to indicate the listing is cheap enough. However, these budget accommodations may be good at the price, but poor on other perspectives, thereby having a lower purchase intention.

5. Discussion and Conclusion

This study analyzes the online reviews through the 7 Ps marketing mix and conducts an analysis

on 100 listings from Taiwan. Through analyzing 1,110 English Airbnb reviews, this study is able to have a better understanding on the customers' past lodging experiences and provide hosts and practitioners with managerial suggestions regarding making vital decisions.

Firstly, this study selects Airbnb online reviews to conduct the analysis and discovers that the 7 Ps marketing mix perfectly matches the 7 evaluating elements of Airbnb star ratings. Rather than merely analyzing online reviews by data mining, the 7Ps model is adopted to implement this research systematically. Researchers can utilize the 7Ps marketing mix to analyze online reviews on Airbnb using different methods and discuss diverse topics so as to supplement the literature or offer more critical insights regarding the lodging industry. The amenities are provided more thoroughly compared to a real home, the greater the likelihood the customers are going to make a reservation. Secondly, product of the 7Ps marketing mix also significantly influences purchase intention in Taiwan. The quality of the listing is an essential requirement when hosts are managing their listings and the positive online reviews.

Furthermore, price is a factor that customers already know when they decide to stay at one specific listing. When customers in Taiwan often mention price in their online reviews, the overall value may match their expectations. They are likely to enjoy the reasonable price within budget, but experience other bad aspects. Thus, the higher the price is mentioned, the lower the purchase intention is.

References

- [1] Airbnb (2022), About us-Airbnb Newsroom, Retrieved December 17, 2022, from: <https://news.airbnb.com/about-us/>
- [2] Booms, B.H. and Bitner, M.J. (1981) Marketing Strategies and Organization Structures for Service Firms. *In: Marketing of Services, American Marketing Association, Chicago,*

47-51.

- [3] Borden, N. H. (1964) The concept of the marketing mix. *Journal of advertising research*, 4(2), 2-7.
- [4] Devi, B. R., Rao, K., Setty, S., & Rao, M. (2013). Disaster prediction system using IBM SPSS data mining tool. *International Journal of Engineering Trends and Technology (IJETT)*, 4(8).
- [5] Hofstede Insights (2023), Country comparison tool, Retrieved December 15, 2023, from: <https://www.hofstede-insights.com/country-comparison/taiwan/>,
- [6] Kwok, L., Tang, Y., & Yu, B. (2020) The 7 Ps marketing mix of home-sharing services: Mining travelers' online reviews on Airbnb. *International Journal of Hospitality Management*, 90, 102616.
- [7] Nilashi, M., Abumalloh, R. A., Samad, S., Alrizq, M., Alyami, S., Abosaq, H., ... & Akib, N. A. M. (2022). Factors impacting customer purchase intention of smart home security systems: Social data analysis using machine learning techniques. *Technology in Society*, 71, 102118.
- [8] Provalis Research (2023), Wordstat- Provalis Research, Retrieved March 25, from: <https://provalisresearch.com/products/content-analysis-software/>
- [9] Statista (2023), Airbnb Bookings Climb Past Pre-Pandemic High in 2022, July 13, 2023, from: <https://www.statista.com/chart/23520/number-of-nights-and-experiences-booked-on-airbnb/>
- [10] Tien, D. H., Rivas, A. A. A., & Liao, Y. K. (2019) Examining the influence of customer-to-customer electronic word-of-mouth on purchase intention in social networking sites. *Asia Pacific Management Review*, 24(3), 238-249.

Building Core Competencies in Chinese Multinational Port Corporations

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Extended Abstract

Drawing on qualitative evidence from a multiple-case study of five Chinese leading MNPCs and three industry associations, this study contributes to enhancing the core competencies concept by unpacking the '*black-box*' of the process of building core competencies and advancing the inquiry on the *dark side* of core competencies.

Key words: core competencies, Chinese multinational port corporations (MNPCs), sustainable competitive advantage (SCA), RBV, bright side, dark side, black-box

1. Introduction

Core competencies are a firm's special bundle of resources and capabilities that can contribute to SCA in the global competitive marketplace. Studies of competencies are closely related to SCA and RBV, and Prahalad and Hamel (1990) advance the study of SCA and RBV by proposing the concept of core competencies. Since then, different views on core competencies emerged. However, few studies focus on how to build core competencies, creating a research vacuum on the core competence building process, especially in the context of Chinese MNEs.

First, from the vantage point of management practice, Chinese MNEs under the study have gained competitive advantage in the global marketplace. For example, Chinese leading MNEs under study possess three generic core competencies: innovation in business models and operation, utilization of skills and technologies, and acquisition of strategic resource, such core competencies contribute to the successes of these corporations. In 2018 and 2019, seven Chinese MNEs ranked among the top 10 of the world-class ports in terms of cargo throughput and container port traffic. Such successes warrant a study on what internal resources and capabilities enable Chinese MNEs to rise up to the challenges by mitigating environmental risks and responding to external opportunities. In particular, it is worthwhile to study how Chinese MNEs bundle their resources and capabilities, such as employee training, application of skills and digital technologies, and capital investments in research & development and port facilities in order to gain competitive advantage in such competitive and turbulent marketplace. Hence, it is timely to study how Chinese MNEs build core competencies.

Second, from the theoretical perspective, although the existing research provides insights on what constitute core competencies and the effects on a firm's SCA, there is little insight on how to build core competencies and the mechanisms that enable or hinder the development of core competencies. This is indeed a black-box of the core competencies process (Wilkens, Meenzel & Pawlowsky, 2004, p.8). Moreover, although past research has warned against the risk of core competencies turning into core rigidities (Leonard-Barton, 1992, p.111), more insights are needed to understand how firms can maintain the currency of core competencies in light of environmental changes and overcome the risks of core competencies. The recent development of Chinese MNEs in dynamic environment provides a fertile ground for research to unpacking the *black-box* of core competencies, as well as investigating the *dark side* of core competencies.

Given the above, this study focuses on the research question: how do Chinese MNEs build core competencies in dynamic environment? To answer this question, this study adopts a multiple-case study design (Yin, 2018) and, specifically, draws on qualitative data based on interviews and secondary evidence from case companies and the industry associations. The findings will advance the conceptualization of the process of building core competencies in the emerging market context and

shed light on the practical implications of core competencies.

2. Literature review and research gap

The literature review on the extant studies on core competencies identified two distinct research perspectives—the bright side perspective and the dark side perspective. The bright side perspective refers to (1) identifying core competencies, (2) classifying core competencies, (3) building core competencies, and (4) leveraging core competencies. While the dark side approach refers to (1) clarifying related terms of core competencies, and (2) critiques of core competencies (Spencer & Spencer, 1993; Wilkens, Menzel & Pawlowsky, 2004; Daud, Ismail & Omar, 2020). As Spencer and Spencer (1993) pointed out the structure of competencies is similar to an iceberg where motives, traits, and self-concept tend to be hidden and central to personality; and knowledge and skills tend to be visible. In addition, the authors identify a salient rift on the studies on the mechanism of building of core competencies on the dark side.

The issues under study on the bright side of core competencies are visible, traceable and easy to be observed and measured (Daud et al., 2010, p.40). Such issues include skills, knowledge, technologies, carriers, embodiments, products, services, dimensions, social role, identification, evaluation, conceptual framework, routines, processes, systems, positions, management, and leveraging, etc. (Leonard-Barton, 1992; Prahalad & Hamel, 1990; Hafeez, Zhang & Malak, 2002; Edgar & Lockwood, 2011; Mascarenhas, Baveja & Jamil, 1998, p.117; Teece, Pisano & Shuen, 1997). The core competencies with visible characteristics on the bright side are relatively pragmatic, observable, and directly related to performance (Daud et al., 2010; Leonard-Barton, 1992). Studies on such issues focus on the formalized core competencies aiming to build, identify, leverage, and manage core competencies; however, they failed to address the essence of how core competencies are generated.

The issues under study on the dark sides of core competencies are hidden in consciousness and not easy to be observed and measured. Such issues include motives, traits, self-concepts, and intent that drive a firm to achieve an outcome (Spencer & Spencer, 1993; Wilkens et al., 2004). Such issues also include definition (Prahalad & Hamel, 1990), clarification of terminology (Capello, 1999, Leonard-Barton, 1992, Mascarenhas et al., 1998; Prahalad & Hamel, 1990; Teece et al., 1997), dimensions, requirements, external acquisition (Deist & Winterton, 2005; Edgar & Lockwood, 2008); unknown dynamics, black-box decomposition, knowledge and organizational learning (Mascarenhas et al., 1998; Crossan, White & Djurfeldt 1995). The dark side perspective deals with issues of the nature, terminology, characteristics, functions, development, and relationships of dimensions of the core competencies concept.

The authors view that the criticisms—ambiguities of terminology, unknown dynamics, and the

unknown process of generation of core competencies (black-box) on the dark side merit remedies for further inquiries, in particular, on the unknown process of generating core competencies (Mascarenhas, et al., 1998, Wilkens et al., 2004). Although some studies address the building process of core competencies, the study on the essence of building core competencies has been neglected; accordingly, the question of how core competencies are built still remains as a black-box on the dark side, resulting in a lack in the study of the mechanism of building core competencies. However, building core competencies in Chinese MNPCs has its idiosyncrasies: Chinese MNPCs, especially those state-owned enterprises, control huge capital investments in terms of cargo terminals, port facilities, cargo gearing and equipment. How do Chinese MNPCs effectively bundle such resources and capabilities towards building core competencies deserves close attention. Especially, as collective learning is the most dynamic element in the process of building core competencies, and it is the immanent cause of the change of core competencies. This study pays particular attention to collective learning in order to unpack the black-box of building core competencies and the mechanisms that enable such process in Chinese MNPCs.

3. Methodology

This study adopted a multiple case study design (Eisenhardt, 1989; Glaser & Strauss, 1967; Yin, 2018). Accordingly, a purposive sampling was applied and the selection of case companies met these three sampling criteria: (1) Chinese state-owned port corporations with domestic and global operations; (2) key industry players with SCA in terms of market share; and (3) listed public companies with shares traded on stock exchanges. Based on these criteria, five Chinese leading MNPCs were selected. With each company, qualitative data including interviews and annual reports were collected and analyzed. In addition, three logistics industry associations located in Hong Kong and southern China were also selected to provide insights.

The study was conducted from year 2020 to year 2021. Eleven in-depth interviews with top executives were conducted, and 23 annual reports from 2015 to 2019 of case companies were collected as data for analysis. Data analysis included three parts: individual case analysis, cross-case comparison, and thematic analysis (Clark, Gioia, Khen & Thomas, 2010). Specifically, the analytical framework was used to establish open coding, axial coding, and selective coding (Corbin & Strauss, 2015). Theme categories were selected in terms of properties, dimensions, conditions, and consequences.

4. Findings and discussion

The study develops a new theoretical model (Figure 1)—the Mechanism of Building Core Competencies (MBCC) with eight dimensions including *critical events*, *responsive strategies*, *knowledge*, *path-dependency*, *collective learning*, *sustainable processes*, *optimal resources amassment*,

and *core competencies*. Figure 1 depicts that essentially it is the change of collective learning that causes the change of core competencies, and it is the interactive relationships among these elements that produce core competencies. MBCC depicts the forms and the dynamics of dimensions, the directions and paths of changes, and the causes and effects among dimensions. It illustrates that the essence of the MBCC is the collective learning, and the change of collective learning is the immanent cause of change of core competencies; the interaction among elements is activated by responsive strategies in response to critical events, eventually resulting changes in core competencies. MBCC is a process of change of collective learning in effective and efficient utilization of resources of a firm; it is triggered by responsive strategies, based on knowledge, moderated by path-dependency, and in response to critical events.

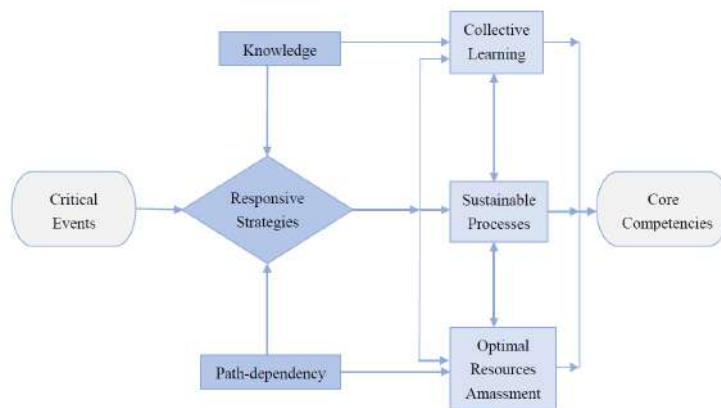


Figure 1: The theoretical model of the Mechanism of Building Core Competencies (MBCC)

5. Conclusions

The study was conducted at the time when the case companies were in operational transformation by employing digital technologies in operation and management. The study provides researchers and practitioners with insights to understand the successes of case companies and the generation process of core competencies. It contributes to the knowledge of core competencies with a new theoretical model advancing the inquiry of core competencies by decomposing the ‘black-box’—how Chinese MNPCs build core competencies by focusing on collective learning. The study anchors on the essence of the core competencies concept that the change of collective learning leads to the change of core competencies. In addition, it provides new ideas to look at the studies on core competencies—the bright side and dark side perspectives. Further, the study develops MBCC as a tool to operationalize the building of core competencies prospectively and to examine core competencies retrospectively through three ways: enhancing collective learning, selecting sustainable processes, and building optimal resources bases. However, the findings do not apply to foreign and private firms in China because their management ideologies are different.

References

- Capello, R. (1999) 'Spatial transfer of knowledge in high technology milieu: learning versus collective learning processes', *Regional Studies*, 33(4), pp.353-365.
- Clark, S.M., Gioia, D.A., Khen,D.J.and Thomas,J.B.(2010) 'Transitional identity as a facilitator of organisaitonal identiy change during a merger', *Administrative Science Quarterly*, pp.397-439.
- Corbin, J. and Strauss, A. (2015) *Basics of qualitative research: techniques and procedures for developing grounded theory*, 4th edn. Thousand Oaks, Ca: Sage.
- Crossan, M.M., Lan, F.W., White, R.E., and Djurfeldt, L. (1995) 'Organizational learning: dimensions for a theory', *The International Journal of Organizational Analysis*, pp.337-360.
- Daud, R., Ismail, M. and Omar, Z. (2010) 'Exploring competencies: a preliminary study of Malaysian SH&E professionals using the delphi technique', *Professional Safety*, October 2010, pp.39-47.
- Deist,F.D.L. and Winterton, J. (2005) 'What is competence?', *Human Resource Development International*, 8(1), pp.27-46.
- Edgar,W.B. and Lockwood, C.A.(2011) 'Organizational competencies: clarifying the constructs', *Journal of Business Inquiry*, pp.21-32.
- Eisenhardt, K.M. (1989) 'Building theories from case study research', *Academy of Management Review*, 14(4), pp.532-550.
- Glaser, B. & Strauss, A. (1967) *The discovery of grounded theory: strategies of qualitative research*. London: Wiedenfeld and Nicholson.
- Hafeez, K. Zhang, Y. and Malak, N. (2002) 'Core competence for sustainable competitive advantage: a structured methodology for identifying core competence', *IEE Transactions on Engineering Management*, 49 (1), pp.28-35.
- Leonard-Barton, D. (1992)'Core capabilities and core rigidities: a paradox in managing new product development', *Strategic Management Journal*, 13, pp.111-125.
- Mascarenhas, B., Baveja, A. and Jamil, M. (1998) 'Dynamics of core competencies in leading multinational companies', *California Management Review*, 40(4), pp. 117–132.
- Prahalad, C.K. and Hamel, G. (1990) 'The core competence of the corporation', *Harvard Business Review*, 68 (3), pp.79-91.
- Spencer, L.M.and Spencer, S.M.(1993) *Competence at work: models for superior performance*. New York: John Wiley & Sons.
- Teece, D.J., Pisano, G. and Shuen, A. (1997) 'Dynamic capabilities and strategic management', *Strategic Management Journal*, 18 (7), pp.509-533.
- Wilkens, U.,Menzel, D. and Pawlowsky, P. (2004) 'Inside the black-box: analyzing the generation of core competencies and dynamic capabilities by exploring collective minds. An organizational learning perspective', *Management Revue*. 15(1), pp.8-26.
- Yin, R.K. (2018) *Case study research and applications: design and methods*. 6th edn. Thousand Oaks: Sage Publications.

The Dynamic Relationship between House Prices and Indirect Real Estate Prices in Hong Kong

MS0060

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The Dynamic Relationship between House Prices and

Indirect Real Estate Prices in Hong Kong

Abstract

This paper attempts to study the dynamic relationship between the mean and variance of house and indirect real estate prices in Hong Kong. First, what is the direction of causality between housing and indirect real estate markets? Second, is there a long run equilibrium relationship between housing and indirect real estate markets? The big question running through our thesis will be to examine the relationship of the markets through asking the following smaller questions of what our dataset, in informational terms, can provide for us.

- 1) Do house prices Granger-cause indirect real estate prices? Is the causation, if any affected by the ease of obtaining bank credit?
- 2) Do indirect real estate prices Granger-cause house prices? Is the causation, if any, affected by the ease of obtaining bank credit?
- 3) If indirect real estate prices Granger-cause house prices, do indirect real estate prices cause or signal house prices?

Quarterly data on real house price index (RHPI), real property stock price index (RPSI), real long term interest rate (RLTR) and bank credit/GDP (EOBC) of Hong Kong will be collected. The modified credit price and modified wealth effects will be tested using Granger causality.

Moreover, whether the strength of these two effects is affected by the ease of obtaining bank credit will be modeled by moderated multiple regression.

Effect of Consumers' Perceived Intimacy on Celebrity Endorsement: A Relationship-building Perspective

MS0062

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Effect of Consumers' Perceived Intimacy on Celebrity Endorsement: A Relationship-Building Perspective

Abstract

The media and entertainment industry has become increasingly prominent in recent years, with the rise of reality talent shows contributing to the emergence of aspiring stars. In a highly competitive market where consumers have numerous product options, marketers often employ celebrity endorsers to establish a strong brand image and stand out from competitors. Instead of relying on global celebrities, more companies are now choosing to utilize talent show stars as endorsers. This shift is driven by the growing consumer awareness of a celebrity's sense of identity and their connection to local culture. Consumers are more likely to remember a brand and have a stronger desire to purchase when they observe their favorite celebrities endorsing specific brands and products. To adapt to the evolving needs of customers, it is crucial to comprehend the impact of celebrity endorsement on consumer decision-making. While there is a considerable body of research on the credibility of endorsers, there is a scarcity of studies specifically examining the influence of consumers' perceived intimacy with celebrity endorsers and their self-brand connection. The results of this study will not only contribute to the existing literature on source credibility but also provide valuable insights to managers on how to enhance the effectiveness of celebrity endorsement. These findings can offer recommendations to marketers in creating endorsers whose personalities align with the preferences of their target customers, while also assisting brands in refining their marketing strategies.

Developing a Robust Scale for Measuring Junzi Virtue Constructs at the Organizational Level

MS0063

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Developing a Robust Scale for Measuring Junzi Virtue Constructs at the Organizational Level

Abstract

I report work in progress on a scale measuring five Junzi virtues at the organizational level, suitable for administration to employees and customers.

There are two existing scales. One is the Junzi Orientation scale (JOS), see Tian, Tang & Tse (2022). This has 18 items and measures ren (benevolence), yi (appropriateness), li (propriety), zhi (wisdom), and xin (integrity). The JOS taps “insider” perceptions. Tian et al (2022) validated the JOS through confirmatory factor analysis of data from 423 senior managers in Hong Kong. A major limitation of the sampling method in Tian et al (2022) is that with ratings by only one member in each firm there was no way to test concurrent validity, such as concordance between different individuals or groups in the same firm.

The other scale is the Customer-rated Junzi Corporation, aka the Confucian Cardinal Virtues scale (CCV), see Kwong, Tang, Tian & Fung (2015). The CCV solicits perceptions of customers. Kwong et al (2015) validated the CCV through exploratory factor analysis of ratings by 274 customers of 16 corporations. A limitation of the CCV is that subscales are available only for ren, yi and li.

The current research took a preliminary step in synthesizing and augmenting items from the JOS and CCV to arrive at 8 items each for li, zhi and xin, perceived as having face validity by both the author and another academic. After this step is completed for ren and yi, a validation study with data from middle managers is envisaged.

References

Kwong, K. K., Tang, F., Tian, V. I., & Fung, A. L. K. (2015). Can customer loyalty be explained by virtue ethics? The Chinese way. *Asian Journal of Business Ethics*, 4(1), 101–115

Tian, V. I., Tang, F., & Tse, A. C. B. (2021). Understanding corporate culture and business performance from a Confucian perspective. *Asia Pacific Journal of Marketing and Logistics*, 34(4), 759-777.

The Impact of Personality Traits across Culture on Ethical Buying Behaviour

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The Impact of Personality Traits across Culture on Ethical Buying Behaviour

Abstract

In today's globalized marketplace, ethical considerations have become a significant concern for both corporations and consumers. Corporations are increasingly expected to adopt ethical sourcing practices, while consumers are encouraged to make ethical buying decisions by choosing genuine products over counterfeit alternatives. Previous studies in the field of psychology mainly focus on individual differences such as values playing a crucial role in shaping an individual's decision-making process. Limited attention has been paid to how personality traits influence buying decisions ethically.

One prominent framework used to understand personality traits is the Five-Factor Model (FFM). In this study, FFM is adopted to explore how personality traits are associated with ethical decision-making. A small amount of research shows that certain traits are associated with ethical decision-making. For example, individuals high in conscientiousness tend to adhere to ethical standards and exhibit moral behaviors. They are more likely to consider the ethical implications of their purchasing decisions. In view of internationalization, it is important to consider cultural dimensions. Particularly, it is reasonable to claim that the indulgence dimension of Hofstede's cultural framework influences ethical behaviours. Some

studies reveal that societies that are categorized as indulgent tend to have lower moral discipline, while restrained societies exhibit higher levels of moral discipline.

This study aims to understand consumers' ethical buying behaviours, not only the impact of personality traits, but also across indulgent-restraint culture dimension. The results will enrich the existing literature on ethical decision-making and provide recommendations to marketers in how to formulate their marketing messages and strategies, showcasing the company being a corporate citizen.

How Covid-19 Changes Organizational Citizenship Behavior and Generates Job Insecurity? Employee Psychological Strain as a Mediating Role

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**How COVID-19 changes organizational citizenship behavior and generates job insecurity?
Employee psychological strain as a mediating role**

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Extended Abstract

Building on a transactional model of stress perspective, this study develops and examine a model of how COVID-19 event generates employee job insecurity and decreases organizational citizenship behavior via psychological strain. This study conducted three waves of measurements to replicate the mediating effects of psychological strain on the relationship between perceived COVID-19. The findings found that a COVID-19 event evokes employees' psychological strain and results in increasing job insecurity and diminishing OCB. Such findings realize that employees feel job insecurity and tend to display less helping behavior during the pandemic.

Keywords: COVID-19; psychological strain; job insecurity; organizational citizenship behavior

1. Introduction

The coronavirus disease 2019 (COVID-19) has caused unprecedented uncertainty in the global workforce and brought about severe economic challenges to companies and employees worldwide.

The unexpected constraints of the COVID-19 pandemic engulfed major economies, health institutions, and all kinds of industries in an emergent contingency plan to manage adversities. Therefore, many companies have sought to cut costs by reducing employee payments and jobs to manage unexpected risks (Borden et al., 2020). These organizational decisions, in turn, increase employees' job insecurity,

which highlights the realized uncertainty of their employment. In addition, the threat of COVID-19 is likely to result in reduced helping behavior in organizations, such that employees diminish contact with their coworkers and reduce contributions within organizations to avoid disease infection. Employees who perceive the COVID-19 crisis may afford less organizational citizenship behavior (OCB) to avoid infection. Thus, people need to better understand the impact of the COVID-19 pandemic on employees in organizations to enable them to navigate through this severe situation, as well as understanding how COVID-19 influences employee job insecurity and reduces employees' engagement in helping behavior.

Although prior studies have reported COVID-19 to be harmful to employees' job insecurity (Khudaykulov et al., 2022; Lian et al., 2022; Lin et al., 2021), little is known about how an important mechanism of an individual's psychological state may mediate the relationship between COVID-19 and its consequences. According to the transactional model of stress (Lazarus & Folkman, 1987), stressful events at work produce psychological strain, thereby resulting in a response to the event. Therefore, the second goal of this study was to explore whether psychological strain, as an important mechanism, is likely to mediate the effects of COVID-19 on helping behavior and job insecurity.

This study makes several contributions to the literature. First, employees' perception of COVID-19 may influence a decrease in OCB, which displays as less helping behavior within their organizations (Lin, Savani, & Ilies, 2019). The second goal of this study was to measure how fear of COVID-19 in the workplace generates job insecurity among employees. Third, this study contributes

to the organizational literature by empirically examining how the process of psychological strain affects the relationship between fear of COVID-19 and its outcomes (i.e., OCB and job insecurity). The impact of the COVID-19 event is more likely to result in employees' psychological strain and concern about their job security.

2. Literature and framework

This study drew on the transactional model of stress (Lazarus, 1993) to explain the process through which the perception of COVID-19 influences employee job insecurity and reduces employees' engagement in helping behaviors. This stress model highlights how people experience the extent of a stressful event and its effect on their psychological and behavioral reactions (Lazarus, 1966). According to this stress model, individuals interpret the strength or severity of a stressful event before determining their attitudes and behaviors (Lazarus & Folkman, 1987). Therefore, this study defined the COVID-19 event as the extent to which an individual perceives COVID-19 strength and reacts to the event. When employees perceive a COVID-19 event, based on the transactional model of stress, they may construe this stressful event and respond with psychological and behavioral reactions.

Job insecurity is a perceived threat to the stability of a job that determines whether employees can continue to stay in organizations based on their organization's financial economy (Probst, 2008). Job insecurity is also defined as a subjective phenomenon, in which employees perceive the extent to which the constant presence of their job in an organization is at risk. It implies a threat to employees' job instability and loss of employment. As perception of COVID-19 increases, we expect employees'

job security concerns to increase. Thus, this study proposes the following hypothesis:

Hypothesis 1: A perceived COVID-19 event is positively related to job insecurity.

During the COVID-19 pandemic, employees who perceived the COVID-19 predicament paid more attention to protecting themselves and their families from the disease. When employees perceive the COVID-19 crisis, they consider that they must keep their distance and stay away from their coworkers to avoid being infected. Therefore, they tend to detach themselves from their coworkers and engage in less OCB, which is a voluntary way of helping their coworkers. Indeed, employees may display less helping behavior because this behavior could increase the likelihood of being infected by COVID-19. Based on these arguments, this study proposes the following hypothesis:

Hypothesis 2: A perceived COVID-19 event is negatively related to OCB.

2.1 Perception of COVID-19 and Psychological Strain

The transactional model of stress implies that psychological strain is a reaction to individual threats and harms of numerous varieties that appear outside of the person-environment relationship (Lazarus, 1993). This model concentrates entirely on the procedures of individuals' psychological states and highlights the processes of the strength of a stressful event in their outcomes (Lazarus & Folkman, 1987). Employees who experience negative events may experience negative psychological strain (Liang, 2020). Caplan et al. (1980) defined psychological strain as a psychological state of negative strain, in which people experience increased frustration and annoyance. Psychological strain is produced when employees have to pay substantial attention to stressors. During the COVID-19

pandemic, employees could feel psychological strain and experience the threat of being infected by the disease. Therefore, perception of COVID-19 is most pertinent and vital in the context of the transactional model of stress. Hence, this study hypothesizes the following:

Hypothesis 3: A perceived COVID-19 event is positively related to psychological strain.

2.2 The Mediating Effect of Psychological Strain

Drawing on the transactional model of stress and psychological strain literature, this study used psychological strain as an important mediating mechanism between the perception of COVID-19 and its outcomes (i.e., job insecurity and OCB). The perceived strength of this disease event manifests in its criticality and severity (Lian et al., 2022). In the perspective of this study, criticality is the extent to which employees believe that COVID-19 may cause a lasting change (Liu et al., 2022;) and the extent to which they consider their current job to have been damaged by the COVID-19 crisis and experience (Liu et al., 2021). Therefore, employees may experience psychological strain and worry from job insecurity, as well as reducing their helping behavior when they perceive a COVID-19 crisis. Little research has looked at providing evidence of psychological strain as an important mediating mechanism between a COVID-19 event and its outcomes (i.e., job insecurity and OCB), even though prior studies have proved the effect of COVID-19 on job insecurity (Khudaykulov et al., 2022; Lin et al., 2021) and proactivity at work (Liu et al., 2021). Specifically, this study proposes the following hypothesis:

Hypothesis 4: Psychological strain mediates the relationship between perceived COVID-19 event and

job insecurity.

Hypothesis 5: Psychological strain mediates the relationship between perceived COVID-19 event and OCB.

3. Methods

The surveys in this study included questions on the perception of COVID-19 event, psychological strain, employee job insecurity, OCB, and control variables (i.e., participants' gender, age, education, number of children living at home, tenure, and hours worked per week). All participants voluntarily participated in this study, and their responses were kept confidential. Before the participants in this study began the surveys, they were asked to fill in the Mandarin version of the survey, which was translated from the English version of the survey by native English-speaking researchers.

3.1 Participants and Procedures

This study conducted three waves of measurements to replicate the mediating effects of psychological strain on the relationship between perceived COVID-19 and its outcomes (i.e., job insecurity and OCB) from May 2021 to December 2021. At Time 1, 800 employees were invited to complete surveys on topics including the perceived COVID-19 crisis strength and their demographic data, and 752 surveys were completed (94% response rate). At Time 2 (three months after Time 1), the 752 responding employees were asked to complete a survey about their psychological strain. A total of 695 surveys (92% response rate) were returned at Time 2. At Time 3 (four months after Time 2), the 695 responding employees were invited to rate their job insecurity and OCB. In total, 640 surveys

were returned (92% response rate). After assessing for missing or unavailable data, a total of 613 surveys were conducted in this study. Of these 613 participants, 477 (78%) were male, with an average age of 42.47 years, and 136 participants (22%) were female, with an average age of 40.72 years. The average organizational tenure was 18.20 years ($SD = 9.59$), the average number of work hours was 42.08 hours ($SD = 3.39$), and the average number of children was 1.19 ($SD = 0.92$). A five-point Likert scale, ranging from never (1) to always (5), was used.

3.2 Measures

Perceived COVID-19 Crisis Strength. At Time 1 (May 2021), therefore, this study assessed the COVID-19 crisis using an 11-item scale, including three dimensions of event novelty (four items), disruption (four items), and criticality (three items) from Morgeson (2005) and Morgeson and DeRue (2006). This study's measure followed Liu et al. (2021), who suggested that the three dimensions could be aggregated into a composite dimension for subsequent analyses. Sample item is "This COVID-19 crisis is critical for my long-term success". The Cronbach's alpha was 0.79.

Psychological Strain. At Time 2 (August 2021), this study adopted a 13-item scale from Caplan et al.'s (1980) measure. The instructions for the COVID-19 crisis were added to this measure to examine the degrees of negative psychological states during the COVID-19 pandemic. For example, "During the COVID-19 pandemic, I feel unhappy." The Cronbach's alpha was 0.80.

Job Insecurity. At Time 3 (December 2021), job insecurity was assessed using a three-item scale (Feather & Rauter, 2004). Sample items included "During the COVID-19 pandemic, I am sure I can

keep my job (reverse)". The Cronbach's alpha was 0.86.

OCB. At Time 3 (December 2021), this study adopted a 15-item Chinese scale ($\alpha = 0.72$) from Hui, Law, and Chen (1999). The items for each of the five OCB dimensions were averaged. A sample items included "During the COVID-19 pandemic, I am willing to help colleagues solve work-related problems".

Control Variables. This study controlled for employees' age, gender, number of children, work tenure, educational level, and work hours per week to diminish erroneous results from possible effects of demographic characters.

4. Results

This study conducted confirmatory factor analysis (CFA) with SEM version 8.8 to confirm the discriminant validity of the measurement model. The baseline model fit the data ($\chi^2(613) = 1979.18, p < 0.01$; RMSEA = 0.03; CFI = 0.96; GFI = 0.90) significantly better than the alternative models, with alternative model 1 reporting the data ($\chi^2(613) = 2274.18, p < 0.01$; RMSEA = 0.09; CFI = 0.94; GFI = 0.79), alternative model 2 reporting the data ($\chi^2(613) = 2498.17, p < 0.01$; RMSEA = 0.11; CFI = 0.91; GFI = 0.72), and alternative model 3 reporting the data ($\chi^2(613) = 6842.50, p < 0.01$; RMSEA = 0.16; CFI = 0.87; GFI = 0.57).

A perceived COVID-19 event was found to be positively related to job insecurity ($r = 0.34, p < 0.01$), supporting Hypothesis 1, and a perceived COVID-19 event was found to be negatively related to OCB ($r = -0.58, p < 0.01$), supporting Hypothesis 2. In addition, perceived COVID-19 was found to

be positively related to psychological strain ($r = 0.45, p < 0.01$), supporting Hypothesis 3. To provide the most precise model, this study conducted CFA with structural equation modeling to test the theoretical model. The hypothesized model, which was a two-partial mediation model, yielded the best fit to the data ($\chi^2(613) = 4.95, p < 0.01$; RMSEA = 0.03; CFI = 0.99; GFI = 0.99), whereas the alternative model, which was a two-full mediation model, reported a poor fit to the data ($\chi^2(613) = 175.71, p < 0.01$; RMSEA = 0.31; CFI = 0.75; GFI = 0.87).

The results of this study indicate that psychological strain partially mediates the relationship between perceived COVID-19 events and job insecurity, supporting Hypothesis 4. Perceived COVID-19 was negatively related to OCB through psychological strain, supporting Hypothesis 5. The finding of this study demonstrates that psychological strain mediates the relationship between perceived COVID-19 events and job insecurity ($z = 4.96, p < 0.01$; CI = 0.06 to 0.23), thus further supporting Hypothesis 4. Finally, the finding of this study reveals that the bootstrapping 99% confidence interval of the mediating effect of psychological strain on the relationship between the perceived COVID-19 event and OCB did not comprise zero (CI = -0.29 to -0.13). In addition, the Sobel test showed that the indirect effect of psychological strain on the relationship between perceived COVID-19 and OCB was significant ($z = -7.50, p < 0.01$), thus further confirming Hypothesis 5.

5. Discussion

The findings of this study show that the COVID-19 pandemic strongly increased employees' job insecurity and diminished employees' OCB through psychological strain. These results correspond to

the findings of prior studies, which found that the COVID-19 crisis was related to job insecurity (Khudaykulov et al., 2022; Lian et al., 2022; Lin et al., 2021). In this study, the results found that the COVID-19 event also influences employees' OCB. Additionally, this study investigated the level to which psychological strain is an important mechanism between the COVID-19 event and its outcomes.

5.1 Theoretical Implications

The theoretical development of this study makes several contributions and provides certain implications. From the transactional model of stress perspective, this study contributes to a developing stream of psychological and behavioral studies on COVID-19 and its mediating role and outcomes. Second, the findings of this study also expand the OCB literature by implying that perceived COVID-19 may reduce employees' participation in helping behaviors. Employees may be concerned about the possibility of COVID-19 infection, resulting in a decrease in OCB when they perceive a COVID-19 crisis. Finally, this study highlights the relationship between a perceived COVID-19 event and its outcomes (i.e., job insecurity and OCB) through psychological strain. By underlining the perspective of the transactional model of stress, this study provides an understanding of the process through which the perception of the COVID-19 event increases employees' job insecurity and reduces their engagement in helping behavior.

5.2 Practical Implications

The COVID-19 pandemic has had a disastrous impact on economic challenges and increased the unemployment rate. Indeed, this study found that a COVID-19 event evokes employees' psychological

strain and results in increasing job insecurity and diminishing OCB. Such findings should assist employers with a positive improvement and appraisal of this disease crisis, as they realize that employees feel job insecurity and tend to display less helping behavior during the pandemic. Employers should provide a sufficient and satisfying working environment during the COVID-19 pandemic.

5.3 Limitations and Recommendations for Future Research

This study had two limitations. First, although this study conducted a three-wave research design, common method variance may exist in the causal relationship between variables. For future research, the author suggests that participants could invite different resources, such as OCB measurements for coworkers in multiple organizations. Second, the participants of this study completed surveys in a large private company in Taiwan. Due to the limited sample size and data collection, this study could not account for the differences in employees' perceptions of COVID-19 events, psychological strain, job insecurity, and OCB among different organizations and across industries.

6. References

- Borden, T., Akhtar, A., Hadden, J., & Bose, D. (2020, October 8). The coronavirus outbreak has triggered unprecedented mass layoffs and furloughs. Here are the major companies that have announced they are downsizing their workforces. Business Insider. <https://www.businessinsider.com/coronavirus-layoffs-furloughs-hospitality-service-travel-unemployment-2020>
- Caplan, R. D., Cobb, S., French, J. R. P., Jr., Harrison, R. V., & Pinneau, S. R., Jr. (1980). Job demands and worker health: Main effects and occupational differences. Ann Arbor, MI: Institute for Social Research. <https://doi.org/10.1037/0021-9010.93.5.1104>
- Feather, N. T., & Rauter, K. A. (2004). Organizational citizenship behaviours in relation to job status, job insecurity, organizational commitment and identification, job satisfaction and work values. *Journal of Occupational and Organizational Psychology*, 77(1), 81-94. <https://doi.org/10.1348/096317904322915928>
- Hui, C., Law, K. S., & Chen, Z. X. (1999). A structural equation model of the effects of negative affectivity, leader-member exchange, and perceived job mobility on in-role and extra-role performance: A Chinese case. *Organizational Behavior and Human Decision Processes*, 77 (1), 3-21. <https://doi.org/10.1006/obhd.1998.2812>
- Khudaykulov, A., Changjun, Z., Obrenovic, B., Godinic, D., Alsharif, H. Z., Jakhongirov, I. (2022). The fear of COVID-19 and job insecurity impact on depression and anxiety: An empirical study in China in the COVID-19 pandemic aftermath. *Current Psychology* (in press). <https://doi.org/10.1007/s12144-022-02883-9>
- Lazarus, R. S. (1966). Psychological stress and the coping process. McGraw-Hill.
- Lazarus, R. S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology*, 44, 1-22. <https://doi.org/10.1146/annurev.ps.44.020193.000245>
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, 1(3), 141-169. <https://doi.org/10.1002/per.2410010304>
- Lian, H., Li, J. K., Du, C., Wu, W., Xia, Y., & Lee, C. (2022). Disaster or opportunity? How COVID-19-associated changes in environmental uncertainty and job insecurity relate to organizational identification and performance. *Journal of Applied Psychology*, 107(5), 693-706. <http://dx.doi.org/10.1037/apl0001011>
- Liang, H-L. (2020). How workplace bullying relates to facades of conformity and work-family conflict: The mediating role of psychological strain. *Psychological Reports*, 123(6), 2479-2500. <https://doi.org/10.1177/0033294119862984>
- Lin, K. J., Savani, K., & Ilies, R. (2019). Doing good, feeling good? The roles of helping motivation and citizenship pressure. *Journal of Applied Psychology*, 104(8), 1020-1035. <https://doi.org/10.1037/apl0000392>
- Lin, W., Shao, Y., Li, G., Guo, Y., & Zhan, X. (2021). The psychological implications of COVID-19 on employee job insecurity and its consequences: The mitigating role of organization adaptive

- practices. *Journal of Applied Psychology*, 106(3), 317-329. <https://doi.org/10.1037/apl0000896>
- Liu, D., Chen, Y., & Li, N. (2021). Tackling the negative impact of COVID-19 on work engagement and taking charge: A multi-study investigation of frontline health workers. *Journal of Applied Psychology*, 106(2), 185-198. <http://dx.doi.org/10.1037/apl0000866>
- Morgeson, F. P. (2005). The external leadership of self-managing teams: Intervening in the context of novel and disruptive events. *Journal of Applied Psychology*, 90(3), 497-508. <https://doi.org/10.1037/0021-9010.90.3.497>
- Morgeson, F. P., & DeRue, D. S. (2006). Event criticality, urgency, and duration: Understanding how events disrupt teams and influence team leader intervention. *The Leadership Quarterly*, 17(3), 271-287. <https://doi.org/10.1016/j.leaqua.2006.02.006>
- Probst, T. M. (2008). Job insecurity. In J. Barling & C. L. Cooper (Eds.), *The sage handbook of organizational behavior* (Vol. 1, pp. 178–195). Thousand Oaks, CA: Sage.

Media Framing of the Legitimacy of Chinese MNEs and Corporate Voice Strategies: A Case-based Study of Trump's TikTok ban

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Media Framing of the Legitimacy of Chinese MNEs and corporate voice strategies:

A Case-based Study of Trump's TikTok ban

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Extended Abstract

Chinese multinational enterprises are facing almost continuous negative media coverage in many Western countries, given the rising geopolitical tensions between the China and the West. This study aims to scrutinize this phenomenon to examine why and how Chinese multinationals are suffering from negative media coverage, and how firms can deal with such challenges when facing geopolitical complexities. To examine the phenomenon of interest, this study takes a cross-disciplinary approach by combining the subjects of international business, mass communication, and international relations.

Keywords: Liabilities of origin; corporate legitimacy; geopolitics; media framing; nonmarket strategy

1. Introduction

The research problem that this paper aims to address is: How can Chinese multinationals interpret and respond to media-framed legitimacy challenges when facing intensive geopolitical tensions? This research problem leads the author to develop three concrete research questions: How are liabilities of origin framed by the media, thereby posing legitimacy challenges for Chinese multinationals? How are the voices of different stakeholders framed by the media in constructing the legitimacy of Chinese multinationals? How can Chinese multinationals form voice strategies to mitigate legitimacy challenges in the geopolitical context?

This study is a cross-discipline research combining subjects of international business (IB), mass communication, and international relations. The research design contains an in-depth case study with supplementary interviews. The case study focuses on the legitimacy challenges of TikTok in the US. Then, semi-structured interviews supplement the case study and explores Chinese MNEs' voice strategies. This study extends knowledge and makes contributions to three theoretical gaps regarding MNEs' legitimacy challenges in the geopolitical rivalry, media framing of Chinese MNEs' legitimacy, and their voice strategies as part of the nonmarket strategy. Besides, it responds to the call for methodological pluralism in case study work. Finally, it generates both managerial and policy implications for MNEs and governments to consider the impact of geopolitical rivalry on MNEs.

2. Literature Review

In modern global business settings, it is crucially important that multinational enterprises (MNEs) understand the nuances and complexities of legitimacy (Deephouse, 1996; Suchman, 1995). Although liabilities of foreignness (LOF) are borne by all MNEs when entering foreign countries (Zaheer, 1995; Kostova et al., 2008), liabilities of origin (LOR) have been recognized as a key disadvantage affecting emerging market multinational enterprises' (EMNEs) legitimacy in developed countries (Ramachandran & Pant, 2010). Relatedly, geopolitical relationships have been considered increasingly as a factor exacerbating the level of opposition MNEs face in foreign countries (Shi et al., 2016). Such a phenomenon has occurred more often for EMNEs operating in developed countries, where we see huge institutional distances between the home and host countries (Kostova & Zaheer, 1999). Due to rising geopolitical rivalry and tension around the world (e.g., the US–China Tech Cold War), more cases of EMNEs' (e.g., Chinese MNEs) legitimacy threats in developed countries are triggered by political allegations rather than corporate wrongdoing and misbehavior. Scholars have emphasized that such legitimacy challenges faced by EMNEs in the host country can be influenced by their home country conditions (Marano et al., 2017).

As legitimacy is a state endorsed by social actors, it is vital to identify two key social actors: government regulators and public opinion (Deephouse, 1996). In terms of government regulators, scholars have claimed that the MNEs' political risk is legitimacy-based (Stevens et al., 2016). As for public opinion, the media is an important social-control agent affecting attitudes of the public toward MNEs (Clemente & Gabbioneta, 2017). Stevens et al. (2016, p. 948) asserts that it is crucial for studies to investigate the "role of legitimacy-granting actors other than the government" that can determine corporate legitimacy. As such, this study scrutinizes the role of the media, as a less examined social actor, in affecting Chinese MNEs' legitimacy in host countries.

This research focuses on the voice strategies for Chinese MNEs to mitigate legitimacy contests and challenges caused by geopolitical issues. The media is an important yet less investigated stakeholder for EMNEs when facing legitimacy contests in the context of geopolitical rivalry (e.g., US—China Tech Cold War). Hence, the purpose of this research is to investigate how media influences Chinese MNEs' legitimacy in developed countries, and how they can make a media-related voice strategy to navigate legitimacy contests in developed countries.

3. Methods and results

To answer the research questions above, I adopt a research design containing three independent yet interrelated studies: two in-depth case studies and one supplementary interview-based study.

Following the case-based research methodology from various qualitative scholars (e.g., Welch et al., 2011; Piekkari et al., 2009), this research design is encapsulated in the following five characteristics:

1) adopting a qualitative approach; 2) focusing on the phenomenon-based research setting; 3) applying an interpretive case study design; 4) emphasizing contextualization in theorizing from case study; 5) using triangulation as quality control.

The case study of TikTok's legitimacy challenges in the US reveals the legitimation dynamics among different stakeholders in the media. It helps to answer the research question of how the voices of

different stakeholders (especially governments and MNEs) are framed by the media in (de)constructing the focal MNE's legitimacy. Findings show that the media can serve as a battlefield in which legitimation contestation is interplayed among government legitimation claims, corporate legitimation responses, and other key stakeholders' voices. The legitimation contestation kept upgrading along with the increasing intervention by both TikTok's host and home governments, which indeed reveals the importance of the geopolitical context. Then, a thematic analysis was conducted based on the dimensions identified from the voices analysis, and a matrix of media framing on the TikTok case was developed. It further articulates the media's role as a legitimacy evaluator for MNEs. Findings show that the politics-oriented media framing overwhelmed the business-oriented media framing in the TikTok case, which again reveals the importance of geopolitical context and how the media framed the TikTok case through such context.

Following the TikTok case, semi-structured interviews are conducted to surface firm-level views and insights into what voice strategies can be used by MNEs and the thinking behind it. Such interviews help to obtain insights into how MNEs are dealing with legitimacy challenges when facing up to rising geopolitical rivalries. In this study, ten public relations (PR) managers are interviewed, half from MNEs and half from PR agencies.

Through an abductive analysis approach, four strategic themes emerged from the analysis, which is "strategic alignment in the home country", "contextual adaptation in the host country", "global media engagement and agility", and "organizational design and collaboration". Based on these themes, two aggregated dimensions were identified: "external orientation and resilience" and "internal capabilities and efficiency". These more theoretical dimensions highlight the importance of external adaptability and resilience, as well as internal alignment, capabilities, and efficiency in successfully implementing voice strategies. Finally, the findings of the supplementary interviews enable the author to put forward a framework of MNEs' voice strategies in the geopolitical context.

4. Discussion and conclusion

This paper provides novel insights and knowledge into how Chinese MNEs can overcome media-framed legitimacy challenges when facing increasing geopolitical tensions. Here, the key theoretical and managerial contributions are summarized.

Regarding theoretical contributions, firstly, this study sheds light on the theory of MNEs' legitimacy in the IB literature (e.g., Suchman, 1995; Ramachandran and Pant, 2010), by revealing the mechanism of how LOR becomes a salient legitimacy challenge for MNEs in host countries. In such a mechanism, LOR serves as the cause, geopolitical rivalry serves as the context, and media framing serves as the process. Secondly, this study sheds light on the theory of corporate media coverage (e.g., Graf-Vlachy et al., 2020; Clemente and Gabbioneta, 2017), by revealing not only the constructs but also the process of media framing on MNEs' legitimacy contestation. This study proposes a new framework of media framing of MNEs' LOR which differs from previous media framing of corporate scandal. Further, this study crystallizes the evolvement and process of media framing, by identifying the legitimization battlefield and legitimization dynamics of different stakeholders in the media. Thirdly, this study sheds light on the theory of MNEs' nonmarket strategies (e.g., Boddewyn and Brewer, 1994; Doh et al., 2017), by developing a framework of MNEs' voice strategies in the context of geopolitical rivalry. Given the focus on business–government relationship in existing nonmarket literature (Sun et al., 2021), the voice strategies proposed in this study enrich nonmarket theories by taking a less investigated stakeholder—the media, into account.

Regarding managerial implications, this study puts forward two general suggestions for MNEs to effectively develop voice strategies and navigate geopolitical complexities. Firstly, MNEs need to develop an ability of external resilience, including making appropriate voices responding to legitimacy complexities in both home and host countries. Secondly, MNEs need to develop internal capabilities and enhance communication efficiency. Although this study focuses on Chinese MNEs, such implications can be drawn for other MNEs involving in the geopolitical context.

Core References

- Clemente, M. and Gabbioneta, C. 2017. How does the media frame corporate scandals? The case of German newspapers and the Volkswagen diesel scandal. *Journal of Management Inquiry*, 26, pp. 287–302.
- Deephouse, D. 1996. Does Isomorphism Legitimate? *Academy of Management Journal*. 39(4), pp. 1024-1039.
- Kostova, T. et al. 2008. Institutional theory in the study of multinational corporations: A critique and directions. *Academy of Management Review*, 33(4), pp. 994-1006.
- Kostova, T. and Zaheer, S. 1999. Organizational legitimacy under conditions of complexity: The case of the multinational enterprises. *Academy of Management Review*, 24(1), pp. 64-81.
- Marano, V., Tashman, P. and Kostova, T. 2017. Escaping the iron cage: Liabilities of origin and CSR reporting of emerging market multinational enterprises. *Journal of International Business Studies*, 48, pp. 386-408.
- Ramachandran, J. and Pant, A. 2010. The liabilities of origin: An emerging economy perspective on the cost of doing business abroad. In T. Devinney, T. Pedersen and L. Tihanyi (Eds.), *The past, present, and future of international business and management*, pp. 231–265. Bingley: Emerald.
- Shi, W., Hoskisson, R. and Zhang, Y. 2016. A geopolitical perspective into the opposition to globalizing state-owned enterprises in target states. *Global Strategy Journal*, 6(1), pp. 13-30.
- Stevens, C., Xie, E. and Peng, M. 2016. Toward a legitimacy-based view of political risk: The case of Google and Yahoo in China. *Strategic Management Journal*, 37, pp.945-963.
- Suchman, M. 1995. Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), pp. 571-610.

Sustainable Strategy Implementation by Locally Owned Businesses in Hospitality Industry: A Case Study of Khao Lak, Phang Nga, Thailand

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Sustainable Strategy Implementation by Locally Owned Businesses in Hospitality

Industry: A Case Study of Khao Lak, Phang Nga, Thailand

Abstract

The tourists' demand is continuously increasing which has led to expanding hospitality businesses to meet such demand, affecting the degradation of the environment. Sustainability becomes the primary for all businesses to adopt. This research aims to understand how locally owned businesses implement a sustainable strategy. Specifically, it investigates the enabling factors influencing its implementation. Results were that stakeholder, strategy, resource, and external organization influenced sustainable strategy implementation in businesses. There were various environmental and social practices. Besides, motivation, benefit, and challenges for implementing the strategy were provided, including customer perspective.

Keywords: Sustainable Strategy Implementation, Environmental Sustainability, Social Sustainability, Economic Sustainability, Hospitality Industry

1. Introduction

With the importance of responsibility for environment and society, the tourists themselves are increasingly aware of sustainability. The hospitality industry is starting to take responsibility since this industry relies on the natural environment which serves as a major tourist attraction. Sustainability has become a strategy for economic planning that aims to promote economic growth while preserving environmental quality for future generations (Meadowcroft, 2021). In light of Khao Lak's natural abundance, the demand is continuously increasing. Yet, the increase in supply, including hotels, restaurants, and tour operators to meet such demand has led to the degradation of Khao Lak's natural resources and the environment. Therefore, it is essential to

create sustainability in the industry to maintain natural resources and the environment for it is what the economy in this area relies on.

This leads to the research question how locally owned businesses in Khao Lak's hospitality industry implement a sustainable strategy in their organizations and the research intends to shed light on investigating the enabling factors derived from prior researches with its implementation.

2. Literature and Framework

Sustainable Strategy in Hospitality Industry

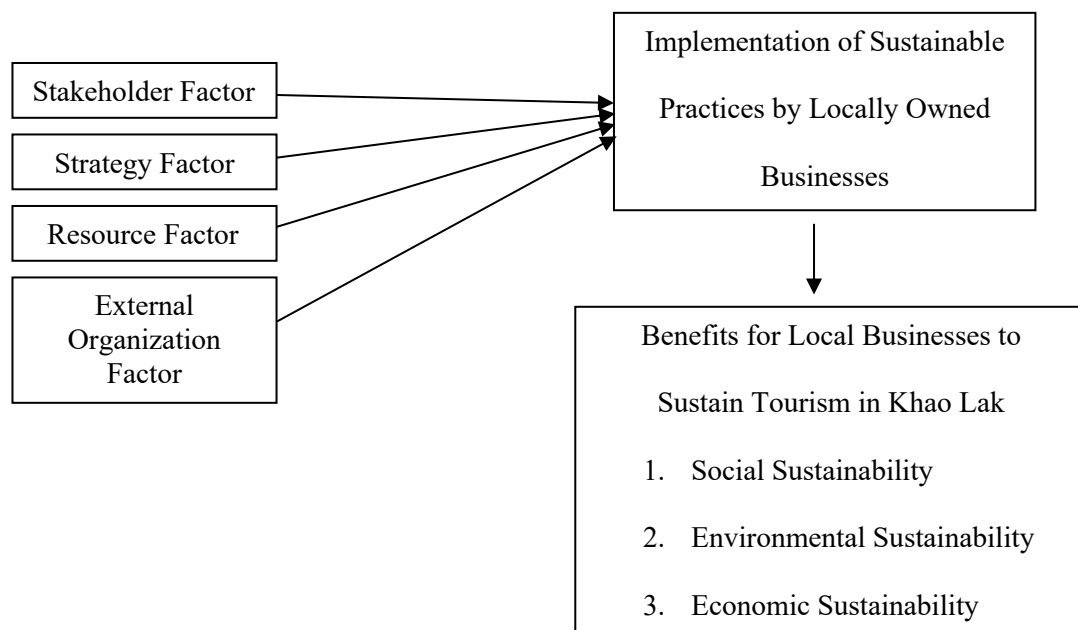
Hospitality industry has an inevitable impact on the environment. Sustainability, hence, has emerged as a critical and necessary factor as well as a growing concern within the global tourism industry. Environmental conception has become a necessity for attaining sustainable tourism development not only to improve the natural environment and take social responsibility to meet the need of people and develop their quality of life but also to maintain the competitive performance in this industry. To increase competition in a globalized world, hospitality businesses, and tourist destinations that do not embrace this philosophy will be unable to compete with their main competitors (Boley and Uysal, 2013).

Factors Influencing the Sustainable Strategy Implementation

A well-implemented strategy not only enhances the business' internal performance but also establishes several competitive advantages. A poor strategy cannot be implemented into an effective strategy. A logical strategy can establish a framework for a set of criteria and outcomes that ease the implementation. On the other hand, problems and barriers caused by poor strategy can jeopardize strategy implementation success (Hrebiniak, 2013 cited in Guenther, 2015).

A review of the study literature on the factors influencing the implementation of sustainable strategy in the hospitality industry and the studies of concept and key factors of sustainable strategy implementation (Radomska, 2015) and (Guenther, 2015) reveal four key factors derived from synthesizing the mutual factors within each sector: stakeholder, strategy, resource, and external organization.

Conceptual Framework of Sustainable Strategy Implementation in Local Hospitality Industry



3. Research Methodology

The key players in the hospitality industry; hotel, restaurant, and tour operator in Khao Lak, Phang Nga, Thailand which implement a sustainable strategy in their organizations were used as case selection. The method involved in the research was a qualitative analysis of in-depth interviews with 16 participants in various roles (i.e., top-level management, employee, and customer) and analyzed the interview transcript through thematic analysis.

4. Results

The practices were various whether environmentally or socially sustainable practices which were energy and water consumption, waste management, ecological product, sustainable sourcing, raising customer awareness and responsibility to society. The implementation was quite similar. All businesses started by determining business objectives to achieve and be aligned with employees' tasks. They often held meetings to let the employee acknowledge the businesses' policies, objectives, and guideline practices, particularly the head of each department. The head of each department was in charge of giving a briefing to the subordinates in each department so that they were aware of the guidelines that must be followed. There were educating and training the employee on strategy and its practices. There was tracking progress after adopting the practices and following up on its result or even problems that occurs, to find the solution or adjust its practices. The report was made for showing the result of implementing the strategy, however, restaurant and tour operator verbally reported to their employees. Finally, the businesses rewarded the employees for they follow the practices which achieves the business objectives. Furthermore, there were various factors contributing to successful implementation. The stakeholders which were leaders, employee involvement, customer collaboration, and the local community were critical elements for implementing strategy. The strategy was also an important factor to ensure the employees acknowledge the guidelines and policies the business wants to achieve in implementing its sustainable strategy, add to this, communicating strategy helped make sure that the employees truly understand the business objective and follow its strategy. In the implementation of a sustainable strategy, resources were an element factor to achieve a goal or carry out activities on sustainability which were employee, cost, tool, and environment. Besides, external organizations, namely, rules and regulations by national parks, local governments, foundations, and other enterprises involved in the development and implementation of sustainable practices were also important factors. However, there were also challenges to sustainable strategy implementation of the businesses

which were no model or roadmap for guiding the implementation, employees feel that sustainable practices are burdened apart from their main responsibilities, the conflict between department and individual, inadequate information sharing in the organization, high cost of being sustainable for business, as well as Covid situation that affects the economy in the businesses. Nevertheless, what locally owned businesses in the hospitality industry implemented sustainable strategy and practices had positive benefits to businesses, that was, business reputation, customer satisfaction, employee satisfaction, cost reduction, market success, competitive advantage, and long-term advantage which contributed to sustaining tourism in Khao Lak.

5. Discussion

The businesses adhere to the practices of social and the environmental sustainability with motivations related to the research (as cited in Pereira et al., 2021) that many businesses are adopting sustainable strategy because of increasing pressure from various parties, for instance, stakeholders, business partner, local governments, and environmentally conscious customers as (Chan et al., 2017) customer awareness of energy efficiency is growing all the time. The image and the reputation of a business are other important driving motivations in attracting customers. Businesses implement a sustainable strategy to help in marketing and to gain business reputation and image. Consistent with (Gavilanes et al., 2019) that the motivator for a customer to choose their vacation location is the credibility of a place it is and promotes itself as sustainable. Natural resource degradation is a major motivator for businesses. Environmental conservation and protection are the primary concerns of sustainable practices to ensure the future survival of the tourism industry. Its benefits are resulting in the reduction of operating cost that environmental practices have a significant impact on financial performance. Social practices also bring in employee satisfaction, which contributes to the efficiency of operations.

And customer satisfaction is the benefit that businesses gain as a business reputation (Alonso-Almeida et al., 2018). In addition, the business's advantage is that success in marketing as a point of sale attracts customers which brings in a competitive advantage and a long-term advantage, consistent with (Robin et al., 2016.) the environmental strategy has a positive impact on an organization's overall competitiveness. However, implementing a strategy into practices across all these businesses is not very complicated due to the organizational structures are not that large. The businesses focus on the outcomes by following the sustainable practices rather than going into the details of implementing an effective strategy. The managements lack knowledge and understanding of effective strategies as well as tools that can help successful strategy. This finding is in line with the obstacles in implementing a strategy to be successful (Hrebiniak, 2013 cited in Guenther, 2015).

6. References

- [1] Alonso-Almeida, M. D. M., Bagur-Femenias, L., Llash, J., & Perramon, J. (2018). Sustainability in small tourist businesses: The link between initiatives and performance. *Current issues in tourism*, 21(1).
- [2] Boley, B.B., & Uysal, M. (2013). Competitive synergy through practicing triple bottom line sustainability: Evidence from three hospitality case studies. *Tourism and hospitality research*, 13(4).
- [3] Chan, E. S., Okumus, F., & Chan, W. (2017). The applications of environmental technologies in hotels. *Journal of hospitality marketing and management*, 26, 23-47.

- [4] Gavilanes, J., Ludena, C. F., & Cassagne, Y. J. (2019). Sustainable practices in luxury class and first-class hotels of Guayaquil, Ecuador. *Rosa dos Ventos*, 11(2), 400-4016.
- [5] Guenther, K. (2015). Key Factor for successful implementation of a sustainability strategy. *Journal of leadership and management*, 4, 1-20.
- [6] Meadowcroft, J. (2021). Sustainability. *Britannica*. Retrieved from <https://www.britannica.com/science/sustainability>.
- [7] Pereira, V., Silva, G. M., & Dias, A. L. (2021). Sustainability practices in hospitality: case study of luxury hotel in Arrabida natural park. *Sustainability*, 13(3164), 1-21.
- [8] Radomska, J. (2015). The concept of sustainable strategy implementation. *Sustainability*, 7.
- [9] Robin, C. F., Valencia, J. C., Munoz, G. J., Astorga, P.S., & Martinez, D.Y. (2016). Attitude and behavior on hotel choice in function of the perception of sustainable practices. *Tourism and management studies*, 12(1), 60-66.

Using the Kano Model in Kansei Engineering to Evaluate Customer Preferences for Metal-cutting Tools Sales and Services

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Using the Kano Model in Kansei Engineering to Evaluate Customer Preferences for Metal-Cutting Tools Sales and Services

Abstract

Emotional preferences play a significant role in customer purchase decisions and satisfaction. Kansei engineering is a promising method for translating psychological emotions into product and service attributes. This research used Kansei engineering to identify the emotional preferences of metal-cutting tool customers and evaluate them in terms of purchase decisions and satisfaction. In addition, the Kano model for service excellence was enhanced to obtain clearer information for decision-making responsive strategy development. 105 respondents chosen by purposive sampling, offered data about emotional preferences by questionnaire. Kansei Engineering indicated that salespersons with technical knowledge; prompt responsiveness; clean proper garbs; and active, enthusiastic personalities were likely to attract more positive purchase decisions and satisfaction. Sub-dealer customer groups would highly prioritize training seminars, while end-users would prefer a flexible regrind and recoat facility as well as computer numerical control (CNC)-literate service engineer. The Kano model produced results in the same direction but in an elevated way. The model helped explain preferences that increased satisfaction and those that led to dissatisfaction in their absence. Without discrediting competitors, purchase intention would not significantly increase, but if it occurred, dissatisfaction surges. The integrative Kano model and Kansei engineering were synergetic ways to discover and evaluate emotional preferences even for intangible activities such as sales and services for industrial products.

Keywords: Kansei engineering, Kano model, Emotional preference, Metal-cutting tool, Industrial sales

1. Introduction

Selling metal-cutting tools is an industrial sale that needs a reasonable price, high quality, direct purchase source, prompt delivery, quick response, and proper information service to compete. (Sangnont & Dampitakse, 2014). These known factors can be referred to as customer basic preferences, but none of them are related to affective or emotional aspects, though many studies have shown that they are also important to purchasing decisions (Consoli, 2009). There are sufficient studies of emotional attributes affecting purchase decisions and customer satisfaction but most of them are concentrating on consumer products. The studies that focus on the sales and services of industrial products are highly limited. One of the most popular tools widely used to translate customer emotions and feelings into design attributes is Kansei engineering. It helps identify emotional attributes that drive purchase decisions. In this study, Kansei engineering is selected, and the Kano model is applied additionally. The Kano model helps to evaluate which emotional attributes gained from Kansei Engineering, promote customer satisfaction the most, and which ones do not.

This study aims to find out and evaluate the emotional preferences that affect the purchase decision and satisfaction of metal-cutting tool customers.

2. Literature and Framework

Kansei Engineering Methodologies

Kansei engineering is a technological and engineering process used to translate customers' feelings into product design specifications (Nagamachi, 2016). The process of Kansei engineering consisted of acquiring the customer's Kansei using the psychological or psychophysiological dimension, analyzing the Kansei data to clarify the structure, interpreting and transferring the data to the new product domain, and applying it to the new Kansei product design. This study applied Kansei Engineering to find out the customers' emotional preferences.

Kano Model

Kano model is a two-dimension model using the linear and non-linear relationship between feature performance and customer satisfaction to understand which attributes generate more satisfaction than others (Noriaki, 2001). The model categorizes attributes by using a bipolar survey with positive and negative questions. The combination of the answers results in the classification of the characteristics (Matzler & Hinterhuber, 1998). This study integrated the Kano model to evaluate the emotional preferences gained from Kansei Engineering.

Using the Kano Model in Kansei Engineering in Services

The most prominent superiority of Kansei engineering is the ability to understand the un-spoke needs of customers and quantify them into customer preferences that are also important for service industries as well (Chia-Hui, 2022). Kansei engineering can be integrated with other service tools such as the Kano model (Llinares & Page, 2011). This study applied the integrative Kano model and Kansei engineering as synergetic ways to discover and evaluate emotional preferences.

3. Research Methodology

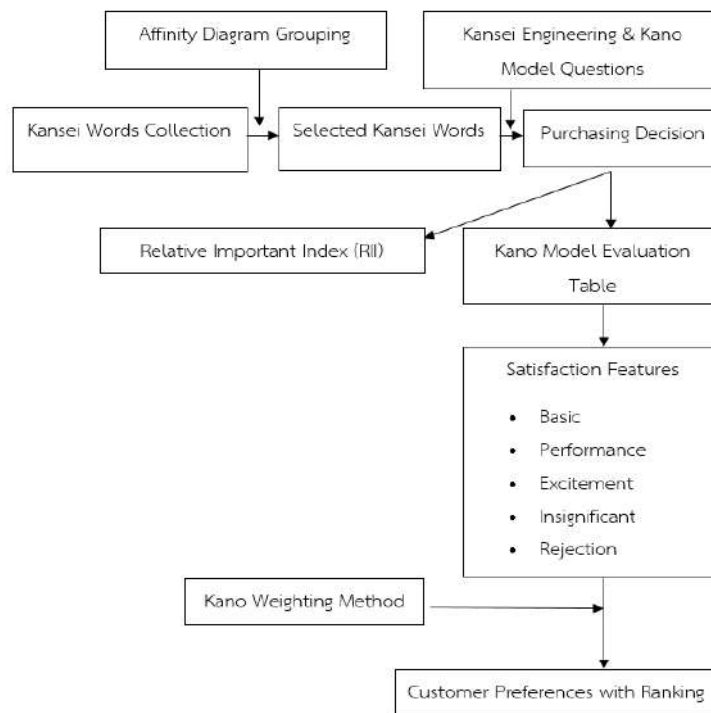


Figure 1 Research Framework

The researcher collected Kansei words from various sources and then selected them by using the affinity diagram grouping method. The final selected Kansei words were used to create a questionnaire with the Kano model's bipolar questions to collect data from 120 active customers of a metal-cutting tools seller. The data was assessed with IBM's Statistical Package for the Social Sciences (SPSS) by running the reliability test and exploratory factor analysis (EFA). The relative importance index (RII) was applied to rank the importance of leading to the purchase decisions. The Kano Evaluation Table was used to classify the satisfaction features, then using the Kano weighting method to rank customer preference.

4. Results

Preference	Kansei Engineering RII	Kano Weighting
Overall		
Good-looking-in Good Shape (I)	12	7
Clean and Proper Garb (M)	2	2
Not discredit Competitors (M)	10	3
Informal Presentation (I)	11	12
Technical Knowledge-Prompt Response (O)	1	1
Cheerful and Funny (M)	7	4
Active and Enthusiastic (I)	3	6
Proper Equipment and Media (M)	4	4
Welcome all Brands for Regrind Recoat (I)	8	10
Training Seminar for Customers (I)	8	9
Joining Test (I)	5	10
Can Adjust the CNC Program (I)	6	8
Sub-dealer Group		
Good-looking-in Good Shape (I)	10	4
Clean and Proper Garb (O)	4	3
Not discredit Competitors (I)	6	9
Informal Presentation (I)	8	8
Technical Knowledge-Prompt Response (O)	1	1
Cheerful and Funny (I)	5	7
Active and Enthusiastic (O)	3	3
Proper Equipment and Media (I)	2	4
Welcome all Brands for Regrind Recoat (I)	11	11
Training Seminar for Customers (O)	7	2
Joining Test (I)	9	12
Can Adjust the CNC Program (I)	12	9

Figure 2 Ranking of Customers' Preferences with RII VS Kano Model Weighing

The preference that brings the most satisfaction is Technical Knowledge-Prompt Response. The preferences that bring the most dissatisfaction when absent or inadequate are Technical Knowledge -Prompt Response, Clean and Proper Garb, and Not Discredit Competitors. For the Sub-dealer group, the most satisfying preferences were Technical Knowledge-Prompt Reply, Active and Enthusiastic, and Clean and Proper Garb. The preferences that bring the most

dissatisfaction if absent or inadequate were Technical Knowledge-Prompt Reply and Training Seminar for Customers.

5. Discussion

This study confirms the capability of Kansei Engineering to obtain some emotional preferences for the sales and services industries. The top-ranked preferences are Technical Knowledge and Prompt response, Clean and Proper Garb, and Active and Enthusiastic, respectively.

Among different groups of job titles, business types, and sexes. There are only a few preferences that vary among them. The engineer/technician/production group is likely to rate higher scores for salespersons with Good-looking-in Good Shape more than the purchase/procurement group does. The end-user group is more likely to rate higher scores than the sub-dealer group when considering Welcome all Brands for Regrind and Recoat and Can adjust the CNC Program. Males are more likely to rate higher scores for salespersons with Good-looking-in Good Shape while females are more likely to rate Active and Enthusiastic higher than males.

Applying the Kano Model to the Kansei engineering approach aims to uncover what preferences tend to satisfy the customers more. Though, there is no attractive preference found in the study. A One-dimensional performance is found, Technical Knowledge-Prompt Response, the other are must-be, and indifferent preferences. The first ranked preference when calculating Kano's weight is Technical Knowledge-Prompt Response. This preference also ranks number one with the highest relative importance index in the Kansei engineering approach. For the sub-dealer group, the top-ranking results are similar.

Kansei engineering could guide which customer preferences lead to purchase decisions. Integrating the Kano model would help us understand these preferences even better. The Kano model helps collect data and interpret how differently the customers would make a judgment when these preferences are absent or insufficient, while Kansei engineering portrays the one

side image only. From this study's result, Not Discredit Competitors might not significantly bring buying intention but if the salespersons discredit competitors, it will create immense dissatisfaction which is not unquestionably good for the business. According to the Kano attribute category, a salesperson with Technical Knowledge-Prompt Response is a one-dimensional or performance feature that brings a higher satisfaction level when this preference is adequate. Owe to the effective Kansei engineering approach, there is no reversal or rejection feature found in this study. The integration of the Kano model in the Kansei engineering approach can create the synergy to promote customer fulfillment.

6. References

- [1] Chia-Hui, H., Chun-Pin, H., & Chun-Chih, C., Applying Kano Model to Explore the Attractive Design Attributes of Jimmy's Picture Book Cover Design, *Proceeding of the 2022 International Conference on Management Engineering, Software Engineering and Service Sciences (ICMSS)*, January 7-9, 2022.
- [2] Consoli, D. 2009. Emotions that influence purchase decisions and their electronic processing, *Annales Universitatis Apulensis: Series Oeconomica*, 11(2), 996.
- [3] Llinares, & Page. 2011. Kano's model in Kansei Engineering to evaluate subjective real estate customer preferences, *International Journal of Industrial Ergonomics*, 41(3), 233-246.
- [4] Matzler, K., & Hinterhuber, H. H. (1998). How to make product development projects more successful by integrating Kano's model of customer satisfaction into quality function deployment, *Technovation*, 18(1), 25-38.
- [5] Nagamachi, M. 2016. Kansei/affective engineering. CRC press.
- [6] Noriaki, K. (2001). Life cycle and creation of attractive quality. *Proceedings of the 4th QMOD Conference, Linkoping, Sweden, September 12-14, 2001*.

[7] Sangnont, & Dampitakse.2014. Factors Affecting Purchase Decision on Cutting Tools of Auto-parts, Factories in Thailand's Eastern Industrial Estates, Rajamangala University of Technology Thanyaburi.

Halal Supply Chain and Halal Recognition in Middle Thailand.

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Halal Supply Chain and Halal recognition in Middle Thailand

Extended Abstract

This study investigated about Halal supply chain and Halal recognition in middle Thailand. In this region, Muslims mingle with Buddhists which is a major religion. The research was done by observation and non-structured interview in January 2022. The target of this study was the whole supply chain such as wholesale market (Talat Thai), wholesale supermarket (Makro), retail supermarket (Big C and Emporium super market), and food court (in Terminal 21 and Emporium).

Keyword: Halal, Supply Chain, middle Thailand.

1. Introduction

Halal originally means “permissible” in Arabic (Narawi et al. 2020). In Islamic law, it means things you can consume in your body; permitted food, cosmetic, vaccine etc. In the Islamic law, eating pork is prohibited, and other meats should be slaughtered as per Islamic law such as praying when slaughtering, proper bleeding and the procedure needs more than 2 participants to make sure it is done in proper way. And after slaughtering, the food should be transported and cooked without contaminating with non-halal food (Khan et al. 2018). In case contaminated, the halal value of the food will disappear (Yama & Tosaporn 2020). Halal products therefore need more cost than others to make and maintain the value. Halal certification mark is applied to confirm the Halal value as per an international standard. These days, Halal business is considered to be a new opportunity for carriers or travel industry; therefore, Halal supply chain management are in the spotlight (Abdul Rahman et al.

2020). This paper examines how halal food is managed in Thailand, Buddhist country in the world but with a long history of residence with Muslims, and about awareness of Halal food among the Thai people.

2. Theoretical Back Ground

Thailand is known as a biggest Buddhist country, however, at the same time, other religions have played important role for the development of this country (Omal 1999) . Though most of the population live in southern Thailand nearby the country boarder between Thailand and Malaysia, other part such as Middle, Northern and Northeast part of Thailand has Mosques and Muslim community around it. 20% of overall population in middle part of Thailand believe in Islam (Ishii 1977).

Compared to Muslims in southern Thailand, Muslims in urban central Thailand are characterized by their adaptation to Thai society. For example, they use different ways of greeting people in the Malay or Thai style, depending on the person they are addressing, and they use Thai family name (Ishii 1977). Thai government gave Thai (language) education to Muslim people who were originally a immigrant, and nowadays, the Muslim decedents consider themselves are “Thai” and often are not very aware of their origin (Kimura, Matsumoto 2005).

Muslims in central Thailand can be divided into several groups according to their roots such as

Persian, Indian, Cambodian Muslim etc. Persian (Iranian) Muslims build a community in Ayutthaya.

Originally those people did trading business since 17th century; and migrated to Ayutthaya which used

to be the trading base. However, the kingdom of Ayutthaya was taken by Burma in late 17th. Because of that, some part of the Persian Muslim population moved to Thonburi and some of them had a great benefit from teak wood trading. In the Ayutthaya period, Indian and Pakistani Muslims also started to migrate in Ayutthaya. The Indian and Pakistani Muslims migrated again into Bangkok in 19th as traders. This is because Bangkok has been capitalized rapidly since 1850; the Muslim traders took important role to trade products such as wood and tin and also overseas luxury goods to meet the demand that increased rapidly. These people also employed as a post officer for their high language skill to treat letters from overseas. Some Muslim people migrated from countries nearby such as Cambodia, Indonesia and Malaysia. Those people also played an important role in Thai industrial history such as producing Thai silk. The meat industry discussed in this paper is particularly conducted by groups of Pakistani Muslims. They originally engaged in breeding, butchery, and dairy farming of cattle. They started to develop slaughterhouses to supply beef to British and Indian soldiers especially during world war II. This is because slaughtering a big animal such as cattle is believed a great guilt (Bap) for Buddhist Thais (Raymond 1981).

3. Methods and Findings

The researcher investigated about Halal supply chain and non-Muslim Thai's awareness about Halal food in Middle Thailand. One-week research was done by observation and non-structured interview in Thai in wholefood market, wholefood super market, retail supermarket and food court in January

2022. The finding was documented in field notes constantly and analyzed afterwards.

Wholesale Market-Talat-Thai is a giant wholesale market located in Nonthaburi which is next to Bangkok and it is open 24hours a day where shop owners come to purchase in a big portion. Meat, fruits, vegetable and even flowers are sold divided in difference zones. The researcher went to see the meat zone; beef, chicken and pork are sold divided in different areas in the meat zone. The researcher first asked if they have Halal chicken in a chicken shop, but the shop owner didn't understand, after rephrasing if they have a "Muslim" chicken, he understood and responded they do not sell one, but the next shop does. Therefore, the researcher went to the next shop and asked again if they have Halal chicken, and the shop owner responded immediately that the everything the shop sells is Halal. After asking the same question in other several shops, it was found that each shop sell either non-halal or halal meat. None of the shop is selling both, however it was not possible to distinguish without asking at chicken shops. The situation was same in beef area- the only difference was some beef shops had Halal mark or some Arabic language on signboard, so it is distinguishable at first sight.

Wholesale Supermarket-Makro is a wholesale supermarket that owner of small business such as food stand can come purchase; this supermarket also accepts general household consumer. The researcher saw two stuffs chatting close to chicken section, so asked them if they sell Halal chicken here. They immediately answered "all the chicken sold in this supermarket is Halal" and showed Halal certificate on a big bag of chicken. They also explained chickens in small packages are also Halal; they just separated the big bag Halal chicken into small package; though, Halal certificate was not

showed on the small package. The staffs also explained the same for beef; and confirmed beef and chicken sold in this supermarket is all Halal.

Retail Supermarket-BIG C is a retail supermarket that usual household would come to buy food. The researcher asked to a staff standing by the meat section if they have Halal meat in here, however she did not understand. After rephrasing it into “Muslim” meat, she went to ask to a staff proceeding meat in backyard. The backyard staff understood and asked her back “what, you did not know Halal?”.

After a while, he showed some packaged beef with Halal certificate and explained other products are not Halal. The staff that the researcher asked first explained they do not sell Halal chicken here (still not sure if she had a proper knowledge or not).

There is a luxury supermarket in a department named Emporium. The situation was same in this supermarket; the supermarket staff first did not understand Halal and went to ask someone else after rephrasing it “Muslim” meat. Finally, a staff who knows Halal showed up and showed some Chickens with Halal certificate. He also explained beef sold in this supermarket are all Halal though Halal certificate is not stamped, and showed a paper-based Halal certification.

Food court -Terminal 21 is a big-casual department. A Muslim friend of the researcher informed that there is a Halal food shop. The researcher looked into a shop that sells Masaman curry and loti that the friend informed, however could not see any Halal information. So, the researcher finally asked verbally and the staff answered it is all Halal. It seems Muslim people in here distinguish Halal shop with the menu, not relying on written information. However, other food court in Emporium

department had Halal mark at Indian food shop. This may because Emporium has more customers from overseas.

4. Discussion

As stated already, there are various Muslim people in their origin in middle part of Thailand, and these people have played an important role in Thai economy. Though most of the population believes in Buddhism, Muslim people can live without worried about Halal supply anywhere. In other words, they are living without losing their own culture and established their position in middle Thailand though nowadays they speak Thai and living among Buddhist Thai people. Halal food have been broadly integrated into daily life that even Buddhist Thais eat them unconsciously.

This might be understood in two ways. First, in economical perspective, Halal value are partially be lost because of the mingle situation; producing Halal food takes more time and cost compared with other food. Buddhist Thais also consume the Halal food, and this means Halal food is consumed without demonstrating the Halal value. Furthermore, Halal meat is managed well in wholesale market, however, sometimes retail shop divide those in smaller package, so the Halal certification mark is not on the smaller package and its Haleness is no longer distinguishable.

On the other hand, however, this can be understood that Thailand has inclusive culture to live with Muslim people; Muslim people live without worrying their daily food though they are not majority religion in middle Thailand. This survey shows that the word "Halal" has not penetrated the general

Thai population. Nevertheless, Thailand can be seen as a developed Muslim country in that has infrastructure for Muslim people and have developed a Halal supply chain. Bangkok may be a model for other non-Muslim countries that accept Muslim migrants of tourists like Japan.

5. References

- [1] Abdul Rahman, N. A., Ghafar, N. H., Yuliana, E., Moin, M., Mohd Nur, N., & Mahmud, N. (2020). The evolution of Halal logistics in Malaysia, Thailand, Indonesia, the Philippines and Vietnam. *Halal Logistics and Supply Chain Management in Southeast Asia*, 87-98.
- [2] Ishii, Y. (1977). A note on the "protection" of Islam in Thailand. *Southeast Asian Studies*, 15(3), 347-361.
- [3] Khan, I., & Haleem, A. (2018). Defining Halal Supply Chain Management. *Supply Chain Forum: An International Journal*, 19(2), 122-131.
- [4] Kimura, M., & Matsumoto, K. (2005). China and Thailand as Part of Islamic Area (2) : A History of the Muslims in Thailand. *The Journal of Communication Studies*, 22, 81-112.
- [5] Omar, B. (1999). The Muslims in Thailand: A Review (<Special Issue>Islam in Southeast Asia). *Southeast Asian Studies*, 37(2), 210-234.
- [6] Nawawi, M., Abu-Hussin, M. F., Faid, M. S., Pauzi, N., Man, S., & Sabri, N. (2019). The emergence of halal food industry in non-Muslim countries: A case study of Thailand. *Journal of Islamic Marketing*, 11(4), 917-931.

[7] Raymond, S. (2007). The socio-economic status of Muslims in central and North Thailand.

Institute of Muslim Minority Affairs Journal, 3(2), 162-190.

[8] Yama, A., & Tosaporn, M. (2020). The Moderating Role of Halal Culture Linking Halal

Orientation Strategies with the Firm's Financial Performance: A Study of Halal Food Firms in

Thailand. *PSAKU International Journal of Interdisciplinary Research*, 7(2), 27-37.

Foreign Direct Divestment in Russia: Motives, Constraints and Actions of Western MNEs

MS0071

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**FOREIGN DIRECT DIVESTMENT IN RUSSIA:
MOTIVES, CONSTRAINTS AND ACTIONS OF WESTERN MNES**

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Abstract

Since the annexation of Crimea by Russia in 2014 and in particular since the Russian invasion of Ukraine beginning in February 2022, many Western countries have engaged in economic sanctions of Russia. Simultaneously, Western MNEs with investments in Russia are considering leaving the country altogether. Whereas many MNEs have announced divestment and exit, only few actually have carried through with these intentions. My study tries to understand the antecedents to related firm decision making regarding stay or leave activities. The goal is to engage in qualitative research that results in propositions as a foundation for large-scale quantitative work.

Keywords: Foreign direct divestment, geopolitical risk, Russia

FOREIGN DIRECT DIVESTMENT IN RUSSIA: MOTIVES, CONSTRAINTS AND ACTIONS OF WESTERN MNEs

1. Introduction

The International Business literature on Foreign Direct Divestment (FDD), i.e., the liquidation or sale of a foreign subsidiary (Hennart, Kim & Zeng, 1998), has focused on subsidiary-level variables and to a lesser degree on parent or host country-level variables driving these decisions (Arte & Larimo, 2019; Schmid & Morschett, 2020). Only recently have bilateral relations between MNE host and home countries been taken into consideration (e.g., Wang & Weiner, 2022). Russia's aggressive actions towards its neighbor to the west, Ukraine, resulted in the significant deterioration of relations between Western countries (e.g., European Union members, the UK, US, but also Australia, Japan, etc.) and Russia as well as strong economic sanctions of the country. This situation creates an opportunity to study the behavior of MNEs and their decision making regarding foreign direct investments (FDI) under duress.

While the second half of the last century saw tremendous growth in FDI worldwide, there has been a slowdown since the great recession (i.e., 2008 onward) (Garcia-Herrero, 2022). There is re-shoring, an increase of protectionism, and heightened interstate tensions. How and to what degree these will affect MNEs and their FDI is much debated and creates challenges for International Business research (Reilly, Tippmann & Scott, 2023). As companies are struggling to deal with these conditions and engaging in divestment considerations, anecdotal evidence indicates that firms are making geopolitical risk an increasingly important variable in location decisions, including contemplating the divestment of subsidiaries in additional countries, including China (Cohen, 2023; Panibratov & Brown, 2018).

Because we have little understanding of what drives MNE divestment decisions in situations of sharply deteriorating political relations between countries, I am engaging in qualitative research to broaden our knowledge and as a foundation for theory development. This follows Edwards and colleagues' (2022) call for more qualitative research on subsidiary management and Contractor's for "more richly textured analysis (2021: 12)" that details deglobalization determinants and trends (Godsell, Lel & Miller, in press). This October, I will be interviewing top management and board members of two Western European

MNEs with subsidiaries in Russia at the beginning of 2022. One of these firms has divested its Russian subsidiary in the meantime. The other announced that it will discontinue additional investments but continues operating its subsidiaries in Russia for the time being. The interview questions build upon the FDD literature and focus on the motives, drivers and constraints of these firms' decision making relative to traditional foreign divestment decision drivers such as the underperformance of a foreign subsidiary. My conference presentation will feature the findings of this research.

My intended contribution is threefold. First, I aim to create a deeper understanding and reveal drivers of FDD (or not) decisions in situations of extreme bilateral tensions, social pressures and heightened geopolitical risk. Second, I will develop related propositions to advance theory in this neglected area of FDD that is gaining in importance. Third, this theory development will be substantiated by qualitative research that will also result in teachable case studies. As such, I hope to generate a more complete understanding of foreign direct investment in emerging economies to include divestment decisions based on geopolitical changes. As has been noted before, company divestment decisions are most likely to be shrouded in secrecy (Panibratov & Brown, 2018) and qualitative research can lift the veil.

2. Literature Review

2.1. Foreign Subsidiary Divestment

Although much International Business research has focused on FDI, a limited set of studies has looked into FDD. This latter work was recently summarized in a literature review by Arte and Larimo (2019) and a meta-analysis by Schmid and Morschett (2020). Their findings largely agree, showing that (a) subsidiary-level variables such as subsidiary financial performance and to a lesser degree (b) parent firm-level variables such as host country specific experience are the main drivers of typical FDD decisions. The meta-analysis also found that economic growth (c) was the only host-country level variable significantly impacting FDD (Schmid & Morschett, 2020). Home country variables have not been considered. Much uncertainty also remains regarding the impact of the host country's institutional environment on FDD decisions (Nguyen, Larimo & Ghauri, 2022). Recent FDD literature has become more refined. For instance, Reilly and others (2023) performed a qualitative study of growing subsidiary closures and thus the raised importance of associated knowledge transfers within MNEs. Yet, traditional

FDD literature has paid little attention to emerging markets, the importance of wars, economic sanctions, associated political and social pressures from constituents, etc.

Nonetheless, nascent literature in Political Economy and International Business has begun to address these issues and their relationship with FDD. Based on the political economy literature, Godsell and colleagues (in press) argue that techno-nationalism is one driver of deglobalization and show that an American 2007 national security law had a negative impact on foreign acquisitions by US MNEs in national security-related industries compared to previous decades. Wang and Weiner (2022) also propose that politics has a significant impact on MNE divestment decisions. For instance, politics of the host country often influence the attractiveness of potential buyers and the prices they are willing to pay. The empirical analysis indicates that deteriorating political relations between MNE home and host country raise the likelihood of FDD (Wang & Weiner, 2022). Relatedly, Panibratov and Brown (2018) describe how several Western MNEs divested their Russian subsidiaries following Russia's annexation of Crimea.

2.2 MNE Conditions and Current FDD Activities in Russia

FDD decision making for Russian subsidiaries since the invasion of Ukraine in 2022 is different from what researchers have studied so far. In addition to concerns for subsidiary financial performance and traditional concern for risk, Western MNEs in Russia are considering economic sanctions, including import and export sanctions instituted by the host and home countries as well as home country political and social pressures to leave Russia (Evenett & Pisani, 2022). The social pressure is reflected in websites like one hosted by Yale University that grades companies with FDI in Russia based on the degree to which they have engaged in FDD there. Of about 1,500 MNEs they are tracking, 526 announced full divestment, getting a grade of "A". 225 are doing business as usual, getting an "F" (Yale CELI, 2023).

At the same time, the Russian government has established significant exit barriers. It has prohibited foreign companies from repatriating dividends and exporting assets. Regulations have been put in place that allow for nationalization of foreign subsidiaries if employees are being laid off or production is slowed (Wall Street Journal, 2022). Furthermore, government approval is required for divestment; if permitted, large write offs are necessary as firms can only sell assets at government-determined prices,

usually at a discount of 50 percent or more of their market value (The Economist, 2023). At the same time, opportunistic buyers, for instance non-Western competitors, have appeared and are taking advantage of the situation to acquire capacity at low cost and gain market share (Financial Times, 2022).

Russia is the 11th biggest economy in the world and has attracted significant investments from European and American MNEs of about \$350bn (The Economist, 2023). Divestment entails giving up significant revenues and profits as well as writing off large assets. The business press describes several cases, including challenges and losses MNEs have incurred. In actuality, because of the exit barriers, fewer MNEs have divested their Russian subsidiaries than statistics like the one from the Yale Chief Executive Leadership Institute listed above indicate. Using balance sheets of Western MNEs as their data source rather than company announcements, Evenett and Pisani (2022) find that less than ten percent of firms from EU and G7 countries with FDI in Russia before February 2022 have actually divested these assets. While many firms are attempting to divest, they face the exit barriers in Russia addressed above. Other firms may be announcing FDD without actually planning to do so to gain public approval (Rogers, 2022). Other firms state they do not want to abandon their Russian employees, customers, or suppliers (Evenett & Pisani, 2022). Research following announcements of withdrawal from Russia by MNEs listed on the US stock market shows a negative market reaction, in particular for firms announcing a complete withdrawal and firms that announced early relative to industry peers (Glambosky & Peterburgsky, 2022).

3. Methods

I seek qualitative data to gain insights in FDD decisions in Russia because large-scale quantitative studies do not provide the deep insights required for theory development in an understudied topic (Reilly et al., 2023). Based on current knowledge in the FDD and other literature reviewed above, I have developed a systematic questionnaire as a foundation for semi-structured interviews with managers in home-country headquarters who are the decision makers regarding foreign investments and divestments. Further, I am gathering archival data on the organizations and their foreign investments in Russia in addition to the interview data, which will also generate teachable case studies. Qualitative data is sought because of this new and complex phenomenon that is difficult to access and observe.

The interviewees are top managers and board members of two Western European manufacturers, both established, successful MNEs from different industries with significant investments in Russia. One of the firms has divested, the other remains fully invested in Russia. Following the recommendations for qualitative research, these contrasting cases provide a strong foundation for theoretical insights and promise to generate a wide range of propositions (Eisenhardt, 1989; Panibratov & Brown, 2018). This approach will be helpful to future deductive research since FDD for geopolitical reasons might become a larger issue given the high level of FDI worldwide in an environment of increasingly hostile relationships between certain countries.

4. Discussion and Conclusion

The goal of this study is to identify what drives foreign firms' decisions to divest subsidiaries in Russia or remain in the country following the Russian invasion of Ukraine. My aim is to contribute to research on FDD in the specific case of worsening bilateral or multilateral political home-host country relations and in consideration of the associated risks as well as pressures on MNEs. The situation is not unique; take for instance American relations with Venezuela or Iran. But it has the potential to become a much more critical issue for MNEs, for instance as Western relations with China deteriorate.

Developing theory on FDD under rising geopolitical tensions requires generating testable propositions. While the following propositions will need to be substantiated by my case studies, a preliminary review of the literature and anecdotal evidence from press reports indicate these and other potential propositions as outcome of my studies:

Potential Proposition 1: Whereas traditional FDD research finds that subsidiary-level variables are most important for FDD decisions, that may not be true for FDD in Russia, where parent-level considerations (e.g., political pressure, legitimacy, exchange rates) may be more important.

Potential Proposition 2: Whereas traditional FDD research finds that MNE size is negatively related to FDD, that may be the reverse for FDD in Russia because larger firms face stronger political and social pressures in their home markets.

Potential Proposition 3: Whereas traditional FDD research finds that (a) host country conditions are of less importance for FDD decisions and (b) disregards home country conditions, this may be

different from FDD in Russia where (a) host country governments are creating explicit exit barriers for FDD and (b) home country governments are pressuring MNEs to divest.

I expect that my qualitative research will identify various other propositions predicting how FDD decision making based on geopolitical considerations differs from traditional FDD theory. Thus, I hope to contribute to a broader understanding of FDD decision making in emerging markets and under deteriorating bilateral country conditions.

5. References

- Arte, P., & Larimo, J. 2019. Taking stock of foreign divestment: Insights and recommendations from three decades of contemporary literature. *International Business Review*, 28(6), 1–20.
- Cohen, P. 2023. The Ukraine War changed this company forever. *New York Times*, <https://www.nytimes.com/2023/07/05/business/economy/nokian-tyres-finland-romania.html?smid=nytcare-ios-share&referringSource=articleShare>, accessed July 25, 2023.
- Contractor, F. 2022. The world will need even more globalization in the post-pandemic 2021 decade. *Journal of International Business Studies*, 53(1): 156–171.
- Edwards, T., Svystunova, L., Almond, P., Kern, P., Kim, K. & Tregaskis, O. 2022. Whither national subsidiaries? The need to refocus international management research on structures and processes that matter. *Journal of International Business Studies*, 53(1): 203-210.
- Evenett, S. J. & Pisani, N. 2022. Less than nine percent of western firms have divested from Russia. Available at SSRN, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4322502, accessed June 13th, 2023.
- Eisenhardt, K. 1989. Building theory from case study research. *Academy of Management Review*, 14(4): 532-550.
- Financial Times*, 2022. Companies trying to exit Russia have to ‘dance with the devil.’ April 30th, <https://www.ft.com/content/4d66f931-563a-4fdb-9032-18cfa73a7f6>, accessed June 29th, 2023.
- Garcia-Herrero, A. 2022. Slowbalization in the context of US-China Decoupling. *Intereconomics*. 57(6): 352-358.
- Godsell, D., Lel, U. & Miller, D. in press. U.S. national security and de-globalization. *Journal of International Business Studies*, forthcoming.
- Nguyen, H. T. T., Larimo, J. & Ghauri, P. 2022. Understanding foreign divestment: The impacts of economic and political friction. *Journal of Business Research*, 139: 675-691.
- Panibratov, A. & Brown, T. 2018. Foreign divestments from Russia: An exploration of the mediating factors. *Strategic Change*, 27(4): 359-367.

- Reilly, M., Tippmann, E. & Scott, P. S. 2023. Subsidiary closures and relocations in the multinational enterprise: Reinstating cooperation in subsidiaries to enable knowledge transfer. *Journal of International Business Studies*, 54(6): 997-1026.
- Rogers, J. 2022. PepsiCo and other U.S. companies accused of “moralwashing” in statements about Russia. *MarketWatch*, <https://www.marketwatch.com/story/us-companies-including-pepsico-accused-of-moralwashing-in-statements-about-russia-11665085846>, accessed June 29, 2023.
- Schmid, D. & Morschett, D. 2020. Decades of research on foreign subsidiary investment: What do we really know about its antecedents? *International Business Review*, 29(4), 101653. <https://doi.org/10.1016/j.ibusrev.2019.101653>.
- The Economist*, 2023, February 24th. Russia’s technocrats keep funds flowing for Vladimir Putin’s war. <https://www.economist.com/europe/2023/02/04/russias-technocrats-keep-funds-flowing-for-vladimir-putins-war?frsc=dg%7Ce>, accessed July 25, 2023.
- Wang, D. & Weiner, R. 2022. The political economy of foreign direct divestment: Beyond ‘kiss your assets goodbye’. *Academy of Management Proceedings*, DOI: 10.5465/AMBPP.2022.205.
- Yale Chief Executive Leadership Institute, 2023. Yale CELI list of companies leaving and staying in Russia. <https://www.yalerussianbusinessretreat.com/>, accessed June 23, 2023.

Executive Succession and International Joint Venture Dissolution

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Executive Succession and International Joint Venture Dissolution

Abstract

Drawn from the literature on managerial social capital and executive succession, this study examines how a parent firm's executive succession impacts the likelihood of post-succession international joint venture dissolution. It proposes that compared to routine executive succession, a parent firm's non-routine executive succession, or CEO dismissal, is more likely to trigger the disruption of the parent firm's managerial capital and therefore increase the likelihood of post-succession international joint venture dissolution. This study further contends that a parent firm's organizational performance moderates the relationship between a parent firm's non-routine executive succession and the likelihood of post-succession international joint venture dissolution. Particularly, it argues that a parent firm's organizational performance strengthens this relationship. The empirical results of this study support the above arguments. To conclude, this study advances our knowledge by demonstrating that the disruption of a parent firm's managerial social capital associated with executive succession affects the post-succession international joint venture dissolution.

Keywords: CEO succession; managerial social capital; international joint venture; routine/ non-routine executive succession

1. Introduction

An international joint venture (IJV) is defined as an organizational entity owned and run by two or more independent parent firms from different countries (Barkema & Vermeulen, 1997; Yan, 1998). Using IJVs is a critical approach to enhance the value-added operations globally because it not only facilitates foreign market entries with higher speed and lower risks but also builds sustained competitive advantages through conducting international exploitative and explorative operations jointly with foreign partners (Hitt, Dacin, Levitas, Arregle, & Borza, 2000; Ren, Gray, & Kim, 2009). Consequently, the issues of IJVs, including the formation, operation, and dissolution of IJVs have received a lot of scholars' attention (Beamish & Lupton, 2016; Nemeth & Nippa, 2013; Ren et al., 2009). Among these issues, investigating the determinants of the IJV dissolution, exit, or termination has emerged as an important research question (Nemeth & Nippa, 2013). Although prior research has visited different determinants of the IJV dissolution (Nemeth & Nippa, 2013), this stream of research remains vague on how a parent firm's executive succession, or chief executive officer (CEO) succession, impacts the post-succession IJV dissolution. This underexplored research area is critical given that a CEO constitutes the managerial social capital, the formal and informal social connections at the top of a firm, and thus a parent firm's executive succession triggers the disruption of managerial social capital (Adler & Kwon, 2002; Adner & Helfat, 2003; Mawdsley & Somaya, 2016).

Similar to prior research (e.g., Fredrickson, Hambrick, & Baumrin, 1988; Wiersema, 1995), this study defines a parent firm's non-routine executive succession as CEO dismissal which the departing CEO is forced to step down while routine executive succession is the situation which the departing CEO leaves the CEO position voluntarily. This study particularly explores how a parent firm's non-routine executive succession affects the likelihood of post-succession IJV dissolution. According to the managerial social capital perspective (Adler & Kwon, 2002; Adner & Helfat, 2003), CEOs as a mechanism that forms and maintains social relationships with other organizations. Prior research has demonstrated that the CEOs are critical since they initiate strategic actions to better align their firms with external environments (Child, 1972). Following this stream of research, prior research has further shown how a parent firm's executive

succession triggers strategic actions, given that new CEOs with different cognition, knowledge, experience, human capital, and demographic characteristics which may affect their preferences to take a particular strategic action (Tushman, Virany, & Romanelli, 1985; Wang, 2019). In addition to managerial cognition and managerial human capital, managerial social capital is also critical since it enables a firm to better access and acquire information and resources (Adler & Kwon, 2002).

Based on managerial social capital perspective, prior research has documented how top executives affect not only the formation of inter-organizational relationships but also the disruption of inter-organizational relationships (e.g., Eisenhardt & Schoonhoven, 1996; Broschak & Block, 2014). For instance, proposing that the size and prior affiliations of top managers are associated with managerial social capital, Eisenhardt and Schoonhoven (1996) show that the size of top management team, top executives' experience of prior affiliations with other firms, and the positions at these prior affiliations all enhance the formation of strategic alliances. On the other hand, from the executive mobility viewpoint, since executives are in charge of building and maintaining external market ties, the change or loss of executives may lead to the dissolution of external market ties (Broschak, 2004; Broschak & Block, 2014; Mawdsley & Somaya, 2016). For instance, examining the mobility of first-line managers in both professional service and client firms, Broschak (2004) finds that not only the leave of first-line managers from professional service firms but also the leave of first-line managers from client firms facilitate the likelihood of market tie dissolution. Broschak and Block (2014) further indicate that the leave of executives acts as an important role on the market tie dissolution, grounded by the mechanism of social capital. However, a parent firm's non-routine executive succession, or routine versus non-routine executive succession, has not yet associated with the likelihood of post-succession IJV dissolution.

According to the literature on managerial social capital and executive succession (Adler & Kwon, 2002; Kesner & Sebor, 1994), this study proposes that compared to routine executive succession, a parent firm's non-routine executive succession is more likely to disrupt external social ties of firms or inter-organizational relationships. As a result, it argues that a parent firm's non-routine executive succession is more likely to trigger the IJV dissolution. In addition to the above direct effect, this study

takes the role of moderating effects into considerations and contends that a parent firm's organizational performance as a moderating effect to affect the above relationship.

This study contributes to the following three streams of literature. It contributes to the IJV literature by examining the impact of a parent firm's executive succession, or routine versus non-routine executive succession, on IJVs, particularly the likelihood of post-succession IJV dissolution. It furthers this stream of literature by demonstrating that the disruption of managerial social capital associated with executive succession affects post-succession IJV dissolution, in addition to other economic and social antecedents. Furthermore, it extends the executive succession literature by examining a new strategic consequences of executive succession, the post-succession IJV dissolution. Prior research on the strategic consequences of executive succession has investigated several post-succession strategic outcomes, mainly grounded by the managerial cognition and managerial human capital aspects. Broadening this stream of research, this study is based on the theoretical rationale of the disruption of managerial social capital and therefore demonstrates that a parent firm's non-routine executive succession impacts the post-succession IJV dissolution, in addition to the other post-succession strategic actions which have been discussed. Finally, it enhances our knowledge on the boundary conditions of a parent firm's non-routine executive succession. In addition to the direct impact of a parent firm's non-routine executive succession on the IJV dissolution, this study identifies important contextual factors and shows that the impact of a parent firm's non-routine executive succession is determined by organizational performance, which is a parent firm-level characteristic.

2. Literature Review and Hypothesis Development

2.1 Direct effect

Prior research has indicated that the use of IJVs generate several advantages when entering global markets (Hitt et al., 2000; Ren et al., 2009). Firms frequently employ IJVs to create and maintain competitive advantages globally. As a result, the dissolution, or exit, of IJVs has become a critical IJV research area, in addition to the other IJV issues (Gulati, 1998; Nemeth & Nippa, 2013). Whereas prior research has applied various theoretical rationales to examine the dissolution of IJVs, these research has

underexplored how social capital, particular managerial social capital, impacts the dissolution of IJVs (Nemeth & Nippa, 2013).

Social connections and interactions among individuals and organizations impact economic behaviors, such as inter-organizational relationships (Granovetter, 1992). These social connections and interactions enhance better information and resource access and opportunity or threat identification. For instance, prior research has indicated that top executives with strong social positions which allow them to gather diversified information and thus enable them to identify external opportunities (Adner & Helfat, 2003; Burt, 1992). Social connections and interactions also facilitate understanding, communication, trust, and commitment among individuals and organizations (Adner & Helfat, 2003). As a result, social capital or managerial social capital enhances inter-organizational collaborations (Gulati, 1998). Prior research has documented that managerial social capital, or managerial personal connections, forms social advantages of an organization and thus offers a base to facilitate the formation of inter-organizational collaborations (Eisenhardt & Schoonhoven, 1996). Once inter-organizational collaborations have formed, partners invest various resources and assets to achieve the goals of inter-organizational collaborations (Levinthal & Fichman, 1988). Among these investments, to build effective routines, communication channels, and trust at the top executives between partners are critical (Baker, Faulkner, & Fisher, 1998; Broschak & Block, 2014; Uzzi, 1996).

These investments by top executives constitute managerial social capital and the value of managerial social capital tends to be firm-specific or relationship-specific (Adler & Kwon, 2002; Broschak & Block, 2014). For instance, familiarity at the top executives between partners facilitates the efficiency and effectiveness of collaborations since it enables firms to better understand their partners' demands and expectations, develop joint problem-solving abilities, and integrate resources and assets effectively (Broschak & Block, 2014; Uzzi, 1996). However, managerial social capital is disrupted or diminished once top executives leave their role or firms (Broschak & Block, 2014). Within top management, the CEO is the most important one since he/she determines strategic actions, such as inter-organizational collaborations (Child, 1972). This study thus proposes that a parent firm's executive succession, routine executive

succession versus non-routine executive succession, is associated with differences in the disruption of managerial social capital and therefore the likelihood of post-succession IJV dissolution.

Prior research has identified that logics for the consequences of executive succession are based on the following aspects: the differences, such as cognition, human capital, social capital, between the incoming CEO and departing CEO, pressures from external environments, and a mandate from the board of directors (Cao, Maruping, & Takeuchi, 2006; Hutzschenreuter et al., 2012; Wang, 2019). For instance, new outside CEOs are preferred when the employing firms demand strategic change (Bailey & Helfat, 2003; Datta & Guthrie, 1994). The new outside CEOs tend to receive mandates for strategic change because boards of directors consider that new outside CEOs are not link to current strategic actions and thus more willing to change the current strategic directions (Finkelstein, Hambrick, & Cannella, 2009). Compared to new inside CEOs, new outside CEOs with different managerial cognition and thus are more likely to initiate strategic change (Karaevli & Zajac, 2013).

In addition, routine executive succession versus non-routine executive succession, or the nature of executive succession, may affect the consequences of executive succession. In routine succession events, the incoming CEOs usually have chosen before the departing CEOs leave their offices. This offers a transition period and thus allows the incoming CEOs to be embedded in the current social networks. In addition, drawn from the socialization theory, the incoming CEOs who have been socialized by their departing CEOs tend to adopt their departing CEOs' social connections (Van Maanen & Schein, 1979). As a result, incoming CEOs who continue the current social networks are inclined to maintain the status quo or current inter-organizational relationships and less likely to lead to the post-succession IJV dissolution.

On the other hand, this study proposes that non-routine executive succession tends to facilitate the IJV dissolution. Prior research has indicated that CEO dismissal is often triggered by poor performance or unsatisfied investors and thus suggested that the incoming CEOs are expected to make changes or alter current strategic actions (Denis & Kruse, 2000; Kaplan & Minton, 2012). These changes include the changes on inter-organizational relationships. The incoming CEOs are also more likely to receive a mandate for change when their boards dismiss the departing CEOs (Wiersema & Zhang, 2011).

Additionally, in non-routine succession events, the incoming CEOs take the CEO positions without a transition period. Thus, these incoming CEOs may not be able to familiarize themselves with the current social connections of their firms. This unfamiliarity may lead to social disruption to the IJV connectivity. Based on the above discussion, this study offers the following hypothesis.

Hypothesis 1: A parent firm's non-routine executive succession is positively associated with the likelihood of post-succession IJV dissolution.

2.2 Moderating role of a parent firm's organizational performance

This study further argues that the impact of non-routine executive succession on the IJV dissolution depends on a parent firm's organizational performance. Prior research has indicated that superior organizational performance tends to keep the successful practices and routines and therefore maintain status quo (Hambrick Geletkanycz, & Fredrickson, 1993). Inferior organizational performance motivates a firm to initiate strategic change (Tushman et al., 1985). However, organizational performance also reflects a firms' financial resources and substitutes the use of international joint ventures. In line with latter theoretical rationales, this study contends that superior organizational performance provides economic resources to change current social connections or inter-organizational relationships. It suggests that non-routine executive succession results in a higher likelihood of post-succession IJV dissolution when a parent firm's organizational performance is superior. Consequently, it offers:

Hypothesis 2: A parent firm's organizational performance will strengthen the relationship between non-routine executive succession and the likelihood of post-succession IJV dissolution.

3. Methodology

3.1 Sample and Data Source

This study selects IJVs in manufacturing industries which primary two-digit standard industrial classification (SIC) codes are 22, 26, and 33 with the U.S. parent firms formed the IJVs outside the U.S. It only contains manufacturing firms since the strategic actions of manufacturing firms differ from those of

firms in service industries and the other industries. In order to acquire information on the executive succession events, the U.S. parent of IJVs are restricted to those U. S. publicly traded firms listed in the *Execucomp* database between the years 1993 and 2019. After removing observations where empirical variables are missing data, this study has 186 CEO succession events that occur in 90 firms.

The dependent variable of this study, the likelihood of post-succession IJV dissolution, is binary (Hosmer and Lemeshow, 2000). Therefore, this study uses logistic regression analysis to examine the proposed hypotheses. In addition, this study uses the mean-centering approach and includes mean-centered predictors into the statistical models because containing interactions in the statistical models may suffer from the potential issue of multicollinearity (Aiken & West, 1991).

The data of this study are gathered from the following sources. The data on the IJVs, including the post-succession IJV dissolution, are gained from the Securities Data Company (SDC) Platinum database, which is widely used by scholars (Schilling, 2009). The data on CEOs and other top executives are acquired from the *Execucomp* database, proxy statements and 10-K filings, and the websites of firms. Since the *Execucomp* database does not contain the reasons why the departing CEOs left their firms, this study manually searches this information from the Lexis-Nexis database and other news reports. Data on firms are gathered from the *Compustat* database.

3.2 Dependent Variable

The likelihood of post-succession IJV dissolution. This dependent variable represents the occurrence of IJV dissolution. It is measured by a dichotomous variable which 1 is given for the occurrence of dissolved IJVs during the first three years after the succession year ($t+1$, $t+2$, $t+3$) and 0 for the existing IJVs.

3.3 Independent Variable

Non-routine executive succession. This study classifies routine (ordinary) versus non-routine (dismissal) executive succession by the nature of executive succession, or whether the departing CEO is voluntary leave or not. In line with prior research (Nakauchi & Wiersema, 2015; Shen & Cannella, 2002; Wang & Yang, 2015; Zhang, 2008), it views the particular situations as a routine executive succession.

These situations include that departing CEOs keep the other positions, such as chairpersons of the boards, in their firms or the reasons for leaving the CEO position are health issues, retirements, the occurrences of merger or acquisition events, or the appointments of executive positions at other firms. Additionally, this study considers non-routine executive succession (or CEO dismissal) as the situation in which the departing CEOs are fired, ousted, unexpectedly resigned, resigned, or retired early. Consequently, it operationalizes the independent variable, non-routine executive succession, as a dichotomous variable. It then treats non-routine executive succession as 1 and 0 otherwise.

3.4 Moderating Variables

Organizational performance. Organizational performance is as an important organizational contingency to enable or constrain the executive succession effect (Berns & Klarner, 2017). For instance, prior research has documented that organizational performance determines the impact of executive succession on organizational outcomes, such as post-succession strategic change and post-succession firm performance (Georgakakis & Ruigrok, 2017; Karaevli, 2007; Karaevli & Zajac, 2013). Following the above theoretical rationales, this study contends that organizational performance has a moderate effect on the relationship between non-routine executive succession and the likelihood of post-succession IJV dissolution. It employs the three-year average return on assets (ROA), the ratio of net income over total assets, before and including the succession year to operationalize organizational performance (Georgakakis & Ruigrok, 2017; Shen & Cannella, 2002).

3.5 Control Variables

To constrain alternative explanations, this study includes several control variables from different levels. At the TMT level, this study controls for TMT turnover and TMT size. Prior research has indicated that TMT turnover facilitates post-succession strategic change (Karaevli & Zajac, 2013; Tushman & Rosenkopf, 1996). In line with this stream of research, this study proposes that TMT turnover may impact the likelihood of post-succession IJV dissolution. Similar to prior research (Karaevli & Zajac, 2013; Tushman & Rosenkopf, 1996), it defines the members of a TMT as those top executives who directly report to their CEO. TMT turnover thus is measured by the ratio of the number of a TMT who leave their

firm over the total number of the TMT. In addition, TMT size reflects the social connections of a firm and thus is controlled. It is measured by the number of TMT members. At the firm level, firm size, leverage, and prior IJV formation are controlled. Firm size is measured by the natural logarithm of the total assets. Leverage is operationalised by the ratio of a firm's average total liabilities to total assets. Prior IJV formation is the number of international joint ventures formed by a firm during the three years before its new CEO successions. Since the sample firms are from U.S., it views an IJV as a firm which cooperates with partner firms from outside the U.S and formed equity joint ventures. Finally, this study creates industry dummies to control for industry effects.

4. Results

Table I demonstrates the descriptive statistics and a correlation matrix for all the variables. Table II reports the results of logistic regression analyses for post-succession IJV dissolution. Model 1 is the baseline model which includes only control variables (LR chi-squared = 13.14, $p < 0.10$). The results indicate that Firm size ($\beta = 1.28$, $p < 0.10$) and prior IJV formation ($\beta = 0.39$, $p < 0.05$) are positive and significantly associated with the likelihood post-succession IJV dissolution.

 INSERT TABLE I & II ABOUT HERE

Model 2 enters the independent variable, non-routine executive succession, into model. The model is significant since its overall model is significant (LR chi-squared = 20.40, $p < 0.05$). Models 3 is the full model which enters the moderator, organizational performance and include all the control and independent variables. Models 3 is also significant (LR chi-squared = 24.68, $p < 0.01$).

Hypothesis 1 examines the direct effect of non-routine executive succession on the likelihood of post-succession IJV dissolution. Hypothesis 1 posits that compared to routine executive succession, non-routine executive succession enhances the likelihood of post-succession IJV dissolution. The coefficients for non-routine executive succession are significant in Model 2 ($\beta = 3.41$, $p < 0.05$) or Model 3 ($\beta = 3.94$, $p < 0.05$). Thus, the results support Hypothesis 1. In addition to examine direct effects, this study

also explores the moderating effects of organizational performance. Hypothesis 2 proposes that organizational performance facilitates the relationship between non-routine executive succession and the likelihood of post-succession IJV dissolution. The coefficient for non-routine executive succession * organizational performance is significant in Model 3 ($\beta = 0.24, p < 0.05$). Thus, the results support Hypothesis 2.

5. Discussion

A CEO serves as a foundation to develop managerial social capital and thus bring several benefits for their firms. Prior research has shown that firms benefit from managerial external social connections since these connections offer opportunities to access and acquire external information and resources and therefore lead to superior firm performance (Geletkanycz & Hambrick, 1997). Prior research has also demonstrated that top executives can form a base to build the inter-organizational cooperative relationships (e.g., Eisenhardt & Schoonhoven, 1996; Lee & Park, 2008; Wang, 2015). For instance, Eisenhardt and Schoonhoven (1996) proposes strong social positions of top executives facilitates the formation of strategic alliances. Extending this line of research, this study aims to help us to better understand how the change of a CEO, executive succession, impact the dissolution of inter-organizational cooperative relationships. It consequently explores how a parent firm's routine versus non-routine executive succession impacts the likelihood of post-succession IJV dissolution. It additionally proposes that a parent firm's organizational performance serves as the boundary condition, or moderator, to impact the above relationship.

5.1 Theoretical Implications

This study offers at least the following three theoretical contributions. First, it makes significant contributions to the research on IJVs by bringing the viewpoint of managerial social capital to investigate the impact of executive succession, routine executive succession versus non-routine executive succession, on the likelihood of post-succession IJV dissolution. Prior IJV dissolution research has applied different theoretical rationales, including the transaction cost economics (e.g., Dhanaraj & Beamish, 2004), organizational learning or knowledge-based view (e.g., Steensma & Lyles, 2000), institutional theory (e.g., Dhanaraj & Beamish, 2009), real option theory (Kogut, 1991), resource-based view (e.g., Dussauge,

Garrette, & Mitchell, 2000), and evolutionary perspective (Koza & Lewin, 1998). These theoretical lens has been challenged by ignoring the impact of social factors (Eisenhardt & Schoonhoven, 1996; Nemeth & Nippa, 2013). Although scholar has employed the social network aspect to explore the phenomenon IJV dissolution (e.g., Polidoro, Ahuja, & Mitchell, 2011), the line of research is based on the firm-level social connections. This study further this stream of literature by applying managerial social capital to study the impact of executive succession on IJV dissolution in the post-succession period.

Second, this study contributes to the executive succession literature by extending subsequent strategic actions of executive succession. Prior research has explored how executive succession affects post-succession strategic actions, such as strategic change, market or country entry, and investment (e.g., Nakauchi & Wiersema, 2015; Virany, Tushman, & Romanelli, 1992; Wang, 2015; Weisbach, 1995). This stream of research proposes that new CEOs are associated with particular characteristics, such as open-minded (Datta, Rajagopalan, & Zhang, 2003), risk-taking willingness (Beatty & Zajac, 1987), and market-specific or country-specific knowledge (Wang, 2019). For instance, prior research has shown that compared to new inside CEOs, new outside CEOs are more likely to initiate strategic change (e.g., Karaevli & Zajac, 2013). This line of research emphasizes new CEO characteristics and largely applies managerial cognition and managerial human capital perspectives (Chiu, Johnson, Hoskisson, & Pathak, 2016; Hutzschenreuter et al., 2012). Consequently, grounded by the disruption of managerial social capital aspect, this study furthers executive succession research by exploring how routine executive succession versus non-routine executive succession impacts the likelihood of post-succession IJV dissolution, in addition to the above strategic actions.

Finally, this study facilitates our understanding on the effect of non-routine executive succession by demonstrating its important boundary conditions or contextual factors. Prior research has indicated that compared to routine executive successions, non-routine executive successions are associated with strategic change (Nakauchi & Wiersema, 2015; Wiersema, 1995). Extending the research on the direct effects of non-routine executive successions, this study uses a contingency perspective and examine the boundary conditions of the impact of non-routine executive successions on the IJV dissolution. It advances our

knowledge by demonstrating that the impact of non-routine executive successions is influenced by organizational performance, which are related to the characteristics of parent firms.

5.2 Practical Implications

This study has at least the following three managerial implications for practitioners. First, it contends that non-routine executive succession is associated with the likelihood to dissolve IJVs in the post-succession period. Some may argue that non-routine executive succession is related to some advantages because this type of executive succession facilitates strategic change. Nevertheless, this study demonstrates that non-routine executive succession is associated with the disruption of managerial social connections and therefore trigger the likelihood of subsequent IJV dissolution, which may hamper the international social connections of the firms. Since maintaining IJVs, or international inter-organizational cooperative relationships, is important for firms to develop competitive advantages globally, the boards of directors should take this impact on the international inter-organizational partnerships into considerations when they determine to use routine or non-routine executive succession.

Second, it offers us insights on the boundary conditions of the impact of non-routine executive succession from the perspective of the parent firm. This study suggests that a parent firm's superior organizational performance is as an economic driving force to facilitate the impact of non-routine executive succession on the IJV dissolution. These implications indicate that boards of directors should take both non-routine executive succession and the parent firm-level moderating factor, or organizational performance, into considerations in order to prevent the IJV dissolution during the post-succession stage.

In conclusion, to better understand the antecedents of the IJV dissolution is important for firms because most firms are required to develop and maintain international inter-organizational cooperative relationships in order to conduct the value-added activities internationally. To enhance our understanding on the subsequent strategic actions of executive succession is also critical for the practical community since it helps practitioners to understand the strategic consequences of executive succession comprehensively. As a result, this study offers some important insights which guide boards of directors to better arrange the type of executive successions, routine versus non-routine executive succession, and

prevent the disruption of managerial social capital which is associated with executive succession events. It is a pioneer study and the empirical results will inspire future research to further our understanding of the associations between executive successions and strategic actions.

References

- Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *Academy of management review*, 27(1), 17-40.
- Adner, R., & Helfat, C. E. (2003). Corporate effects and dynamic managerial capabilities. *Strategic management journal*, 24(10), 1011-1025.
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*: sage.
- Bailey, E. E., & Helfat, C. E. (2003). External management succession, human capital, and firm performance: An integrative analysis. *Managerial and decision economics*, 24(4), 347-369.
- Baker, W. E., Faulkner, R. R., & Fisher, G. A. (1998). Hazards of the market: The continuity and dissolution of interorganizational market relationships. *American sociological review*, 147-177.
- Barkema, H. G., & Vermeulen, F. (1997). What differences in the cultural backgrounds of partners are detrimental for international joint ventures? *Journal of international business studies*, 28(4), 845-864.
- Beamish, P. W., & Lupton, N. C. (2016). Cooperative strategies in international business and management: Reflections on the past 50 years and future directions. *Journal of World Business*, 51(1), 163-175.
- Beatty, R. P., & Zajac, E. J. (1987). CEO change and firm performance in large corporations: Succession effects and manager effects. *Strategic management journal*, 8(4), 305-317.
- Berns, K. V., & Klarner, P. (2017). A review of the CEO succession literature and a future research program. *Academy of Management Perspectives*, 31(2), 83-108.
- Broschak, J. P. (2004). Managers' mobility and market interface: The effect of managers'

career mobility on the dissolution of market ties. *Administrative science quarterly*, 49(4), 608-640.

Broschak, J. P., & Block, E. S. (2014). With or without you: When does managerial exit matter for the dissolution of dyadic market ties? *Academy of Management journal*, 57(3), 743-765.

Burt, R. S. (1992). *Structural holes: The social structure of competition*: Harvard university press.

Cao, Q., Maruping, L. M., & Takeuchi, R. (2006). Disentangling the effects of CEO turnover and succession on organizational capabilities: A social network perspective. *organization Science*, 17(5), 563-576.

Child, J. (1972). Organizational structure, environment and performance: The role of strategic choice. *sociology*, 6(1), 1-22.

Chiu, S.-C., Johnson, R. A., Hoskisson, R. E., & Pathak, S. (2016). The impact of CEO successor origin on corporate divestiture scale and scope change. *The Leadership Quarterly*, 27(4), 617-633.

Datta, D. K., & Guthrie, J. P. (1994). Executive succession: Organizational antecedents of CEO characteristics. *Strategic management journal*, 15(7), 569-577.

Datta, D. K., Rajagopalan, N., & Zhang, Y. (2003). New CEO openness to change and strategic persistence: The moderating role of industry characteristics. *British Journal of Management*, 14(2), 101-114.

Denis, D. J., & Kruse, T. A. (2000). Managerial discipline and corporate restructuring following performance declines. *Journal of Financial Economics*, 55(3), 391-424.

Dhanaraj, C., & Beamish, P. W. (2004). Effect of equity ownership on the survival of international joint ventures. *Strategic management journal*, 25(3), 295-305.

Dhanaraj, C., & Beamish, P. W. (2009). Institutional environment and subsidiary survival. *Management International Review*, 49(3), 291-312.

Dussauge, P., Garrette, B., & Mitchell, W. (2000). Learning from competing partners: Outcomes and durations of scale and link alliances in Europe, North America and Asia. *Strategic management journal*, 21(2), 99-126.

Eisenhardt, K. M., & Schoonhoven, C. B. (1996). Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *organization Science*, 7(2), 136-150.

Fee, C. E., & Hadlock, C. J. (2004). Management turnover across the corporate hierarchy. *Journal of Accounting and Economics*, 37(1), 3-38.

Finkelstein, S., Cannella, S., Hambrick, D., & Cannella, A. (2009). Strategic leadership: Theory and research on executives, top management teams, and boards: Oxford University Press. In: USA.

Fredrickson, J. W., Hambrick, D. C., & Baumrin, S. (1988). A model of CEO dismissal. *Academy of management review*, 13(2), 255-270.

Geletkanycz, M. A., & Hambrick, D. C. (1997). The external ties of top executives: Implications for strategic choice and performance. *Administrative science quarterly*, 654-681.

Georgakakis, D., & Ruigrok, W. (2017). CEO succession origin and firm performance: A multilevel study. *Journal of Management Studies*, 54(1), 58-87.

Granovetter, M. (1992). Economic institutions as social constructions: a framework for analysis. *Acta sociologica*, 35(1), 3-11.

Gulati, R. (1998). Alliances and networks. *Strategic management journal*, 19(4), 293-317.

Hambrick, D. C., Geletkanycz, M. A., & Fredrickson, J. W. (1993). Top executive commitment to the status quo: Some tests of its determinants. *Strategic management journal*,

14(6), 401-418.

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, 9(2), 193-206.

Hayes, R. M., Oyer, P., & Schaefer, S. (2006). Coworker complementarity and the stability of top-management teams. *Journal of Law, Economics, and Organization*, 22(1), 184-212.

Hitt, M. A., Dacin, M. T., Levitas, E., Arregle, J.-L., & Borza, A. (2000). Partner selection in emerging and developed market contexts: Resource-based and organizational learning perspectives. *Academy of Management journal*, 43(3), 449-467.

Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5): sage.

Hutzschenreuter, T., Kleindienst, I., & Greger, C. (2012). How new leaders affect strategic change following a succession event: A critical review of the literature. *The Leadership Quarterly*, 23(5), 729-755.

Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of international business studies*, 8(1), 23-32.

Kaplan, S. N., & Minton, B. A. (2012). How has CEO turnover changed? *International review of Finance*, 12(1), 57-87.

Karaevli, A. (2007). Performance consequences of new CEO ‘Outsiderness’: Moderating effects of pre-and post-succession contexts. *Strategic management journal*, 28(7), 681-706.

Karaevli, A., & Zajac, E. J. (2013). When do outsider CEOs generate strategic change? The enabling role of corporate stability. *Journal of Management Studies*, 50(7), 1267-1294.

Kesner, I. F., & Sebor, T. C. (1994). Executive succession: Past, present & future. *Journal of management*, 20(2), 327-372.

- Kim, W. C., & Hwang, P. (1992). Global strategy and multinationals' entry mode choice. *Journal of international business studies*, 23(1), 29-53.
- Kogut, B. (1988). Joint ventures: Theoretical and empirical perspectives. *Strategic management journal*, 9(4), 319-332.
- Kogut, B. (1989). The stability of joint ventures: Reciprocity and competitive rivalry. *The journal of industrial economics*, 183-198.
- Kogut, B. (1991). Joint ventures and the option to expand and acquire. *Management Science*, 37(1), 19-33.
- Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of international business studies*, 19(3), 411-432.
- Koza, M. P., & Lewin, A. Y. (1998). The co-evolution of strategic alliances. *organization Science*, 9(3), 255-264.
- Lee, H. U., & Park, J. H. (2008). The influence of top management team international exposure on international alliance formation. *Journal of Management Studies*, 45(5), 961-981.
- Levinthal, D. A., & Fichman, M. (1988). Dynamics of interorganizational attachments: Auditor-client relationships. *Administrative science quarterly*, 345-369.
- Luo, Y., & Park, S. H. (2004). Multiparty cooperation and performance in international equity joint ventures. *Journal of international business studies*, 35(2), 142-160.
- Lyles, M. A., & Salk, J. E. (1996). Knowledge acquisition from foreign parents in international joint ventures: An empirical examination in the Hungarian context. *Journal of international business studies*, 27(5), 877-903.
- Mawdsley, J. K., & Somaya, D. (2016). Employee mobility and organizational outcomes: An integrative conceptual framework and research agenda. *Journal of management*, 42(1), 85-113.

Mohr, A., Wang, C., & Fastoso, F. (2016). The contingent effect of state participation on the dissolution of international joint ventures: A resource dependence approach. *Journal of international business studies*, 47(4), 408-426.

Nakauchi, M., & Wiersema, M. F. (2015). Executive succession and strategic change in Japan. *Strategic management journal*, 36(2), 298-306.

Nemeth, A., & Nippa, M. (2013). Rigor and relevance of IJV exit research. *Management International Review*, 53(3), 449-475.

Park, S. H., & Ungson, G. R. (1997). The effect of national culture, organizational complementarity, and economic motivation on joint venture dissolution. *Academy of Management journal*, 40(2), 279-307.

Polidoro Jr, F., Ahuja, G., & Mitchell, W. (2011). When the social structure overshadows competitive incentives: The effects of network embeddedness on joint venture dissolution. *Academy of Management journal*, 54(1), 203-223.

Ren, H., Gray, B., & Kim, K. (2009). Performance of international joint ventures: What factors really make a difference and how? *Journal of management*, 35(3), 805-832.

Schilling, M. A. (2009). Understanding the alliance data. *Strategic management journal*, 30(3), 233-260.

Shen, W., & Cannella Jr, A. A. (2002). Power dynamics within top management and their impacts on CEO dismissal followed by inside succession. *Academy of Management journal*, 45(6), 1195-1206.

Steensma, H. K., & Lyles, M. A. (2000). Explaining IJV survival in a transitional economy through social exchange and knowledge-based perspectives. *Strategic management journal*, 21(8), 831-851.

Tushman, M. L., & Rosenkopf, L. (1996). Executive succession, strategic reorientation and

performance growth: A longitudinal study in the US cement industry. *Management Science*, 42(7), 939-953.

Tushman, M. L., Virany, B., & Romanelli, E. (1985). Executive succession, strategic reorientations, and organization evolution: The minicomputer industry as a case in point. *Technology in Society*, 7(2-3), 297-313.

Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American sociological review*, 674-698.

Van Maanen, J. (1979). The fact of fiction in organizational ethnography. *Administrative science quarterly*, 24(4), 539-550.

Virany, B., Tushman, M. L., & Romanelli, E. (1992). Executive succession and organization outcomes in turbulent environments: An organization learning approach. *organization Science*, 3(1), 72-91.

Wagner, W. G., Pfeffer, J., & O'Reilly III, C. A. (1984). Organizational demography and turnover in top-management group. *Administrative science quarterly*, 74-92.

Wang, Y.-K. M. (2015). The impact of prestigious top management team on international alliance formation: Evidence from Taiwanese electronics firms. *Journal of Management and Organization*, 21(6), 835.

Wang, Y.-K. M. (2019). Executive migration and international mergers and acquisitions. *International Business Review*, 28(2), 284-293.

Wang, Y.-K. M., & Yang, K. M. (2015). The impact of executive job demands on dismissals of newly appointed CEOs. *Journal of Management and Organization*, 21(6), 705.

Weisbach, M. S. (1995). CEO turnover and the firm's investment decisions. *Journal of Financial Economics*, 37(2), 159-188.

Wiersema, M. F. (1995). Executive succession as an antecedent to corporate restructuring.

Human Resource Management, 34(1), 185-202.

Yan, A. (1998). Structural stability and reconfiguration of international joint ventures. *Journal of international business studies*, 29(4), 773-795.

Yoshino, M. Y. (1976). *Japan's multinational enterprises*: Harvard University Press.

Zhang, Y. (2008). Information asymmetry and the dismissal of newly appointed CEOs: An empirical investigation. *Strategic management journal*, 29(8), 859-872.

Table 1: Descriptive Statistics and Correlations

		<i>Mean</i>	<i>S.D.</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1	Post-succession IJV dissolution	0.03	0.16	1.00							
2	TMT turnover	20.73	18.69	0.00	1.00						
3	TMT size	5.41	1.52	0.02	0.56	1.00					
4	Firm size	14.42	1.26	0.08	0.01	0.04	1.00				
5	Leverage	63.61	20.30	-0.03	-0.11	-0.06	0.11	1.00			
6	Organizational performance	1.08	18.85	0.00	-0.05	0.02	0.05	-0.50	1.00		
7	Prior IJV formation	0.31	1.39	0.27	-0.02	0.01	0.12	0.01	0.05	1.00	
8	Non-routine executive succession	0.19	0.39	0.18	0.08	-0.02	-0.02	0.22	-0.23	-0.04	1.00

Note. 1. $N = 186$; 2. Correlations with industry dummies are not reported due to space constraints; 3. Correlations greater than 0.18 in absolute value are significant at the $p < 0.05$ level.

Table 2: Results of Logistic Regression Analyses for Post-succession IJV dissolution

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>
TMT turnover	-0.02 (0.04)	-0.06 (0.05)	-0.06 (0.06)
TMT size	0.09 (0.47)	0.17 (0.50)	0.02 (0.55)
Firm size	1.28† (0.69)	1.74* (0.84)	2.67* (1.29)
Leverage	-0.03 (0.04)	-0.06 (0.04)	-0.09† (0.05)
Organizational performance	-0.02 (0.03)	-0.03 (0.03)	-0.28* (0.13)
Prior IJV formation	0.39* (0.16)	0.53** (0.20)	0.79** (0.29)
Non-routine executive succession		3.41* (1.44)	3.94* (1.73)
Non-routine executive succession*			0.24*
Organizational performance			(0.11)

Industry dummies	Included	Included	Included
Constant	-1.40 (0.86)	-2.88* (1.30)	-2.89* (1.46)
Likelihood ratio chi squared	13.14	20.40	24.68
<i>p</i> -value	(.090)	(.015)	(.006)

Notes: 1. $N=168$; 2. Standard errors are in square brackets; 3. All tests are two-tailed; *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; † $p < 0.10$.

Global Work-from-home: Exploring the Growth of Online Filipino Workers and Explicating Insights for International Business

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Global Work-from-Home: Exploring the Growth of Online Filipino Workers and Explicating Insights for International Business

Extended Abstract

This study – which is exploratory in nature – focuses on the phenomenon of global work-from-home as experienced in the Philippines. Specifically, we describe the growth of the so called “Online Filipino Workers” (OFWs) – their demographics, motivations, challenges and the skillsets needed to thrive in this type of work. We then generate valuable insights for the broader international business and international management literature.

Keywords: Global Work-from-Home; Online Filipino Workers; International Business; International Management.

1. Introduction

Work has traditionally been done in an office requiring physical presence and co-location. But the continuing proliferation and advancements in work technologies provided opportunities for workers to complete any tasks anywhere. Hence, we have seen the rise of work-from-home (Nakrošienė, Bučiūnienė & Goštautaitė, 2019); hybrid work (Gratton, 2021) and alternative work arrangements (Spreitzer, Cameron & Garrett, 2017) particularly for those employees who maintain employee-employer relations. Interestingly, even without formal employee-employer relations, workers have leveraged on technologies to do freelancing work online. This phenomenon can be observed in the Philippines – an emerging market context where the global work-from-home has flourished contributing to the growth of a special cohort called as Online Filipino Workers (OFWs). In this study, we explore this cohorts’ demographics, motivations, challenges and the skillsets and identify a number of implications for international businesses and management.

2. Method

To shed light on this special cohort (OFWs), we collected data from the ICT Industry Development Bureau (IIDB) which is a bureau under the Department of Information and

Communications Technology (DICT). The department's main goal is "ensuring sustainable growth of Philippine ICT-enabled industries resulting to the creation of more jobs." DICT commits to professionalizing the country's freelancer communities through the Empowering the Digital Workers of the Gig Industry Ecosystem in the Philippines (EDGE PH program). The same information is used when DICT launched the Philippine Online Freelancing Industry Study (August 31, 2022) to the key stakeholders and "was created to provide baseline information, freelancers' skills, sources of online jobs, and the impact of the online freelancing industry on their lives, as well as the profile of Filipino digital workers and professionals that are crucial to assess the needs and the current situation of the online freelancing industry in the country." We utilized these reports and also interviewed a top-level official and IDB team on two separate occasions when visiting their DICT office with headquarters in Quezon City, Philippines. During those two visits, we obtained valuable information which we will present below to better understand the growing cohort of OFWs.

3. Initial Findings and Observations

Growth trends. Global work market for online freelance workers continue to rise after the initial decline during the pandemic. From a decrease of 32% during the onset of the COVID-19 pandemic on March 2020, the demand for online freelancers grew by 28% in May to June of the same year (Payoneer, 2020). Philippine data reflects this global trend. In 2019, the earnings of the freelancing / gig economy in the Philippines had a 35% year-on-year revenue growth, which was ranked 6th globally (Payoneer, 2019). The following year, the Philippines rose to the top spot as its gig economy had a 208% year-on-year revenue growth (Payoneer, 2020). Other countries like India, Japan, Australia, Pakistan, Ukraine, and the U.S. also posted substantial growth. In 2023, almost three years after the impact of the pandemic, a global survey of about 2000 freelancers from 122 countries reported that 46% of the respondents experienced higher demand for work, while 29% experienced same demand as the previous year, and around 68% projects the continuous increase in demand (Payoneer, 2023).

Demographics of OFWs. Freelance online workers present varying demographics. In the latest global review, ages 24 - 35 comprise the biggest group, ranging from 75% (Asia Pacific region) to 40% (South American region) (Payoneer, 2023). Moreover, freelancers beyond 65 years old report a dramatic decline in work demand. Over half of the survey respondents indicated that they have taken

either full-time or part-time work in addition to their freelance work. Female participation has increased from 24% in 2020 to 29% in 2022. Philippine 2022 data shows that 33% of freelancers in the country are Gen Zs (up to 25 years old), and 22% are Millennials (ages 26-41) (Payoneer & GCash, 2022). Majority of Filipino freelancers have another source of income, either owning their own businesses (69%), employed (10%), or in-between jobs (2%). Moreover, it was observed that Filipino freelance workers are located from different parts of the country, 54.9% in Luzon, 18.5% in Visayas, 26.6% in Mindanao (Department of Information and Communications Technology [DICT], 2022). In 2021, Paolo Mercado, President of the Creative Economy Council of the Philippines, estimates that around 1.5 million Filipinos are on online freelancing platforms, and expects that creative freelancing work will be the next wave of outsourcing in the country (Payoneer & GCash, 2022).

Benefits for OFWs. Advantages of global freelance online work continue to be recognized. Global data shows that freelance online work offers competitive compensation, from an average hourly rate of \$21 in 2020 to \$28 in 2022. It was observed that in 2022 younger freelance workers are able to command higher rates (Payoneer, 2022), as opposed to a 2020 data showing that freelancers over the age of 55 earn more than twice as much as their 18 -24 year old counterparts (Payoneer, 2020). As of 2023, 38% of surveyed freelancers reported increasing their rates, 46% maintained their rate, and 15% had a decline in rate. 80% reported either satisfied or very satisfied with their lifestyle, citing flexibility and work-life balance as primary contributors. Interestingly, the 2022 study revealed that the highest paying freelance field (multimedia production) did not necessarily provide the highest job-to-income satisfaction. In the Philippines, 2021 data shows that majority (around 64%) of Filipino freelance workers reported a range of \$100 to \$500 fee, with some (21%) reported earning between \$501 to \$2,000, and a few reporting more than \$2,000 income. In addition to the need for additional sources of income, flexible work hours during the pandemic accelerated the continued rapid growth of the gig economy in the country (Payoneer & GCash, 2022). Additional income provided the freelancers improved lifestyle, while the flexibility of time has allowed them to have more time for family, personal and professional growth, and work-life balance (DICT, 2022).

Areas of work for OFWs. Fields of freelance online work present different opportunities. In 2022 and 2023, an increase in global demand was observed in the field of programming, web and graphic

design, IT, gaming, marketing, and content writing (Payoneer, 2022; Payoneer, 2023). Finance, translation, sales, multimedia and QA showed declining or unchanged demand levels. Other fields open are project management and customer support. In the Philippines, interestingly, 42.9% of interviewed OFWs have reported to have international clients. Most of the freelancing jobs taken by Filipinos in 2022 are in virtual assistance (58.78%), social media marketing (43%), data entry and transcription (36.51%), content creation (38.48%) (DICT, 2022; Payoneer & GCash, 2022). Filipino freelancers fall into two major categories: traditional freelancers who are in the field of sales and marketing, customer service, data entry/internet search; and content creators who are into design/creative/media-photography, blogging/vlogging, design/creative/media-graphic designs, and writing jobs. It may be observed that most of the fields where Filipino freelancers are involved in have not shown increase in global demand. There was also an observed oversaturation on these fields like customer support, content writing, translation, QA, and admin. Meanwhile, the growing global demand in the programming, web and graphic designs, IT, and gaming open an opportunity to be tapped by the Filipino online freelance workforce.

Skillsets of OFWs. Specific skills are seen to be of increasing value to the freelance online industry. Globally, around 80% of the freelancers in 2023 are either a bachelor degree or a postgraduate degree holder. However, the impact of higher education on earning is still to be determined. In fact, 2020 study shows that high school graduate freelancers earn more than those with bachelor's degree and a little less than those with post-graduate degree (Payoneer, 2022). Same study identified experience, portfolio, and ratings from other clients to be of more relevance. Meanwhile freelancers in the Philippines are sought after by both local and overseas clients because of various reasons, such as their english-proficiency, lower labor costs compared to other Western countries, and familiarity with outsourcing (Payoneer & GCash, 2022). Majority of respondents to the study expressed interest in taking training in developing skills in communication, marketing and project management (Payoneer & GCash, 2022), and that the common way to train is to self-study and take free online courses/webinars (DICT, 2022).

Challenges of OFWs. Cited challenges encountered by freelancers – both global and local – center around security of work, finding new projects, uncertainty of income, lack of benefits, and

working alone. Filipino freelance workers, in particular, highlighted difficulties in securing loans and government financial aids, because the field of freelance online work is not recognized as a profession. Despite these challenges, freelancing continues to be an attractive career choice for Filipinos including those who are just starting to work, and those who are seeking additional income (DICT, 2022; Payoneer & GCash, 2022). The global demand for freelance work continues to increase in 2023 (Payoneer, 2023), and the Philippines is in a good position to capitalize on this trend.

4. Conclusion

These initial findings offered a glimpse of OFWs' demographics, motivations, challenges and skillsets and extended the body of knowledge on existing business process offshoring industry prevalent in the Philippines. Specifically, this research focused on freelancing – a unique context on gig work which is characterized by the absence of formal employee-employer relationship. From a macro-level (country) perspective, this can have implications for the Philippines' economy given that this can bring in substantial earnings for the country without investing much on foreign travels and global mobility. OFWs can stay in the comforts of their homes while generating income from overseas. On a global level, this presents potential impact on serving the needs for Human Resources for international business requirements and might possibly influence the way recruitment is managed. However, this requires further attention and effective systems have to be put in place by different stakeholders (e.g., government; industry; academia) to collectively manage those who engage in online freelancing work and ensure that they are protected. From a micro-level (individual) perspective, this further generates a range of implications. For example, while many can take advantage of this opportunity – some can be exploited particularly if they do not fully understand the scope of their work. Given the absence of formal employment contracts, freelancers can be abused. Hence, systems have to be in place in cases these untoward incidents happen. Lastly, this calls for additional capability building given that these freelancers work for foreign clients such as improving their cultural intelligence as capable and qualified global talents.

References

- Department of Information and Communications Technology. (2022). *Philippine online freelancing industry study*.
- Gratton, L. (2021). Four principles to ensure hybrid work is productive work. *MIT Sloan management Review*, 62(2), 11A-16A.
- Nakrošienė, A., Bučiūnienė, I., & Goštautaitė, B. (2019). Working from home: characteristics and outcomes of telework. *International Journal of Manpower*, 40(1), 87-101.
- Payoneer. (2019). *The global gig-economy index*.
https://explore.payoneer.com/q2_global_freelancing_index/.
- Payoneer. (2020). *Freelancing in 2020: An abundance of opportunities: Reviewing the surge of demand in today's global freelancing economy*. <https://explore.payoneer.com/en/report/2020-gig-economy-index/>
- Payoneer. (2022). 2022 Global freelancer income report: The ongoing rise of the freelancer revolution.
<https://blog.payoneer.com/e-sellers/industry-tips-sellers/the-2022-global-freelancer-income-report/>
- Payoneer. (2023). *2023 Freelancer Insights Report: Takeaways for small businesses*.
<https://discover.payoneer.com/businesses/freelancer-insights-report>
- Payoneer & GCash. (2022). The Philippines freelance market 2022 report.
<https://blog.payoneer.com/freelancers/philippines-freelance-market-2022-report/>
- Spreitzer, G.M., Cameron, L., & Garrett, L. (2017). Alternative Work Arrangements: Two Images of the New World of Work. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 473-499

From Beneficial to Harmful: The Effects of Voice Endorsement on Employee's Cyberloafing

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From Beneficial to Harmful: The Effects of Voice Endorsement on Employee's Cyberloafing

Extended Abstract

Voice literature to date has mainly centered on the beneficial outcomes of voice endorsement (e.g., resilience). However, in this study, we propose that voice endorsement may potentially be harmful to organizational effectiveness. Drawing from moral licensing theory and self-evaluation maintenance theory, we contend that voice endorsement can engender a heightened sense of entitlement among voicers, thereby precipitating a specific form of deviant workplace behavior — cyberloafing. In particular, this effect may be more salient where there is a heightened perceived rarity of voice endorsement. Our expected conclusions offer several theoretical and practical contributions.

Keywords: Voice Endorsement, Psychological Entitlement, Moral Licensing, Cyberloafing.

1. Introduction

In the intricate and fiercely competitive business environment, employee voice, which refers to the voluntary sharing of ideas, suggestions, and concerns to improve the status quo (Morrison, 2011), is indispensable for organizations endeavoring to stand out from their rivals (e.g., Crant, 2000; Parker, Bindl, & Strauss, 2010). Meanwhile, in order to materialize the advantages derived from employee voice, the acknowledgment and implementation of the ideas expressed by the recipients (e.g., supervisors), referred to as voice endorsement, is equally crucial (e.g., Farh, Oh, Hollenbeck, Yu, Lee, & King, 2020; Howell, Harrison, Burris, & Detert, 2015; Nelson & Proell, 2018). Burris (2012) defines voice endorsement as voice receipt's affirmative response to change-focused ideas, including support and readiness to execute such ideas. In an endeavor to comprehensively apprehend the dynamics of voice endorsement, numerous voice scholars have investigated the predictors of voice endorsement, encompassing aspects like the content of voice, voice tactics, and the characteristics of both the voicers and the receivers (see a review, Kim, Lam, Oh, & Sohn, 2023). Yet, research on the effects of voice endorsement on the ensuing behaviors of the voicer is conspicuously scarce. Within the limited studies that have addressed this issue, the predominant emphasis centers upon the impact of voice endorsement on voicers' subsequent voice behavior (e.g., Janssen & Gao, 2015; Ng, Shao, Koopmann, Wang, Hsu, & Yim, 2022; Newton, Sessions, Lam, Welsh, & Wu, 2023), largely ignoring its potential influence on the other facets of voicer's behavior.

Typically, organizations aim to encourage the voicers to contribute actively and consistently by endorsing their ideas (e.g., Detert & Burris, 2007). However, a recent study conducted by Welsh and colleagues (2022) indicates that employees are less likely to engage in interpersonal citizenship behaviors after expressing concerns about work procedures (i.e., prohibitive voice). Given that some form of voice restricts the voicer's subsequent pro-social behaviors, it is plausible to propose that managerial voice endorsement may not invariably promote the voicer's sustained contributions to the organization. Conversely, under certain circumstances, it might inadvertently embolden the voicer to adopt behaviors that could potentially undermine organizational effectiveness. Furthermore, moral licensing theory (Miller & Effron, 2010) illustrates that when individuals engage in socially laudable

behaviors, they might subsequently exhibit behaviors that deviate from societal norms. Building on this, our study seeks to explore whether managerial voice endorsement may facilitate voicers' deviant workplace behaviors, and if so, how and when.

In this study, we focus on a specific deviant workplace behavior: *cyberloafing*, which refers to “employees’ voluntary use of organizations’ Internet resources for nonwork-related activities during official working hours” (Lim & Teo, 2022: 1). We prioritize the examination of cyberloafing due to the pivotal role of digital connectivity in the modern workplace, which has rendered cyberloafing one of the most pervasive forms of deviant workplace behavior (e.g., Lim, 2002). We predict that managerial voice endorsement may facilitate voicers’ subsequent cyberloafing via psychological entitlement. Moreover, drawing from self-evaluation maintenance theory (Tesser, 1988), we posit that the impact of voice endorsement on psychological entitlement will be more pronounced in situations where voice endorsement is infrequent within the organization. Taken together, we offer a moderated mediation model between voice endorsement and voicers’ cyberloafing. Figure 1 depicts the overall hypothesized model.

2. Literature and framework

2.1 Cyberloafing

In light of unprecedented acceleration in Internet advancements over recent years, coupled with the widespread shift to remote work prompted by the Covid-19 pandemic, the significance of the Internet in the modern workplace has come to the forefront (e.g., Lim & Teo, 2022; Tsai, 2023). This heightened impact of the Internet has also led to a noteworthy phenomenon that is becoming a focal concern for both scholars and practitioners — employees’ use of organizational Internet resources for personal purposes, namely cyberloafing. Although some studies have demonstrated that cyberloafing could be beneficial for employees’ well-being by reducing work-related stress (e.g., Aghaz & Sheikh, 2016; Fathonah & Hartijasti, 2014), the majority of cyberloafing literature views cyberloafing as a specific form of deviant or counterproductive workplace behavior. In addition, empirical evidence has revealed that such behavior can compromise organizational security and lead to low organizational

productivity simultaneously (e.g., Wu, Mei, Liu, & Ugrin, 2020).

In the pursuit of comprehending the origins of such behavior and mitigating its occurrence, a large body of cyberloafing studies has begun to elucidate the antecedents of employees' cyberloafing from different dimensions, including individual characteristics (e.g., Andreassen, Torsheim, & Pallesen, 2014; Jia & Jia, 2015), contextual factors (e.g., Zhou, Li, Hai, Wang, & Niu, 2021), and interpersonal relationship (e.g., Liberman, Seidman, McKenna, & Buffardi, 2011). Nevertheless, little research has delved into the potential impact of employees' pro-social behaviors on their engagement in cyberloafing. Magee and Galinsky (2008) indicates such a possibility by suggesting that high-status employees are more likely to engage in behaviors that violate organizational norms, and the acknowledgment from supervisors can augment an individual's status within the team (e.g., Anderson & Kilduff, 2009). Thus, our study seeks to bridge this research gap.

2.2 The Mediating Role of Psychological Entitlement Between Voice Endorsement and Cyberloafing

As the core of moral licensing theory, moral balance model posits that people's moral self-regard, defined as the evaluation of their current moral level, can fluctuate in accordance with the perceived moral degree inherent in their behaviors (Nisan, 1991). Every individual has a distinct moral equilibrium point, and people are inclined to ensure their moral self-regard either surpasses or at least aligns with this equilibrium (Ahmad, Klotz, & Bolino, 2021). Additionally, individuals' current degree of moral self-regard influences their perceptions of subsequent actions (Lin, Ma, & Johnson, 2016). Specifically, in line with moral licensing theory, engaging in morally commendable behaviors endows people with a psychological "license". This psychological license further emboldens them to undertake morally ambiguous actions without fear of retribution or discrediting their positive self-image. Since their moral self-regard is above the equilibrium threshold, they perceive themselves as having surplus moral capital that can be adeptly leveraged to "purchase" the privilege to deviate from social norms (e.g., Bradley-Geist, King, Skorinko, Hebl, & McKenna, 2010; Lin et al., 2016). On the contrary, when people initially partake in immoral behaviors, their moral self-regard falls below the equilibrium. As a result, there arises a motivation for individuals to subsequently pursue moral actions (Ahmad et al., 2021; Miller & Effron, 2010).

Building upon these arguments, we suggest that managerial voice endorsement has a positive impact on the voicer's subsequent cyberloafing, and such a relationship is mediated by psychological entitlement. Psychological entitlement refers to an individual's positive belief that he or she is entitled and deserves more (e.g., Campbell, Bonacci, Shelton, Exline, & Bushman, 2004). According to moral licensing theory, when one's moral self-regard exceeds the equilibrium point, he or she will perceive "a sense of entitlement to some moral laxity" (Zhong, Liljenquist, & Cain, 2009: 78). Besides, prior research has also found out that employees feel more entitled after they engaged in citizenship behaviors (e.g., Klotz & Bolino, 2013; Yam, Klotz, He, & Reynolds, 2017). Therefore, we argue that when employees secure managerial endorsement for their voice, they may interpret their suggestions as markedly advantageous for the organizations. This, in turn, could bolster their moral self-regard, ultimately leading to a sense of psychological entitlement. Moreover, entitled employees perceive themselves as unique and consider that they deserve more than they have been given (Loi, Kuhn, Sahaym, Butterfield, & Tripp, 2020). Consequently, based on moral licensing theory, such employees believe that they are entitled to engage in immoral behaviors occasionally because, as previously delineated, such behavior is not construed as morally questionable from their own standpoint (e.g., Miller & Effron, 2010; Vincent & Kouchaki, 2016). This concurs with the findings of previous studies, which also suggest that entitled employees are more likely to engage in workplace deviant behaviors (e.g., Loi et al., 2020). Taken together, we expect that managerial voice endorsement has a positive effect on employees' cyberloafing via psychological entitlement.

Hypothesis 1: The indirect positive relationship between managerial voice endorsement and employees' cyberloafing is mediated by psychological entitlement.

2.3 The Moderating Role of the Rarity of Voice Endorsement

While the arguments above predominantly focus on the implications of voice endorsement on voicers' subsequent cyberloafing from a within-person perspective, the between-person examination in terms of when such effect is magnified remains unexplored. We contend that the influence of voice endorsement on psychological entitlement will be more salient in organizations where voice endorsement is rare.

As discussed earlier, psychological entitlement is a cognitive state of self-evaluation. Drawing from

the self-evaluation maintenance theory (Tesser, 1988), individuals' self-evaluation is molded through the mechanism of social comparison, whereby the perceived prevalence of specific attributes or traits within a given social setting significantly sculpts their self-perception (e.g., Jemmott, Ditto, & Croyle, 1986). Notably, if individuals' traits or attributes are both positive and relatively scarce, they tend to exaggerate the rarity (O'Mahen, Beach, & Tesser, 2000), thereby giving rise to a more favorable self-evaluation (Vincent & Kouchaki, 2016). Therefore, in an organization where voice is frequently ignored and rarely endorsed, the impact of the rarity of voice endorsement becomes even more pronounced. A voicer fortunate enough to secure such an exceptional endorsement may perceive a sense of distinction, thus fostering a heightened psychological entitlement. Based on these arguments, we predict that:

Hypothesis 2: The perceived rarity of voice endorsement moderates the positive relationship between managerial voice endorsement and psychological entitlement, such that, the effect is stronger when employees perceive that voice endorsement is rare rather than common.

Combining the mediating role of psychological entitlement and the moderating role of the perceived rarity of voice endorsement, we offered a pattern of moderated mediation between voice endorsement and employees' cyberloafing. Hence, we hypothesize that:

Hypothesis 3: The perceived rarity of voice endorsement moderates the positive relationship between managerial voice endorsement and employees' cyberloafing via psychological entitlement, such that, the indirect effect is stronger when employees perceive that voice endorsement is rare rather than common.

3. Methods

3.1 Research Design

We intend to test our hypotheses by using a multi-wave research design. At Time 1, we will conduct a screening survey through an online platform to select full-time employees who have voiced in the preceding two weeks as our target. In this phase, participants will also engage in addressing questions

related to voice endorsement, their perceptions of the rarity of voice endorsement within their organizations, and various demographic variables. Additionally, to ensure adherence to the conceptual definition of voice, eligible respondents will be prompted to provide a succinct account of voice content. Two weeks from the initial phase (Time 2), we will require the respondents to respond to questions related to psychological entitlement. Subsequently, two weeks after Time 2 (Time 3), we will have the respondents answer questions related to cyberloafing.

3.2 Measures

Unless specified otherwise, all variables will be measured using a five-point Likert-type scale (*1 = strongly disagree, 5 = strongly agree*).

Independent Variable: Voice Endorsement. We will measure voice endorsement using five items developed by Burris (2012). A sample item is “My idea was supported by my supervisor”.

Mediator: Psychological Entitlement. We will assess psychological entitlement using 9 items developed by Campbell et al. (2004). A sample item is “I demand the best because I am worth it”.

Moderator: The Rarity of Voice Endorsement. To measure the perceived rarity of voice endorsement within organizations, we will utilize a two-item scale created by Vincent and Kouchaki (2016). Notably, this scale was originally developed to assess the rarity of creativity within a similar context. The two items are “Supervisors rarely endorse voice in my organization” and “Endorsement for voice is uncommon in my organization”.

Dependent Variable: Cyberloafing. We will use a 12-item self-report scale developed by Lim and Chen (2012) to measure employees’ cyberloafing states (e.g., Browsing nonwork-related websites on your computer or cellphone.)

Control Variables. As suggested by Lim and Teo (2022), we will control demographic variables that are related to cyberloafing, including age, gender, marital status, and educational background. We also will control employees’ agreeableness and conscientiousness by utilizing 12 items from BFI-2-S (Soto & John, 2017), given that previous research asserts a correlation between agreeableness and the emergence of psychological entitlement. Finally, we will control the Internet policy regulation of organizations by using a 3-item scale developed by Andreassen, Torsheim, & Pallesen (2014).

4. Conclusion

If our hypotheses are empirically supported, our conclusions will contribute to the extant voice literature by extending the understanding of the potentially deleterious consequence of voice endorsement. Moreover, from a practical perspective, organizations should foster a climate wherein employees' ideas and suggestions frequently garner recognition and endorsement. By diminishing the perceived rarity of voice endorsement, this approach can effectively serve as a strategy to counterbalance the potential detrimental outcome of voice endorsement.

5. References

- [1] Aghaz, A., & Sheikh, A. (2016). Cyberloafing and job burnout: An investigation in the knowledge-intensive sector. *Computers in Human Behavior*, 62, 51-60.
- [2] Ahmad, M. G., Klotz, A. C., & Bolino, M. C. (2021). Can good followers create unethical leaders? How follower citizenship leads to leader moral licensing and unethical behavior. *Journal of Applied Psychology*, 106(9), 1374-1390.
- [3] Anderson, C., & Kilduff, G. J. (2009). The pursuit of status in social groups. *Current Directions in Psychological Science*, 18(5), 295-298.
- [4] Andreassen, C. S., Torsheim, T., & Pallesen, S. (2014). Predictors of use of social network sites at work—A specific type of cyberloafing. *Journal of Computer-Mediated Communication*, 19(4), 906-921.
- [5] Bradley-Geist, J. C., King, E. B., Skorinko, J., Hebl, M. R., & McKenna, C. (2010). Moral credentialing by association: The importance of choice and relationship closeness. *Personality and Social Psychology Bulletin*, 36(11), 1564-1575.
- [6] Burris, E. R. (2012). The risks and rewards of speaking up: Managerial responses to employee voice. *Academy of Management Journal*, 55(4), 851-875.
- [7] Campbell, W. K., Bonacci, A. M., Shelton, J., Exline, J. J., & Bushman, B. J. (2004). Psychological entitlement: Interpersonal consequences and validation of a self-report measure. *Journal of Personality Assessment*, 83(1), 29-45.
- [8] Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462.
- [9] Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal*, 50(4), 869-884.
- [10] Farh, C. I., Oh, J. K., Hollenbeck, J. R., Yu, A., Lee, S. M., & King, D. D. (2020). Token female voice enactment in traditionally male-dominant teams: Facilitating conditions and consequences for performance. *Academy of Management Journal*, 63(3), 832-856.
- [11] Fathonah, N., & Hartijasti, Y. (2014). The influence of perceived organizational injustice towards workplace personal web usage and work productivity in Indonesia. *The South East Asian Journal*

of Management, 8(2), 151-166.

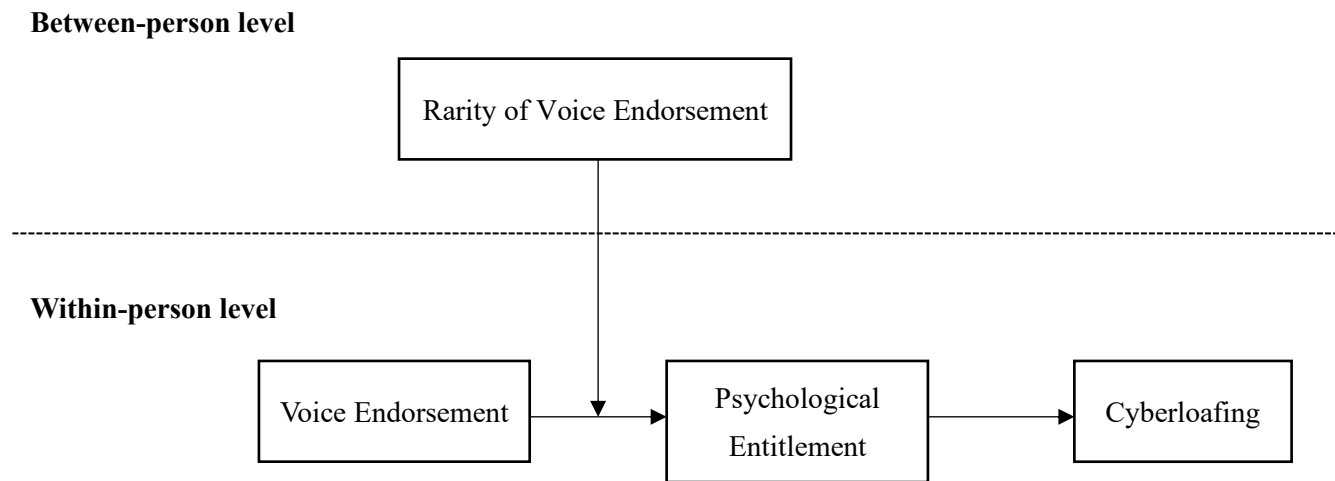
- [12] Howell, T. M., Harrison, D. A., Burris, E. R., & Detert, J. R. (2015). Who gets credit for input? Demographic and structural status cues in voice recognition. *Journal of Applied Psychology*, 100(6), 1765-1784.
- [13] Janssen, O., & Gao, L. (2015). Supervisory responsiveness and employee self-perceived status and voice behavior. *Journal of Management*, 41(7), 1854-1872.
- [14] Jemmott, J. B., Ditto, P. H., & Croyle, R. T. (1986). Judging health status: effects of perceived prevalence and personal relevance. *Journal of Personality and Social Psychology*, 50(5), 899-905.
- [15] Jia, R., & Jia, H. H. (2015). An individual trait-based investigation of employee cyberloafing. *Journal of Information Technology Management*, 26(1), 58-71.
- [16] Kim, Y. J., Lam, C. F., Oh, J., & Sohn, W. (2023). Employee constructive voice: An integrative review and a dyadic approach. *Journal of Management*, 49(1), 430-473.
- [17] Klotz, A. C., & Bolino, M. C. (2013). Citizenship and counterproductive work behavior: A moral licensing view. *Academy of Management Review*, 38(2), 292-306.
- [18] Liberman, B., Seidman, G., McKenna, K. Y., & Buffardi, L. E. (2011). Employee job attitudes and organizational characteristics as predictors of cyberloafing. *Computers in Human Behavior*, 27(6), 2192-2199.
- [19] Lim, V. K. G. (2002). The IT way of loafing on the job: Cyberloafing, neutralizing and organizational justice. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 23(5), 675-694.
- [20] Lim, V. K., & Chen, D. J. (2012). Cyberloafing at the workplace: gain or drain on work? *Behaviour & Information Technology*, 31(4), 343-353.
- [21] Lim, V. K., & Teo, T. S. (2022). Cyberloafing: A review and research agenda. *Applied Psychology: An International Review*, Online Advance Publication.
- [22] Lin, S. H. J., Ma, J., & Johnson, R. E. (2016). When ethical leader behavior breaks bad: How ethical leader behavior can turn abusive via ego depletion and moral licensing. *Journal of Applied Psychology*, 101(6), 815-830.
- [23] Loi, T. I., Kuhn, K. M., Sahaym, A., Butterfield, K. D., & Tripp, T. M. (2020). From helping

- hands to harmful acts: When and how employee volunteering promotes workplace deviance. *Journal of Applied Psychology*, 105(9), 944-958.
- [24] Magee, J., & Galinsky, A. (2008). Social hierarchy: The self-reinforcing nature of power and status. *The Academy of Management Annals*, 2(1), 351-398.
- [25] Miller, D. T., & Effron, D. A. (2010). Psychological license: When it is needed and how it functions. In M. P. Zanna & J. Olson (Eds.), *Advances in Experimental Social Psychology*, 43, 115-155.
- [26] Morrison, E. W. (2011). Employee voice behavior: Integration and directions for future research. *Academy of Management Annals*, 5(1), 373-412.
- [27] Nelson, M. W., & Proell, C. A. (2018). Is silence golden? Audit team leader reactions to subordinates who speak up “in the moment” and at performance appraisal. *The Accounting Review*, 93(6), 281-300.
- [28] Newton, D. W., Sessions, H., Lam, C. F., Welsh, D. T., & Wu, W. (2023). Loaded down from speaking up: A resource-based examination of voicer regret following supervisor delegation. *Journal of Management*, Online Advance Publication.
- [29] Ng, T. W., Shao, Y., Koopmann, J., Wang, M., Hsu, D. Y., & Yim, F. H. (2022). The effects of idea rejection on creative self-efficacy and idea generation: Intention to remain and perceived innovation importance as moderators. *Journal of Organizational Behavior*, 43(1), 146-163.
- [30] Nisan, M. (1991). The moral balance model: Theory and research extending our understanding of moral choice and deviation. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of Moral Behavior and Development*, 213-249.
- [31] O'Mahen, H. A., Beach, S. R., & Tesser, A. (2000). Relationship ecology and negative communication in romantic relationships: A self-evaluation maintenance perspective. *Personality and Social Psychology Bulletin*, 26(11), 1343-1352.
- [32] Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 827-856.
- [33] Soto, C. J., & John, O. P. (2017). Short and extra-short forms of the Big Five Inventory-2: The BFI-2-S and BFI-2-XS. *Journal of Research in Personality*, 68, 69-81.

- [34] Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*, 21, 181-227.
- [35] Tsai, H. Y. (2023). Do you feel like being proactive day? How daily cyberloafing influences creativity and proactive behavior: the moderating roles of work environment. *Computers in Human Behavior*, 138, 107470.
- [36] Vincent, L. C., & Kouchaki, M. (2016). Creative, rare, entitled, and dishonest: How commonality of creativity in one's group decreases an individual's entitlement and dishonesty. *Academy of Management Journal*, 59(4), 1451-1473.
- [37] Welsh, D. T., Outlaw, R., Newton, D. W., & Baer, M. D. (2022). The social aftershocks of voice: An investigation of employees' affective and interpersonal reactions after speaking up. *Academy of Management Journal*, 65(6), 2034-2057.
- [38] Wu, J., Mei, W., Liu, L., & Ugrin, J. C. (2020). The bright and dark sides of social cyberloafing: Effects on employee mental health in China. *Journal of Business Research*, 112, 56-64.
- [39] Wu, J. N., Song, M., Ugrin, J. C., Liu, L., & Zhu, T. (2021). Cyberloafing research 1997–2019: A citation-based literature review. *The Organizacija (Journal of Management, Information Systems and Human Resources)*, 54(2), 98-111.
- [40] Yam, K. C., Klotz, A. C., He, W., & Reynolds, S. J. (2017). From good soldiers to psychologically entitled: Examining when and why citizenship behavior leads to deviance. *Academy of Management Journal*, 60(1), 373-396.
- [41] Zhong, C.-B., Liljenquist, K. A., & Cain, D. M. (2009). Moral self-regulation. In D. De Cremer (Ed.), *Psychological Perspectives on Ethical Behavior and Decision Making*, 75-89.
- [42] Zhou, B., Li, Y., Hai, M., Wang, W., & Niu, B. (2021). Challenge-hindrance stressors and cyberloafing: A perspective of resource conservation versus resource acquisition. *Current Psychology*, 1-10.

Appendix

Figure 1: Overall Hypothesized Model



Does Working in Japan Remain Attractive to Highly Skilled Self-initiated Expatriates from Asia?

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Does Working in Japan Remain Attractive to Highly Skilled Self-initiated Expatriates from Asia?

Abstract

This study examines Japan's appeal to highly skilled migrants from Asia. Previous studies confirm the challenges in the Japanese foreign labor market, and data indicate its decline in attractiveness in multiple aspects compared to other advanced countries. The primary data show that Asian foreign workers in Japan struggle with work and socio-cultural life, and face an uncertain future. Conversely, the immigration inflow during the last decade reveals that Japan is still attractive to highly skilled workers, but almost exclusively from a particular country, China. This is encouraging for immigration policy targets, but achieving an inclusive and sustainable working environment may still be a distant possibility.

Keywords: Highly skilled migrants, Self-initiated expatriates, Working in Japan, Labor shortage

1. Introduction

Over the last century, Japan's labor conditions have undergone unprecedented changes. The once prevalent lifetime employment and thriving economy are now almost nonexistent. Furthermore, the country is grappling with a significant challenge – a labor shortage. In an aging society like Japan, the solution is obvious. Supplemental labor must come from the global market. While this solution is not unique, as skilled migrants have always been mobile, labor migration has some implications for host countries' labor and immigration policies and how local firms and MNEs operate (Hajro, Brewster, Haak-Saheem & Morley, 2023). Japan has always been the sought-after employment destination within Asia, together with South Korea, due to its highly developed country status and being the third largest economy in the world. The determinants of this used to be the positive wage differentials,

quality of opportunities, and quality of life (OECD, 2023). However, given the dynamics of global migration and the impact of economic globalization, the attractiveness of the Japanese labor market has been put to the test. This is particularly important to the highly skilled migrants from Asia who consider Japan the nearest and most familiar destination. Another issue is the fact that Japanese immigration policies seem to have a hang-up with the ancient closed-door regime. As a result, there's a large discrepancy between the official immigration policy and the actual implementation outcome (Chiavacci, 2017). As of 2022, a cumulative total of 38,014 "Highly Skilled Professional" visas were approved. This number fell short of the government's target KPI by around 2,000; an outcome that is not new. Given this context, this study examines whether Japan remains a desirable destination for highly skilled migrants from Asia. The secondary data confirmed that Japan is facing a downtrend in attractiveness in multiple aspects, such as talent ranking, comparative financial rewards, and quality of work-life balance, while the preliminary data show that the working environment and socio-cultural life proved to be quite challenging for foreign workers, especially those with families. On the other hand, this study also shows that Japan can still be considered attractive to highly skilled workers from Asia, but predominantly from China. Thus, despite the continuous influx of highly skilled migrants, Japan still faces challenges in creating an inclusive and sustainable working environment.

2. Theoretical Background

2.1. The Highly-Skilled Migrants and Self-Initiated Expatriates

Individuals with a university degree, particularly at the post-graduate level, and with significant experience working in their field are classified as highly skilled migrants (HSMs). This general classification would vary in host governments (Chand & Tung, 2019). One group of these HSMs is the self-initiated expatriates (SIEs). Self-initiated expatriates are individuals who have decided to work and reside in a foreign country on their own accord, without any backing from a company (Tharenou and Caulfield, 2010). These combined characteristics, highly skilled self-initiated expatriates, offer the unique kind of global worker whose work opportunities are not exclusive to any country. Also, in contrast to most foreign workers who seek employment in another country due to unfavorable

opportunities back home, highly skilled self-initiated expatriates are almost always considered an asset in their home country and may return to work anytime. They continue to evaluate their opportunities globally and must possess a compelling reason to stay in a particular host country for a certain period.

2.2. The Japanese immigration policy for Highly-Skilled Migrants

The concept of high-skilled migrants is best discussed from the onset of the bubble era. This period saw a surge in the demand for skilled foreigners who could meet the advanced needs of the booming Japanese economy (Sellek, 2001). Wakisaka and Cardwell (2021) divide the development of the Japanese skilled migration policies into three phases. Phase 1 (80's~2000), which follows the implementation of the Immigration Control Act of 1971, characterizes the need to respond to the rapid economic globalization and push the Japanese government to iron out illegal immigration activities, the Nikkeijin policy, while at the same time proactively seeking highly skilled workers. Phase 2 (2000-2012) provided the response to the bursting of the bubble economy and smoothened the entry of valued skilled migrants, especially in the IT industry, and created the "Points-Based Preferential Treatment for Highly-skilled Professionals" system. Lastly, Phase 3 (2013 – present) focused on the “economically-driven migration policy-making”, which aims to place highly skilled migrants as part of the solutions to invigorate the stagnating Japanese economy. The Immigration Control Act and other laws have undergone multiple revisions, especially in 2014, 2019, and 2021, to recognize the shortcomings of previous policies, as well as to review skilled migrants' family arrangements and easing of permanent residency applications.

2.3. The attractiveness of a country's working environment

There are several reasons why a highly skilled migrant might be drawn to a particular host country or working environment. The International Institute for Management Development (IMD) formulated the World Talent Ranking (WTR) to evaluate a country's talent competitiveness through the state and

progression of competencies crucial for establishing enduring value within economies and enterprises (IMD, 2023). IMD implements this ranking across 63 countries annually by employing indicators to gauge the cultivation, retention, and attraction of highly skilled workforces, both on a local and global scale. This ranking is anchored in three primary factors: Investment and Development, Appeal, and Readiness. The factor of "Investment and Development" centers on nurturing domestic talent. It assesses the magnitude of public investment in education, employee training, apprenticeships, and health infrastructure. Secondly, the "Appeal" factor evaluates a country's ability to access global talent reservoirs. It considers indicators such as the cost of living, quality of life, and the nation's adeptness at drawing highly skilled migrants. This factor also examines how enterprises prioritize attracting and retaining talent, and assesses the influence of brain drain on a country's competitive standing. Lastly, the "Readiness" factor analyzes the preparedness of the talent pool, encompassing elements like the growth of the labor force, skill proficiency, and the capabilities of senior managers. Overall, the higher the ranking of a particular country, the better the opportunity for the highly skilled migrants to thrive, upgrade, and compete with their knowledge and skills. On the other hand, the OECD adopted the Indicators of Talent Attractiveness (ITA) to determine what factors make a country appealing for highly skilled migrants to relocate or work in (OECD, 2023). The ITA comprises seven dimensions with corresponding variables that provide detailed information on the main drivers of talent mobility across the economic and social spheres. The seven dimensions are Quality of Opportunity, Income and Tax, Future Prospects, Family environment, Skills environment, Inclusiveness, and Quality of life. In conjunction with these dimensions, the migration policy of a country is also included in the assessment as factors such as Visa and other immigration procedures affect how a highly skilled migrant enters and stays in the host country. Generally, the stronger the country in these dimensions, the more appealing it is to highly skilled migrants seeking employment and living conditions.

3. Methods and Results

The study utilized a combined approach, merging secondary data collection with primary data through emails and personal interviews, and conducted a descriptive analysis.

3.1. Secondary Data analysis

3.1.1. Japan's Ranking in Talent Competitiveness

Of 63 countries, Japan's overall talent competitiveness ranking has decreased annually (IMD, 2023). In 2018, it was 29th, in 2020 it dropped to 38th, and 41st in 2022. As of 2022, Japan's rank in Investment and Development was 37th, while Appeal ranked 27th and Readiness ranked 54th. In the context of attracting HSMs, significant factors are Japan's business environment, which ranked 54th, and the Cost-of-living Index at 59th respectively.

3.1.2. Japan's Ranking in Talent Attractiveness for Highly skilled workers

Among OECD countries, Japan ranks as a middle performer (scores 5 out of 10) in its ability to attract and retain talented migrants based on the ITA measures (OECD, 2023). It is in the 21st spot, after countries from Europe, North America and Oceania.

3.1.3. Recent trend on approved "Highly-Skilled Foreign Professionals" Visa in Japan

There's been a continuous inflow of HSM in the last ten years (ISA, 2023). In 2012, there were 313 approved HSMs, 5,549 in 2016, and 15,735 in 2021, respectively. It has an average of 164% increase each year. The prominent HSMs come from the following countries: China, India, South Korea, the USA, Taiwan, and others. From the total number in 2012, China occupies 56.2%, India 5.4%, South Korea 4.2%, USA 7.7%, Taiwan 3.2%, and others 23.3%, respectively. These percentage shares did not change in the last ten years, with China having an average annual share of 63.6%, India at 4.9%, South Korea at 4.2%, USA at 5.2%, Taiwan at 3.1%, and others at 19%. In general, these numbers on nationalities are also similar to the composition of migrants in Japan.

3.2. Initial primary Data analysis

The study conducted interviews, an average of one hour each, with HMS through personal references. For this paper, only two cases and their brief description are presented, see Figure 1 below. In Case 1, the HMS appears content with his job, but as a family-oriented person, he has concerns about social factors affecting his family. Meanwhile, Case 2 experiences significant stress due to the rigorous Japanese working standards, but finds comfort in Japanese pop culture.

Description	Case 1- Male 43, Tokyo	Case 2 - Male 29, Tokyo
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Personal and Employment Profile	This HSM is from Rajasthan, India; Married, has a six year-old daughter; Finished MBA in a Japanese university; Intermediate Japanese language ability (N3); got Highly-skilled Visa; Works as project manager in one of the biggest Japanese e-commerce companies, mostly use English at work; been living in Japan for eight years	The HSM is from Manila, Philippines; Single; Finished an IT degree; Intermediate Japanese language ability (N2); got skilled Visa status; Works as IT development assistant in a medium-sized Japanese company and expected to use considerable Japanese language at work; been living in Japan for three years
Encouraging experience	<i>"I can go back to my state in India and land a job, but work and the quality of life here in Japan is way better for me and my family.."</i>	<i>"I'm happy that I get to enjoy my hobbies (related to Japanese Anime) while being here in Japan as a worker. It is a dream come true.."</i>
Discouraging experience	<i>"I'm worried about my daughter's education here in Japan..it's also very difficult for my parents to get a visa to stay to Japan..in my culture, it's my responsibility to take care of them.."</i>	<i>"I'm expected to do lot of overtime..also, I didn't expect the huge amount of Japanese (language) I needed to use in my projects..work is really stressful..I wish there's another way.."</i>

Figure 1. Description of two Highly Skilled Migrant cases

4. Discussion

Despite being an advanced nation and the third largest economy in the world, Japan has a relatively low ranking in both talent competitiveness and talent attractiveness. It is not the top choice for highly skilled global workers seeking the optimal work environment. There are many reasons for this decline, including the rising brain drain brought about by the decreasing number of Doctoral graduates in Japan and the emigration of skilled talents (Horiuchi & Oishi, 2022). The experience of the two cases of HSM also produced mixed results, but mostly not all positive. On the other hand, the skewed number of Chinese HSM approvals might have something to do with the low language barrier. This trend suggests that the influx of HSMs in Japan results in a recurring bias towards Chinese HSMs, leading to a conservative approach and risks of cumulative causation over time.

5. Conclusion

This study concludes that working in Japan has not remained attractive for highly skilled self-initiated expatriates worldwide. While the inflow of Chinese HSMs is a positive trend, it is an immigration outcome that might result in an imbalanced policy direction and limited knowledge development in both local companies and MNEs operating in Japan. Finally, in light of HR sustainability concerns, it is increasingly important to consider some recommendations such as employing and training current and past international students from Japanese universities, as leverage, and encouraging more innovative HR policies by Japanese companies.

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6. References

- [1] Chiavacci, D. (2017). *Japan as a new immigration country: the gap between immigration policy and actual immigration in international comparison*. In Y. Hayashi & N. Aoki (Eds.), *Open Japan – Closed Japan: Towards Interdisciplinary Studies in Human Mobility* (pp. 81-93).
- [2] Chand, M., & Tung, R. L. (2019). Skilled immigration to fill talent gaps: A comparison of the immigration policies of the US, Canada, and Australia. *J of Int Business Policy*, 2, 333-355.
- [3] Hajro, A., Brewster, C., Haak-Saheem, W., & Morley, M. J. (2023). Global migration: Implications for international business scholarship. *Journal of International Business Studies*, 54(6), 1134-1150.
- [4] Horiuchi, Y., & Oishi, N. (2022). Country Risks and Brain Drain: The Emigration Potential of Japanese Skilled Workers. *Social Science Japan Journal*, 25(1), 55-82.
- [5] IMD. (2023). IMD WORLD TALENT RANKING 2022. Institute for Management Development.
- [6] ISA. (2023). Acceptance status of Highly Skilled Foreign Professional. Ministry of Justice, Japan.
- [7] OECD. (2023). What is the best country for global talents in the OECD?
- [8] Sellek, Y. (2001). *Migrant labour in Japan*. Springer.
- [9] Tharenou, P., & Caulfield, N. (2010). Will I stay or will I go? Explaining repatriation by self-initiated expatriates. *Academy of Management Journal*, 53(5), 1009-1028.
- [10] Wakisaka, D., & Cardwell, P. J. (2021). Exploring the trajectories of highly skilled migration law and policy in Japan and the UK. *Comparative Migration Studies*, 9(1), 43.

Adverse Effects of Institutions on Trade Amidst Global Uncertainty

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Adverse Effects of Institutions on Trade Amidst Global Uncertainty

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Extended Abstract

Common wisdom holds that high institutional quality promotes trade, yet our study offers a more nuanced analysis: the positive effect of institutional quality on trade diminishes as uncertainty level decreases and might turn negative, reducing trade when uncertainty is sufficiently low. Analyzing a comprehensive dataset encompassing 165 countries over the period from 2002 to 2020, we find that the effect of institutional quality on trade flow increases with the uncertainty level. Furthermore, in conditions of low uncertainty, at least 66.2% of trade flows in our dataset were negatively affected by the destination country's high institutional quality.

Keywords: Institution, International Trade, Uncertainty

1. Introduction

The role of institutions in international trade has long been studied, with many papers pointing out that countries with higher institutional quality are inclined to trade more (e.g., Anderson and Marcouiller, 2002). Nonetheless, the potential disadvantages associated with high institutional quality remain unexplored in related literature. Under circumstances of low uncertainty, high institutional quality might carry some drawbacks, such as bureaucratic inefficiency and regulatory burdens, that impose trade costs. Focusing on this unaddressed issue in the literature, this study investigates whether the effect of

institutional quality is conditional upon the level of uncertainty and explores the scenario where higher institutional quality may paradoxically exert negative effects on trade.

Examining a comprehensive dataset of bilateral trade flows encompassing 165 countries from 2002 to 2020, we find that the effect of institutional quality on trade flow increases with the uncertainty level. Higher institutional quality tends to have a stronger positive effect on trade flows during periods of high uncertainty. This effect, however, diminishes as the uncertainty level decreases. When the uncertainty level is sufficiently low, the trade cost incurring from regulatory burden outweighs the uncertainty-mitigating effect of high institutional quality, resulting in a negative net effect of high institutional quality on trade. Specifically, at least 66.2% of trade flows in our sample data were adversely affected by the destination country's high institutional quality in conditions of low uncertainty. To our best knowledge, our study is the first to provide empirical evidence on the adverse effect of institutional quality on international trade.

2. Literature and Framework

The theoretical and empirical literature suggests that high institutional quality promotes trade by mitigating the negative effect of uncertainty on trade (see e.g., Anderson and Marcouiller, 2002). Since the risk-averse decision-makers require higher compensation as the level of risk increases (Klemperer and Meyer, 1986), firms may adapt their strategies to the uncertainty level in the foreign marketplace when making export decisions (e.g., De Sousa, Disdier, and Gaigné, 2020). Considering the risk premium driven by uncertainty as a cost of trading, institutions can promote trade by reducing these uncertainty-driven trade costs (e.g., Dixit, 2011). Trade towards countries with high institutional quality carries less of such costs. Thus, facing uncertainty, countries with high institutional quality are inclined to import more (e.g., Anderson and Marcouiller, 2002). Given that uncertainty levels fluctuate over time,

the extent to which institutions promote trade through mitigating the impacts of uncertainty would depend on the level of uncertainty, leading to our first hypothesis:

Hypothesis 1: The effect of destination country's institutional quality on bilateral trade flows is positively associated with the uncertainty level.

Our second hypothesis relates to the net effect of institutions on trade, considering both the advantages and disadvantages of high institutional quality. On the one hand, governments may impose bureaucratic inefficiency and excessive regulations when establishing and maintaining institutions like laws and regulations. Such disadvantages can increase the regulatory burdens that firms are obligated to make costly efforts to comply with. Consequently, the profitability of firms' economic activities decreases in such costs of compliance (Parker and Kirkpatrick, 2012), potentially leading to trade reduction. On the other hand, if our first hypothesis holds, the uncertainty-mitigating effect decreases when the uncertainty level declines. When the uncertainty level is sufficiently low, the uncertainty-mitigating effect may drop below the adverse effect of increasing regulatory burden. In light of this, weighing the benefits against the disadvantages, we arrive at our second hypothesis:

Hypothesis 2: Under conditions of low uncertainty level, the net effect of institutional quality on trade flows may become negative.

3. Methods and Results

Our empirical approach employs a modified gravity model and uses the Poisson Pseudo Maximum Likelihood (PPML) estimator. We primarily focus on the interaction effect between institutional quality and uncertainty on trade flow, which is captured by β_7 in the following specification:

$$\ln X_{od,t} = \beta_0 + \beta_1 \ln dist_{od,t} + \beta_2 \ln GDP_{o,t} + \beta_3 \ln GDP_{d,t} + Z_{od,t} + \beta_4 I_o + \beta_5 \ln Inst_{d,t-1} + \beta_6 \ln GU_{t-1} + \beta_7 (\ln Inst_{d,t-1} * \ln GU_{t-1}) + U_{od,t}$$

Following the standard gravity model, $X_{od,t}$ denotes the bilateral trade flow from origin country (o) to the destination country (d) at year (t); $dist_{od,t}$ denotes the geographical distance between the two countries; I_o is a set of origin country dummies; $Inst_{d,t-1}$ is the institutional measure; GU_{t-1} is the global uncertainty measure; $Z_{od,t}$ contains all other control variables; $U_{od,t}$ is the error term.

We derived the trade flow and control variables' data from the CEPII Gravity Database. To measure institutional quality, we adopted the Worldwide Governance Indicators (WGIs) from the World Bank. The uncertainty level is measured by three indices, which represent the different context of uncertainty, namely, the Global Economic Policy Uncertainty (GEPU) by Davis (2006), and the World Trade Uncertainty Index (WTUI) and World Uncertainty Index (WUI) by Bloom and Furceri (2022).

Table 1 presents our primary findings. The positive and significant coefficients of the interaction terms in columns 2, 3, and 4 support our first hypothesis, elucidating the positive interaction effect between institutional quality and uncertainty on trade flow. Concurrently, the negative and significant main effects of the institutional measure in columns 3 and 4, combined with our findings from the first hypothesis, support our second hypothesis on the potential negative net effect of institutional quality on trade flow. Delving deeper into specific institutional quality dimensions, similar patterns were found and reported in Table 2. Remarkably, among the six dimensions of institutional quality, only the Voice and Accountability (VA) dimension exerts a negative net effect on trade flow in our dataset under conditions of low uncertainty.

4. Discussion

This study investigates the relationship between institutions and international trade factoring in the level of global uncertainty. Our empirical results show that the positive effect of institutional quality on trade diminishes as the uncertainty level decreases and might turn negative, reducing trade when uncertainty

is sufficiently low. Specifically, the VA dimension of institutional quality, which indicates a country's level of democracy, showed a stronger tendency to reduce trade when the uncertainty level is low. This intriguing result can be rationalized by considering the practices of democratic governments. Such governments often invest heavily in transparent processes to ensure that the design and implementation of regulations align with public sentiments. Given the varied nature of public opinion, this can result in excessive regulation as governments also cater to factions within the public that advocate for increased regulatory efforts.

Our novel findings suggest that, when exporting to the foreign market, firms should factor in the interaction effect between institutional quality and uncertainty level as the net effect of institutions on bilateral trade flows is conditional upon the level of uncertainty. Furthermore, exporting firms would be well-advised to monitor the Voice and Accountability (VA) of destination countries as a key institutional quality indicator since our empirical results show that it exerts a negative net effect on trade flow under conditions of low uncertainty.

Table 1. Estimated coefficients with interactions of uncertainty and institutional quality

	(1) -	(2) WTUI	(3) GEPUI	(4) WUI
WGI_PC1	0.510*** (0.005)	0.296*** (0.005)	-0.458*** (0.066)	-1.150*** (0.163)
WTUI		-0.083*** (0.005)		
GEPUI			-0.493*** (0.029)	
WUI				-0.447*** (0.035)
WGI_PC1*WTUI		0.032*** (0.002)		
WGI_PC1*GEPUI			0.155*** (0.014)	
WGI_PC1*WUI				0.146*** (0.016)
Origin Country FE	Yes	Yes	Yes	Yes
Year FE	Yes			
Robust Standard Error	Yes	Yes	Yes	Yes
Observations	466340	466340	466340	466340
pseudo-R2	0.91499	0.91440	0.91467	0.91447

PPML estimation. All other control variables included. Dependent variable is X_{odt} . WGI_PC1 captures overall institutional quality, derived from six dimensions of WGI using Principle Component Analysis. Robust standard errors are reported in parenthesis. ***, **, and * indicate statistical significance at 1%, 5%, and 10%, respectively.

Table 2. Estimated coefficients: interactions between WTUI and six dimensions of institutional quality

	(1) COC	(2) GE	(3) PSVA	(2) RQ	(3) RL	(2) VA
WTUI	-0.052*** (0.004)	-0.101*** (0.006)	-0.110*** (0.007)	-0.083*** (0.006)	-0.083*** (0.005)	-0.047*** (0.003)
Institutional Dimension	0.194*** (0.004)	0.487*** (0.007)	0.442*** (0.007)	0.453*** (0.006)	0.266*** (0.005)	-0.014*** (0.003)
Interaction	0.019*** (0.002)	0.04*** (0.003)	0.045*** (0.003)	0.032*** (0.002)	0.032*** (0.002)	0.016*** (0.002)
Origin Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Robust Standard Error	Yes	Yes	Yes	Yes	Yes	Yes
Observations	466340	466340	466340	466340	466340	466340
pseudo-R2	0.91421	0.91502	0.91490	0.91532	0.91423	0.91349

PPML estimation. All other control variables included. Dependent variable is X_{it} . Six dimensions of WGI: Control of Corruption (COC), Government Effectiveness (GE), Political Stability (PSVA), Regulatory Quality (RQ), Rule of Law (RL), and Voice and Accountability (VA). Robust standard errors are reported in parenthesis. ***, **, and * indicate statistical significance at 1%, 5%, and 10%, respectively.

Reference

- [1] Ahir, H., Bloom, N., and Furceri, D. 2022. World Uncertainty Index, NBER Working Paper 29763.
- [2] Anderson, J. E., and Marcouiller, D. 2002. Insecurity and the pattern of trade: An empirical investigation, *Review of Economics and Statistics*, 84(2), 342-352.
- [3] Davis, S. J. 2016. An Index of Global Economic Policy Uncertainty, NBER Working Paper 22740.
- [4] De Sousa, J., Disdier, A. C., and Gaigné, C. 2020. Export decision under risk, *European Economic Review*, 121, 103342.
- [5] Dixit, A. 2011. International trade, foreign direct investment, and security, *Annual Review of Economics*, 3(1), 191-213.
- [6] Klemperer, P., and Meyer, M. 1986. Price competition vs. quantity competition: The role of uncertainty, *The RAND Journal of Economics*, 17(4), 618-638.
- [7] Parker, D., and Kirkpatrick, C. 2012. The economic impact of regulatory policy: A literature review of quantitative evidence, Expert Paper No. 3, *Organization for Economic Co-operation and Development*, 1-47.

Quest for Global Peace - A Process Framework

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Quest for Global Peace – A Process Framework

Extended Abstract

Global economic growth and the achievements of the multinationals are a direct result of the peace and stability provided by the United Nations (UN) system. The recent globalization could not have taken place without the support of the UN and its umbrella organizations that include International Monetary Fund (IMF), World Trade Organization (WTO), and The World Bank (WB). This study presents an interventionist model. Global peace and stability are the outcomes of the framework. Structural support to the process is provided by the UN and its umbrella institutions. The antecedent to the process includes global governance architecture; shifting economic paradigms; military alliances and expenditures; and ethnolinguistic fractionalization. Proper leadership is critical in influencing the antecedents and process for global peace.

KEYWORDS. Global Peace, Peace, Managing Peace, Peacebuilding, War, World War III, World Order, United Nations, International Business.

1. Introduction

In 1945, the victorious allied powers established a world order under the UN and its umbrella organizations that include the IMF, WTO, and WB. The system is an outcome of multilateral dialogues and conferences among the Big Three (United States, United Kingdom, and the Soviet Union). Now Russia has replaced the Soviet Union. Most nations have benefited from the UN, it has consistently received favorable ratings in Pew Research polls. The achievements of the multinationals are a direct result of the peace and stability provided by the UN system. The recent globalization could not have taken place without the support of these organizations. An investigation into global governance would help us formulate better business strategy.

2. Need, Objectives, And Outcome

Despite the success, the world has lost 10.5 million people due to war, 100 million people have been displaced, and 32.5 million are living as refugees since the establishment of the UN. Today's \$3.0 billion (UN budget) peacekeeping effort is a poor match for a \$2.1 trillion global military spending. The war in Ukraine with no end in sight is an example of its failures. Reform is a popular demand. UN list of inadequacies includes the followings: 1) the UN has fallen behind in inclusivity, participation, and power-sharing; 2) its veto power is not compatible with the current economic and political reality; 3) the representation in the Security Council (SC) has not been able to accommodate the racial, ethnic, linguistic, and religious representation of the world population; 4) current dollar-based exchange rate system favor the richer nations, especially USA; 5) the IMF quota system gives more importance to the richer nations; 6) we have not been able to conclude the Doha Round that started in 2001; and 7) the UN could not stop the war in Ukraine, Vietnam, Afghanistan, Chechnya, Georgia, Gulf, Iraq, Syria, Libya, and Yemen, most proxy wars. The moral purpose of the UN is defeated when the superpowers directly get involved in conflicts.

Evidently, the inadequacies are weakening the global system. The question is, how do we fix a system that is not broken? Famous Austrian American political economist Joseph Schumpeter's "creative destruction" has an answer to that. We can apply his logic and determine how creatively we can destroy the current framework. Destruction does not mean complete overhaul; some modification or adjustment for global peace should work. Given this, the specific objectives of the study are stated as follows: a) discuss the history of global order and governance after World War II; b) present a framework for global peace; c) suggest implementation and draw conclusion. The outcome of the study would be a synthesis of various viewpoints leading to sustainable peace.

3. Historical Development

In this section, we outline the historical development of the current world order consulting relevant literature. The actual framework describing the new order is presented in the next section.

3.1 *Establishment of the World Order (1945-1960)*: After World War II, the colonial empires broke down giving rise to a global political structure based on nation-states. A global governance architecture was established with the help of the UN, WTO, IMF, and WB.

3.2 *Cold War Period (1960-1990)*: The period denotes the ideological rivalry between the capitalist west and the socialist/communist east. The dissolution of USSR ended the cold war.

3.3 *Post-Berlin Wall Period (1990-2022)*: The Fall of the Berlin Wall in 1989 redefined the geopolitical map and the global order. Technological growth reshapes the world. The march of globalization, trade liberalization, and interdependence and interconnectedness reshaped the world economy. The emerging markets became prominent players in global markets. China-USA rivalry takes a new turn.

3.4 *Post-Ukraine War Period (2022-beyond)*: As the world was recovering from the pandemic, war broke out Ukraine on February 24, 2022. The West (Nato and European Union) have sided with Ukraine against Russia. The world is observing a proxy war.

4. Literature Review

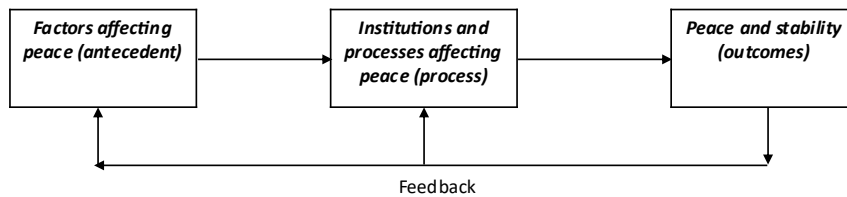
A theoretical understanding of the world order borrows from a large number of social science disciplines that include economics, history, politics, geography, sociology, anthropology, international relations, and military science. This is an extended abstract. Page limitation does not allow a detailed literature review. A global peace framework is developed based on the literature on the topic.

5. Global Peace Framework

The story of war and peace is a polemical postulation that is tied to our belief system. The duality of nature as stated by “Ying and Yang” in Chinese and “Usry and Yusra” in Arabic coexisted as the two sides of the same coin throughout history. According to monotheist belief, this will end on the Day of Judgment. Those who believe in reincarnation assume the phenomenon to coexist eternally. International relations studies define “war as large-scale organized violence” between political units and “peace is defined as the absence of war.” In an excellent review article, Levy (1998) notes as follows: “There is no

consensus as to what the causes of war are, what methodologies are most useful for discovering and validating those causes, what general theories of world politics and human behavior a theory of war might be subsumed within, what criteria are appropriate for evaluating competing theories, or even whether it is possible to generalize about anything as complex and contextually dependent as war.” (Levy 1998, p. 140).

Global Peace Framework



List of Variables in the Diagram

Factors affecting peace (antecedent)	Institutions and processes affecting peace (process)	Peace and stability (outcomes)
Global governance architecture Shifting economic paradigms Military alliances and expenditures Ethnolinguistic fractionalization Random Disturbance	Institutions: United Nations World Trade Organization International Monetary Fund The World Bank UN umbrella organizations Processes: UN peace keeping force Security Council veto power Rounds of negotiations Dollar and pegged rate system Development deliberations	Economic growth Equity in distribution Trade growth Investment growth Stability of currency Less global conflicts Decrease in human casualties Reduction of displaced population Fewer refugees Lesser negative social consequences

This is an interventionist model. Global peace or stability is an outcome of the performance of the institutions and processes involved in managing global peace. The working of the institutions is affected by a wide range of macro factors. Leaders can intervene both at the macro factor level and process level to determine peace.

5.1 Factors affecting peace

The antecedent to the process includes global governance architecture; shifting economic paradigms; military alliances and expenditures; ethnolinguistic fractionalization, and leadership. The current Global Governance Architecture (GGA) operates under the auspices of the UN, WTO, IMF, and WB. The economic paradigm, defined by the core, semi-periphery, and periphery countries, has undergone a fundamental structural shift during the last 40 years. Globalization, the Internet, technology transfer, multinational companies, and emerging markets have redefined the global economic relationship. Consistently, military expenditure has been increasing over time. Today, it amounts to \$2.1, globally. Perpetuation of war favors the military industry and privatization have only degenerated the process. Ethnolinguistic fractionalization is a constant source of conflicts that has the potential to ignite a global war.

5.2 Institutions and processes affecting peace

Structural support to the process is provided by the institutions that include UN, WTO, IMF, WB and various UN umbrella organizations. Their operational process and activities are performed by the UN peace keeping force; Security Council veto power; rounds of negotiations; dollar and pegged rate system; and development deliberations. Proper functioning of these institutions is critical in managing peace.

5.3 Peace and stability

Peace and stability are the outcomes. They are postulated by economic growth; equity in distribution; trade growth; investment growth; stability of currency; less global conflicts; decrease in human casualties; reduction of displaced population; fewer refugees; and lesser negative social consequences. If the system works, we should be able to attain these.

6. Implementation and Conclusion

As stated, leadership invention is a critical issue in the model. A leader's faith, vision, integrity, and ability to motivate people sway the outcome. Leaders can galvanize the spirit of a nation for war or in

peacebuilding. It is our moral obligation to elect, if we can, those leaders who will not coerce us to war. A dynamic interplay of the traits and characteristics of the leader, characteristics and loyalty of his followers, and the situation determine the success or failure in leadership.

Developing future leaders for peace is essential. We can develop training programs to educate and build leaders for peace. Building awareness about the scourge of war, underscoring the consequences of war, and developing conscious citizens are its sine qua non. Broadly, topics could include a broad understanding of the history, geography, growth of human civilization, importance of global understanding, respect for cultural diversity, international relations, military science, and globalization. Initial investment for program development for peace should come from foundations, civic organizations, and governments. Training for peace could also be introduced to the younger generation in high schools and colleges. International business would flourish when global peace and stability is ensured.

References available upon request

National Corporate Responsibility Institutions as a Determinant of FDI: A Sub-dimensional Analysis

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National Corporate Responsibility Institutions as a Determinant of FDI: A Sub-Dimensional Analysis

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Extended Abstract

This study identifies host country corporate responsibility institutions as an important determinant of FDI inflows. Considering the multidimensionality of such institutions and the fundamental differences between developing and developed countries, we examine the individual and interactive effects of the environmental, social and governance sub-dimensions of AccountAbility's national corporate responsibility index (NCRI) on FDI inflows by distinguishing between developing and developed countries. Basing our analysis on UNCTAD's Bilateral FDI Statistics dataset for 165 economies, we find empirical support for all but one of our hypotheses.

Keyword: Host Country Development Stage, National Corporate Responsibility institutions, FDI Determinants

1. Introduction

One of the significant phenomena over the last decades has been the dramatic increase in FDI, which has been a driver of global economic integration and growth. As such, the determinants of FDI have been an important theme in international business (IB) research, and Dunning's (1988) eclectic paradigm (the OLI paradigm) is one of the most frequently used IB theories in explaining FDI location decisions. According to this paradigm, FDI takes place only if three sets of advantages exist simultaneously: ownership advantage, location advantages, and internalization advantage. Among these, the O- and I-advantages are micro-level firm-specific determinants, whereas L-advantages are country level determinants. For studies which uses aggregated FDI data at the country level, the focus has been placed on L-advantages. While factor endowments were once major location attractions for FDI, favorable institutions have become a crucial locational advantage (Dunning & Lundan, 2008). According to institutional theory, favorable institutions reduce uncertainty, lower information and

transaction costs, and as a result, not only influence the location strategies of multinational enterprises (MNEs) but also affect their operation and performance (North, 1990; Peng, 2000).

The extant literature has documented a multitude of institutional FDI determinants (Bénassy-Quéré et al., 2005; Lucke & Eichler, 2016). Despite the volume of literature, further research is warranted using more institutional variables that capture more fully the diverse dimensions of institutional context (Contractor et al., 2020). In addition, the extant studies are conducted with a narrow geographic focus, using FDI outflows or inflows of one country (usually a developed economy) to/from the rest of the world (Kox & Rojas-Romagosa, 2020). Such an approach not only limits the generalizability of the findings to developing countries, but also prevents the study of FDI flows between developed and developing countries or between developing countries themselves (Li & Oh, 2016). This study contributes to the literature by identifying host country corporate responsibility institutions as a determinant of FDI and using a large-scale dataset on bilateral FDI statistics.

2. Literature and Framework

2.1. Literature

There is a voluminous theoretical and empirical literature on FDI determinants, and it has been systematically reviewed elsewhere (e.g. Assunção et al., 2011; Blonigen & Piger, 2014; Kim & Aguilera, 2016). This study focuses only on the literature related to the environmental, social and governance aspects of host country national corporate responsibility institutions, and the distinction between developed and developing countries is borne in mind when reviewing the literature.

2.2. Framework

The framework of this study is based on the following theoretical assumptions:

- (1) The predominant consideration of MNEs is enlightened self-interest according to instrumental theories of corporate responsibility, which assume that the ‘corporation is an instrument for wealth creation and that this is its sole social responsibility’ (Garriga & Melé, 2004: 52).
- (2) MNEs make location decisions based on a joint consideration of both transaction cost and conformity cost, the latter has received scant attention. Conformity costs can be defined as the costs that MNEs incur in doing things they wish to avoid in order to conform to institutional pressure

(Beamish et al., 2019). While conformity can benefit organizations cognitively, economically, and socially (Phillips et al., 2000), it also tends to require substantial conformity costs.

(3) MNEs behave differently according to host country development stage due to a difference in the sensitivity of transaction cost and conformity cost to institutions in developing and developed countries (Peng & Beamish, 2008). Cost minimizing MNEs will exploit such differences in cost structures when weighing the tradeoff between transaction cost and conformity cost.

(4) MNEs make location decisions based on an overall consideration of all dimensions of national corporate responsibility institutions; the interactions among various dimensions should be considered.

2.3. Hypotheses

Based on the above assumptions and an extensive literature review, we developed the following hypotheses:

Hypothesis 1a: *There will be a non-monotonic and disordinal interaction between the environmental dimension of NCRI and host country development stage on FDI inflow, such that:*

Hypothesis 1b: The relationship between the environmental dimension of NCRI and FDI inflow in developing countries is positive.

Hypothesis 1c: The relationship between the environmental dimension of NCRI and FDI inflow in developed countries is negative.

Hypothesis 2a: *There will be a non-monotonic and disordinal interaction between the social dimension of NCRI and host country development stage on FDI inflow, such that:*

Hypothesis 2b: The relationship between the social dimension of NCRI and FDI inflow in developing countries is positive.

Hypothesis 2c: The relationship between the social dimension of NCRI and FDI inflow in developed countries is negative.

Hypothesis 3a: *There will be a non-monotonic and disordinal interaction between the governance dimension of NCRI and host country development stage on FDI inflow, such that:*

Hypothesis 3b: The relationship between the governance dimension of NCRI and FDI inflow in developing countries is negative.

Hypothesis 3c: The relationship between the governance dimension of NCRI and FDI inflow in developed countries is positive.

Hypothesis 4: *There exists a three-way interaction between the environmental and social dimensions of NCRI and host country development stage on FDI inflow. As the score on the environmental dimension of NCRI increases, developing countries*

with higher scores on the social dimension are more likely to receive more FDI inflows.

Hypothesis 5: *There exists a three-way interaction between the governance and social dimensions of NCRI and host country development stage on FDI inflow. As the score on the governance dimension of NCRI increases, developed countries with higher scores on the social dimension are more likely to receive more FDI inflows.*

Hypothesis 6: *There exists a three-way interaction between the environmental and governance dimensions of NCRI and host country development stage on FDI inflow. As the score on the environmental dimension of NCRI increases, developing countries with lower scores on the governance dimension are more likely to receive more FDI inflows.*

3. Method and Results

3.1. Data

Data for 2001-2012 were collected from public sources. This time window was chosen because the dependent variable, FDI inflow, was taken from UNCTAD's Bilateral FDI Statistics (UNCTAD, 2014) which covers only 2001–2012. After merging with data on other variables, the final sample size is 34,847 observations on FDI flows to 79 destination countries from 165 origin countries.

3.2. Variables

We included over 20 control variables, which can be seen in Table 1. These variables are included based on prior literature, and some of them are routinely used in gravity models. Data sources include the World Bank, the United Nations, UNDP, CEPII, the Fraser Institute, among others. The research variables include a dummy variable for host country development stage and the environmental, social and governance sub-dimensions of AccountAbility's national corporate responsibility index (NCRI).

3.3. Analysis

To test our hypothesis, we use the widely used 'gravity' model. The traditional base gravity equation relates bilateral FDI flows to the economic sizes of destination and origin economies and the distance between them, with all the variables in logarithm (Burger et al., 2009; Head & Ries, 2008). The base model is then augmented with variables such as taxes, factor endowments, and various institutional factors (Head & Ries, 2008). Despite its wide use, the traditional log-normal specification has been found to suffer from multiple shortcomings. As such, this study uses the Poisson pseudo maximum

likelihood (PPML) estimator, which is widely considered as the best available estimator for the gravity model (Santos Silva & Tenreyro 2006, 2022). In implementing the PPML estimator, the dependent variable should be used in the original level form and independent variables should be used in logarithm form. On the computational side, we estimate the PPML model in STATA using the *ppmlhdfc* command by Correia et al. (2020). In Hypotheses 1-3, we also hypothesized about the different behaviors MNEs demonstrate according to host country development stage. To test these, we did not use subgroup analysis considering its multiple issues. Instead, we adopted the code-switching strategy as described in Aiken and West (1991). Examples of how to apply this technique can be found in Peng and Beamish (2008) and Beamish et al. (2019).

3.4. Results

The PPML regression results are shown in Table 1. As can be seen from the underlined regression coefficients and their significance levels, all of our hypotheses were supported except for Hypothesis H2b. Even though H2b was not supported, the coefficient has the expected negative sign.

4. Conclusion

This study identifies host country corporate responsibility institutions as an important determinant of FDI. Considering the multidimensionality of such institutions and the fundamental differences between developing and developed countries, we examine the individual and interactive effects of the environmental, social and governance sub-dimensions of AccountAbility's national corporate responsibility index (NCRI) on FDI inflows to both developing and developed countries. Basing our analysis on UNCTAD's Bilateral FDI Statistics dataset for 165 economies, we find empirical support for all but one of our hypotheses. Our findings highlight the need to consider both transaction cost and conformity cost when studying FDI behavior, and to distinguish between developing and developed countries due to the fundamental differences in sensitivity of each cost to institutions in these two settings. We call for a refocus on institutional theory's core purpose of understanding how organizations acquire institutional conformity without sacrificing their internal efficiency.

REFERENCES, TABLE FOR VARIABLE DESCRIPTION AND DATA SOURCES, TABLE FOR DESCRIPTIVE STATISTICS, AND INTERACTION PLOTS ARE AVAILABLE FROM THE AUTHOR ON REQUEST

Table 1 Poisson pseudo-maximum likelihood regression results

Variable	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Origin GDP	1.142***	0.039	1.144***	0.039	1.144***	0.039	1.149***	0.039	1.143***	0.039	1.143***	0.039
Destination GDP	1.869***	0.060	1.782***	0.061	1.782***	0.061	1.739***	0.063	1.776***	0.063	1.776***	0.063
Origin GDP per cap	2.624***	0.103	2.617***	0.103	2.617***	0.103	2.617***	0.102	2.619***	0.102	2.619***	0.102
Destination GDP per cap	0.562**	0.198	0.866***	0.239	0.866***	0.239	0.985***	0.241	1.065***	0.274	1.065***	0.274
Harmonic mean distance	-1.170***	0.072	-1.191***	0.072	-1.191***	0.072	-1.272***	0.074	-1.269***	0.073	-1.269***	0.073
Contiguity	-0.298***	0.085	-0.299***	0.085	-0.299***	0.085	-0.329***	0.085	-0.322***	0.085	-0.322***	0.085
GDP growth	-0.004	0.009	0.008	0.009	0.008	0.009	0.006	0.009	0.008	0.009	0.008	0.009
Resources rents	0.035***	0.007	0.024**	0.008	0.024**	0.008	0.020*	0.008	0.030***	0.008	0.030***	0.008
Trade ratio	0.005***	0.001	0.005***	0.001	0.005***	0.001	0.004**	0.001	0.005***	0.001	0.005***	0.001
Inflation	0.010*	0.005	0.008	0.005	0.008	0.005	0.005	0.005	0.006	0.005	0.006	0.005
Labor participation	0.009*	0.004	0.005	0.005	0.005	0.005	0.001	0.005	0.001	0.005	0.001	0.005
Unemployment	0.018**	0.007	0.014†	0.007	0.014†	0.007	0.012	0.007	0.017*	0.007	0.017*	0.007
Tax rate	-0.012*	0.005	-0.008	0.005	-0.008	0.005	-0.014**	0.005	-0.016**	0.006	-0.016**	0.006
Country risk	-0.007*	0.003	-0.007*	0.003	-0.007*	0.003	-0.006†	0.003	-0.006	0.004	-0.006	0.004
HDI	-1.824*	0.788	-3.123***	0.857	-3.123***	0.857	-2.563**	0.937	-2.474*	0.994	-2.474*	0.994
Common language	0.768***	0.158	0.793***	0.156	0.793***	0.156	0.819***	0.157	0.827***	0.156	0.827***	0.156
Common ethnic language	-0.167	0.163	-0.185	0.163	-0.185	0.163	-0.203	0.165	-0.214	0.166	-0.214	0.166
Common religion	0.910***	0.092	0.848***	0.092	0.848***	0.092	0.730***	0.091	0.703***	0.092	0.703***	0.092
Hegemon (origin)	0.451***	0.093	0.434***	0.093	0.434***	0.093	0.413***	0.093	0.410***	0.093	0.410***	0.093
Hegemon (destination)	-0.173	0.123	-0.187	0.127	-0.187	0.127	-0.128	0.127	-0.120	0.130	-0.120	0.130
Sibling relationship	-0.094	0.088	-0.120	0.087	-0.120	0.087	-0.158†	0.090	-0.150†	0.091	-0.150†	0.091
Economic Freedom	0.214**	0.073	0.212**	0.076	0.212**	0.076	0.146†	0.075	0.206**	0.077	0.206**	0.077
NCRI (environmental) (ENV)	-0.213**	0.066	0.493***	0.128	-0.264**	0.077	0.489***	0.138	0.851***	0.157	0.209**	0.077
NCRI (social) (SOC)	0.087	0.084	0.344***	0.086	-0.196	0.154	0.453***	0.087	0.647***	0.101	-0.496**	0.150
NCRI (governance) (GOV)	0.308***	0.058	-0.245*	0.108	0.445***	0.072	-0.188	0.115	-0.467***	0.128	0.165	0.149
Development stage (DEV)	-0.117	0.108	-0.122	0.104	0.122	0.104	-0.441***	0.126	-0.652***	0.131	0.652***	0.131
DEV x ENV			-0.757***	0.149	0.757***	0.149	-0.320†	0.167	-0.643***	0.178	0.643***	0.178
DEV x SOC			-0.540**	0.163	0.540**	0.163	-1.117***	0.166	-1.144***	0.172	1.144***	0.172
DEV x GOV			0.690***	0.131	-0.690***	0.131	0.558**	0.190	0.632**	0.198	-0.632**	0.198
SOC x ENV							0.043	0.116	1.318***	0.268	-0.171	0.132
SOC x GOV							0.541***	0.089	-0.122	0.224	0.590***	0.110
GOV x ENV							-0.426***	0.080	-0.713***	0.151	-0.287**	0.101
DEV x SOC x ENV									-1.488***	0.280	1.488***	0.280
DEV x SOC x GOV									0.712**	0.254	-0.712**	0.254
DEV x GOV x ENV									0.425*	0.197	-0.425*	0.197
<i>Model indices</i>												
Pseudo-R ²	0.6800		0.6823		0.6823		0.6855		0.6863		0.6863	
Log pseudolikelihood (LL)	-10441324.57***		-10364277.66***		-10364277.66***		-10261471.20***		-10234501.98***		-10234501.98***	
Change in 2LL			154093.82***		154093.82***		205612.92***		53938.44***		53938.44***	

Notes: (1) † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. (2) Year dummies are included in all models but not presented in the table. (3) $n = 34,847$. (4) In Model 2 and Model 5, developing country group is coded as '0' and developed country group is coded as '1'; in Model 3 and Model 6, the codes are switched.

Envy toward Senpai (Seniors), Kohai (Juniors) and Doki (Peers) and Helping Behavior in Japanese Workplaces: The Moderating Role of Warm and Friendly Climate

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Envy toward *Senpai* (Seniors), *Kohai* (Juniors) and *Doki* (Peers) and Helping Behavior in Japanese Workplaces: The Moderating Role of Warm and Friendly Climate

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Extended Abstract

Much remains unknown about the organizational factors that moderate the negative effects of workplace envy and how this effect varies depending on the target's status. This study examined whether the strength of the negative relationship between envy and helping behavior varied by target status (*senpai* [seniors], *kohai* [juniors], or *doki* [peers]) in the Japanese workplace and whether a warm and friendly climate moderated this relationship. Results showed that envy toward seniors was most negatively related to helping behavior and that a warm and friendly climate moderated the negative effects of envy.

Keyword: Workplace envy, organizational climate, helping behavior, *Senpai-Kohai* relationship

1. Introduction

Envy, defined as “pain from unfavorable or upward social comparisons (Tai, Narayanan & McAllister, 2012: 108)”, is common in the workplace, as promotions, raises, and awards cause social comparisons (Duffy, Lee & Adair, 2021). Prior research has shown that people who feel envy engage in constructive behaviors (e.g., self-improvement) to close the gap with the target of envy while engaging in destructive behaviors (e.g., social undermining) (Duffy et al., 2021; Li et al., 2021; Lee & Duffy, 2019).

Because destructive behavior reduces productivity, scholars have examined factors that moderate the relationship between envy and destructive behavior. Duffy et al. (2021) reviewed studies on workplace envy and found that moderating factors include personal, relational, and contextual factors. However, the research on contextual factors is limited, and further exploration of organizational factors that reduce

the negative effects of envy is needed.

Furthermore, the strength of the relationship with destructive behavior may differ depending on who is envied. In Japan, Confucianism creates unique relationships among seniors (*senpai* in Japanese), juniors (*kohai*), or peers (*doki*) differentiated by their time of company joining (Hosomi, Sekiguchi & Froese, 2020). Based on this culture and prior studies, employees in Japanese workplaces may act more destructive behavior when envious of their juniors (*kohai*).

Therefore, we examined whether the strength of the negative relationship between envy and helping behavior varied by target status (seniors [*senpai*], juniors [*kohai*] or peers [*doki*]) and whether a warm and friendly climate moderated this relationship.

2. Literature and framework

2.1. Workplace envy and helping behavior

Helping behavior is assisting someone with a heavy task or problem and is considered useful to an organization if it provides necessary help to the subject (Dalal & Sheng, 2019). However, envy might prevent helping behavior. People who feel envy are more likely to engage in destructive behaviors to reduce the pain caused by their difference from the target (Duffy et al., 2021) and are less likely to engage in altruistic behaviors. In fact, a study of hotel employees found that envy was negatively correlated with helping behavior (Kim et al., 2010). A meta-analysis also shows that organizational citizenship behavior, including helping behavior, is negatively associated with envy (Li et al., 2021).

Hypothesis 1. Envy has a negative relationship with helping behavior.

Furthermore, Tan, Tai & Wang (2016) point out that people feel a strong threat when those of lower status outperform them. In Japan, there is a clear informal structure of seniors (*senpai*), juniors (*kohai*) and peers (*doki*); juniors (*kohai*) are considered lower, and seniors are higher than themselves. Thus, it can be assumed that employees are more likely to act to close the gap when envious of juniors (*kohai*), while they are less likely to do so when envious of seniors (*senpai*).

Hypothesis 2. Relationships between envy and helping behavior is stronger in the order of juniors (kohai), peers (doki), and seniors (senpai).

2.2. Moderation effect by warm and friendly climate

According to Patient, Lawrence & Maitlis (2003) behavior after feeling envy is regulated by the moral

structure of the workplace. In other words, people who feel envy are more likely to take destructive behavior in organizations that have unethical rules and practices. In contrast, people who feel envy are less likely to take destructive behavior in moral organizations. In an organization with a warm and friendly climate, it is believed that employees should help each other. Therefore, it is assumed that in an organization with such a climate, even with envy, it is difficult to act against the organization's recommendations and not help others. The hypothetical model is shown in Figure 1.

Hypothesis 3. Warm and friendly climate moderates the negative relationship between envy and helping behavior.

3. Method and results

3.1. Method

3.1.1. Sample

The study used data from a three-wave Internet survey on informal workplace relationships conducted among Japanese employees in March-April 2021. Respondents were 330 at wave1, 286 at wave2, and 275 at wave3. Of the sample, 79.1% were male, the mean age was 49.53 ($SD=11.15$). Management positions accounted for 37.88%, and 41.52% worked in companies with over 300 employees.

3.1.2. Measures

Warm and friendly climate (Wave1): Two original items were used. The sample item was “The company has a family atmosphere ($\alpha=.734$).” **Envy** (Wave2): Eight items from Schaubroeck & Lam (2004) were used to separately ask about envy toward seniors (*senpai*) ($\alpha=.971$), juniors (*kohai*), ($\alpha=.972$), and peers (*doki*) ($\alpha=.975$). **Helping behavior** (Wave3): Five items from Altruism of Podsakoff, MacKenzie, Moorman & Fetter (1990) were used. $\alpha=.930$.

3.2. Results

3.2.1. Descriptive statistics and correlations analysis

Descriptive statistics and Spearman's rank correlation coefficients for the variables are shown in Table 1. As shown in Table 1, weak negative correlations were observed between envy toward seniors (*senpai*) and juniors (*kohai*) and helping behavior, while no significant correlation was found with peers (*doki*).

3.2.2. Hypothesis testing

To test the hypotheses, we conducted multiple regression analyses (Table 2). The peers (*doki*) model

did not show significant results in the analysis of variance, so other results are listed. Focusing on Model 1, the analysis of seniors (*senpai*) showed a significant negative relationship between envy and helping behavior, and that of juniors (*kohai*) showed a significant trend. Also, no significant correlation was found in the peers' case (Table 1). Thus, Hypothesis 1 was partially supported, and Hypothesis 2 was not. Furthermore, Model 2 shows that the interaction term between envy and warm and friendly climate has a significant positive relationship with helping behavior in the seniors (*senpai*) and juniors (*kohai*) analyses. To demonstrate the moderate effect, the simple slopes of the modeling factors are plotted in Figures 2 and 3 for the low (1 *SD* below average) and high (1 *SD* above average) warm and friendly climate cases. As shown in Figures 2 and 3, warm and friendly climate weakened the negative relationship between envy and helping behavior in the seniors (*senpai*) and juniors (*kohai*) analyses. Hypothesis 3 is partially supported as the hypothesis was supported except for the peers (*doki*).

4. Discussion

This study examined whether the strength of the negative relationship between envy and helping behavior varied by target status (seniors [*senpai*], juniors [*kohai*] or peers [*doki*]) and whether a warm and friendly climate moderated this relationship.

The results partially supported Hypothesis 1, suggesting envy is negatively associated with helping behavior. Contrary to hypothesis 2, the relationship between envy and helping behavior was strongest for seniors (*senpai*), followed by juniors (*kohai*), with no significant relationship for peers (*doki*). In Japan, older employees are paid higher salaries, which may have made them less willing to help when they felt envious of seniors (*senpai*). Furthermore, the sample size for peers (*doki*) was small, which may affect the relationship's significance.

Hypothesis 3 was partially supported. While prior research has revealed little about organizational factors that moderate the negative effects of envy, this study provides new evidence that a warm and friendly climate may weaken the negative effects of envy. This study also highlights a new possibility to explore other potential moderating climates. The findings also suggest to practitioners that if they can create a tolerant, family-like atmosphere in the workplace, they can prevent the negative effects of envy. However, this study has limitations in measuring organizational climate and envy. Therefore, more precise research is needed in the future.

5. References

- [1] Dalal, R. S. and Sheng, Z. 2019. When is helping behavior unhelpful? A conceptual analysis and research agenda, *Journal of Vocational Behavior*, 110, 272-285.
- [2] Duffy, M. K., Lee, K. and Adair, E. A. 2021. Workplace envy, *Annual Review of Organizational Psychology and Organizational Behavior*, 8, 19-44.
- [3] Hosomi, M., Sekiguchi, T. and Froese, F. J. (2020). Mentoring in Japan: A systematic review and conceptual model. *Mentorship-Driven Talent Management: The Asian Experience*, 43-65.
- [4] Kim, S., O'Neill, J. W. and Cho, H. M. 2010. When does an employee not help coworkers? The effect of leader-member exchange on employee envy and organizational citizenship behavior, *International journal of hospitality management*, 29(3), 530-537.
- [5] Lee, K. and Duffy, M. K. 2019. A functional model of workplace envy and job performance: When do employees capitalize on envy by learning from envied targets?, *Academy of Management Journal*, 62(4), 1085-1110.
- [6] Li, M., Xu, X. and Kwan, H. K. 2021. The antecedents and consequences of workplace envy: A meta-analytic review, *Asia Pacific Journal of Management*, 40, 1-35.
- [7] Patient, D., Lawrence, T. B. and Maitlis, S. 2003. Understanding workplace envy through narrative fiction, *Organization Studies*, 24(7), 1015-1044.
- [8] Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., and Fetter, R. 1990. Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors, *The leadership quarterly*, 1(2), 107-142.
- [9] Schaubroeck, J. and Lam, S. S. K. 2004. Comparing lots before and after: Promotion rejectees' invidious reactions to promotes, *Organizational Behavior and Human Decision Processes*, 94, 33-47.
- [10] Tai, K., Narayanan, J., and McAllister, D. J. 2012. Envy as pain: Rethinking the nature of envy and its implications for employees and organizations, *Academy of Management Review*, 37(1), 107-129.
- [11] Tan, Y., Tai, K., & Wang, C. 2016. Culture and the Elicitation, Experience, and Expression of Envy., Richard H. Smith, Ugo Merlone, and Michelle K. Duffy (eds), *Envy at Work and in Organizations*. Oxford University Press.

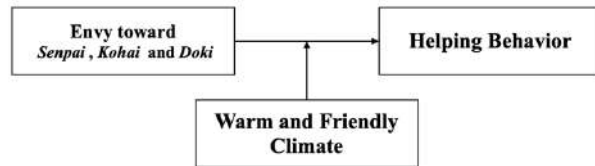


Figure1 Framework of this study

Table1 Descriptive statistics and correlations analysis

	N	M	SD	1	2	3	4	5	6	7	8
1 Envy toward seniors (<i>senpai</i>)	181	2.86	1.49								
2 Envy toward juniors (<i>kohai</i>)	179	2.66	1.46	.91 ***							
3 Envy toward peers (<i>doki</i>)	96	2.79	1.57	.94 ***	.96 ***						
4 Warm and friendly climate	317	4.06	1.23	.01	.04	.10					
5 Helping behavior	264	4.40	1.10	-.23 **	-.20 **	-.10	.17 **				
6 Male	330	.79	.41	-.08	-.06	-.04	-.04	-.05			
7 Age	330	49.53	11.15	-.19 *	-.24 **	-.30 **	.06	-.07	.43 ***		
8 Non-managerial positions	330	.55	.50	.00	.08	-.01	-.14 *	-.12 *	-.23 ***	-.34 ***	
9 Employee size	330	.42	.49	.02	-.01	.07	.01	.15	-.05 *	-.13 *	.07

* $p < .05$, ** $p < .01$, *** $p < .001$. All items were measured using a 7-point Likert scale. Pair-wise deletion was used to treat missing values. Because envy variables did not show normal distributions, the results of Spearman's rank correlation analysis are conducted.

Table2 Hypothesis testing

	Envy toward seniors (<i>senpai</i>)		Envy toward juniors (<i>kohai</i>)	
	Model1	Model2	Model1	Model2
	β	β	β	β
Male	.024	.011	-.066	-.071
Age	-.129	-.123	.015	.025
Non-managerial positions	-.171 *	-.179 *	-.188 *	-.181 *
Employee size	.028	.011	.074	.058
Envy	-.201 **	-.232 **	-.140 †	-.160 *
Warm and friendly climate	.203 **	.192 *	.192 *	.191 *
Envy $\times$ Warm and friendly climate		.225 **		.204 **
R ²	.109 *	.158 **	.110 **	.151 **
ΔR^2		.049 **		.041 **

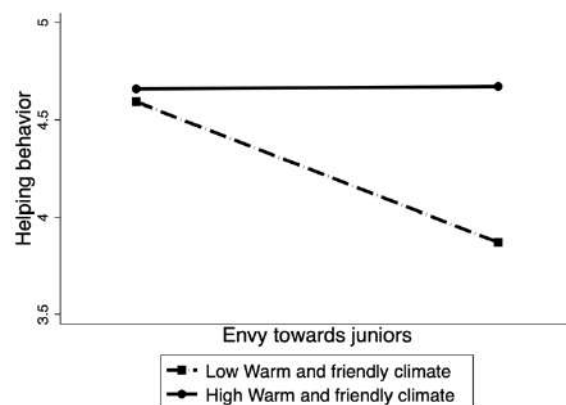
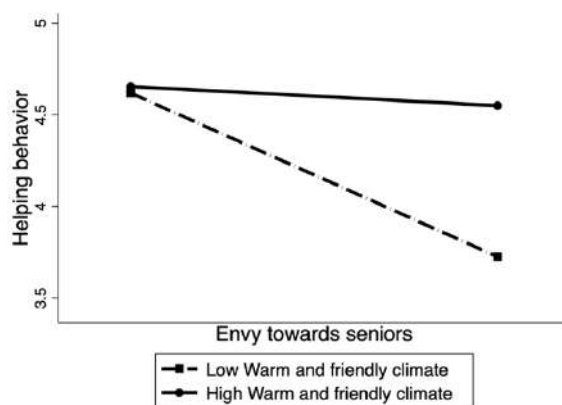


Figure2 Interaction of envy toward seniors (*senpai*) and warm and friendly climate on helping behavior

Figure3 Interaction of envy toward juniors (*kohai*) and warm and friendly climate on helping behavior

Rethinking International Markets Strategy for Indian and Chinese Firms: Meta-analysis and Research Framework in the Context of Digital Strategies and “New Silk Road” Initiatives

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Rethinking International Markets Strategy for Indian and Chinese Firms: Meta-Analysis and Research Framework in the Context of Digital Strategies and “New Silk Road” Initiatives

Abstract

How does India’s international strategic expansion, in the context of its North-South Transport Corridor (NSTC) project, compare and contrast with China’s expansion strategy under its Belt and Road Initiative (BRI)? These country-level undertakings, commonly referred to as New Silk Road (NSR) projects, are strategic, country-level initiatives that will dictate the competitive advantage of several nations going forward. Their development is also inextricably linked to the corporate strategies of domestic firms in the two countries. Idiosyncrasies of these projects are challenging traditional theories of mode of participation for emerging market firms in foreign markets.

Our objective for this paper is three-fold: (a) conduct a review of existing strategy and international business literature to identify the lacunae in country-firm relationships in the context of NSR initiatives and digital strategies (b) propose a comprehensive theoretical framework to identify linkages between country strategy, firm strategy, and competitive advantages, and (c) identify emerging research questions, and discuss avenues for future policy and business research.

KEYWORDS: Emerging Market Strategies, New Silk Road, India, China, Digital Strategies

China and India – NSR Background

First off, BRI and NSTC are not synonymous with the New Silk Road. They are part of a broader endeavor to better integrate the economies of Eurasian countries - which is ultimately the exact same goal of similar initiatives spearheaded by Russia, Japan, Turkey, and others. Think of all these variously labeled initiatives as important branches of a complex network known as the “New Silk Road” (NSR), with China and India leading the way. NSR projects are reshaping firm-level involvement in the countries that are on these routes, by providing increasing opportunities, creating new barriers to participation, or both.

China is India’s largest trading partner, with over \$135 billion worth of goods exchanged in 2022 (Economic Times, 2023a). The trade deficit for India is currently over \$100 billion, a record high, and emphasizes an acute need for Indian firms to step in to reduce it. In contrast, Pakistan - a core participant in the BRI - transacts a mere \$14 billion with China. Chinese companies have major stakes in Indian companies such as Oyo, Ola, Swiggy, Flipkart, Byju, Dream11 and Unacademy. Large Chinese companies – both manufacturing and investment firms - such as Huawei, Haier, Tencent, and Steadview Capital, are actively engaged in India. They have participated in major Indian infrastructure projects, and invested heavily in technology and pharmaceutical industries. On the flip side, prominent Indian companies with a significant presence in China include, amongst others, Dr. Reddy’s Labs, Aurobindo Pharma, Matrix Pharma, NIIT, Bharat Forge, Infosys, TCS, Wipro, Mahindra Satyam, Dr. Reddy’s, Essel Packaging, and Sundaram Fasteners. Geographically and politically, one of the consequences of the BRI project has been that Myanmar, Bangladesh, Nepal, Sri Lanka, the Maldives, and Pakistan are all engaged, leaving India stuck in the middle as the sole protestor of the initiative (Miller, 2022).

Literature Review and Need for the Study

Most studies on international business strategies in emerging markets have been conducted from the perspective of an individual firm or industry, and not country-level (Lewin & Witt, 2022). In a recent Special Issue of the Journal of International Business Strategies (JIBS), Meyer et al (2022) argue that businesses operating abroad tend to develop digital strategies that are interdependent with their internationalization strategies, while accounting for differences across national contexts including informal institutions, formal institutions, and resource endowments. Nambisan, Zahra, & Luo (2019) propose how digital platforms and ecosystems can afford new ways of internationalization, facilitate new ways of building knowledge and relationships, and enable new ways of creating and delivering value to customers. Hu, Cui & Aulakh (2019) demonstrate how elements of institutional environments comprising of the state’s approach to organizations and the political context of these interactions can influence the resource

allocation strategies of domestic business groups. Some researchers, for example Kano, Tsang & Yeung (2020), have proposed novel, technology-based pathways that can help firms to become involved in foreign markets. Dau et al (2022) have examined relationships between several key formal and informal institutional factors, and the international strategy of firms. At the country level, research has focused on the ecological and sustainability impacts of the silk road initiatives. Liu (2019), for example, propose empirical models to monitor vegetation changes in the Chinese corridor and explore their relationship to climate changes and human activities. Similarly, Ariken et al. (2021) developed urbanization and eco-environment evaluation models to explore impacts along BRI-affected provinces in China. These and several such similar papers focus only on very specific elements of country-firm relationships in the context of NSR projects. *(In light of the page limitations imposed for submissions to the conference, and for illustrative purposes only, we have provided just a sampling of our literature review here).*

In contrast to existing literature, in this theoretical paper we take a comprehensive, meta-analytic view of strategies (including digital strategies) of countries and their domestic firms within the context of NSR initiatives. Till date there has been little academic research that looks comprehensively at the intersection of country strategies and strategies of emerging market firms from those countries. Our paper is an effort to fill this gap in literature. In the following sections, we first briefly discuss the current status of both China and India's NSR endeavors, and why their Internal (Domestic) Digital Strategy (IDS) is central to their NSR strategies. We then identify various country-firm relationships and contingencies that arise when countries embark on ambitious and important NSR projects such as BRI and NSTC. We propose a comprehensive research framework to study country-firm, country-country and firm-firm inter-relationships, and their implications for both country and firm-level competitive advantages. Specifically, our research framework identifies six areas where future research should be focused.

China, BRI and Internal Digital Strategy

The BRI is China's most ambitious geo-economic and foreign policy initiative by far, and is a program for increasing infrastructural, economic, and political connectivity between China and several countries in Asia, Africa, and Europe. With this grandiose strategy, China seeks to tackle industrial overcapacity and economic slowdown at home, and at the same time acquire political influence and presence abroad through investments and financings. In Eurasia, there are two main BRI corridors: North, connecting China to Europe through Russia, and Middle, that runs through Central Asia, the Caspian Sea, South Caucasus, and Türkiye or the Black Sea (Chourasia, 2023).

China executes large scale national digital projects through stacks of multiple technologies, connected together in technology ecosystems. Projects are executed as a coordinated whole, with the involvement of multiple state agencies, provincial-level authorities, and technology vendors, both foreign and domestic. Major Chinese digital projects, made up of multiple technology ecosystems, can be huge both in geographic scope and global implications. An example would be Digital Beibu Gulf (Digital Gulf of Tonkin); the project is designed to digitally transform the transportation corridor through China that links Belt and Road countries in Southeast and South Asia by building a new digital hub in Hainan Province linking southwest China to ASEAN countries. Overall, China's BRI aims to achieve both an economic vision and a political vision (Yu, 2019).

Internally, Digital China has incrementally become China's overall strategy for national informatization. It entails the construction of major digital infrastructure networks across the nation, as well as a nationwide system to govern and control data. Its stated intent is to grow China's digital economy, strengthen its governance, update and promote its manufacturing, bolster its innovative ecosystem, and shape global digital governance (Dorman & Hemmings, 2023). More recently in 2022, China recalibrated its strategy for the digital economy. Recognizing its innovation shortcomings in key technologies, supply chain vulnerabilities, and a wide digital gap between different regions and industries, the country now plans to upgrade its digital infrastructure by expanding 5G/Gigabit internet connectivity, exploit data as vital assets with better pricing and trading mechanisms, promote digitization of traditional industries, achieve innovations in key areas such as integrated circuits and AI, as well as improve performance of digital

public services. It hopes to incorporate more digitization into financial regulatory frameworks, provide wider social security coverage for workforce in digital industries, and focus more on unresolved governance issues of the digital economy such as unfair competition, labor rights, tax collection, and national security. In essence, national security, industrial competitiveness, orderly capital expansion and social equality will continue to be the overriding policy objectives for governance.

India, NSTC Initiative, and Internal Digital Strategy

By contrast, India has embarked on a more cautious and somewhat less ambitious NSR initiative. At its root, the NSTC is a 7,200-kilometer multimodal trade corridor that extends from India to Russia, linking the Indian Ocean and Persian Gulf to the Caspian Sea. Goods travel by sea from Jawaharlal Nehru and Kandla ports in western India to the port of Bandar Abbas in Iran, then go by road and rail north through Baku to Moscow and St. Petersburg beyond. A prospective second route goes along the eastern side of the Caspian Sea, linking up with the new Kazakhstan-Turkmenistan-Iran railway and integrating with the North-South Transnational Corridor. The thought is that this internationally constructed corridor will decrease the cost and time needed to ship goods between cities such as Mumbai, Bandar Abbas, Tehran, Baku, Aktau, Moscow, and St. Petersburg, and is posited as a driver to bolster trade throughout a region that is rapidly integrating and developing (Vinokurov et al, 2022).

India views its relatively low volume of bilateral trade with Russia – about \$40 billion in 2022 (Economic Times, 2023b) - as conspicuously incongruent, given the size of the economies involved. India views this discrepancy partially as a logistical problem. Currently, getting products between the two countries requires a prolonged and convoluted journey by ship through the Arabian Sea, Suez Canal, Mediterranean Sea, North Sea, and Baltic Sea, taking a minimum of 45 days. The NSTC is meant to be a remedy for this. Equally importantly, NSTC provides India with better access to the heart of Eurasia while completely bypassing Pakistan, which is very appealing from India's perspective, especially as China is firmly embedded there with its China-Pakistan Economic Corridor (Chatterjee, 2018).

Internally, India is rapidly developing an impressive digital public infrastructure (DPI) to support its digital strategies. "India Stack" is the name given to a set of commonly used DPIs, and consist of three layers: those related to unique identity (an example would be the Aadhaar card), complementary payment systems (example would be Unified Payments Interface), and data exchange platforms (DigiLocker). India Stack enables online, paperless, cashless, and privacy-respecting digital access to a variety of public and private services. It is now being used as a platform to foster innovation and competition; expand markets; close gaps in financial inclusion; boost government revenue collection; and improve public expenditure efficiency (Alonso et al, 2023). The Indian government has enabled the success of India Stack by establishing institutions, such as the National Payments Corporation of India, to support it (Ernst & Young, 2023). Despite its initial success, some long-term challenges remain. Digital literacy remains low in India, and a digital divide is apparent along geographic, gender and income lines. A robust data protection framework, however, is in the works, and Indian lawmakers recently passed a data protection law that have provisions for citizens' privacy, and dictates how tech companies can process users' data (Financial Times, 2023). In essence it will allow firms to transfer some user data abroad, while giving the government power to seek information from firms and issue directions to block content.

Developing a Meta-Study Agenda for Academic Researchers

According to the European Commission, the pace of digitalization in India and China was the fastest among most major economies between 2011 and 2019, growing at about 11% annually (Srivastava, 2023). Digital Stack and Digital China are loosely used, all-encompassing terms applied by public and private sector leaders to data and connectivity projects domestically and in countries that are nominally part of the NSR. Some such projects have received heavy state backing; some, none at all.

Under Digital China, the country wants its domestic firms to participate in building many more pieces of financial, information, and telecom networks globally, with the goal of increasing China's overall capacity to participate in settling international technology standards and governance norms (Greene and Triolo,

2020). However, in some foreign markets along the BRI corridor, concerns about overreliance on China-based firms, about ecological impact, and security fears over surveillance and data handling will continue to limit the growth of Chinese influence. In India, the government's focus to develop digital infrastructure has laid the foundation for a digital economy, and the digital India Stack is now the global benchmark for many countries (Ernst & Young, 2023). However, as in other countries, technological advance has continued to outpace policy evolution as the country makes steady strides towards a digital-first economy (Gupta and Auerswald, 2019). India's NSTC endeavor to better link in with Central Asia goes beyond mere geopolitics and the more efficient shipment of goods. India is already the world's fourth largest consumer of energy, with demand rapidly growing by the day, and countries on the NTSC route are richly endowed with such natural resources. It will therefore be interesting to see how India's outreach efforts to these countries eventually pan out.

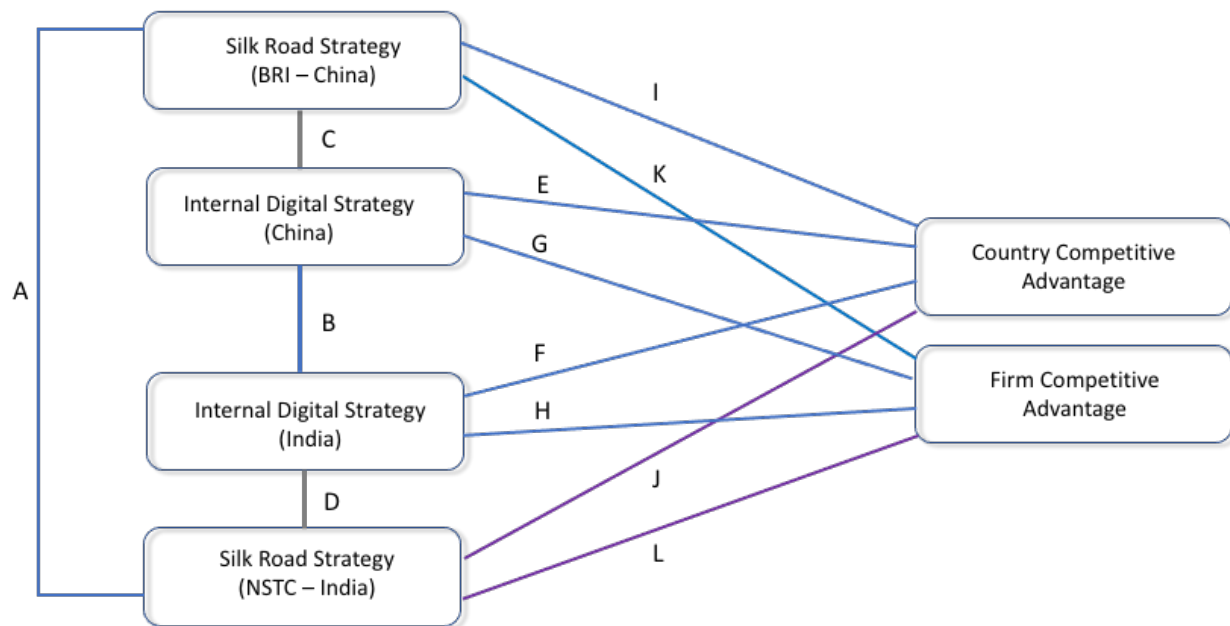
Despite their importance, the silk road initiatives of China and India have been given little attention in international management literature. They cannot be ignored, if only for their extraordinary scale and scope alone at both statistical and strategic levels. The BRI, for example, has the potential to involve more than 60 countries, 4.4 billion people, and up to \$21 trillion in collective GDP (Kugelman, 2019) – and this is in addition to ample preexisting Chinese investments around the world. The project also confronts security and financial challenges that are as serious as its potential is soaring. Similar arguments can be made for India's silk road initiatives, given the strengths of its domestic digital capabilities. In contrast, some researchers, for example Jones & Zeng (2019), have argued that BRI is a loose, indeterminate scheme, driven primarily by “debt-trap diplomacy” and competing domestic and state capitalist interests, whose struggle for power and resources will undermine the original intent of the project. In this regard, the topic is ripe for serious examination from a strategic management and international business literature perspective.

In summary, there is now a clear and pressing need for an expanded research agenda in the broad arena of international business strategies, at the intersection of firm and country-level, in India and China. We must not only analyze the silk road ambitions of the two countries, but tally the resources being put into it, as well as assess its likely success in achieving stated objectives. For the countries along the NSR, especially in Eurasia, connectivity is key, as they work towards partnering up with the big geo-economic players on all sides to create a colossal grid of enhanced east-west and north-south trade routes that strategically intersect in their respective countries. We must also begin to understand the retaliatory and push-back efforts of some countries whose interests are not aligned with the silk road initiatives. Some research in this area has begun to emerge. Li et al (2022), for example, recently offered a theoretical bargaining model of BRI participation by Chinese local firms and MNEs, but have not offered any frameworks to guide others (see Chan 2018). Our meta-analytic survey of existing literature on SRS, IDS and DSR confirms that to jump-start research on this topic there is first an urgent need to categorize various research sub-streams under an overarching research schema that encompasses these three broad areas.

We therefore propose a meta-model (Figure 1) to classify as well as undertake future research on these inter-related topics. The schema identifies six sets of studies (12 distinct linkages A through L) as sub-streams for future research. These studies can be viewed from several different lenses and grounded in multiple existing theories, such as the resource-based view (Barney, Ketchen & Wright, 2021; Beamish Chakravarty, 2021), resource-dependency perspective (Hillman, Withers & Collins, 2009; Pfeffer & Salancik, 1978), and transaction cost theory (Williamson, 1975, 1999), among others. Such investigations would yield a better understanding of the phenomena under study, and more precise exposition of the logic and constructs within the model, thereby yielding both theoretical and empirical advances. Given the disparate nature of research in this area, we believe that there is tremendous scope to productively combine and leverage literature streams from different fields – economics (for example, the notion of information economics and signaling theory); organization theory and organizational behavior (bounded rationality and organizational learning perspective); strategic management (network theory and dynamic capabilities); international business (institutional voids and factor proportions); sociology (trust, opportunism); and psychology and behavioral economics (heuristics, risk preferences, and biases) – and juxtapose alternative

views to see if any apparent contradictions across different perspectives can be resolved. In essence, more dialogue between different fields and streams of research in the area is encouraged.

Figure 1: Proposed Research Schema



Study Set #1: Comparative country-vs-country or firm-vs-firm studies

- Linkage A: SRS China vs SRS India - Studies that compare, contrast, and study the inter-relationships between DSR strategies of the two countries, within the broader context of the BRI and NSTC, including the role and responses of countries on the two routes. Studies on the risks and benefits of the SRS of the two countries.
- Linkage B: India IDS and China IDS - Studies that compare and contrast the IDS (internal or within-the-country digital strategy) of the two countries, including how respective domestic firms are benefiting or being negatively impacted by government “asks”

Study Set #2: Within country, firm-country strategic relationships

- Linkage C: SRS China (BRI) and China IDS - Studies that focus on alignment (or misalignment) of China’s digital strategies, within the BRI corridor, and its IDS.
- Linkage D: SRS India (NSTC) and India IDS - Studies that focus on alignment (or misalignment) of India’s digital strategies, within the NSTC corridor, and its IDS.

Study Set #3: Internal state policies and strategies, and country competitive advantage

- Linkage E: IDS China and Country CA - Studies on how its IDS provides or can provide China with a geopolitical or economic competitive advantage vis-à-vis countries along the BRI.
- Linkage F: IDS India and Country CA - Studies on how its IDS provides or can provide India with a geopolitical or economic competitive advantage vis-à-vis countries along the NSTC.

Study Set #4: Internal state policies and strategies, and domestic firms’ competitive advantage

- Linkage G: IDS China and Firm CA - Studies on how China’s IDS provides or can provide its domestic firms with a competitive advantage, vis-à-vis firms from other countries, in BRI countries.
- Linkage H: IDS India and Firm CA - Studies on how India’s IDS provides or can provide its firms with a competitive advantage, vis-à-vis firms from other countries, in NSTC countries.

Study Set #5: Country silk road strategy, and country competitive advantage

- Linkage I: SRS China and Country CA - *Studies on how China's SRS (specifically the BRI) provides or can provide the country with a geopolitical or economic competitive advantage over other countries.*
- Linkage J: SRS India and Country CA - *Studies on how India's SRS (specifically the NSTC) provides or can provide the country with a geopolitical or economic competitive advantage over other countries.*

Study Set #6: Country silk road strategy, and domestic firms' competitive advantage

- Linkage K: SRS China and Firm CA - *Studies on how China's SRS (specifically the BRI) provides or can provide domestic firms in China with a competitive advantage over other international firms.*
- Linkage L: SRS India and Firm CA - *Studies on how India's SRS (specifically the NSTC) provides or can provide domestic firms in India with a competitive advantage over international other firms.*

(Please Note: In our full paper, we provide examples of types of research questions that could be studies within each linkage, as well as identify extant research for the linkage)

Future Agenda

Research in the context of country-firm nexus is unique in several ways. First, there are numerous entities involved, both from public and private sectors. Second, the motivations of various entities to get involved could be economic or non-economic (or both). Third, any major decisions or events in this context could have geopolitical implications, sometimes major ones, for countries within and outside of the NSR routes. For each of the 12 linkages identified above, studies can be process-oriented that factor in temporal dynamics, purely content-oriented, or a mix of the two. Research could be positioned through several theoretical lenses, or it could be grounded in various theoretical streams, such as varieties of capitalism and geopolitics, as those identified by Li et al. (2022). In essence, our proposed frameworks lends itself to adequate flexibility, in terms of which approach to take, to better understand the complexities and nuances of this exciting and emerging stream of research.

(Select) Bibliography

Alonso, et al. (2023). Stacking up the Benefits Lessons from India's Digital Journey. *International Monetary Fund (IMF)*, Working Paper #23/78.

Ariken, M., et al. (2021). Coupling coordination analysis and spatio-temporal heterogeneity between urbanization and eco-environment along the Silk Road Economic Belt in China. *Ecological Indicators*, 121.

Barney, J., Ketchen, D., & Wright, M. Bold voices and new opportunities: An expanded research agenda for the resource based view. *Journal of Management*, Vol 47(7): Special Issue, pages 1677-83.

Beamish, P. & Chakravarty, D. Using the resource based view in multinational enterprise research. *Journal of Management*, Vol 47(7): Special Issue, pages 1861-77.

Chan, M. (2018). The Belt and Road Initiative – the New Silk Road: a research agenda. *Journal of Contemporary East Asia Studies*, 7(2): 104-123.

Chatterjee, S. (2018). International North-South transportation corridor (INSTC) connecting India and Central Asia. *International Journal of Research in Social Sciences*, Vol. 8 Issue 4.

Chourasia, S. (2023). The rise of the Middle Corridor: What is India's response? *Observer Research Foundation*, June 1.

Dau, L. et al. (2022). Informal institutions and the international strategy of MNEs: Effects of institutional effectiveness, convergence, and distance. *Journal of International Business Studies*, Vol. 53: 1257–1281.

Dorman, D. & Hemmings, J. (2023). Digital China: The strategy and its geopolitical implications. *Pacific Forum International*, Vol 3, WP 2.

Economic Times (2023a). India-China trade shows first signs of slowdown in years. July 13.

- Economic Times** (2023b). India-Russia trade hit a record \$39.8 billion in 2022-23. April 4
- Ernst & Young LLP** (2023). INDIA@100: Realizing the potential of a US\$26 trillion economy.
- Financial Times** (2023). India passes landmark data protection bill. August 9.
- Greene, R. & Triolo, P.** (2020). Will China control the global internet via its digital silk road? *Carnegie Endowment for International Peace*, May 8.
- Gupta, A. & Auerswald, P.** (2019). The ups and downs of India's digital transformation. *Harvard Business Review*, May 6.
- Hillman, A.; Withers, M & Collins, B.** (2009). Resource dependence theory: A review. *Journal of Management*, 35(6): 1404-1427.
- Hu, H., Cui, L. & Aulakh, P.** (2019). State capitalism and performance persistence of business group affiliated firms: A comparative study of China and India. *Journal of International Business Studies*, 50, pages 193–222.
- Jones, L. & Zeng, J.** (2019). Understanding China's 'Belt and Road Initiative': beyond 'grand strategy' to a state transformation analysis, *Third World Quarterly*, 40(8): 1415-1439.
- Kano, L., Tsang E. & Yeung, H.** (2020). Global value chains: A review of the multi-disciplinary literature. *Journal of International Business Studies*, Vol. 51(4): 577-622.
- Lewin, A. & Witt, M.** (2022). China's Belt and Road Initiative and international business: The overlooked centrality of politics. *Journal of International Business Policy*, Vol. 5(2): 266-275.
- Li, J., Van Assche, A., Li, L. & Qian, G.** (2022). Foreign direct investment along the Belt and Road: A political economy perspective. *Journal of International Business Studies*, 53: 902–919.
- Liu, H.** (2019). Relative importance of climate change and human activities for vegetation changes on China's silk road economic belt over multiple timescales. *Catena*. 224-237.
- Meyer K., Li, J., Brouthers K., & Jean R.** (2023). International business in the digital age: Global strategies in a world of national institutions. *Journal of International Business Studies*, Vol. 54(4): 577-598.
- Miller, M.** (2022). China and the belt and road initiative in South Asia. *Council on Foreign Relations* (New York), Discussion Paper, June.
- Nambisan, S., Zahra, S. & Luo, Y.** (2019). Global platforms and ecosystems: Implications for international business theories. *Journal of International Business Studies*, Vol. 50(9): 1464-86.
- Pantucci, R.** (2019). China in Central Asia: The first strand of the silk road economic belt. *Asian Affairs*, 50:2, 202-215.
- Pfeffer, J. & Salancik, G.** (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Srivastava, D.** (2023), How digital transformation will help India accelerate its growth in the coming years. *Ernst & Young LLP Report*, 25 April.
- Vinokurov, E., Ahunbaev, A. & Zaboev, A.** (2022). International N-S transportation corridor: Boosting Russia's "pivot to the South" and Trans-Eurasian connectivity. *Russian Journal of Economics*, 8(2):159-13.
- Williamson, O.** (1975). *Markets and Hierarchies*. New York: Free Press.
- Williamson, O.** (1999). Strategy Research: Governance and Competence Perspectives. *Strategic Management Journal*, 20: 1087-1108
- Yu, S.** (2019). The belt and road initiative: Modernity, geopolitics and developing global order. *Asian Affairs*, 1-15.

How Does the Psychological Resilience of Entrepreneurs Affect Organizational Resilience and Startup Success? - Through the Survey of Entrepreneurs in Japan

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**How does the psychological resilience of entrepreneurs affect
organizational resilience and startup success?
— Through the survey of entrepreneurs in Japan —**

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Extended Abstract

In entrepreneurial resilience research, Anwar, Coviello, and Rouziou (2023) and Santoro, Messeni-Petruzzelli, and Del Giudice (2021) developed a multi-level analysis. Adding variables to their model, this study intends to theoretically and empirically determine the impact of individual psychological resilience on organizational resilience and firm success through the survey of entrepreneurs in Japan.

Keywords: entrepreneurial resilience, employee resilience, psychological resilience, organizational resilience, multi-level approach

1. Introduction

Entrepreneurial resilience research has emphasized the need for multilevel analyses that account for the relationship between individual and organizational levels (Kawakatsu and Sekiguchi, 2022), but these studies are few in number. Indeed, there are a few multilevel studies such as Anwar, Coviello, and Rouziou (2023) and Santoro, Messeni-Petruzzelli, and Del Giudice (2021), however, the mechanism of individual psychological resilience affecting organizational resilience and startup success has not yet been fully explained. Therefore, by adding the variable of external resource acquisition capacity described by Lengnick-Hall and Beck (2005) and Lengnick-Hall, C. A., Beck, & Lengnick-Hall, M. L.,

(2011) to their findings, we attempt to identify the relationship between individual resilience, organizational resilience, and startup success, and to develop this field. Specifically, we ask entrepreneurs in Japan to respond to our questionnaires to unravel these relationships.

2. Literature Review

2.1. Theoretical Background

Among entrepreneurial resilience literature, Anwar et al. (2023) and Santoro et al. (2021) conducted multilevel analyses. Anwar et al. (2023) surveyed 111 top management team (TMT) members before and after Covid-19 and found that TMT individual resilience and inter-functional coordination, such as interdepartmental collaboration among R&D, marketing, and sales, support organizational resilience and that organizational resilience positively affects organizational outcomes (including sales revenue, sales growth, and customer retention). Santoro et al. (2021) examined entrepreneurial resilience and perceived performance, cognitive, behavioral, and contextual dimensions of employee-level resilience (Lengnick-Hall et al., 2011) for entrepreneurs with 10 or more employees. As a result, the cognitive and contextual dimensions improved the companies' perceived performance, but this effect was evident among resilient entrepreneurs. They also found that the behavioral dimension affected perceived performance positively and significantly, and the effect was stronger when entrepreneurs showed resilience.

However, while the findings of Anwar et al. (2023) are ideal as a multilevel analysis, it is undeniable that the model fitted with the collected data was presented, and this left a possibility to supplement them with theoretical explanations. On the contrary, Santoro et al. (2021) collected both team-level and individual-level data only from individual entrepreneurs, but we expect that their approach could be developed into a more sophisticated multilevel analysis by asking their employees as well.

2.2. Research Questions and Hypothesis

This study aims to expand their multi-level model by adding the concept of organizational resilience presented by Lengnick-Hall and Beck (2005). They proposed cognitive, behavioral, and contextual

resilience as components of organizational resilience. In particular, regarding contextual resilience, they referred to the similar ability to acquire resources from external sources at individual and organizational levels. We can interpret it like this; if individuals can get some help from others, that means organizations can obtain resources and become resilient. Furthermore, Lengnick-Hall et al. (2011) also argued that resilient individuals are better able to build relationships with others that allow them to offer important resources.

From these statements, we can draw the following hypotheses:

Hypothesis 1. The psychological resilience of entrepreneurs is positively related to their ability to acquire external resources.

Hypothesis 2. The entrepreneurs' ability to acquire external resources is positively related to the organizational resilience of startups.

From Hypothesis 1 and Hypothesis 2, we would derive Hypothesis 3:

Hypothesis 3. The psychological resilience of entrepreneurs has a positive indirect effect on the organizational resilience of startups through their ability to acquire external resources.

To broaden the research setting of Santoro et al. (2021), the survey should take in employee members as well as entrepreneurs. Moreover, for a more rigorous multilevel analysis, it is preferable to set organizational resilience as an outcome, rather than directly linking employee-level resilience to perceived performance. Then, we also hypothesize:

Hypothesis 4. The psychological resilience of entrepreneurs positively moderates the relationship between employee resilience and organizational resilience of startups.

Regarding the relationship between employee resilience and organizational resilience, Anwar et al. (2023) measured individual resilience as TMT, but this study separates entrepreneurial and employee resilience and examines the model of Anwar et al (2023) more closely. Therefore,

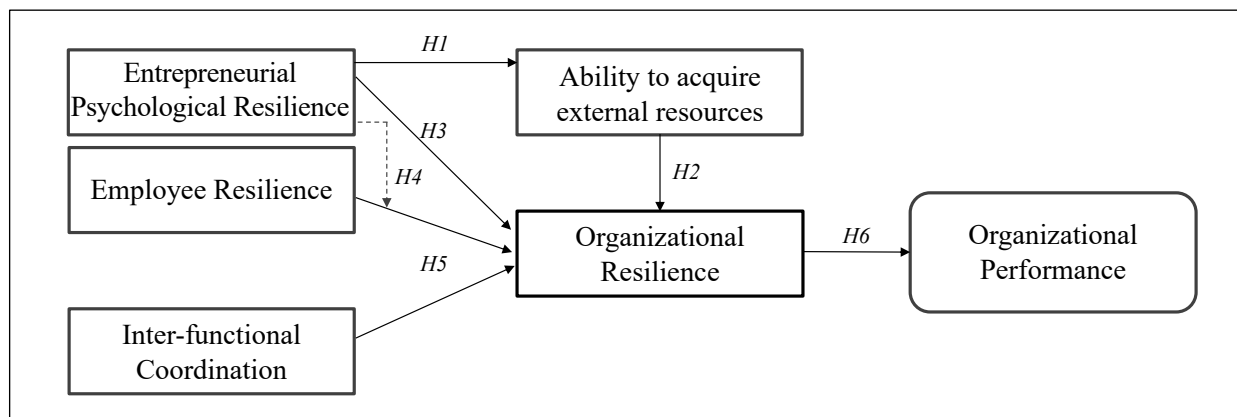
Hypothesis 5. The organizational resilience of startups is positively affected by employee resilience and inter-functional coordination

Accordingly, we can suggest the last hypothesis:

Hypothesis 6. The higher the organizational resilience of startups, the higher the positive impact on organizational performance.

This framework is illustrated in Figure 1

Figure 1



3. Methodology

Samples and Measures

This research targets entrepreneurs who operate in Japan and their employees. Our data collection is done by using online questionnaires.

Regarding the questionnaire, most of the constructs are made up of established scales. We set the dependent variable as firm performance. Like Anwar et al. (2022), we measure sales revenue, sales revenue growth, and customer retention. Regarding independent variables, we use items to scale psychological resilience, the ability to obtain external resources, organizational resilience, and inter-functional coordination. Besides, several control variables are included.

4. Discussion

Discussion, Limitation, and Future Research

Although previous studies have tried to find the process of entrepreneurial resilience from multilevel perspectives, it is still blurred whether individual resilience is transformed into organizational resilience or not. The current research offered and tested a modified model of entrepreneurial resilience. Specifically, based on the discussion of Lengnick-Hall and Beck (2005) and Lengnick-Hall et al. (2011), we suggest and consider the possibility that the ability to obtain external resources becomes the node of individual psychological resilience and organizational resilience. Our approach bridges the discussion between the individual and organizational levels by adding new variables and provides insight into entrepreneurial resilience research.

As for limitation, this approach could not fully clarify the resilience of "entrepreneurs" who realize economic development based on their innovative initiatives, because we targeted general entrepreneurs whom we chose randomly. To supplement this, a qualitative analysis would be required.

5. References

- [1] Anwar, A., Coviello, N., & Rouziou, M. (2023). Weathering a Crisis: A Multi-Level Analysis of Resilience in Young Ventures. *Entrepreneurship Theory and Practice*, 47(3), 864–892. <https://doi.org/10.1177/10422587211046545>
- [2] Kawakatsu, S., & Sekiguchi, T., (2022) The development and reconceptualization of entrepreneurial resilience. *Kyoto University, Graduate School of Economics, Discussion Paper Series, E-22-002*
- [3] Lengnick-Hall, C. A., & Beck, T. E. (2005). Adaptive fit versus robust transformation: how organizations respond to environmental change. *Journal of Management*, 31(5), 738–757. <https://doi.org/10.1177/0149206305279367>
- [4] Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource*

Management Review, 21(3), 243–255. <https://doi.org/10.1016/j.hrmmr.2010.07.001>

- [5] Santoro, G., Messeni-Petruzzelli, A., & Del Giudice, M. (2021). Searching for resilience: the impact of employee-level and entrepreneur-level resilience on firm performance in small family firms. *Small Business Economics*, 57(1), 455-471. <https://doi.org/10.1007/s11187-020-00319-x>

Crisis Management and Strategic Response to Covid-19: Evidence from Taiwan International Ports Corporation Ltd.

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Crisis Management and Strategic Response to COVID-19: Evidence from Taiwan International

Ports Corporation Ltd.

Abstract

Taiwan International Ports Corporation (TIPC) primarily focuses on port management and international shipping, playing a pivotal role in driving Taiwan's economy. This study delves into how the company adapted its operations, formulated pandemic prevention strategies, and assisted shipping businesses amid the COVID-19 outbreak and shifting prevention policies. Through in-depth interviews and prolonged observation, the research analyzed how the company responded during the four stages of the crisis. The findings indicate that, amid policy uncertainty, the company needed to assess and act. In the initial phase of the crisis, it prioritized objectives and reallocated resources. During the outbreak, the company placed emphasis on rapid leadership and team collaboration to bolster frontline coordination. In the continuation phase, it established pandemic performance metrics and participation mechanisms. During the resolution period, focused on strengthening organizational resilience with continuous forecasting and improvements.

Furthermore, organizational agility, effective communication, and transparent information are paramount in crisis management. The study also introduces a 4R strategy model for decision-makers to reference, aiming to aid economic recovery. **KEYWORDS:** COVID-19, crisis management, strategic response, resilience management, organizational agility.

Introduction

Today's businesses face volatility and uncertainty. With the rapid advancements in industrial and internet technologies, coupled with the metamorphosis of sociopolitical landscapes, any unforeseen event can profoundly impact organizations, affecting their long-term prospects. At the end of 2019, the COVID-19 outbreak began in Wuhan, China, and rapidly spread to all corners of the world. This event not only hit the world economy hard but also posed an unprecedented challenge to the global public health system.

For port managers such as the Taiwan Port Authority, the challenges are not limited to epidemic prevention. Ports are gateways to cities; they have to ensure not only ships' normal operations but also prevent viruses from entering the city, ensuring the health and safety of dock workers and citizens. In such circumstances, how leaders of the port authority manage crises, lead their teams when encountering challenges, and make the right decisions test their leadership quality. However, was this pandemic truly an unexpected event? Do businesses have sufficient crisis response capabilities? Can they learn lessons from one event to prepare for potential future crises? This tests a company's crisis-management ability, which can depend on how companies cope with external uncertainties.

Through in-depth interviews and prolonged participant observation, this study conducts a detailed analysis of the strategies the port authority employed at different crisis stages. Through this empirical research, better understanding can be gained for how to formulate

effective strategies in a crisis and provide valuable references for future crisis management.

Literature Review

2.1 Crisis Management

Crisis management essentially devises strategies to address sudden, uncertain, and potentially hazardous events, aiming to minimize their tangible effect on organizations (Coombs, 2015). If a crisis is not handled properly, it can directly affect an organization's culture, economy, and result in financial losses, posing a serious threat to its long-term operational goals (Shafi, Liu & Ren, 2020). Building on the research foundation Fink (2013) set, this study defines crisis management as the systematic strategic response organizations adopt when facing disruptive and unforeseen crises, aiming to minimize potential negative effects on both the organization and its stakeholders. Crisis management thus offers organizations a systematic and incremental approach to address crisis situations, ensuring they can continue to operate even during times of crisis (Darling, 1994).

From a practical perspective, crises often encompass a high degree of uncertainty. The pivotal challenge for organizations is determining how to respond swiftly and proactively to these unpredictable circumstances while concurrently developing and fostering their crisis-management capabilities (Dobrowolski, 2020). To attain the goal of a resilient organization, one must first break down the four primary stages of crisis management as Fink proposed in 1986: prodromal crisis, acute crisis, chronic crisis, and crisis resolution.

2.1.1 Prodromal Crisis

Most crises do not occur abruptly. Organizations typically can detect warning signs during the latent phase of a crisis and examine them as symptoms arise. The real challenge in crisis management is not about identifying the crisis but rather the strategic response upon timely detection. In fact, receiving crisis signals and recognizing and examining the symptoms are much simpler than facing crisis's aftermath. If warning lights are on and a company chooses to ignore them, the ensuing crisis and losses could be far more costly than if the company had chosen to address it directly during its latent phase.

2.1.2 Acute Crisis

In a crisis, enterprises must act promptly. During early signs, they should establish protective measures and prepare resources. However, as the crisis intensifies, immediate action is vital. Establishing fast top-down communication can control the fallout. Academic studies show that in service errors, a swift apology is more effective than later compensation in preserving brand image (Jung & Seock, 2017). Hence, during crises, managers should assess the situation and lead their teams to address the issue promptly.

2.1.3 Chronic Crisis

The majority of crisis management scholars believe this phase is crucial for organizational success or failure. When encountering long-standing crises, companies typically adopt comprehensive action plans to address the issues once and for all. Successful

crisis management typically results from organizational teams' collective efforts, and the performance metrics developed during this phase aim to recognize and encourage employees involved in crisis-handling appropriately. What differentiates this phase from the outbreak one is that organizations usually adopt a continuous and efficient horizontal communication model during the continuation phase, integrating cross-departmental resources and accumulating crisis management experience. The goal is to reduce the learning curve and costs when facing future crises.

2.1.4 Crisis Resolution

During the latent phase of a crisis, a successful manager will quickly take control and discern the most efficient means to resolve the crisis. At this juncture, the goal of crisis management is to transform the crisis into an opportunity as much as possible. These scenarios test an organizational manager's judgment, experience, and capability in crisis management. According to Fink's (1986) crisis theory modern organizations can be viewed as organisms (Kash & Darling, 1998) that evolve their response strategies in line with external environmental changes and the progression of a crisis. A hallmark of a successful organization is resilient management: When a crisis emerges, it can identify pivotal environmental factors, analyze and assess their effect on the organization, and promptly establish corresponding strategies to adapt or overcome environmental threats and challenges.

Method

This research adopted the case study method, utilizing participatory observations of a single-case enterprise for as long as two and a half years. In-depth interviews served as the main axis of these participatory observations (Babbie, 1998). A case study involves empirical investigations set in a singular context, using information from various sources to explore, describe, and explain the current real situation based on its prevailing context and causal relations (Yin, 1981). As Eisenhardt (1989) noted, case studies aim to present factual explanations to describe objectively the current issues within a constrained time and space context (Peng Yushu, Liang Yizhong, Yu Zhuoming, and Liang Jinjia, 2010). Starting from the epidemic's outbreak at the end of 2019, the participatory observation period spanned from early January 2020 to the end of June 2022. Through complete and direct observations of the case enterprise's epidemic prevention actions, the researcher collected diverse and dynamic data (Wimmer & Dominick, 2003).

One research method, in-depth interviews, involve a small and representative sample, where interactions occur between the researcher and the interviewee (Lin Xinruo, 2003). Similar to participatory observation, the in-depth interview method can provide researchers with rich and detailed information. This research employed open-ended interviews, emphasizing the interaction between the researcher and the interviewees without a standardized interview guide. There are two main reasons for this: First, the current epidemic crisis was unprecedented, making it difficult to develop comprehensive questions using a

structured interview guide in advance. Second, to document the situation of the crisis as it happened and the corresponding measures taken in a genuine way, open-ended interviews were likely to reduce the pressure on interviewees and increase their willingness to participate. The list of interviewees is summarized in Table 1.

Table 1: List of Interviewees

Interviewee	A	B	C	D
Title	On-Site Operations Supervisor	Epidemic Department Head	Epidemic Task Force Member	Staff
Interview Duration	30 minutes	1 hour	1 hour	30 minutes
Corresponding Crisis Management Phase	Latency Period	Outbreak & Continuation Phase	Continuation Phase	Resolution Phase

Taiwan International Port Corporation Introduction

Taiwan Ports Corporation (TIPC) has a capital of USD 70 billion and employs around 2,600 staff. Its primary business is to manage Taiwan's international ports and delegate the administration of two domestic ports. The company oversees and centrally manages four subsidiary port firms in Keelung, Taichung, Kaohsiung, and Hualien. These subsidiaries operate seven international commercial ports, specifically Keelung Port, Taipei Port, Su'ao Port, Taichung Port, Kaohsiung Port, Anping Port, and Hualien Port. Each year, TIPC serves

over 75,000 vessels, handling the operations and management of international commercial ports, leasing and utilization of commercial land within ports, and the construction and maintenance of public facilities.

This study focuses on port crisis management. The port authority company, as the primary manager of Taiwan's ports, plays a representative role in this practical event. First, it is the main management and operating company for Taiwan's ports, offering international vessel docking, passenger and cargo immigration management, and terminal warehouse management. Second, the port authority company is completely (100%) under the jurisdiction of the Ministry of Transportation and represents the government's policies. Third, ports connect to urban communities, and with the large number of cruise tourists entering and exiting, concerns over public health and safety make it the first line of defense against epidemics. This research adopts a single case study approach, collecting qualitative primary data through interviews from various sources. Secondary data complements this, which includes reports from event participants, third-party reports, and literature reviews for comparison and analysis. This helps in understanding and interpreting the specific context of practical events (Welch & Piekkari, 2017) and offers comprehensive insights into the causal logic behind the epidemic prevention actions and response strategies the port authority company adopted in the face of pandemic crises and policy uncertainties. The case study, encompassing in-depth interviews combined with participatory research methods, not only

verifies the effectiveness of the port company's crisis response strategies but also serves as a reference for enterprise crisis management practices.

Results and Findings

In early 2020, as the COVID-19 pandemic continued to escalate globally, countries raised travel warnings and successively restricted international travel. Cruise ships faced increasing infections among crew members and passengers, leading to restrictions on port entry and subsequent suspensions. Commercial vessels entering ports had to undergo full ship disinfection. Customs clearance and quarantine measures for logistics became stringent, resulting in extended transportation times, which in turn affected the timeline of goods import and export. This study explains the strategies of the port service company in each epidemic prevention stage based on Fink's (1986) four crisis management developmental stages: prodromal crisis, acute crisis, chronic crisis, and crisis resolution. Additionally, it explores the development of a more comprehensive and detailed institutional management mechanism in the future.

1. Prodromal Crisis

On January 21, 2020, when the first imported case of COVID-19 was identified in Taiwan, it was just before the Chinese New Year holiday, and to note, due to the connection between the port and the city community, this area is also a tourist development. At the onset of the crisis, the port company's general manager immediately convened a meeting with

senior executives. They promptly liaised with other relevant agencies to establish a crisis prevention task force and swiftly set guidelines for epidemic prevention operations at the port. Senior managers from each subsidiary were asked to form emergency response teams for their respective ports, in line with the business nature. These teams were to cooperate with the head company, central epidemic prevention policies, and the Ministry of Transportation's contingency plans. Given the circumstances at the time, Respondent A, a field supervisor, provided the following explanation.

Due to the on-site staff needing to regularly interact with crew members from various countries for different operations, initially, there were no restrictions on cruise ships, and foreign passengers would come and go. Therefore, everyone was on high alert, maintaining strict vigilance, complying with the epidemic prevention standards set by the company, and supervising on-site staff to ensure proper execution. They carried out all the necessary pre-protective measures, focusing on the on-site environment disinfection, and paid attention to the condition of crew members and passengers, reporting at any time. If violations of epidemic prevention regulations are found within the port area, port business operators will be immediately notified to make corrections. If no improvements are made, evidence will be gathered and the case will be transferred to the port authority for action and penalties.

2. Acute Crisis

This phase is aimed at the current crisis, with allocating tasks, making collaborative efforts, rapidly executing crisis strategies, having effective communication with leadership, and establishing and strictly controlling various standards all within the shortest time frame. In early January 2020, successive incidents of confirmed cases were reported on multiple international cruise ships. On February 1, 2020, the Diamond Princess Cruise ship became the center of attention when an 80-year-old passenger was diagnosed, leading to the entire ship's passengers being quarantined onboard and unable to disembark. This resulted in several passengers contracting the infection consecutively, drawing global attention to the issue of virus prevention on ships. As a result, many countries began to restrict cruise ships from docking. This incident led Taiwan's ports to be more stringent with ship and port epidemic prevention to avoid similar occurrences in the future. In line with the central epidemic prevention policy, the port authorities banned the docking of international cruise ships from February 6, 2020, to prevent the inflow of the COVID-19 virus. The port authorities have adopted a series of epidemic prevention measures for ships and passengers, as described below.

(1) Epidemic prevention policy for ships entering and leaving the port.

During the 2020 COVID-19 pandemic, cargo ships had to file port entry applications 4-72 hours prior to arrival and cruise ships within 24 hours. Docking was permitted only after the Harbor Bureau's approval. Captains and staff signed a Maritime Health Declaration. The

shipping agent managed subsequent procedures, forwarding them to the Taiwan CDC. If a crew member fell ill or had a fever, the agent informed the Taiwan Ministry of Health, and the individual was sent to the hospital. All crew remained isolated on board for 14 days. TIPC set COVID-19 guidelines for harbor risk management and vessel operation, ensuring epidemic prevention. Ship loading and unloading was capped at four people, and emergency personnel at one. TIPC kept operations' records, including worker details. Everyone had to wear masks and protective gear during loading and unloading.

In the 2020/2021 phase of the COVID-19 pandemic, before vaccines were available, the circumstances were critical. Workers on site had to have their temperatures checked every day. Anyone registering a temperature over 37.5°C was not allowed to work. They would be reported to their higher-ups and guided towards medical care. As a rule, every employee had to wear a mask continuously while in the workplace and was instructed to observe social distancing – keeping a distance of 1 meter when outside and 1.5 meters when indoors. (Respondent B)

(2) Passenger epidemic prevention measures

Upon entering the country, passengers are provided with alcohol-based hand sanitizers at various points within the passenger center to ensure hygiene. Additionally, every disembarking passenger must complete an “Entry Health Declaration Card.” Each of these cards is meticulously inspected. Before exiting, passengers are required to undergo an infrared

temperature screening to detect any signs of fever. Customs officials are responsible for inspecting and disinfecting luggage, as well as assisting passengers in understanding and complying with enhanced quarantine standards and regulations. After passengers have cleared customs, the passenger service center undergoes thorough cleaning and disinfection using a disinfectant diluted 100 times, as illustrated in Figure 1.



Figure 1: Disinfection operations at the Passenger Service Center

(Source: TIPC Sustainable Business Report, 2021).

(3) TIPC Company's Internal Office Epidemic Prevention Policy

In 2020, during the COVID-19 outbreak, TIPC implemented measures to safeguard employees and to prevent virus spread in office spaces. Infrared detectors were positioned at entrances for temperature checks, and screening stations were set up at various office zones, including docks and container areas. Employees underwent temperature checks twice daily, with a threshold set below 37.5°C. Those with fevers were denied entry and guided to medical

care. Hand sanitizers were placed near elevators, and conference room seats had partitions.

Employees had to wear masks during commutes. Technologically use was implemented, specifically conferencing tools, to limit physical meetings, and primary discussions were held virtually. Enhanced cloud storage ensured data security, and a virtual operating system was introduced for efficient remote work.

(4) Epidemic prevention material management

During the pandemic, the port authority company would take inventory and prepare complete epidemic prevention supplies every week, including masks, forehead thermometers, alcohol, hand sanitizers, disinfectants, gloves, and protective clothing. Starting from February 2020, the company began to provide a unified monthly application for masks to all its units, supplying one mask per day for employees to wear. Until August 2022, the COVID-19 situation remained tense, and the demand for epidemic prevention supplies was urgent. To ensure there would be no shortage of epidemic prevention materials for ship operators and dockyard workers in the port area, the company subsidized the need for epidemic prevention supplies, as shown in Table 2.

Table2: Subsidies for epidemic prevention materials port companies provided

Item	Number of Subsidized Firms in the Port Area	Quantity
Ear Thermometers	41	41
Face Masks (each)	465	857,768
Alcohol (bottle/500ml)	328	2,072
Gloves (box/100 pairs)	233	457
Isolation Gowns	128	36,287
Eye Protection Equipment	44	583
Total	1,239 firms	897,208 items

Source: TIPC port companies (2021)

3. Chronic Crisis

During this phase, constant monitoring of the crisis is maintained, control of the growing crisis is reinforced, border epidemic prevention in the harbor area is strengthened, and timely good communication with the media is sustained. Facing the increasing threat of COVID-19 new variants, the number of epidemic cases in Taiwan continues to rise. TIPC has actively prevented the risk of community transmission, and there exists the risk of unspecified persons or crew infection due to the nature of services harbor personnel and affiliated staff provide, where social distancing cannot be maintained. TIPC has actively promoted the vaccination of

employees, tenants of dock vendors, and frontline harbor workers to enhance their willingness and efficiency. During 2022, TIPC cooperated with the Central Epidemic Command Center and local governments to periodically set up COVID-19 vaccination stations in the harbor area for vaccination operations (as shown in Figure 2) to increase the vaccination coverage rate and to reduce the risk of severe infection. It will also periodically provide rapid screening tests for employees.



Figure 2: Vaccination area (Source by TIPC Corporation of ESG report, 2022)

At present, the vaccination status of on-site operators and TIPC employees in the port area is shown in Table 3.

Table 3: Coverage of COVID-19 vaccine in the port area

Implementation of vaccination			
As of April 29, 2022			
Types of Vaccinators	Vaccines	Number of people	Inoculation rate
TIPC employees	first dose	2,086	98.96%
	second dose	2,073	98.34%
	third dose	2,045	97.01%
Wharf site staff	first dose	35,020	98.03%
	second dose	34,376	96.23%
	third dose	31,619	88.51%

(Source by TIPC Corporation of ESG report, 2021)

TIPC also strictly enforces boarding boat control and it implements traffic vessel management and personnel entry and exit control. A checkpoint for boarding personnel is set up at the public docks of the international commercial port under its jurisdiction. All boarding personnel must inspect their business identity and protective equipment before boarding the ship. Then, they go to the boarding personnel decontamination area to complete the cleaning and disinfection operation of the boarding boat personnel, and strictly observe the national border epidemic prevention security (TIPC Corporation of ESG report, 2021).

Employee C, a member of the epidemic prevention team, stated that the company has set regulations.

During the epidemic prevention period, employees are required to measure their temperature twice a day, once in the morning and once in the evening, when entering the office. The IT department has designed a temperature input system to monitor the health condition of every employee. If an employee's temperature exceeds 37.5°C, we assist that employee in seeking medical attention and isolation. We also investigate the activities and contacts of potentially infected individuals and notify those who have been in contact to manage them accordingly. Affected areas are immediately disinfected. We have established a COVID-19 notification management process so that all colleagues are informed and adhere to it strictly. Every month, we inspect our epidemic prevention supplies to ensure there is no shortage. We also provide assistance to harbor businesses in need of epidemic prevention materials. Moreover, since Taiwan entered a peak infection period in early 2022, the company has offered free COVID-19 testing reagents for employees to use.

4. Crisis Resolution

At this stage, we offer comprehensive solutions for post-crisis management to minimize the crisis's effect. During a crisis, it is common to encounter unclear information or for misconceptions to spread. Many take advantage of communication software to spread rumors, which can lead to public panic. To prevent this, TIPC has made all epidemic prevention information transparently available on its company website, ensuring that all maritime

businesses can stay updated on the current epidemic status and follow-up measures.

Employee D stated: *Our Company has posted all epidemic prevention regulations and subsidy programs on the official website for suppliers and shipping carriers to inquire and apply. All the latest epidemic prevention updates are announced on the official website, reducing the risk of direct contact and increasing work efficiency.*

(1) Take various subsidy measures

During the COVID-19 pandemic in 2021, the port authority company administered three measures: “Subsidy for international cruise ship agency and ticketing station rental fees in Taiwan,” “Subsidy for port terminal operators' pandemic prevention supplies,” and “Subsidy for international cruise ship terminal anchorage fees.”

(2) Port border epidemic prevention continues to intensify drills and precautions.

Some of the actions and precautions taken include the following: strengthen personnel on-site drills, prepare sufficient epidemic prevention materials and resources, establish relevant unit information-communication platforms, conduct daily environmental cleaning and disinfection, continuously control the implementation of epidemic prevention standards between ports, and constantly review and improve them.

(3) Promote the intelligent transformation of ports

During the COVID-19 pandemic, the port management company continuously planned strategies for digital transformation within the port area. They installed a wireless network at

each dock to provide access to the Internet and cloud services. Port lessees can receive information related to port ships through mobile or computer applications, and they can connect to the port management company's website to conduct various application processes. This accelerates business procedures, reduces human contact, and minimizes the risk of epidemic transmission.

Conclusion

The findings of this study indicate that to achieve the goal of a resilient organization, businesses must prudently assess, forecast, and take action when encountering crises and policy uncertainties. First, during the latent phase of a crisis, organizations should prioritize their objectives to conduct an internal resource review and reorganization (readiness assessment via prioritization). Next, during the outbreak phase of a crisis, they should rely on quick-reacting leadership and teamwork (responsive leadership and teamwork) to establish and strengthen direct connections with frontline staff. As the crisis persists, companies should establish reliable pandemic performance metrics and full-participation mechanisms (reliable delivery and engagement). Finally, during the crisis resolution phase, they can continually accumulate and bolster organizational resilience (resilient organization), including continuous improvements in crisis forecasting and stress-testing systems. At the same time, the study's findings reveal that during different stages of crisis management, organizational agility, effective communication, and information transparency are all indispensable managerial

actions for businesses implementing their strategies, as shown in Table 4.

Table 4: Four-Stage Crisis Management Strategy Response 4R Model

Crisis Management Phase	Strategic Response	Management Actions
Prodromal Crisis	Readiness assessment via prioritization. Inventory, reorganization, and integration of internal resources, prioritizing organizational goals.	▪Organizational agility ▪Effective communication ▪Information transparency
Acute Crisis	Responsive leadership and teamwork. Rapid issuance of instructions., Appointment of a crisis team.	
Chronic Crisis	Reliable delivery and engagement. Setting KPIs to measure epidemic prevention performance. Full participation in epidemic prevention.	
Resolution	Resilience management. Establishing predictive crisis capability and stress testing systems.	

Data source: Compiled from this study

Organizational agility allows businesses to respond quickly to ever-changing opportunities and crises, aiding them in managing uncertainties (Lee et al., 2015; Teece et al., 2016). This adaptability is crucial in unexpected situations such as the COVID-19 pandemic.

To counter such challenges, organizations must be prepared for unforeseen external forces, enabling them to act efficiently both immediately and in the long term (Carmeli & Schaubroeck, 2008). Response strategies should encompass various environmental factors, from the sociopolitical to the technological.

TIPC exemplifies this preparedness, rigorously enforcing pandemic policies with maritime businesses. Their rapid pandemic response, strict compliance, and focus on preventive measures, such as increased vaccination rates, have been crucial. While continuing their development projects, TIPC also introduced subsidies to support businesses during the pandemic. Senior management at TIPC has shown commendable leadership, intensifying preventive actions, optimizing operations, and focusing on long-term planning amid the pandemic. Establishing standard procedures, enhancing staff training, monitoring the pandemic, and adjusting strategies have been vital. Their success is attributed to timely decision-making, efficient resource integration, collaboration with government bodies, and transparent communication. Despite resolving the immediate crisis, TIPC continues its proactive measures, ensuring readiness for future challenges.

References

- Babbie, E.R. (1998). *The Practice of Social Research*. Wadsworth Publishing Company.
- Carmeli, A. and Schaubroeck, J. (2008). *Organisational crisis-preparedness: the importance of*

- learning from failures, *Long Range Planning*, 41(2): 177-196.
- Coombs, W.T., 2015. *Ongoing Crisis Communication*, 4th ed. Sage, Thousand Oaks, CA.
- Darling-Hammond, L., (1994). Performance-based assessment and educational equity, *Harvard Educational Review*, 64(1): 1-27.
- Dobrowolski, Z. (2020). The supreme audit institutions readiness to uncertainty. *Entrepreneurship and Sustainability Issues*, 8(1): 513-525.
- Eisenhardt, K. M. 1989. Building theories from case study research. *Academy of Management Review*, 14(4):532-550.
- Fink, S. (1986). *Crisis management: Planning. for the inevitable*. New York: American Management Association.
- Fink, S. (2013). *Crisis Communications: The Definitive Guide to Managing the Message*. New York:McGraw-Hill.
- Jung, N.Y., & Seoc, Y.K., 2017. Effect of service recovery on customers' perceived justice, satisfaction, and word-of-mouth intentions on online shopping websites. *Journal of Retailing and Consumer Services*, 37: 23-30.
- Kash, T. J., & Darling, J. R. (1998). Crisis management: Prevention, diagnosis and intervention. *Leadership & Organization Development Journal*, 19(4): 179–186
- Lee, O.-K., (Daniel), Sambamurthy, V., Lim, K.H. and Wei, K.K. (2015). How does IT ambidexterity impact organizational agility?, *Information Systems Research*, 26(2): 398-

417.

Lin Xinruo (2003). Female Friendships in the Internet: A Case Study of NTU's Yelin "Women on Guard". Unpublished master's thesis, Graduate Institute of Journalism, National Chengchi University, Taipei.

Peng, Y. S., Liang, I. C., Yu, C. M., & Liang, C. C. 2010. Review andprospection of qualitative research in the area of management in Taiwan. *Sun Yat-Sen Management Review*, 18(1): 11-39.

Shafi, M., Liu, J., & Ren, W. (2020). Impact of COVID-19 pandemic on micro, small, and medium-sized Enterprises operating in Pakistan. *Research in Globalization*, 2, 100018.

TIPC Corporation of ESG report (2021) <https://www.twport.com.tw/csr/cp.aspx>

Welch, Catherine & Piekkari, Rebecca, 2017. How should we (not) judge the ‘quality’ of qualitative research? A re-assessment of current evaluative criteria in International Business," *Journal of World Business*, Elsevier, 52(5): 714-725.

Wimmer, R. D., & Dominick, J. R. (2003). Mass media research: An introduction (7th ed.). Belmont, CA: Wadsworth/Thomson Learning.

Yin, R. K. 1981. The case study crisis: Some answers. *Administrative Science Quarterly*, 6(1): 58-65.

Championship Chase: How Financial Superiority Shapes Soccer's Title Contenders

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The Championship Chase: How Financial Superiority Shapes Soccer's Title Contenders

This study examines the balance of competitiveness in the German Bundesliga during the periods from 2017/18 to 2020/21, using key financial indicators as significant factors. The findings reveal a strong link between financial resources and sporting performance within the league, with the most significant impacts observed during the COVID-19-affected seasons of 2019/20 and 2020/21. As existing scholarly sources suggest, a decrease in competitive equilibrium could potentially threaten the unpredictability of match results in the league. We are considering potential upcoming challenges that the Bundesliga may face in light of the latest worldwide developments in the soccer industry.

Keywords: Soccer, Bundesliga, Competitive Balance, COVID-19

Introduction

Even though the transfer window for the top five European football leagues continues until September 1st, a lot of activity has already taken place this summer. For instance, after much negotiation, Harry Kane completed his move to FC Bayern Munich, making him the Bundesliga's most expensive signing to date (Conolly, 2023). Likewise, Jude Bellingham's transfer to Real Madrid during this window has contributed to the list of significant departures from Bundesliga clubs (Garcia-Ochoa, 2023).

However, an examination of the other transfers in and out of Bundesliga clubs shows that these record-breaking sums were not exclusive to the dominant teams of the past few years. RB Leipzig, among others, experienced record departures, while Union Berlin set a new record by bringing in German international Robin Gosens from Inter Milan Football Club in 2023.

Yet, the spotlight hasn't only been on Bundesliga transfer activities this summer. The Saudi Pro League has emerged as a major financial player in the transfer market, notably highlighted by Al Nassr FC's acquisition of Cristiano Ronaldo during the previous transfer window (Orme, 2023). This summer, Saudi clubs have taken it up a notch by luring several high-profile star players away from Europe's top five leagues with substantial transfer fees and salaries.

This development introduces a new competitor to the Bundesliga teams and other major European leagues, alongside the English Premier League, which has been a prominent contender in attracting talent due to its strong financial standing (Bridge et al., 2023).

Traditionally, financially successful clubs have reaped the rewards of substantial transfer income, potentially exacerbating the financial gap between larger and smaller clubs within the same league. The impact of the COVID-19 pandemic further complicates matters, with many clubs facing financial difficulties and implementing measures like salary cuts and reduced working hours (Bandyopadhyay, 2022). Given this context, the surge in transfer activity this summer might come as a surprise. Moreover, the link between financial resources and on-field success has been extensively studied across various soccer leagues (Mondal et al., 2023; Plumley, Wilson, & Ramchandani, 2017; Plumley, Wilson, & Shibli, 2017).

This study aims to assess whether financial indicators contribute to the disparities in competitiveness. Additionally, it seeks to investigate whether the COVID-19 pandemic and its impact on club revenues have heightened these imbalances. Looking ahead, the study contemplates the future based on its findings and the current landscape.

Literature Review

Professional sports clubs differ from businesses, particularly in Germany where they are still classified as clubs, and club members have a say in the decision-making process. However, there are significant variations in procedures and regulations globally and even within Europe. Notably, the allocation of television revenue is managed differently in each country. While television revenues are distributed relatively evenly among individual clubs in North America, European big and successful clubs receive significantly higher revenues due to their wider reach.

This creates a cycle where larger teams remain successful, while smaller teams have limited chances of competing against the financial power of the big clubs, as they have less overall revenue to invest.

This issue has already been extensively studied in the literature. Brandes and Franck (2007) examines the implications of unequal competition on spectator attention, while Pawlowski et al. (2010) explores the effect of international competitions such as the Champions League on national leagues. Participating in such tournaments generates significantly higher revenues compared to national leagues and is restricted to the strongest teams in Europe. Therefore, the authors conclude that internationally successful clubs also dominate national leagues, potentially distorting competition. (Pawlowski et al., 2010) In terms of performance evaluation, Plumley, Wilson, and Shibli (2017) created a statistical model that incorporates both, financial and athletic performance of soccer clubs. Nevertheless, their research pertains to the Premier League in England. In Germany, research is predominantly centred around the market value (for more see Leifheit & Follert, 2021). However, it is important to note that this approach has some drawbacks, as will be detailed in the succeeding chapter.

Given that international literature offers different perspectives and German research focuses heavily on market value, the purpose of this study is to bridge the gap between financial status and athletic achievements in Germany by exploring the correlations between these factors. In addition, particular attention is given to the COVID-19 seasons of 2019/2020 and 2020/2021 to uncover the impact of the pandemic on finances and athletic accomplishment.

Method and Results

In this research project, we employ rank correlation and various statistical analyses to investigate the effects of the COVID-19 season on the financial situation and sporting performance in the context of the Bundesliga. Our methodology is structured as follows:

1. Selecting the Bundesliga as the study subject due to its significant disparity:
2. Data collection for financial and sporting performance:
3. Conduct a Spearman rank correlation, accompanied by a statistical analysis:

4. The statistical results are analysed and discussed:

The present study aims to investigate comprehensively the relationship between financial indicators derived from the annual reports of sports clubs and Bundesliga points, which quantify the sporting success of soccer clubs in Germany. The financial indicators that were analysed include the clubs' market value, revenue, net profit, and equity and liabilities. The objective is to uncover potential correlations between these financial factors and sporting success.

The research covered various seasons and is completely presented in Table 1. The statistical analysis reveals a high level of significance in almost all cases. The strength of the identified correlations is evaluated by applying the rank correlation (r) by Spearman. An r -value of ≤ 0.3 suggests a small effect, while a value ranging from 0.3 to 0.5 suggests a moderate effect. An r -value of ≥ 0.5 , however, indicates a strong effect. This criterion of interpretation is applied analogously to the coefficient of determination R^2 , which assesses the precision of data point fit to the regression line. (Plumley, Wilson, & Shibli, 2017; Witte & Witte, 2017)

Table 2: Findings

Market value – Bundesliga points					
Season	17/18	18/19	19/20	20/21	All Seasons
Rank correlation (r)	0,87***	0,884***	0,869***	0,759***	0,821***
R ²	0,757	0,781	0,755	0,576	0,674
Significance	0	0	0	0	0
Revenue – Bundesliga points					
Season	17/18	18/19	19/20	20/21	All Seasons
Rank correlation (r)	0,629**	0,737***	0,805***	0,637**	0,705***
R ²	0,396	0,543	0,648	0,406	0,497
Significance	0,006	0	0	0,004	0
Net Profit – Bundesliga points					
Season	17/18	18/19	19/20	20/21	All Seasons
Rank correlation (r)	0,249	0,3	0,12	0,439	0,233*
R ²	0,062	0,09	0,014	0,193	0,054
Significance	0,318	0,226	0,636	0,068	0,048
Stockholder's Equity – Bundesliga points					
Season	17/18	18/19	19/20	20/21	All Seasons
Rank correlation (r)	0,24	0,69**	0,79***	0,591*	0,62***
R ²	0,058	0,476	0,624	0,349	0,384
Significance	0,338	0,002	0	0,01	0
Liabilities – Bundesliga points					
Season	17/18	18/19	19/20	20/21	All Seasons
Rank correlation (r)	0,47	0,602**	0,594*	0,49*	0,511***
R ²	0,221	0,362	0,353	0,24	0,261
Significance	0,05	0,008	0,01	0,04	0

Note: ***p < .001, **p < .01, *p < .05

The present findings demonstrate that nearly all of the examined financial indicators significantly influence sporting success in the Bundesliga. Regarding the correlation between net profit and Bundesliga points, the impact is relatively weaker. Additionally, these correlations are insignificant beyond the overall analysis across all seasons. A clear explanation for this can be attributed to the fact that clubs usually allocate net profits among members and shareholders or use them to acquire young talents. As a result, this indicator has limited significance within the Bundesliga.

The seasons of 2019/2020 and 2020/2021 were noteworthy due to the COVID-19 pandemic. In this time period, the clubs faced substantial revenue reductions, e.g. as a result of stadium closures. Here, the influence of equity capital on the success of the clubs stands out. This effect can possibly be attributed to the use of equity capital to compensate for the decline in revenue.

In summary, this analysis indicates the presence of a disrupted competitive balance in soccer, which cannot be solely attributed to the COVID-19 pandemic. This conclusion is supported by correlations from seasons preceding the pandemic. Furthermore, it is apparent that during the pandemic, other financial indicators, including equity capital, became more important in terms of sporting success. Overall, it is evident that there exists a strong correlation between a club's financial capabilities and their performance in sport within the Bundesliga.

Outlook

The analysis reveals significant financial imbalances which, in turn, result in sporting dominance by financially powerful clubs. The particularities of European soccer (FFP, transfer systems), and specifically the circumstances of Bundesliga clubs (50+1 regulation or distribution of television revenue), may also be factors contributing to this state of affairs.

In the future, it remains to be seen if the gap will widen further and if the current global dynamic trends in transfer fees and salaries, as well as the general interest in the sport and its marketing, will have a decisive impact on competitiveness in the Bundesliga.

References

- Bandyopadhyay, K. (Ed.). (2022). *COVID-19 and the soccer world* (1st). Routledge.
- Brandes, L., & Franck, E. (2007). Who Made Who? An Empirical Analysis of Competitive Balance in European Soccer Leagues. *Eastern Economic Journal*, 33(3), 379–403.
- Bridge, T., Rawnsley, P., Dhillon, S., Clarke, A., & Haskel, J. (2023). *Annual Review of Football Finance: A balancing act*. Deloitte Sports Business Group.
- Conolly, K. (2023). *At what price?': German press sceptical over Harry Kane's £100m transfer*. The Guardian. <https://www.theguardian.com/football/2023/aug/13/german-press-sceptical-harry-kane-100m-transfer>
- Franck, E., & Nüesch, S. (2012). Talent and/or Popularity: What does it take to be a Superstar? *Economic Inquiry*, 50(1), 202–216.
- Garcia-Ochoa, J. I. (2023). *Real Madrid sign Bellingham for 103 million euros*. Marca. <https://www.marca.com/en/football/real-madrid/2023/06/07/6480b0ec46163ff9168b45b5.html>
- Leifheit, N., & Follert, F. (2021). Financial player valuation from the perspective of the club: the case of football. *Managing Sport and Leisure*, 1–20.
- Mondal, S., Plumley, D., & Wilson, R. (2023). The other ISL: analysing the finances of the Indian Super League (football) and its franchisees. *Managing Sport and Leisure*, 28(3), 302–321.
- Orme, D. (2023). *Cristiano Ronaldo 'brutally snubbed' by English club as Al-Nassr transfer exit eyed*. Mirror. <https://www.mirror.co.uk/sport/football/transfer-news/cristiano-ronaldo-al-nassr-transfer-bromley-29873361>
- Pawlowski, T., Breuer, C., & Hovemann, A. (2010). Top Clubs' Performance and the Competitive Situation in European Domestic Football Competitions. *Journal of Sports Economics*, 11(2), 186–202.
- Plumley, D., Wilson, R., & Ramchandani, G. (2017). Towards a model for measuring holistic performance of professional Football clubs. *Soccer & Society*, 18(1), 16–29.
- Plumley, D., Wilson, R., & Shibli, S. (2017). A Holistic Performance Assessment of English Premier League Football Clubs 1992–2013. *Journal of Applied Sport Management*, 9(1), 1–24.
- Witte, R. S., & Witte, J. S. (2017). *Statistics* (Eleventh edition). Wiley.

The Role of System Quality for Value Co-creation in C2C Service Orchestration Process

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The Role of System Quality on C2C Value Co-creation in Sharing economy

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Extended Abstract

Digital platforms are popular for enhancing productivity and customer loyalty. Despite advances in information technology providing new means to get platform consumers involved in the orchestration process, little is known about how system quality relates to the process that enables value co-creation in the sharing economy. Based on the IS success model and the resource management perspective, we suggest that the system quality, which is the primary resource obtained from the use of an IS, has a positive impact on two crucial service capabilities - service transparency and service efficiency- thereby improving relational value to the platform firms.

Keyword: C2C service orchestration, System Quality, Customer Loyalty

1. Introduction

The core of the sharing economy is value co-creation, where customer and service provider inputs are essential for the orchestration process, providing more excellent value to digital platforms. However, not all platforms benefit from the network effect due to challenges faced by co-creating partners (peer service providers and service users). Scaraboto and Figueiredo (2021) found that platform consumers' critical challenges in co-creation are heterogeneity, networked sociality, interpersonal trust, and

personalization and also suggest possible orchestration mechanisms through which platform consumers create value for firms. However, there is a lack of understanding on how platforms can facilitate consumers' (service providers and service users) engagement in the value co-creation process as it often occurs outside the platform and minimize roadblocks in orchestration work. In other words, how platform firms could efficiently capture the value co-created by platform consumers for long-term sustainability and loyalty in the sharing economy (Scaraboto & Figueiredo, 2021; Eckhardt, Houston, Jiang, Lamberton, Rindfleisch, & Zervas, 2019). Moreover, platform consumers interact with the platform before they contact platform consumers. With advances in information technology (IT), C2C services can be orchestrated, with IT playing a pivotal role. It enables platform consumers to sustain transparency and efficiently deliver real-time, high-quality information and services to customers throughout the system quality. The platform consumers can monitor each one's activities and decisions, reducing concerns of opportunistic behavior. Hence, this paper examines the effect of system quality on consumer loyalty in the sharing economy.

2. Main Body

2.1. Information System (IS) success model

From the standpoint of the Information System (IS) success model, system quality is the crucial resource generated by an IS that affects the value from the quality system use (Rai, Tang, Yin, & Du, 2017). The platform can facilitate consumer interaction, make decision-making transparent and efficient, and adjust service offerings in real-time by providing a high-quality system process. While the IS success model identifies system quality as a driver of digital trust and co-creation value, studies examining this fundamental relationship in C2C value creation are still lacking. Motivated to address this critical theoretical void, we formulate the following research question: How does system quality in the service orchestration process facilitate value co-creation in the sharing economy? Our research focuses on sharing system quality, which are crucial to both our practical needs and theoretical interests. As online shopping becomes more popular, customers are shifting from physical to digital transactions. Successful companies foster reliance and loyalty by utilizing digital platforms and benefiting from value co-creation

by its consumers. In 2019, a group of scholars from the MIT Sloan School of Management, University of Surrey, and Harvard Business School discovered that the leading 43 publicly-traded platform firms had almost double the operating profits, growth rates, and market capitalizations of the 100 largest companies in the same industries over a 20-year span, despite employing only half the number of workers (Cusumano, 2020). We investigate sharing platform system quality as they involve the flow of three key factors: ease of use, reliability and security and system quality plays a critical role in managing the other two resources effectively (Rai et al, 2017) to creative rational value to the platform.

2.2 Theory Development

The system quality in sharing economy involves multiple processes, including revealing, cultivating reviews, scaffolding which enable consumers to minimize risks in co-creation (Scaraboto & Figueiredo, 2021). We specifically focus on the digital trust investment (Sundararajan, 2019) orchestration process to develop a framework for how system quality creates relational value in C2C sharing economy. Relational value refers to the mutual benefits that are jointly created by two or more partners. We measure relational value by customer loyalty in the sharing economy context. We consider customer loyalty as a measure of relational value, as it reflects the customer commitment to a mutually beneficial relationship. Figure 1 presents our research model and hypotheses.

2.3 Research model

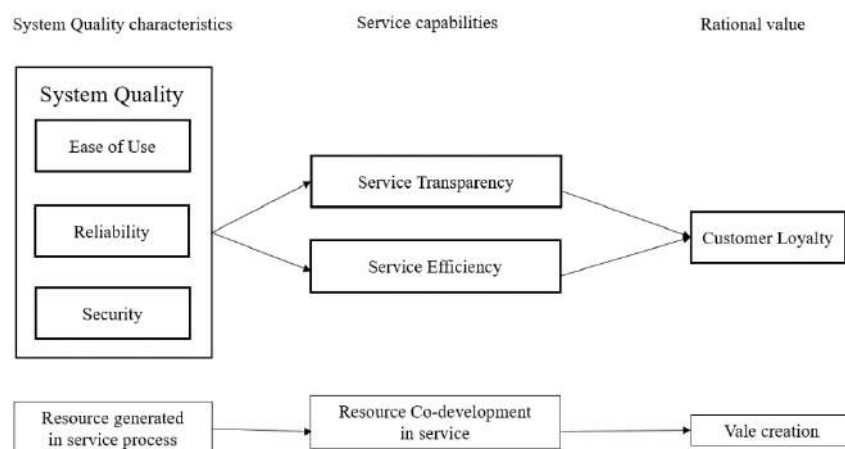


Figure1: Research Framework

The understanding of how system quality: Ease of Use, Reliability and Security impacts relational value is based on the resource management perspective, which builds upon the resource-based view (Rai, et al., 2017). This perspective highlights the importance of resource deployment as the crucial factor that determines the value created by resources. It emphasizes that possessing resources alone is not enough to create value; it is how they are utilized that makes a difference. Incorporating this reasoning into the IS success model, we assert that a top-notch system linked to the orchestration of investment trust is a vital asset produced by the IS to facilitate the process. As a result, we define system quality as "the performance of the IS system in terms of usability, availability, reliability, adaptability, and response time" (Rai, et al., 2017).

2.4 The impacts of system quality on service capabilities

The value creation process in C2C service needs the collaboration from both customers and the service provider. System quality is one of the dimensions of IS success and refers to the performance of the IS system determined by factors such as usability, availability, reliability, adaptability, and response time. Platform consumers prefer business transactions to be transparent and expect to get services completed efficiently. If an online system fails to comply with these standards, users may opt to switch to alternative platforms. With greater transparency to the trust investment mechanism, the customer can quickly identify potential problems and inform the platform service provider. With input from the customer, the platform provider can adapt service execution to meet the customer's changing needs.

H1: Information quality is positively associated with (a) service transparency and (b) service efficiency.

2.5 The impacts of service capabilities on relational value

Enhancing service transparency and efficiency increases customer loyalty (Rane, Achari, & Choudhary, 2023).

H2: Service transparency is positively associated with customer loyalty

H3: Service Efficiency is positively associated with customer loyalty

3 Research Methods and Analysis

For this research, we utilized a survey approach and assessed all questions in the questionnaire using a 5-point scale similar to the Likert scale, with options ranging from strongly disagree to strongly agree. We received 365 responses from online Airbnb users. Out of these respondents, 58.4% identified as female while 41.6% identified as male. Prior to testing the model, we assessed the factor structure of the measures using a confirmatory factor analysis of the multi-item constructs, such as system quality, service transparency, service efficiency and customer loyalty. The data showed that the five-factor model was a good fit ($CFI = .96$, $NFI = .96$, $RMSEA = .05$).

4 Conclusion

By integrating the IS success model with a resource management perspective, we have deepened our comprehension of how system quality drives value co-creation in the sharing economy. Our preliminary empirical evidence suggests that our research framework is generally valid. We have broadened the scope of the resource management perspective to encompass sharing economy business models, as well as conventional ones. Moreover, we have emphasized the potential of IT to facilitate service orchestration, which can result in excellent system quality that both customers and service providers can leverage to enhance service transparency and efficiency, thereby generating relational value.

5 References

- [1] Cusumano, M. A. (2020, February 11). *The future of platforms*. MIT Sloan Management Review.

<https://sloanreview.mit.edu/article/the-future-of-platforms/>

- [2] Eckhardt, G. M., Houston, M. B., Jiang, B., Lamberton, C., Rindfleisch, A., & Zervas, G. (2019). Marketing in the sharing economy. *Journal of Marketing*, 83(5), 5–27.
<https://doi.org/10.1177/0022242919861929>
- [3] Eldrandaly, K. A., Naguib, S. M., & Hassan, M. M. (2015). A model for measuring geographic Information Systems success. *Journal of Geographic Information System*, 07(04), 328–347.
<https://doi.org/10.4236/jgis.2015.74026>
- [4] Rai, A., Tang, X., Yin, Z., & Du, S. (2017, December 10) - *ICIS 2017 Proceedings: Role of Information Quality for Value Co-Creation in B2B Service Orchestration Process*. ICIS 2017 Proceedings. 15. <http://aisel.aisnet.org/icis2017/Strategy/Presentations/15>
- [5] Rane, N., Achari, A., & Choudhary, S.P. (2023) Enhancing Customer Loyalty Through Quality of Service: Effective Strategies to Improve Customer Satisfaction, Experience, Relationship, And Engagement. *International Research Journal of Modernization in Engineering Technology and Science*, 07, 427-452. <https://doi.org/10.56726/irjmets38104>
- [6] Scaraboto, D., & Figueiredo, B. (2021). How consumer orchestration work creates value in the sharing economy. *Journal of Marketing*, 86(2), 29–47. <https://doi.org/10.1177/00222429211027777>
- [7] Sundararajan, A. (2019). Commentary: The twilight of brand and consumerism? Digital trust, cultural meaning, and the quest for connection in the sharing economy. *Journal of Marketing*, 83(5), 32–35. <https://doi.org/10.1177/0022242919868965>

The Effect of Traumatic Cue on Secrete Buying Behavior

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The Effect of Traumatic Cue on Secrete Buying Behavior

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Extended Abstract

Digital Consumers often encounter traumatic cues in daily life, such as news of deaths and injuries caused by food contamination, typhoon disasters, or traffic accidents. This study examines how traumatic cues asymmetrically impact consumers' preferences for secret buying. Findings across three studies reveal that consumers who report previously experiencing traumatic events feel a need for social connection, which attenuates their preference for secrecy buying. This effect is weakened when consumers are in a high perceived self-control capacity. This study expands on trauma and consumer secrecy buying behavior by identifying underlying mechanisms, suggesting retailers adopt a trauma-informed approach to support shoppers.

Keyword: Traumatic Cue, Secrecy Buying, Self-control capacity

1. Introduction

Traumatic experience is a ubiquitous problem that trigger severe and lasting effects on a person's well-being. Waites, Stevens, and Hancock (2023, p. 103277) define it as “an event, or series of events, experienced by an individual as physically or emotionally harmful or life-threatening that has lasting adverse effects on an individual’s functioning and mental, physical, social, emotional, and spiritual well-being”. Trauma can be triggered by many events, causing a significant impact on the consumer experience. According to previous research trauma may increase compulsive buying (Park et al., 2022),

panic buying (Islam et al., 2021; Prentice et al., 2020), materialism (Ruvio et al. 2014), purchase involvement (Seabra et al., 2014), retailer shopping environment (Waites et al., 2023). Nevertheless, little is known about how traumatic events might influence consumers' secret buying behavior. The potential impact is important given that the act of keeping secrets is intrinsically social behavior. Brick, Wight, & Fitzsimons (2022, p.1) defined it as “purposefully concealing information from another person(s)” In our digital world, consumer’s preference to secret buying might provide more opportunities to brand, companies that wins the confidence and remain confidential about consumers buying activities might trigger relational response such brand loyalty, positive word of mouth and online review. Despite negative response, there is little research on the positive effect on traumatic cue. Therefore, this paper examines the effect of traumatic cue on secrete buying behaviors in general. It will contribute to improving consumer’s self-control capacity to counter balance traumatic cues.

2. Main Body

2.1. Theoretical Development

When faced with traumatic events, people may respond to fight or flight (Waites et al., 2023). They often look for strategies to manage the emotional void triggered by their traumatic experiences. Research in psychology suggests that when individuals feel deprived of a specific need, they seek alternative means to satisfy it. The experience of a traumatic event indicates that a person's need to belong is unmet, motivating them to pay attention to social cues that may present opportunities for social reconnection and relationship building (Chen, Wan, & Levy, 2017). Some researchers have found that individuals who experience traumatic events show a greater desire to make new friends and adjust their spending patterns and product preferences to affiliate with others. According to social connectedness theory, humans are social beings with the fundamental need to connect with others. In our context, the traumatic cue would enforce the need for social connection, resulting in public consumption rather than secrete consumption. However, one's perceived self-control level might moderate the feeling of need for social connection. Hence, when consumers experience traumatic cues, they might be willing to avoid secret buying due to an increased need for social connection. The figure

I explain the theoretical framework for this paper.

2.2 Research model

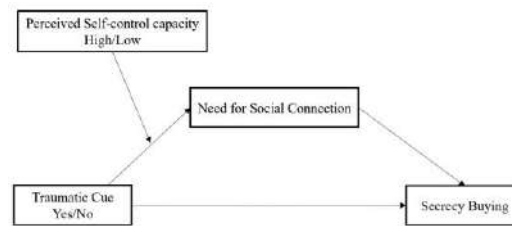


Figure1: Research Framework

2.3 Trauma Cue and Secret consumption behavior

Trauma exposure has become more prevalent in recent decades, especially after the COVID-19 pandemic (Bermes, 2021). It is now considered normal for people to experience multiple traumatic events. From a behavioral science perspective, after experiencing trauma, individuals may exhibit a range of behaviors to fight or flight (Center for Substance Abuse Treatment, 2014). Hence, those who have undergone such experiences often struggle to adapt and cope (Kessler, 2000; Bermes, 2021). Trauma survivors may seek support from family and friends or avoid seeking help due to fear of burdening others, being judged, or being misunderstood. They may also feel shame and a sense of betrayal. From the consumer's perspective, it is common for trauma survivors to exhibit different consumption behaviors both in social and close family settings. Recently, a study by Peterson (2021) revealed that 60% of women and 44% of men have secretly consumed products such as alcohol, video games, and chocolate, especially in romantic relationships. The reason can be either preventive or promotion motives. For example, someone may want their partner to continue to succeed with their diet choices, so they hide the candy wrapper so that their partner would not see it. In a romantic relationship, couples may also keep a purchase secret for prevention reasons, such as making a large purchase under budget constraints and keeping it a secret from each other (Peterson, 2021). Secrecy is defined as an act of deception by omission to prevent another person from knowing something (Lane & Wegner 1995). Studies have shown that almost everyone has an undisclosed experience or secret (Rodas & John, 2019). There are various types of secrets discussed in the psychology literature, such

as sexual secrets, including information about sexual partners and practices and secret crushes (Lane, Wegner, Erber, & Gilmour, 2013), family secrets (finances, abuse) (Kelly & McKillop, 1996). We are primarily interested in secrecy within the consumption domain. Rodas and John (2019, 9.1094) define secrete consumption as “consuming a product with the intent of hiding the consumption from others.” They also differentiate secrete consumption from private consumption. Consumption that is intended to be hidden from others is called secret consumption, while private consumption can occur when one is alone. Moreover, secret consumption can take place in both private and public places. Therefore, we argue that traumatic cues are less likely to influence secret buying behaviors due to their need for social connection. Based on the research framework, we argue that consumers who report previously experiencing traumatic events might feel a greater need for social connection, which attenuates their preference for secrecy buying. This effect is weakened when consumers are in a high perceived self-control capacity.

3. Study design, Analysis and Results

We utilized an experimental study design to test our predictions. The studies used Survey Cake to construct an electronic questionnaire and find an individual in the Line groups to send a private message. Study 1 was a one factor 3(Perceived seriousness high vs. low vs. control) between-subject design. Study 2 was a 2 (traumatic cue vs. control) * 2(perceived self-control capacity high vs. low) between-subject design.

In Study 1, participants are randomly assigned to four groups. Participants were first asked to read news. In the high seriousness group, there was a real news report about 44 people being sent to the hospital with salmonella poisoning, one of whom died. In the low seriousness group, only food poisoning was reported and no death was reported. In the control group, there is a science news article about salmonella. Participants were then asked to imagine that they were travelling home past a new drinks shop and bought a drink, and were then asked how likely they would be to talk about it with family members or close partners when they got home, and how likely they would be to keep it a secret if asked. In Study 2, participants are randomly assigned to four groups. Participants were asked

to imagine that they were in a car, looking out of the window. The traumatic cue group was presented with a questionnaire with three photos of the aftermath of a typhoon, while the control group was presented with three photos of a normal landscape. Participants were then asked to read a fictional research article. In the high self-control capacity group, the article concluded that self-control capacity is generally higher in modern people, while the low self-control capacity group indicated that self-control capacity is generally lower in modern people.

3.1 Results

Study 1 tested the effect of traumatic cues on consumers' preference for secret buying. A one-way ANOVA confirmed that participants in traumatic conditions showed no interest in secret buying ($M = 6.09$, $SD = .83$) than those in non-traumatic conditions ($M = 4.33$, $SD = 1.73$; $F(1, 102) = 30.44$; $p < .001$). In study 2, we analyzed the mediating effect of the need for social connectedness with 5000 bootstraps. The indirect effect supports the mediation ($b = 0.74$, $SE = .18$, 95% $CI = [0.3701, 1.0914]$). Similarly, we ran PROCESS model 7 (Hayes, 2017) to analyze the moderated mediating of perceived self-control capacity. The indirect effect supports the moderated mediation ($b = -0.41$, $SE = .17$, 95% $CI = [-0.7982, -0.1268]$).

4. Conclusion

The research examines how trauma affects consumers' secretive buying behavior. Specifically, trauma cue attenuates the choice for secret buying when there is a need for social connection to recover from the traumatic event. However, the personal characteristic of perceived self-control was found to mitigate the traumatic effect. The findings will allow retailers to strategically organize social events, provide different shopping options to recover from traumatic experience.

5. References

- [1] Brick, D. J., Wight, K. G., & Fitzsimons, G. J. (2022). Secret consumer behaviors in close relationships. *Journal of Consumer Psychology*, 33(2), 403–411. <https://doi.org/10.1002/jcpy.1315>

- [2] Chen, R. P., Wan, E. W., & Levy, E. P. (2017). The effect of social exclusion on consumer preference for anthropomorphized brands. *Journal of Consumer Psychology*, 27(1), 23–34.
<https://doi.org/10.1016/j.jcps.2016.05.004>
- [3] Kelly, A. E., & McKillop, K. J. (1996). Consequences of revealing personal secrets. *Psychological Bulletin*, 120(3), 450–465. <https://doi.org/10.1037/0033-2909.120.3.450>
- [4] Lane, J. D., Wegner, D. M., Erber, R., & Gilmour, R. (2013). Secret Relationships: The Back Alley to Love. In R. Erber & R. Gilmour (Eds.), *Theoretical Frameworks for Personal Relationships* (pp. 67–85). Hillsdale,. <https://doi.org/10.4324/9780203772065-8>
- [5] Peterson, J. M. (2021) *Understanding Secret Consumer Purchases and Their Effects on Brands"* Honors Theses and Capstones. 592. <https://scholars.unh.edu/honors/592>
- [6] Rodas, M. A., & John, D. R. (2019). The secrecy effect: secret consumption increases women's product evaluations and choice. *Journal of Consumer Research*, 46(6), 1093–1109.
<https://doi.org/10.1093/jcr/ucz041>
- [7] Treatment, C. F. S. A. (2014). *Understanding the impact of trauma*. Trauma-Informed Care in Behavioral Health Services - NCBI Bookshelf. <https://www.ncbi.nlm.nih.gov/books/NBK207191/>
- [8] Waites, S. F., Stevens, J., & Hancock, T. (2023). Trauma's effects on shopper choice confusion: The role of psychological hardiness and retailer strategies as mitigating factors. *Journal of Retailing and Consumer Services*, 72, 103277. <https://doi.org/10.1016/j.jretconser.2023.103277>

Is “Ugly” Food Still Good? An Examination into the Determinants of Purchase Intentions of Inglorious Fruits and Vegetables (IFV) in the Context of Smallholder Farmers in Thailand

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Is “ugly” food still good?

An examination into the determinants of purchase intentions of Inglorious Fruits and Vegetables (IFV) in the context of smallholder farmers in Thailand

Abstract

Global trade liberalisation has provided opportunities to increase agricultural exports. However, beyond contributing to global food waste, stringent aesthetic requirements for agricultural products have detrimental effects on farmers' who uphold the pre-determined appearance of their produce. Although suboptimal food commercialisation is now being pervasively implemented in western countries, it is still a novel concept in Asian markets, where a lack of knowledge about consumers' perceptions exists. To address this important gap, we employ behavioural reasoning theory to examine critical factors influencing purchase intentions. Using a sample of Thai consumers, we test the relationships between the key constructs in our model.

Keywords: *Inglorious Fruits and Vegetables, Behavioural Reasoning Theory, Purchase Intention, Emerging Markets, Thailand.*

1. Introduction

Worldwide revenues in vegetables, fruits and nuts are estimated to be worth over \$1 trillion in 2023 (Statista, 2023) and this is set to increase. However, in recent years consumers across the world have faced increasing food prices and shortages, exacerbated by the COVID-19 pandemic, supply chain disruptions, climate events and the war in Ukraine. Given the vast sums of global revenues and emergent challenges, innovative new approaches are required to sustain and facilitate the industries growth in emerging markets. The deviation of cosmetically idealised prototypes of fruits and vegetables, such as discolouration, misshape, and abnormal size (referred to as Inglorious Fruits and Vegetables (IFV)) relate to global food waste as it influences consumers' value-perceived quality and suitability for human consumption (Gustafsson and Stage, 2011). Food waste is a significant issue, around one third of the food produced worldwide is wasted each year (Mazzucchelli et al., 2021), causing approximately 8% of greenhouse gas emissions (Srinivasan and Eden, 2021).

The setting for our study is Thailand, an understudied Asian country experiencing rapid economic development. In less than a generation, Thailand has sustained strong growth using an export led approach and progressed from being a low-income, to an upper-income nation (The World Bank, 2023). Thailand is representative of other important Asian markets in that it is both an exporter and importer of fruits and vegetables. Within this context, in Thailand, the negative consequences of food waste flow upstream and effect producers' quality of life. Retailers and distributors impose aesthetic specifications on growers whose production capacity are limited (Parfitt et al. 2010). Farmers have less negotiating power to secure higher farmgate prices as a result (Jayne et al. 2006). Meanwhile it generates issues with pesticide overuse, resulting in widespread cases of poisoning and around 600 deaths from chemical farming side effects annually (The Nation Thailand, 2018). Therefore, producers in developing markets are frequently left in a vulnerable position, despite their central role in food supply-chain resilience (Sinkovics, Sinkovics and Archie-Acheampong, 2021). Surprisingly, there has been scant scholarly focus in this area and a significant gap exists when considering Asian consumers views and perspectives of IFV. Our research provides an important and timely contribution to the International Business (IB) literature by exploring Thai consumers' perspectives toward imperfect fruit and vegetables consumption.

2 Literature Review and framework

Our study is underpinned by behavioral reasoning theory (BRT) which “proposes that reasons serve as important linkages between beliefs, global motives (e.g., attitudes, subjective norms, and perceived control), intentions, and behavior” (Westaby, 2005, p.97). This theoretical perspective differentiates between beliefs (subjective probability judgements) and reasons (explanations used in defence of behavioral choices). Theorizing reasons (*for and against*) associated with intentions and behaviors provides new insights in the IB domain (e.g. Calza, Cannavale and Nadali, 2020). However, this theoretical lens has been largely overlooked in the field of IB to date, as such we hope our study will also serve to ignite further interest in this perspective. Based on a review of prior literature, we identified four key variables; price consciousness (PC), environmental concern (EC), institutional trust (INT), and interpersonal trust (IPT), to employ within our model as *reasons for* and two variables; quality inferior (QI) and unappealing appearance (UA), as *reasons against*. A previous study by Xu et al. (2021) conducted in the USA used EC and PC as *reasons for* and UA as *reasons against*. We

extend their work by conducting research within an emerging Asian market, significantly, we also incorporated two new trust constructs. Trust is important in reducing perceived risk for studies involving food (Janssen and Hamm, 2014). Trust is divided into (a) interpersonal trust (IPT), this refers to direct communication between growers and customers, facilitating customers the chance to gain a deeper understanding of the issues that small farmers face leading to sympathy and (b) institutional trust (INT) refers to food safety certification and labelling guaranteed by government or third parties to reduce perceived risk and distrust towards agricultural product consumption.

Acknowledging the importance of customer attitudes in our model, we also introduce it as a mediator.

Overall, the hypotheses were postulated as follow:

Hypothesis 1: <i>Reasons for</i> has a positive influence on purchase intention towards IFV.
Hypothesis 2: <i>Reason for</i> has a positive influence on consumer attitude towards IFV.
Hypothesis 3: <i>Reasons against</i> has a negative influence on purchase intention towards IFV.
Hypothesis 4: <i>Reason against</i> has a negative influence on consumer attitude towards IFV.
Hypothesis 5: Consumer attitude has a positive influence on IFV purchase intention.
Consumer attitude mediates the relationship between:
Hypothesis 5a) <i>Reasons against</i> and IFV purchase intention
Hypothesis 5b) <i>Reasons for</i> and IFV purchase intention

3. Methodology and results

The source of the empirical work is survey data collected from 141 Thai consumers who reside in Thailand. Pre-qualification suitability criteria ensured that participants were above 18 years old and have recent experience shopping for fruits and vegetables. To measure our independent, dependent and mediating variables, established constructs were adapted from prior studies. Structural equation modeling (SEM), specifically, the two-stage analysis of PLS-SEM was employed for outer model evaluation and structural model assessment involving hypothesized relationships testing. For the first step, an evaluation of the measurement model was conducted with regards to normality, reliability, convergent validity and discriminant validity. Then, in the second step, the structural model was assessed using maximum likelihood to assess the significance of the hypothesised relationships.

Table 4.1 Path coefficients for the model relating BRT and purchase intention/attitudes towards IFV.

Paths	β	Std. Errors	t-value	p-value	Effect size (f^2)	Verification	VIFs
H1: Reason for $\rightarrow$ Intention	0.187	0.057	11.842	0.000	0.061	Accepted	1.490
H2: Reason for $\rightarrow$ Attitude	0.556	0.073	7.65	0.000	0.424	Accepted	1.046
H3: Reason against $\rightarrow$ Intention	-0.081	0.066	1.237	0.216	0.016	Rejected	1.048
H4: Reason against $\rightarrow$ Attitude	-0.029	0.085	0.337	0.736	0.001	Rejected	1.046
H5: Attitude $\rightarrow$ Intention	0.67	0.066	2.852	0.004	0.809	Accepted	1.435

Table 4.2 Specific indirect effects

Paths	Effect	Std. Errors	p-Value	Mediation
H5(a): Reason against → Attitude → Intention	-0.019	0.058	0.737	Rejected
H5(b): Reason for → Attitude → Intention	0.373	0.060	0.000	Accepted

*Reasons for (PC-price consciousness, EC-environmental concern, INT-institutional trust, IPT-interpersonal trust).
Reasons against (QI - quality inferior , UA – unappealing appearance).*

4. Discussion

As predicted, the results (c.f. tables 4.1 and 4.2) suggest that *reasons for* (PC, EC, INT and IPT positively influence Thai consumers' attitudes and intention to purchase IFV. Therefore, H1 and H2 are supported. Given that PC and EC are shown to be key motivators, our findings demonstrate that purchasing suboptimal food can simultaneously serve consumers egoistic values through economic advantage (cheaper prices), and their altruistic values by supporting local producers and reducing food waste. With regard to trust, this study is the first to establish the positive influence of INT and IPT on determinants of IFV. This is an important contribution and the results for INT are align with work in the organic food sector that has established certification stimulates trust. International certifications for food safety standards require adherence to requirements across all stages of the value chain from farmers produce to processors and distribution (Montiel, Christmann and Zink (2019). Therefore, compliance and certification of IFV could lead to increased export orders for producers in emerging markets. Our findings are consistent with prior literature that has found a correlation between higher levels of IPT and INT within unconventional food systems (Chen et al., 2021). We would contend there is a symbiotic relationship at play, increased IPT will reassure buyers and boost INT, while in synergy, an environment with higher levels of INT reinforces and supports growth in IPT.

Contrary to expectations, *reasons against* (QI and UA) were not found to have a significant negative effect on purchase intention or attitudes towards IFV. Thus, H3 and H4 were rejected and the findings present a different picture to recent scholarly work into IFV being conducted in developed markets (e.g. Spielmann, Gomez and Minton, 2023). Our results imply that Thai consumers have lower levels of concern about cosmetically imperfect fresh produce. There is a correlation between higher levels of consumer experience and familiarity with the cultivation of produce and lower levels of bias towards the aesthetic beauty of misshapen fruits and vegetables (Hingston and Noseworthy, 2020). Therefore, one explanation for the surprising findings could be attributed to Thailand being an agricultural nation with an extremely high proportion of the population working in the sector (30-40%).

The hypothesised link (H5) between consumer attitudes and purchase intentions of IFV was confirmed. However, findings from our complimentary mediation analysis, indicate only one of the mediated paths was significant (H5a rejected, H5b accepted). This mediation analysis is consistent with findings from the direct effects (H1 and H3). That is to say consumer attitudes do not mediate the relationship between *reasons against* and IFV purchase intention. Conversely, the results do indicate that the mean indirect effect of the interaction between *reasons for* on IFV purchase intention through consumer attitudes is positive and significant. These key findings relating to consumer attitudes are linked to research in the food domain that suggests consumer attitudes can be altered. For example, by normalising food practises that teach consumers to value food and knowledge about the issue of food waste (Makhal et al. 2020). There is also scope to enhance the sales environment, by developing store hygiene around IFV and providing salespeople with a full understanding of the characteristics of suboptimal food in order for them to deliver trustworthy information to buyers (Cao et al. 2023). Given that consumers are drawn to products that appear familiar, attitudes and purchase intentions can be altered through increased exposure to extremely abnormally shaped fruit (Loebnitz, Schuitema and Grunert, 2015). This experience of unattractive produce could then counter any potential negative attitudes formed through self-perception connections of IFV (e.g. Grewal et al., 2019).

5. Conclusion

The results from this study provide an important theoretical and empirical contributions to the emergent literature examining the determinants of purchase intentions and attitudes towards IFV. We have shifted the boundaries of knowledge in a number of ways and this is the first study to examine the phenomenon in an emerging market context. From a theoretical perspective, we adopted BRT as a robust framework to assess the links between *reasons for*, and *reasons against* on consumer attitudes and purchase intentions of IFV. Our empirical findings demonstrate that *reasons for* are the primary driver and have a significant effect on both consumer attitudes and purchase intentions of IFV. We suggest that familiarity with agricultural products as an explanation for the insignificant effects of *reason against*. Consumer attitudes have both a direct effect on purchase intentions and a mediating effect on the link between *reasons for* and purchase intentions of IFV. Therefore, positive attitude directly encourages intention to purchase IFV but also acts as the centrepiece of a social psychological process, bridging the motivation-intention gap.

6. References

- Calza, F., Cannavale, C. and Nadali, I.Z. (2020). How do cultural values influence entrepreneurial behavior of nations? A behavioral reasoning approach. *International Business Review*, 29(5), p.101725.
- Cao, S., Gong, S. and Bai, L. (2023). Situational variables that affect consumers' suboptimal food purchasing behavior in China. *British Food Journal*, 125(1), 145-166.
- Chen A. L., Miranda, B.V., Parcell, J.L. and Chen, C. (2019). The foundations of institutional-based trust in farmers' markets, *Agriculture and Human Values*, 36(1), 395-410.
- Grewal, L., Hmurovic, J., Lamberton, C. and Reczek, R.W. (2019). The self-perception connection: Why consumers devalue unattractive produce. *Journal of Marketing*, 83(1), pp.89-107.
- Gustavsson, J. and Stage, J. (2011). Retail waste of horticultural products in Sweden, *Resources, Conservation and Recycling*, 55, 554-556.
- Hingston S.T. and Noseworthy, T.J. (2020). On the epidemic of food waste: Idealized prototypes and the aversion to misshapen fruits and vegetables, *Food Quality and Preference*, 86, 1-10.
- Janssen, M. and Hamm, U. (2014). Governmental and private certification labels for organic food: Consumer attitudes and preferences in Germany, *Food Policy*, 49(1), 437-448.
- Jayne, T. S., Zulu, B. and Nijhoff, J. J. (2006). Stabilizing food markets in eastern and southern Africa, *Food Policy*, 31, 328 -341.
- Loebnitz, N., Schuitema, G. and Grunert, K.G. (2015). Who buys oddly shaped food and why? Impacts of food shape abnormality and organic labeling on purchase intentions. *Psychology & Marketing*, 32(4), pp.408-421.
- Makhal, A., Thyne, M., Kristen, R. and Miroso, M. (2020). I don't like wonky carrots- an exploration of children's perceptions of suboptimal fruits and vegetables, *Journal of Retailing and Consumer Services*, 54, 1-10.
- Mazzucchelli, A., Gurioli, M., Graziano, D., Quacquarelli, B. and Aouina-Mejri, C. (2021). How to fight against food waste in the digital era: Key factors for a successful food sharing platform. *Journal of Business Research*, 124, pp.47-58.
- Montiel, I., Christmann, P. and Zink, T. (2019). The effect of sustainability standard uncertainty on certification decisions of firms in emerging economies. *Journal of Business Ethics*, 154, pp.667-681.
- Parfitt, J., Bartheland, M. and Macnaughton, M. (2010). Food waste within food supply chains: quantification and potential for change to 2050', *Philosophical Transactions of the Royal Society B: Biological Sciences*, 365(1554), 3065-3081.
- Sinkovics, N., Sinkovics, R.R. and Archie-Acheampong, J. (2021). Small-and medium-sized enterprises and sustainable development: In the shadows of large lead firms in global value chains. *Journal of International Business Policy*, 4(1), pp.80-101.
- Spielmann, N., Gomez, P. and Minton, E. (2023). The Role of the Ugly= Bad Stereotype in the Rejection of Misshapen Produce. *Journal of Business Ethics*, pp.1-25.
- Srinivasan, N. and Eden, L. (2021). Going digital multinationals: Navigating economic and social imperatives in a post-pandemic world. *Journal of International Business Policy*, 4(2), pp.228-243.
- Statista (2023) Fresh Fruit and Vegetables Worldwide. Statista Market Insights, Consumer, Food.
- The Nation Thailand. (2018). *Toxic farm chemicals take a toll on lives*. Available at: <https://www.nationthailand.com/in-focus/30354068> (Accessed: 5 April 2023)
- The World Bank. (2023). *The World Bank in Thailand*. World Bank. Available at: <https://www.worldbank.org/en/country/thailand/overview> (Accessed: 20 July 2023)
- Westaby, J.D. (2005). Behavioral reasoning theory: Identifying new linkages underlying intentions and behavior. *Organizational Behavior and Human Decision Processes*, 98(2), pp.97-120.
- Xu, Y., Jeong, E., Jang, S.C. and Shao, X. (2021). Would you bring home ugly produce? Motivators and demotivators for ugly food consumption, *Journal of Retailing and Consumer Service*, 59, 1-10.

Do Foreign Institutional Investors Curb Carbon Emissions? Evidence from an Emerging Economy

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Do Foreign Institutional Investors Curb Carbon Emissions? Evidence from an

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Extended Abstract

This study examines the effect of foreign institutional investors on corporate carbon emissions of Chinese listed firms from 2010 to 2019. Our findings support the monitoring view of foreign institutional ownership and find that foreign institutional investors have a negative effect on corporate carbon emissions. Our results remain robust to a battery of endogeneity tests including the instrumental regression model and the Heckman selection model. Our research highlights the critical role that foreign institutional investors play in addressing environmental issues in emerging economies and provides a deeper understanding of this phenomenon.

Keywords: foreign institutional investors, monitoring, corporate carbon emissions, emerging economies, China

1. Introduction

With the continuous deepening of capital internationalization and the accelerated development of economic globalization in recent decades, more emerging markets have opened their domestic capital markets to foreign institutional investors (FIIs) (Arouri et al., 2010). Despite their growing significance, current studies have mainly focused on the impact of FIIs on firms' financial performance and governance qualities (Bena et al., 2017; Kim et al., 2020). However, there remains a notable gap in understanding the potential effect of FIIs on carbon emissions in emerging economies.

Environmental problems have emerged as a pressing concern for emerging economies due to their adverse impacts on the natural environment. Global warming, primarily driven by greenhouse gas emissions, poses a formidable challenge to the global community and significantly impacts the lives of millions around the world. Recent studies show that institutional investors have been identified as one influential stakeholder for firms' commitments to sustainability issues in developed economies (Calvet et al., 2022). In addition, asset management companies face mounting public pressure to evaluate climate risks within their investment portfolios (Krueger et al., 2020). Motivated by these developments, our study aims to examine the relationship between FIIs and carbon emissions of companies in their portfolios. The existing literature on FIIs provides two contrasting predictions (Mian et al., 2023). The monitoring view suggests that FIIs, lacking business relationships with local networks (Bena et al., 2017), can provide independent oversight over managers, leading to a reduction in carbon emissions. On the other hand, the information disadvantage view argues that FIIs may not be effective monitors due to their significant information acquisition and processing costs arisen from geographical distance and cultural or language barriers (Kim et al., 2016). These challenges hinder their ability to monitor self-interested managers. Given the two opposing predictions, the impact of FIIs on carbon emissions remains an empirical question that requires investigation.

1.1. Main text

To examine this relationship, our study focuses on a sample of Chinese publicly listed companies during the time span of 2010 to 2019. Empirically, due to the lack of corporate carbon emission disclosure, direct measurement is often not feasible. To address this issue, we derive a comparable firm-level carbon emission measure using insights from the recent energy economics literature (Wang et al., 2023). Additionally, we manually collect data on foreign institutional investors of Chinese listed firms over 2010-2019, closely following the steps in Chen et al. (2022). Consistent with the monitoring view, our results show that FIIs reduce corporate carbon emissions. We conduct a number of tests to establish the robustness of the main finding, such as the two-stage least squares (2SLS) regression and the Heckman two-step method and our results continue to hold.

Furthermore, research suggests that FIIs are influenced by the norms and practices of the regions in which they come from. Therefore, we expect that FIIs from regions with a greater focus on environmental issues and green innovation may possess more energy-saving and carbon emission-reduction experiences.

Moreover, we delve deeper into the potential mechanisms through which FIIs impact corporate carbon emission. Given that reducing carbon emissions can impose short-term financial costs on firms, managers may lack the incentive to pursue such initiatives. Thus, the role of external monitoring becomes crucial. If FIIs play an effective governance role, they are supposed to be more effective in monitoring investee firms beset with severe information

asymmetries or firms with weaker governance qualities. Specifically, regarding information asymmetries, when investee firms have less analyst following or poor reporting qualities, FIIs have a greater effect in reducing carbon emissions. Concerning governance qualities, we find that the negative impact of FIIs is more pronounced when investee firms have lower levels of board independence or board shareholding. Overall, the results indicate that FIIs act as effective monitors and reduce corporate carbon emissions.

This study makes contributions to the existing research in several aspects. First, our work enriches the existing literature on the determinants of carbon emissions. Considering the importance of achieving the net-zero economy, scholars have explored what factors can achieve this goal (Krueger et al., 2020). Prior studies have focused on how macro-level factors influence corporate carbon emissions. However, there is a growing body of work on firm-level factors. We contribute to this rich literature by demonstrating that FIIs can serve as a catalyst for carbon reductions across national borders.

Second, we expand research on the role of FIIs by highlighting their potential to improve not only the financial performance of their investee firms, but also their environmental practices. Recently, there is growing attention to the impact of FIIs on their investee firms' social and environmental performance. Our study contributes to this strand of literature by providing valuable insights into how FIIs can transfer environmentally friendly technologies across nations and reducing carbon emissions.

Third, our paper contributes to the existing research on foreign investor heterogeneity. Recent studies suggest that the behavior of FIIs is strongly shaped by their home country characteristics. Building on prior work, our study investigates the role of FIIs' home country environmental values and green innovation in curbing corporate carbon emissions. Specifically, we provide nuanced insights by demonstrating that FIIs from regions with high levels of environmental awareness and green innovation are better able to curb corporate carbon emissions. By highlighting the potential for environmental practices to be transferred from developed economies to emerging economies by FIIs, our study deepens our current understanding of the role of heterogeneous FIIs in an increasingly integrated global capital market.

2. References

- [1] Arouri, M. E. H., Jawadi, F., and Nguyen, D. K. 2010. The dynamics of emerging stock markets. *Springer*. <https://doi.org/10.1007/978-3-7908-2389-9>
- [2] Bena, J., Ferreira, M. A., Matos, P., and Pires, P. 2017. Are foreign investors locusts? The long-term effects of foreign institutional ownership. *Journal of Financial Economics*, 126(1), 122-146. <https://doi.org/10.1016/j.jfineco.2017.07.005>
- [3] Calvet, L., Gianfrate, G., and Uppal, R. 2022. The finance of climate change. *Journal of Corporate Finance*, 73, 102162. <https://doi.org/10.1016/j.jcorpfin.2022.102162>
- [4] Chen, L., Han, M., Li, Y., Megginson, W. L., and Zhang, H. 2022. Foreign ownership and corporate excess perks. *Journal of International Business Studies*, 1-22. <https://doi.org/10.1057/s41267-021-00466-7>

- [5] Kim, J. B., Li, X., Luo, Y., and Wang, K. 2020. Foreign investors, external monitoring, and stock price crash risk. *Journal of Accounting, Auditing & Finance*, 35(4), 829-853. <https://doi.org/10.1177/0148558X19843358>
- [6] Kim, I., Miller, S., Wan, H., and Wang, B. 2016. Drivers behind the monitoring effectiveness of global institutional investors: Evidence from earnings management. *Journal of Corporate Finance*, 40, 24-46. <https://doi.org/10.1016/j.jcorpfin.2016.06.006>
- [7] Krueger, P., Sautner, Z., and Starks, L. T. 2020. The importance of climate risks for institutional investors. *The Review of Financial Studies*, 33(3), 1067-1111. <https://doi.org/10.1093/rfs/hhz137>
- [8] Mian, R. U., Irfan, S., and Mian, A. 2023. Foreign institutional investment horizon and earnings management: Evidence from around the world. *International Review of Financial Analysis*, 102509. <https://doi.org/10.1016/j.irfa.2023.102509>
- [9] Wang, Z., Fu, H., and Ren, X. 2023. Political connections and corporate carbon emission: New evidence from Chinese industrial firms. *Technological Forecasting and Social Change*, 188, 122326. <https://doi.org/10.1016/j.techfore.2023.122326>

Language in MNEs: A Bibliometric Analysis

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Language in MNEs: A Bibliometric Analysis

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Extended Abstract

This paper presents a comprehensive bibliometric analysis of language-related research in the context of multinational enterprises (MNEs). The study aims to provide insights into the existing literature, research frameworks, methodologies used, and the key findings in this field. This review provides insights into the key authors, countries, institutions, outlets, articles, and themes in language-related research in MNEs spanning a period of 33 years, from 1990 to 2023. By analyzing a wide range of scholarly articles, this study offers a systematic overview of the current state of knowledge and identifies potential research gaps. The findings contribute to a better understanding of the role of language in MNEs and provide valuable implications for future research and managerial practices.

Keyword: Language, Cultural distances, Bibliometric analysis, Liability of foreignness

1. Introduction

Language plays a crucial role in the operations and strategies of multinational enterprises (MNEs). As MNEs expand their operations globally, they encounter diverse linguistic environments that present both opportunities and challenges. Language affects various aspects of MNEs, including communication, negotiation, knowledge transfer, and cultural adaptation. Therefore, understanding the role of language in MNEs is vital for effective cross-border management and international business strategies.

The significance of language in MNEs lies in its impact on communication effectiveness. Effective communication is crucial for building relationships, coordinating activities, and transferring knowledge within MNEs (Håkansson & Kappen, 2017). Language barriers can hinder effective communication, leading to misunderstandings, conflicts, and inefficiencies. Moreover, language is closely intertwined with culture, and cultural differences can significantly impact business practices and strategies (Hofstede, 1980).

The research objectives of this study are twofold. Firstly, we aim to conduct a comprehensive bibliometric analysis to assess the existing literature on language in MNEs. By examining the publication trends, authorship patterns, and citation networks, we aim to identify the key themes, influential authors, and major research outlets in this field. Secondly, we seek to identify research gaps and provide recommendations for future investigations to advance the understanding of language in MNEs.

The scope of this study encompasses scholarly articles that specifically focus on language-related issues in the context of MNEs. We aim to include studies that explore various dimensions of language, such as language diversity, language strategies, language training, and the impact of language on different aspects of MNEs' operations. By focusing on the intersection of language and MNEs, we aim to provide a comprehensive analysis of the literature in this specific domain.

In terms of the methodological approach, this study employs a bibliometric analysis. Bibliometrics is a quantitative research method that analyzes publication patterns, authorship networks, and citation data to assess the development and impact of a specific research field (Acedo & Casillas, 2005). By applying bibliometric techniques, we can systematically review and analyze a large volume of scholarly articles to gain insights into the current state of knowledge on language in MNEs.

In the following sections, we will present a detailed review of the literature and framework, describe the methodology used for the bibliometric analysis, present the results of the analysis, and discuss the findings in the context of existing research and future directions.

2. Literature and framework

2.1 Overview of key theories and concepts related to language in MNEs

Several key theories and concepts have been developed to understand the role of language in multinational enterprises (MNEs). One prominent theory is the Language Management Theory (LMT) proposed by Piekkari et al. (2009). LMT emphasizes the importance of language as a strategic resource for MNEs and suggests that language can be actively managed to enhance competitive advantage. According to LMT, language can be a source of differentiation, facilitating knowledge creation, transfer, and integration within MNEs.

Another relevant concept is Language Diversity Management (LDM), which focuses on how MNEs handle linguistic diversity within their global workforce. LDM recognizes that MNEs operate in linguistically diverse contexts and need to develop strategies to effectively manage language differences. This concept highlights the importance of language policies, language training programs, and the use of lingua franca in facilitating communication and collaboration among employees from different language backgrounds (Brett, 2001).

2.2 Review of relevant literature in the field

A review of the literature reveals a growing body of research on language in multinational enterprises (MNEs). Numerous studies have explored different aspects of language within MNEs, including language strategies, language use in international negotiations, language training programs, and the impact of language on knowledge transfer and innovation.

Li et al. (2018) conducted a systematic review of the literature on language strategies in MNEs. Their study identified three primary types of language strategies: monolingual, bilingual, and multilingual strategies. They found that the choice of language strategy depends on various factors, such as the nature of MNEs' operations, the linguistic diversity of the host country, and the strategic goals of the MNEs.

Language also plays a crucial role in international negotiations, significantly influencing negotiation processes and outcomes (Brett, 2001). The choice of language and the level of language proficiency have been shown to have a substantial impact. Research indicates that negotiators who can effectively communicate in the language of their counterparts have a higher likelihood of reaching mutually beneficial agreements (Gelfand et al., 2012).

Furthermore, language training programs have been explored as a means to enhance communication and collaboration within MNEs. These programs aim to improve employees' language skills and cultural understanding, enabling them to navigate cross-cultural interactions more effectively (Kogut & Singh, 1988). By investing in language training, MNEs can foster better communication, facilitate knowledge transfer, and promote innovation within their global operations (Song, 2014).

The impact of language on knowledge transfer and innovation within MNEs has also received attention in the literature. Language barriers can hinder the effective transfer of knowledge across different units and locations within an MNE (Inkpen & Beamish, 1997; Ambos, 2009). Researchers have explored strategies to overcome these barriers, such as the use of common languages or translation services, to facilitate knowledge sharing and foster innovation on a

global scale (Lang, 2001; Oshri et al., 2008; Welch, 2008; Li, 2010;).

3. Method

In this study, we conducted a bibliometric analysis to explore the landscape of research on language in multinational enterprises (MNEs). Bibliometric analysis is a valuable research methodology for examining the publication trends, authorship patterns, citation networks, and influential articles and journals in a specific field (Donthu et al., 2021). The analysis was conducted using VOSviewer, a widely used software for the visualization of bibliometric networks, and the literature database Web of Science.

3.1 Data collection and selection criteria

The research procedure was meticulously conducted through several stages to ensure the robustness of the data gathered. As shown in Figure 1, an exhaustive search was embarked upon within the Web of Science database (Clarivate, 2023). The search parameters were defined by the keywords "Language in MNEs" or "Language in international business". The temporal boundaries were set from the year 1990 to 2023, as the first paper appeared within such domain in 1990. This comprehensive search yielded an initial pool of 5370 articles. Subsequently, the pool of articles was subjected to a scholarly filtration process. The inclusion criteria were set to encompass only journal articles, conference proceedings, review articles, and book chapters (Huff, 2009). This filtration process refined the sample size to a total of 5285 articles. To ensure linguistic coherence and accessibility, a language filter was employed (Harzing & Pudelko, 2013). The inclusion criteria were narrowed down to articles exclusively written in English. This linguistic filtration process further refined the sample size to 5188 articles. The articles were further filtered based on their subject matter. The inclusion criteria were specified to articles that were categorized under the subjects of Business, Economics, Operations research, and Management science (Huff, 2009). This subject matter filtration process resulted in a final sample size of 1669 articles. The final sample, comprising

1669 articles, was then subjected to rigorous bibliometric analysis to extract pertinent data and insights.

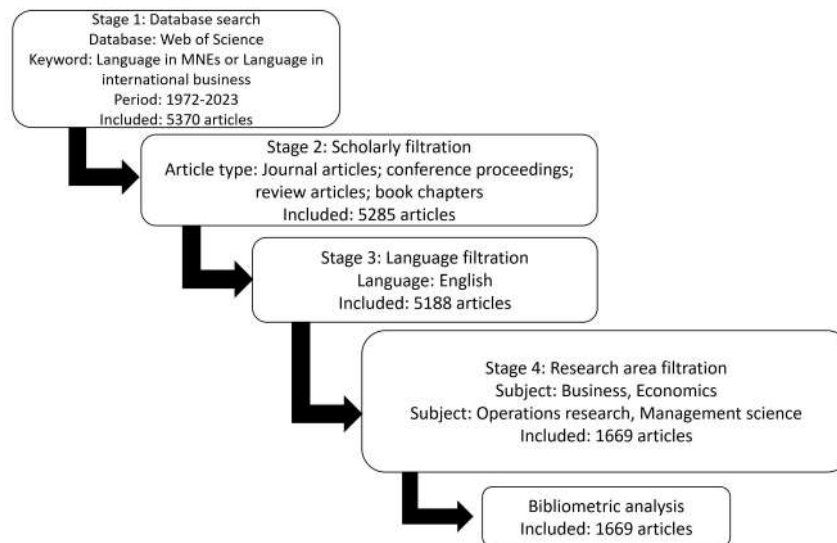


Figure 1. Search and filtration strategy for bibliometric analysis

3.2 Bibliometric analysis perspectives

This review undertook a bibliometric review of literature pertaining to language in multinational enterprises (MNEs) (refer to Figure 2) from two perspectives, descriptive analysis and visualization analysis. From the initial bibliometric search in WoS, a total of 1669 articles were retained for further analysis.

The study employed several bibliometric-based analysis methods, including publication, global citation, and network analyses from the perspective of co-occurrence and co-authorship. These methods were used to delineate the publication trends and to identify the leading contributors in terms of authors, countries, and institutions. The analyses also highlighted the most significant publications, including outlets and articles, in the field of language in MNEs.

Descriptively, we analyzed the publication trends in the field of language in MNEs. This analysis involved examining the number of publications over time, identifying key authors,

leading institutions and countries.

Furthermore, we analyzed the citation ranks to identify influential articles in the field. By examining the number of citations received by each article, we were able to identify key works that have had a significant impact on the research in this area. This analysis helped us understand the intellectual foundations and seminal contributions in the field of language in MNEs. Additionally, we identified influential journals that have published a significant number of articles on language in MNEs. These journals serve as important platforms for disseminating research findings and facilitating scholarly discussions in the field. By analyzing the publication patterns in these journals, we gained a better understanding of the research trends and directions in the field.

The software VOSviewer played a crucial role in this study as it was used to delve deeper into the leading contributors and publications in the field of language in multinational enterprises (MNEs). This was achieved through two main analyses: co-authorship and co-occurrence analyses.

The co-authorship analysis facilitated the identification of the most influential authors and their collaborative networks within the field. This analysis was based on the frequency of joint authorship, which provided insights into the intellectual connectivity and collaborative dynamics among scholars. It helped to spotlight the most active and influential researchers, and their interconnectedness, thus revealing the key nodes of knowledge creation and dissemination.

The co-occurrence analysis, on the other hand, was based on the frequency with which keywords appear together within the same articles. This analysis shed light on the thematic concentration and interrelation of research topics within the field. It helped to identify the most prominent themes and how they interrelate, thus providing a comprehensive overview of the intellectual landscape of language in MNEs.

These analyses not only provided a nuanced understanding of the current state of research but also offered valuable insights for future exploration. By identifying the leading contributors, the most influential publications, and the dominant themes, future researchers can locate their work within the existing body of knowledge. Furthermore, by revealing the thematic interrelations and gaps, these analyses can help to identify potential avenues for future research, thereby contributing to the continuous evolution and expansion of the field.

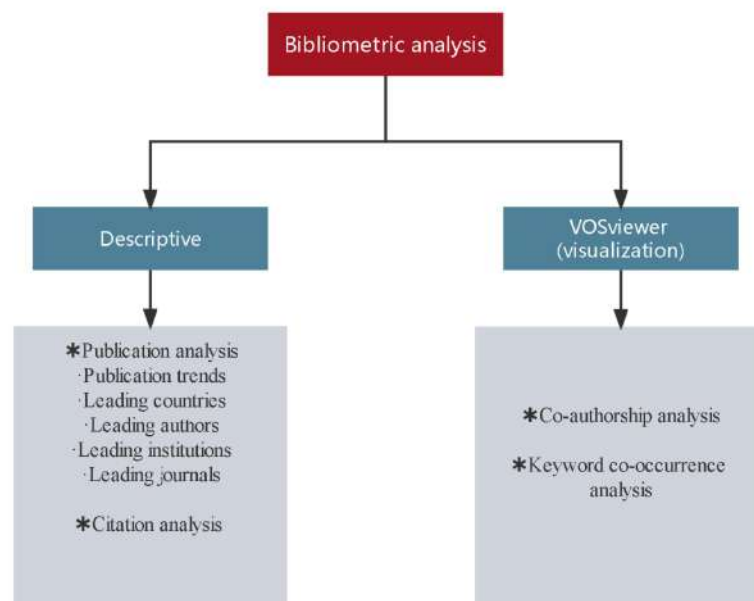


Figure 2. Analysis perspectives for bibliometric analysis

Overall, such methodology provided a comprehensive overview of the publication trends, authorship patterns, research themes, and influential articles and journals in the field of language in MNEs, which offers valuable insights into the current state of research and highlights key areas for future exploration and development.

4. Discussion

The bibliometric analysis of language in multinational enterprises (MNEs) using VOSviewer and the Web of Science database has provided valuable insights into the research landscape in

this field. Several key findings have emerged from this analysis.

4.1 Descriptive bibliometric analysis

4.1.1 Publication Analysis

This section provides a comprehensive exploration of the intricate theme of language in multinational enterprises. And the following analysis is structured to encompass various dimensions, including publication trends, leading countries, prominent authors, esteemed institutions, and influential journals within this specialized domain. By delving into these components, the analysis aims to offer a panoramic view of the evolving discourse surrounding the interplay between language and multinational enterprises.

4.1.1.1 Publication trends

According to WoS records, the term "language in MNEs" in its current context first surfaced in a journal in 1990. However, the volume of related documents published annually prior to 2014 was quite sparse, with less than 50 each year. The data from 2015 to 2023, on the other hand, shows a marked increase in interest in this field, as shown in Figure 3.

Except for the initial 10 years, there has been a yearly growth in the number of publications, indicating an initial period of relative stability. From 2000 to 2018, the number of publications saw a gradual rise. However, from 2018 onwards, there was a noticeable uptick in academic interest in this topic. In 2019, the count of articles on language in MNEs was almost 100 more than the previous year.

By 2014, the number of publications had escalated to 71, and by 2015, it had reached 82. The upward trajectory continued with 78 publications in 2016, 103 in 2017, a jump to 129 in 2018, and a significant rise to 182 in 2019. In 2020, there were 190 publications, 183 in 2021, 153 in 2022, and as of 2023, there have been 112 publications.

This continued academic interest suggests that the study of language in MNEs remains a

pertinent topic for both society and researchers, with numerous unexplored areas. These could include determining the most suitable organizational forms for MNEs (Ghoshal and Nohria, 1993; Contractor and Kundu, 1998), understanding the variances in organizing an MNE in developed versus emerging countries (Luo and Zhang, 2016; Cuervo-Cazurra and Genc, 2008), and exploring the impact of language in MNEs on the sustainable development of a country, city, or region (Van Tulder et al., 2021; Fortanier and Van Wijk, 2020). Other potential areas of research could involve investigating the connections between institutional ideas and social goals of the population, and devising a feasible organizational and marketing plan for such initiatives.

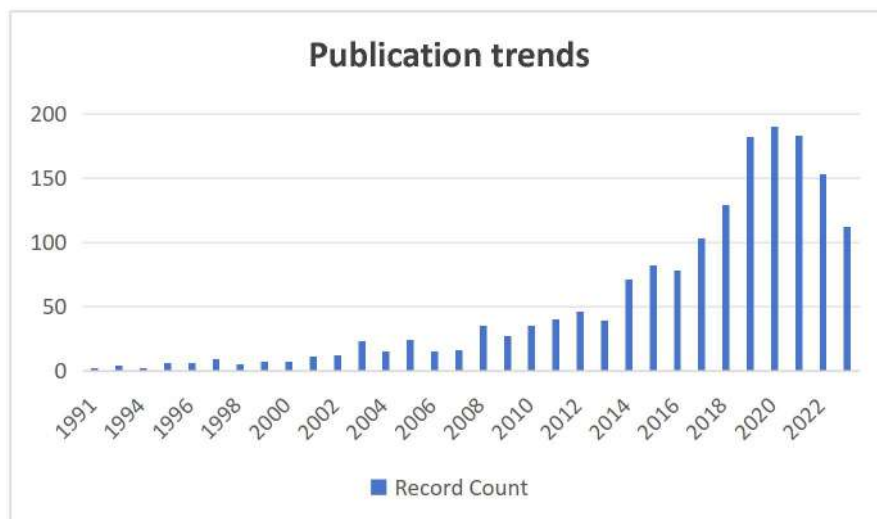


Figure 3. Publication trends between 1990 and 2023.

4.1.1.2 Leading countries

Figure 4 illustrates that the USA leads in the field of language in multinational enterprises (MNEs) with a contribution of approximately 27.741% of the total 1,669 publications. England comes next, contributing 16.657% of the total publications. The People's Republic of China ranks third, contributing 13.721% to the total publications. This is followed by Australia (9.587%), Germany (7.31%), France (6.411%), Canada (6.171%), and Finland (4.733%). Spain, India, Japan, the Netherlands, Italy, Denmark, South Korea, Sweden,

Taiwan, Malaysia, Scotland, and Switzerland also contribute to the body of work, albeit with less than 5% each. The study does not include countries with contributions of less than 2% to the total publications, as these are considered less significant for the purpose of this analysis. The discrepancy in the number of publications across different countries can be attributed to the fact that most journals listed in the Journal Citation Reports (JCR) are based in the USA or England.

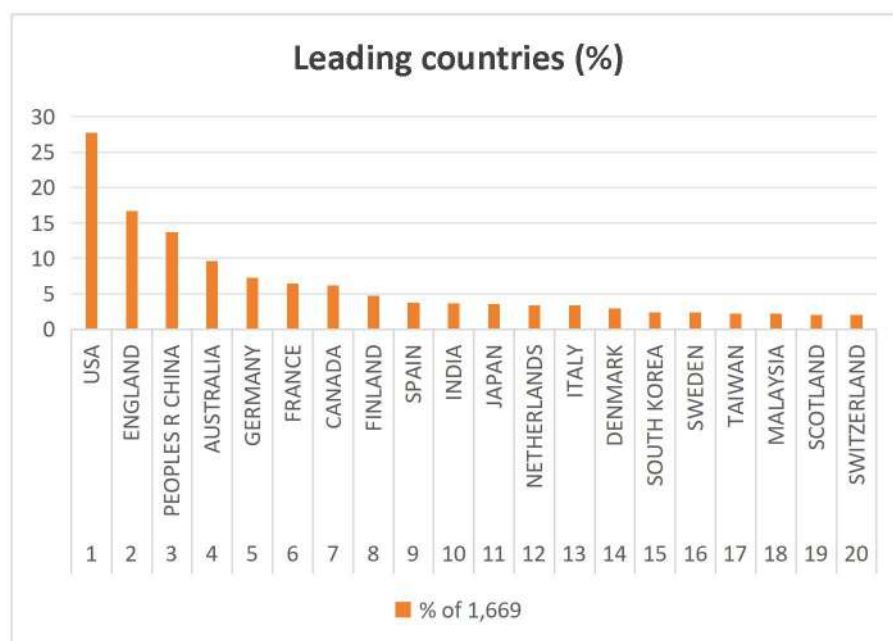


Figure 4. Leading countries of language in MNEs related research

4.1.1.3 Leading authors

As shown in Figure 5, the provided data offers an understanding of the individual contributions of various authors in the field of language in multinational enterprises (MNEs), based on a total of 3,983 authors of the 1,669 publications. At the forefront is Piekari R, with a contribution of 27 publications. Following closely are Ellis R, Harris DE, Holyfield L, Jones L, and Neal J, each having contributed 20 publications. Not far behind is Harzing AW, with 19 publications to their credit. Peltokorpi V, Welch DE, and Welch LS have each made a significant contribution of 15 publications. Pudenko M has added 13 publications to the total

count. Herlin A, Lauring J, and Minondo A have each made a substantial contribution with 12 publications. Zhang LE has added 11 publications, while Tenzer H and Tietze S have each contributed 10 publications. Fan SX has enriched the field with 8 publications. Lastly, both Mayfield J and Mayfield M have each made a meaningful contribution with 7 publications.

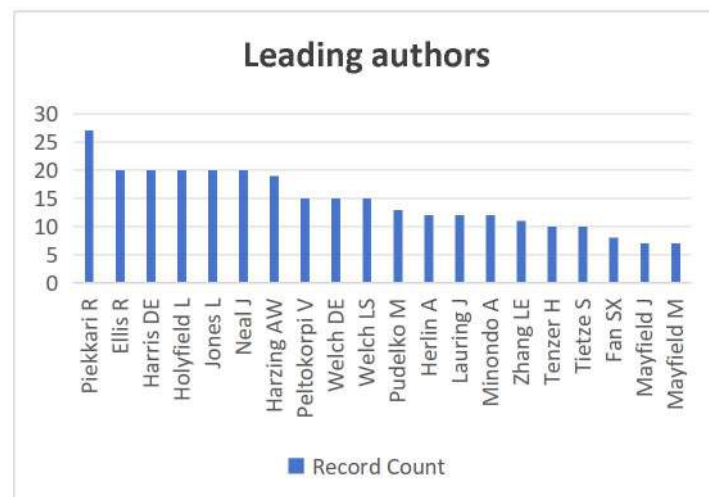


Figure 5. Leading authors of language in MNEs related research

4.1.1.4 Leading institutions

The data in Figure 6 provided gives insight into the contribution of different affiliations to the field of language in multinational enterprises (MNEs), based on a total of 1,669 publications. Leading the list is the University of London, contributing 2.636% of the total publications. This is followed by the State University System of Florida, contributing 1.977% to the total body of work. Aalto University ranks third, with a contribution of 1.618%. The University of Arkansas System and the University of Melbourne each contribute 1.558%, tying for the fourth position. The University of Arkansas Fayetteville is not far behind, contributing 1.498% to the total publications. The Pennsylvania Commonwealth System of Higher Education (PCSHE) follows with a contribution of 1.378%. The University of International Business Economics, Aarhus University, Copenhagen Business School, and the University of Leeds all have a similar level of contribution, around 1.25% each. Edgewalkers International, Intouch Coaching LLC, Tyson Center for Faith and Spirituality in the Workplace, and Walton

College of Business each contribute approximately 1.198% to the total publications. Monash University, the University of Texas System, and the University System of Ohio each contribute slightly over 1% to the total publications. Lastly, Hong Kong Polytechnic University and Indiana University Bloomington each contribute 1.019%.

This analysis provides a snapshot of the major academic contributors to the field of language in MNEs. It highlights the importance of these affiliations in shaping the research landscape in this area.



Figure 6. Leading institutions of language in MNEs related research

4.1.1.5 Leading journals

Understanding which journals frequently publish research on the topic of language in

multinational enterprises (MNEs) is crucial. This knowledge aids in selecting journals to examine during a literature review and familiarizing oneself with each journal's emphasis on the language in MNEs. The impact factor of a journal, as defined by the Journal Citation Reports (JCR) by the Science Citation Index (SCI), provides an objective measure of a journal's significance within a specific category. The JCR gathers and disseminates information about scientific research across various disciplines and specialties, focusing on both citations made and received. The Web of Science (WoS) official website (2023) states that the JCR "helps to measure research influence and impact at the journal and category levels, and shows the relationship between citing and cited journals." The Institute of Scientific Information (ISI) also provides a classification of journals based on intuitive criteria. The International Journal of Business Communication leads the list with 65 publications on the language in MNEs. The Journal of International Business Studies follows with 55 publications.

A total of 590 journals have published research on the language in MNEs according to the WOS. However, for the sake of brevity, this analysis only considers the 20 most relevant journals in terms of the number of publications.

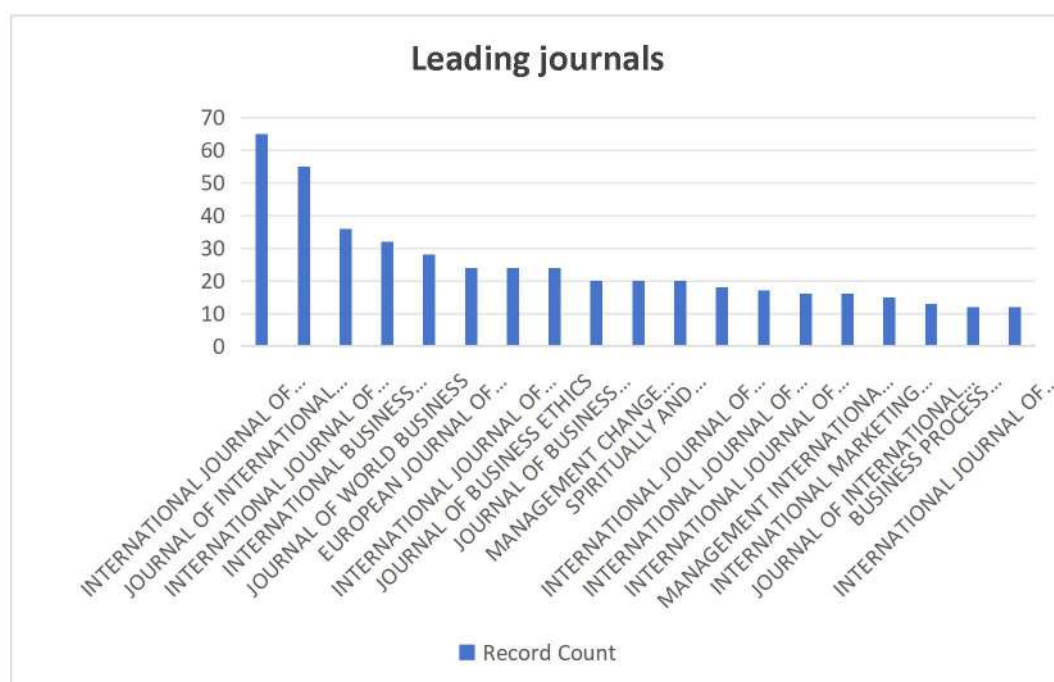


Figure 7. Leading journals published research on language in MNEs

4.1.2 Citation Analysis

In this review, the article that has garnered the highest number of citations over time from the publication year to 2023 in the context of language in MNEs is "Networks versus markets in international trade" with a total of 1183 citations. This is followed by "Distance still matters - The hard reality of global expansion" which has received 1058 citations.

It is worth noting that the theme of language in MNEs appears to be a central focus in most of the articles on this list, as evidenced by the titles of the articles. This underscores the significance of examining citations within this context.

Rank	Title	Authors	Source Title	Year	Citations
1	Networks versus markets in international trade	Rauch, JE	JOURNAL OF INTERNATIONAL ECONOMICS	1999	1183
2	Distance still matters - The hard reality of global expansion	Ghemawat, P	HARVARD BUSINESS REVIEW	2001	1058
3	Culture, openness, and finance	Stulz, RM; Williamson, R	JOURNAL OF FINANCIAL ECONOMICS	2003	766
4	Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator	Chang, Hsin Hsin; Chuang, Shuang-Shii	INFORMATION & MANAGEMENT	2011	623
5	Business process management: A survey	van der Aalst, WMP; ter Hofstede, AHM; Weske, M	BUSINESS PROCESS MANAGEMENT, PROCEEDINGS	2003	614
6	IMMIGRANT LINKS TO THE HOME COUNTRY - EMPIRICAL IMPLICATIONS FOR UNITED STATES	GOULD, DM	REVIEW OF ECONOMICS AND STATISTICS	1994	455
7	BILATERAL TRADE-FLOWS Developing a multidimensional instrument to measure psychic distance stimuli	Dow, Douglas; Karunaratna, Amal	JOURNAL OF INTERNATIONAL BUSINESS STUDIES	2006	450
8	The Multidimensional Work Motivation Scale: Validation evidence in seven languages and nine countries	Gagne, Marylene; Forest, Jacques; Vansteenkiste, Maarten; Crevier-Braud, Laurence; van den Broeck, Anja; Aspell, Ann Kristin; Beilerose, Jenny; Benabou, Charles; Chenelli, Emanuela; Guentert, Stefan Tomas; Halvari, Hallgeir; Indiyastuti, Devani Laksmi; Johnson, Peter A.; Molstad, Marianne Hauan; Naudin, Mathias; Ndao, Assane; Olafsen, Anja Hagen; Roussel, Patrice; Wang, Zheni; Westbye, Cathrine	EUROPEAN JOURNAL OF WORK AND ORGANIZATIONAL PSYCHOLOGY	2015	415
9	More Than Words: The Influence of Affective Content and Linguistic Style Matches in Online Reviews on Conversion Rates	Ludwig, Stephan; de Ruyter, Ko; Friedman, Mike; Brueggen, Elisabeth C.; Wetzels, Martin; Plann, Gerard	JOURNAL OF MARKETING	2013	404
10	Dimensions, determinants, and differences in the expatriate adjustment process	Shaffer, MA; Harrison, DA; Gilley, KM	JOURNAL OF INTERNATIONAL BUSINESS STUDIES	1999	377

Table 1. Most prestigious articles on language in MNEs based on citations

4.2 Visualized bibliometric analysis

Within this section, two distinct but interconnected analyses take center stage: co-authorship analysis and keyword co-occurrence analysis. These visualizations serve as powerful tools that enable a deeper understanding of the collaborative networks shaping the research landscape and the pivotal concepts driving scholarly discourse in this domain (Meyer et al.,

2013). By delving into co-authorship patterns and uncovering the nuanced interplay of keywords, this section presents an insightful visualization of the multifaceted interactions within the realm of language and multinational enterprises.

4.2.1 Co-authorship analysis

As presented by Table 2 and Figure 8, a co-authorship analysis has been systematically undertaken utilizing the 1,669 publications to offer elucidation into the intricacies of collaborative dynamics among authors within the domain of language in multinational enterprises (MNEs). This analytical endeavor holds paramount importance in discerning preeminent contributors and comprehending the magnitude of their collaborative endeavors.

Among the cohort of authors, namely Ellis, R., Harris, D.E., Holyfield, L., Jones, L., and Neal, J., a conspicuous distinction emerges as they manifest the most substantial presence in terms of authored documents (a total of 20 each) and cumulative link strength (an aggregate of 80 each). This salient observation not only attests to the prolific nature of their output but also underscores their proclivity for intricate scholarly collaborations, substantiated by their copious co-authored works. The notably elevated sum of their cumulative link strength serves as a testament to the discernible impact of their collaborative undertakings, which have left an indelible imprint on the evolution of the field.

Analogously, the scholarly corpus of Harzing, A.W. encompasses 19 distinct documents and is accompanied by a cumulative link strength of 57, bearing eloquent testimony to their active and substantive engagement within this scholarly domain. Despite yielding a quantitatively smaller corpus relative to the preceding quintet of authors, the lofty magnitude of Harzing, A.W.'s cumulative link strength efficaciously accentuates the interwoven nature of their work, indicative of its commendable standing within the fabric of the research community.

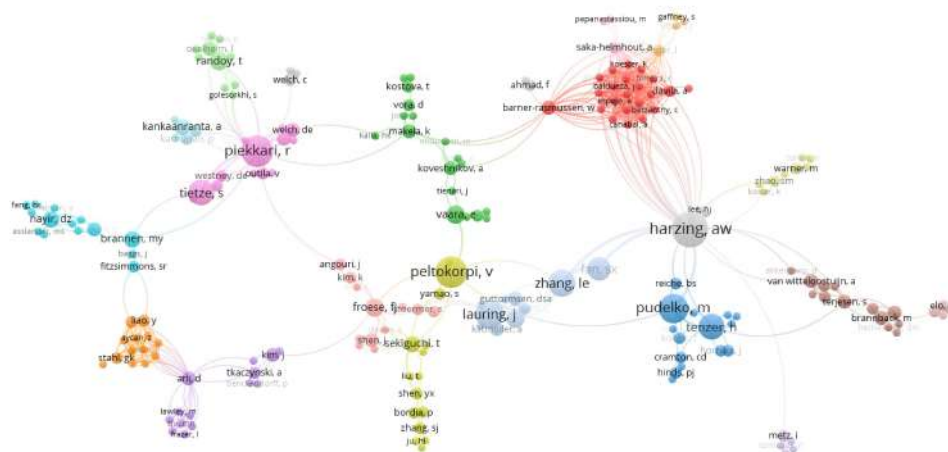
The scholarly trajectory of Piekkari, R., substantiated by 15 authored documents and a cumulative link strength amounting to 31, signifies a discernible but measured degree of

collaborative involvement. Notwithstanding the relatively restrained extent of their collaborative engagements, the sizeable sum of their cumulative link strength compellingly suggests a noteworthy imprint left upon the disciplinary landscape.

A separate cohort of authors, including Barner-Rasmussen, W., Minondo, A., Zander, L., Saka-Helmhout, A., and Davia, A., though characterized by a more modest corpus of authored documents, elicit attention by virtue of their elevated cumulative link strength. This pattern alludes to the supposition that their contributions, while quantitatively limited, are endowed with a caliber of considerable distinction, wielding substantive influence and effectually enriching the scholarly dialogue within the field.

Authors	Documents	Total link strength
ellis,r	20	80
harris,de	20	80
hollyfield,l	20	80
jones,l	20	80
neal,j	20	80
harzing,aw	19	57
piekkari,r	15	31
barner-rasmussen,w	3	27
minondo,a	12	26
zander,l	2	26
saka-helmhout,a	2	25
davia,a	2	24
barzantny,c	1	23
canabal,a	1	23
choudhury,sr	1	23

Table 2. Authors ranked by the total link strength



4.2.2 Keyword co-occurrence analysis

A comprehensive keyword co-occurrence analysis was performed on a total of 1,669 articles using the VOSviewer tool. This analysis aimed to delve deeper into the themes that are prevalent in the research concerning language in multinational enterprises (MNEs). The fundamental assumption driving this analysis is that the keywords chosen in an article serve as a representative snapshot of the article's content.

Significantly, the co-occurrence of these keywords provides valuable insight into the intellectual structure of a particular domain. In this context, the domain refers to the broad area of research focusing on the role of language in MNEs (Chakma and Dhir, 2021).

The co-occurrence network of keywords revealed several noteworthy trends. Initial research on language in MNEs up until 2008 was primarily centered around fundamental issues such as performance, impact, and management. These topics are critical to the functioning of MNEs, and it is unsurprising that they were the focus of early research.

Between 2008 and 2012, the research focus shifted towards issues surrounding internationalization. This was evident in the keyword occurrences of international-business, diversity, and culture. These topics reflect the increasing globalization of business and the

consequent need for MNEs to navigate diverse cultures and conduct business internationally.

A surge of interest in coordination and growth issues was observed between 2012 and 2014. This trend was highlighted through the keyword occurrences of organization, strategies, and innovation. These keywords suggest a growing emphasis on strategic organization and innovation as drivers of growth in MNEs.

After 2014, research on language in MNEs has predominantly concentrated on issues related to communication, identity, and information. The keyword 'language' was also identified as a significant lens through which this research domain is viewed.

The keyword 'language' emerged as the most critical topic in the co-occurrence network, featuring prominently in the majority of the papers. A seminal paper on language by Feely and Harzing (2003) discussed the role and use of language in MNEs. Language policies, initially established to facilitate intra-firm trade for conglomerates, have been leveraged by numerous MNEs. Various authors have also explored the impact of language on the performance and management of MNEs (Marschan-Piekkari et al., 1999; Peltokorpi and Vara, 2014; Piekkari, 2006). The influence of language on aspects such as communication, identity, and information within MNEs has been a recurring theme in recent literature. This ongoing research underscores the importance and multifaceted role of language in the context of multinational enterprises.

Keyword	Ocurrences	Total link strength
language	313	2026
performance	196	1370
impact	180	1097
management	158	1016
model	126	688
business	90	640
communication	90	600
culture	98	588
determinants	79	583
knowledge	79	502
international-business	61	449
work	61	417
information	72	411
organization	53	385
china	59	376
diversity	53	375
perspective	52	364
identity	53	363
organiation	50	358
strategies	50	357
innovation	53	343

Table 3. Keywords ranked by total link strength

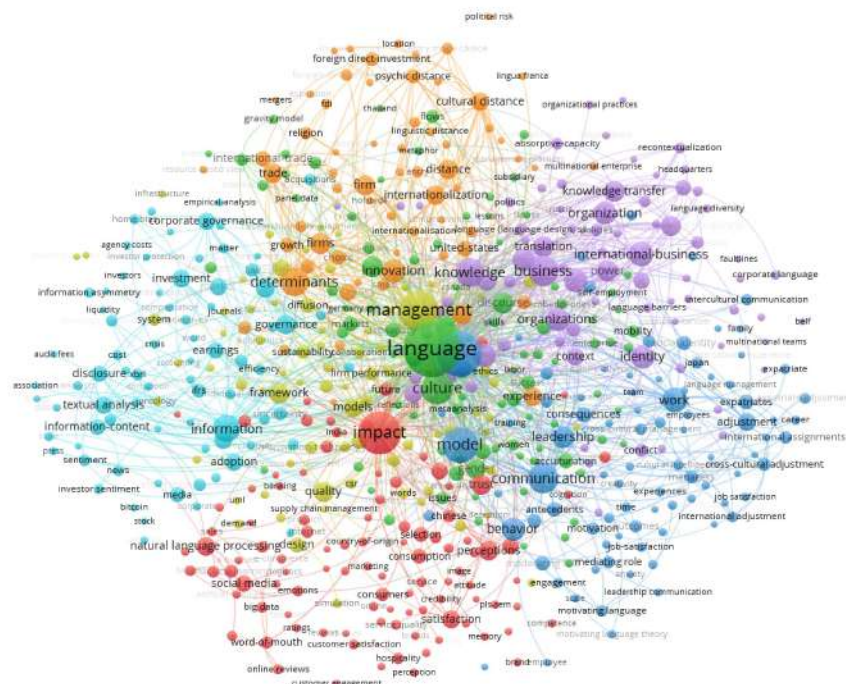


Figure 9. Keyword co-occurrence analysis

4.3 Identification of research gaps and areas for future investigation

Despite the progress made in understanding the role of language in MNEs, several research gaps and areas for future investigation have been identified through this bibliometric analysis.

One research gap is the limited attention given to specific aspects of language in MNEs, such as the impact of language on cross-cultural communication, negotiation processes, and knowledge transfer. Future research could delve deeper into these areas to gain a more comprehensive understanding of how language influences various aspects of MNEs' operations.

Another research gap is the limited focus on non-English languages in the context of MNEs. Most of the studies identified in this analysis have primarily focused on English as the lingua franca in MNEs. Future research could explore the role of other languages in MNEs, particularly in regions where English may not be the dominant language.

Additionally, there is a need for more longitudinal studies to examine the dynamic nature of language use and language strategies in MNEs. Longitudinal studies can provide insights into how language practices evolve over time and how they are influenced by changes in the global business environment.

4.4 Implications for managerial practices in MNEs

The findings of this bibliometric analysis have important implications for managerial practices in MNEs. Understanding the role of language in MNEs can help managers develop effective language strategies, promote cross-cultural communication, and enhance knowledge transfer within their organizations.

Managers should recognize the importance of language diversity management and develop policies and practices that support linguistic diversity within their workforce. This may include providing language training programs, promoting the use of a lingua franca, and

creating a supportive linguistic environment that values and respects different languages and cultures.

Furthermore, managers should consider the impact of language on international negotiations and develop strategies to overcome language barriers. This may involve ensuring that negotiators have the necessary language skills or providing translation and interpretation services to facilitate effective communication with counterparts from different language backgrounds.

Conclusively, the bibliometric analysis of language in MNEs has provided valuable insights into the research landscape, identified research gaps, and highlighted implications for managerial practices. By addressing the limitations and pursuing future research in the identified areas, scholars can further advance our understanding of the role of language in the context of MNEs and contribute to the development of effective language strategies in global business settings.

5. Conclusion

This study undertakes a bibliometric examination to illuminate the landscape of language dynamics within Multinational Enterprises (MNEs). The analysis seeks to elucidate areas of emphasis in linguistic investigations, the prevalent language choices for publication, temporal trends in publication output, pivotal journals for scholarly discourse, and noteworthy scholars at the forefront of this domain. This investigation proffers invaluable insights for newcomers to the sphere of language within MNEs, proffering recommendations for authoritative sources and eminent scholars to consult.

Incorporating a bibliometric analysis of 5,370 documents drawn from the Web of Science (WoS) repository, the investigation unveils 5,285 of these documents as scientific articles. Preeminent among these documents is English, representing the lingua franca for publication in 5,188 instances. Business economics emerges as the predominant thematic area with 1,669

documents, surpassing the cumulative output from other disciplines. Notably, the terminological inception of "language in MNEs" is traced back to 1990, with substantial scholarly attention intensifying post-2008. This surge is mirrored in a consistent annual increment in the publication count, culminating in 381 documents released in 2014. The United States emerges as the focal point for this research endeavor, responsible for 982 publications.

As regards scholarly dissemination, the International Journal of Business Communication as the preeminent conduit, having published 65 documents. In the realm of influential authors, Piekkari R takes precedence with 27 documents, showcasing a commendable scholarly contribution.

However, it is imperative to acknowledge certain limitations in this study. It is recommended that subsequent investigations encompass a wider array of articles beyond those within the Web of Science, encompassing works that may not be associated with an impact factor. This inclusion would provide a more comprehensive understanding of the language dynamics within MNEs. Furthermore, future bibliometric inquiries might refine their scope by focusing exclusively on articles relevant to the field within the WOS, excluding non-article documents such as reviews, proceedings, and book reviews. This strategic narrowing of focus could yield deeper insights into the scholarly discourse surrounding language within MNEs.

In summation, the synthesis of existing scholarly literature and the in-depth exploration of foundational theories and concepts culminate in the proposition of a comprehensive conceptual framework tailored to the meticulous analysis of language dynamics within Multinational Enterprises (MNEs). This framework envelops a constellation of discerning dimensions:

The foremost dimension, denoted as Language Strategies, is centered upon the deliberate and strategic linguistic choices actualized by MNEs in the purview of their global operations. This

encompasses the strategic selection of lingua franca, the judicious engagement of translation and interpretation services, and the institutionalization of comprehensive language training programs.

A pivot towards the Language Diversity Management dimension is discerned, which engenders a shift in focus towards the adroit management of linguistic diversity entrenched within the MNE's workforce. This dimension encompasses the strategic formulation of language-oriented policies, the cultivation of initiatives aimed at nurturing linguistic competence, and the cultivation of an inclusive milieu that reveres and accommodates a plethora of languages and cultural nuances.

The third dimension, denominated as Language and Communication Effectiveness, navigates the terrain of language's profound ramifications upon communication paradigms within MNEs. This pertains to probing the contours of factors encompassing linguistic proficiency, the dexterity exhibited in intercultural communicative endeavors, and the efficacious utilization of communication technologies devised to surmount linguistic barriers.

Lastly, the ambit of Language and Knowledge Transfer dimension delves into the substantive role of language as a facilitator of knowledge diffusion and innovation within MNEs. This dimension meticulously unpacks the dynamics through which language predicates the dissemination and amalgamation of intellectual capital across diverse subsidiary entities, in addition to scrutinizing the intricate ways by which language-mediated variables intricately influence the efficacy of knowledge transfer mechanisms.

In amalgamating these discerning dimensions, the conceptual framework undergirds a comprehensive analytical lens through which the multifaceted tapestry of language-related intricacies within MNEs can be methodically unraveled. It thereby provides a scholarly aperture through which researchers are endowed with the capacity to discern the nuanced interplay between language and multifarious dimensions of MNE operations, thereby

illuminating strategies and practices that hold the potential to amplify communicative acumen, engender collaborative synergies, and elevate the efficacy of knowledge dissemination within the intricate mosaic of multinational operational domains.

6. References

- [1] Acedo, F. J., & Casillas, J. C. (2005). Current paradigms in the international management field: An author co-citation analysis. *International Business Review*, 14(5), 619-639.
- [2] Ambos, T. C., & Ambos, B. (2009). The impact of distance on knowledge transfer effectiveness in multinational corporations. *Journal of International Management*, 15(1), 1-14.
- [3] Brett, J. M. (2001). *Negotiating globally: How to negotiate deals, resolve disputes, and make decisions across cultural boundaries*. Jossey-Bass.
- [4] Chakma, R., Paul, J., & Dhir, S. (2021). Organizational ambidexterity: A review and research agenda. *IEEE Transactions on Engineering Management*.
- [5] Clarivate. (2023). Web of Science. Clarivate Analytics. <https://clarivate.com/webofsciencigroup/solutions/web-of-science/>
- [6] Contractor, F. J., & Kundu, S. K. (1998). Modal choice in a world of alliances: Analyzing organizational forms in the international hotel sector. *Journal of international business studies*, 29, 325-356.
- [7] Cuervo-Cazurra, A., & Genc, M. (2008). Transforming disadvantages into advantages: Developing-country MNEs in the least developed countries. *Journal of international business studies*, 39, 957-979.
- [8] Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of business research*, 133, 285-296.
- [9] Feely, A. J., & Harzing, A. W. (2003). Language management in multinational companies. *Cross Cultural Management: an international journal*, 10(2), 37-52.

- [10] Fortanier, F., & Van Wijk, J. (2010). Sustainable tourism industry development in sub-Saharan Africa: Consequences of foreign hotels for local employment. *International Business Review*, 19(2), 191-205.
- [11] Gelfand, M. J., Brett, J. M., Gunia, B. C., Imai, L., Hsu, B., & Huang, T. (2012). Toward a culture-by-context perspective on negotiation: Negotiating teams in the United States and Taiwan. *Journal of Applied Psychology*, 97(4), 760-778.
- [12] Ghoshal, S., & Nohria, N. (1993). Horses for courses: Organizational forms for multinational corporations. *MIT Sloan Management Review*, 34(2), 23.
- [13] Håkansson, H., & Kappen, P. (2017). Language and communication in international business: An interdisciplinary research agenda. *Journal of International Business Studies*, 48(6), 666-684.
- [14] Harzing, A. W., & Pudelko, M. (2013). Language competencies, policies and practices in multinational corporations: A comprehensive review and comparison of Anglophone, Asian, Continental European and Nordic MNEs. *Journal of World Business*, 48(1), 87-97.
- [15] Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Sage.
- [16] Huff, A. S. (2009). *Designing research for publication*. Sage.
- [17] Inkpen, A. C., & Beamish, P. W. (1997). Knowledge, bargaining power, and the instability of international joint ventures. *Academy of Management Review*, 22(1), 177-202.
- [18] Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19(3), 411-432.
- [19] Lang, J. C. (2001). Managerial concerns in knowledge management. *Journal of knowledge management*, 5(1), 43-59.
- [20] Li, L., Zhang, H., & Li, J. (2018). Language strategies in multinational enterprises: A systematic literature review. *Journal of World Business*, 53(6), 842-855.
- [21] Li, W. (2010). Virtual knowledge sharing in a cross-cultural context. *Journal of knowledge management*, 14(1), 38-50.

- [22] Li, Y., Tan, J., & Liu, X. (2018). Language strategies in multinational corporations: A systematic review. *International Business Review*, 27(2), 379-392.
- [23] Luo, Y., & Zhang, H. (2016). Emerging market MNEs: Qualitative review and theoretical directions. *Journal of International Management*, 22(4), 333-350.
- [24] Marschan-Piekkari, R., Welch, D., & Welch, L. (1999). In the shadow: The impact of language on structure, power and communication in the multinational. *International business review*, 8(4), 421-440.
- [25] Meyer, R. E., Höllerer, M. A., Jancsary, D., & Van Leeuwen, T. (2013). The visual dimension in organizing, organization, and organization research: Core ideas, current developments, and promising avenues. *Academy of Management annals*, 7(1), 489-555.
- [26] Oshri, I., Van Fenema, P., & Kotlarsky, J. (2008). Knowledge transfer in globally distributed teams: the role of transactive memory. *Information Systems Journal*, 18(6), 593-616.
- [27] Peltokorpi, V., & Vaara, E. (2014). Knowledge transfer in multinational corporations: Productive and counterproductive effects of language-sensitive recruitment. *Journal of International Business Studies*, 45, 600-622.
- [28] Piekkari, R. (2006). Language effects in multinational corporations: A review from an international human resource management perspective. *Handbook of research in international human resource management*, 536-550.
- [29] Piekkari, R., Welch, D., & Welch, L. S. (2009). *Language in international business: The multilingual reality of global business expansion*. Edward Elgar Publishing.
- [30] Song, J. (2014). Subsidiary absorptive capacity and knowledge transfer within multinational corporations. *Journal of International Business Studies*, 45, 73-84.
- [31] Van Tulder, R., Rodrigues, S. B., Mirza, H., & Sexsmith, K. (2021). The UN's sustainable development goals: can multinational enterprises lead the decade of action?. *Journal of International Business Policy*, 4, 1-21.
- [32] Welch, D. E., & Welch, L. S. (2008). The importance of language in international knowledge transfer. *Management International Review*, 48, 339-360.

- [33] Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429-472.

Domestic Versus Foreign Listing: The Role of Local VC Firms

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Domestic versus Foreign Listing: The Role of Local VC Firms

The initial public offering (IPO) is an important part of internationalization strategy and a key element in the development of entrepreneurial companies (Bai et al 2020; Humphery- Jenner and Suchard 2013b; Moore et al 2012). Due to the poor governance environments and strict IPO regulation in emerging markets, many entrepreneurial companies in emerging markets decide to seek to list on foreign exchanges as the exit option (Bai et al 2020; Humphery-Jenner and Suchard 2013b; Purkayastha and Kumar 2021). Foreign listings can raise money and reduce the cost of capital for entrepreneurial companies (Brouthers et al 2022; Hursti and Maula 2007; Purkayastha and Kumar 2021). There are both financial and strategic benefits to foreign listings. In terms of financial outcome, entrepreneurial companies can have improved and efficient cash flow and cash management and greater recognition among investors (Blass and Yafeh 2001). In terms of strategic outcomes, listing in foreign markets can increase the internationalization of products and services (Forssbäck and Oxelheim 2008), improve corporate governance practices (Bell et al 2014), enhance corporate social responsibility (Marano et al 2017), and pursue new projects and growth opportunities (Daily et al 2005). On the other hand, entrepreneurial companies also face difficulties when choosing to list in foreign markets as they don't have the knowledge that can apply to international activities (Bai et al 2020; Ding et al 2010; Park et al 2015).

Understanding factors that affect companies' IPO location is of crucial importance for a better understanding of the strategic dynamics of firms (Moore et al 2012). Previous work has suggested that entrepreneurial companies can leverage both internal and external knowledge to achieve foreign IPOs. For example, the top management team's international experience and the CEO's foreign education experience can act as the primary internal knowledge source to facilitate foreign IPOs (Bai et al 2020; Duan et al 2020; Hursti and Maula 2007). In terms of external knowledge sources, venture capital (VC) investment is always considered the key knowledge provider. VC firms can provide institutional knowledge (Moore et al 2012), market knowledge (Humphery-Jenner and Suchard 2013b), network

knowledge (Fernhaber and McDougall-Covin 2009), business knowledge (Park et al 2015), and management recruitment knowledge (Hellmann and Puri 2002) to invested companies. Recent research has shown that foreign VC investment can overcome the difficulties of facilitating foreign IPOs (Cheng and Schwienbacher 2016; Humphery-Jenner and Suchard 2013b; Zhang and Yu 2017).

Although certain progress has been made in the international finance and international entrepreneurship literature and foreign VC firms have been widely acknowledged as the main knowledge providers to facilitate invested entrepreneurial companies' foreign listing, little is known about whether local VC firms in emerging markets can also provide knowledge and the mechanism through which local VC firms function in the foreign IPO process. Local VC firms in emerging markets are latecomers but have become more prominent nowadays (Dai et al 2012; Khurshed et al 2020). It is widely acknowledged that they are relatively young and lack knowledge in selecting, nurturing, and monitoring portfolio companies (Humphery-Jenner and Suchard 2013a). Therefore, recent research has shown that local VC firms reduce the likelihood of listing abroad (Cheng and Schwienbacher 2016). However, according to organizational learning theory (Argote et al 2021), local VC firms may be able to acquire knowledge from their experience. One recent study shows that local VC firms can learn from prior foreign IPO experience to facilitate their invested entrepreneurial companies to seek foreign listing (Zhang and Yu 2017). This indicates that local VC firms' experience may affect the IPO location choice, however, no study has investigated when and how local VC firms can facilitate invested entrepreneurial companies' foreign IPOs, beyond learning from prior foreign IPO experience.

It has been widely acknowledged that local VC firms can not only learn from prior foreign IPO experience but also from cross-border syndication experience. Cross-border syndication experience has been recognized as the key international experience in emerging markets (Khurshed et al 2020), but the heterogeneous knowledge it can provide is less investigated. Previous studies in the international business literature have indicated that the direction and location of international experiences matter to learning and knowledge acquisition (Gu and Lu 2011; Li et al 2017; Li et al 2014; Zhang and Yu 2017). Local VC firms can learn from international experience when they

syndicate in local markets or learn from international VC firms in foreign markets. The former is called inward cross-border syndication and the knowledge about foreign markets the local VC firms acquired is through vicarious learning; whereas the latter is called outward cross-border syndication and the knowledge gained is through direct learning. Similarly, local VC firms can learn from international VC firms to gain general knowledge, or they can learn from international VC firms from IPO host countries to acquire more location-specific knowledge, through cross-border syndication. Therefore, I separate the cross-border syndication experience into inward general international experience, outward general international experience, inward IPO host country international experience, and outward IPO host country international experience to investigate how these experiences are going to help local VC firms facilitate the foreign IPO of invested entrepreneurial companies.

To answer the above questions, I constructed a dataset covering entrepreneurial companies invested by Chinese VC firms that were exited via IPO between 1990 and 2020. I examine how Chinese VC firms can learn from different types of cross-border syndication experiences to influence the likelihood of foreign listing of invested entrepreneurial companies. The results show that Chinese VC firms can learn from prior cross-border syndication experience to help invested entrepreneurial companies achieve foreign IPO market exits. In addition, not all local VC firms that have cross-border syndication experience can help invested entrepreneurial companies exit through a foreign IPO in the same way. Local VC firms that have outward cross-border syndication experience or local VC firms that have cross-border syndication experience with international VC firms from the IPO host countries can gain additional knowledge to enable foreign listing. Overall, the results suggest local VC firms can learn from cross-border syndication experience to acquire knowledge to facilitate their invested entrepreneurial companies to exit through foreign IPO, and this effect is heterogeneous in that it depends on the direction and location of international experience.

This study contributes to the international business and entrepreneurship literature in the following ways. First, this study contributes to the IPO literature by illustrating the factors that determine IPO location. The choice of IPO location is an important issue because a foreign listing is critical to

international business (Bai et al 2020; Purkayastha and Kumar 2021). Although several studies have shown that the nationality of VC firms determines the location of IPO exits (Cheng and Schwienbacher 2016; Gucbilmez 2014; Humphery- Jenner and Suchard 2013b; Hursti and Maula 2007), one recent study argues that VC firms' IPO experience instead of their nationality dictates the IPO location (Zhang and Yu 2017). This study extends this line of research by showing that VC firms' cross-border syndication experience is an antecedent to foreign listing. Second, this research further contributes to international entrepreneurship research by illustrating the heterogeneous impact of international experience on the IPO's choice of listing location. Previous studies have shown that VC firms' international experience can select investment locations, syndicate partner investment portfolios (Guler and Guillen 2010; Khurshed et al 2020; Meuleman and Wright 2011) and have a universal impact on the invested entrepreneurial companies (Humphery-Jenner and Suchard 2013b; Khurshed et al 2020). This study examines various types of international experience and their impact on the IPO location choices of invested companies. Decomposing the international experiences into different types permits a more nuanced analysis of the knowledge they provide, adding a more fine-grained understanding of how they support the internationalization of entrepreneurial companies. Third, this study contributes to the literature on venture capital by expanding upon the current understanding of portfolio companies' internationalization strategies. Although previous research has highlighted that foreign VC firms can contribute to the invested companies' internationalization (Fernhaber and McDougall-Covin 2009; Fernhaber et al 2009; George et al 2005), the benefits of local VC firms have been largely ignored (Khurshed et al 2020). This research clarifies the relationship between local VC firms and invested entrepreneurial companies' internationalization by investigating how local VC firms can contribute to the foreign IPOs of their invested entrepreneurial companies.

How Does Family Impact Women Entrepreneurs? A Mixed Method Study in Thailand

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HOW DOES FAMILY IMPACT WOMEN ENTREPRENEURS? A MIXED METHOD STUDY IN THAILAND

Extended abstract

Women entrepreneurs struggle in developing countries where poverty persists and the traditional gender role expectations reinforce their gender role-based disadvantages. Drawing upon the family embeddedness perspective, we find that family can be a double-edged sword for women entrepreneurs in this context. One perspective sees family responsibilities as a distraction from women entrepreneurs' capability to manage their businesses and to gain access to external finance. Another perspective is that family can be an asset, when family members provide financial, material, and emotional support necessary to run businesses and gain access to external finance. We test these competing hypotheses by investigating how the family of women entrepreneurs affects their business operating efficiency and access to external finance. Empirically, we adopt a mixed method approach using Thailand's socio-economic household survey from 2015, 2017, 2019, and 2021 and in-depth interviews with 27 Thai women entrepreneurs, which allows us to disentangle the conflated effect of family. Our findings reveal which family elements can be a burden or an asset for women entrepreneurs. Qualitative analysis findings particularly highlight the idea that entrepreneurship can be a viable route to alleviate poverty and achieve regional sustainable development in developing countries.

Keywords: Women entrepreneurs, family-business interface, operating efficiency, access to external finance and mixed method.

1. Introduction

Entrepreneurship has been highlighted by several scholars as a way to alleviate poverty among females in the context of developing countries (Kevane and Wydick, 2001; Lin, Winkler, Wang, and

Chen, 2020). Regarding women entrepreneurship and regional sustainable development, such literature claims that pre-existing social norms and associated gender roles accepted in developing countries create significant challenges for women seeking meaningful opportunities in the labor market (Jayachandran, 2015). Scholars argue that, in such a context, entrepreneurship provides an alternative path to escape poverty and become meaningful contributors to the economic system (De Vita, Mari and Poggesi, 2014). Obviously, however, the effect of women entrepreneurship on poverty reduction can be fruitful only when their business creates profit. In this study, we focus on the traditional gender roles (men as the primary performer of economic activities and women as housekeepers) to explicitly examine the unique challenge that women entrepreneurs confront in a developing country.

Following a dominant perspective that considers family as a burden for women entrepreneurs (Eddleston and Powell, 2012), we first hypothesize that family essentially hinders women's entrepreneurial activities. Yet, we also suggest that some aspects of family can be helpful if family members' knowledge, skills, and experiences relevant to entrepreneurial activities can be transferred to women entrepreneurs. Thus, we attempt to identify which family-related factors are helpful or burdensome. This leads us to develop an explorative research question concerning *how family impacts women entrepreneurs in the context of a developing country where traditional gender role expectations persist*.

2. Literature and Framework

The central argument of the family embeddedness perspective is that entrepreneurship and family are fundamentally intertwined institutions (Aldrich and Cliff, 2003). It concerns how family members shape individuals' entrepreneurial experience and what resources and knowledge they can provide (Aldrich and Cliff, 2003; Hsu, Wiklund and Anderson, 2016; Bonacich, 1987; Kuada, 2009). Scholars suggest that family embeddedness is particularly important for women entrepreneurs in developing countries because of the lack of institutional support and the difficulty women face in separating work from family (Acs, Bardasi, Estrin and Svejnar, 2011; Jennings and McDougald, 2007). They propose two opposing views,

which we call “family-as-a-burden view” and “family-as-an-asset view” (Hsu et al., 2016; Welsh and Kaciak, 2019; Vaziri, Casper and Wayne, 2020).

First, the family-as-a-burden view suggests that family functions as a *burden* for women entrepreneurs. The burden reduces the time they can devote to businesses which makes it difficult to make good decisions for business operations (Greenhaus and Beutell, 1985; Jennings and McDougald, 2007). Moreover, the family burden could also prevent women entrepreneurs from undertaking the tasks necessary to access external finance including identifying potential investors, preparing applications and supplementary documents, and meeting with investors (Carter, Shaw, Lam and Wilson, 2007). These led us to develop our hypothesis:

Hypothesis 1a: *There is a negative relationship between family-to-business interference and operating efficiency of women entrepreneurs.*

Hypothesis 1b: *There is a negative relationship between family-to-business interference and women entrepreneurs' ability to secure external funding.*

On the other hand, the family-as-an-asset view suggests that family can be an *asset* for women entrepreneurs. There are generally three interdependent reasons: (1) skillset transfer, (2) social capital transfer, and (3) emotional support. In the context where entrepreneurship is viewed as a masculine occupation, their family members, especially husbands who own businesses, may serve as a source of business knowledge, skills, and know-how (Caputo and Dolinsky, 1998), which can enhance entrepreneurial human capital (Unger, Rauch, Frese and Rosenbusch, 2011). Husbands may provide women entrepreneurs with personal networks that can help them search for financial capital (Tinkler, Whittington and Davines, 2015). These led us to develop our hypothesis:

Hypothesis 2a: *There is a positive relationship between family-to-business enrichment and operating efficiency of women entrepreneurs.*

Hypothesis 2b: *There is a positive relationship between family-to-business enrichment and women entrepreneurs' ability to secure external funding.*

3. Method and Result

We used a mixed method to test our hypothesis (quantitative analysis section) and extend the results by conducting interviews with Thai women entrepreneurs (qualitative analysis section). First, for the quantitative analysis, we use the national-level household survey data collected in 2015, 2017, 2019, and 2021. The dataset comprises approximately 52,000 households, representing all 77 provinces in Thailand. For the first independent variable which is Family-to-business interference (Hypothesis 1a and 1b), we use (1) the number of children under 16 residing in the household, (2) the number of elders over 60 residing in the household, and (3) if the women are household head (“0” or “1”). For Family-to-business enrichment (Hypothesis 2a and 2b), we measure if women entrepreneurs have a business-owner husband (“0” or “1”). We incorporated both individual- and firm-level control variables. To test Hypotheses 1a and 2a, we used pooled OLS regression because our measure of operating efficiency is a continuous variable. To test Hypotheses 1b and 2b, we employed logistic regression. Second, we then hired six research assistants who were well trained in a PhD program in management and economics to interview 27 Thai women entrepreneurs in three regions in Thailand. All our interviews were one hour per interviewee. We analyzed the data, following a typical interview analysis method.

Table 1. Regression results

[illegible]

Industry control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region-level control (GDP)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	4.044*** (0.22)	3.970*** (0.21)	3.910*** (0.21)	3.832*** (0.21)	4.170*** (0.23)	1.433* (0.84)	1.102 (0.80)	0.800 (0.79)	0.926 (0.79)	1.078 (0.85)
Observations	15000	15000	15000	15000	15000	12528	12528	12528	12528	12528
R ²	0.080	0.080	0.080	0.080	0.081					
Adjusted R ²	0.079	0.079	0.079	0.078	0.080					
-2 log likelihood						-3088.42	-3089.03	-3081.97	-3084.19	-3078.80
Chi ²						323.64	322.06	336.25	332.33	343.12

Standard errors in parentheses, * $p < .1$, ** $p < .05$, *** $p < .01$

Additionally, we conducted a subgroup analysis (Employer Entrepreneurs vs. Solo Entrepreneurs), so that we can examine whether the impact of family on our dependent variables is more pronounced in one subgroup than another. The finding suggested that, overall, these results support that the impact of family on women entrepreneurs' businesses is more salient for solo entrepreneurs in the middle and low class (Table 2). The interview results confirm the findings. The effects of family on women entrepreneurship are more evident in Middle-and-lower class women entrepreneurs (MLC) than in upper class (UC). For the negative impact, MLC women entrepreneurs described that time conflict, overwhelming cognitive load, and stress from caring for elders and children were major factors interrupting their business. For the positive impact, we found that the role of the business owner's husband is crucial for the MLC women entrepreneurs. This finding is consistent with our overall expectation that the business-owner husband will share knowledge and social capital, ideally offering emotional support as well.

Table 2. Subgroup analysis (Employer entrepreneurs vs Solo entrepreneurs)

	DV: Operating efficiency = Revenue/Operating cost		DV: Access to external financing	
	Employer	Own account worker	Employer	Own account worker
Number of children	-0.00747 (0.032)	-0.0344*** (0.013)	0.136 (0.23)	-0.0494 (0.045)
Number of elder	-0.0555* (0.034)	-0.0417*** (0.016)	0.0213 (0.32)	-0.0382 (0.054)
Household headship	0.0247 (0.058)	0.0504** (0.024)	-0.733 (0.46)	-0.234*** (0.081)
Business owner husband	0.0452 (0.067)	0.0370 (0.025)	0.355 (0.59)	0.192** (0.092)
Individual & firm level control	Yes	Yes	Yes	Yes
Year control	Yes	Yes	Yes	Yes
Industry control	Yes	Yes	Yes	Yes
Region-level control (GDP)	Yes	Yes	Yes	Yes
Constant	2.672*** (0.59)	4.251*** (0.24)	1.687 (4.19)	1.019 (0.82)
Observations	874	14126	675	11848
R ²	0.032	0.086		
Adjusted R ²	0.007	0.085		
-2 log likelihood			-125.79	-2937.27
Chi ²			33.13	346.86

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

4. Discussion

The impact of the family-business interface on women entrepreneurs has emerged as a significant research theme in the entrepreneurship literature (Hughes, Jennings, Brush, Carter and Welter, 2012; Welsh, Botero, Kaciak, and Kopanicova, 2021). However, there was a need for a further exploration into which family characteristics influence women entrepreneurs' businesses, especially in a context of developing countries where entrepreneurship plays a key role in reducing poverty but the traditional gender role expectation hinders women from pursuing entrepreneurship. Our research contributes to this area of literature by partially clarifying which family characteristics can be burdens or assets for women entrepreneurs. Specifically, our study shows that being a head of household induces women entrepreneurs to save operating cost at an extreme level, yet it adversely impacts their access to external finance.

Second, our findings reveal an unexpected dynamic where the hiring of employees could potentially offset both the positive and negative impacts of family factors on entrepreneurship outcomes. The existing studies show that women entrepreneurs with small businesses are reluctant to employ others due to the lack of trust and confidence (Morris, Miyasaki, Watters, and Coombes, 2006). However, our study suggests that expanding their workforce can negate the adverse effects of family responsibilities.

References

****Only core references are listed due to the page limit****

- Aldrich, H. E., and Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing*, 18(5), 573-596.
- Eddleston, K. A., and Powell, G. N. (2012). Nurturing entrepreneurs' work-family balance: A gendered perspective. *Entrepreneurship Theory and Practice*, 36(3), 513-541.
- Greenhaus, J. H., and Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of management review*, 10(1), 76-88.
- Hsu, D. K., Wiklund, J., Anderson, S. E., and Coffey, B. S. (2016). Entrepreneurial exit intentions and the business-family interface. *Journal of Business Venturing*, 31(6), 613-627.
- Vaziri, H., Casper, W. J., Wayne, J. H., and Matthews, R. A. (2020). Changes to the work-family interface during the COVID-19 pandemic: Examining predictors and implications using latent transition analysis. *Journal of Applied Psychology*, 105(10), 1073.
- Welsh, D. H., and Kaciak, E. (2019). Family enrichment and women entrepreneurial success: The mediating effect of family interference. *International Entrepreneurship and Management Journal*, 15, 1045-1075.

Transforming International Business Education Through Generative AI: A Paradigm Shift

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Extended Abstract

Generative Artificial Intelligence (AI) is rapidly altering the landscape of education, including the teaching of complex subjects such as international business. This paper delves into how generative AI is reshaping the pedagogical approach to international business education. By examining the theoretical foundations, benefits, and practical applications of integrating generative AI, this paper seeks to elucidate the profound impact this technology is having on the teaching and learning processes within the realm of international business. Specifically, this paper highlights how ChatGPT can be used as a powerful teaching and learning tool for international business education. Drawing upon the principles of social constructivism, generative A.I. tools like ChatGPT offer a distinctive platform for facilitating the interactive process of learning.

Keyword: IB Education, Generative A.I., ChatGPT

1. Introduction

In an era where technology continues to reshape the landscape of education, the integration of generative artificial intelligence (A.I.) has emerged as a transformative force in pedagogical approaches (Lim et al., 2023; Ratten & Jones, 2023). This paper draws upon the notion of social constructivism theory and the utilization of generative A.I., exemplified by tools such as ChatGPT, within the realm of higher education. Drawing upon the interactive tenets of Vgotsky's (1978) social constructivism theory, this paper proposes a method to actively engage students in constructing

knowledge through problem-solving, dialogue, and reflection. Concurrently, the paper highlights how generative A.I. tools offer an innovative avenue for students to participate in shaping their learning experiences, transcending traditional passive modes of instruction.

As an embodiment of this synthesis, this paper also delves into the application of ChatGPT in an international business education context, where its scenario generation capabilities are harnessed to create lifelike cross-cultural business scenarios. Additionally, this paper highlights how students are involved in evaluating AI-generated role-play scenarios, thereby nurturing their cognitive engagement and refining AI-generated content to align with the intricacies of the global business landscape. This intersection of social constructivism, generative A.I., and innovative pedagogy underscores a progressive approach to education, fostering dynamic and enriched learning environments that equip students with skills essential for leadership in the complex global arena.

2. Theoretical Foundation

Drawing upon the tenets of social constructivism theory, this study posits that knowledge acquisition is an active process wherein students construct their own understanding through social interactions and environmental stimuli. By actively engaging in problem-solving, dialogue, and reflection, students create personal meanings and shape their learning experiences. The utilization of generative A.I. in educational contexts offers students an opportunity to participate in the active construction of knowledge, moving beyond passive modes of instruction such as reading or writing.

Moreover, social constructivism theory highlights the pivotal role of social interaction in the learning process, advocating for collaborative activities such as group discussions and peer feedback, which facilitate the collective construction of knowledge. Integrating Chat GPT into the classroom fosters collaboration among students, promoting interaction and discourse regarding their respective interactions. Moreover, using generative A.I. tools such as ChatGPT enables the creation of multiple international business scenarios for students to interact with and apply their theoretical knowledge.

The inclusion of Chat GPT introduces a lively dimension to the learning environment, motivating students to engage more actively in tasks compared to conventional discussions . Through such collaborative activities, students are expected to attain higher levels of achievement by drawing upon peer assistance and tutor feedback, thereby bridging the gap between their existing knowledge and their potential for further development. Consequently, the utilization of Chat GPT offers an avenue to identify and address the zone of proximal development (Vgotsky, 1978), as students' individual interactions serve as a diagnostic tool for evaluating their existing knowledge and subsequently expanding their understanding.

Essentially, ChatGPT can be harnessed to craft scenarios that accurately emulate the complexities of the international business environment, offering a valuable resource for educational purposes. By generating dynamic and realistic scenarios, ChatGPT enables students to immerse themselves in lifelike situations that require navigating cultural nuances, economic factors, and global market dynamics. These scenarios can encompass challenges related to cross-border negotiations, market entry strategies, supply chain management across diverse regions, and more. Through engagement with these AI-generated scenarios, students can develop a deeper understanding of the intricacies involved in international business operations. This innovative approach not only enhances their critical thinking and decision-making skills, but also fosters adaptability and cultural sensitivity – qualities crucial for success in a globalized business landscape.

3. Using Generative A.I. in the Classroom

In the context of a Masters level unit on International Business Theory and Practice, I integrated ChatGPT as a powerful tool to impart practical insights into ethical dilemmas that frequently arise in the global business arena. By utilizing ChatGPT, a diverse set of 10 intricate ethical dilemmas was generated, each stemming from real-world scenarios involving cultural clashes, environmental concerns, bribery, supply chain complexities and more. These dilemmas were carefully designed to mirror the complex decision-making challenges that professionals often face when operating in cross-cultural business environments.

Furthermore, as a unique extension of this innovative approach, students were actively involved in the creation and evaluation of role-play scenarios using ChatGPT. In a collaborative exercise, students were tasked with leveraging ChatGPT to devise their own role plays to resolve the ethical dilemmas. Subsequently, students engaged in a critical evaluation of the AI-generated role-play scenarios. This evaluation process involved assessing the accuracy and authenticity of the solution produced by ChatGPT, comparing them against their insights gleaned from academic study and real-life experiences. This dual-layered approach fostered a higher level of cognitive engagement, as students actively analyzed and refined the AI-generated content to align it with the intricacies of global business dynamics. By having students participate in both the creative and evaluative stages, the pedagogical experience became more interactive, immersive, and transformative, enabling them to develop a comprehensive understanding of ethical dilemmas in international business that extends beyond theoretical concepts.

Engaging the students in role-playing exercises based on these AI-crafted ethical dilemmas proved to be an effective pedagogical approach. Through these role-play activities, students were prompted to assume various roles within the scenarios, such as business executives, regulators, or local community leaders. This interactive approach enabled them to immerse themselves in the intricacies of ethical decision-making and encouraged lively discussions on diverse perspectives. By navigating through the dilemmas, students not only honed their ethical reasoning abilities but also developed a heightened awareness of the multifaceted factors that shape international business practices. The fusion of ChatGPT's scenario generation and role-playing methodologies fostered a dynamic and enriching learning environment, equipping students with essential skills for ethical leadership in the global business landscape.

4. Conclusion

In conclusion, the integration of generative A.I., exemplified by tools like ChatGPT, harmonizes seamlessly with the principles of social constructivism theory, culminating in a dynamic and transformative learning experience. This study has highlighted how students, as active constructors of knowledge, engage in problem-solving, dialogue, and reflection to shape their understanding. By

incorporating generative A.I. into educational contexts, learners are empowered to participate in the vibrant construction of knowledge, moving beyond traditional passive modes of instruction.

Moreover, the social constructivist emphasis on collaborative interaction aligns with the collaborative capabilities of ChatGPT, fostering engagement, discourse, and collective knowledge-building among students. This infusion of technology introduces a dynamic dimension to the learning environment, motivating students towards active participation and bridging the gap between existing knowledge and untapped potential.

The application of ChatGPT's scenario generation within the context of international business education further amplifies these benefits. By crafting real-life scenarios, students are immersed in the intricacies of cross-cultural business, bolstering critical thinking, adaptability, and cultural sensitivity. The integration of ChatGPT also extended into ethical dilemma role-play exercises, whereby students took an active role in both generating and evaluating scenarios. This dual-layered approach engendered a higher level of cognitive engagement, allowing students to refine AI-generated content to align it with the complex dynamics of the global business landscape. The fusion of role-play and AI-generated scenarios fostered a dynamic and enriching learning environment, equipping students with essential ethical leadership skills for the global business arena.

In sum, the synergy between social constructivism, generative A.I., and innovative pedagogical approaches exemplified by ChatGPT represents a pioneering path towards a more effective and holistic educational paradigm.

5. References

- Lim, W. M., Gunasekara, A., Pallant, J. L., Pallant, J., & Pechenkina, E. (2023). Generative AI and the future of education: Ragnarök or reformation? A paradoxical perspective from management educators. *The International Journal of Management Education*, 21 (2), <https://doi.org/10.1016/j.ijme.2023.100790>
- Ratten, V., & Jones, P. (2023). Generative artificial intelligence (ChatGPT): Implications for management educators. *The International Journal of Management Education*, 21 (3), <https://doi.org/10.1016/j.ijme.2023.100857>

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*.
Cambridge, MA: Harvard University Press

Operating Cost Control for Business Recovery: Study in Transportation Industry

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Operating Cost Control for Business Recovery: Study in Transportation Industry

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The Covid-19 pandemic starting from 2020 disrupted most industries. Transportation industry faced unprecedented challenges due to the lockdown and movement restriction imposed by governments. To be economically sustainable during slowdown and recover with increasing demand after the ease of restriction, it is vital for firms to make strategic cost control in operations. Considering the unique cost structure of transportation industry, this research examines the cost behavior, more specifically, cost stickiness, to discuss the optimal cost management under uncertainty.

Keywords: Business Recovery, Cost Control, Cost Stickiness, Corporate Performance

1. Introduction

During the year 2020 and 2021, the economies in most countries have been on lockdown at various levels. While such lockdowns or movement restrictions supposed to suppress the transmission of Covid-19, it forced various industries into a sudden slowdown with disrupted

activities, especially logistics and transportation industry. For example, the number of passenger flights dropped around 60% worldwide in 2020 (ICAO). In spite of the different levels of measures introduced by government to stimulate economies, it is vital for firms to operate effectively and efficiency to cope with the uncertain demands. The operation of transportation industry, including passenger airlines, cargo firms, and domestic logistics (e.g., train, truck), relies heavily on capacity allocation where both idle and unmet demand would incur significant losses to the firms (Cannon, 2014; Yoon et al., 2016). In addition, due to the nature of the industry where the depreciation of transportation vehicles (e.g., aircraft, truck, train) is fixed in operating costs, the needs of cost control in other variable costs become vital to the business economic sustainability.

During the Covid-19 pandemic, transportation industries encountered significant losses due to the sudden dropped and/or absent of demands. However, while the sales revenue has decreased dramatically, the operating cost will not reduce at the same rate, leading to lower profit margin. For instance, while firms could lower the cost with lower fuel usage and labor costs, fixed costs such as depreciation costs and rental costs are unlikely to reduce along with the sales drop. This leads the firms become vulnerable and difficult to recover from the sunk cost incurred without sales revenue. Therefore, the management cost decisions would have significant effect on the firm performance, where such decision could be observed through cost behavior (Banker et al., 2018). From a traditional management cost behavior, the relationship

between cost driver and total costs are linear. However, recent accounting research has proposed that cost may behave asymmetrically, which refers to cost stickiness. This phenomenon is observed when the changes in costs are higher when sales are increasing than sales are decreasing (Anderson et al., 2003; Banker et al., 2013). In other words, when the costs are sticky, the firms do not save the same rate of costs with decreased sales compared to increased sales. One possible reason for such cost behavior may due to resource allocation (Anderson et al., 2003; Banker et al., 2010) and agency theory (Chen et al., 2012; Chung et al., 2019). Managers are likely to commit to excess resources when the market demand is high but unwilling to adjust accordingly with lean demand (Agarwal, 2022). In this research, we conjecture that cost stickiness will pose a significant effect to transportation industry with the unpredictable demand in the past few years. Therefore, this research sets out to examine the relationship between cost stickiness and firm performance before, during and after pandemic, to discuss the optimal management cost decisions in transportation industry.

2. Literature and Framework

Despite the extensive discussion in cost stickiness, the research of Ibrahim et al. (2020) find that most literature on the determinants and the existence of cost stickiness but only a few on the economic consequences of cost stickiness. Existing research shows that firms would have sticky cost with various reasons, including economic uncertainty and corporate governance.

Cost stickiness is found to be reflected based on firms' strategies and characteristics. Research has shown that firms' structures such as institutional ownership, board size and social capital have significant effect on cost decisions (Chung et al., 2019; Hartlieb et al., 2019; Ibrahim, 2018; Prabowo et al., 2018). On the other hand, competition is also one of the major factors contributing to the management cost decision. The costs are more likely to be sticky when the competition is high because firms will manage to maintain its competitive advantage by committing resources (Cheung et al., 2018; Costa and Habib, 2021; Lee et al., 2021). As the objective of firms' operations is to maximize profit, research also finds evidence that the uncertainty and risk will affect managers decisions in resource adjustment, leading to different levels of cost stickiness (Jin and Wu, 2021; Li and Zheng, 2020; Lee et al., 2020). Under traditional operations management, the firms should be more flexible in costs adjustments when the demand is uncertain to avoid additional sunk costs. In other words, costs should be less sticky for managers to optimize its operations by adjusting the operations. However, Banker et al. (2014) examine the manufacturing industry and suggest that the firm's cost structure will be more rigid (i.e., stickier cost) when the demand is uncertain in order to reduce the congestion cost.

To understand optimal cost behavior for business recovery in transportation industry, this research is to examine such effect to firm performance throughout the pandemic through the lens of cost stickiness.

3. Methods

We adopt the cost stickiness formula proposed by Weiss (2010) to examine the relationship between management cost decisions and firm performance during and after pandemic. To overcome the limitation of cost stickiness model developed by Anderson et al. (2003) where it could not be served as independent variable, we employ the cost stickiness measurement proposed by Weiss (2010). The cost stickiness measures the difference in cost functions between the two most recent quarters sales, one with increasing sales and the other with decreasing sales. The cost is considered to be sticky if cost increases higher when sales increase than cost decreases when sales are decreasing. The sample includes all transportation companies around the world from the year 2016 to 2022.

4. Discussion

The uncertainties caused by pandemic has made the demand become more unpredictable, especially it depends on the spread of virus and government policies. However, the demand in travelling and logistics have started to rebound since the end of 2022 following the rollout of vaccines and easing of movement restrictions. U.S. Travel Association (2023) has forecasted that both domestic and international travels will be normalized in 2023 and expected to be fully recovered in 2025. To meet such fluctuations in demand, it is essential for transportation firms to make effective and efficient cost adjustments to sustain during downside but be able to meet

the increasing demand to recover. While fixed costs (e.g., depreciation) and fixed assets are major cost components in transportation firms and it is important for firms to commit such resources to prevent cost of congestion during peak demand, our research conjectures that the key factors for sustainability and success in the industry are the cost adjustments between variable and fixed cost. In contrasts with Banker et al. (2014), our research suggests that firms in transportation industry should present a non-sticky cost behavior, especially during period of uncertainties, to ensure its sustainability rather than committing resources beforehand.

The research is expected to contribute to the extant literature in cost stickiness and business recovery. First, even though sticky cost behavior has been discussed in accounting literature, few research focuses on the consequences of such behavior. Second, while current research proposed various business recovery strategies after the pandemic, few studies focus on transportation industry where the cost behavior will be different with outstanding cost structures (i.e., more investments in fixed assets). Therefore, this research aims to provide managerial implications for transportation industry about the effective and efficient cost adjustments in business recovery.

5. Reference

- [1] Agarwal, N. 2022. Cost Stickiness and Stock Price Delay. *European Accounting Review*, 1-25.
- [2] Anderson, M. C., Banker, R. D., and Janakiraman, S. N. 2003. Are selling, general, and administrative costs “sticky”? *Journal of accounting research*, 41(1), 47-63.
- [3] Banker, R. D., Basu, S., Byzalov, D., & Chen, J. Y. (2016). The confounding effect of cost stickiness on conservatism estimates. *Journal of Accounting and Economics*, 61(1), 203-220.
- [4] Banker, R. D., Byzalov, D., Ciftci, M., and Mashruwala, R. 2014. The moderating effect of prior sales changes on asymmetric cost behavior. *Journal of Management Accounting Research*, 26(2), 221-242.
- [5] Banker, R. D., Byzalov, D., Fang, S., and Liang, Y. 2018. Cost management research. *Journal of Management Accounting Research*, 30(3), 187-209.
- [6] Cannon, J. N. (2014). Determinants of “sticky costs”: An analysis of cost behavior using United States air transportation industry data. *The Accounting Review*, 89(5), 1645-1672.
- [7] Chen, C. X., Lu, H., and Sougiannis, T. 2012. The agency problem, corporate governance, and the asymmetrical behavior of selling, general, and administrative costs. *Contemporary Accounting Research*, 29(1), 252-282.
- [8] Cheung, J., Kim, H., Kim, S., and Huang, R. 2018. Is the asymmetric cost behavior affected by competition factors?. *Asia-Pacific Journal of Accounting & Economics*, 25(1-2), 218-234.
- [9] Chung, C. Y., Hur, S. K., and Liu, C. 2019. Institutional investors and cost stickiness: Theory and evidence. *The North American Journal of Economics and Finance*, 47, 336-350.
- [10] Costa, M. D., and Habib, A. 2021. Trade credit and cost stickiness. *Accounting & Finance*, 61(1), 1139-1179.
- [11] Ibrahim, A. E. A. 2018. Board characteristics and asymmetric cost behavior: evidence from Egypt. *Accounting Research Journal*, 31(2), 301-322.
- [12] Ibrahim, A. E. A., Ali, H., and Aboelkheir, H. 2022. Cost stickiness: A systematic literature review of 27 years of research and a future research agenda. *Journal of International Accounting, Auditing and Taxation*, 46, 100439.
- [13] Jin, X., and Wu, H. 2021. Economic policy uncertainty and cost stickiness. *Management Accounting Research*, 52, 100750.
- [14] Lee, E., Kim, C., and Leach-López, M. A. 2021. Banking competition and cost stickiness. *Finance Research Letters*, 41, 101859.
- [15] Lee, W. J., Pittman, J., and Saffar, W. 2020. Political uncertainty and cost stickiness: Evidence from national elections around the world. *Contemporary Accounting Research*, 37(2), 1107-1139.

- [16] Li, W. L., and Zheng, K. (2020). Rollover risk and managerial cost adjustment decisions. *Accounting & Finance*, 60(3), 2843-2878.
- [17] Prabowo, R., Hooghiemstra, R., and Van Veen-Dirks, P. 2018. State ownership, socio-political factors, and labor cost stickiness. *European Accounting Review*, 27(4), 771-796.
- [18] The International Civil Association (ICAO). 2020. Effects of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis. United Nations <https://www.icao.int/sustainability/Documents/COVID-19/ICAO%20COVID%202020%2012%2010%20Economic%20Impact.pdf>
- [19] U.S. Travel Association. 2023. Travel Forecast. [Travel Forecast \(2023-06-14\)| U.S. Travel Association \(ustravel.org\)](https://ustravel.org)
- [20] Weiss, D. 2010. Cost behavior and analysts' earnings forecasts. *The Accounting Review*, 85(4), 1441-1471.
- [21] Yoon, J., Yildiz, H., and Talluri, S. 2016. Risk management strategies in transportation capacity decisions: an analytical approach. *Journal of Business Logistics*, 37(4), 364-381.

Corporate Carbon Emissions, Environmental Innovation and Gender Diversity: Evidence from TSMC

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Corporate Carbon Emissions, Environmental Innovation and Gender Diversity: Evidence from TSMC

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Abstract

This paper develops the argument that a firm's carbon emissions is influenced not only by its environmental innovation but also by its corporate governance mechanism (i.e., gender diversity) to achieve environmental sustainability over time. Based on the largest semiconductor in Taiwan, this paper examines the effects of environmental innovation on its total carbon emissions, including its direct (Scope 1) and indirect CO₂ emissions (Scope 2 and 3) from 2015 to 2021. Moreover, the paper explores the moderating effect of gender diversity on the environmental innovation – carbon emissions relationship. The findings show that environmental innovation significantly reduces a firm's total carbon emissions when executive gender diversity governs the relationship.

1. Introduction

Recent regulatory changes in Taiwan require listed companies to implement sustainability practices to respond to climate change. In particular, carbon management has gained significant attention due to the increasing recognition of environmental sustainability and climate change mitigation. Before 2025, the carbon fee will be levied in phases in Taiwan. According to the Environmental Protection Department, the first phase will target "large carbon emitters" that emit more than 25,000 metric tons of carbon dioxide equivalent (CO₂e) annually - such as steel, semiconductors, or cement, which account for the largest share of Taiwan's carbon emissions. Meanwhile, some preferential benefits are provided to enterprises if they adopt self-directed CO₂ reduction program or other initiatives. Thus, how carbon emissions are reduced by using innovative environmental practices and how other organizational factors influence the effectiveness of environmental innovation in reducing carbon emissions are crucial aspects of combating climate change and achieving sustainable development.

Prior studies have investigated the relationship between environmental innovation and carbon emissions but the findings are mixed. Some previous studies indicated the significant and negative relationship between environmental innovation and CO₂ emissions (Albitar et al., 2023; Ali et al., 2016; Fethi & Rahuma, 2019; Sharif et al., 2022; Zhang et al., 2017). Whereas other studies found a non-significant relationship between environmental innovation and CO₂ or toxic air emissions (Chen & Lee, 2020; Töbelmann & Wendler, 2020).

Environmental innovation refers to the development and application of new technologies, processes, and practices that have positive impacts on the environment. Recently, some research has begun to further study moderating factors affecting the effectiveness of environmental innovation on carbon emission reduction and call for the investigation of governance mechanisms that affect the relationship between environmental innovation and carbon emissions (Albitar et al., 2023; Sharif et al., 2022). Previous research has contended that specific governance mechanisms, like the environmental committee (Albitar et al.,

2023) or social globalization (Sharif et al., 2022), may serve as effective moderators in the context of the relationship between environmental innovation and carbon emissions. However, limited attention has been given to the significant role played by top management teams, especially women, in this regard.

Building on upper echelons theory and top management teams (TMTs) heterogeneity, we develop an argument that carbon emissions are influenced not only by firm environmental innovation but also by its ability to implement environmental sustainability practices over time, with TMT playing a significant role in shaping strategic decisions (Hambrick & Mason, 1984). According to upper echelons theory, top management teams play a significant role in shaping a firm's strategic decisions regarding environmental innovation and carbon emissions. Additionally, certain characteristics of top management teams, such as gender diversity, can be viewed as a crucial corporate governance mechanism that affects the relationship between environmental innovation and carbon emissions (Campbell & Mínguez-Vera, 2008; Hambrick, Humphrey, & Gupta, 2015). Gender diversity, especially the presence of women, can be seen as a means to introduce diverse perspectives into the decision-making process, potentially influencing this relationship.

Our work stands out from previous studies in several key aspects. First, by focusing specifically on gender diversity, this study can provide a more targeted analysis of its role in shaping environmental innovation and carbon emissions reduction efforts. It makes meaningful and sustainable progress toward gender equality. Second, we provide a more comprehensive measure of firm total carbon emissions. From the value chain perspective, firm's total carbon emissions should include not only direct emissions but also upstream and downstream emissions. Thus, we use a more comprehensive measure to reflect its accuracy.

This paper aims to investigate the moderating role of gender diversity in the relationship between environmental innovation and carbon emissions. While the impact of environmental innovation on carbon emissions has been examined in previous studies, understanding how gender diversity influences this relationship remains an important area of investigation. By addressing this research gap, the study contributes to an understanding of the factors influencing carbon emissions and provides valuable insights for organizations seeking to enhance their environmental sustainability.

2. Theory and Proposition

2.1 The Relationship between environmental innovation and CO₂ emissions

Many previous studies have attempted to examine the relationship between the level of a firm's environmental innovation and environmental outcomes (Albitar et al., 2023; Ali et al., 2016; Chen and Lee, 2020; Fethi & Rahuma, 2019; Sharif et al., 2022; Töbelmann and Wendler, 2020; Zhang et al., 2017). The relationship between environmental innovation and CO₂ emissions is a crucial aspect of addressing climate change and achieving sustainable development. Environmental innovation refers to the development and application of new technologies, processes, and practices that have positive impacts on the environment, such that the development of renewable energy sources (e.g., solar, wind, and hydroelectric power) provides cleaner alternatives to fossil fuels, which significantly contribute to CO₂ emission reduction.

Environmental innovation often leads to the creation of technologies that reduce CO₂ emissions. For example, the development of renewable energy sources such as solar, wind, and hydroelectric power provides cleaner alternatives to fossil fuels, which significantly contribute to CO₂ emissions. Besides, Innovations in energy efficiency across various sectors, including manufacturing, transportation, and buildings, can lead to reduced energy consumption and subsequently lower CO₂ emissions. This includes

energy-efficient appliances, vehicles, and industrial processes. Building on their work, we establish the following baseline proposition:

Proposition 1: The level of a firm's environmental innovation is negatively related to its total CO₂ emissions.

2.2 Corporate governance mechanism

2.2.1 Top Management Teams

Researchers have devoted great effort to examining the characteristics of top management teams (TMTs) and their effects on organizational strategy and performance. The upper echelons theory posits that top managers' backgrounds, experiences, values, and cognitive processes influence their decisions and behaviors in leadership positions (Hambrick and Mason, 1984; Finkelstein Hambrick, 1996). The core premise of upper echelons theory is that the top management team (TMT) characteristics and experiences influence their interpretation of situations they face and, in turn, affect strategic choices, and the overall outcome of the organization. Hambrick and Mason (1984) emphasizes that TMTs bring their unique psychological characteristics, experiences, and perspectives to their roles. These factors affect how they perceive opportunities, threats, and challenges, and subsequently influence their strategic decisions.

The theory suggests that observable characteristics of TMTs (e.g. age, gender, education, tenure, personal values, prior experiences) are the proxy measures of psychological factors (e.g. values, cognitive style, cognitive content) that contribute to an executive's mental models and cognitive frameworks. Various studies demonstrate that organizations are the reflection of top managers. These mental models then guide their understanding of the organization's environment and shape their decisions. In summary, the upper echelons theory highlights the impact of top executives' personal attributes on their decision-making and ultimately on organizational outcomes. It provides insights into how leaders' backgrounds shape their strategic thinking and behaviors, which in turn can influence the direction and success of the organizations they lead (Hambrick, Humphrey, and Gupta, 2015).

2.2.2 TMTs Heterogeneity

Studies have addressed the importance of TMT composition, especially TMT heterogeneity (or diversity of member attributes) on firm strategic decisions but yielded mixed and confusing results about its influence on organizational outcomes such as turnover, consensus, and financial or environmental performance. On the positive side, the imputed logic is that having a heterogeneous team enhances the knowledge base, cognitive abilities and overall problem-defining and problem-solving skills of the group (Finkelstein & Hambrick, 1996; Hambrick, Humphrey, & Gupta, 2015). In dynamic environments, information processing requirements call for identification of greater adaptive capabilities, thus favoring heterogeneous teams (Hambrick, Cho & Chen, 1996). Thus, TMTs heterogeneity is of utmost importance to firms that operate in industries characterized by high velocity environments.

Some studies, however, contend that heterogeneity generates tension or a gulf that constrains the information exchange and thus adversely affects firm performance (Ancona & Caldwell, 1992). Researchers have found that heterogeneous teams cause less social integration and communication frequency and high turnover in top management teams (Wagner, Pfeffer, & O'Reilly, 1984; Schippers et al., 2003). Diverse viewpoints, different thinking wave-lengths, uncommon vocabularies, paradigms, and objectives often make a heterogeneous team a net liability to the organization (Hambrick, Cho, & Chen,

1996). Heterogeneous teams thus can create strains in the decision-making process, which may contribute negatively to organizational performance (Pfeffer, 1983).

Other studies found that TMT heterogeneity (i.e., tenure) did not significantly affect executive departures (Hambrick, Humphrey, & Gupta, 2015). The relationship between tenure heterogeneity and executive departures would be significantly positive under high structural interdependence, such as horizontal interdependence.

2.3 The Moderating Effect of Gender Diversity in TMTs on the Relationship of Environmental Innovation - CO₂ Emissions

Although TMTs' heterogeneity and characteristics are recognized as vital factors that can contribute to organizational performance, there has been little investigation of how gender diversity can affect the relationship between environmental innovation and carbon emissions. Prior studies investigated women representation on board members argued that gender diversity leads to effective governance performance. For example, Campbell, and Mínguez-Vera (2008) investigated women representation on boards from a firm performance aspect and argued that gender diversity leads to effective governance performance.

Research shows that gender diversity in a firm's board member and management positions (Campbell & Mínguez-Vera, 2008), social performance (Byron and Post, 2016), and diversity initiatives (Glass and Cook, 2018) affects organizational outcomes. Gender diversity promotes ESG information disclosure and relates to ESG performance measures (Velte, 2016), indicating that gender diversity policies is needed for investigation. Some studies investigating the relationship between team heterogeneity and organizational outcomes has made a distinction between job-related and non-job related demographic characteristics of executives. Functional background, educational background, and tenure of executives are highly job-related attributes, whereas age and gender are low in job-relatedness (Pelled, Eisenhardt & Xin, 1999). If the heterogeneity is high with respect to highly job-related attributes, then these attributes are apt to have a stronger relationship with strategic choices.

Studies that investigated women representation on boards from a firm performance aspect (Campbell, and Mínguez-Vera, 2008; Vandewaerde et al., 2011) argued that gender diversity leads to effective governance performance (Adams & Ferreira, 2009). Gul et al. (2011) also documented that board diversity leads to greater knowledge, innovation and creativity, thus providing a competitive advantage. Building on their work, we establish the following proposition:

Proposition 2: The relationship between a firm's environmental innovation and carbon emissions is positively moderated by gender diversity (women).

3. Methods

3.1 Sample and Data collection

We investigate the largest semiconductor in Taiwan, Semiconductor Manufacturing Company Limited (TSMC), for our research sample from 2015 to 2021. As mentioned in sustainability report "TSMC will use best available technology to reduce emissions of greenhouse gases (GHG), becoming an industry leader in low-carbon manufacturing." Since TSMC is the largest IC manufacturing firm in Taiwan and worldwide, its environmental practices- carbon emissions- should provide significantly empirical evidence for how a firm respond to climate change. We collect data from the company's sustainability

report and Eikon dataset from 2015 to 2021.

3.2 Variables

3.2.1 Dependent variable: Total carbon emissions. Unlike Albitar et al. (2013), this variable is measured by company's total carbon emissions, including Scope 1, Scope 2 and Scope 3 across overall company's sites. We converted the CO2 emissions to a natural logarithm ($\ln$ CO2 emissions) to reduce the skewness.

3.2.2 Independent variable: Environmental innovation. It is measured as TSMC's environmental innovation score from Eikon database (Albitar et al., 2023), ranging from 0 to 100. The higher score means better performance in the environmental innovation dimension.

3.2.3 Moderator: Gender diversity in top management teams. We use three measures to gauge gender diversity: women in managerial roles, in executive positions, and on the board of directors. Those information was also obtained from Eikon database.

3.2.4 Control variable. We control firm's profitability since it may influence company's environmental management initiatives (Albitar et al., 2023). We use ratio of net income before interest and tax (EBIT) to total assets to measure profitability.

3.3 Model

Time-series regression is conducted. All time-varying explanatory variables were lagged by one year.

4. Results

4.1 The total carbon emissions for Scope 1, 2 and 3 from 2015 to 2021 by TSMC

Figure 1 and 2 illustrate the total carbon emissions and individual Scope emission from 2015 to 2021. The carbon emissions for Scope1 and 2 emissions increase from 6.67 to 11.35 million metric tons. And the total carbon emissions for Scope1, 2 and 3 emissions increase from 10.10 to 17.40 million metric tons. From the trend, we observed that the indirect carbon emissions outside TSMC (Scope 3) greatly increased over time, indicating its significant factor for carbon emissions management.

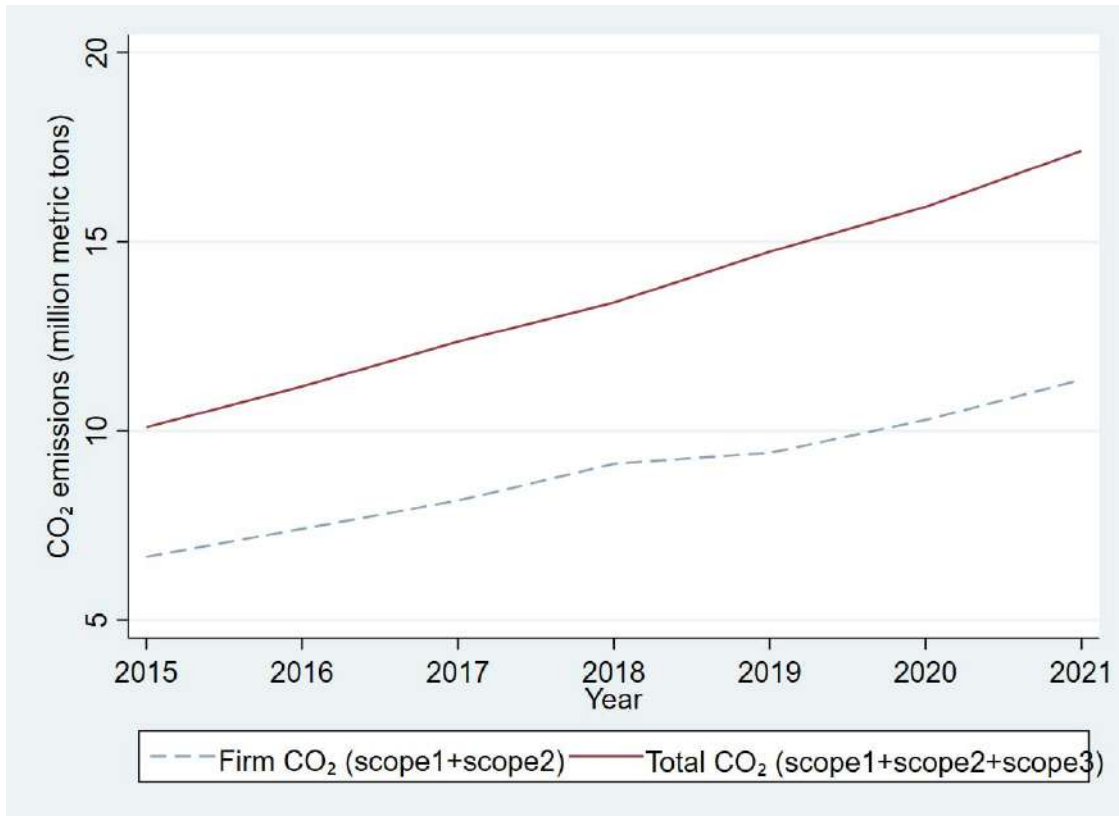


Figure 1 Total carbon emissions from 2015 to 2021

Further, the three scope carbon emissions were displayed in figure 2. In contrast to Scope 2, the steady increase of scope 1 emissions indicates that TSMC manage its direct carbon emissions better the indirect emissions. In 2015, the three scope carbon emissions are 2, 4.64 and 3.45 million metric tons, respectively. In 2021, the figures are 2.15, 9.20 and 6.05 million metric tons, respectively. Among the three scope, Scope 2 carbon emissions are the largest component of total carbon emissions. Now, most attention is paid to the Scope 1 and 2 carbon emissions. However, Scope 3 carbon emissions include all other indirect emissions that occur across the value chain and are outside of the organization's direct control. It will become a challenge for the firm to manage them.

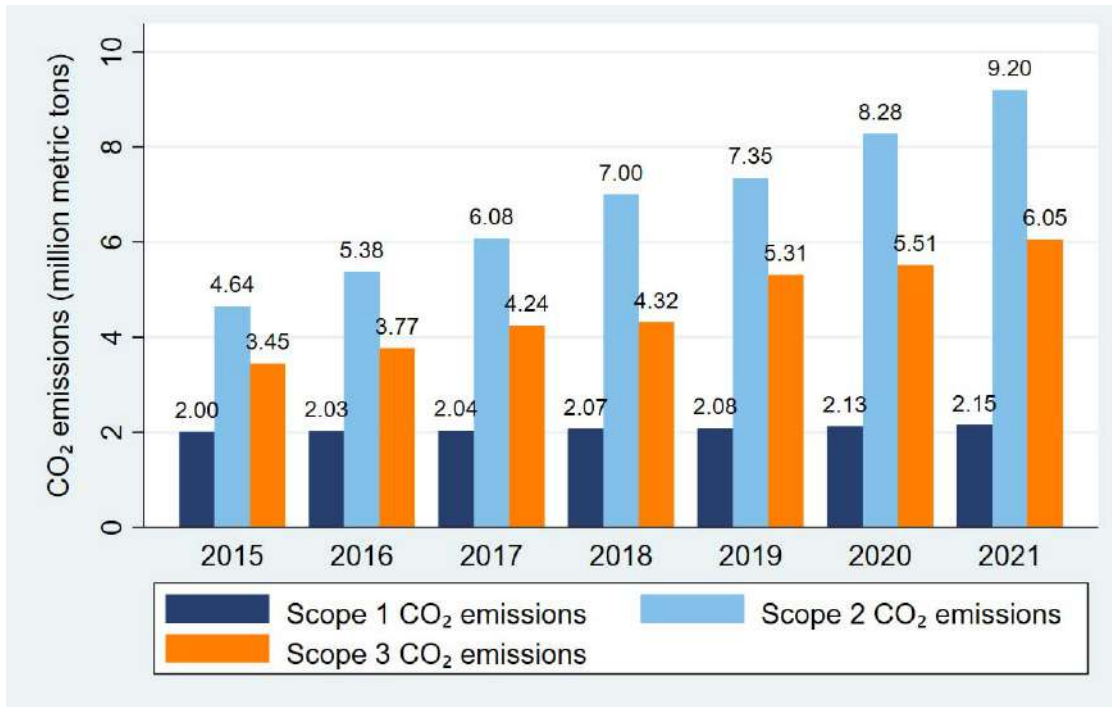


Figure 2. The carbon emissions by scope

Moreover, gender diversity for the three measures are illustrated in figure 3. In 2015, the percentages of women managers, executives and directors are 0.11, 0.18, and 0.13, respective. In 2018, TSMC has the highest gender diversity as 0.13, 0.19 and 0.22. However, in 2021, the percentages decrease from 0.22 to 0.1 for the percentage of female directors. Overall, we observe the decreasing gender diversity for TSMC over time.

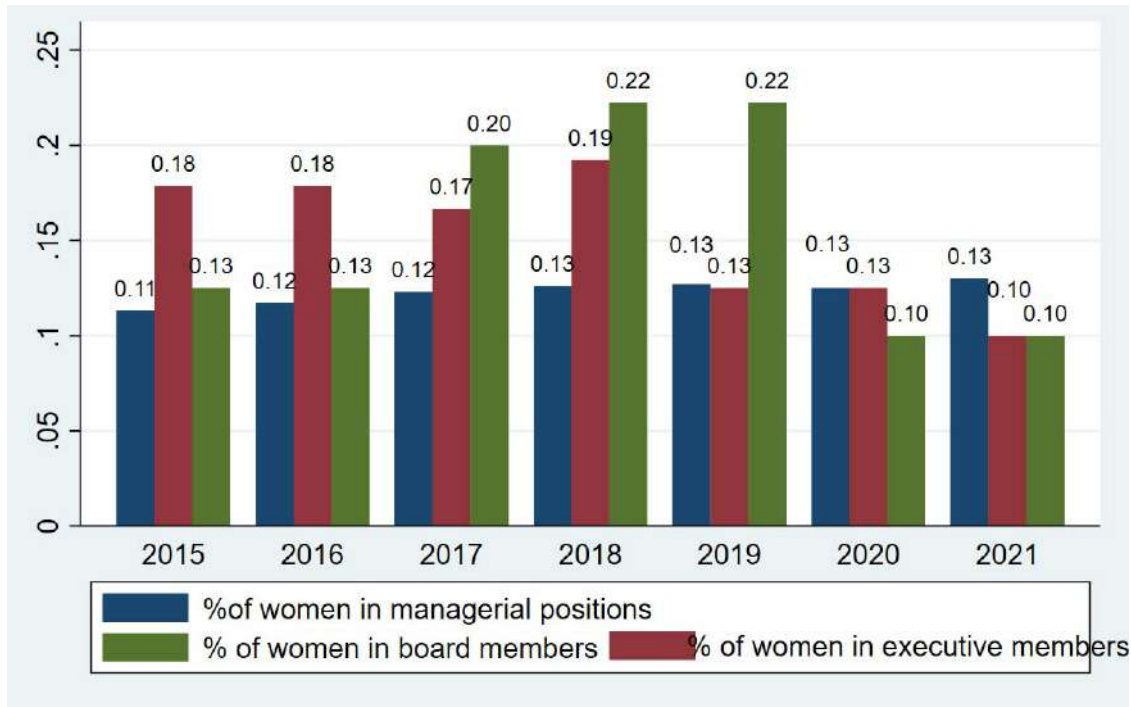


Figure 3. Women Gender diversity

4.2 Regression results

Table 1 displays the descriptive statistics and correlations for the variables included in the analysis. Total carbon emissions include Scope1, 2 and 3 emissions for all sites' emissions (sites located in Taiwan and abroad). The mean and standard deviation of total carbon emissions are 13.58 million metric tons and 2.61, respectively. The mean and standard deviation of environmental innovation score are 96.56 and 2.77, respectively. It shows TSMC performs well in environmental innovation dimension from the score. The three gender diversities are managerial, executive, and board gender diversity. Their means are 0.12, 0.15, 0.16, respectively. And standard deviations of these three measures are 0.01, 0.04, and 0.06, respectively. Although the mean of board gender diversity is higher than the other two, its larger value of standard deviation indicates its variation.

Table 1: Means, Standard Deviations, and Intercorrelations

Variable	Mean	S.D.	Min	Max	1	2	3	4	5	6
1. Total carbon emissions ^a	13.58	2.61	10.09	17.40	1.00					
2. Profitability	0.20	0.02	0.17	0.21	-0.59	1.00				
3. Env_innovation	96.56	2.77	91.77	99.57	0.39*	-0.32	1.00			
4. Managerial gender diversity	0.12	0.01	0.11	0.13	0.93*	-0.74	0.62	1.00		
5. Executive gender diversity	0.15	0.04	0.10	0.19	-0.83*	0.49	0.04	-0.66	1.00	
6. Board gender diversity	0.16	0.06	0.10	0.22	-0.10	-0.46	0.67	0.23	0.36	1

* $p < 0.05$

^a measured as total carbon emissions (in million metric ton)

Table 2 reports the regression results. Model 1 reports the effects of profitability and environmental innovation on carbon emissions. Regarding the control variable, profitability did not show a significant effect on carbon emissions.

Proposition 1 predicted that environmental innovation will reduce carbon emissions. As shown on Model 1, environmental innovation is not significant, indicating no support for Proposition 1.

In Model 2-4, the variables related to gender diversity, specifically managerial and executive gender diversity, demonstrated statistical significance. This suggests alignment with previous research on upper echelon characteristics (Finkelstein & Hambrick, 1996), indicating that the characteristics of managers and executives directly impact a firm's environmental performance, particularly in terms of carbon emissions. However, it's noteworthy that the signs of their effects were both positive and negative, indicating distinct influences on carbon emissions. Women in executive roles appear more inclined toward carbon emission reduction, while women in managerial roles exhibit contrasting behavior. In addition, women board governance was not significant, which implies that board governance did not have significant impact on the relationship between environmental innovation and carbon emissions. The varying significance of different gender diversity (managerial, executive, and board) on the relationship between environmental innovation and carbon emissions can be explained by two angles. First, managerial and executive positions typically have more direct influence on a firm's strategic decisions and day-to-day operations compared to board members. Board members often set broader policies and provide oversight but may not be as deeply involved in daily operational decisions related to environmental innovation and carbon emissions. Second, executives and managers are closer to the operational aspects of the business. They may have a more immediate impact on the adoption and implementation of environmental initiatives, which could significantly affect carbon emissions. Board members, on the other hand, might focus on governance and long-term strategic planning.

Proposition 2 predicted that the relationship between a firm's environmental innovation and carbon emissions was positively moderated by women gender diversity. As shown in Model 6, the interaction between environmental innovation and executive gender diversity was significantly positive ($p < 0.05$). This finding means that women executives are more attentive to environmental innovation and carbon emissions. Meanwhile, the interaction between environmental innovation and managerial gender diversity was negative but not significant. Also, the interaction between environmental innovation and board gender diversity was positive but not significant. In support of this proposition, women executives have the significant impact on the reduction of carbon emissions by using environmental innovation.

Table 2: Regression results

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Profitability	-1.03 (-0.19)	3.72 (-1.21)	-2.37 (-0.55)	-9.53 (-0.90)	4.41* -20.63	1.09 -8.57	-16.19 (-0.63)
Env_innov.	0.03 (-1.18)				0.23 (-7.45)	-0.69* (-40.06)	-0.03 (-0.06)
M_gender diversity(%)		0.328* -3.96			2.67 -10.99		
E_gender diversity(%)			-0.38* (-1.69)			-3.98* (-42.39)	
D_gender diversity(%)				-0.02 (-0.58)			-0.65 (-0.20)
Env_innov. x M_gender diversity(%)					-0.02 (-8.80)		
Env_innov. x E_gender diversity(%)						0.04* (-41.99)	
Env_innov. x B_gender diversity(%)							0.01 (-0.18)
Constant	13.46*	11.71**	17.53***	18.64**	-12.48	84.28*	23.35
Observations	6	6	6	6	6	6	6

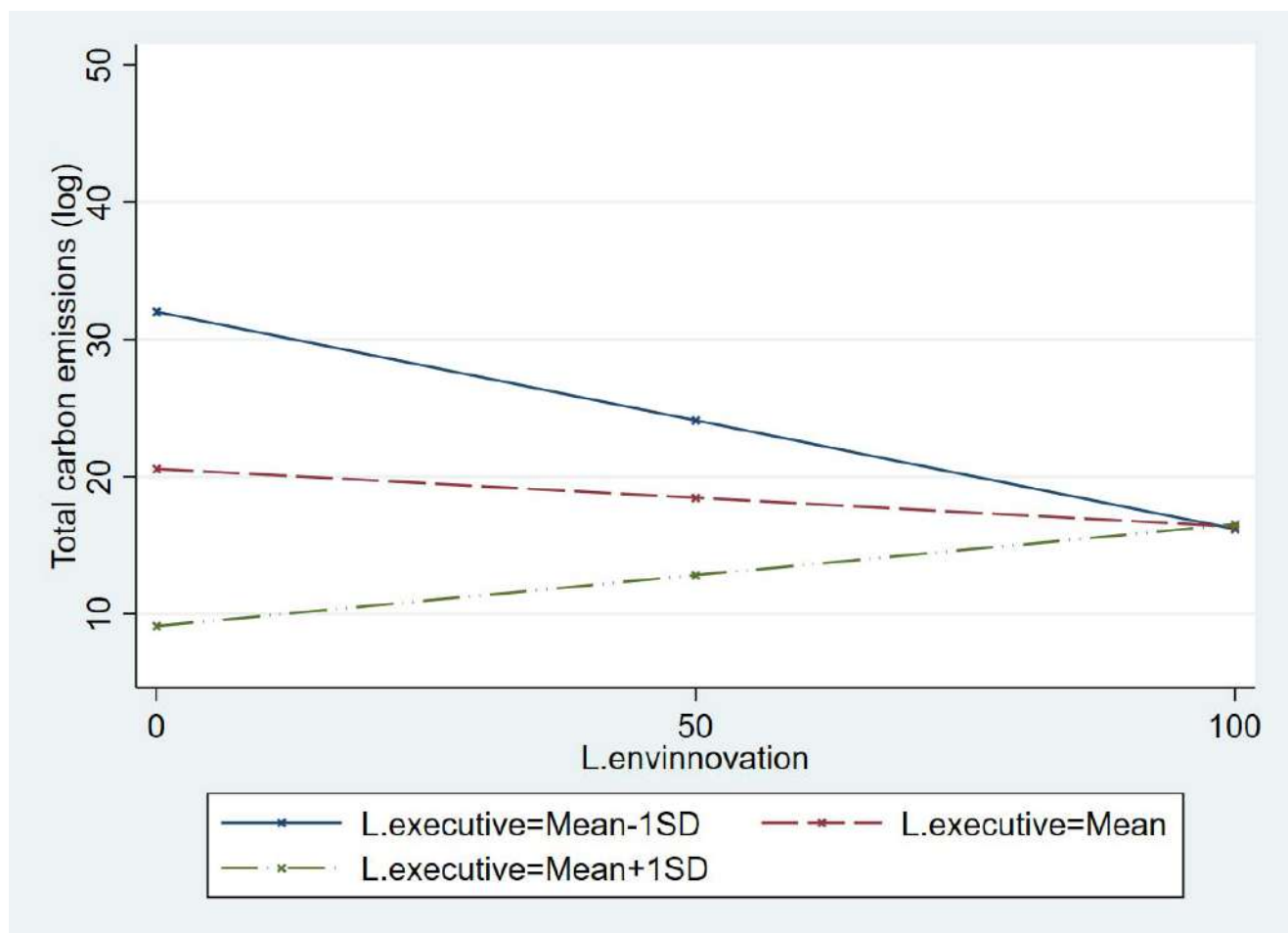
Note: Env_innov. stands for environmental innovation; M_gender diversity stands for Managerial gender diversity; E_gender diversity stands for Executive gender diversity; B_gender diversity stands for Board gender diversity. We lag all the control, independent variable and moderators.

Standard errors in parentheses

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

For the remainder of the analyses, we focus mainly on the moderating effects of women executive gender diversity on the relationship between environmental innovation and carbon emissions. In Fig. 1, we plot the estimated effects of environmental innovation on carbon emissions across various levels of executive gender diversity (at mean, mean -1 standard deviation, and mean +1 standard deviation level levels). The figure shows that environmental innovation is more likely to reduce carbon emissions when women executives gender diversity is low. When companies have fewer women in executive roles, the projected carbon emissions decrease by approximately 86%, dropping from log (32), equivalent to 78,962,960 million metric tons, to log (16.8), equivalent to 10,638,605 million metric tons, when gender diversity among women executives is at a lower level (mean - 1 standard deviation level). In contrast, for firms with managers who have more women executives at a higher level (mean + 1 standard deviation level), the projected carbon emissions increase as environmental innovation increases.

In sum, the impact of environmental innovation on carbon emissions varies based on the level of women executives gender diversity. When women executive gender diversity is low, environmental innovation is more effective in reducing carbon emissions, with a substantial 86% decrease in projected emissions. Conversely, in companies with higher levels of women executives gender diversity, an increase in environmental innovation tends to lead to an uptick in projected carbon emissions. This demonstrates a differential effect, highlighting the importance of considering gender diversity in executive roles when assessing the environmental impact of innovation.



5. Discussion and Conclusion

The study reveals a notable connection between the gender diversity of women executives and the effectiveness of environmental innovation in reducing carbon emissions. This finding underscores the importance of considering not only the technical aspects of environmental innovation but also the TMT governance factors that influence carbon emissions. While the three gender diversity (managerial, executive and board) are important, their varying significance on the relationship between environmental innovation and carbon emissions can be attributed to differences in decision-making authority and proximity to operational decisions.

Besides, when analyzing the moderating results, it is evident that only executive gender diversity emerges as a statistically significant moderator in the relationship between environmental innovation and carbon emissions. This finding is not entirely in line with the upper echelons theory and TMT heterogeneity perspective, but it does offer support for at least one aspect of the theory. When women executives' gender diversity is low (specifically at the mean - 1 standard deviation level), environmental innovation has a significant positive effect on reducing carbon emissions. In contrast, firms with a higher level of gender diversity among women executives (mean + 1 standard deviation level) experience an unexpected increase in projected carbon emissions as they implement more environmental innovation. This finding raises questions about potential challenges associated with managing innovation initiatives in organizations with greater gender diversity.

These results have practical implications for businesses. Companies aiming to reduce their carbon footprint should consider their current level of gender diversity in executive positions when formulating and implementing environmental innovation strategies. Tailoring approaches based on gender diversity levels could enhance the effectiveness of sustainability initiatives. Besides, the study highlights a complex relationship between gender diversity and environmental innovation outcomes. Further research is needed to delve deeper into the mechanisms at play and to explore the reasons behind the observed trends. Beyond its business implications, this study raises broader social and ethical questions about the role of diversity in addressing environmental challenges. It underscores the importance of inclusivity in leadership positions and its potential impact on solving pressing global issues like climate change.

The study has limitations. First, it relies on data from a single company over time, which limits its generalizability. Second, the findings indicate that gender diversity among managerial and board members, particularly women, does not impact the association between environmental innovation and carbon emissions. This outcome may be attributed to the limited presence of female representation on the managerial positions or board of directors.

In conclusion, the research findings suggest that gender diversity among women executives has a differential effect on the outcomes of environmental innovation efforts within organizations. Recognizing and addressing these effects can be essential for businesses committed to sustainability and long-term environmental responsibility.

Reference

- Adams, Renée B., Ferreira, Daniel (2009), Women in the boardroom and their impact on governance and performance, *Journal of Financial Economics*, 94 (2), 291-309.
- Albitar, K., Borgi, H., Khan, M., & Zahra, A. (2023). Business environmental innovation and CO2 emissions: The moderating role of environmental governance. *Business Strategy and the Environment*, 32(4), 1996–2007.
- Ali, W., Abdullah, A., & Azam, M. (2016). The dynamic linkage between technological innovation and carbon dioxide emissions in Malaysia: An autoregressive distributed lagged bound approach. *International Journal of Energy Economics and Policy*, 6(3), 389–400.
- Ancona, D. G., & Caldwell, D. F. (1992). Bridging the boundary: External activity and performance in organizational teams. *Administrative Science Quarterly*, 37(4), 634–665.
- Byron, K., and Post, C. (2016) Women on boards of directors and corporate social performance: A meta-analysis. *Corporate Governance: An International Review*, 24: 428–442.
- Campbell, K. & Mínguez-Vera, A. (2008). Gender diversity in the boardroom and firm financial performance. *Journal of Business Ethics*, 83(3), 435-451.
- Chen, Y., & Lee, C. C. (2020). Does technological innovation reduce CO2 emissions? Cross-country evidence. *Journal of Cleaner Production*, 263, 121550.
- Fethi, S., & Rahuma, A. (2019). The role of eco-innovation on CO2 emissions reduction in an extended version of the environmental Kuznets curve: Evidence from the top 20 refined oil exporting countries. *Environmental Science and Pollution Research*, 26(29), 30145–30153.
- Finkelstein, S. & Hambrick, D. (1996) Strategic leadership: Top executives and their effects on organizations. West Publishing Company, St. Paul, Minneapolis.
- Glass, C, Cook, A. (2018) Do women leaders promote positive change? Analyzing the effect of gender on business practices and diversity initiatives. *Human Resource Management*, 57: 823–837.
- Gul, Ferdinand A., Srinidhi, Bin & Ng, Anthony C. (2011). Does board gender diversity improve the informativeness of stock prices? *Journal of Accounting and Economics*, 51(3), 314-338.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review*, 9(2), 193–206.
- Hambrick, D. C., Cho, T. S., & Chen, M.-J. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, 41(4), 659–684.
- Hambrick, D.C., Humphrey, S.E. and Gupta, A. (2015), Structural interdependence within top management teams: A key moderator of upper echelons predictions. *Strategic. Management Journal*, 36: 449-461.
- Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. (1999). Exploring the black box: An analysis of work group diversity, conflict, and performance. *Administrative Science Quarterly*, 44(1), 1–28.
- Pfeffer, J. (1983). Organizational demography. *Research in Organizational Behavior*, 5, 299–357.
- Schippers, M. C., Den Hartog, D. N., Koopman, P. L., & Wienk, J. A. (2003). Diversity and team outcomes: the moderating effects of outcome interdependence and group longevity and the mediating effect of reflexivity. *Journal of Organizational Behavior*, 24(6), 779–802.
- Sharif, A., Saqib, N., Dong, K., & Khan, S. A. R. (2022). Nexus between green technology innovation, green financing, and CO2 emissions in the G7 countries: The moderating role of social globalisation. *Sustainable Development*, 30(6), 1934–1946.
- Töbelmann, D., & Wendler, T. (2020). The impact of environmental innovation on carbon dioxide emissions. *Journal of Cleaner Production*, 244, 118787.
- Vandewaerde, M., Voordeckers, W., Lambrechts, F., & Bammens, Y. (2011). Board team leadership

- revisited: A conceptual model of shared leadership in the boardroom. *Journal of Business Ethics*, 104(3), 403–420.
- Velte, P. (2016). Women on management board and ESG performance. *Journal of Global Responsibility*, 7(1), 98-109.
- Wagner, W. G., Pfeffer, J., & O'Reilly, C. A. (1984). Organizational demography and turnover in top-management groups. *Administrative Science Quarterly*, 29(1), 74–92.
- Zhang, Y.-J., Peng, Y.-L., Ma, C.-Q. & Shen, B. (2017). Can environmental innovation facilitate carbon emissions reduction? Evidence from China. *Energy Policy*, 100, 18-28.

Paradox between Gross National Happiness and Economic Growth - A Survey in Bhutan

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Paradox between Gross National Happiness and Economic Growth

-A Survey in Bhutan

Extended Abstract

This study investigates how Gross National Happiness (GNH) cope with economic growth in governmental policy perspective and actual implement perspective. The researcher conducted one-week observation and also conducted interview to public officers, freelance worker, and students in Thimphu and Lobesa. It was found that government is trying to regulate activity of private sector by awarding a certificate and giving tax benefit if their activity matches with GNH philosophy. On the other side, Bhutan is struggling with high unemployment rate of 11.9% of young people. This situation is making young people afraid; alcohol and drug use of youth is also a problem in Bhutan. Though a lot of young people hope to be a civil officer for stable income, it is also found that people who were not received a high education also make live such as a freelance taxi driver as equal as civil officer. Overall, GNH is thought to be a philosophy for country development. The Bhutanese people were unexpectedly self-reflective about GNH, and understand their own problem. If the GNH certificate actually contributes to happiness, it can be an important model for other countries to pursue people's happiness and corporate activities at the same time.

Keyword: Bhutan, GNH, Paradox

1. Introduction

Bhutan is a country of 38 square kilometers located inland of South Asia, North of India. The country has maintained monarchy for many years and kept isolation policy for 30 years (Nagata 2008).

However, the country transitioned to democracy in 2008 and gradually moving toward to capitalist society to meet with global situation. Around 80 percent of population believes in Tibetan Buddhism.

The religion influences on economic policy; Jigme Singye Wangchuk the forth king stated “GNH is far more important than GNP” and has been a central philosophy of national development. Especially after APEC conference in 1998, the Bhutanese economic philosophy contradicting GDP and GNP, has been broadly known as GNP: Gross National Happiness (Aoki et al., 2010). As stated by the King,

Bhutan has pursued happiness of the people as well as economic growth. Capitalist expansion and

Economic growth may not always coincide with the happiness of the people. Still, Bhutanese policy may be considered to be advanced model in happiness studies. In this study, the researcher conducted a pre-survey in Bhutan to investigate if GNH policy is actually spread in society and bringing people a work-life happiness.

2. Theoretical Background

It is necessary to define happiness to discuss about happiness.; this is the most difficult part in happiness study because what brings happiness defers from person to person. In economic point of view, materialistic wellness can bring happiness, however as stated above, increase of GDP and GNH do

not always equal with increase of happiness. For example, un-happy coincidence such as illness or car accident can add to GNP increases if financial expenditure increase (Aoki et al., 2010). “Utility” is used to measure happiness other than financial value in economics. For example, the pleasure one initially feels when drinking beer after a long day is expressed as “marginal utility”, the point of maximum utility. In other words, increasing utility is established as one way to pursuit of happiness. However, whether people consider individual pleasure to be happiness or a state of constantly changing pleasure to be happiness is not a universal criterion. Cultural characteristics such as individualism vs collectivism might affect. In psychology area, it is thought that immersing on a rewarding activity can bring a happiness. This state is called “flow” (Csikszentmihalyi 1990). However, it is also said that people in such as state do not value happiness and do not recognize and report by themselves (Frey et al. 2012).

There are some happiness studies in philosophy area from collectivism point of view. Uchida (2012) insisted that definition of happiness is not homogenous worldwide; it might depend on cultural characteristic. “Flow” state in psychology or “utility” in economics are individual experience, and this would relate with happiness in individualistic culture such as in U.S. On the other hand, in collectivist countries like Japan, human relations would affect more on happiness (Uchida 2021).

3. Methods and Findings

The researcher conducted the one-week observation and interview in Thimphu and Lobesa in August

2018. Official language in Bhutan is Dzongkha, however, a lot of people speak fluent English therefore the interview was done directly in English except freelance worker; a tour guide translated Dzongkha to English and vice versa.

Working situation in Bhutan-There are some Indian workers in Thimphu other than their own people. Bhutan's government relies on aid from India for their expense, and therefore has a special connection with its neighbor India. The youth unemployment rate in Bhutan today is extremely high at 11.9 percent, and 86 percent of all unemployed people are the youth (Statistical Yearbook of Bhutan 2020). A person who has worked in ministry of labor told that more people are educated in Bhutan nowadays more than job demand; Bhutanese avoid dirty or heavy work so they are relying those jobs on foreign workers (Former Ministry of Labor official, 2018).

GNH and activity of private sector-Most people in Bhutan believes in Buddhism and GNH also stems from Buddhism thought. GNH is not against the need for money; it is thought to be necessary to feed a family and other needs. Economical wellness is easy to appeal, but culture is invisible and difficult to regain once it is lost. GNH regulation is to break (slow down) the economic development to maintain something invisible. To regulate activity of private sector, GNH certification program is going to start in 2019. Each private company is graded from A to C and the high graded companies will receive benefits from government for example reducing tax. The GNH certificate helps branding of the company; this also helps customers to make better buying decision (Anthropologist in Center for Bhutanese Studies, 2018).

Group Interview of Students-The researcher conducted a group interview of five students in a University in Lobesa realizing unemployment problem of younger generation in Bhutan.

About the career after graduation, becoming a civil officer was the most popular choice. Because of the popularity, passing exam to be the civil officer is very demanding. However, students do not prefer to work in a private company because they think salary may not be paid properly. They are interested in starting business rather than working in a private sector.

I want to be a civil officer, if it is too difficult, I want to start own business. (Student, 2018)

Public sector is stable (to work) and they have good welfare. Private company may not pay salary sometimes. (Student, 2018)

They say that happiness is important but money is also important because it can bring happiness. They insist they do not need too much money. On the other hand, they also insist they need to feed to their family; they think they need to earn money for more than themselves.

Happiness is important, but money brings happiness. (Student, 2018)

We need to support our family such as parents, younger siblings or unemployed siblings.(Student, 2018)

Finally, the researcher asked if they think Bhutanese are happy. After a moment's pause, one student shook his head. But then, one student said, "The Bhutanese are satisfied and kind. We are still isolated from the rest of the world, so we are happy".

Interview to a taxi driver-The researcher conducted an interview to a young freelance who work as a

taxi driver and also a tracking chef. Freelance workers work unstable working hours and have unregulated holiday. The interviewee also stated that he works 12 hours a day and take one day off in two weeks.

I have been a monk since childhood and have never studied in a school. I returned to a secure life to take care of my grandfather, but now someone else is taking care of the grandfather so I started to work.

Age:	Occupation:	Income:	Working hour:	Holiday:
32	Taxi driver, Tracking chef	Depends on luck, about 500-2000 per a day. 20000-30000nu in a month.	About 12 hours a day.	About one day in every two weeks.

He also stated the difficulty in work to handle young customers who is drunk or using drug.

There are various customers. Some people are difficult to handle, such as someone who have drunk alcohol in night party or kids who used drug.

As comparison, the researcher conducted an interview to a civil officer. As for the working conditions of civil officer, they are regulated to work eight hours a day in summer and seven hours in winter (this 7 or 8 hour includes a lunch break) and the salary was 23,000Nu.

Age:	Occupation:	Income:	Working hour:	Holiday:
40-50's (not specified)	Civil officer	23,000Nu per a month	9:00-17:00 in summer 9:00-16:00 in winter.	Two days in a week.

Comparing the above freelance worker with civil officer, the young-adult freelance driver earns equal or more than the older civil servant. Though the job is tough, it seems uneducated or young people still have opportunity to earn money depending on their efforts.

4. Discussion

The Bhutanese people were unexpectedly self-reflective about GNH in comparison with other countries. The GNH policy does not deny democratization and capitalism, but rather is a strategy to cope with them. However, the wave of capitalism is still affecting people's lives in various ways. For example, anxiety about unemployment and drug abuse have become problems among young people. Bhutanese government is trying to ensure that the activity of private sector will conform with GNH policy by GNH certificate program. Additional research is necessary to investigate what kind of company have been certified and if the certificate is actually implementing GNH or not. If the GNH certificate actually contributes to happiness it can be an important model for other countries to pursue people's happiness and corporate activities at the same time.

5. References

- [1] Aoki, H., Ishido, H., & Kawashima, K. (2010). In Search of Abundance : The Case of Bhutan's Gross National Happiness. *Studies on Humanities and Social Sciences of Chiba University*, 20, 49-68.
- [2] Csikszentmihalyi, M. (1990). *Flow: the psychology of optimal experience*. New York, Harper & Row.

[3] Frey, B. S., Stutzer, A., Benz, M., Meier, S., Luechinger, S., & Benesch, C. (2008). *Happiness: A Revolution in Economics*. The MIT Press.

[4] Nagata, T. (2008). Economic Development and the Pursuit of Gross National Happiness in the Kingdom of Bhutan. *HUE Journal of Economics and Business*, 30, 191-208.

[5] National Statistics Bureau of Bhutan (n.d.). *Statistical Yearbook of Bhutan 2020*. National Statistics Bureau. <https://www.nsb.gov.bt/publications/statistical-yearbook/>

Uchida, Y. (2020). *これからの幸福について 文化的幸福感のすすめ*(Japanese title only). Shinyosha.

[6] Uchida, Y., & Ogiwara, Y. (2012). Cultural construal of happiness: Cultural psychological perspectives and future direction of happiness research. *Japanese Psychological Review*, 55(1), 26-42.

Exploring AI Adoption Strategies for International Business in Asia Pacific: A Systematic Review

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Exploring AI Adoption Strategies for International Business in Asia Pacific:

A Systematic Review

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Extended Abstract

This research uses a systematic review approach to investigate the strategies for adopting AI technologies to achieve international market expansion effectively. This thorough investigation encompasses an analysis of real-world case studies, industry reports, and academic literature. The initial phase, focusing on case studies from the Asia Pacific region, highlights the shared strategic approach of collaboratively utilizing AI expertise and optimizing operations through big data, all while still tailoring unique strategies to suit their business context.

Keywords: Artificial Intelligence, International Market Expansion, Born-digital firms,

1. Introduction

The rapid global expansion of born-global firms, born-digital firms, and local firms in Asia Pacific until some of them become the first unicorns in Thailand inspires us to investigate what strategies and how they use AI. The increasing investment in Artificial Intelligence (AI) usage demonstrates that firms see AI's potential to add value to firms. While AI is pervasive in the business landscape, exploring firms' strategies for harnessing AI to expand into new global markets and create new revenue streams needs to be developed more. The current research studies provide us with knowledge about how AI accelerates business growth and how marketers can leverage AI (Campbell, Sands, Ferraro, Tsao, & Mavrommatis, 2020). However,

those existing studies may still need to answer the specific questions. Therefore, this paper aims to bridge the literature gap by answering these questions: 1) How do firms potentially use AI to facilitate their international market expansion? and 2) What are the different strategies employed by born-global firms, local firms, and born-digital firms?

This paper examines firms' strategies based on three case studies of different types of firms, including born-digital firms, born-global firms, and local firms within the Asia Pacific region that adopt AI to expand market opportunities and create revenues. The findings of this initial stage show that three primary strategies include encompassing talent acquisition, data utilization, and strategic partnerships tailored to the unique characteristics of each type of enterprise (born digital firms, born global firms, and local firms).

There are several significant contributions to the field of International Business (IB). Firstly, our study is grounded in case studies encompassing a diverse array of firms in the Asia-Pacific region. The findings illustrate the common patterns and distinctive AI strategies employed by born-global firms, local firms, and born-digital firms for market expansion. Secondly, this research challenges the conventional gradualism approach of international business by showing case studies of firms actively engaging in collaborations, forming strategic partnerships, and leveraging AI to accelerate their global expansion. Furthermore, although the subject of AI in business has been examined in existing research (Babina, Fedyk, He, & Hodson, 2020; Campbell et al., 2020; Nair & Gupta, 2020), the exploration of strategies employed by firms leveraging AI to expand their global market presence remains a relatively underexplored facet within the realm of International Business.

2. Literature Review

International market expansion has been pervasively investigated. Previous research in IB mentioned experienced learning, which takes time (Johanson & Vahlne, 2009). However, the lack of market knowledge may no longer pose a significant obstacle to internationalization—global platform shifts the international

business landscape (Kromidha & Robson, 2021). Born-global firms have more opportunities to accelerate market growth by adopting digital technology (Anand, Singh, Selivanovskikh, & Ren, 2023; Mostafiz, Sambasivan, & Goh, 2023). This change stems from the transformative influence of artificial agents, like AI, which expedite the internationalization process. AI technology and machine learning help firms identify the right customers and gain market insights (Nair & Gupta, 2020). The new AI era may disrupt the concept of gradual expansion. Firms can leverage AI in a broader perspective, such as operations, communications, and marketing (Monaghan, Tippmann, & Coviello, 2020).

In the context of global market expansion, Arun Kumar (2021) indicates that AI facilitates the acquisition of customer insights through data analysis, particularly in turbulent environments. AI can improve marketing performance by predicting and engaging customers (Campbell et al., 2020; Vlačić, Corbo, Costa e Silva, & Dabić, 2021). AI empowers marketers to harness data for personalized messaging, task automation, campaign optimization and enhanced customer experiences (Kietzmann, Paschen, & Treen, 2018). Furthermore, AI can optimize marketing operations (Arun Kumar, 2021) and advertising (Kietzmann, Paschen, & Treen, 2018), enabling digital marketing performance to improve marketing strategies.

Even though the current studies have emphasized the AI role in nurturing marketing growth (Kromidha & Robson, 2021; Nair & Gupta, 2020), the focus on international expansion needs further studies. This study does not focus on the role of AI but analyzes the pattern and strategies that different types of firms use AI to expand markets.

3. Research Methodology & results

3.1 Research Methodology

The case studies have been used in the initial stage of conducting a systematic review since we want to understand the strategies of firms in the context of international expansion and the different strategies

employed by different types of firms. These cases provide real-world contextual information that may not be accessible through quantitative research studies alone. We analyzed and classified the shared theme and different strategies across the case studies from KBTG (local firm), Flash Express (global firm), and Lazada (born-digital firms) in terms of using AI for international market expansion.

The second source for this systematic review relies on professional reports, including but not limited to the McKinsey Global Institute Report, Deloitte's AI in the Enterprise Report, PwC's AI Predictions and Trends, and World Economic Forum (WEF) Reports, among others. These reports provide a more comprehensive industry perspective and insights from actual occurrences. In the final stage of our research methodology, we will collect relevant evidence related to AI adoption strategy and international market expansion. We will draw from the Scopus and Google Scholar databases, focusing on articles published in peer-reviewed journals between 2000 and 2023. The journals selected for this review encompass high-impact publications, including but not limited to the Journal of International Business Studies, Global Strategy Journal, Journal of World Business, International Business Review, Journal of International Marketing, International Small Business Journal, etc. This approach will facilitate an assessment of the existing knowledge base and identify gaps within the international business literature.

3.2 Findings

The findings from the primary stage, using the case studies, highlight that each type of firm employs AI differently, but they share common strategic approaches. The first approach is collaboration with AI expertise. KBTG's strategy involves strategic collaborations with prestigious academic institutions and fostering partnerships with top AI professionals, making them a research consortium member. Their "Future You" platform offers a unique, psychologically grounded AI application. Flash Express has formed partnerships with 400 TikTok influencers and aims to have 1000 influencers in 2023, and Lazada (A born-digital firm) has collaborated with local brands to learn the local insights.

A second common approach is utilizing big data. Flash Express leverages AI to optimize delivery routes and partners with influencers for revenue generation. The use of AI helps them to expand markets to Vietnam and the Philippine. Furthermore, Lazada relies on AI and big data for user personalization, search optimization, and image recognition, contributing to its global expansion and revenue growth. KBTG's "Future You" platform enables users to interact with their future selves. Thirdly, these firms focus on acquiring talent. Flash Express leverages AI to enhance live commerce, and Lazada uses AI for tailored recommendations and affiliate marketing. Their strategies aim to support their AI-related initiatives.

A summary table shows the key findings from case studies related to the first research question, which focuses on how firms potentially use AI to facilitate their international market expansion:

Table 1. Common patterns of AI utilization for International Market Expansion

Case Study	Collaboration with AI Expertise	Utilization of Big Data	Acquisition of AI talents
KBTG	/	/	
Flash Express	/	/	/
Lazada	/	/	

4. Discussion

This research advances the theoretical understanding of international business by showcasing real-world examples of firms that are adapting to a rapidly changing business environment with AI-driven strategies that challenge the conventional IB theory, in which firms expand the market gradually. Through an initial synthesis of evidence, understanding the commonalities and differences in their approaches is crucial to navigating the evolving landscape of international business. This primary analysis can provide practical guidance for enterprises in formulating AI strategies that fortify their competitive edge in the face of disruptive technological forces.

5. References

- Anand, A., Singh, S. K., Selivanovskikh, L., & Ren, S. 2023. Exploring the born global firms from the Asia Pacific. *Asia Pacific Journal of Management*, doi:10.1007/s10490-023-09913-5.
- Arun Kumar, B. R. 2021. AI-Based Digital Marketing Strategies—A Review. *Lecture Notes in Networks and Systems*.
- Babina, T., Fedyk, A., He, A. X., & Hodson, J. 2020. Artificial Intelligence, Firm Growth, and Industry Concentration. *SSRN Electronic Journal*, doi:10.2139/ssrn.3651052.
- Campbell, C., Sands, S., Ferraro, C., Tsao, H. Y. (Jody), & Mavrommatis, A. 2020. From data to action: How marketers can leverage AI. *Business Horizons*, 63(2).
- Johanson, J., & Vahlne, J. E. 2009. The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9).
- Kietzmann, J., Paschen, J., & Treen, E. 2018. Artificial intelligence in advertising: How marketers can leverage artificial intelligence along the consumer journey. *Journal of Advertising Research*.
- Kromidha, E., & Robson, P. J. A. 2021. The role of digital presence and investment network signals on the internationalisation of small firms. *International Small Business Journal: Researching Entrepreneurship*, 39(2).
- Monaghan, S., Tippmann, E., & Coviello, N. 2020. Born digitals: Thoughts on their internationalization and a research agenda. *Journal of International Business Studies*.
- Mostafiz, M. I., Sambasivan, M., & Goh, S. K. 2023. Born global phenomenon: a critical review and avenues for future research. *European Journal of International Management*, 20(3).
- Nair, K., & Gupta, R. 2020. Application of AI technology in modern digital marketing environment. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(3).
- Vlačić, B., Corbo, L., Costa e Silva, S., & Dabić, M. 2021. The evolving role of artificial intelligence in marketing: A review and research agenda. *Journal of Business Research*. Elsevier Inc.

Performance Effects of Building Interpersonal Ties with Alliance Partners: Do Family Owners Better Invest Than Professional Managers?

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Performance Effects of Building Interpersonal Ties with Alliance Partners: Do Family Owners

Better Invest Than Professional Managers?

Extended Abstract

Drawing on the behavioral agency theory, this study argues that investment in interpersonal ties with alliance partners can increase partners' commitment to the focal alliances and can ultimately lead to enhanced relevant business-unit performance. This paper argues and shows that performance effect will be greater for family owners' investment in interpersonal ties than that of professional senior managers especially for long-term business-unit performance. In addition, our study shows that predicted relationships are stronger when the average alliance duration is longer. Our results imply that, within family business groups, family owners and professional managers may pursue different strategic priorities in terms of economic benefits earned from strategic alliances. This study also can extend the family business group literature such that economic benefits created by family involvement in strategic risk-takings such as strategic alliances may exceed costs stemming from family involvement in the long term.

Keyword: Strategic alliance, Family owners, Behavioral agency theory

1. Introduction

When firms engage in strategic alliances, one of the major uncertainties that the participating firms face is whether or not their partners are willing to make desired alliance-specific investments, which may incur irreversible costs (Parkhe, 1993). Safeguarding alliance-specific investments by partners is a critical task because this investment is the basis of maximizing mutual economic benefits out of the focal alliance (Zollo, Reuer, and Singh, 2002). To increase the likelihood that partners make alliance-specific investments, firms engaging in strategic alliances often try to build (inter-personal and) inter-

organizational trust with their partners (Krishnan, Martin, and Noorderhaven, 2006). One of important research gaps in the strategic alliance literature is that whether investments in interpersonal ties are made by single agent who represent the focal firm. For instance, if some owners of a firm exert a great extent of control over the firm, those owners may try to build social capital with the firm's alliance partners through their investments in interpersonal ties even when the firm's managers have tried to build interpersonal ties with the partners. This study fills this gap within the context of family business groups in Korea. If family owners have a different priority on strategic alliance outcomes from a priority that professional managers have, family owners and professional managers will respectively invest in interpersonal ties with alliance partners in order to serve different strategic purposes. Therefore, family owners' investments in interpersonal ties may have different performance implications from those of professional managers.

This study draws on behavioral agency theory (Gomez-Mejia et al., 2007; Wiseman and Gomez-Mejia, 1998) to develop our predictions on the associations between investments in interpersonal ties with alliance partners and short- and long-term business unit performance. According to behavioral agency theory, each agent tries to avoid loss of her/his socioemotional wealth (Gomez-Mejia et al., 2007) when they make major risk-taking decisions concerning the focal strategic alliance. Because agent may pursue own socioemotional wealth at the expense of others' wealth, each agent's socioemotional wealth maximization may not necessarily be aligned with firm wealth maximization (Chang and Shim, 2015). We argue that family owners and professional managers want to avoid different types of socioemotional wealth when they invest in interpersonal ties with alliance partners. Family owners are more concerned with transgenerational family control over the long run (Zellweger et al., 2012). By contrast, professional managers are more concerned with their employment risks even in the short run (Feldman et al., 2016).

We also posit that, due to different types of socioemotional wealth they pursue, family owners and professional managers may have different priorities on strategic alliance objectives. From family owners' perspective, strategic alliances are expected to contribute to the firm's long-term growth so that family owners ensure transgenerational family control. From professional managers' perspective, strategic alliances are desired to contribute to the firm's short-term costs and risks reduction by costs/risks sharing

between partners so that professional managers reduce their own employment risks. Therefore, family owners and professional managers are likely to make their investments in interpersonal ties with alliance partners such ways that induce partners' alliance-specific investments towards their own ends.

2. Theory and Hypotheses

2.1. Building interpersonal ties across investment horizons

Investments in interpersonal ties made by family owners and professional managers are self-selected decisions (Feldman et al., 2016), in the sense that they choose their alliance counterparts by themselves and they decide what types of and how much commitment they want to make to build partner-specific social capital. Likewise, alliance partners' resources investment patterns over time, in response to investments in building social capital by family business group counterparts, are self-selected ones as well. In other words, if alliance partners are rational enough to ex ante expect possible agency costs arising from forming strategic alliances with family business groups (Perkins et al., 2014), they determine their investment patterns in the alliance based on their own calculations of costs and benefits associated with partnering with those agents from family business groups.

In particular, alliance partners may want to strike a balance between long-term growth opportunities and short-term cost reduction opportunities created by the alliance. One way that the alliance partner can strike a balance between short- and long-term objectives is to distinguish between investing in the relationship with family owners and that in the relationship with professional managers. Because family owners are oriented toward long-term alliance goals, based on their socioemotional wealth preferences, they tend to make their efforts to build partner-specific social capital such that the focal firm and affiliated firms are expected to contribute to complementary resources that are not formerly accessible to the alliance partner and create new capabilities by leveraging these complementary resources. By contrast, because professional managers are oriented toward short-term alliance goals, based on their socioemotional wealth preferences, they tend to make their efforts to build social capital such that the focal firm is expected to contribute to maximize short-term profitability by providing several means to reduce costs, such as sharing distribution channels and logistics facilities.

Therefore, we expect that the positive association between family owners' investment in interpersonal ties and business unit financial performance will be stronger in the long term, while the positive association between professional managers' investment in interpersonal ties and business unit performance will be stronger in the short term:

Hypothesis 1a. The positive association between family owners' investment in interpersonal ties with alliance partners and the focal business unit financial performance will be stronger in the long term.

Hypothesis 1b. The positive association between professional managers' investment in interpersonal ties with alliance partners and the focal business unit financial performance will be stronger in the short term.

2.2. Moderating effect of alliance duration

Each party engages in a strategic alliance is likely to be embedded within the mutual exchange relationship when the relationship is repeated over time (Gulati, 1995). Moran (2005) emphasizes the importance of both structural and relational embeddedness in enhancing performance by building social capital with repeated exchange partners.

In the context of family business groups, each firm affiliated to a family business group tends to manage a portfolio of alliance partner firms because typically family business groups have diversified into a large number of industries (Chang and Shim 2015; Masulis et al., 2011; Peng et al., 2005). In terms of corporate-level performance, a large size alliance portfolio generally implies mixed performance effect because large alliance portfolio size imposes both higher complexity and broader external resource access (Lavie, 2007).

Considering complexities to manage and coordination costs arising from the complexities (Gulati and Singh, 1998), an affiliated firm with a large size alliance portfolio has strong incentive to maintain existing alliance ties as long as the partners have fulfilled agreed, partner-specific investments in the past. That means, alliance partners with longer alliance duration are likely to have built greater partner-

specific social capital with the group-affiliated firm compared to partners with shorter alliance duration.

In this sense, affiliated firms that have alliance partners with longer alliance duration can utilize the accumulated experience of repeated ties between them as basis to reduce potential agency costs arising from unique socioemotional wealth structures of family owners and professional managers in family business groups. Assuming repeated ties increase the extent of structural and relational embeddedness between parties (McEvily and Marcus, 2005), the performance-enhancing effect by aligning interests of family owners with those of alliance partners in the long term, while aligning interests of professional managers with those of alliance partners in the short term, will become stronger. That is because increased embeddedness can reduce the likelihood of partners' opportunism, therefore each party can rely more on relational contracting instead of formal contracting in order to induce desired partner-specific investments (Carson, Madhok, and Wu, 2006). In sum, our prediction that repeated ties between the same alliance parties will enhance performance effects of investment in building partner-specific social capital leads to the following hypotheses:

Hypothesis 2a. The positive association between family owners' investment in interpersonal ties with alliance partners and long-term business unit financial performance will be stronger when the average alliance duration of the focal business unit is longer.

Hypothesis 2b. The positive association between professional managers' investment in interpersonal ties with alliance partners and short-term business unit financial performance will be stronger when the average alliance duration of the focal business unit is longer.

3. References

- [1] Carson, S. J., Madhok, A., Wu, T. 2006. Uncertainty, opportunism, and governance: The effects of volatility and ambiguity on formal and relational contracting. *Academy of Management Journal*, 49(5), 1058-1077.
- [2] Chang, S.-J., Shim, J. 2015. When does transitioning from family to professional management improve firm performance? *Strategic Management Journal* 36, 1297-1316.

- [3] Feldman, E. R., Amit, R., Villalonga, B. 2016. Corporate divestitures and family control. *Strategic Management Journal* 37, 429-446.
- [4] Gomez-Mejia, L. R., Haynes, K. T., Nunez-Nickel, M., Jacobson, K., J. L., Moyano-Fuentes, J. 2007. Socioemotional wealth and business risks in family-controlled firms: evidence from Spanish olive oil mills. *Administrative Science Quarterly* 52, 106-137.
- [5] Krishnan R, Martin X, Noorderhaven N. G. 2006. When does trust matter to alliance performance? *Academy of Management Journal* 49(5), 894-917.
- [6] Lavie, D. 2007. Alliance portfolios and firm performance: A study of value creation and appropriation in the U.S. software industry. *Strategic Management Journal*, 28(12), 1187-1212.
- [7] McEvily, B, Marcus, A. 2005. Embedded ties and acquisition of competitive capabilities. *Strategic Management Journal* 26, 1033-1055.
- [8] Moran, P. 2005. Structural vs. relational embeddedness: social capital and managerial performance. *Strategic Management Journal* 26, 1129-1151.
- [9] Parkhe, A. 1993. Strategic alliance structuring: a game theoretic and transaction cost examination of inter-firm cooperation. *Academy of Management Journal* 36, 794-829.
- [10] Peng, M. W., Lee, S.-H., Wang, D. Y. L. 2005. What determines the scope of the firm over time. *Academy of Management Review*, 30, 622-633
- [11] Perkins, S, Morck, R, Yeung, B. 2014. Innocents abroad: the hazards of international joint ventures with pyramidal group firms. *Global Strategy Journal* 4, 310-330.
- [12] Wiseman R. M, Gomez-Mejia L. R. 1998. A behavioral agency model of managerial risk taking. *Academy of Management Review* 23(1), 133-153.
- [13] Zellweger, T. M., Kellermanns, F. W., Chrisman, J. J., Chua, J. H. 2012. Family control and family firm valuation by family CEOs: the importance of intentions for transgenerational control. *Organization Science* 23(3), 851-868.
- [14] Zollo, M., Reuer, J. J., Singh, H. 2002. Interorganizational routines and performance in strategic alliances. *Organization Science* 13(6), 701-713.

Does Investor-pay Rating Coverage Lead to Rating Conservatism from the Issuer-pay Credit Rating Agencies?

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Does Investor-pay Rating Coverage Lead to Rating Conservatism from the Issuer-pay Credit Rating Agencies?

Abstract

Issuer-pay credit rating agencies (CRAs) such as S&P are susceptible to assigning too favourable ratings as the issuers pay them. Investor-pay CRAs like Egan-Jones Rating Company (EJR) do not confront such conflicts of interest because they receive rating fees from investors. The rating coverage by investor-pay CRA imposes pressure on issuer-pay CRAs and elevates their reputational concerns, which could lead to more rigorous ratings assigned by issuer-pay agencies. Using the S&P credit ratings on the US public firms from 2011 to 2018, we show that ratings become more conservative if the issuers are covered by the EJR, especially in the speculative grades. The rating conservatism is associated with the informativeness to predict the expected default frequency and the subsequent defaults, and it is more prominent when S&P assigns a rating lower than or equal to the EJR rating. However, the rating conservatism due to the more stringent ratings assigned by S&P than EJR does not convey more informativeness on the default probability or subsequent defaults, indicating that the S&P ratings may not be more informed when the ratings follow EJR ratings. Meanwhile, rating conservatism increases the likelihood of false warnings (i.e., assigning too harsh ratings to issuers not defaulting in the subsequent period) and the rating volatility.

Keywords: Issuer-pay credit rating agency, Investor-pay rating coverage, Rating conservatism, Informativeness, False warnings, Rating stability

1. Introduction

Three recent studies (Alp, 2013; Baghai et al., 2014; Wojewodzki et al., 2018) document that the rating standard in the major credit rating agencies became more stringent from 1985 to 2010. The findings are inconsistent with the argument that issuer-pay credit rating agencies relax the rating criteria and assign too favourable ratings to issuers due to conflict of interest (e.g., Jiang et al., 2012; Eling & Hau, 2015; Kraft, 2015). Alp (2013) argues that the more conservative rating standard coincides with regulatory pressure and investor criticism in the post-2002 period. Bonsall et al. (2018) show that the business press coverage can largely explain the growing rating conservatism as the CRAs' reputational concern elevates for the widely covered firms.

This paper explores whether the rating coverage by investor-pay CRAs can cause rating conservatism in the issuer-pay CRAs and its impact on the rating performance. The studies on the issuer-pay vs. investor-pay model (e.g., Beaver et al., 2006; Bruno et al., 2016) find that investor-pay ratings are timelier than issuer-pay ratings. Xia (2014) shows that S&P rating quality improves after the EJR covers firms with their credit ratings as the coverage increases the reputational concerns of S&P.

However, no study investigates the relationship between investor-pay rating coverage and rating conservatism in issuer-pay CRAs.

This paper has two objectives. First, it examines the impacts of EJR coverage on the rating standard of S&P, given that EJR ratings may drive S&P to adopt a more stringent standard to avoid reputational loss (e.g., caused by the slow downgrades before the events of default). The response to EJR coverage can help explain the rating conservatism in S&P. We further explore whether the potential rating conservatism in S&P ratings is the consequence that S&P follows the EJR and gives the same rating level to a firm (the literature argues that EJR ratings are more informed and lead the S&P ratings; EJR may have more stringent standard than S&P), or S&P raises the standard and assign ratings even harsher than EJR. In addition, our study tests whether the rating conservatism and the response to EJR ratings in S&P are more informative in predicting subsequent defaults.

Second, we explore the impacts of EJR coverage and the change of rating standard on the rating performance in S&P. The evidence on whether the pressures from the regulatory body and public criticism improve the credit rating performance is mixed. Dimitrov et al. (2015) show that after the passage of the Dodd-Frank Act, CRAs assign lower ratings and give more false warnings. The observation is consistent with the argument by CARs that there are trade-offs between the desired rating properties, that is, timeliness, accuracy and stability (Cheng & Neamtiu, 2009). On the contrary, deHaan

(2017) shows that in the post-crisis period, both rating timeliness and accuracy (missed default and false warning) are improved, and rating volatility and the probabilities of large (multi-notch) downgrades are decreased. Bonsall et al. (2018) show that greater business press coverage leads to timelier downgrades before defaults, fewer missed defaults, and false warnings. They find that CRAs strategically assign analysts with better education and experience to the widely covered firms, improving the rating quality.

The closest study is Xia (2014), who studies whether initial EJR coverage improves the information quality of S&P ratings. It explores the informativeness of S&P credit rating to credit risk and the information content of rating changes in the 12 quarters after the initial EJR coverage. Xia (2014) shows that the S&P rating is lower after the initial EJR coverage only when EJR assigns a lower rating than the S&P. The paper does not directly test whether the EJR coverage can induce rating conservatism in the S&P ratings or the impacts of the rating conservatism on the rating performances.

2. Literature review

The three big credit rating agencies (hereafter CRAs), S&P, Moody's, and Fitch, implement the issuer-pay business model in which they receive most of their revenues from rated entities (the issuers). On the one hand, each of the big three CRAs employs a large team of credit risk analysts with access to advanced quantitative models sufficient to deliver accurate and timely ratings (e.g., Bonsall et al., 2017;

Lee et al., 2021). According to Blume et al. (1998), Baghai et al. (2014), and Wojewodzki et al. (2018), the big three CRAs became more conservative over the 1978-1995, 1985-2010, and 1991-2010 periods, respectively. On the other hand, the issuer-pay compensation model suffers from a significant inherent weakness: the conflict of interest between the rating agency and the issuers on whose payments the agency relies. This, in turn, creates a habitat in which the issuer-paid rating agencies may produce positively biased (inflated) credit ratings to retain their clientele (see, e.g., He et al., 2012; Kedia et al., 2014; Kraft, 2015).

Ample empirical evidence shows that the big three CRAs produce biased ratings for various reasons. For instance, Mählmann (2011) finds that the length of time during which the issuers and the S&P were doing business together is positively associated with the average ratings assigned. Similarly, Efung and Hau (2015) and Baghai and Becker (2018) show that the three big CRAs produce significantly more favourable ratings for the firms with a stronger business relationship and receive more non-rating services-related revenues. Cornaggia et al. (2016) document that the analysts working for the big three issuer-paid CRAs award inflated ratings to their prospective employers, in line with the '*revolving doors*' effect.

Khatami et al. (2016) report that the firms whose directors have a personal connection to the directors of Moody's, on average, receive one notch better rating compared with the non-connected

issuers. According to Kedia et al. (2017), issuers who are S&P and Moody's primary equity holders can enjoy positively biased ratings. Beatty et al. (2019) show that in the follow-up to the fine-tuning of the rating scale in 2010, the customers of Moody's and Fitch enjoyed more favourable ratings, which, in turn, brought more revenues and a further increase in market share for these two CRAs. More recently, in the US market study, Cornaggia et al. (2020) find evidence of a highly significant (statistically and economically) '*home bias*' effect present in ratings assigned by the analysts working for S&P and Moody's. Specifically, the issuers from the analysts' home state are 3 (25) times more (less) likely to receive a rating upgrade (downgrade) than the issuers from other states. According to Huang and Shen (2021), the big three CRAs display strong herding behaviour, i.e., simultaneously producing accurate and erroneous ratings mainly due to safety considerations. Moreover, Fong et al. (2022) show that a decline in equity analyst coverage leads to inflated bond ratings by the big three CRAs.

Despite the above evidence of biased and inflated ratings, the big three CRAs and some scholars claim that a long-term reputation is necessary for investors to regard credit ratings as valuable and practical tools (e.g., Cantor and Packer, 1995; deHaan, 2017). According to Bolton et al. (2012) model, overly optimistic and inaccurate ratings would trigger an adverse reaction from the market participants who would shun the rating agency and its services. They argue that this would be followed by the issuers holding back from hiring this rating agency. Therefore, potential long-term reputational costs outweigh the short-term gains from additional revenues earned from assigning inflated ratings, effectively

managing the conflict of interest (SEC, 2003). In the study of bond ratings produced by the big three CRAs during the 2000-2011 period, Bonsall et al. (2018) show that “high-visibility issuers create greater reputational consequences (e.g., lost future ratings of new issuances) following rating agencies’ failure to predict default” (p. 88).

Some empirical studies document the evidence suggesting that subject to strengthening regulatory and/or market discipline, the issuer-paid CRAs face more significant reputational costs, bringing greater accuracy and/or timeliness to their services. For instance, Alp (2013) observes increased conservatism in S&P’s after 2002, coinciding with heightened regulatory pressure and investor criticism in the post-2002 period in the U.S. Similarly, Berwart et al. (2019) find that in the wake of regulatory reforms, issuer-paid CRAs improve the timeliness of their services. deHaan (2017) and Ferreira et al. (2022) also observe improved accuracy and/or timeliness of credit ratings assigned by the big three CRAs amid a greater likelihood of reputational losses, i.e., in the aftermath of the 2008 global financial crisis and the Dodd-Frank Act. Most recently, Bonsall et al. (2022a) show that the commencement of credit default swap trading successfully disciplines S&P, resulting in significantly improved accuracy and timeliness of credit ratings, watches and outlooks produced by S&P. On the contrary, Dimitrov et al. (2015) argue that the precision and informational value of ratings assigned by the big three issuer-paid CRAs worsened in the follow-up to the Dodd-Frank Act. Specifically, the authors find that the big three CRAs produce lower ratings, less informative downgrades, and erroneous warnings post-Dodd-Frank.

An alternative rating business model is the investor-pay model, in which the rating agency is compensated for its services by subscribers (usually institutional investors) (Bonsall et al., 2017). The initial investor-paid model was replaced by the issuer-paid model first by Moody's in 1971 and then in 1974 by S&P (White, 2019). According to Jiang et al. (2012), between 1971 and 1974, firms were assigned lower (higher) ratings by the investor-paid S&P (issuer-paid Moody's). However, in the post-1974 period, S&P inflated their ratings to the same level as Moody's. As of 2022, out of ten CRAs licensed by the U.S. Securities and Exchange Commission (hereafter SEC) as '*nationally recognised*' or NR, EJR is the only one functioning entirely under the investor-paid model (SEC, 2022). Specifically, EJR ratings are available only to their subscribers subject to an annual fee, which, according to Xia (2014) and Bruno et al. (2016), is contingent on the size of the customer and varies from USD12,750 to USD150,000. Importantly, as part of their marketing strategy, EJR argues that the above-outlined conflict of interest is absent in their business model; thereby, unlike the majority of issuer-paid CRAs, EJR boasts of offering uninflated, timely and highly informative ratings¹.

According to a theoretical optimal contracting model created by Kashyap and Kovrijnykh (2016), the subscriber-paid rating model is more accurate than the issuer-paid rating model. Most of the relevant

¹ In an official letter dated on the 20th of January 2020 and addressed to the U.S. SEC, the founder and CEO of EJR, Mr Sean Egan, reiterated his view that the subscriber-paid model followed by EJR is a "ready solution" to the inherent conflict of interest present in the issuer-pay model, (SEC 2020).

empirical literature also documents the dominance of the EJR's subscriber-paid model vis-à-vis the issuer-paid model of the big three CRAs in terms of the accuracy and timeliness of ratings (e.g., Beaver et al., 2006; Jiang et al., 2012; Xia & Strobl, 2012; Cornaggia & Cornaggia, 2013; Bruno et al., 2016; Bonsall et al., 2017).

Notwithstanding, the big three issuer-paid CRAs contend that the subscriber-paid rating model suffers from another conflict of interest in which the rating agency is induced to please the subscribers (institutional investors) by assigning inflated ratings. Similar concerns have been raised by the SEC (e.g., SEC, 2011, 2012), which in January 2013 sanctioned EJR for failing to disclose their analysts' awareness of subscribers' holdings. Some recent evidence is consistent with the conflict of interest in the investor-paid rating model and favouring the issuer-paid rating model. Specifically, Toscano (2020) documents that the Dodd-Frank Act, S&P enhances both the timeliness and the accuracy of their rating compared to EJR. In an experiment with Master of Accounting students employed as rating analysts, Tang et al. (2020) show that if analysts of investor-paid CRA know their subscribers' holdings, they will likely produce biased ratings in favour of their holdings. However, the results also suggest that the observed effect is significantly smaller when sophisticated investors analyse the rated entity. According to Bonsall et al. (2022b), EJR assigns more (less) inflated (accurate) ratings and issues downgrade announcements in a less timely manner for the bonds that are held by more of the investors who subscribe to EJR's ratings. Furthermore, Lee et al. (2021) use the distribution dynamics approach and find no evidence of

Moody's ratings being inflated relative to ratings issued by EJR during the post-Dodd Frank period (2011-2018).

To the best of our knowledge, a study by Xia (2014) is the only one investigating how the coverage by investor-paid CRA (EJR) affects the informative value of the same entity's ratings but issued by the issuer-paid CRA (S&P). Specifically, he finds that S&P's ratings' quality improves after EJR covers the same firms with their ratings. Xia (2014) explains the documented effect by arguing that EJR coverage improves the reputational concerns of S&P, which, in turn, leads to more informative ratings issued by the latter.

3. Methodology

3.1 Hypotheses development

The first hypothesis is related to EJR rating coverage and the rating conservatism in S&P ratings. Some studies show that EJR ratings are timelier and more accurate than S&P ratings (Beaver et al., 2006; Bruno et al., 2016). S&P may respond to the coverage of investor-pay credit rating by applying a more stringent rating standard because the slower downgrade than EJR before the defaults could damage its reputation. Thus, the reputational concerns by S&P are stronger for the firms also covered by EJR than

those without EJR coverage (Xia, 2014). However, the rating conservatism may not be symmetrical for all rated firms. More specifically, this is because firms with a speculative rating are more likely to default (than their peers with investment ratings), and the reputational cost could be more significant if CRAs fail to give an early warning signal before the default occurs. Therefore, the incentive to assign more conservative ratings to firms in the investment grade is much weaker as the potential reputational loss is minimal. We expect that the rating conservatism related to EJR coverage is not symmetrical, i.e., more significant if a firm is assigned a speculative rating than an investment grade rating.

Xia (2014) shows that the S&P assigns a lower rating to a firm if EJR initially covers it, and the conservatism is only significant when the EJR rating is lower than the S&P rating. The author implicitly assumes that S&P would inflate the ratings and give higher ratings than EJR to firms not rated by the latter CRA. Furthermore, Xia (2014) argues that when EJR covers the firms, the lower EJR ratings force S&P to adjust its ratings (albeit its rating remains higher than that issued by EJR). However, the incumbent issuer-pay CRAs (S&P) may respond to investor-pay CRA (EJR) entry by assigning equal or lower ratings than the entrants. We hypothesise that the rating conservatism is more robust if S&P gives a lower rating than EJR.

H1 EJR coverage and rating conservatism

H1a: Rating conservatism in speculative-grade S&P ratings is significant for the firms covered by EJR.

H1b: Rating conservatism in S&P ratings is significantly stronger when S&P assigns lower credit ratings than EJR.

The second hypothesis is about the informativeness of rating conservatism in predicting subsequent issuer defaults. Alp (2013) shows that strict rating standards increase the bond market's credit spread, reduce the overall default, and increase the recovery rate. Baghai et al. (2014) find that firms with more significant rating conservatism issue less debt, hold more cash, and have lower leverage ratios and growth. We explore whether rating conservatism in S&P ratings is associated with rating informativeness. If the S&P ratings become more informative (or more accurate in assessing firms' credit risk) after the EJR rating coverage, the rating conservatism should be positively related to the expected default probability or subsequent issuer defaults (Kedia et al., 2014; Bonsall et al., 2017; Bonsall et al., 2018).

On the other hand, the negative side effect of increased rating conservatism is that the S&P may respond to the pressure of the EJR rating coverage by assigning overly harsh ratings (Dimitrov et al., 2015). In such a situation, the unfavourable (overly harsh) ratings given by S&P may not convey additional informational content to predict the defaults.

H2 Rating conservatism and the informativeness to predict default

H2a: Rating conservatism in the S&P ratings related to the EJR coverage is positively associated with the expected default probability or the likelihood of the actual default.

H2b: Rating conservatism in the S&P ratings related to the more unfavourable ratings than EJR ratings do not carry additional informativeness to predict future defaults.

The last hypothesis explores the relationship between conservatism and the performance of S&P's credit ratings, focusing on the Type II error and the rating stability. The literature gives mixed evidence on the consequences of the regulatory pressure on rating performance (Dimitrov et al., 2015; deHaan, 2017). The rating conservatism caused by EJR coverage may have two opposite effects on the rating performance. On the one hand, it could improve the rating accuracy to predict default but lead to more false warnings and rating volatility if the trade-offs on rating properties are unavoidable. On the other hand, the rating performance can be improved without sacrificing desired rating properties if CRAs put more resources into the firms covered by EJR (e.g., assign better analysts to those firms, as documented in Bonsall et al., 2018). Thus, we have two opposite predictions about the impacts of EJR coverage and rating conservatism: false warnings and rating stability.

H3 EJR coverage, rating conservatism and rating performance

H3: EJR coverage and rating conservatism in S&P ratings significantly affect the chances of false

warnings and rating volatility.

3.2 Sample and variables

Table 1: the number of issuers and ratings by year

	No. of rated firms		Average rating		
				S&P	EJR
Year	S&P	EJR	All	Covered by EJ	
2011	1,118	470	11.31	10.01	9.45
2012	1,143	548	11.43	10.17	9.76
2013	1,196	564	11.46	10.02	9.50
2014	1,241	633	11.46	10.10	9.57
2015	1,252	651	11.65	10.33	10.08
2016	1,233	627	11.83	10.45	10.30
2017	1,195	590	11.60	10.21	9.96
2018	1,162	571	11.49	10.15	9.87
Average (2011-2018)	1,193	582	11.53	10.18	9.81

Note: this table reports the number of firms rated by S&P and EJ by years. The rating grades are converted into numerical values as: AAA = 1, AA+ = 2, AA = 3, ..., CC = 20, and C = 21. The sample contains US-listed firms rated by S&P from 2011 to 2018, excluding the firms in the finance and utility industries.

Table 2: summary statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Panel A: rating conservatism					
SRATING	7,252	11.04	3.32	1	21
SRATING_IND	7,027	10.99	2.95	2.28	20.29
SRATING_FIRM	7,027	10.99	1.60	6.05	16.12
RAT_DIFF_IND	7,027	0.00	1.51	-5.74	8.65
RAT_DIFF_FIRM	7,027	0.00	2.21	-7.76	8.74
SGRADE	7,252	0.57	0.49	0	1
ERATING	3,787	9.70	3.80	1	21
SEDIF	3,787	0.37	1.84	-8	8
EJRCOV	7,252	0.52	0.50	0	1
WORSE	7,252	0.25	0.43	0	1
EQUAL	7,252	0.12	0.33	0	1
BETTER	7,252	0.15	0.36	0	1
EDF	7,153	0.11	0.27	0	1
DEF	7,252	0.03	0.16	0	1

Panel B: rating timeliness, accuracy and stability

DAHEAD	175	354.96	27.17	134	360
WRATE	186	6.21	1.62	2.25	13
ERRORI(BBB)	186	0.01	0.07	0	1
ERRORI(BB)	186	0.06	0.25	0	1
ERRORI(B)	186	0.67	0.47	0	1
ERRORII(BBB)	3,207	0.76	0.43	0	1
ERRORII(BB)	3,207	0.45	0.50	0	1
ERRORII(B)	3,207	0.09	0.29	0	1
RATVOL	9,269	0.15	0.37	0	6.35
REVERSAL	9,540	0.01	0.08	0	1
LRC	9,540	0.02	0.13	0	1
LDOWN	9,540	0.01	0.10	0	1

Panel C: firm-level variables

LEV	7,252	0.37	0.20	0	0.99
PROFIT	7,227	0.20	0.18	-0.66	0.77
MTB	7,231	1.67	0.89	0.67	6.44
TANG	7,225	0.33	0.26	0	0.91
LNSALE	7,250	3.60	0.65	-0.70	5.70

LEVOL	7,101	0.06	0.06	0	0.50
PROFITVOL	7,076	0.05	0.10	0	0.98
BANKRUPT	9,492	0.01	0.08	0	1
LASSET	7,319	8.68	1.45	4.44	13.09
INTCOVER	7,280	6.14	28.54	-56.22	401.40
DEBTEQUITY	7,321	1.31	3.76	-11.73	19.85
LARGELOSS	7,431	0.02	0.13	0	1
NEGRE	7,130	0.31	0.46	0	1
Variable	Obs.	Mean	Std. Dev.	Min	Max
Panel D: macroeconomic variables					
GDP	9,492	17890.37	1552.50	15542.58	20494.08
CRSPBOND	9,492	0.07	0.16	-0.16	0.39
SPINDEX	9,492	2011.40	452.24	1131.42	2913.98
LDEFAULTS	9,492	31.68	5.58	11	71

Note: this table reports the summary statistics of the key variables and control variables. Panel A reports the variables from the test of rating conservatism. Panel B gives the variables of rating timeliness, accuracy and stability for S&P. Panels C and D provide the control variables.

4. Discussion of the results

Table 3 shows that, on the one hand, S&P ratings tend to be more conservative in the speculative grades across the full spectrum of ratings if EJR covers the firms. Moreover, in three cases (B+, B, and CCC), this greater conservativeness (compared to the EJR) is statistically significant. On the other hand, for the investment grade ratings, in four (out of seven) cases, S&P gives better ratings to the firms covered by EJR than those not followed by EJR. In addition, for A and BBB- ratings, the difference is statistically significant. In other words, the results suggest that S&P tightens the speculative grade's rating standard, offering initial support to H1a. However, we also find evidence of loosening the rating standard for investment grade by S&P in the firms covered by EJR ratings.

Table 3: rating conservatism in S&P ratings by rating grade

S&P rating grade	Rating	RAT_DIFF_IND			Difference	
		All	EJRCOV = 0	EJRCOV = 1	1 - 0	t-stat
AAA	1	-2.68	-2.92	-2.58	0.34	0.73
AA+	2	-3.16	-3.30	-3.13	0.17	0.15
AA	3	-1.61	-1.15	-2.01	-0.86	4.56
AA-	4	-0.85	-0.72	-0.90	-0.18	0.73
A+	5	-1.04	-0.87	-1.10	-0.22	1.17
A	6	-1.05	-0.89	-1.08	-0.19	1.18

A-	7	-0.80	-0.80	-0.80	0.00	0.00
BBB+	8	-0.65	-0.72	-0.62	0.11	0.93
BBB	9	-0.56	-0.64	-0.53	0.12	1.21
BBB-	10	-0.05	0.13	-0.14	-0.27	2.67
BB+	11	-0.01	-0.06	0.03	0.09	0.84
BB	12	0.32	0.29	0.36	0.08	0.81
BB-	13	0.34	0.30	0.41	0.11	1.19
B+	14	0.51	0.30	0.93	0.63	5.46
B	15	0.73	0.60	1.01	0.41	3.30
B-	16	0.89	0.87	0.94	0.07	0.40
CCC+	17	1.61	1.49	1.80	0.31	0.84
CCC	18	2.05	1.63	3.18	1.55	2.01
CCC-	19	2.90	2.50	3.47	0.96	0.68
CC	20	3.27	3.17	3.62	0.45	0.54
SD/C	21	4.69	4.30	5.08	0.78	0.58
All		0.00	0.15	-0.13	-0.29***	7.96
Investment grade		-0.63	-0.55	-0.67	-0.12**	2.35
Speculative grade		0.49	0.42	0.58	0.16***	3.30

S&P ratings covered by EJR:

S&P rating better than EJR	-0.35
S&P rating equal to EJR	-0.12
S&P rating worse than EJR	-0.01
Difference: Worse - Better	0.34***
t-stat	5.84

Note: this table reports the rating conservatism (RAT_DIFF_IND) in S&P ratings. RAT_DIFF_IND is the difference between the actual firm rating from S&P (SRATING) and the predicted firm rating SRATING_IND in a year. Thus, given that the better the rating, the lower the integer assigned to it (e.g., AAA = 1, but A = 6), the negative (positive) value of the RAT_DIFF_IND term means that the actual S&P rating is higher (lower) than the predicted rating. The rating difference measures conservatism, in which the higher (and positive) the difference, the more conservative the rating (Baghai, Servaes and Tamayo, 2014). The values of rating conservatism are reported for total S&P ratings, the S&P ratings that are not covered by EJR, and the S&P ratings that are covered by EJR. The differences in rating conservatism between the two groups (EJRCOV = 1 vs. EJRCOV = 0) are reported.

The estimated results are presented in Table 4, test H1a. We can observe that the estimated coefficient on the EJRCOV variable (columns 1-5) is significantly negative, suggesting that overall, S&P assigns less (?) conservative ratings to the issuers also rated by EJR. However, the coefficients on the SGRADE term and the EJRCOV*SGRADE interaction variable are positive and statistically

significant. For instance, in column 3, we can observe that the SGRADE and the EJRCOV*SGRADE coefficients are equal to 1.797 and 0.192. This, in turn, means that, on average, speculative-grade ratings assigned by S&P are approximately 1.8 notches more conservative than the predicted ratings. Furthermore, if EJR also rates the firm, the rating conservativeness of S&P increases by an additional 0.2 notch. Accordingly, the total conservative bias by S&P for speculative-grade issuers rated by EJR amounts to 2 notches, meaning that the firm with an implied BB rating, instead, would have been assigned a B+ rating by S&P. Collectively, the two coefficients mean that S&P is significantly more conservative when issuing speculative-grade ratings. At the same time, this stringency in ratings is even more significant when EJR also covers speculative-grade issuers (firms).

Table 4: EJR coverage and rating conservatism in S&P ratings

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS			Entropy balancing		
EJRCOV (instrumented)	-0.350***	-0.164***	-0.284***	-0.331***	-0.111**	-0.086
	(-8.10)	(-4.20)	(-4.92)	(-6.50)	(-2.49)	(-1.29)
SGRADE		1.918***	1.797***		2.013***	2.038***
		(43.18)	(27.96)		(35.11)	(24.11)

EJRCOV (instrumented)* SGRADE			0.192***			-0.047
			(2.74)			(-0.55)
LEV	-0.198	-1.248***	-1.227***	0.316*	-1.114***	-1.119***
	(-1.58)	(-10.53)	(-10.32)	(1.68)	(-6.98)	(-6.99)
PROFIT	0.554***	0.704***	0.705***	0.577***	0.707***	0.707***
	(3.33)	(4.51)	(4.53)	(2.81)	(3.97)	(3.96)
MTB	-0.497***	-0.214***	-0.217***	-0.552***	-0.213***	-0.212***
	(-18.38)	(-8.54)	(-8.68)	(-17.29)	(-7.34)	(-7.33)
TANG	-0.341***	-0.356***	-0.369***	-0.704***	-0.646***	-0.642***
	(-2.83)	(-3.26)	(-3.37)	(-4.00)	(-4.16)	(-4.16)
LNSALE	0.166*	0.446***	0.441***	0.277**	0.504***	0.505***
	(1.65)	(4.76)	(4.72)	(2.21)	(4.49)	(4.49)
SIZE	-0.045	0.409***	0.408***	-0.201	0.349***	0.348***
	(-0.45)	(4.40)	(4.41)	(-1.60)	(3.09)	(3.08)
LEVOL	2.129***	1.185***	1.185***	2.253***	1.261**	1.280**
	(5.23)	(3.22)	(3.22)	(3.98)	(2.51)	(2.56)
PROFITVOL	0.279	0.188	0.183	0.589	0.129	0.123
	(1.02)	(0.76)	(0.74)	(1.55)	(0.41)	(0.39)
Constant	0.514***	-3.449***	-3.332***	0.476	-4.040***	-4.054***

	(3.12)	(-19.59)	(-18.39)	(0.96)	(-8.43)	(-8.49)
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
N	7,006	7,006	7,006	7,006	7,006	7,006
R-squared	0.0777	0.2633	0.2641	0.0939	0.2983	0.2984

Note: this table reports the results of the instrumental variables regressions following Xia (2014). The sample period is from 2011 to 2018. The dependent variable in column (1) is EJRCOV, which is a dummy variable equal to 1 if a firm has both S&P and EJR ratings in a year and 0 if it has only an S&P rating. The instrumental variable in the first stage regression is the industry-average market capitalization for the firm in a two-digit SIC industry, following Xia (2014). The dependent variable in columns (2) – (4) is the rating conservatism (RAT_DIFF_IND) in S&P ratings. The variable EJRCOV in columns (2) – (4) is a predicted probability from the first stage regression for a firm each year. SGRADE is a dummy variable equal to 1 if the S&P rating is within the speculative grade in a firm in a year and 0 otherwise. EJRCOV * SGRADE is the interaction term of EJRCOV and SGRADE. LEV is the leverage ratio. PROFIT is EBITDA divided by sales. MTB is market to book ratio. TANG is tangibility. LNSALE is the log value of sales. LEVOL is the volatility of the leverage ratio. PROFITVOL is the volatility of the profitability ratio. Industry dummies and year dummies are included in the second stage regressions. The t-statistics adjusted by robust standard errors clustered at the firm level are in parentheses. ***, ** and * indicate the significance at the 1%, 5%, and 10% levels, respectively.

Such results align with H1a and deliver further evidence confirming that the rating conservatism by S&P is significantly larger (smaller) in the firms with EJR coverage and speculative (investment) grade ratings. Summing up, Tables 3 and 4 indicate that S&P responds to the EJR coverage by applying stringent criteria to speculative ratings in a conscious effort to avoid reputational loss in case of missed defaults in the future.

The estimated results presented in Table 5 enable us to test H1b, which argues that the rating conservatism in the S&P ratings is the strongest when the S&P gives lower (harsher) ratings than EJR. Column 1 (2 and 3) shows the output based on the full sample (only firms rated by both S&P and EJR). Specifically, we can observe a positive and statistically significant coefficient on the WORSE (columns 1 and 2) variable, suggesting that S&P is more conservative for issuers rated higher by EJR. Especially in column 2, the coefficient on WORSE is equal to 0.6, which means that, on average, S&P gives a rating 0.6 notch harsher to firms rated more favourably by EJR. Likewise, the coefficient on the SEDIF term (column 3) carries a positive sign and is highly significant statistically and economically speaking. Such a result, in turn, indicates that the more significant the rating difference (higher EJR rating compared to S&P rating, e.g., the EJR-S&P gap increases from AA versus AA+ to AA- versus AA+), the more conservative S&P is in their ratings compared to the predicted rating for the rated issuer.

Table 5: rating differences between S&P and EJR and rating conservatism in S&P ratings

	(1)	(2)	(3)
WORSE (S&P < EJR)	0.166	0.601	
	(2.27)**	(6.62)***	
EQUAL (S&P = EJR)	0.008	0.311	
	(0.11)	(3.92)***	
SEDIF (EJR – S&P)			0.186
			(7.46)***
EJRCOV	0.388	2.584	2.485
	(1.00)	(2.61)***	(2.46)**
SGRADE	1.919	1.826	1.750
	(22.59)***	(17.39)***	(16.66)***
LEV	-1.289	-0.672	-0.420
	(-5.78)***	(-1.91)*	(-1.19)
PROFIT	1.057	1.177	1.103
	(5.03)***	(3.66)***	(3.48)***
MTB	-0.261	-0.424	-0.455
	(-5.73)***	(-5.91)***	(-6.62)***
TANG	-0.356	-0.535	-0.494
	(-1.63)	(-1.78)*	(-1.68)*

LNSALE	0.656	0.116	0.148
	(4.56)***	(0.38)	(0.47)
LEVOL	1.752	3.888	3.768
	(2.73)***	(2.76)***	(2.66)***
PROFITVOL	0.364	-0.164	-0.007
	(0.95)	(-0.25)	(-0.01)
Constant	-2.832	-1.432	-1.237
	(-5.36)***	(-1.28)	(-1.09)
Industry dummies	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes
N	7006	3742	3742
R-squared	0.261	0.343	0.357

Note: this table reports the OLS regressions of rating conservatism on the rating difference between the S&P rating and EJR rating. The sample period is from 2011 to 2018. The dependent variable is the rating conservatism (RAT_DIFF_IND) in S&P ratings. WORSE is a dummy variable equal to 1 if a firm has an S&P rating worse than the EJR rating in a year and 0 otherwise. EQUAL is a dummy variable equal to 1 if a firm has an S&P rating equal to the EJR rating in a year and 0 otherwise. SEDIF is the rating difference between S&P and EJR in a year. Column (1) gives the regressions on the full sample. Columns (2) and (3) are from the sample of the firms with both S&P and EJR ratings. The control variables are the same as in Table 4. Industry dummies and year dummies are included

in the regressions. The t-statistics adjusted by robust standard errors clustered at the firm level are in parentheses.

***, ** and * indicate the significance at the 1%, 5%, and 10% levels, respectively.

Overall, the results presented in Table 5 offer robust support to H1b but starkly contrast with Xia (2014), who finds that S&P assigns lower ratings only when EJR ratings are lower than the S&P ratings. Tables 3 to 5 deliver nascent empirical evidence that the rating conservatism in the S&P ratings is related to the EJR coverage, especially in the speculative grade and the “overly harsh” ratings compared to EJR ratings.

Table 6 shows that the rating conservatism by S&P is positively related to the expected default frequency (EDF variable) and the likelihood of the actual default in the following three years (DEF variable). Such findings are as expected and in line with anecdotal and empirical evidence (REFS). Furthermore, statistically significant coefficients with positive sign and high magnitude on the EJRCOV*DEF interaction term (columns 3 and 4) are in line with H2a and render support to the claim that the positive association between S&P rating conservatism and probability of issuers’ default is significantly more pronounced when EJR also rates issuers. However, the rating conservatism induced by EJR is positively associated with the EDF term only in the case of speculative-grade firms. This result, in turn, can be interpreted as additional evidence favouring H1b.

Table 6: Information on S&P rating conservatism associated with EJR coverage

	(1)	(2)	(3)	(4)
EJRCOV	0.209	0.598	0.079	0.574
	(0.53)	(1.55)	(0.20)	(1.49)
EDF	0.701	0.979		
	(2.79)***	(4.01)***		
EJRCOV * EDF	0.220	-0.891		
	(0.55)	(-2.49)**		
EJRCOV * EDF * SGRADE		1.491		
		(3.96)***		
DEF			0.236	0.693
			(0.70)	(2.21)**
EJRCOV * DEF			2.271	1.477
			(3.26)***	(2.29)**
SGRADE		1.854		1.922
		(22.08)***		(22.93)***
LEV	-0.459	-1.692	-0.458	-1.568
	(-1.89)*	(-7.68)***	(-1.91)*	(-7.16)***

PROFIT	0.703	1.256	0.770	1.278
	(3.17)***	(6.16)***	(3.39)***	(6.02)***
MTB	-0.481	-0.231	-0.492	-0.248
	(-9.63)***	(-5.16)***	(-10.04)***	(-5.58)***
TANG	-0.351	-0.379	-0.353	-0.387
	(-1.41)	(-1.79)*	(-1.40)	(-1.78)*
LNSALE	-0.060	0.613	-0.010	0.623
	(-0.41)	(4.18)***	(-0.07)	(4.28)***
LEVOL	2.750	1.951	2.469	1.750
	(3.92)***	(3.06)***	(3.51)***	(2.74)***
PROFITVOL	-0.072	0.146	-0.088	0.154
	(-0.17)	(0.39)	(-0.21)	(0.41)
Constant	0.860	-2.665	0.769	-2.688
	(1.64)	(-4.95)***	(1.48)	(-5.03)***
Industry dummies	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
N	6914	6914	7006	7006
R-squared	0.093	0.291	0.083	0.275

Note: this table reports the OLS regression of the informativeness of rating conservatism, following Xia (2014)

and Kedia et al. (2014). Specifically, it shows the results of the impacts of EJR coverage on the informativeness of rating conservatism (H2a testing). The sample period is from 2011 to 2018. The dependent variable is the rating conservatism (RAT_DIFF_IND) in S&P ratings.

Similar to Table 5, Table 7 shows the coefficients on the WORSE variable to be positive and statistically significant at the 1% level, suggesting that S&P is more conservative in the case of the issuers rated higher by EJR. However, except for the estimated coefficient on the WORSE*EDF interaction term in column (1), the results suggest that if S&P assigns a more unfavourable rating than EJR, the related rating conservatism is not more informative to predict the expected (EDF) or the actual (DEF) default if the rated firm. Moreover, while the estimated coefficients on the SEDIF variable (columns 3 and 6) are positive and statistically significant, the coefficients on interaction variables (SEDIF*EDF and SEDIF& DEF) are insignificant. This further supports H2b and means that growing rating conservatism by S&P applied to the issuers rated lower by the ERJ does not translate into higher informativeness. Furthermore, the coefficients on the SGRADE term are highly similar to those observed in Table 3, i.e., positive and highly statistically and economically significant. This, in turn, suggests that S&P become more stringent than EJR in the speculative ratings (as per H1a). However, the stringency is not caused by the efforts to improve rating accuracy.

Table 7: Information on S&P rating conservatism related to EJR rating

	EDF			DEF		
	(1)	(2)	(3)	(4)	(5)	(6)
WORSE	0.234	0.657		0.164	0.598	
	(3.24)***	(7.13)***		(2.23)**	(6.49)***	
WORSE * EDF	0.729	0.158				
	(1.90)*	(0.39)				
EQUAL	0.064	0.387		0.025	0.326	
	(0.84)	(4.73)***		(0.34)	(4.04)***	
EQUAL * EDF	0.248	-0.113				
	(0.99)	(-0.45)				
SEDIF			0.198			0.182
			(8.06)***			(7.18)***
SEDIF * EDF			0.027			
			(0.35)			
EDF	0.899	1.186	1.242			
	(6.55)***	(5.80)***	(6.40)***			
WORSE * DEF				0.306	0.274	
				(0.60)	(0.60)	

EQUAL * DEF				-0.310	-0.204	
				(-0.40)	(-0.25)	
SEDIF * DEF						0.089
						(1.01)
DEF				1.262	1.159	1.249
				(6.84)***	(4.90)***	(4.85)***
EJRCOV	0.542	3.080	3.004	0.498	2.684	2.576
	(1.42)	(3.23)***	(3.10)***	(1.30)	(2.70)***	(2.55)**
SGRADE	1.919	1.804	1.723	1.936	1.838	1.762
	(22.72)***	(17.61)***	(16.83)***	(22.97)***	(17.58)***	(16.84)***
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
N	6914	3717	3717	7006	3742	3742
R-squared	0.290	0.370	0.386	0.276	0.353	0.367

Note: this table reports the OLS regression of the informativeness of rating conservatism, following Xia (2014) and Kedia et al. (2014). The sample period is from 2011 to 2018. The dependent variable is the rating conservatism (RAT_DIFF_IND) in S&P ratings. Specifically, it provides the results of the impacts of the difference between the S&P rating and the EJR rating (H2b testing).

Tables 8 and 9 present the results around our last hypothesis, H3, in which we argue that ERJ coverage and rating conservatism by S&P are associated with the false warnings (Table 8) and volatility (Table 9) of ratings issued by S&P. Similar to e.g., Cheng and Neamtiu (2009), the dependent variables in Table 8 are ERRORII(BBB) (BB and B), that is, binary dummy variables equal to 1 for false warning and 0 otherwise with cut-off rating grade of BBB- (BB- and B-). Specifically, we define a false warning as a firm receiving a rating worse than the cut-off grade and not having an event of default within one year from the rating date. In other words, the ERRORII variable is a proxy for type II errors, that is, the probability of assigning too harsh ratings to non-defaulting firms by S&P, i.e., false warnings (Cheng and Neamtiu. 2009).

Table 8: EJR coverage and false warning

	(1)	(2)	(3)	(4)	(5)	(6)
	ERRORIIBB	ERRORIIB	ERRORII	ERRORIIBB	ERRORIIB	ERRORII
	B	B	B	B	B	B
EJRCOV	5.679	6.314	4.596			
	(1.93)*	(1.06)	(1.19)			
RAT_DIFF_IND				0.780	0.513	0.386
				(10.80)***	(8.85)***	(4.29)***
LASSET	-2.036	-1.791	-1.040	-1.447	-1.072	-0.661

	(-4.41)***	(-2.07)**	(-1.99)**	(-13.99)***	(-13.34)***	(-5.27)***
INTCOVER	-0.008	-0.031	-0.024	-0.029	-0.075	-0.025
	(-2.09)**	(-0.98)	(-1.84)*	(-1.62)	(-5.95)***	(-2.01)**
DEBTEQUIT						
Y	0.097	0.013	-0.068	0.078	-0.002	-0.090
	(3.79)***	(0.42)	(-1.99)**	(2.92)***	(-0.11)	(-2.79)***
LARGELOSS	-0.901	-0.107	0.387	-0.056	0.742	1.253
	(-1.20)	(-0.10)	(0.54)	(-0.10)	(2.24)**	(3.46)***
NEGRE	3.176	2.199	2.533	2.446	1.393	1.797
	(7.33)***	(2.87)***	(4.19)***	(9.24)***	(8.57)***	(3.76)***
GDPA	-0.001	-0.000	-0.000	-0.000	0.000	-0.000
	(-1.50)	(-0.56)	(-0.42)	(-1.17)	(0.71)	(-0.28)
CRSPBOND	-1.913	-1.255	-0.993	-0.121	0.787	-0.193
	(-1.98)**	(-0.77)	(-0.73)	(-0.23)	(1.74)*	(-0.18)
SPINDEX	0.001	0.000	0.001	0.001	-0.000	0.001
	(1.34)	(0.42)	(0.45)	(1.44)	(-0.08)	(0.56)
LDEFAULTS	-0.002	-0.003	0.018	0.001	-0.002	0.026
	(-0.36)	(-0.60)	(1.71)*	(0.20)	(-0.28)	(2.23)**
Constant	22.603	15.054	3.593	16.038	4.660	0.202

	(3.23)***	(1.30)	(0.47)	(4.99)***	(1.79)*	(0.05)
N	2191	2191	2191	1803	1803	1803
Pseudo R-						
squared	0.407	0.303	0.250	0.508	0.368	0.286

Note: this table reports the impacts of EJR coverage on the false warnings and rating stability on the S&P ratings.

The sample period is from 2011 to 2018. Specifically, it reports the results of false warnings based on the ratings received by the firms during the sample period. The independent variable EJRCOV is the predicted probability from the logistic regressions on whether a firm is rated by EJR. The variable RAT_DIFF_IND is the rating difference between the actual S&P rating and the predicted rating from the most recent fiscal year, which measures the rating conservatism. The control variables in Panel A are the same as Cheng and Neamtiu (2009). Industry dummies and year dummies are included in the regressions in Panel B. The t-statistics adjusted by robust standard errors clustered at the firm level are in parentheses. ***, ** and * indicate the significance at the 1%, 5%, and 10% levels, respectively.

Table 9: EJR coverage and rating stability

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	RATVOL	REVERSAL	LRC	LDOWN	RATVOL	REVERSAL	LRC	LDOWN
EJRCOV	0.140	2.889	5.861	7.411				
	(2.04)**	(0.78)	(1.56)	(2.00)**				

RAT_DIFF_IND					0.025	0.478	0.492	0.299
					(6.58)***	(3.72)***	(3.79)***	(1.84)*
Control		Yes	Yes	Yes	Yes	Yes	Yes	Yes
variable	Yes							
Industry								
dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year								
dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	6651	6775	6775	4922	5719	5676	5463	3900
pseudo-R-								
squared	0.091	0.332	0.301	0.256	0.077	0.331	0.294	0.287

Note: this table reports the impacts of EJRCOV on the false warnings and rating stability on the S&P ratings.

The sample period is from 2011 to 2018. Specifically, it reports the results of rating standard deviation, reversal and large rating change in a firm each year. The independent variable EJRCOV is the predicted probability from the logistic regressions on whether a firm is rated by EJRCOV. The variable RAT_DIFF_IND is the rating difference between the actual S&P rating and the predicted rating from the most recent fiscal year, which measures the rating conservatism. The control variables in Panel A are the same as Cheng and Neamtiu (2009). Industry dummies and year dummies are included in the regressions in Panel B. The t-statistics adjusted by robust standard errors clustered at the firm level are in parentheses. ***, ** and * indicate the significance at the 1%, 5%, and 10% levels,

respectively.

We can observe robust evidence that rating conservatism is positively associated with the probabilities of false warnings. For instance, the estimated coefficients on the RAT_DIFF_IND variable in columns 4 to 6 are statistically significant at the 1% level, positive and vary from 0.78 to 0.386 for the highest and lowest cut-off grade, respectively. This means that for the highest (lowest) cut-off grade of BBB- (B-), on average, we would expect a one-notch increase in rating conservativeness by S&P (proxied by the RAT_DIFF_IND term) to be associated with 0.78% (0.39%) increase in the probability of a false warning, *ceteris paribus*. However, overall, we do not find evidence of a positive association between EJR coverage and the odds of false warnings (type II errors) embedded in S&P ratings. This can be explained by the fact that firms covered by EJR are generally large-cap stocks.

In Table 9, we present the estimated results from four models of S&P rating volatility, each with a different dependent variable (volatility proxy) created based on deHaan (2017). We can observe robust empirical evidence suggesting that EJR coverage (rating conservatism in the S&P ratings) is positively associated with two (all four) measures of rating volatility. Specifically, on average, S&P ratings assigned to firms also rated by EJR have a standard deviation (RATVOL) of 0.14 greater than S&P ratings assigned to firms not covered by EJR. They are significantly more likely to be downgraded by over three notches within a year. Likewise, an increase in S&P rating conservatism proxied by the

RAT_DIFF_IND term has a positive effect on a standard deviation of issued ratings, the probability of rating reversal (an upgrade followed by a downgrade or vice versa) and of rating change (downgrade) greater than three notches (e.g., from BB+ to B).

Summing up, Tables 8 and 9 do not support the argument that S&P would allocate more resources to the firms covered by EJR (Bonsall et al., 2018) but are consistent with the results in Dimitrov et al. (2015) that in response to the regulatory pressure, credit rating agencies increase the probability of false warnings as a negative side effect stemming from the uninformed downgrades.

References

- Alp, A. (2013). Structural shifts in credit rating standards. *The Journal of Finance*, 68(6), 2435-2470.
- Baghai, R.P., & Becker, B. (2018). Non-rating revenue and conflicts of interest. *Journal of Financial Economics*, 127(1), 94–112.
- Baghai, R.P., Servaes, H., & Tamayo, A. (2014). Have rating agencies become more conservative? Implications for capital structure and debt pricing. *The Journal of Finance*, 69(5), 1961-2005.
- Beatty, A., Gillette, J., Petacchi, R., & Weber, J. (2019). Do rating agencies benefit from providing higher ratings? Evidence from the consequences of municipal bond ratings recalibration. *Journal of Accounting Research*, 57 (2), 323-354.

- Berwart, E., Guidolin, M., & Milidonis, A. (2019). An empirical analysis of changes in the relative timeliness of issuer-paid vs. investor-paid ratings. *Journal of Corporate Finance*, 59, 88–118.
- Blume, M.E., Lim, F., & MacKinlay, A.C. (1998). The declining credit quality of U.S. corporate debt: Myth or reality? *Journal of Finance*, 53, 1389-1413.
- Bolton, P., Freixas, X., & Shapiro, J. (2012). The credit ratings game. *Journal of Finance*, 67(1), 85-111.
- Bonsall S.B., IV, Green, J. R., & Muller III, K. A. (2018). Are Credit Ratings More Rigorous for Widely Covered Firms? *The Accounting Review*, 93(6), 61-94.
- Bonsall S.B., IV, Koharki, K., & Neamtiu, M. (2017). When do differences in credit rating methodologies matter? Evidence from high information uncertainty borrowers. *The Accounting Review*, 92(4), 53-79.
- Bonsall, S.B., IV, Koharki, K. & Neamtiu, M. (2022a). The Disciplining effect of credit default swap trading on the quality of credit rating agencies. *Contemporary Accounting Research*, 39, 1297-1333.
- Bonsall, S.B., IV, Gillette, J., Pundrich, G., & So, E.C. (2022b). Conflicts of interest in subscriber-paid credit ratings. (April 2022). Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3931024.
- Bruno, V., Cornaggia, J., & Cornaggia, K.J. (2016). Does regulatory certification affect the information content of credit ratings? *Management Science*, 2(6), 1578-1597.

- Cantor, R., & Packer, F. (1995). The Credit Rating Industry. *The Journal of Fixed Income*, 5(3)10-34.
- Cheng, M., & Neamtiu, M. (2009). An empirical analysis of changes in credit rating properties: Timeliness, accuracy and volatility. *Journal of Accounting and Economics*, 47(1-2), 108-130.
- Cornaggia, J., & Cornaggia, J.K. (2013). Estimating the costs of issuer-paid credit ratings. *Review of Financial Studies*, 26(9), 2229–2269.
- Cornaggia, J., Cornaggia, J.K., & Xia, H. (2016). Revolving doors on Wall Street. *Journal of Financial Economics*, 120(2), 400-419.
- Cornaggia, J., Cornaggia, J.K., & Israelsen, R.D. (2020). Where the Heart Is: Information Production and the Home Bias. *Management Science*, 66(12), 5532-5557.
- deHaan, E. (2017). The financial crisis and corporate credit ratings. *The Accounting Review*, 92(4), 161-189.
- Dimitrov, V., Palia, D., & Tang, L. (2015). Impact of the Dodd-Frank Act on credit ratings. *Journal of Financial Economics*, 115(3), 505-520.
- Efing, M., & Hau, H. (2015). Structured debt ratings: Evidence on conflicts of interest. *Journal of Financial Economics*, 116(1), 46-60.
- Ferreira, P.H., Landsman, W.R., Liu, T., & Zhao, J. (2022). The effect of changes in legal liability on credit rating agencies' reliance on financial statement information and rating quality. Available at SSRN: <https://ssrn.com/abstract=4146006>.

- Fong, K., Hong, H., Kacperczyk, M., & Kubik, J.D. (2022). Do security analysts discipline credit rating agencies? *The Review of Corporate Finance Studies*, cfac021.
- He, J.J., Qian, J.Q., & Strahan, P.E. (2012). Are all ratings created equal? The impact of issuer size on the pricing of mortgage-backed securities. *Journal of Finance*, 67(6), 2097–2137.
- Huang, Y.-L., & Shen, C.-H. (2021). From revenue to safety: Rating agencies have changed their concerns after the crisis. *Journal of International Financial Markets, Institutions & Money*, 73, 101363.
- Jiang, J. X., Stanford, M. H., & Xie, Y. (2012). Does it matter who pays for bond ratings? Historical evidence. *Journal of Financial Economics*, 105(3), 607-621.
- Kashyap, A.K., & Kovrijnykh, N. (2016). Who should pay for credit ratings and how? *Review of Financial Studies*, 29(2), 420–456.
- Kedia, S., Rajgopal, S., & Zhou, X. (2014). Did going public impair Moody' s credit ratings? *Journal of Financial Economics*, 114(2), 293-315.
- Kedia, S., Rajgopal, S., & Zhou, X. A. (2017). Large shareholders and credit ratings. *Journal of Financial Economics*, 124(3), 632-653.
- Khatami, S.H., Marchica, M.-T., & Mura, R. (2016). Rating friends: The effect of personal connections on credit ratings. *Journal of Corporate Finance*, 39, 222-241.
- Kraft, P. (2015). Do rating agencies cater? Evidence from rating-based contracts. *Journal of Accounting and Economics*, 59(2-3), 264-283.

- Lee, W.C., Shen, J., Cheong, T.S., & Wojewodzki, M. (2021). Detecting conflicts of interest in credit rating changes: A distribution dynamics approach. *Financial Innovation*, 7(45).
- Mählmann, T. (2011). Is there a relationship benefit in credit ratings? *Review of Finance*, 15(3), 475-510.
- SEC. (2003). Report on the role and function of credit rating agencies in the operation of securities markets. Available at <https://www.sec.gov/news/studies/credratingreport0103.pdf>.
- SEC. (2011). 2011 summary report of commission staff's examinations of each nationally recognized statistical ratings organization. https://www.sec.gov/files/2011_nrsro_section15e_examinations_summary_report.pdf.
- SEC. (2012). Report to Congress on assigned credit ratings as required by Section 939f of the Dodd-Frank Wall Street Reform and Consumer Protection Act. <https://www.sec.gov/news/studies/2012/assigned-credit-ratings-study.pdf>.
- SEC. (2020). Egan Jones comments on file number 265-30, comments to the Committee meeting to be held on February 10, 2020. Available at <https://www.sec.gov/comments/265-30/26530-6732296-207477.pdf>.
- SEC. (2022). Current NRSROs. Available at <https://www.sec.gov/ocr/ocr-current-nrsros.html>
- Tang, L., Peytcheva, M., & Li, P. (2020). Investor-paid ratings and conflicts of interest. *Journal of Business Ethics*, 163, 365-378.

Toscano, F. (2020). Does the Dodd-Frank Act reduce the conflict of interests of credit rating agencies?

Journal of Corporate Finance, 101595.

White, L.J. (2019). The credit rating agencies and their role in the financial system. In: Brousseau, E.,

Glachant, J.-M., & Sgard, J. (Eds). The Oxford handbook of institutions of international economic governance and market regulation. Oxford University Press.

Wojewodzki, M., Poon, W., & Shen, J. (2018). The role of credit ratings on capital structure and its speed of adjustment: an international study. *European Journal of Finance*, 24(9), 735-760.

Xia, H. (2014). Can investor-paid credit rating agencies improve the information quality of issuer-paid rating agencies? *Journal of Financial Economics*, 111(2), 450-468.

Xia, H., & Strobl, G. (2012). The issuer-pays rating model and ratings inflation: Evidence from corporate credit ratings. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2002186.

Appendices

Appendix 1: Univariate tests of the rating timeliness, accuracy and stability in S&P ratings

	All	EJRCOV = 1	EJRCOV = 0	Diff. (1 - 0)	t-stat
Panel A: rating timeliness					
DAHEAD	354.96	359.31	352.97	6.34	1.44
WRATE	16.79	16.54	16.91	-0.37	1.46

Panel B: rating accuracy

ERRORI(BBB)	0.54%	1.72%	0.00%	1.72%	1.49
ERRORI(BB)	6.45%	10.34%	4.69%	5.66%	1.46
ERRORI(B)	67.20%	68.97%	66.41%	2.56%	0.34
ERRORII(BBB)	75.87%	59.55%	85.01%	-25.46%	16.87
ERRORII(BB)	45.49%	27.95%	55.33%	-27.38%	15.48
ERRORII(B)	9.14%	7.12%	10.27%	-3.15%	15.48

Panel C: rating stability

RATVOL	15.09%	12.94%	17.21%	-4.27%	5.63
REVERSAL	0.72%	0.56%	0.88%	-0.32%	1.85
LRC	1.65%	1.20%	2.07%	-0.86%	3.32
LDOWN	0.91%	0.62%	1.19%	-0.56%	2.90

Note: this table reports the results of univariate tests of rating timeliness, accuracy and stability in S&P ratings.

The variables of rating timeliness and accuracy (stability) are constructed following Cheng and Neamtiu (2009)

(deHaan (2017))

Appendix 2: EJR coverage, rating timeliness and missed default

	(1)	(2)	(3)	(4)
	DAYS	WRATE	ERRORIBB	ERRORIB
EJRCOV	-11.691	0.523	-0.885	-1.464
	(-0.59)	(0.35)	(-0.05)	(-0.55)
BANKRUPT	5.784	0.799	-2.542	-1.363
	(1.24)	(3.33)***	(-0.74)	(-2.52)**
LASSET	5.765	-0.447	15.827	0.492
	(1.76)*	(-1.98)**	(2.42)**	(1.27)
INTCOVER	-0.419	-0.074	1.826	0.068
	(-2.06)**	(-3.28)***	(2.23)**	(1.67)*
DEBTEQUITY	0.123	-0.049	1.187	0.071
	(0.43)	(-1.59)	(1.79)*	(1.34)
LARGELOSS	-18.987	-0.385	12.632	1.251
	(-2.12)**	(-0.99)	(2.27)**	(1.71)*
NEGRE	1.537	1.017	23.482	-2.899
	(0.27)	(1.86)*	(1.91)*	(-2.81)***
GDPA	0.019	0.001	0.006	-0.000
	(2.43)**	(2.71)***	(0.95)	(-0.33)

CRSPBOND	54.237	-0.192	117.523	5.846
	(1.94)*	(-0.18)	(1.95)*	(2.76)***
SPINDEX	-0.048	-0.003	0.025	0.002
	(-2.22)**	(-2.00)**	(1.02)	(0.57)
LDEFAULTS	0.109	0.002	0.863	0.000
	(0.65)	(0.30)	(2.11)**	(0.01)
Constant	67.275	6.649	-400.697	2.382
	(0.60)	(1.59)	(-2.08)**	(0.23)
N	112	120	120	120
R-squared	0.241	0.360	0.7483	0.208

Note: this table reports the impacts of EJR coverage on the rating timeliness and accuracy (Type I error) on the S&P ratings. The sample period is from 2011 to 2018. The results of rating timeliness and missed default based on the sample of 186 defaults in US-listed firms rated by S&P. The key independent variable EJRCOV is the predicted probability from the logistic regressions on whether a firm is rated by EJR. The control variables are the same as Cheng and Neamtiu (2009). The t-statistics adjusted by robust standard errors clustered at the firm level are in parentheses. ***, ** and * indicate the significance at the 1%, 5%, and 10% levels, respectively.

Appendix 3: The list of variables with definitions and sources.

SRATING is the numerical value of the S&P rating at the end of each fiscal year on a firm.

SRATING_IND and SRATING_FIRM are the predicted firm ratings from the OLS regressions based on industry-fixed effects and firm-fixed effects.

RAT_DIFF_IND (RAT_DIFF_FIRM) is the difference between the actual firm rating from S&P (SRATING) and the predicted firm rating SRATING_IND (SRATING_FIRM) in a year.

SGRADE is a dummy variable equal to 1 if the S&P rating is within the speculative grade in a firm in a year and 0 otherwise.

ERATING is the numerical value of the EJR rating for a firm in a year.

SEDIF is the rating difference between S&P and EJR in a year.

EJRCOV is a dummy variable equal to 1 if a firm has both S&P and EJR ratings in a year and 0 if it has only an S&P rating.

WORSE is a dummy variable equal to 1 if a firm has an S&P rating worse than the EJR rating in a year and 0 otherwise.

EQUAL is a dummy variable equal to 1 if a firm has an S&P rating equal to the EJR rating in a year and 0 otherwise.

BETTER is a dummy variable equal to 1 if a firm has an S&P rating better than the EJR rating in a year and 0 otherwise.

EDF is the expected default frequency from Merton's model in a firm at the end of the fiscal year.

DEF is a dummy variable equal to 1 if a firm defaulted in the subsequent three years.

DAHEAD is the number of days between the speculative grade rating date and the default date (with a

maximum value of 360).

WRATE is the average monthly rating in the 12 months before default.

ERRORI(BBB) (BB and B) is a dummy variable equal to 1 for missed default and 0 otherwise with cut-off grade BBB- (BB- and B-). Missed default is defined as a firm having ratings equal to or better than the cut-off grade within a year before default.

ERRORII(BBB) (BB and B) is a dummy variable equal to 1 for false warning and 0 otherwise with cut-off grade BBB- (BB- and B-). A false warning is defined as a firm that receives a rating worse than the cut-off grade and does not have an event of default within one year from the rating date.

RATVOL is the standard deviation of the monthly rating in a year.

REVERSAL is a dummy variable if a firm has both upgrades and downgrades in a year.

LRC is a dummy variable if a firm has a rating change of more than three notches in a year.

LDOWN is a dummy variable if a firm is downgraded by more than three notches in a year.

LEV is the leverage ratio. PROFIT is EBITDA divided by sales. MTB is market to book ratio. TANG is tangibility. LNSALE is the log value of sales. LEVOL is the volatility of the leverage ratio.

PROFITVOL is the volatility of the profitability ratio.

BANKRUPT is a dummy variable if the default is bankruptcy. LASSET is the log value of quarterly total assets. INTCOVER is quarterly interest coverage. DEBTEQUITY is the quarterly debt-to-equity ratio. LARGELOSS is a dummy if a firm has a large loss in a year. NEGRE is a dummy if a firm has negative retained earnings in a year. GDP is the gross domestic product. CRSPBOND is the 30-year

Treasury bond return from CRSP. SPINDEX is the value of the S&P500 index. LDEFAULTS is the number of defaults in a quarter.

Understanding the Motivations of the NFT Players

MS0104

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Understanding the Motivations of the NFT Players

ABSTRACT

With the increased adoption of blockchain applications emerged a new type of online game based on nonfungible tokens (NFT). Players can now purchase and own various in-game items and sell them to other gamers. This novel NFT approach to online gaming has not received much attention in the scholarly community. In particular, little is understood about users' motivations. Drawing on the Uses and Gratification framework, this study seeks to understand what motivates individuals to play NFT games. We tested our model with 252 NFT gamers. Our empirical study reveals the five gratifications (purposive value, entertainment, social enhancement, maintaining interpersonal interconnectivity, and self-discovery) derived from the U&G theory significantly predict adoption intentions. Furthermore, our investigation revealed the moderating role of trust in the blockchain on users' motivations to play NFT games. Our study contributes to the understanding of user adoption of blockchain applications. The findings offer practitioners directions for improving NFT games.

Can Satellite Imagery be Used to Estimate Labor Force Population? A Preliminary Study Using Building Shape Data and Thai Labour Force Survey Results

MS0105

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Can Satellite Imagery be Used to Estimate Labor Force Population?

A Preliminary Study Using Building Shape Data and Thai Labour Force Survey Results

Abstract

The purpose of this study was to estimate the province-level labor force from the building area while relying on allometry, a type of power law. Our target area was each prefecture in Thailand. The building area was calculated from the building footprint data using the Microsoft software. The labor force by prefecture was based on the numbers estimated from the labor force survey in the first quarter of 2020. We clarified that area and labor force have a linear relationship, suggesting that we can express the relationship using allometry. When we employ the area with the entire building, the model fits well, suggesting that using both large and small building footprints can better express the labor force.

Keyword: Labour force, allometry, building area, Thailand

Introduction

The purpose of this study is to estimate the labor force from the building footprint area.

The labor force population is considered to approximate the abundance of human resources available to companies. Therefore, it is important to clarify the number and spatial distribution of the labor force and understand the mechanism of its temporal movement.

Because of the quality of data, however, estimating the labour force often becomes challenging and objective proxy of the statistics is often necessary. One option of the proxy is information derived from satellite imagery, which is primarily nocturnal luminosity, serves as a surrogate for socioeconomic indices. Notably, the Gross Domestic Product (GDP) within developing nations stands as a prominent focal point, yielding successful outcomes (Ghosh et al., 2013). Nonetheless, the estimation process is not without its reservations; namely, issues related to saturation and theoretical underpinnings. Nocturnal luminosity represents a confluence of radiance in specific geographic locales. The urban areas are characterized by high luminosity density, which is presumed to be concentrated in developed urban centers and sparse in rural or underdeveloped regions. In urban

settings, luminous intensity frequently reaches a saturation volume due to excessive density, consequently leading to imprecise estimations (Mellander et al., 2015). The utilization of luminosity data as a proxy predictor for social indicators is a challenging endeavor, primarily due to its spatial disparities. Some transformations have been explored (Sutton, 1997), yielding positive results. However, a dominant theory that adequately explains the correlation between luminosity data and social indicators remains elusive. In sum, it is imperative that we seek alternative proxy indicators and develop robust theoretical frameworks to harness the information gleaned from the realms of outer space.

As for the theory considering the N., estimation, allometry in population research is worth discussing. Allometry refers to a type of power law that expresses relationship variables with different dimensions. The simplest expression of the allometry is given, $y = \alpha x^\beta$. To decline deviation, we transform the equation given, $\log y = \log \alpha + \beta \log x$. Originally, this theory was established in biology (Bettencourt, 2013; Bettencourt et al., 2007), but it has a wide range of applications. In labor research, research that clarified the relationship between the number of occupational accidents and the number of workers (Cempel et al., 2016), urban population and size, and population distribution and GDP in cities (Ribeiro et al., 2021) applied allometry.

Methodology

We focus on the survey results of the labor force survey (LFS) in Thailand. Thailand is a main actor of the East Asian miracle. Traditionally, in social science settings, research on labor in Thailand has been the main focus (Lawler et al., 1995; Lewis & Kapur, 1990; Robinson, 1978). Since the early 2000s, interest-specific research has flourished, such as human resource management practices and skill formation) leadership (Selvarajah et al., 2013; Yukongdi, 2010), returns on educational investment), and labor mobility (Jayasuriya & Shand, 1986; Jitsuchon, 2014; Sanglaoid et al., 2014). However, few studies have examined where and to what extent the labor force is distributed and how it changes in the country. We obtained province-level N. of labor force from the NSO website. These data often contain missing values and fault data. Missing values can result in problems. To overcome these challenges, we estimate the labor force while applying the state-space method. The target period was Q3, 2020.

As a proxy of the N. of labor force, we employed building footprint by Microsoft. (<https://github.com/microsoft/GlobalMLBuildingFootprints>). We added the address from shapefiles distributed by DIVA-GIS (<https://www.diva-gis.org/>) to the footprint. To save the calculation period, we randomly sampled 1% (N is approximately 240,000) of the building data and calculated the aggregate area by province. To consider the influence of building use, we set two datasets: the area of the 20 largest buildings and the total area. The former area data includes buildings mostly for industrial purposes, such as factories, warehouses, and shopping malls; namely, we assume that relatively larger buildings are used for business purposes. The latter includes all buildings, including the houses. Combining the estimated labor force and the area, we estimated the province-level labor force from the building area while applying the regression model given, $\log y = \log \alpha + \beta \log x + \varepsilon$, where y denotes the number of labor force, x denotes area of building footprint, and ε denotes error term following the normal distribution $N(0, \sigma^2)$. To compute the variables, we used R (ver. 4.2.1).

1. Results

Figure 1 shows the relationship between the building area of each prefecture and labor force. It is likely that the figure shows a linear relationship between the area and labor force. When we use footprint data from entire buildings, the coefficients are as follows: $\alpha = -0.9$ (SE = ± 0.7), and $\beta = 0.9313$ (SE = ± 0.04), respectively. Adjusted coefficient of determination (R^2) is 0.84. In addition to the intercept, the estimated results were statistically significant at the 5% level. The results suggest that the N. of the labor force increases almost proportionally to the building area. In addition, according to Figure 1, Bangkok is clearly an outlier, probably because high buildings and apartments located merely in Bangkok house more residents and workers than lower buildings. When only the 20 largest buildings were extracted, the situation changed. The coefficient are indicated below; $\alpha = 6.39$ (SE = ± 0.85), and $\beta = 0.56$ (SE = ± 0.04). Adjusted coefficient of determination (R^2) is 0.43. All estimated results were significant at the 5% level. Even in the absence of large buildings, the labor force population exists to some extent, and the square root of the building area is the growth rate of the labor force population. For the estimation, the data for the 20 largest buildings do not appear to provide sufficient information.

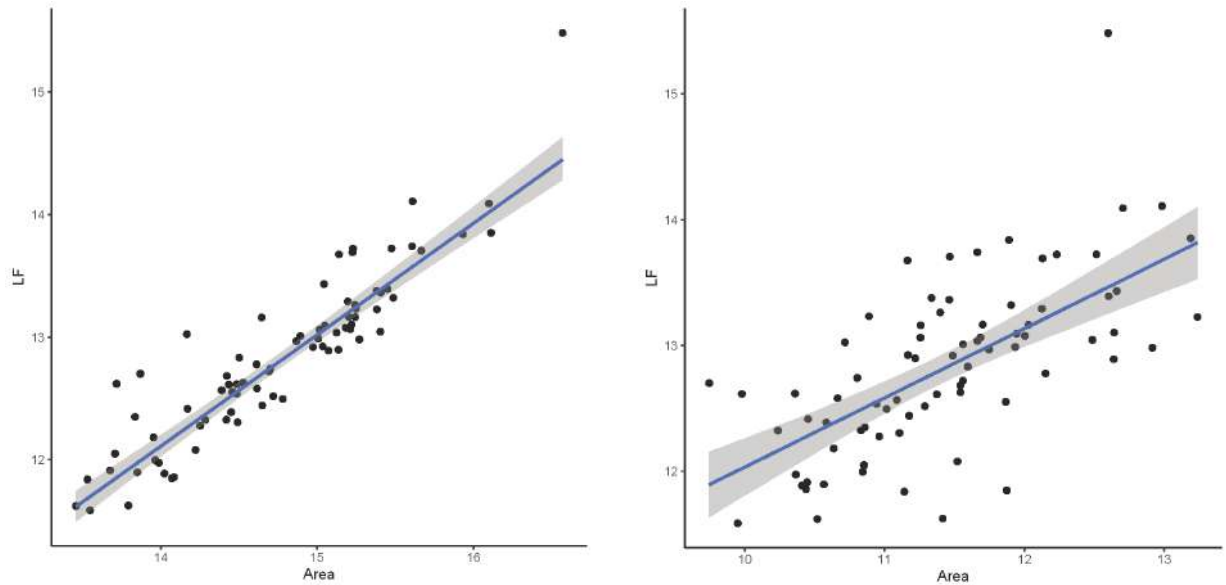


Figure 1 Regression results using entire buildings (left) and the 20 largest buildings (right). The x-axis indicates the building area, and the y-axis indicates the N. of the labor force.

2. Discussion

The purpose of this study was to estimate the province-level N. of the labor force using the building area obtained from satellite imagery. To estimate this number, we applied the theory of allometry. For the estimation, this study referred to building data using Microsoft and the labor force survey results from the NSO. We examined both the area data using all buildings and one limited to the 20 largest buildings. Regression analysis is applied to the estimation.

We found that the building area predicts the N. of the labor force well. We also found that area data from entire buildings were more convincing, suggesting that it is important to consider not only relatively large buildings but also small buildings presumed to be houses when estimating the number. This study presents a new method for estimating labor force population. By applying a relatively simple method called regression analysis to objective data such as building shapes obtained from satellite images, we estimated the labor force population with high accuracy. Allometry, a theory and method with a large amount of accumulated research, ensures high reproducibility. Our estimation methodology will help understand the business environment in terms of labor supply.

References

- Audia, P. G., Rider, C. I., Gordon, I. R., McCann, P., Arita, T., McCann, P., Callois, J. M., Bothner, M. S., Chari, S., Hassink, J., Hulsink, W., Grin, J., Denrell, J., Kovacs, B., Ehrhardt, O., Nowak, E., Carrie, A. S., Barnett, W. P., Sorenson, O., ... Rowley, C. (2004). Promotion systems and career development in Thailand: A case study of Siam Cement. *World Development*, 14(1), 196–218.
- Bettencourt, L. M. A. (2013). The Origins of Scaling in Cities. *Science*, 340(6139), 1438–1441.
- Bettencourt, L. M. A., Lobo, J., & Strumsky, D. (2007). Invention in the city: Increasing returns to patenting as a scaling function of metropolitan size. *Research Policy*, 36(1), 107–120.
- Cempel, C., Tabaszewski, M., & Ordysinski, S. (2016). Allometric scaling and accidents at work. *International Journal of Occupational Safety and Ergonomics*, 22(2), 173–178.
- Ghosh, T., Anderson, S. J., Elvidge, C. D., & Sutton, P. C. (2013). Using nighttime satellite imagery as a proxy measure of human well-being. *Sustainability (Switzerland)*, 5(12), 4988–5019.
- Hawley, J. D. (2003). Comparing the payoff to vocational and academic credentials in Thailand over time. *International Journal of Educational Development*, 23(6), 607–625.
- Hawley, J. D. (2004). Changing returns to education in times of prosperity and crisis, Thailand 1985–1998. *Economics of Education Review*, 23(3), 273–286.
- Hawley, J. D. (2008). Vocational-technical schooling and occupational matching in Thailand: Differences between men and women. *Asia Pacific Journal of Education*, 28(2), 189–205.
- Jayasuriya, S. K., & Shand, R. T. (1986). Technical change and labor absorption in Asian agriculture: Some emerging trends. *World Development*, 14(3), 415–428.
- Jitsuchon, S. (2014). Income inequality, poverty and labor migration in Thailand. *Singapore Economic Review*, 59(1), 1–17. <https://doi.org/10.1142/S0217590814500040>
- Kamoche, K. (2000). From boom to bust: The challenges of managing people in Thailand. *The International Journal of Human Resource Management*, 11(2), 452–468.
- Lawler, J. J., Jain, H. C., Ratnam, C. S. V., & Atmiyanandana, V. (1995). Human resource management in developing economies: A comparison of India and Thailand. *The International Journal of Human Resource Management*, 6(2), 319–346.

- Lewis, J. P., & Kapur, D. (1990). An updating country study: Thailand's needs and prospects in the 1990s. *World Development*, 18(10), 1363–1378.
- Mehta, A., Felipe, J., Quising, P., & Camingue, S. (2011). Overeducation in developing economies: How can we test for it, and what does it mean? *Economics of Education Review*, 30(6), 1334–1347.
- Mellander, C., Lobo, J., Stolarick, K., & Matheson, Z. (2015). Night-Time Light Data: A Good Proxy Measure for Economic Activity? *PLOS ONE*, 10(10), e0139779.
- Paul, Sutton. (1997). Modeling Population Density with Night-time Satellite Imagery and GIS.
- Ribeiro, H. V., Oehlers, M., Moreno-Monroy, A. I., Kropp, J. P., & Rybski, D. (2021). Association between population distribution and urban GDP scaling. *PLOS ONE*, 16(1), e0245771.
- Robinson, W. C. (1978). Economic policy and population change in Thailand. *World Development*, 6(11–12), 1261–1269.
- Sanglaoid, U., Santipolvut, S., & Thamma-Apiroam, R. (2014). Determinants of intra-ASEAN labour migration to Thailand. *Asian Social Science*, 10(8), 66–72.
- Selvarajah, C., Meyer, D., & Donovan, J. (2013). Cultural context and its influence on managerial leadership in Thailand. *Asia Pacific Business Review*, 19(3), 356–380.
- Sussangkarn, C. (1995). Labour Market Adjustments and Migration in Thailand. *Asean Economic Bulletin*, 12(2), 237–254.
- Warunsiri, S., & McNown, R. (2010). The returns to education in Thailand: A pseudo-panel approach. *World Development*, 38(11), 1616–1625.
- Yukongdi, V. (2010). A study of thai employees' preferred leadership style. *Asia Pacific Business Review*, 16(1–2), 161–181.

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The International Trade Content of Globalization Indices

MS0106

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The international trade content of globalization indices

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Abstract

International business activities, such as trade of goods, services, knowledge, and technologies, have undergone remarkable growth in volume as the process of globalization progresses. The extant literature has proposed several indices for measuring the manifold facets of globalization. Only a handful of studies have compared selected indices using the qualitative approach coupled with basic statistical tools. The relative merits of these indices as regards to the information they convey about actual international business activities remains unexplored. This paper aims to provide a rigorous quantitative assessment of two promising indices, the KOF and DHL indices, by exploring their explanatory and predictive power on international trade, a prominent form of international business transactions.

A panel dataset of the world economies for the period of 2001-2020 is compiled to examine the indices. While the KOF index is the most accepted and widely used, the recent DHL index is comparable in terms of dimension, economy, and time coverage. The KOF index has the de facto and de jure aspects, and encompasses the economic, social, and political dimensions. The DHL index covers the dimensions of trade, capital, information, and people in the depth and breadth aspects. In analysis, the states of trade expansion and trade contraction are distinguished, and the panel dynamic random effects probit model with unobserved

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heterogeneity is employed to incorporate trade dynamics persistence and cross-economy differences.

Results suggest significant explanatory and predictive power of economic globalization and globalization in depth on trade expansion, while trade contraction can be explained and predicted by social globalization and globalization in breadth. Findings reveal heterogeneous information content of different dimensions and aspects of the globalization indices on trade growth. Therefore, gauging the evolution of appropriate globalization components is imminent for invigorating international trade dynamism, particularly under the contemporary international business environment characterized by deglobalization and decoupling.

JEL classification: F10, F47, F62

Keywords: Dynamic panel probit model, globalization, international trade

How and When Quality of B2B Professional Services Adds Value to Companies: The Case of Investment Relations (IR)

MS0107

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**How and When Quality of B2B Professional Services Adds Value to Companies: The Case of
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Structural Abstract

Methodology

This study employs a proprietary dataset on voting records of an annual investment relations (IR) awards event and the corresponding company-level archival data for analysis. Regression analysis is used to test hypotheses.

Purpose

This study aims at proposing and testing a model delineating how and when the quality of a special B2B professional service, investment relations (IR), would drive corporate intangible value.

Findings

IR service quality not only directly enhances corporate intangible value, but also indirectly boosts it via information transparency. While competitive intensity does not moderate the relationship between IR service quality and corporate intangible value, its moderating effect on the relationship between information transparency and this value is negative.

Limitations/Research Implications

The findings advance academic understanding of the mechanism and boundary conditions underlying the complex and dynamic relationships among IR service quality, information transparency, corporate intangible value and competitive intensity. Future research endeavors to verify the present findings in other service and/or geographic settings would help establish their external validity.

Practical Implications

The findings advise companies to expand the traditional role of IR by taking it as a powerful relationship marketing and communication tool to improve their visibility and attract investors.

Social Implications

The findings suggest that superior IR service would strengthen the company's social bonding with institutional investors and effectively signal to them its commitment to good corporate governance practices.

Originality

Matching a proprietary dataset on IR voting records with the corresponding company-level archival data over a five-year period to investigate the performance implications of IR service quality within the Hong Kong context rectifies methodological limitation and geographic confinement of prior IR research.

Keywords: Investment relations, information transparency, corporate intangible value, competitive intensity

Overview

Over the last couple of decades, business-to-business (B2B) professional services have experienced significant growth, emerging as a vital catalyst for the knowledge economy (Empson et al., 2015; Pemer, 2021). These services grew from US\$6,024 billion in 2022 to US\$6,383 billion in 2023 at a compound annual growth rate of 6%, and are expected to further grow to US\$7,770 billion in 2027 (The Business Research Company, 2023). The services are relational in nature and characterized by high levels of information asymmetry and interactions between service provider and customer (Patterson, 2016). Moreover, they require service providers to leverage their professional expertise, relationship marketing skills, and close interactions with clients to assist the latter in making well-informed business decisions (Siahtiri, 2017).

Of various B2B professional services, the corporate function of investment relations (IR) has become increasingly popular (Hoffmann et al., 2018). According to the National Investor Relations Institute (2016), IR is “a strategic management responsibility that integrates finance, communication, marketing and securities law compliance to enable the most effective two-way communication between a company, the investment community, and other constituencies, which ultimately contributes to a company’s securities achieving fair valuation”. It is concerned with the management of relationships between a company with publicly traded securities and the holders or potential holders of such securities (Marston and Straker, 2001). Owing to the specialization, professionalization and globalization of capital markets over the last couple of decades (Hoffmann and Binder-Tietz, 2021), companies today are faced with a growing number of well-informed and demanding investors who may question their corporate stewardship credentials (Hoffmann et al., 2018). This development has led to the evolution of IR from the routine function of mere regulatory compliance to the strategic role of boundary spanning and relationship management that aim at developing long-term profitable relationships with the investment community (Chapman et al., 2019; Hoffmann et al., 2018). Through this relationship development, IR plays a crucial role in enhancing the visibility and reputation of companies, and ultimately, making them an attractive choice for the investment community (Hoffmann, 2018). IR also helps deliver accurate, timely and relevant information about a

company's strategic positioning and new developments to investors, as well as foster trust and rapport with the investment community. All these IR activities enable companies to expand their investor base, attract new capital, achieve a fair share price and reduce share price volatility (Laskin, 2011; Hoffmann et al., 2018). Chapman et al. (2019) have found that companies with IR officers experience 2.5% lower share price volatility, and 1.5% faster share price discovery compared to those without. In summary, this literature suggests the integral role of IR in enhancing a company's intangible value, which is concerned with the financial benefits derived from its intangible resources such as corporate brand equity and relationship networks (Bruhl and Falkheimer, 2023; Rao et al., 2004).

When examined more closely, IR's contribution to corporate intangible value may also be attributed to its ability to foster an environment of information transparency that facilitates investors' decisions (Brown et al., 2019). By actively promoting open and accessible communication, IR helps the company disseminate sufficient and relevant information to address investors' concerns, and consequently, enhance corporate credibility and reputation (Chapman et al., 2019; Hoffmann and Binder-Tietz, 2021). This analysis well echoes findings of prior research on B2B professional services that sufficient product-related information to customers can help reduce their information asymmetry and perceived risks, and ultimately, boost their confidence in the company (Howden and Pressey, 2008).

Despite the practical significance of IR, research on it is nascent (Hoffmann et al., 2018). Among the limited studies conducted to date, the majority have primarily focused on IR's contributions from a public relations perspective (Laskin, 2006, 2011) or analyzed its functions and evolution through the lens of finance (Brown et al., 2019; Chapman et al., 2019). The scarcity of research and disciplinary focus highlight the limited academic understanding of how IR, as a relationship marketing function, can impact a company's value, particularly its intangible value.

Against this backdrop, this study empirically investigates how a company's IR service quality influences its intangible value in an Asian fast-growing international capital market, Hong Kong (Li, 2018). In view of the essential role of IR service quality in cultivating relationships with and enhancing corporate brand equity among salient stakeholders of the financial community, a thorough

investigation on its impact on corporate intangible value would enrich the extant literature on B2B service practices and provide useful insights into fine-tuning these practices. Given the significant role of Investor Relations (IR) in information dissemination, this study also examines whether the relationship between IR service quality and intangible value would be mediated by information transparency. The mediation analysis further distinguishes the present study from prior research which focused mainly on the direct influence of IR practices on corporate performance (e.g., Agarwal et al., 2016; Vlittis and Charitou, 2012). This analysis will further enrich the IR literature by advancing understanding of the mechanism underlying the influence of IR service quality on corporate intangible value.

In addition, this study explores the moderating effect of competitive intensity on the aforementioned mechanism. Competitive intensity refers to the degree of competition faced by companies (Ang, 2008). Given the increasingly competitive business environment today (Chan and Ma, 2016), it is important to investigate whether competitive intensity plays a significant role in facilitating or inhibiting the mechanism. This moderation analysis will provide further insights into the boundary conditions associated with the effective transformation of a company's IR service quality into favorable organizational outcomes.

In the following, a review on the relevant literature and hypothesis development will first be given. After this, the adopted methodology and empirical results will be described. All these will be followed by discussion of the major implications derived from the empirical results, and then concluding remarks.

Conclusion

To supplement the limited body of prior IR research that often relied on cross-sectional surveys for investigation in Western developed countries, this study employs archival data over a five-year period to empirically examine how and when IR service quality would affect corporate intangible value within the Hong Kong context. Through regression analysis, the study reveals that IR service quality not only directly enhances corporate intangible value but also does so indirectly via information

transparency. The subsequent moderation analysis further highlights the robustness of the direct enhancement effect of IR service quality on corporate intangible value, regardless of competitive conditions. It also reveals that the positive impact of information transparency on this value will be attenuated as competitive intensity increases. All these findings have significant academic and practical implications, as discussed in the preceding implications section. In short, the present findings advance understanding of the mechanism and boundary conditions that underlie the complex and dynamic relationships among IR service quality, information transparency, corporate intangible value, and competitive intensity.

Despite its valuable contributions, this study has a few limitations that warrant attention in future research. Firstly, the present findings are derived from archival data collected within the context of Hong Kong. Consequently, further assessment of their generalizability is necessary, particularly in other more mature Western capital markets. Secondly, this study focuses on IR as the service type for investigation. To enhance the external validity of the findings, services marketing researchers should consider applying the proposed model to explore other types of B2B professional services in future investigations. Thirdly, the observation of a negative rather than positive moderating effect of competitive intensity on the relationship between information transparency and corporate intangible value suggests a need for future research to uncover the underlying reasons behind this finding. Such endeavors will advance understanding of the potentially intricate nature of information transparency (e.g., its degree of imitability) and shed further light on its performance implications under different competitive conditions.

Digitalization and International Performance of MNCs: A Relational Analysis using m-TISM

MS0108

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Abstract

The advancement of digital technology is transforming the competitive landscape of internationally business opportunities thus rendering them more accessible to multinational corporations (MNCs) to enhance international performance (IP). The paper explores the complex interrelationship between factors of digitalization and MNCs' IP. “Modified total interpretive structural modeling (m-TISM)” is used in this study to establish the relationship among identified factors that impact digitalization and IP of MNCs and create a hierarchical model. The proposed structural framework can help practitioners and academicians to enhance their understanding of digitalization and MNCs' IP.

Keyword: Digitalization, International Performance, MNCs, m-TISM

1. Introduction

The integration of digitization has become a transformative force in the dynamic landscape of the global business ecosystem, significantly impacting the performance and strategies of multinational corporations (MNCs) (Le Nguyen and Larimo, 2021; Gurkov and Filinov, 2022). As markets have become more integrated, MNCs are forced to move through a complicated web of issues spanning geographic boundaries, cultural settings, and regulatory regimes (Lim, 2009). MNCs are looking for acquiring a competitive edge in the global marketplace by strategic integrating digital technologies into their operations (Luo, 2021). Digitalization has not only completely changed how MNCs conduct business, but it has also weakened the boundaries between classical industry sectors. In addition, the COVID-19 epidemic has accelerated the adoption of digital technologies, changing them from gaining a competitive edge to necessities for thriving in an economy increasingly dominated by technology (Elgazzar et al., 2022). The adoption and implementation of technologies, such as AI (artificial intelligence), meraverse, big data, and quantum computing are key emerging technologies for MNCs to become globally competitive (Ferreira et al., 2023).

Several studies have analyzed the impact of international intention, digitalization capability, distribution channel integration, digitalization, institutional voids, digital product co-creation, networking capability, and orchestration capability on firm's international performance (Brieger et al., 2022; Chatterjee et al., 2023). However, hierarchical interrelations between the determinants of digitalization and international performance have not been widely studied. Previous studies have stated multiple perspectives on how digitalization influences international performance (Fayos et al., 2022; Bhandari et al., 2023). Understanding the digitalization and international performance of MNCs requires an in-depth comprehension of the relationships among and between numerous factors that might benefit its global performance. Therefore, this study aims to establish the hierarchical relationships between factors of digitalization and MNCs' international performance using the modified-total interpretive structural modeling (m-TISM) methodology.

2. Literature Review

This study identifies eight factors that influence MNCs' digitalization and international performance using the systematic review methodology (Srivastava et al., 2020; Ocelik et al., 2023) (Table 1).

3. Methodology

This study uses m-TISM to establish the hierarchical relationship between the factors impacting digitalization and international performance of MNCs. The m-TISM is the advanced version of “ISM (Integrated structural modeling)” and “TISM (Total interpretive structural modeling)”. Warfield, (1974) discussed that ISM helps in understanding the “what” and “How” of a research phenomenon. Whereas TISM (Sushil, 2012) gives the “Why” aspect of research, and every identified variable is given an interpretation, which further shows the model (digraph) based on iterations (Srivastava and Sushil, 2013).

Table 1 Factors impacting international performance of MNCs

Sl. No.	Factors	Sample studies
1	Cultural Distance (CD)	Sousa and Tan, 2015; Szabó et al., 2023
2	Digital Capability (DC)	Yasa et al., 2019; Bui and Le, 2023
3	Digitalization	Denicolai et al., 2021; Fayos et al., 2022
4	International Innovation (II)	Nyuur et al., 2018; Zheng and Sun, 2022
5	International Orientation (IO)	Falahat et al., 2022; Lee et al., 2022
6	Institutional Voids (IV)	Brieger et al., 2022; Pindado et al., 2023
7	Networking Capability (NC)	Adomako et al., 2022; Chatterjee et al., 2023
8	Orchestration Capability (OC)	Adomako et al., 2022; Luo and Zahra, 2023
9	Risk Acceptance (RA)	Dana et al., 2022; Mursalov et al., 2022

4. Results

The following steps are involved in m-TISM: -

Step 1: Pair-wise comparison of identified factors

Pairwise comparisons are done for all factors. If there are q total items, then there will be $[q(q - 1)/2]$ overall comparisons.

Step 2: Formulation of reachability matrix and transitivity checks of elements

Two methods convert the comparison matrix to a binary matrix. Assign ‘1’ to all factors that have a relationship. Second, factors without a relationship are coded as ‘0’. Further transitivity relation check was performed between the factors. Table 2 presents the reachability matrix with transitive

links.

Step 3: Hierarchical partitioning

This step involves the hierarchical partitioning of the identified factors. The factors are partitioned hierarchically using antecedent, reachability, and intersection sets.

Table 2 Reachability matrix with transitivity

		E1	E2	E3	E4	E5	E6	E7	E8	E9	E10
E1	Cultural distance	1	1	1	1	1*	1*	1*	1*	1*	1*
E2	Institutional voids	1	1	1*	1	1	1*	1*	1*	1*	1*
E3	Risk acceptance	0	0	1	1	1*	1	1*	1*	1*	1*
E4	International orientation	0	0	1	1	1	1	1*	1*	1*	1*
E5	Digital capability	0	0	1*	1	1	1	1*	1*	1*	1*
E6	Digitalization	0	0	0	0	0	1	1	1	1	1*
E7	International innovation	0	0	0	0	0	0	1	1	1*	1
E8	Orchestration capability	0	0	0	0	0	0	1	1	1	1
E9	Networking capability	0	0	0	0	0	0	1*	1	1	1
E10	International performance of MNCs	0	0	0	0	0	0	0	0	0	1
* Denotes transitive relationship											

Step 4: Building of the digraph

This step builds the digraph using the final reachability matrix. The levels obtained from step 3 are translated into a digraph.

Step 5: Binary matrix using created digraph

The digraph created in step 4 is converted into an interpretative model (Figure 1) that explains the framework for the relationship between the factors.

Step 6: Construction of m-TISM model

This step involves identifying the paths from the driving variable to the dependent variable for constructing the m-TISM model (Figure 1).

5. Discussions and Conclusion

The study explores the implications of the factors, interdependence, and mutual connections using m-TISM. The study also describes how the components are related in a hierarchical structure. Level V contains only two factors: cultural distance (E1) and institutional voids (E2). Level IV consists of three factors: risk acceptance (E3), international orientation (E4), and digital capability (E5). Level III

contains single-factor digitalization (E6). International innovation (E7), orchestration capability (E8), and networking capability (E9) are at level II. Level I comprises one factor, i.e., international performance of MNCs (E10).

The hierarchical structure level V base presents the interrelationship between CD and IV (Figure 1). The IV influences CDs in international markets. IV can arise due to cultural factors, hindering the development of effective regulations. Conversely, CD directly influences the perception of IV. Understanding culture can help the MNCs to navigate the IV more effectively. A strong IO and advanced DC can help enterprises become successful in various global marketplaces, but stronger CD and IV frequently need higher RA.

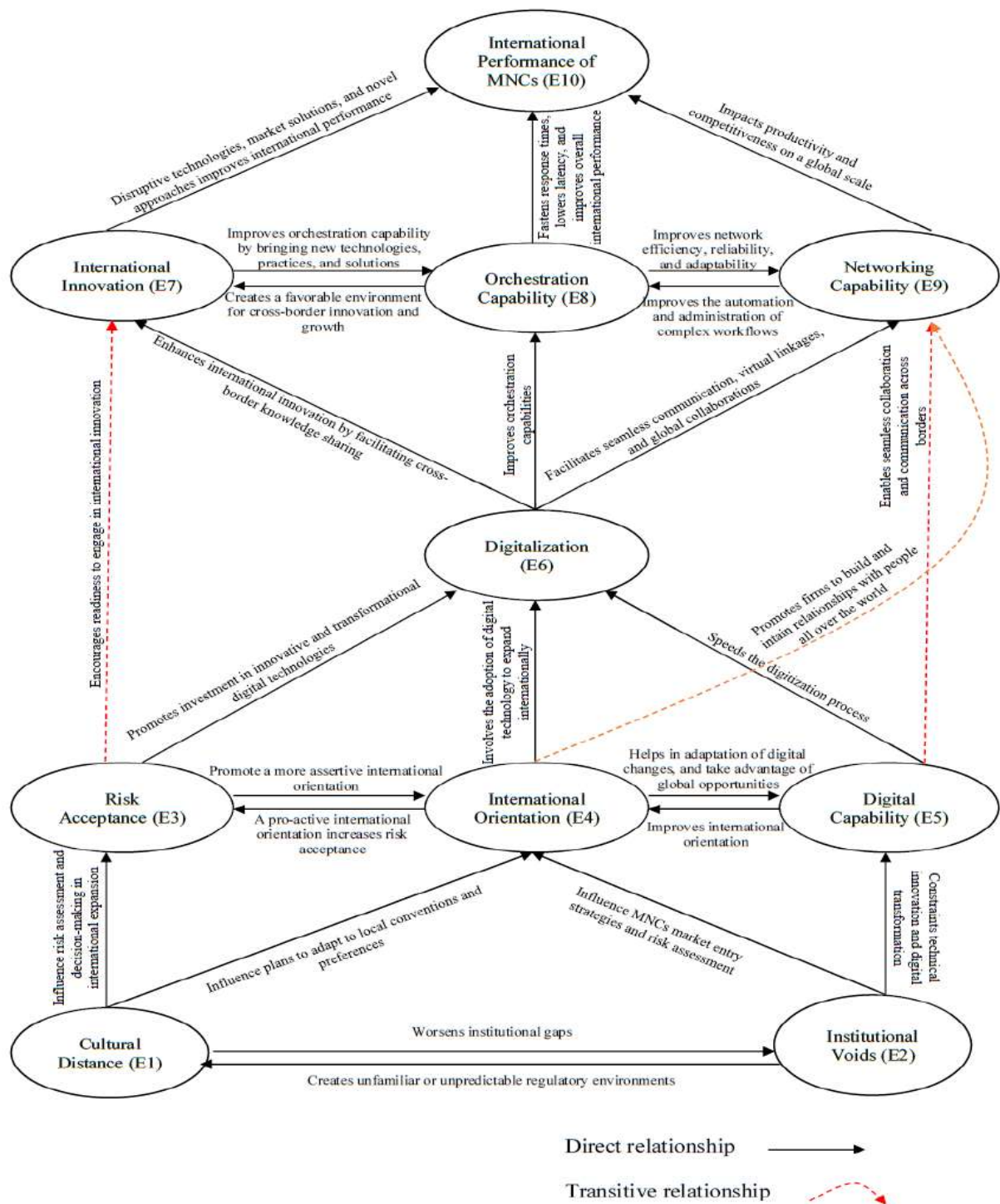
Level IV presents the interrelationship between RA, IO, and DC that shapes the global strategies for enhancing the international performance of MNCs. DC enables real-time system monitoring to support RA decisions. IO can drive an MNC to develop its DC, while DC of MNCs may influence its RA. Level III interlinks the level IV and level II. As firms use digital tools and resources to cooperate, create, and compete globally, II, OC, and NC become increasingly important in utilizing digitalization to generate enhanced international performance of MNCs.

Level II presents that MNCs that advance in IO, OC, and NC are more likely to thrive in the global marketplace by continuing to innovate, effectively managing their operations, and using strategic relationships for development and competitiveness. IO, OC, and NC positively impact MNCs' international performance. Therefore, the strong interrelationship between II, OC, and NC enhances MNCs' international performance by improving their capability to innovate across borders, coordinate global operations, and build strategic networks.

This study identifies and examines the crucial elements in achieving MNCs digitalization and effective international performance. A model of hierarchical relationships of identified eight elements is formulated using m-TISM methodology. The findings of this study suggest that CD and IV are the most critical factors for achieving digitalization of MNCs. The other important factors for achieving digitalization are RA, IO and DC. Digitalization plays a crucial role in achieving better international performance of MNCs. OC, II and NC also impacts the international performance effectiveness of MNCs. When pursuing digitalization in multinational businesses, managers can consider addressing

cultural disparity and navigating institutional voids as a priority. For a successful digital transformation and increased international performance in the global business landscape, it is also crucial to promote a culture of RA, strengthen IO, and develop DC. This study contributes to digital transformation theory, internationalization theory, and RBV.

Figure 1 m-TISM Model.



6. References

- Adomako, S., Amankwah-Amoah, J., Donbesuur, F., Ahsan, M., Danso, A., & Uddin, M. (2022). Strategic agility of SMEs in emerging economies: Antecedents, consequences and boundary conditions. *International Business Review*, 31(6), 102032.
- Bhandari, K. R., Záborský, P., Ranta, M., & Salo, J. (2023). Digitalization, internationalization, and firm performance: A resource-orchestration perspective on new OLI advantages. *International Business Review*, 32(4), 102135.
- Brieger, S. A., Chowdhury, F., Hechavarría, D. M., Muralidharan, E., Pathak, S., & Lam, Y. T. (2022). Digitalization, institutions and new venture internationalization. *Journal of International Management*, 28(4), 100949.
- Bui, M. T., & Le, H. L. (2023). Digital capability and creative capability to boost firm performance and formulate differentiated CSR-based strategy. *Heliyon*, 9(3).
- Chatterjee, S., Chaudhuri, R., Vrontis, D., & Maalaoui, A. (2023). Internationalization of family business and its performance: examining the moderating role of digitalization and international networking capability. *Review of Managerial Science*, 17(7), 2443-2470.
- Dana, L. P., Salamzadeh, A., Mortazavi, S., & Hadizadeh, M. (2022). Investigating the impact of international markets and new digital technologies on business innovation in emerging markets. *Sustainability*, 14(2), 983.
- Denicolai, S., Zucchella, A., & Magnani, G. (2021). Internationalization, digitalization, and sustainability: Are SMEs ready? A survey on synergies and substituting effects among growth paths. *Technological Forecasting and Social Change*, 166, 120650.
- Elgazzar, Y., El-Shahawy, R., & Senousy, Y. (2022). The role of digital transformation in enhancing business resilience with pandemic of COVID-19. In *Digital transformation technology: Proceedings of ITAF 2020* (pp. 323-333). Springer Singapore.
- Falahat, M., Soto-Acosta, P., & Ramayah, T. (2022). Analysing the importance of international knowledge, orientation, networking and commitment as entrepreneurial culture and market orientation in gaining competitive advantage and international performance. *International Marketing Review*, 39(3), 463-481.
- Fayos, T., Calderón, H., Cotarelo, M., & Frassetto, M. (2022). The contribution of digitalisation, channel integration and sustainability to the international performance of industrial SMEs. *Management of Environmental Quality: An International Journal*, (ahead-of-print).
- Ferreira, J. J., Lopes, J. M., Gomes, S., & Rammal, H. G. (2023). Industry 4.0 implementation: Environmental and social sustainability in manufacturing multinational enterprises. *Journal of Cleaner Production*, 404, 136841.
- Gurkov, I., & Filinov, N. (2022). Digitalization and corporate parenting styles of multinational corporations. *International Journal of Organizational Analysis*.

- Le Nguyen, H., & Larimo, J. (2021). 10. Corporate renewal and performance outcome: evidence from emerging market located MNCs. *Entrepreneurial Internationalization in an Increasingly Digitized and Networked World Economy*, 185.
- Lee, J. Y., Yang, Y. S., Ghauri, P. N., & Park, B. I. (2022). The impact of social media and digital platforms experience on SME international orientation: The moderating role of COVID-19 Pandemic. *Journal of International Management*, 28(4), 100950.
- Lim, J. S. (2009). Global integration or local responsiveness?: Multinational corporations' public relations strategies and cases. In *International media communication in a global age* (pp. 307-326). Routledge.
- Luo, Y. (2021). New OLI advantages in digital globalization. *International Business Review*, 30(2), 101797.
- Luo, Y., & Zahra, S. A. (2023). Industry 4.0 in international business research. *Journal of international business studies*, 54(3), 403-417.
- McDougall, P. P., & Oviatt, B. M. (2000). International entrepreneurship: the intersection of two research paths. *Academy of management Journal*, 43(5), 902-906.
- Mursalov, M., Yarovenko, H., & Vasilyeva, T. (2022, June). Entrepreneurial Ecosystem and Digitalization: Relationship and Synergy of Development. In *PRIZK International Conference-Novel Insights in the Leadership in Business and Economics After the COVID-19 Pandemic* (pp. 109-127). Cham: Springer Nature Switzerland.
- Nyuur, R. B., Brecic, R., & Debrah, Y. A. (2018). SME international innovation and strategic adaptiveness: The role of domestic network density, centrality and informality. *International Marketing Review*, 35(2), 280-300.
- Ocelik, V., Kolk, A., & Ciulli, F. (2023). Multinational enterprises, industry 4.0 and sustainability: A multidisciplinary review and research agenda. *Journal of Cleaner Production*, 137434.
- Pindado, E., Alarcón, S., Sánchez, M., & Martínez, M. G. (2023). International entrepreneurship in Africa: The roles of institutional voids, entrepreneurial networks and gender. *Journal of Business Research*, 166, 114109.
- Ritala, P., Armila, L., & Blomqvist, K. (2009). Innovation orchestration capability—Defining the organizational and individual level determinants. *International Journal of Innovation Management*, 13(04), 569-591.
- Sousa, C. M., & Bradley, F. (2006). Cultural distance and psychic distance: two peas in a pod?. *Journal of international marketing*, 14(1), 49-70.
- Sousa, C. M., & Tan, Q. (2015). Exit from a foreign market: Do poor performance, strategic fit, cultural distance, and international experience matter?. *Journal of International Marketing*, 23(4), 84-104.

- Srivastava, A.K. and Sushil (2013), "Modelling strategic performance factors for effective strategy execution", *International Journal of Productivity and Performance Management* , Vol. 62 No. 6, pp. 554-582.
- Srivastava, S., Singh, S., & Dhir, S. (2020). Culture and International business research: A review and research agenda. *International Business Review*, 29(4), 101709.
- Sushil. (2012). Interpreting the interpretive structural model. *Global Journal of Flexible Systems Management*, 13, 87-106.
- Szabó, R. Z., Szedmák, B., Tajti, A., & Bera, P. (2023). Environmental Sustainability, Digitalisation, and the Entrepreneurial Perception of Distances as Drivers of SMEs' Internationalisation. *Sustainability*, 15(3), 2487.
- Warfield, J. N. (1974). Toward interpretation of complex structural models. *IEEE Transactions on Systems, Man, and Cybernetics*, (5), 405-417.
- Yasa, N. N. K., Ekawati, N. W., & Rahmayanti, P. L. D. (2019). The role of digital innovation in mediating digital capability on business performance. *European Journal of Management and Marketing Studies*.
- Zheng, X., & Sun, A. (2022). Digitalization and internationalization: a study of the manufacturing industry in China. *Transformations in Business & Economics*, 21.

TikTok as a Marketing Tool for Global Business Expansion

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TikTok as a Marketing Tool for Global Business Expansion

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Extended Abstract

TikTok is one of the most popular social media networking platforms, with 1 billion active monthly users and above 2.6 billion downloads in over 150 countries. Firms utilizing this as a marketing tool are reaping the benefits in terms of enhanced customer interaction, leading to increase in brand recall, brand recognition, and brand identity. Still, there is inadequate valuation of this app among marketing managers, eventually resulting in underestimation of its latent potential. Additional managerial challenges include developing creative content, resulting in ineffective use of this platform. Nonetheless, used properly, TikTok enables brands to provide enriching experience to its customers.

Keywords: social media, TikTok, marketing tool, branding, global business strategy

1. Introduction

In September 2016, Chinese tech giant ByteDance released a video-sharing social networking service called “Douyin,” similar to Instagram and Facebook, both of which were banned in China at the time. ByteDance acquired “Musical.ly” in November 2017, a social media app used to create short lip-sync video clips. The company went on to incorporate and merge features from Musical.ly into Douyin, ultimately discontinuing the Musical.ly app in November 2018. ByteDance launched the global version of Douyin, naming it TikTok. TikTok’s main attraction lies in its sophisticated algorithm that quickly discerns user’ preferences based on their interactions and engagement within the app

(Big3Media, 2020). As stated on TikTok's website, the application aims to "inspire creativity" and "bring joy" to its users (TikTok, 2020).

In 2022, TikTok exceeded 1 billion monthly users, making it one of the biggest global social media platforms (Geyser, 2022). A large majority of TikTok users are between the ages of 18 to 34. Despite its growing popularity, TikTok has faced backlash and several controversies over the years, including concerns about data privacy, interferences with personal devices, and exertion of algorithmic control (Lozano, 2023). However, when it comes to business, brands can leverage TikTok in an intelligent manner to engage consumers (Geyser, 2022).

As per the blog GoCardless (2022) there are five key benefits of using TikTok. Firstly, TikTok gives businesses opportunity to enhance their brand identity as the app's user base keeps growing. Secondly, TikTok can be used to enhance brand awareness as businesses can use hashtags and popular trends to gain consumer attention online. Thirdly, TikTok gives businesses an opportunity to partner with famous, well-known influencers to reach a wider audience. Fourthly, TikTok can enable businesses to utilize user-generated content where content from users can be repurposed at a low cost. Lastly, TikTok with its high engagement level, can help businesses reach target markets faster.

Karra (2022) argues in Forbes that businesses can gain from being on TikTok in numerous ways. TikTok's unique engaging format creates an engaging and interactive experience for users as it combines videos with catchy music and special effects. The app enables fun interactions with businesses as it goes beyond traditional social media. Furthermore, TikTok can also be used to effectively advertise products and services by making use of catchy music, as research shows that good music is essential to the TikTok user experience, and can be used as a great advertising tool. A large number of businesses are increasingly investing in and turning to TikTok advertisements due to the app's expansive user base and wide reach (Karra, 2022). While the app benefits those businesses that use it strategically, due to its popularity, advertising on the app has become very competitive as businesses have to work hard to make engaging and creative content to stand out.

Many businesses today successfully advertise their products using influencer marketing – which involves a collaboration with a popular individual on platforms such as TikTok and Instagram, however, many marketing managers still find it difficult to make use of social media apps in the new digital marketing era (Haenlein et al., 2020). As per a survey, 90% of respondents agreed that using Tiktok as marketing tools is very effective, however, the content requires creativity and accuracy (Dewi, 2022). Research suggests that TikTok has contributed vastly in terms of marketing, specifically with its feature ‘TikTok Shop,’ an e-commerce feature which can vastly benefit businesses in the digital marketing era and has shown to boom consumer orders and led to turnovers that exceeds targets for businesses (Rosiyana et al., 2021).

2. Use of TikTok to Enhance Effectiveness of Businesses

2.1 Use of TikTok as Marketing Strategy

Panigrahi (2023) suggests five ways businesses can effectively make use of TikTok. Firstly, businesses need to understand their target audience’s preferences to create content tailored to the platform. Secondly, businesses should aim to create entertaining videos that can catch attention through hashtags and incorporating popular trends. Thirdly, businesses can make use of TikTok’s advertising features (such as in-feed ads, hashtag challenges, top-view ads, customized filters and stickers) to boost brand awareness and sales. Fourthly, businesses should incorporate and build on popular trends into their brand’s content, which show that the business/brand is active on TikTok – beyond advertising, engaging a wide range of audience. Lastly, businesses should make use of user-generated content (UGC) to connect with customers, to reach target audiences in a cost effective way. For instance, Netflix used UGC to increase audience through their hashtag - #WhatsYourPower, generating over 100,000 user-generated videos.

TikTok provides businesses with an opportunity to reach a wide range of audience, enhances consumer engagement and gives businesses creative opportunity (Schooley, 2023). Schooley (2023)

on Business News Daily recommends four strategies to use TikTok for businesses, firstly, through proper research, businesses should examine prevalent trends that their consumers/target audiences engage with most on TikTok and align these trends with their content to increase engagement. Secondly, businesses should aim to use a more laid-back approach to advertising and avoid overly formal posts to fit in with the fun and playful TikTok environment. Thirdly, businesses should try to participate in popular TikTok challenges and create their own branded versions of the trend to engage audience by increasing visibility and use relevant hashtags to boost reach among audience. Lastly, businesses, specifically small businesses, should post about their location in their TikTok content and create unique content relevant to the local locations to make the business more relatable to consumers.

2.2 Global Brands Utilizing TikTok as a Marketing Tool

In a blog post titled ‘27 TikTok brands that are winning at marketing in 2023,’ Bump (2023) reveals that WWE, Overtime, ESPN, The NBA and Netflix are the Top5 most followed brands on TikTok. For instance, Netflix uses the platform to post trailers and creative videos to create hype. It also makes use of user-generated content by engaging with users through hashtags. The NBA uses TikTok on a lighter note – showing players working out, dancing, and highlighting their best performances. Fenty Beauty and e.l.f. cosmetics are two brands with the remarkably high engagement, as they upload makeup tutorials, comedic videos and celebrity interviews to engage audiences. Furthermore, brands like The Washington Post use humor to make news content more engaging and fun for younger audiences. Disney’s Marvel Studios tends to humanize its brand by sharing exclusive behind the scenes and humorous content on TikTok. Levi’s uses TikTok to educate consumers about its products and explain how clothing can be styled or how jeans are ‘ripped’ for aesthetic purposes. One of the most creative brands on TikTok is Taco Bell, which incorporates trending sounds and trending challenges to embrace humor. Overall, popular brands have found success on TikTok by incorporating humor into their posts, engaging with audiences, being authentic about and humanizing their brands – hence catering to the platform’s younger audiences.

Despite its image as a lighthearted social media platform, TikTok has a darker side. Claims of TikTok storing and tracking user data, have raised privacy concerns. Global concerns regarding its negative impacts have also been raised – contribution to mental health issues, anxiety, depression and addiction amongst young people; spreading misinformation among the masses (Dpaulla, 2023; Jarivsky, 2022).

3. Conclusion

TikTok has become a valuable and instrumental platform for the brands and a ‘must-have’ for the ones whose prime target comprises of youth. Sudden and rapid increase in its popularity, and that too in its infancy, left the majority startled – who found it challenging to catch up with the early adopters of this platform. Brand recall, recognition and brand identity, can all be enhanced using TikTok as a marketing tool, but only with the right approach. Creative, interactive, engaging and customized content tailored to the audience’s preferences, and rightly aligned with the popular trends and appropriate use of relevant hashtags, may lead to achieving remarkable results.

4. References

- Big3Media. (2020, August 31). A Brief History of TikTok and Its Rise to Popularity.
<https://www.big3.sg/blog/a-brief-history-of-tiktok-and-its-rise-to-popularity>
- Bump, P. (2023). 27 TikTok Brands that are winning at Marketing in 2023. HubSpot.
<https://blog.hubspot.com/marketing/brands-on-tiktok>
- Dewi, Y. R. (2021). Creating Customer Engagement and Customer Value within 15 second: How Tiktok Works for Content Marketing. *AMAR (Andalas Management Review)*, 5(1), 33-45.
- Dpaulla, M. (2023, March 7). The Dark Side of TikTok: Concerns over its Impact on Mental Health, Privacy, and Society. LinkedIn. <https://www.linkedin.com/pulse/dark-side-tiktok-concerns-over-its-impact-mental-health-dpaulla>
- Geyser, W. (2022, December 30). What is TikTok? Influencer Marketing Hub.
<https://influencermarketinghub.com/what-is-tiktok/#toc-1>

- Giuda, M. (2023). The dark side of TikTok. The Hill. <https://thehill.com/opinion/congress-blog/3915037-the-dark-side-of-tiktok/>
- GoCardless. (2022). Business Benefits of Using TikTok. <https://gocardless.com/en-us/guides/posts/five-ways-your-business-can-profit-from-presence-on-tiktok/>
- Haenlein, M., Anadol, E., Farnsworth, T., Hugo, H., Hunichen, J., & Welte, D. (2020). Navigating the New Era of Influencer Marketing: How to be Successful on Instagram, TikTok, & Co. *California Management Review*, 63(1), 5-25.
- Jarivsky, L. (2022). The dark side of TikTok. The Times of Israel. <https://blogs.timesofisrael.com/the-dark-side-of-tiktok/>
- Karra, S. (2022). Why Businesses Benefit from Being on TikTok? Forbes. <https://www.forbes.com/sites/forbesbusinesscouncil/2022/12/09/why-businesses-benefit-from-being-on-tiktok/>
- Lozano, G. S. (2023, July 26). The TikTok controversy: its impact on international security. Real Instituto Elcano. <https://www.realinstitutoelcano.org/en/analyses/the-tiktok-controversy-its-impact-on-internationalsecurity/#:~:text=TikTok%2C%20the%20popular%20social%20media,and%20interference%20with%20personal%20devices.>
- Oberlo. (2023). TikTok Age Demographics (Statistics & Insights). <https://www.oberlo.com/statistics/tiktok-age-demographics#:~:text=According%20to%20recent%20research%20studying,775%20million%20TikTok%20users%20worldwide.>
- Panigrahi, S. (2023, August 1). How to Use TikTok for Business in 2023. SocialPilot. <https://www.socialpilot.co/tiktok-marketing/tiktok-for-business>
- Rosiyana, R. N., Agustin, M., Iskandar, I. K., & Luckyardi, S. (2021). A New Digital Marketing Area for E-Commerce Business. *Int'l. J. of Research and Applied Technology (Injuratech)*, 1(2), 370-381.
- Schooley, S. (2023, February 21). TikTok for Business: How You Can Use This Social Network. Business News Daily. <https://www.businessnewsdaily.com/12020-tiktok-business-features.html>
- TikTok. (2020). About TikTok. <https://www.tiktok.com/about?lang=en>

A Two-pronged Approach Can Backfire: Stakeholder Responses to Employee Layoffs and Philanthropy in Declining Firms

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A Two-Pronged Approach Can Backfire: Stakeholder Responses to Employee Layoffs and Philanthropy in Declining Firms

ABSTRACT

Many researchers suggest that declining firms should pursue a two-pronged approach to turnaround by implementing both saving through strategies and investing through strategies, focusing on the benefits of this approach in improving operational efficiency while ignoring how stakeholders may respond. In this study, we examine stakeholder responses to declining firms that engage in employee layoffs (a saving through strategy) and philanthropy (an investing through strategy) simultaneously and theorize why and when a two-pronged approach can backfire. Based on a sample of Chinese listed declining firms from 2009 to 2019, we find a significant negative interaction effect between employee layoff and philanthropy on stakeholder responses and that such a negative interaction effect is stronger when the firm's executive compensations are higher. Our study emphasizes the importance of considering stakeholder responses in the strategic management of declining firms.

INTRODUCTION

It is not uncommon for firms to experience a declining situation. Firms in decline typically face financial distress—a state of low cash flow—due to their inability to generate sufficient profits (Barbero, Martínez, & Moreno, 2020). This financial difficulty can expose declining firms to severe financial constraints and liquidity risks that threaten their survival. Like rats fleeing a sinking ship, stakeholders (e.g., customers, creditors, suppliers, and employees) tend to cut their transactions with a declining firm, making it more difficult for the firm to survive. Therefore, it is particularly important for declining firms to maintain good relationships with their stakeholders. Indeed, extant research suggests that declining firms should invest in stakeholder relationships to circumvent exacerbating challenges and retain competitive edge (Flammer & Ioannou, 2021; Pajunen, 2006; Trahms, Ndofor, & Sirmon, 2013).

The field of literature has proposed two categories of response actions and their effects on turnaround performance. The first category is referred to retrenchment response as "saving through

actions", with the aim to minimize expenses and enhance effectiveness by means such as reducing workforce or assets (Lim et al., 2013; Morrow et al., 2004). The second category - strategic response - is known as "investing through actions", which are taken to explore new opportunities through introducing new products or allocating resources to corporate social responsibility (CSR) initiatives (Barker & Duhaime, 1997; Flammer & Ioannou, 2021). No matter retrenchment or strategic response actions have significant impacts on stakeholders, which are likely to elicit strong stakeholder responses (Flammer & Ioannou, 2021). Although stakeholders play a key role in decline and turnaround scenarios, few research has investigated how these two categories' response actions *individually and interactively* influence stakeholders' responses (Trahms, Ndofor, & Sirmon, 2013). According to the literature, pursuing a two-pronged approach by implementing both strategies, rather than opting for one or the other, is vital for declining firms to ensure survival and maintain competitiveness (Arogyaswamy, Barker, & Yasai-Ardekani, 1995; Flammer & Ioannou, 2021). Nevertheless, the extant literature fails to provide insights into how stakeholders may respond to the "two-pronged" approach.

In this study, we focus on employee layoff and philanthropy as two turnaround responses reflecting retrenchment and strategic actions (Flammer & Ioannou, 2021; Schmitt & Raisch, 2013). Recently, we have observed the increasing use of philanthropy in declining firms as a strategic mechanism to engage stakeholders to explore more opportunities (Bansal, Jiang, & Jung, 2015). Declining firms also frequently lay off employees to alleviate financial distress and/or free up resources for other strategic initiatives (Lim, Celly, Morse, & Rowe, 2013; Morrow, Johnson, & Busenitz, 2004). These two response actions are commonly found in declining firms, highly visible, and closely related to stakeholder interests.

Taking the lens of relational stakeholder theory (Bridoux & Stoelhorst, 2014), we draw on previous research on stakeholder responses (Carlos & Lewis, 2018; Love & Kraatz, 2009; Vergne, Wernicke, & Brenner, 2018; Wang, Jia, & Zhang, 2021; Wang & Qian, 2011) to argue that for declining firms, (a) stakeholders may not respond negatively to their employee layoffs because declining profitability and the associated financial distress justify the need for curtailing labor forces and (b) they are also less likely to reward declining firms' philanthropic investments, which could expose the firms to

greater financial distress and bankruptcy risk. More importantly, we argue that stakeholders will likely react negatively to declining firms that undertake employee layoffs and philanthropy simultaneously. This is because investing in philanthropy signals that the firm has financial resources available, which is conflicted with the justification of laying off employees. Such behavior not only send incongruent signals to stakeholders but also violate stakeholder expectations. As a result, stakeholders may view the firm's decisions to lay off employees as less justifiable and perceive the firm as hypocritical, opportunistic, irresponsible, and untrustworthy. Based on the same premise, we further argue that stakeholder responses will be even more negative if the firm gives its executives higher pay.

We test these arguments with a sample of all declining firms listed in China from 2009 to 2019. We operationalize stakeholder responses in terms of the financial resources a firm has acquired from banks (i.e., long-term bank loans) and investors (i.e., Tobin's Q). For declining firms, continued support from banks and investors is especially crucial for their survival (Trahms et al., 2013). Our regression results reveal that employee layoff is neither related to long-term bank loans nor Tobin's Q. Philanthropy is positively related to long-term bank loans but not Tobin's Q. Additionally, the interaction effect of employee layoffs and philanthropy is negatively significant for both long-term bank loans and Tobin's Q, and this negative interaction effect is stronger for firms with above-industry-median executive compensations.

Our study contributes to both the literature on strategic management of declining firms and the literature on stakeholder management. First, we highlight the importance of considering stakeholder responses in the strategic management of declining firms. Whereas previous research supporting a two-pronged approach argues that when firms experience decline, "layoffs are not necessarily inconsistent with socially responsible practices" (Flammer & Ioannou, 2021: 1285), our findings suggest that stakeholders become more likely to punish a declining firm's layoff activities when it engages in philanthropy simultaneously and that excessive executive compensation exacerbates such negative effects. Second, we contribute to the literature on stakeholder management by answering calls to investigate why and when stakeholders will tolerate an irresponsible action or sanction a responsible behavior (Jones et al.,

2018; Lynn, 2021) and by enriching relational stakeholder theory. We show that stakeholder perceptions and responses do not solely depend on whether a strategy improves or harms stakeholder interests. Instead, stakeholders screen a firm's financial position and how it treats different stakeholder groups to evaluate its intentions and quality, which in turn determines their responses.

THEORY AND HYPOTHESES

Stakeholder Responses to Employee Layoffs in Declining Firms

The organizational decline literature has documented employee layoffs as one of the most important strategies to cut costs and save declining firms from financial distress (Guthrie & Datta, 2008). According to the core tenet of instrumental stakeholder theory, laying off employees will impair a firm's financial performance by breaking its relationship with not only employees but also the broader stakeholders who care about ethical treatment in the workplace (Flammer & Luo, 2017).

The declining situation features a lack of financial resources in the firm to cover its operating costs (including labor costs) and support its continued existence (Barbero et al., 2020), and the firm must survive to create jobs (Carroll, 1991). Therefore, the possibility of stakeholders perceiving declining firms that downsize their workforce as unethical or irresponsible is low, even though the laid-off employees do suffer. Rather, stakeholders are more likely to agree that the survival of the firm is more important than protecting the jobs of its employees, thus perceiving employee layoffs as legitimate or even necessary for declining firms. At the same time, it is well established in the organizational decline literature that employee layoffs benefit declining firms by reducing liquidity risks, alleviating financial constraints, and improving operational efficiency (Barbero et al., 2020).

Hypothesis 1. For declining firms, there is a positive relationship between employee layoffs and firm performance.

Stakeholder Responses to Philanthropy in Declining Firms

Recently, we have observed the increasing use of philanthropy by declining firms as a strategy to enhance revenues and relieve financial distress. Stakeholders generally admire corporate philanthropic contributions (Wang & Qian, 2011). By contributing financial and human resources to the community,

philanthropy helps firms build goodwill and trust among stakeholders and thus improves firm performance through the mechanisms we discussed earlier based on instrumental stakeholder theory (Godfrey, 2005).

Nevertheless, another stream of studies leads us to question whether declining firms can reap similar benefits by investing in philanthropy, which echoes our argument that stakeholders evaluate a firm's CSR activities according to its financial position. Specifically, they show that stakeholders are less likely to reward the philanthropic activities of firms with inferior performance or in financial distress because they expect such firms to utilize the limited financial resources to improve their business operations rather than charity (Koh et al., 2014; Wang & Qian, 2011). Their theoretical foundation is the legitimacy theory from Suchman (1995), which is in line with Carroll's (1979) CSR pyramid (Wang et al., 2021). Specifically, they argue that firms have a more salient responsibility to satisfy the pragmatic needs of stakeholders that they are directly associated with (e.g., provide job security to their employees) than to engaging more peripheral stakeholders (e.g., philanthropic contributions to the community). In this sense, a declining firm's investments in philanthropic activities, because they impose greater financial distress and bankruptcy risk on the firm, may elicit less reward from stakeholders (Koh et al., 2014; Wang & Qian, 2011). We, therefore, propose a null hypothesis for the relationship between philanthropy and the performance of declining firms.

Hypothesis 2. For declining firms, the relationship between philanthropy and firm performance is insignificant.

The Interaction Effect of Employee Layoffs and Philanthropy in Declining Firms

Consistent with this logic, we argue that stakeholders respond to a firm's entire set of CSR strategies rather than its individual CSR practices. If firms fail to meet the lower levels of CSR responsibility (i.e., economic and ethical responsibilities), but directly engage in the highest-level philanthropy, stakeholders are more likely to perceive the firm negatively.

First, when firms invest in philanthropy, they send signals to stakeholders regarding not only their goodwill but also their financial capabilities to take care of stakeholders (DesJardine et al., 2021; Qian et al., 2021). However, if the firm engages in philanthropy, which signals that the firm has financial

resources but deploys them to the least important social activities, the reasons for stakeholders to tolerate the firm's behavior that damages employees become invalid.

Second, if a declining firm fails to satisfy the fundamental needs of its employees while investing in philanthropy, it violates stakeholder expectations and thus is unlikely to get rewards from stakeholders (Wang & Qian, 2011). What is worse, stakeholders might view such firms as unethical and hypocritical as the employee layoff activities directly contradict the goodwill signal philanthropy represents (Carlos & Lewis, 2018; Wang et al., 2021). Specifically, stakeholders are more likely to interpret declining firms' philanthropic activities as ingratiating attempts to win favor and layoff activities as immoral intentions to mistreat employees.

Hypothesis 3. For declining firms, there is a negative interaction effect between employee layoffs and philanthropy on firm performance.

The Moderating Role of Peer Reference

Stakeholders may further utilize reference points (e.g., the average philanthropic and executive compensation levels of industry peers) to evaluate a firm's CSR strategies (Cao et al., 2019). When a declining firm makes small philanthropic donations, stakeholders may understand that the firm must make philanthropy to maintain legitimacy. However, when a declining firm's philanthropic level is above the industry average while it lays off employees, stakeholders are more likely to perceive the firm as unethical and hypocritical.

Similarly, when a declining firm pays its top executives well above the industry average, stakeholders are more likely to infer that the firm's top executives are greedy and irresponsible and that they intend to treat employees unethically while utilizing philanthropy for firm benefits only.

Hypothesis 4. For declining firms, the negative interaction effect of employee layoffs and philanthropy on firm performance is stronger when the firm's philanthropic level is above industry average.

Hypothesis 5. For declining firms, the negative interaction effect of employee layoffs and philanthropy on firm performance is stronger when the firm's executive compensation level is above industry average.

METHODS AND RESULTS

Our initial sample comprised all Chinese firms listed on Shanghai and Shenzhen stock exchanges between 2009 and 2019. Three data sources were used in this study: the China Stock Market & Accounting Research (CSMAR) database, the China Statistical Yearbook, and company annual reports. We follow prior declining firm literature to select declining firms as those with two consecutive years of declining return on assets (ROA) during 2009 and 2014. We then analyze these declining firms' CSR activities and the performance throughout 2015 and 2019, which leads to a final sample of 1,608 firm-year observations. Table 1 summarizes the measures for our key variables. In addition, we control for decline severity, quick ratio, intangible assets, slack resource, financial capability, firm size, firm age, board size, CEO change, CEO duality, R&D intensity, CAPEX, and GDP per capita. We estimated our models with fixed effects panel data regressions. Table 2-4 report our regression results (due to space limits, we only show the results of the main variables).

References

- Barbero, J. L., Martínez, J. A., & Moreno, A. M. (2020). Should declining firms be aggressive during the retrenchment process? *Journal of Management*, 46(5), 694–725.
- Bridoux, F., & Stoelhorst, J. W. (2022). Stakeholder governance: Solving the collective action problems in joint value creation. *Academy of Management Review*, 47(2), 214–236.
- Bundy, J., Vogel, R. M., & Zachary, M. A. (2018). Organization–stakeholder fit: A dynamic theory of cooperation, compromise, and conflict between an organization and its stakeholders. *Strategic Management Journal*, 39(2), 476–501.
- Cao, J., Liang, H., & Zhan, X. (2019). Peer effects of corporate social responsibility. *Management Science*, 65(12), 5487–5503.
- Carlos, W. C., & Lewis, B. W. (2018). Strategic silence: Withholding certification status as a hypocrisy avoidance tactic. *Administrative Science Quarterly*, 63(1), 130–169.
- Choi, J., & Wang, H. (2009). Stakeholder relations and the persistence of corporate financial performance. *Strategic Management Journal*, 30(8), 895–907.
- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117.
- Crilly, D., Ni, N., & Jiang, Y. (2016). Do-no-harm versus do-good social responsibility: Attributional thinking and the liability of foreignness. *Strategic Management Journal*, 37(7), 1316–1329.
- DesJardine, M. R., Marti, E., & Durand, R. (2021). Why activist hedge funds target socially responsible

- firms: The reaction costs of signaling corporate social responsibility. *Academy of Management Journal*, 64(3), 851–872.
- Flammer, C. (2013). Corporate social responsibility and shareholder reaction: The environmental awareness of investors. *Academy of Management Journal*, 56(3), 758–781.
- Flammer, C., & Ioannou, I. (2021). Strategic management during the financial crisis: How firms adjust their strategic investments in response to credit market disruptions. *Strategic Management Journal*, 42(7), 1275–1298.
- Flammer, C., & Luo, J. (2017). Corporate social responsibility as an employee governance tool: Evidence from a quasi-experiment. *Strategic Management Journal*, 38(2), 163–183.
- Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. *Academy of Management Review*, 30(4), 777–798.
- Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. *Strategic Management Journal*, 30(4), 425–445.
- Koh, P.S., Qian, C., & Wang, H. (2014). Firm litigation risk and the insurance value of corporate social performance. *Strategic Management Journal*, 35(10), 1464–1482.
- Lange, D., Bundy, J., & Park, E. (2022). The social nature of stakeholder utility. *Academy of Management Review*, 47(1), 9–30.
- Lynn, A. (2021). Why “doing well by doing good” went wrong: Getting beyond “good ethics pays” claims in managerial thinking. *Academy of Management Review*, 46(3), 512–533.
- Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48(2), 268–305.
- Qian, C., Crilly, D., Wang, K., & Wang, Z. (2021). Why do banks favor employee-friendly firms? A stakeholder-screening perspective. *Organization Science*, 32(3), 605–624.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610.
- Waddock, S. a., & Graves, S. B. (1997). The Corporate Social Performance-Financial Performance Link. *Strategic Management Journal*, 18(4), 303–319.
- Wang, H., Jia, M., & Zhang, Z. (2021). Good deeds done in silence: Stakeholder management and quiet giving by chinese firms. *Organization Science*, 32(3), 649–674.
- Wang, H., & Qian, C. (2011). Corporate philanthropy and corporate financial performance: The roles of stakeholder response and political access. *Academy of Management Journal*, 54(6), 1159–1181.
- Wang, H., Tong, L., Takeuchi, R., & George, G. (2016). Corporate social responsibility: An overview and new research directions. *Academy of Management Journal*, 59(2), 534–544.
- Zhao, X., & Murrell, A. J. (2016). Revisiting the corporate social performance-financial performance link: A replication of Waddock and Graves. *Strategic Management Journal*, 37(11), 2378–2388.

Table 1. Measures for key variables

	Variable Name	Measurement
DV	Firm Performance	the ratio of net income to total assets
IVs	Layoffs	equals 0 if the firm curtails less than 5% employees from last year to this year and equals the proportion of employee layoffs otherwise
	Philanthropy	the total amount corporate philanthropic donations
Moderators	Industry average philanthropic level	a dummy that equals 1 if the firm's philanthropic level is above the industry average and 0 otherwise
	Industry average executive compensation level	a dummy that equals 1 if the firm's top three highest-paid executives' average compensation is above industry average and 0 otherwise

Table 2. Regression on the (interaction) effects of layoffs and philanthropy on the performance of declining firms

DV=ROA _t	(1)	(2)	(3)	(4)
Layoffs _{t-1}	0.090** (0.03)		0.087** (0.03)	0.092** (0.03)
Philanthropy _{t-1}		0.010* (0.00)	0.008* (0.00)	0.013** (0.00)
Layoffs _{t-1} × Philanthropy _{t-1}				-0.015* (0.01)

Table 3. The moderating role of philanthropic level

DV=ROA _t	(1)	(2)	(3) above ind. average	(4) below ind. average
Layoff _{t-1}	0.090** (0.03)		0.078+ (0.04)	0.114* (0.05)
Philanthropy _{t-1}		0.010* (0.00)	0.012+ (0.01)	0.091 (0.14)
Layoffs _{t-1} × Philanthropy _{t-1}			-0.019* (0.01)	0.036 (0.79)

Table 4. The moderating role of executive compensation level

DV=ROA _t	(1)	(2)	(3) above ind. average	(4) below ind. average
Layoff _{t-1}	0.090** (0.03)		0.036+ (0.02)	0.172** (0.06)
Philanthropy _{t-1}		0.010* (0.00)	0.009* (0.00)	0.018+ (0.01)
Layoffs _{t-1} × Philanthropy _{t-1}			-0.010+ (0.01)	-0.053 (0.08)

Notes: Standard errors in parentheses, + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001.

Relationship between International Firm Performance and ESG Efforts of the Indian Firms

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Relationship between International firm performance and ESG Efforts of the Indian firms

Abstract

Corporate sustainability, also referred to as ESG, involves the concurrent management of three dimensions: the planet (environmental), the people (social), and the profit (governance).

India, one of the world's largest emerging economies, is in a special position with regard to ESG. In India, corporate social responsibility, the Social component of ESG, has become a legal mandate. India, a common-law nation, has better legal and regulatory systems than many developed civil-law nations in terms of governance. India, however, clearly falls behind developed nations in terms of environmental regulations and legal requirements. The Indian firms, which are suppliers to the MNCs from the developed markets, need to give attention to corporate sustainability issues. It is because the buyer firms from the developed market are under pressure from their stakeholders and regulators to ensure sustainability across their supply chain. Due to the pressure from the buyer MNCs, the emerging market firms would invest in corporate sustainability initiatives. However, the relationship between internationalization and the ESG efforts of the emerging market firms has not been studied much in the academic literature. This paper aims to investigate the relationship between the performance of Indian listed companies in the global product markets and their corporate sustainability initiatives. An empirical study was carried out among the listed non-financial Indian companies to determine the relationship between their international revenues and their sustainability initiatives, as determined by their ESG scores. Initial regression results show that ESG success does assist businesses in enhancing their success in global markets.

Introduction

Corporate sustainability involves the simultaneous management of three dimensions: planet (environmental), people (social), and profit (governance), shortly known as ESG. Typically, the emerging market economies, which are part of the supply chain of the developed market MNCs, lag

behind the developed countries in their ESG performance (Garcia, Mendes-Da-Silva, & Orsato, 2017).

However, India, one of the fastest growing emerging markets of the world, is in a unique position. Corporate Social responsibility, one of the dimensions of corporate sustainability, has been made as mandatory requirement in India, through Companies Act 2013, for large profit making companies. In the governance dimension, India being common law country, has better legal and regulatory systems compared to many developed civil law countries . However, on the environmental front, India certainly lags the developed countries in terms of legal and regulator requirement.

Given the unique condition of India on Corporate sustainability dimensions, the corporate sustainability performance of the Indian firms requires a detailed study. However, the literature on corporate sustainability focused mainly on developed countries and only limited research has been done in the context of emerging markets like India (Orsato et al., 2015).

Unlike their peer firms which are predominately focus on their respective domestic markets, the emerging market firms which are suppliers to the MNCs from the developed markets, need to give attention to corporate sustainability issues. It is because the buyer firms from the developed market are under pressure from their stakeholders and regulators to ensure sustainability across their supply chain. Due to the pressure from the buyer MNCs, the emerging market firms would invest in corporate sustainability initiatives. However, the relationship between internationalization and the corporate sustainability efforts of the emerging market firms has not been studied much in the academic literature. (Geleilate, Magnusson, Parente, & Alvarado-Vargas, 2016; Marano, Arregle, Hitt, Spadafora, & van Essen, 2016). But the interest for analysing the internationalization of emerging market firms as well as its commitment to sustainability goals (Gomez-Trujillo and Gonzalez-Perez, 2020).

This paper attempts to study the relationship between the corporate sustainability efforts of the Indian listed firms and their international product market performance. The main argument is that the more

the emerging firms depend on foreign sales, the more they devote themselves to corporate sustainability because they pay attention to global stakeholders who are more concerned with sustainability than their domestic stakeholders (Kang, 2013). Moreover, it is argued that this positive effect of internationalization on emerging market firms' sustainability strengths is in counterpoint to that of internationalization on their sustainability concerns (Park, 2018). An empirical survey was conducted among the listed non-financial Indian firms to understand how their sustainability efforts, measured using their ESG scores is related to their international revenues.

This study contributes to international supply chain literature by highlighting the role of MNC pressure on their emerging market suppliers to improve their sustainability efforts. Given that this relationship has not been explored directly in the international business and green supply chain literature, these findings fill an important yet previously unaddressed gap in these two fields.

Literature Survey

Both the ideas of internationalization and corporate sustainability evolved over a period of time. The understanding of internationalization phenomena has undergone an enormous evolution since its evolution in the 1960s (Vieira, Frade, Ascenso, Martinho, & Martinho, 2021). The initial days of research on internationalization was predominantly based on the traditional Uppsala Model. However, in the recent years it moved to study new approaches such as the ones promoting networks as important aspects that provide legitimacy and commitment in the internationalization process (Pervez Tasavori, and Zaefarian, 2014).

Similarly, the term corporate sustainability was initially focused on environmental and economic issues, but later evolved to include social issues (Rao Patil, Bhat, and Ketkar, 2017). The research works on corporate sustainability were primarily focused on the firms from the developed markets, particularly the USA (Park, 2018).

The literature linking internationalization and corporate sustainability debated a lot about the extent internationalization fosters environmental sustainability (Christmann & Taylor, 2001; Suarez-Perales, Garces-Ayerbe, Rivera-Torres, & Suarez-Galvez, 2017) and social contributions (Attig, Boubakri, El Ghoul, & Guedhami, 2016)

The studies have shown that international firms seek legitimacy in international markets by reinforcing their environmental disclosure, even when their environmental performance is relatively poor (Aragón-Correa, Marcus, & Hurtado-Torres, 2016)

However only limited work has been done to understand the impact of internationalization on sustainability efforts in the context of emerging markets. Gómez-Bolaños, Hurtado-Torres, & Delgado-Márquez, (2020) studied the above relationship in the context of energy industry. relationship between internationalization and environmental management remains significant when firms' internationalization is oriented towards developing countries also, not just developed countries.

Park (2018) examined how the internationalization of emerging market multinationals (EMNEs) affects their corporate sustainability. The paper concluded that internationalization can be both good and bad for corporate sustainability and there is neither a positive nor a negative relationship between internationalization and sustainability. This paper focuses on filling the research gap

Buckley, Pass and Prescott (1988) argued that a single measure of competitiveness could not encompass all elements of competitiveness. They developed a framework for measuring the international competitiveness with multiple parameters. According to their framework, international competitiveness had to be measured based on three attributes namely Competitive Performance, Competitive Potential and Management Process. The above three categories could be measured through the following variables at the firm level:

1. Performance: Export market share, Export dependency, Export growth rate and Profitability

2. Potential: Cost competitiveness, Labor Productivity, Price competitiveness, and Technology indicators
3. Processes: Ownership advantage, commitment to international business, Marketing aptitude, Management relations, Closeness to customers and Economies of Scale and Scope

The above mentioned International Competitiveness variables were collectively called the 3P framework.

Our study focuses on the relationship between International competitive performance of Indian firms and their corporate sustainability efforts.

In the first part of the study, the paper examines the relationship between the above two parameters through an empirical survey.

In the second part of the study uses case research method to understand the relationship better. Three firms from three different industries are chosen and their corporate sustainability efforts are studied in detail to understand to what extent they are influenced by the requirements of their major buyer MNCs from the developed markets.

2. Empirical Survey

Our study focuses on the research issue of how the corporate sustainability efforts help Indian firms to improve their competitive performance in the international market. In specific terms, the objective of this research is

- To study the relationship between the corporate sustainability efforts and the international competitive performance of the Indian firms.

While examining the above objective, we need to consider the variables that are already established to have influence over the firm's international competitive performance. There are two sets of theories regarding the determinants of the firm level competitiveness. One set of theories emphasize that the external factors are the most important determinants of the firm performance and competitiveness. Another set of theories identifies the organizational factors as major determinants of competitiveness (Hansen and Wernerfelt, (1989)). Capon, Farley and Hoenig (1990) had done a Meta analysis of the results of 320 published studies on determinants of financial performance, one of the most important components of firm competitiveness. They concluded that Industry concentration, firm growth rate (in terms of sales or assets), market share and capital intensity had a positive relationship with the financial performance of the firm in most of the studies. The size of the firm measured as 'sales' showed a positive relationship with financial performance in some studies.

In this study we consider industry concentration, firm growth and size of the firm as control variables. Capital intensity was not considered as most Indian firms do not disclose the employee details. To sum up, the impact of firm's corporate sustainability efforts on the international competitive performance will be examined after controlling for the effect of these control variables .

2.1 Hypotheses

The hypotheses to be examined are:

- a) Does the corporate sustainability efforts of Indian firms relate with their international product market competitive performance measures (after controlling for the effect of firm size, industry concentration and firm growth on the international competitiveness of Indian firms)?

The above can be hypothesized (Null Hypotheses) as follows:

There exists no relationship between the corporate sustainability efforts and the international product market competitive performance measures of Indian firms after controlling for the effect of firm size, industry concentration and firm growth on the international competitiveness of Indian firms.

2.2 Methodology

The research works have indicated that the corporate sustainability efforts have a linear relationship with the international product market competitive performance. Hence this paper adopts multiple linear regression models to examine the above mentioned relationships. The control variables namely, size of the firm, industry concentration ratio and the firm growth rate are also included in the regression analysis.

We consider the Nifty 500 index firms who earns at least 10% of their revenue from international market in at least one of the financial years during the period 2018-2022. The financial services firms were not considered for this study as their operational requirements are different.

There were 175 firms in India with the above criterion. Of these, only for 174 firms, we could access the complete annual reports, financial data and corresponding global market data. Hence we use these 165 firms for our study.

The 165 firms selected for this study are spread across 18 industries as per the GICS classification. Out of the 165 firms, 144 firms are controlled by private Indian promoters, eight are State Owned Enterprises and 13 firms are controlled by the foreign firms. The required data is collected from annual reports of firms for the financial years 2017-18 and 2021-22.

2.2.1 Variables

To analyze relationship between international product market competitive performance and the corporate sustainability efforts, we define two sets of variables. The first set of variables would measure the international firm competitiveness. The second set of variables would measure the corporate sustainability efforts of the sample firm. The control variables are the size of the firm, industry concentration ratio, the firm's compounded annual growth rate and firm ownership type.

International Product Market Competitive performance

Product market competitive performance of firms is measured using four variables broadly based on Buckley *et al* (1998) model. They are

- Market share of the firm in the international market
- Export market share of the firm in the international market excluding India
- Relative Sales Growth Rate - Ratio of four years (2017-18 to 2021-22) - Compound Annual Growth Rate (CAGR) of the sales of the firm to the four year CAGR of the sales of global Industry (Excluding the sample firm value).
- Relative Export Growth Rate- Ratio of four years (2017-18 to 2021-22) CAGR of exports of the firm to the four-year CAGR of the sales of the Global Industry (Excluding India).

The International market data is collected from the Bloomberg database and the Data monitor reports. The Global Industry Classification Standards (GICS) were used for classifying a firm into a specific industry for calculating the international parameters. Generally the financial year for the Indian firms is April to March. But for most of the international firms, the calendar year is the financial year. This anomaly has been taken care of while calculating the market share data. The quarterly industry statistics data has been used wherever necessary to match it with that of the Indian financial year end.

Variables measuring Sustainability efforts

The sustainability efforts by business entities fall into three categories, namely environmental, social and governance. They are jointly called ESG measures. We use indirect measures to capture the efforts of the sample firm on sustainability front.

We use three measures to capture the Sustainability efforts

- The average CSR Spending by the firm during the period of analysis, as percentage of its profits
- ESG Score of the company given by CRISIL, the credit rating agency

- ESG Risk ranking by Sustainlytics

Control Variables

While examining the relationship between the firm competitiveness and the disclosures, industry concentration, firm growth and size of the firm are included as the control variables. Ln(sales) is used as a measure of firm size. The combined market share of the top four firms in the global market is used as a measure of industry concentration ratio. The compounded annual growth rate (CAGR) of total sales of the firm for the period 2018 to 2022 is used as a measure of firm growth. We measure ownership type using a dummy variable which takes the value of one if the firm is a subsidiary of an MNC and zero if it is owned by an Indian promoter.

2.3 Empirical analysis

We have used each of the four international competitive performance measures of the firm as the dependent or the study variable. The independent variables are the sustainability efforts and the control variables namely ln(sales), four firm concentration ratio and firm growth rate. Multiple linear regression model is used to study the firm's competitiveness in the international market with the help of firm's sustainability effort measures and the specified control variables. The variables used in examining the relationship are detailed below:

Dependent variables

TMS: Global market share of the firm in the year 2021-22 - measuring the total market share of the firm in the global market

EMS5: Firm's export / global industry sales (excluding India) in the year 2021-22 -measuring the export market share of the firm in the global market excluding India

TGR: Relative Sales Growth Rate - Firm's total sales CAGR / Industry total sales CAGR (excluding the chosen firm) during the four year period (2017-18 to 2021-22) - measuring the relative sales growth rate of the firm compared with the global market growth rate

EGR: Relative Export Growth Rate - Firm's export CAGR / Industry CAGR during the years 2017-22
- measuring the relative export growth of the firm compared with the global market (excluding India)
growth rate

Independent variables

CSR: Average CSR Spending by the firm during the period of analysis, as percentage of its profits

ESGE: Environmental performance score of the firm as part of CRISIL ESG Score 2022

ESGS: Social performance score of the firm as part of CRISIL ESG Score 2022

ESGG: Governance performance score of the firm as part of CRISIL ESG Score 2022

ESGT- Overall ESG Score of the firm given by CRISIL

ESGR- ESG Risk ranking for the firm by Sustainlytics

FCR: Four firm concentration ratio for the industry for the year 2021-22

LS5: Ln (Sales) of the firm for the year 2021-22 – measuring the size of the firm

FG: CAGR of the firm's total sales for the four period 2002-05 – measuring the growth rate of the firm.

OND- Ownership Dummy Variable

Regression Equations

The international competitive performance measures of the firm, which are the study or dependent variables, are calculated for the year 2021-22. The Sustainability effort scores are used as independent variables. The control variables ln(sales), four-firm concentration ratio, firm growth rate, ownership dummy is also included in the regression for studying competitiveness measures. Firm growth rate has not been used while studying Total market share and export market share of the firm. SPSS software is used for estimating the regression equations with White's heteroscedastic-consistent standard error estimators.

The data collection is complete and regression analysis would be done in the next step

References

Buckley, P. J., Pass, C. L. & Prescott, K. (1988). Measures of international competitiveness: A critical survey, *Journal of Marketing Management*, 4(2), 175-200.

Orsato R.J. A.S. Garcia, A W. Mendes-Da-Silva, R. Simonetti, M. Monzoni (2015), Sustainability indexes: why join in? A study of the 'Corporate Sustainability Index (ISE)' in Brazil *J. Clean. Prod.*, 96 (1) , pp. 161-170

Jayanti, R. K., & Gowda, M. R. (2014). Sustainability dilemmas in emerging economies. *IIMB Management Review*, 26(2), 130-142.

Geleilate, J.-M. G., Magnusson, P., Parente, R. C., & Alvarado-Vargas, M. J. (2016). Home country institutional effects on the multinationality-performance relationship: A comparison between emerging and developed market multinationals. *Journal of International Management*, 22, 380–402.

Marano, V., Arregle, J.-L., Hitt, M. A., Spadafora, E., & van Essen, M. (2016). Home country institutions and the internationalization-performance relationship: A meta-analytic review. *Journal of Management*, 42, 1075–1110

Pervez, G., Tasavori, M. and Zaefarian, R. (2014), "Internationalisation of service firms through corporate social entrepreneurship and networking", *International Marketing Review*, Vol. 31 No. 6, pp. 576-600.

Kang, J. (2013). The relationship between corporate diversification and corporate social performance. *Strategic Management Journal*, 34(1), 94–109

Rao, P., Patil, Y., Bhat, V. and Ketkar, M. (2017), "Building energy, environment and sustainability linkages in management education in India — an innovative curriculum based approach", *Curricula for Sustainability in Higher Education*, pp. 61-76, doi: 10.1007/978-3-319-56505-7.

Suarez-Perales, I., Garces-Ayerbe, C., Rivera-Torres, P., & Suarez-Galvez, C. (2017). Is strategic proactivity a driver of an environmental strategy? Effects of innovation and internationalization leadership. *Sustainability*, 9(10), 1870. <https://doi.org/10.3390/su9101870>

Attig, N., Boubakri, N., El Ghouli, S., & Guedhami, O. (2016). Firm internationalization and corporate social responsibility. *Journal of Business Ethics*, 134(2), 171-197.

Christmann, P., & Taylor, G. (2001). Globalization and the environment: Determinants of firm self-regulation in China. *Journal of International Business Studies*, 32, 439–458. <https://doi.org/10.1057/palgrave.jib>

Aragón-Correa, J. A., Marcus, A., & Hurtado-Torres, N. (2016). The natural environmental strategies of international firms: Old controversies and new evidence on performance and disclosure. *Academy of Management Perspectives*, 30(1), 24–39.

Gómez-Bolaños, E., Hurtado-Torres, N. E., & Delgado-Márquez, B. L. (2020). Disentangling the influence of internationalization on sustainability development: Evidence from the energy sector. *Business Strategy and the Environment*, 29(1), 229-239.

Vieira, J., Frade, R., Ascenso, R., Martinho, F., & Martinho, D. (2021). Determinants of Internationalization as Levers for Sustainability: A Study of the Portuguese Pharmaceutical Sector. *Sustainability*, 13(17), 9792.

Salzmann, O., Ionescu-Somers, A., & Steger, U. (2005). The business case for corporate sustainability:: literature review and research options. *European management journal*, 23(1), 27-36.

Garcia, A. S., Mendes-Da-Silva, W., & Orsato, R. J. (2017). Sensitive industries produce better ESG performance: Evidence from emerging markets. *Journal of cleaner production*, 150, 135-147.

Gomez-Trujillo, A.M. and Gonzalez-Perez, M.A. (2020), "What do we know about organizational sustainability and international business?", *Management of Environmental Quality*, Vol. 31 No. 2, pp. 292-305

Body, Mind & Culture - The Role of the Body in Intercultural Research

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Body, mind & culture - The role of the body in intercultural research

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Extended Abstract

The field of international management has long called for novel ways to conceptualize and investigate culture. This paper contributes to the discussion by focusing on the role of the body in intercultural research. Based on the emerging paradigm of ‘embodied cognition’, we will discuss how culture is learned through the body. We will then explore ‘embodied inquiry’ as an innovative approach for intercultural research which allows to gain insights into people’s lived experiences.

Keywords: culture, embodied cognition, embodied inquiry, qualitative research

1. Introduction

The field of international management has long called for rethinking how to conceptualize and investigate culture in order to move the study of culture forward (Caprar, Devinney, Kirkman, & Caligiuri, 2015). This paper contributes to the discussion by focusing on the role of the body in intercultural research. We will start by introducing the emerging paradigm of ‘embodied cognition’ and discuss the implications of this approach for how culture is learned. We will then explore ‘embodied inquiry’ as an innovative approach for intercultural research which allows to gain insights into people’s lived experiences. The paper will provide examples of how the approach has been used and what researchers need to be aware of.

2. Embodied Cognition

Contrary to classical cognitivism, embodied cognition emphasizes the importance of the body in making sense of the world. The body’s anatomy and movements are seen as essential in the shaping of cognition prior to brain processing (Shapiro, 2004). Thinking therefore is an activity strongly

influenced by the body and our interaction with the environment. "By using the term *embodied* we mean to highlight two points: first that cognition depends upon the kinds of experience that come from having a body with various sensorimotor capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological and cultural context." (Varela, Thompson & Rosch, 1991: 172-173)

The paradigm of 'embodied cognition' has long been explored in a variety of disciplines such as philosophy, psychology, neuroscience, linguistics, cognitive science,... among others. In his work 'Phenomenology of Perception' (1962), Merleau-Ponty (1962) viewed the body as the primary site of experiencing the world. By putting the body in the center of attention, Merleau-Ponty challenged the dichotomy between subject and object, mind and body. He rejected Cartesian mind-body dualism with its focus on disembodied consciousness and the view of the human body as an 'object'. Influenced by Merleau-Ponty's work, Bourdieu (1990) developed his concept of "habitus", an embodied internal compass, which guides the way in which we act, feel, and think. Different social environments with different choices of practices generate different habitus. The role of the body has since been explored in a variety of disciplines such as sociology (embodied turn, Hassard, Holliday & Willmott, 2000), education (Sullivan, 2018), organization studies (Harquail & Wilcox King, 2010). Farina (2021) provides an overview of the variety of approaches in the literature on embodied cognition ranging from 'minimal embodiment' to 'full embodiment' and 'radical embodiment'.

2.1 Embodied Cognition and Culture

The link between embodied cognition and culture has received renewed attention through latest insights from neuroscience research. A central tenet of this perspective is summarized in the following quote: "The embodied cognition literature suggests the physical actions we perform and the actions being performed around us shape our mental experience." (Sullivan, 2018: 128). Neuroscientists point to the importance of mirror neurons as a biological explanation for the origins of human culture. In other words, "society creates culturally specific neuro-physiological structures" (Waters, 2014: 620). The notion of 'embodiment' consequently goes beyond the human body and implies embeddedness in social practices.

In their article on cultural neuroscience, Kitayama and Park (2010) review studies that reveal how brain processes are shaped by cultural practices. Their hypothesis on how exactly culture shapes the brain is that active and repeated engagement in scripted behavioral sequences (which they call ‘cultural tasks’) can shape and modify brain pathways. Neuroscientists refer to this process as ‘plasticity of the brain’. “Culture induces neural activities, often modifying and fostering neural processing pathways, by providing cultural tasks designed to achieve the culture’s values” (Kitayama & Park, 2010). This also points to the embodied nature of cultural learning, i.e. learning through enacting cultural tasks which in turn shape the pathways in the brain. This makes it reasonable to expect that people who are socialized in different cultures develop different brain pathways through engaging in different cultural practices and tasks (Kitayama & Park, 2010).

2.2 Investigating embodied culture

Investigating the unconscious, tacit perceptions of embodied cognition requires research methods that allow access to what is not directly accessible. Leigh & Brown (2021) explore ‘embodied inquiry’ as a research approach which puts the body in the center of investigation and allows to reach deeper, authentic truths which are stored in the body as lived experience. While interview and narrative approaches help to explore what participants think and how they make sense of their experiences, the Embodied Inquiry gets closer to re-creating the participants' lived experience. The philosophical foundation for this type of research is provided by phenomenology (Merleau-Ponty) with its emphasis on embodiment and the view of the body as a means to communicate. The physical process of ‘making something’ (e.g. a drawing, a clay object, a LEGO® construction) engages the body and this bodily engagement in creative tasks uses the brain in a different way which is likely to generate a different quality of data. Tactile techniques are particularly suitable for embodied research approaches because they allow participants to create models with their hands, a process that is also referred to as ‘thinking with your hands’ (Barry, 1994). Participants first create an analog of their internal images and perceptions and these unconscious processes then come to the surface through a depth inquiry process guided by the researcher. Similar methods have been applied in corporate strategy consulting (Heracleous & Jacobs, 2008) and management education (Kainzbauer & Lowe, 2018).

In cross-cultural management research, embodied methods such as LEGO® constructions have successfully been used to surface culture-specific perceptions and experiences of participants in cross-cultural work settings. In an empirical study using embodied research methods with foreign expatriate leaders in Thailand, Vora and Kainzbauer (2020) found that the embodied metaphor most often used by expatriate leaders in the Thai context was that of a family member. Expatriate leaders saw their leadership role in the Thai context as a “mother, father, older brother, aunt...”. While this role concept is ubiquitous in the Thai context, it is usually not shared with expatriate leaders, thus indicating that the expatriate leaders learned the role subconsciously, through embodied engagement with Thai colleagues. The expat leaders’ lived experiences then surfaced as LEGO® metaphors during the leadership research study.



Figure 1: LEGO® construction “father” Source: Vora and Kainzbauer (2020)

In another study, Lowe et al. (2015) found that Thai and Chinese employees of a Chinese multinational company in Thailand portrayed their workplace differently. While the Chinese employees used more mechanistic metaphors associated with machines and competition (‘racing car’, ‘airplane’, ‘train’), the Thais used organismic and relational metaphors (‘heart’, ‘giraffe’, ‘tiger’), indicating different ‘lived experiences’ of the two cultural groups.

2.3 Practical application - tips for researchers

From our own experience of using analogically-based methods in cross-cultural settings, we recommend to start the LEGO® exercise with a guiding question to invite participants to think in metaphors and images e.g. “In my role as a leader, I am like a ...” Each construction exercise is followed by a debriefing where participants narrate their interpretation of their LEGO® model, guided by questions from the moderator. These guiding questions for debriefing should help to draw out

participants' feelings, perceptions and interpretation through metaphorical storylines. Participants should be encouraged to explore the overall features of the analog before looking at its details. For the purpose of cross-cultural research, the process of debriefing the constructions should ideally be conducted in the participants' native language. Investigating intercultural differences with the help of LEGO® or other embodied methods might help to reveal deeper, authentic, pre-linguistic truths stored in the body as lived experiences.

3. Conclusion

The aim of this paper was to explore the role of the body in intercultural research. Through the concept of 'embodied cognition' we gained insights into how culture is learned and which methods might be useful to investigate cultural differences. Building on the notion that culture is embodied, a relevant tool for exploring culture would need to move away from purely analytical (cerebral) research methods such as interviews and surveys, to tools that allow embodied involvement and discovery.

In the spirit of methodological pluralism, these embodied methods could be used in combination with other research methods as suggested by Lowe et al. (2020), however we concur with Heracleous and Jacobs (2008) who point out that epistemology and ontology of paradigms need to be made explicit in the selection of approaches to inquiry.

4. References

- [1] Barry, D. 1994. Making the invisible visible: Using analogically-based methods to surface unconscious organizational processes. *Organization Development Journal*, 12(4), 37–47.
- [2] Bourdieu, P. 1990. *The logic of practice*. Stanford, CA: Stanford University Press.
- [3] Caprar, D. V., Devinney, T. M., Kirkman, B. L., & Caligiuri, P. 2015. Conceptualizing and measuring culture in international business and management: From challenges to potential solutions. *Journal of International Business Studies*, 46(9), 1011-1027
- [4] Farina, M., 2021. Embodied cognition: dimensions, domains and applications. *Adaptive Behavior*, 29(1): 73–88

- [5] Harquail, C.V. & Wilcox King, A. 2010. Construing Organizational Identity: The Role of Embodied Cognition. *Organization Studies*, 31(12), 1619-1648.
- [6] Hassard, J., Holliday, R. & Willmott, H. 2000. *Body and Organization*, London: Sage Publications.
- [7] Heracleous, L. & Jacobs, C. D., 2008. Understanding organizations through embodied metaphors. *Organization Studies*, 29(1), 45–78.
- [8] Kainzbauer, A. & Lowe S. 2018. Embodied realism by design in Thai management education. *International Journal of Management Education*, 16(2), 281-291.
- [9] Kitayama, S. & Park, J. 2010, Cultural neuroscience of the self: understanding the social grounding of the brain. *Social Cognitive and Affective Neuroscience*, 5(2-3),111-29.
- [10] Leigh N. & Brown N., 2021. *Embodied Inquiry*. Research Methods. Bloomsbury Academic.
- [11] Lowe S., Kainzbauer A. & Hwang K.S. 2020. Exploring culture as a paradox: complementary QUEUE analysis of cultural values and practices. *Journal of Organizational Change Management*, 33(1), 127-142.
- [12] Lowe, S., Kainzbauer, A., Magala, S. J. & Daskalaki, M. 2015. International business and the Balti of meaning: Food for thought. *Journal of Organizational Change Management*, 28(2), 177-193.
- [13] Merleau-Ponty, M. 1962. *Phenomenology of perception*. London: Routledge.
- [14] Shapiro, L. A., 2004. *The Mind Incarnate*. Cambridge, MA: MIT Press.
- [15] Sullivan, J.V. 2018. Learning and Embodied Cognition: A Review and Proposal. *Psychology Learning & Teaching*, 17(2), 128-143.
- [16] Varela F.J., Thompson E. & Rosch, E. 1991. *The Embodied Mind: Cognitive Science and Human Experience*, The MIT Press.
- [17] Vora, D. & Kainzbauer, A., 2020. Humanistic leadership in Thailand: a mix of indigenous and global aspects using a cross-cultural perspective, *Cross Cultural & Strategic Management*, 27(4), 665-687.
- [18] Waters, T. 2014. Of Looking Glasses, Mirror Neurons, Culture, and Meaning. *Perspectives on Science*, 22, 616-649.

Learn From Which Ties in Crisis? What Do We Need to Know More

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Learn From Which Ties in Crisis? What Do We Need to Know More

Abstract

SMEs often grapple with resource shortages due to their small scale, particularly in health-related crises like the COVID-19 pandemic. Existing research has predominantly focused on SME survival during financial crises, leaving health crises relatively unexplored. SMEs inherently face a greater risk of failure due to their limited resources, underscoring the importance of forging connections with external partners.

To bridge this resource gap, SMEs are advised to cultivate relationships with external entities such as customers, suppliers, and industry peers, as each of these affiliations offers distinct advantages and resources. However, it remains uncertain which of these connections SMEs rely on most during crises and what kind of knowledge they acquire from these associations.

This commentary underscores the need to investigate how SMEs learn from their external ties during crises, with a particular emphasis on the significance of customers, suppliers, and industry peers. A deeper understanding of this can aid SMEs in better preparing for future crises, thereby enhancing their resilience and economic contributions.

Keywords: SMEs, vicarious learning, ties, health-related crisis

Introduction

The liability of smallness leads SMEs (small and medium enterprises) to resource insufficiency. This deficiency impacts SMEs. Searching previous studies, they often concentrate on financial crises as they show interest in how SMEs survive in disadvantaged conditions instead of in health-related crises, for instance, the COVID-19 pandemic. Small firms by their nature, have a higher likelihood of failure than large firms. The size of a firm determines the availability of its resources. To overcome such liability, SMEs are recommended to develop ties with external parties. SMEs spend much time and effort to develop external ties with the purpose of compensating for the insufficient resources which often they are incapable of building internally. In the context of SMEs, customers, suppliers, and industrial peers are the three most important relationships as each tie provides distinctive values to the firms. Each party provide distinctive resources and capabilities. For instance, customers help SMEs to acquire strategic information for future decision-making (Greve & Salaff, 2003). Building ties with suppliers helps SMEs receive solid support from manufacturers (Zhang & Li, 2008). Developing ties with industrial peers helps firms obtain information that only circulates among insiders (Park & Luo, 2001).

As mentioned previously, lots of work has been done on how SMEs use ties to survive in economic downturns but not in health-related crises. We believe it is an important issue as SMEs are recognised as the economic backbone of each country, both developed and emerging. To list only a few, SMEs contribute to employment creation, income generation and innovation. Even though the COVID-19 pandemic has ended in 2023, another health-related crisis might occur sooner or later. During the pandemic, many SMEs were forced to shut down; one reason was their incapability to tackle the problem. As a result, when a firm lacks internal resources, it must seek outside help. In this regard, ties provide some levels of assistance.

Compared with large firms, SMEs often possess fewer resources, and therefore, a compelling question emerges, “For firms that own insufficient resources and capabilities, does learning exist?” In this scenario, vicarious learning comes into play. If we assume that SMEs without sufficient resources and capabilities will learn from others through observations. If we assume that SMEs will mostly learn from the failures of other firms. Then, it would be interesting to know which ties SMEs learn from the most to the

least in a crisis. Would it be customers, suppliers or industrial peers? Or would they be equally important? How do they learn, and what do they learn? Up to the present, no study has tried to discuss this question. We believe it is an interesting and important research issue.

As the firm is considered an insider, it can observe its networks and what they do wrong. In the present literature, each tie provides distinctive resources and capabilities in a “normal context”. However, in a crisis, we only have a little understanding of the importance of each tie, namely, customer, supplier, and industrial peer. Does a firm learn from the failures of its customer, supplier or industrial peer? If it observes and learns, what does it learn? We hope our commentary can raise some attention and attract more studies on this issue. We believe it is crucial to fill the gap so that before SMEs face such an imbroglio, they can prepare beforehand instead of being caught off guard.

Literature Review

Organisational Crisis

Organisational crisis issues have been studied extensively (Alves, Lok, Luo, & Hao, 2020). 51% of the studies focus on traditional financial crises (Egger, 2020). When the unanticipated natural outbreak started and spread rapidly in 2019, more research has begun to examine how the COVID-19 pandemic impacts large and small firms. It is believed that health-related crises, compared with financial disasters, lead to more severe repercussions for the world.

A crisis can be perceived as an event or a process. The former views a crisis as a delimited event with a beginning and an end (Pedersen, Ritter, & Benedetto, 2020). The latter treats a crisis as a process from unknown paths to known scenarios (Merendio & Sarens, 2020). In line with previous studies, we view a crisis as a process in which firms identify and respond to unexpected situations. This study defines a crisis as “a phenomenon with low chance of occurrence, a high ambiguity and a situation with strong repercussions at all organisational levels” (Gabielli, Russo & Ciceri, 2019).

SMEs and Crisis

The liability of smallness leads SMEs (small and medium enterprises) to resource insufficiency. This deficiency impacts SMEs. Searching previous studies, they often concentrate on financial crises as they show interest in how SMEs survive in disadvantaged conditions. Possible explanations include the adoption of both market and entrepreneurship-oriented strategies (Alves et al., 2020), the utilisation of entrepreneurial culture and knowledge diversity (Bishop, 2019), and the possession of an optimistic personality as well as negotiation skills (Kottika, Özsomer, Rydén, Theodorakis, Kaminakis, Kottikas, & Stathakopoulou, 2020).

However, only a few studies discuss how SMEs survive the COVID-19 pandemic, the global natural crisis. Kottika et al. (2020) provide an interesting point in their paper, “There are some differences between the Greek financial crisis and the current COVID-19 crisis. In the case of the Greek crisis, as the domestic market continued to sink, the global economy started to recover, prodding SMEs opportunities to explore foreign markets. In the case of the global COVID-19 crisis, finding healthy international markets will be even more challenging.” Agreeing with their statement, we believe SMEs react differently in these two crises, and therefore a more thorough study is needed because disease outbreaks are becoming “a fact of life and, when not managed properly, can generate major difficulties for companies,” (Cortez & Johnston, 2020).

SMEs and Vicarious Learning

Levitt and March (1988) noted that learning can arise from experiential learning, also known as first-hand experience. For instance, firms learn how to curb a crisis better after such an experience. However, the precondition of experiential learning is that a firm needs to be equipped with the necessary resources and capabilities. Compared with large firms, SMEs often possess fewer resources, and therefore, a compelling question emerges, “For firms that own insufficient resources and capabilities, does learning exist?” In this scenario, vicarious learning comes into play. Bandura and his colleagues (1963) explained it is unnecessary to have a direct experience, behavioural observation can also help one man to learn. “Through interaction and observation, organisations accumulate information about the characteristics and performance of other organisations. Such information provides the basis for vicarious learning and imitation. Firms try to learn from others by imitating seemingly successful practices” (Denrell, 2003).

Several studies have shown that firms use vicarious learning to acquire knowledge (Bastos & Greve, 2003; Kim & Miller, 2007; Tuschke, Sanders, & Hernandez, 2014). Using 169 SMEs in Saudi Arabia, Ali, Ali, Salam, Bhatti, Arain, and Burhan (2020) showed a positive relationship between vicarious learning and firm performance in the context of SMEs. Jiménez and De la Fuente (2016) analysed a sample of 164 Spanish firms and demonstrated that vicarious learning helped firms when undertaking internationalisation. Puthusserry and his colleagues (2020) also proved that vicarious learning enabled Indian SMEs to acquire useful knowledge in the stage of internationalisation. As a result, vicarious learning has become increasingly imperative because it enhances a firm's competitiveness.

SMEs and Ties

Building ties with one another is a universal phenomenon in the East or the West. The inclination for forming ties can be perceived as more prevalent in SMEs than in large firms as one of the main purposes is to complement resource constraints (Manolova, Brush, Edelman, and Green, 2002; Dimitratos, Liouka, and Carte, 2004). Ties can be distinguished into personal and firm levels. An individual possesses personal ties. For example, an owner-manager of a small firm knows a manager from another small firm. In this regard, it is considered a personal tie between the owner-manager and vice versa. On the other hand, firm ties are owned by a collective entity, and it often can be observed from large firms. Hence, in this study, personal ties are concentrated as an owner-manager often represents the firm. In the study, the ties of a manager-owner are referred to as managerial ties. Managerial ties can be derived from various sources, for example, personal, social, and economic relations with suppliers, customers, competitors, and community organisations (Granovetter, 1985; Acquaah, 2007). Due to its micro-macro link, an owner-manager's managerial ties embodied in him or herself can be transferred from personal to firm level.

The Importance of Each Tie

In the context of SMEs, customers, suppliers, and industrial peers are the three most important relationships as each tie provides distinctive values to the firms. Each tie provides unique resources. Babakus, Yavas, and Haahti (2006) used small firms in Sweden and Norway to examine the relationship between entrepreneurial networks and uncertainty. The result showed that networking with domestic and foreign parties had a positive impact on firm performance. Roxas and Chadee (2011) conducted a survey study with small firms in the Philippines and found that entrepreneurial network assists the firm in acquiring market knowledge. As a

result, it is argued that SMEs spend much time and effort to develop external ties to compensate for insufficient resources, which often they are incapable of building internally (BarNir & Smith, 2002).

Developing ties with industrial peers helps firms obtain information that only circulates among insiders (Li, Schulze, and Li 2009) and stimulates collaboration and collusion (Park & Luo, 2001). Ties may prevent exchange business parties from performing opportunistic behaviour. The Network is similar to a small society; the speed of transmitting information is swift. Once a firm performs opportunistically, it will be circulated to others. Consequently, the reputation of the firm is being influenced negatively. Building ties with suppliers helps SMEs receive solid support from manufacturers (Zhang & Li, 2008). Furthermore, networking with suppliers helps the focal firm to create, acquire, and exploit knowledge (Yli-Renko, Autio, and Sapienze, 2000) and to provide better services to customers of the focal firm (Li et al., 2009).

Crisis, Vicarious Learning, and Ties: What is Missing? What is Being Neglected?

Much of the empirical work focuses on firms learning from other successful organisations of positive replication routines and strategies (Darr, Argote, and Epple, 1995; Haunschild & Miner, 1997). However, another strand of studies raises an intriguing question: whether firms learn from the failures of other firms, “organisations learn more effectively from failures than success that knowledge from failure depreciates more slowly than knowledge from cues andthe magnitude of failure influence how effectively organisations can learn from various forms of experience” (Madesn & Desai 2010). Conducting a bibliographic study on learning from failure from 1994 to 2019 with 23 research, Lee, Jiménez, and Devinney (2020) indicated that it had witnessed a stream of publications on vicarious learning from failure in the past decade. Two possible explanations illuminate why learning from failure has a greater impact than learning from success. First, failure experiences from other firms enable the focal firm to use them as benchmarks and question its own experiential knowledge, instigating “problem search” (Baum & Dahlin, 2007). Second, the secrets of success need to be protected tightly and be held confidently; however, when firms are tripped by failures, they tend to be more likely to be circulated (Lee *et al.*, 2020).

If we assume that SMEs without sufficient resources and capabilities will learn from others through observations. If we assume that SMEs will mostly learn from the failures of other firms. Then, it would be interesting to know which ties SMEs learn from the most to the least in a crisis. Would it be customers, suppliers or industrial peers? Or would they be equally important? How do they learn, and what do they learn? Up to the present, no study has tried to discuss this question. We believe it is an interesting and important research issue.

Statistically, the proportion of SMEs exceeded 95 per cent in 1995, with a total of 930, 000 firms hiring approximately 7,080,000 employees (Hsiao & Hsiao, 2006). Between 2008 and 2016, a total number of newly founded firms were developed, accounting for 135,273 (Ministry of Economic Affairs, R.O.C., 2017). SMEs are recognised as the economic backbone of each country, both developed and emerging. To list only a few, SMEs contribute to employment creation, income generation and innovation. Even though the COVID-19 pandemic has ended in 2023, another health-related crisis might occur sooner or later. During the pandemic, many SMEs were forced to shut down; one reason was their incapability to tackle the problem. As a result, when a firm lacks internal resources, it must seek outside help. In this regard, ties provide some levels of assistance.

As the firm is considered an insider, it can observe its networks and what they do wrong. In the present literature, each tie provides distinctive resources and capabilities in a “normal context”. However, in a crisis, we only have a little understanding of the importance of each tie, namely, customer, supplier, and industrial peer. Does a firm learn from the failures of its customer, supplier or industrial peer? If it observes and learns, what does it learn?

Ties are particularly important to small firms for resource complementary. We believe it is more crucial in a crisis because firms must react promptly. Even though the COVID-19 pandemic was declared an end in May 2023, new health-related outbreaks will come and have a severe impact on the world economy. As mentioned previously, SMEs create approximately 60 to 70 per cent of employment; another economic recession cannot be tolerated. We believe it is crucial to fill the gap so that before SMEs face such an imbroglio, they can prepare beforehand instead of being caught off guard.

References

- Acquaah, M. (2007). Managerial social capital, strategic orientation, and organizational performance in an emerging economy. *Strategic Management Journal*, 28(12): 1235-1255.
- Ali, I., Ali, M., Salam, M. A., Bhatti, Z. A., Arain, G. A., & Burhan, M. (2020). How international SME's vicarious learning may improve their performance? The role of absorptive capacity, strength of ties with local SMEs, and their prior success experience. *Industrial Marketing Management*, 88: 87-100.
- Alves, J. C., Lok, T. C., Luo, Y., & Hao, W. (2020). Crisis challenges of small firms in Macao during the COVID-19 pandemic. *Frontiers of Business Research in China*, 14(26): 1-23.
- Babakus, E., Yavas, U., & Haahti, A. (2006). Perceived uncertainty, networking and export performance: A study of Nordic SMEs. *European Business Review*, 18(1): 4-13.
- Bandura, A., Ross, D., & Ross, S. (1963). Vicarious reinforcement and imitative learning. *Journal of Abnormal and Social Psychology*, 67(6): 601-607.
- BarNir, A., & Smith, K. A. (2002). Interfirm Alliances in the Small Business: The Role of Social Networks. *Small Business Management*, 40(3): 219-232.
- Bastos, P. V., & Greve, H. R. (2003). Interorganizational learning and the location of manufacturing subsidiaries; is chain migration also a corporate behavior? In J. A. C. Baum & O. Sorenson (Eds.), *Advances in strategic management: geography and strategy* (pp. 159-199). Kidlington: JAL.
- Baum, J. A., & Dahlin, K. B. (2007) Aspiration performance and railroads' patterns of learning from train wrecks and crashes. *Organization Science*, 18(3): 368-384.
- Cortez, R. M., & Johnston, W. J. (2020). The Coronavirus crisis in B2B settings: Crisis uniqueness and managerial implications based on social exchange theory. *Industrial Marketing Management*. 88: 125-135.
- Darr, E., Argote, L., & Eppler, D. (1995). The acquisition, transfer, and depreciation of knowledge in service organizations: Productivity in franchises. *Management Science*, 41(11): 1750-1762.
- Debrell, J. (2003). Vicarious Learning, Undersampling of Failure, and the Myths of Management. *Organization Science*, 14(3): 227-243.
- Dimitratos, P., Lioukas, S., & Carte, S. (2004). The Relationship Between Entrepreneurship and International Performance: The Importance of Domestic Environment. *International Business Review*, 13(1): 19-41.
- Eggers, F. (2020). Masters of disasters? Challenges and opportunities for SMEs in times of crisis. *Journal of Business Research*, 116: 199-208.
- Gabrielli, G., Russo, V., & Ciceri, A. (2019). Understanding organizational aspects for managing crisis situations. *Journal of Organizational Change Management*, 33(1), 29-49.
- Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91(3): 481-510.
- Greve, A., & Salaff, J. W. (2003). Social networks and entrepreneurship. *Entrepreneurship Theory and Practice*, 1: 1-20.
- Gu, F. F., Huang, K. H., & Tse, D. V. (2008). When Does Guanxi Matter? Issues of Capitalization

- and Its Dark Sides. *Journal of Marketing*, 74(4): 12-28.
- Haunschild, P. R., & Miner, A. S. (1997). Modes of interorganizational imitation: The effect of salience and uncertainty. *Administrative Science Quarterly*, 42: 472-500.
- Hsiao, F. S. T., & Hsiao, M. C. W. (2006). FDI, Exports, and Growth in East and Southeast Asia -Evidence from Time-Series and Panel Data Causality Analyses. *International Conference on Korea and the World Economy*, Korea University.
- Jiménez, A., & De la Fuente, D. (2020). Learning from others: the impact of vicarious experience on the psychic distance and FDI relationship. *Management International Review*, 56: 633-664.
- Kim, J., & Miner, A. S. (2007). Vicarious learning from the failure and near-failure of others: Evidence from the U.S. commercial banking industries. *Academy of Management*, 50(2): 687-714.
- Kottika, E., Özsoy, A., Rydén, P., Theodorakis, I., Kaminakis, K., Kottikas, K. G., & Stathakopoulos, V. (2020). We survived this! What managers could learn from SMEs who successfully navigated the Greek economic crisis. *Industrial Marketing Management*, 88: 352-365.
- Lee, J. Y. Jiménez, A., & Devinney, T. M. (2020). Learning in SME Internationalization: A New Perspective on Learning From Success versus Failure. *Management International Review*, 60: 485-513.
- Levitt, B., & March, J. G. (1988). Organizational learning. *Annual Review of Sociology*, 14(1): 319-340.
- Li, S., Schulze, W., & Li, Z. (2009). Plunging into the sea, again? A study of serial entrepreneurship in China. *Asia Pacific Journal of Management*, 26(4): 667-680.
- Madsen, P.M., & Desai, V. (2010). Failing to learn? The effects of failure and success of organizational learning in the global orbital launch vehicle industry. *Academy of Management Journal*, 53(3): 451-476.
- Manolova, T. S., Brush C., Edelman, L. F., & Green, P. G. (2002). Internationalization of Small Firms Personal Factors Revisited. *International Small Business Journal*, 20(1): 9-31.
- Merendino, A., & Sarens, G. (2020). Crisis? What crisis? Exploring the cognitive constraints on boards of directors in times of uncertainty. *Journal of Business Research*, 118: 415-420.
- Park, S. H., & Luo, Y. D. (2001). Guanxi and organizational dynamics: organizational networking in Chinese firms. *Strategic Management Journal*, 22(5): 455-477.
- Pedersen, C. L., Ritter, T., & Benedetto D. A. (2020). Managing through a crisis: Managerial implications for business-to-business firms. *Industrial Marketing Management*, 88: 314-322.
- Puthusserry, P., Khan, Z., Knight, G., & Miller Kirstel. (2020). How Do Rapidly Internationalizing SMEs Learn? Exploiting the Link Between Network Relationships, Learning Approaches and Post-entry Growth of Rapidly Internationalizing SMEs from Emerging Markets. *Management International Review*, 60: 515-542.
- Roxas, H. B., & Chadee, D. (2011). A resource-based view of small export firms' social capital in a Southeast Asian country. *Asian Academy of Management Journal*, 16(2): 1-28.
- Sheng, S. B., Zhou, K. Z., & Li, J. J. (2011). The Effects of Business and Political Ties on Firm Performance: Evidence from China. *Journal of Marketing*, 75(1): 1-15.
- Tuschke, A., Sanders, G. W.M., & Hernandez, E. (2014). Whose experience matters in the boardroom? The effects of experiential and vicarious learning on emerging market entry. *Strategic Management Journal*, 35: 398-418.
- Wu, J., & Chen, X. (2012). Leaders' Social Ties, Knowledge Acquisition Capability and Firm Competitive Advantage. *Asia Pacific Journal of Management*, 29(2): 331-350.
- Yli-Renko, H., Autio, E., & Sapienza, H. J. (2001). Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms. *Strategic Management Journal*, 22: 587-613.
- Zhang, S. J., & Li, X. C. (2008). Managerial ties form resources, and performance cluster firms. *Asia Pacific Journal of Management*, 25: 615-533.

Protectionism and Differentiation of the Emerging Market Brands: Insights from Trademark Filings

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Protectionism and Differentiation of the Emerging Market Brands: Insights from Trademark Filings

Abstract

The anti-globalization trend in the world economy is reflected in escalating trade restrictions such as tariff increases, stricter customs procedures, imposition of taxes and export duties introduced by major economies. Simultaneously, the emerging markets experience rise of nationalism which is reflected in increasing preference for and support of domestic brands. In this study we examine how protectionist measures by emerging economies affect branding activities of local producers which are aimed to be insulated by such actions. Precisely, using trademark filings in twenty emerging economies, we examine how emerging country's protectionism influences differentiation of domestic brands.

Keywords: brand differentiation, emerging economy, protectionism, trademark

Introduction

A policy of protecting domestic producers against foreign competition by tariffs, import quotas, stricter customs procedures, embargos, and subsidies have been extensively studied in economics (Georgiadis & Gräb, 2016) and political sciences (Flanders, 1965). The countries' pragmatic desires to their firms to trade more easily may lead to the destructive trade tensions, such as recent US-Chinese trade war that cost US firms loss of \$1.7 trillion in market capitalization. Recently, the World Trade Organization warned its members that during global economic turmoil the sharp backward steps by major players may threaten international peace and stability of the world economy. Moreover, an increase in within-country income inequality during the period of rapid globalization has fueled an intense debate about the benefits of trade liberalization in emerging economies (Mohan, 2018). As a result, pressured by ongoing structural changes and the rise of nationalism, the policymakers in these markets are tempted to shape commercial relationships between states in order to protect domestic industries from import competition. Obviously, such actions have impact on marketing and branding strategies of firms domiciled or hosted in emerging markets (Reagan, 2018). However, the mechanisms underlying such impact are not well understood. In this study, we aim to uncover one of the mechanisms that explains the complex influence of protectionist policies in an emerging market on domestic branding activities in that market. Specifically, we examine changes in the emerging market brands' differentiation through the trademarks filed by the brand owners in twenty emerging economies. As a preview, we find a positive association between protectionism and trademarking activity of the emerging market brands. We offer explanation of such result and provide theoretical, managerial, and policy recommendations.

Literature and Framework

Protectionism

Prior research has established that countries adopt protectionist policies in response to recessions and/or losses in competitiveness through an appreciation of the real exchange rate (Bown & Crowley, 2012). Some evidence also suggests that countries erect trade barriers when their trading partners experienced weaker growth (Georgiadis & Gräb, 2016). The benefits of pursuing trade protection have been assessed

in several studies. For example, (Marsh, 1998) demonstrated that US firms, which seek anti-dumping protection had also experienced growth of market value of US firms. On contrary, Baggs and Brander (2006) demonstrate that lifting trade barriers and reducing protectionism hurt import-oriented but benefited export-oriented Canadian firms. In studying cultural antecedents of protectionist measures, Balabanis, Diamantopoulos, Mueller, and Melewar (2001) identify that consumer ethnocentrism and nationalism are associated with trade barriers that shield domestic producers against international competitors. As such, there is evidence that protectionist activities have impact on operations and performance of firms in the markets subject to such policies.

Strategy of the Emerging Market Brands

Strong brand is often claimed as top priority for firms operating in various categories and markets. After all, brands with strong equity often enjoy high customer loyalty and superior profitability stemming from positional advantages (Keller & Lehmann, 2006). Keller (1993) argues that companies use brands to establish relationships with their customers. As such, brand strategy involves design and implementation of marketing activities aimed at achieving effective brand differentiation in the target markets and maintaining relationships with customers and key stakeholders (Keller, 2013, Morgan, 2012). Building on these theoretical foundations and prior research, we identify brand differentiation – an extent to which a brand is distinctive from competitors (Keller, 2013) - that may be conducive to the changes in the branding strategies, caused by protectionism.

Differentiation of brands in global markets is a key imperative of many emerging market (EM) government policies aimed at growing and increasing the competitiveness of their economies. Such EM government policies often include pro-active efforts to increase domestic firms' competitiveness (Zhang & Tan, 2007), which often involve pro-market regulatory reforms that lift barriers to starting new businesses and transferring property, as well as focused state-backed initiatives such as *Made in China 2025* (China), *Federal Development Strategy 2020-2031* (Brazil), and *National Development Plan 2030* (South Africa). These protectionist initiatives fueled growth and escalation of the exports of the EM brands, recently.

Prior research (Bai, Du, Tao, & Tong, 2004, Fajgelbaum, Goldberg, Kennedy, & Khandelwal, 2020) suggests that protection of domestic industries shields home firms from foreign competition. Reduced competition creates opportunities for domestic firms on several levels. First, such firms may enjoy superior profitability and create resource slack for future investments in brand development and expansion abroad. Second, emerging market firms may devote more attention to serving customers and brand building rather than on monitoring and following competitors' moves. Finally, increasing nationalism and ethnocentrism in emerging markets may create positional advantages for domestic firms, which may be effectively exploited to capture market share from foreign competitor. Collectively, these arguments suggest that protectionism will lead emerging market brand owners to focus more on brand differentiation.

Hypothesis 1: The protectionist measures in an emerging economy are positively associated with the differentiation of the emerging market brands.

Method and Results

To conduct empirical test, we collected information on trademarks filed by domestic producers in twenty emerging economies over the period of 2000-2020. A trademark represents any sign or identifier capable of distinguishing the goods or services of one seller from those of other enterprises. Trademarks are protected by intellectual property rights. Trademark data was extracted from the World Intellectual Property Organization (WIPO) database. Differentiation was measured using annual trademark filing activity by EM firms. The protectionist measures were captured using counts of the tariffs and non-tariff measures (such as, veterinary control) from World Trade Organization (WTO). In addition, we used World Bank databases to record following covariates for our model: country's Gross Domestic Product per capita, population size, education attainment, annual inflation rate, poverty level, and unemployment rate (Bahadir, Bharadwaj, & Srivastava, 2015).

We used autoregressive model to fit the panel data. The results of the empirical model suggest that both tariffs and non-tariff measures have positive impact on the differentiation of the emerging market brands. As such, our main hypothesis was supported. The results of the post-hoc analysis

demonstrate that the studied effect was stronger in the economies with higher wealth levels and lower unemployment.

Discussion

This study makes several substantive contributions. Theoretically, it proposes the framework explaining the association between trade restrictions and domestic firm branding strategies. It also provides guidance to the managers on how shielding of the focal market may benefit their firms and brands. Specifically, shrinking competition from foreign brands provides opportunities to differentiate and grow brands domestically. Finally, the study offers implications to the policy makers by suggesting how trade restrictions may be used to support domestic businesses.

References

- Bahadir, S. C., Bharadwaj, S. G., & Srivastava, R. K. 2015. Marketing mix and brand sales in global markets: Examining the contingent role of country-market characteristics. *Journal of International Business Studies*, 46(5): 596-619.
- Bai, C.-E., Du, Y., Tao, Z., & Tong, S. Y. 2004. Local protectionism and regional specialization: evidence from China's industries. *Journal of international economics*, 63(2): 397-417.
- Balabanis, G., Diamantopoulos, A., Mueller, R. D., & Melewar, T. 2001. The impact of nationalism, patriotism and internationalism on consumer ethnocentric tendencies. *Journal of international business studies*, 32(1): 157-75.
- Bown, C. P. & Crowley, M. A. 2012. *Import protection, business cycles, and exchange rates: Evidence from the Great Recession*: The World Bank.
- Fajgelbaum, P. D., Goldberg, P. K., Kennedy, P. J., & Khandelwal, A. K. 2020. The return to protectionism. *The Quarterly Journal of Economics*, 135(1): 1-55.
- Flanders, M. J. 1965. Measuring Protectionism and Predicting Trade Diversion. *Journal of Political Economy*, 73(2): 165.
- Georgiadis, G. & Gräß, J. 2016. Growth, Real Exchange Rates and Trade Protectionism since the Financial Crisis. *Review of International Economics*, 24(5): 1050-80.
- Keller, K. L. 2013. *Strategic Brand Management*. 4th ed: Pearson.
- Keller, K. L. & Lehmann, D. R. 2006. Brands and Branding: Research Findings and Future Priorities. *Marketing Science*, 25(6): 740-59.
- Marsh, S. J. 1998. Creating barriers for foreign competitors: a study of the impact of anti-dumping actions on the performance of US firms. *Strategic Management Journal*, 19(1): 25-37.
- Mohan, R. 2018. Rising Ethnic Nationalism and Protectionism: Impact on Global Companies and Brands in Emerging Markets, *Strategic Marketing Issues in Emerging Markets*: Springer.
- Morgan, N. A. 2012. Marketing and Business Performance. *Journal of the Academy of Marketing Science*, 40(1): 102-19.
- Reagan, C. 2018. Levi Strauss CFO says trade war could tarnish American brands around the world. CNBC.
- Zhang, X. & Tan, K.-Y. 2007. Incremental Reform and Distortions in China's Product and Factor Markets. *The World Bank Economic Review*, 21(2): 279-99.

Resilience in Tourism Revenue: The Case of February 2023 Twin Earthquakes in Türkiye

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Resilience in Tourism revenue: The case of February 2023 twin earthquakes in Türkiye

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Extended Abstract

This article addresses the challenges of the financial resilience of tourist industry after Türkiye's twin earthquakes by highlighting the measures to tackle the disaster's aftermath. This also discusses the role of authorities during and after disaster to build this resilience as the timely intervention has helped them to minimize economic losses. The purpose of this article is twofold; firstly, to evaluate the magnitude of post-disaster losses on international tourism and secondly, to forecast how long will it take for the situation to get back to its pre-disaster normal level. Data reveals interesting and encouraging trends for tourism industry due to multiple reasons which have been discussed in detail. It has implications for earthquakes and other disasters occurring in other parts of the world, and their post-disaster recovery time period.

Keywords: Earthquake, Event study methodology, Resilience, Tourism revenue, Turkey

1. Introduction

The natural disasters always cause economic and human loss. Therefore, it becomes important to take up measures to tackle the aftermath of these disasters. One of the objectives of managing the aftermath is the minimization of economic losses due to the loss in inbound tourism. Thus measures

should be devised for the revival of tourism potential that prevailed before the disaster. These are twofold. One, we want to assess the post-disaster magnitude of losses due to the event. Secondly, we want to forecast how long will it take for the situation to get back to its pre-disaster normal level.

A host of external circumstances impact tourism including natural disasters such as earthquakes. Their effect on tourism revenue flows can be considerable. (Rosselló, Becken, & Santana-Gallego, 2020). This is felt even more so in countries where tourism is a major contributor to the economy. According to Statista website, the share of tourism sector to GDP is expected to grow from 7.01% to 12.65% from 2022 to 2028 (Degenhard, 2023).

A disaster of such enormity hit the southern region of Kahramanmaraş, Türkiye, on February 6, 2023. Two devastating earthquakes of magnitudes of 7.8 Mw and 7.5 Mw occurred about nine hours apart. The damage in property and lives was colossal. Official estimates of human lives alone put the injured at upward of 120,000; at least 50,000 perished (Kırkağaç & Karpuz, 2023). The extent of financial loss to Türkiye's economy was estimated at \$34 billion by the World Bank Report (2023). Also 1.25 million people lost their homes.

All this suggests that the adverse effect for industries, especially international tourism, would be felt for a long time. However, our study exhibits great resilience in this sector. As the data available since the event is only about six months, strong predictions cannot be made. Despite that, our results show a quick bounce back in this sector of Türkiye's economy.

2. Revenue Convergence

The event study methodology – also known as Residual analysis – is a widely used measure to capture the effect of a particular event on a financial indicator value. For instance Mazzocchi and Montini (2001) use it to measure the financial impact of the 1997 earthquake for tourism in the Umbria region of Italy. The aim of our study to estimate the change in tourism revenue over time for the particular natural disaster of these twin earthquakes.

First, we obtained the official tourism monthly data from Türkiye starting January 2022 (T.C. Kültür, 2023). This was cross checked against previous years' tourism data report from a second official source (Yatirim Ve İşletmeler, 2022). Then we checked for the effect of two independent variables on tourism revenue. These are the Turkish Lira to Euro exchange rate, and the Inflation rate of Türkiye. Both are important determinants of tourists deciding to opt for a particular destination. In other words, how far will one's budget go for one option versus another? Then the difference between actual tourist data and forecasted tourist data was taken to determine the residuals. Finally, the change in tourism revenues was assessed to check for convergence. The sooner the convergence, the more quicker is the recovery from the disastrous event. EViews 10 was used as software to run the tests.

Table 1

Variable	Coefficient	Prob.
C	11.43	0.00
EXR_L_E	0.12	0.00
INF	-0.14	0.00
R-squared	0.57	

Table 1 shows the first step. Tourist arrival is the Dependent variable. The first Independent Variable is Lira per Euro exchange rate(EXR_L_E), and it is found significant against tourists' arrival. The second Independent Variable is inflation rate (INF). It too is found significant against tourists' arrival. The coefficient of Determination is good, around 60%. This means the 60% of the variations in tourism arrivals are explained by these two independent variables.

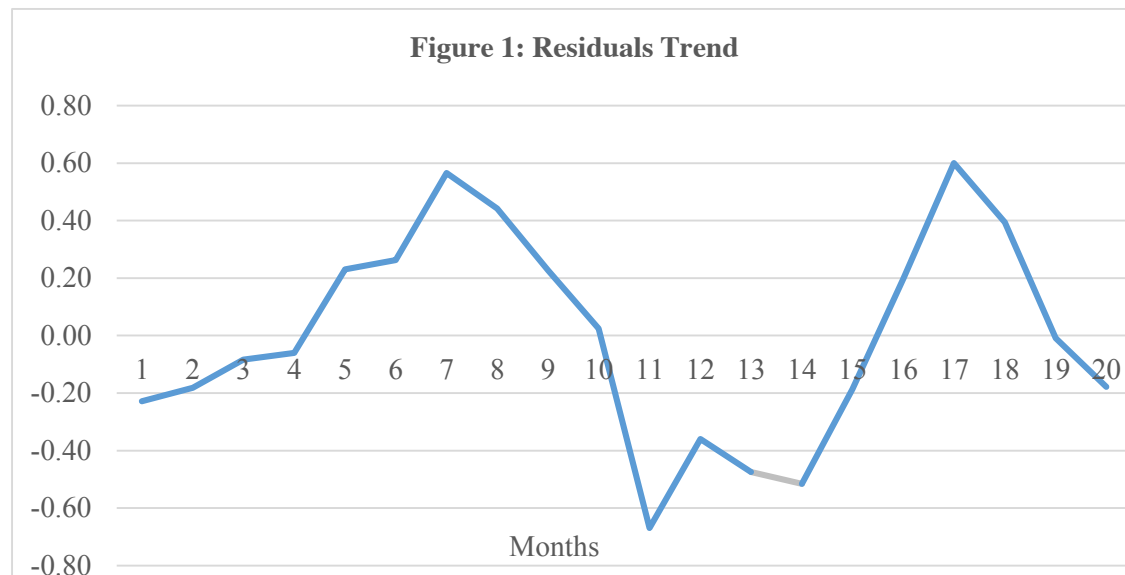
The next step is to study the residuals. Monthly data from January 2022 is used to track the residuals. These are plotted in Figure 1. The twin earthquake event is shown on the 14th data point by a slight difference in color.

Table 2

Variable	Coefficient	Prob.
C	-0.85	0.51
@TREND	-0.06	0.09

In Table 2, we applied convergence criteria to test for any convergence (@TREND) taking place in the residuals (i.e., any difference between actual and forecasted tourist values) post the earthquake

disaster. The beta value is significant at 10%. More importantly, its sign is negative. This means the after the twin earthquake disaster month, the errors are converging to zero i.e., becoming lesser and lesser. Thus the tourism sector is showing signs of revival in these six months, and it continues to revive further.



Lastly, it is also pertinent to note what is missing in this picture. Figure 1 shows random behavior in place of a clear trend. It is possibly due to the missing information due to the exclusion of other principal variables not selected in our study, for example, tourist-income, GDP performance, Law and order situation. This could improve the predictability of the model, and is a suggestion for future studies.

3. Conclusion

Our study set out to show the financial resilience of Türkiye's twin earthquakes on its tourist industry. What measures could explain that instead of a drop in tourism revenue compared to the previous time period, the trend has instead gone up? Part of the reason may be that Turkish authorities – even as early as late February – decided to keep encouraging tourists to come visit (Rizzi, 2023). It is also pertinent to note that the tourism hot-spots such as İstanbul, Antalya, Konya, Cappadocia, are largely situated away from Kahramanmaraş, toward the western side. Still, a disaster of this magnitude jolts the entire country, and not all tourists may be so well informed. The larger picture however, may best

be explained by the fact that post-Covid recovery was incomplete when the earthquakes hit. This is borne out by the manifold difference between 2021 and 2022 tourist inflows. What it means that while the tourist revenue *did* continue to increase after the event, it would have been even more, had the disastrous event *not* occurred. Once the year-to-year data comes in, the magnitude of that effect can be better studied. The good news for the industry is the observance of resilience in tourism shown in Türkiye's case. But will the same effect be observed in Morocco's case (Granados, Berger, Laurent, Barghouty, and Snell, 2023)? Or some other earthquake brewing elsewhere in the future? Time and data will tell.

4. References

- Degenhard, J. 2023. *Statista*, August 9, <https://www.statista.com/forecasts/1152997/tourism-sector-gdp-share-forecast-in-turkey>.
- Granados, S., Berger, M., Laurent, O., Barghouty, L., and Snell, J. 2023. The earthquake's destruction in Morocco in maps, videos and photos. *The Washington Post*. Accessed on <https://www.washingtonpost.com/world/2023/09/09/morocco-earthquake-map-marrakesh-visual/>.
- Kırkağaç, M., and Karpuz, E. 2023. Kahramanmaraş depremlerinin bist banka ve sigorta piyasasına etkisi üzerine bir olay çalışması analizi. *Kırıkkale Üniversitesi Sosyal Bilimler Dergisi*, 13(2), 387-401.
- Mazzocchi, M. and Montini, A. 2001. Earthquake effects on tourism in central Italy. *Annals of Tourism Research*, vol. 28(4): 1031-1046.
- Rizzi, C. 2023. Türkiye stays open for tourists despite earthquake tragedy. *Euronews.next*. Accessed on <https://www.euronews.com/next/2023/02/27/turkiye-stays-open-for-tourists-despite-earthquake-tragedy>.

Rosselló, J., Becken, S., and Santana-Gallego, M. 2020. The effects of natural disasters on international tourism: A global analysis. *Tourism Management*, vol. 79, 104080.

T.C. K lt r ve Turizm Bakanlıđı. 2023 Ocak – Temmuz D ndeminde  lkemizi Ziyaret Eden Toplam Ziyaret i Sayısı. <https://www.ktb.gov.tr/TR-96268/turizm.html>.

Yatirim Ve I letmeler Genel M d rl đ . 2022 Yılı Sınır Giri - ıkı  İstatistikleri. Accessed on <https://yigm.ktb.gov.tr/TR-249709/yillik-bultenler.html>

World Bank report. 2023. Accessed on <https://www.worldbank.org/en/news/press-release/2023/02/27/earthquake-damage-in-turkiye-estimated-to-exceed-34-billion-world-bank-disaster-assessment-report>.

Promoting Circular Economy Principles in the Textile Industry in Bangladesh: A Case Study of Waste Management Practises in a Textile Supply Chain

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Title: Promoting Circular Economy Principles in the Textile Industry in Bangladesh: A Case Study of Waste Management Practises in a Textile Supply Chain

Abstract:

The textile industry is one of the largest and most resource-intensive industries in the world, with significant environmental impacts, particularly in the areas of water consumption, energy use, and waste generation. To address these issues, many companies in the textile industry are exploring circular economy principles and waste reduction strategies. This research project will investigate the adoption of circular economy principles in the textile industry in Bangladesh, focusing on waste management practices in the textile supply chain. The project will involve a case study of a textile supplier in Bangladesh, with a particular focus on the company's approach to textile waste management and circular economy practices. The findings of the project will contribute to a wider understanding of circular economy principles in the textile industry and provide insights into best practices for waste reduction and circularity in textile supply chains.

Introduction

The textile industry in Bangladesh has a number of pressing environmental and social concerns. Significant water use, energy consumption, and greenhouse gas emissions lead to environmental degradation and climate change as a result of these difficulties (Islam et al., 2017). In addition, the textile sector generates voluminous volumes of waste, particularly textile waste, posing considerable difficulties for waste management and recycling (Hidayati et al., 2020). An estimated 92 million tons of textile waste are produced annually around the globe, making textile waste a serious issue in the industry (Ellen MacArthur Foundation, 2020). Textile waste is frequently thrown in landfills or burned in Bangladesh, posing environmental and health dangers (Islam et al., 2020). In addition, the industry has limited awareness and

comprehension of circular economy ideas and best practices for waste reduction and recycling (Hanssen et al., 2021).

To address these issues, Bangladesh's textile sector needs additional research and initiatives to promote circular economy ideas and waste reduction measures. This research will contribute to this endeavour by examining waste management methods and circular economy principles in a textile supply chain in Bangladesh, thereby providing insights into best practices and strategies for fostering circularity and waste reduction in the industry. Companies in the textile industry in Bangladesh and other nations interested in establishing sustainable and circular supply chain processes will find the research findings valuable.

Literature Review:

The textile industry is facing growing pressure to address its significant environmental impacts, particularly in the areas of water consumption, energy use, and waste generation. In recent years, there has been increasing interest in circular economy principles and waste reduction strategies as a means of addressing these issues (Farrant et al., 2018; Yang et al., 2020). Circular economy principles seek to minimize waste and maximize resource efficiency by designing out waste, keeping products and materials in use, and regenerating natural systems (Ellen MacArthur Foundation, 2021). In the context of the textile industry, circular economy principles are particularly relevant to waste reduction and resource efficiency. Textile waste is a significant problem in the industry, with an estimated 92 million tons of textile waste generated globally each year (Ellen MacArthur Foundation, 2020). Much of this waste ends up in landfills or incinerated, contributing to environmental degradation and greenhouse gas emissions (Hidayati et al., 2020). Circular economy principles, such as product redesign, recycling, and upcycling, offer a way to reduce this waste and promote resource efficiency (Hanssen et al., 2021). In Bangladesh, the textile industry is a major

contributor to the country's economy, accounting for over 80% of the country's exports (World Bank, 2021). However, the industry is also associated with significant environmental and social impacts, including water pollution, energy use, and labour rights issues (Islam et al., 2017). Despite these challenges, there are growing efforts within the industry to promote sustainable and circular practices, including waste reduction and circularity (Islam et al., 2020; Shah et al., 2021). Bangladesh's textile sector is one of the country's greatest economic contributors, employing millions of people and providing significant export earnings (Islam et al., 2020). Yet, the business is also related to substantial environmental and social issues, such as water pollution, energy use, and worker rights concerns (Shah et al., 2021). Many companies in the textile sector are investigating circular economy ideas and waste reduction solutions to meet these concerns. By planning out waste, keeping products and materials in use, and regenerating natural systems, circular economy ideas attempt to reduce waste and maximize resource efficiency (Ellen MacArthur Foundation, 2021). Circular economy ideas are particularly applicable to waste reduction and resource efficiency in the textile industry. An estimated 92 million tons of textile waste are produced annually on a global scale, making textile waste a significant industry issue (Ellen MacArthur Foundation, 2020). Much of this garbage is disposed of in landfills or is burned, adding to environmental deterioration and greenhouse gas emissions (Hidayati et al., 2020).

The textile sector in Bangladesh is increasing its efforts to promote sustainable and circular practices, such as waste reduction and circularity. The Bangladesh Garment Manufacturers and Exporters Association (BGMEA), for instance, has initiated many initiatives to promote sustainability in the industry, including the construction of a textile waste management system (Shah et al., 2021). The Bangladesh Textile Mills Association (BTMA) is another organization that has adopted water recycling systems and energy-saving methods to lessen environmental consequences (Islam et al., 2020). Notwithstanding these efforts, promoting circular economy principles and waste reduction in Bangladesh's textile industry still faces considerable obstacles. These obstacles include a lack of awareness and comprehension of circular economy principles, a lack of infrastructure and technology for waste management and recycling, and a lack of

collaboration and coordination within the supply chain (Islam et al., 2020; Shah et al., 2021). To address these issues, Bangladesh's textile sector needs additional research and initiatives to encourage circularity and waste reduction. This research project will contribute to this endeavour by examining waste management methods and circular economy concepts in a textile supply chain in Bangladesh and, providing insights into best practices and strategies to promote circularity and waste reduction in the industry.

Existing research on sustainability and circularity in Bangladesh's textile industry is primarily focused on the garment sector, and finds that collaboration among stakeholders is the solution for responsible practices within the textile industry in Bangladesh (Hossain, et.al., 2023). However, there is a need for greater research on the textile supply chain as a whole. In addition, research on waste management strategies and circular economy principles in the Bangladesh textile industry is scarce (Shah et al., 2021). This research project will address this need by evaluating the waste management procedures and circular economy principles of a textile manufacturer in Bangladesh. Beneficial insights will be gained regarding best practices and strategies for improving circularity and waste reduction in the textile industry supply chain in Bangladesh. The research will also contribute to a broader knowledge of circular economy principles and waste reduction measures in the textile industry, particularly in the context of poor nations such as Bangladesh, where environmental and social concerns are especially severe. By addressing these gaps in the existing literature, this study will make a significant contribution to the academic and industry knowledge of the circular economy and textile waste management in Bangladesh, as well as provide insights into best practices for promoting sustainable and circular practices in the industry.

Methodology:

This research project will use a case study approach to investigate waste management practices and circular economy principles in a textile supply chain in Bangladesh. The case study will focus on a textile supplier in Bangladesh, which will be selected based on its size and the extent of its waste management and circularity practices. The research will involve a combination of qualitative data collection methods,

including semi-structured interviews with key stakeholders within the supply chain, focus group discussion and site visits to the supplier's facilities to observe waste management practices. The collected data will be analyzed using thematic analysis to identify key themes and patterns in the supplier's waste management practices and circular economy principles.

Finding and Contribution:

The case study will try to reveal the current Waste Management Practices within the textile supplier in Bangladesh. Primare focus will be given on disposal and recycling system. We will try to explore with the supplier relies heavily on landfills and incineration for waste disposal, indicating a significant gap in sustainable waste management, or if they are trying to implement with circular economy system. Our research experience suggests that the textile industry has taken some initiative anbd there are some isolated initiatives, such asas the recyclingg of textile scraps, but we assume that the system lacks integration and that they are not widespread or systematic throughout the supply chain. The reason could the lack of regulatory barriers, a lack of awareness among stakeholders, or limited access to recycling infrastructure.

We expect that this research will provides valuable insights for textile suppliers in Bangladesh and similar contexts by highlighting the current state of waste management practices and the potential benefits of embracing circular economy principles. Suppliers can use this information to identify areas for improvement and take steps towards more sustainable operations. The study will try to identify regulatory barriers. Policymakers can use these findings to develop and implement policies that incentivize and facilitate the transition to circular practices in the textile industry, potentially through tax incentives, subsidies, or supportive infrastructure.

Additionally, it will develop the awareness and education about circular economy principles and sustainable waste management within the textile supply chain. Industry associations and organizations can leverage these findings to develop training programs and awareness campaigns for stakeholders. In conclusion, this

research project will shed light on the current status of waste management practices and circular economy principles in a textile supply chain in Bangladesh. The finding will provide actionable insights for stakeholders, policymakers, and researchers to work collaboratively toward a more sustainable and circular future for the textile industry in the region.

References:

Ellen MacArthur Foundation. (2020). A new textiles economy: Redesigning fashion's future.

<https://www.ellenmacarthurfoundation.org/publications/a-new-textiles-economy-redesigning-fashions-future>

Ellen MacArthur Foundation. (2021). Circular economy. <https://www.ellenmac>

Ellen MacArthur Foundation. (2020). A new textiles economy: Redesigning fashion's future.

<https://www.ellenmacarthurfoundation.org/publications/a-new-textiles-economy-redesigning-fashions-future>

Farrant, K., Fisher, T., & Wilkes, K. (2018). Reducing textile waste through sustainable supply chain management: A review. Sustainability, 10(3), 640. <https://doi.org/10.3390/su10030640>

Hanssen, O. J., Hauge, A. L., & Hansen, E. G. (2021). Circular economy strategies in the textile industry: A systematic review. Journal of Cleaner Production, 294, 126245. <https://doi.org/10.1016/j.jclepro.2021.126245>

Hidayati, N., Nurmahmudi, S., & El Mawazini, I. (2020). Sustainability of textile waste management: A systematic literature review. Journal of Cleaner Production, 245, 118906. <https://doi.org/10.1016/j.jclepro.2019.118906>

Hossain, M. T. B., Momin, M. A., & Dellaportas, S. (2023). Do stakeholders' interaction and collaboration influence CSR practice within supplier premises in Bangladesh? A managerial perception study. Social Responsibility Journal.

Islam, M. N., Bhattacharya, P., & Hossain, M. A. (2017). Environmental impact of textile industries in Bangladesh. Environmental Pollution, 225, 22-28. <https://doi.org/10.1016/j.envpol.2017.02.031>

Islam, M. S., Ali, M., Rahman, M. M., & Mostafiz, M. I. (2020). Sustainable textile production and consumption: A critical review. *Journal of Cleaner Production*, 268, 122228. <https://doi.org/10.1016/j.jclepro.2020.122228>

Shah, M. A., Afrin, T., & Sultana, S. (2021). Exploring sustainable practices in the textile industry of Bangladesh: A case study of Dhaka. *Sustainability*, 13(5), 2805. <https://doi.org/10.3390/su13052805>

World Bank. (2021). Bangladesh overview. <https://www.worldbank.org/en/country/bangladesh/overview>

Questionnaire for the Interview

1. Can you tell us about your company and the textile products that you produce?
2. How do you manage the waste generated during your textile production processes?
3. What are your current waste management practices, and how effective do you think they are?
4. Have you implemented any circular economy principles in your textile production processes? If so, can you describe them?
5. What are the main challenges that you face in promoting circularity and waste reduction in your textile production processes?
6. How do you think the textile industry in Bangladesh can promote circular economy principles and waste reduction strategies more effectively?
7. Are there any specific regulations or policies in Bangladesh that impact your waste management and circular economy practices?
8. Have you collaborated with other companies or stakeholders in the textile supply chain to promote circularity and waste reduction? If so, can you describe those collaborations?
9. What are your future plans for promoting circularity and waste reduction in your textile production processes?
10. Is there anything else that you would like to share with us about your experiences with waste management and circular economy principles in the textile industry in Bangladesh?

Unveiling the Symphony of Social Responsibility: Philippine SMEs' Response to Crisis

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Unveiling the Symphony of Social Responsibility: Philippine SMEs' Response to Crisis

Extended Abstract

Amidst the global pandemic's turmoil, Corporate Social Responsibility (CSR) has gained extraordinary prominence. The study explores how small and medium-sized enterprises (SMEs) engage in corporate social responsibility (CSR) during the COVID-19 pandemic in Bulacan, Philippines. It surveyed 35 SME proprietors to understand their motivations and actions. The study found that SMEs are resilient and engaged in CSR initiatives such as employee-centric efforts, consumer-focused campaigns, and community gestures. Practical insights guide SMEs towards harmonious CSR, resonating with resilience, adaptation, and social mindfulness in the business landscape. The study urges SMEs to embrace their role as social conduits and envision CSR as more than an obligation.

Keyword: Corporate Social Responsibility, Best Practices, Life Attitude Profile

1. Introduction

The contemporary business literature underscores the expanding role of businesses in society, encompassing not only traditional stakeholders but also employees, customers, suppliers, and the community (McLennan & Banks, 2019). The COVID-19 pandemic, akin to the Great Depression of the 1930s, has had a profound impact on health, society, and the economy (Euronews, 2020). This global event has prompted a reevaluation of corporate social responsibility (CSR) practices as firms respond by implementing diverse CSR initiatives, recognizing the evolving concerns of stakeholders (Vu & Buranatrakul, 2018).

CSR sets firms apart from competitors by enhancing corporate reputation and fostering goodwill among stakeholders (Lindgreen and Swaen, 2010). CSR, as defined in this study, involves a discretionary allocation of corporate resources to enhance social welfare and bolster relationships with key

stakeholders (Barnett, 2007). It is considered a potent tool for sustainable development, offering a win-win strategy, allowing firms to bolster financial performance while simultaneously providing significant social benefits during the COVID-19 pandemic (Mahmud et al., 2020; Bapuji et al., 2020; Guan et al., 2020; Guerriero et al., 2020; Kucharska & Kowalczyk, 2019). The pandemic has created a moment for astute CSR practitioners to shine, with companies actively engaging in initiatives that support the fight against the virus while abstaining from unethical practices (He & Harris, 2020).

Numerous studies have explored CSR responses to the COVID-19 pandemic, particularly in the context of Small and Medium Enterprises (SMEs). They emphasize the vital role of CSR in navigating pandemic challenges. However, there's a need to understand how SMEs in specific regions, such as Bulacan, Philippines, respond to the pandemic through CSR initiatives, given the heterogeneity of SMEs and the varying focus on employees (Mahmud & Ding, 2021; Bapuji et al., 2020; Guan et al., 2020; Guerriero et al., 2020; Kucharska & Kowalczyk, 2019). This study aims to address these gaps by investigating the local context, the sustainability of CSR initiatives, the impact on employees, and by providing practical guidelines and a map of CSR activities for SMEs in Bulacan.

This study aims to explore SME's responses to Coronavirus (COVID-19) Pandemic through CSR programs. This study examines registered SMEs in the Department of Trade and Industry from the province of Bulacan. Business firms with engagements in CSR activities during pandemic were considered in this study. An initial assessment of these firms was conducted to identify if qualified with the criteria set in this research. This study's general objective is to assess the SME's responses to Coronavirus (COVID-19) Pandemic through CSR programs. Specifically, this study aims to describe the characteristics of CSR engaged SME's in terms of type of business, type of industry, number of employees, years of doing business, years engaged in CSR. It also aims to describe the characteristics SME's owners in terms of age, sex, marital status, educational attainment. It examines the life attitude of SME owners. In addition, it identifies the CSR initiatives implemented by SMEs in terms of employees, customers, community. Moreover, this study identifies the CSR best practices of SME's. Lastly, it develops a map of CSR activities that can be utilized by SME's in Bulacan.

2. Methods

This study employs a descriptive quantitative research design, which aims to systematically gather and describe data in a structured manner to understand the characteristics and relationships within a specific population, in this case, SMEs in Bulacan and their CSR initiatives. The study uses purposive sampling to select SMEs with CSR initiatives operating in Bulacan, allowing for focused and relevant data collection, although it may limit the generalizability of findings. Out of 50 targeted business owners, 35 responded to the survey questionnaire, providing a 70% response rate that forms the basis for analysis, with consideration for potential response bias.

The study utilizes a survey instrument to gather data on SME characteristics, owner demographics, and CSR initiatives. Additionally, it employs a 7-point Likert scale instrument to assess the life attitudes of SME owners involved in CSR activities, adding a qualitative dimension to the study. Data collection is done through an online survey to ensure accessibility and convenience for respondents while following research ethics principles. Descriptive statistics are used to summarize and present the data, including frequencies, percentages, means, and standard deviations, to provide a clear and concise summary of SMEs' characteristics, owner demographics, CSR initiatives, and life attitudes. This research design and methodology offer a structured and systematic approach to achieving the study's objectives, providing a comprehensive understanding of how SMEs in Bulacan engage in CSR activities and their owners' attitudes, particularly in response to the COVID-19 pandemic.

3. Results

This study presents the frequency and percentage distribution of various profiles of small and medium-sized enterprises (SMEs) participating in the study. In terms of the type of business, the majority of the SMEs were categorized as Sole Proprietorships, constituting 57% of the total sample, while Partnership-based businesses accounted for 43%. Moving on to the type of industry, Merchandising was the most prevalent category, representing 43% of the SMEs, followed by Manufacturing at 34%, and Service-based SMEs at 23%. Regarding the duration of their business operations, 43% of the SMEs had been active for 4 to 6 years, while 31% had been operating for 7 to 9 years. Those with 1 to 3 years of business

experience comprised 6% of the sample, and businesses with 10 years or more accounted for 20%. When examining the duration of engagement in Corporate Social Responsibility (CSR) initiatives, a significant portion of SMEs, 46%, had been involved for 4 to 6 years, followed by 31% who engaged in CSR for 1 to 3 years. Meanwhile, 14% had been practicing CSR for 7 to 9 years, and 9% had an engagement of 10 years or more. These distributions provide a comprehensive overview of the characteristics of the SMEs participating in the study, shedding light on their business types, industries, longevity, and commitment to CSR endeavors.

This provides an insightful breakdown of the profiles of the small and medium-sized enterprise (SME) owners who participated in the study. The study presents the profile of SME (Small and Medium Enterprises) owners based on various demographic factors. In terms of age, the majority of SME owners fall into the 31-40 years old category, constituting 43% of the sample, while the 41-50 years old group makes up 29%. Those in the 20-30 years old and 51-60 years old categories account for 9% and 17%, respectively, with only 3% of SME owners being more than 61 years old. In the context of gender distribution, it shows that 57% of SME owners are male, while 43% are female. Regarding marital status, the largest group comprises married individuals, representing 34% of the sample, followed by singles at 26%. Widows make up 17%, and those who are separated constitute 6% of the SME owners. Looking at educational attainment, it indicates that the majority of SME owners have a Bachelor's degree (77%), followed by those with a Master's degree (17%). A smaller portion, 6%, has a vocational education background. These findings provide insights into the diversity of SME owners' profiles, with variations in age, gender, marital status, and educational background among those participating in the study.

In addition, this study provides a comprehensive insight into the life attitude profiles of the small and medium-sized enterprise (SME) owners in the study. The mean scores in various dimensions reveal the overall outlook and attitudes of these owners. The SME owners demonstrate a generally positive life attitude, with a mean score of 3.55 in the Life Purpose category, indicating a sense of purpose guiding their actions. A similar positivity is seen in the Existential Vacuum dimension, with a mean score of 4.05, suggesting a tendency to find meaning and purpose in their lives. Life Control, with a mean score of 3.80, reflects SME owners' belief in having reasonable control over their lives. The Death Acceptance

category, with a mean score of 3.55, highlights a positive outlook in acknowledging the inevitability of death.

Notably, the highest mean score is in the Will to Meaning dimension (4.52), indicating a strong drive to find purpose in their lives. Goal Seeking also achieves the maximum score of 5.00, emphasizing their proactive and determined approach in pursuing their aspirations. The Future Meaning to Fulfill dimension, with a mean score of 4.20, underscores their aspirations for meaningful goals in the future. With an overall mean score of 4.10, SME owners display a predominantly positive attitude, which could influence their responses to challenges, including their engagement in corporate social responsibility initiatives during the COVID-19 pandemic. This optimism may contribute to their resilience and effective navigation of uncertainties.

Moreover, this study offers a comprehensive analysis of the frequency and ranking of various corporate social responsibility (CSR) initiatives adopted by small and medium-sized enterprises (SMEs) in response to the COVID-19 pandemic. For Employee-focused initiatives, Continuous Payment of Salaries is the most frequently adopted CSR measure, emphasizing SMEs' commitment to their workforce's financial well-being. Flexible Work Schedules are also a priority, showing their responsiveness to employees' evolving needs. Other initiatives like Meal Allowance/Free Food, Training and Development, and Employee Assistance Programs demonstrate efforts to support employee well-being and development. In the realm of Customer-oriented initiatives, the Fight Pandemic Awareness Campaign is the top CSR effort, indicating SMEs' active role in raising public health awareness. Better Brand Perceptions and Product/Service Feedback initiatives follow, emphasizing the importance of a positive brand image and customer feedback. Within the Community, Charitable Activities are at the forefront, showing SMEs' commitment to providing essential support to their communities. Support to Medical Frontliners is also a priority, reflecting recognition of healthcare workers' crucial role during the pandemic. Partnership with Civic Organizations highlights collaborative efforts to address community needs.

Furthermore, this study presents a comprehensive mapping of potential Corporate Social Responsibility (CSR) activities that Small and Medium Enterprises (SMEs) in Bulacan, Philippines, can consider implementing in response to the Coronavirus (COVID-19) pandemic. The suggested CSR activities are

derived from a careful analysis of the SMEs' characteristics, owner profiles, life attitude profiles, and existing CSR initiatives. These activities are tailored to address the specific needs and challenges faced by SMEs during these unprecedented times. This comprehensive map of CSR activities reflects the unique characteristics and challenges faced by SMEs in Bulacan, providing a framework for businesses to engage in socially responsible actions that align with their capacities and resources. By implementing these initiatives, SMEs can not only contribute to societal well-being but also strengthen their relationships with employees, customers, and the community. This map serves as a practical guide for SMEs to navigate the complexities of the COVID-19 pandemic while fostering a positive impact on various stakeholders.

4. Conclusion

This study offers a comprehensive understanding of small and medium-sized enterprises (SMEs) engaged in corporate social responsibility (CSR) initiatives within the context of the COVID-19 pandemic. It reveals that SMEs in Bulacan predominantly consist of sole proprietorships, with a strong focus on employee-centric CSR initiatives, such as continuous payment of salaries and flexible work schedules. Additionally, SMEs prioritize customer-oriented initiatives, like awareness campaigns and enhancing brand perceptions. Community-oriented CSR efforts, including charitable activities and support for medical frontliners, are also prominent.

SME owners exhibit a positive disposition and a strong commitment to purpose-driven lives. This optimistic outlook likely influences their engagement in CSR initiatives. The study underscores the proactive and socially responsible nature of these SMEs, contributing to a more responsible and sustainable business landscape in Bulacan. However, there are limitations to the study, such as its geographical focus on Bulacan and its cross-sectional design. It primarily relies on self-reported information and does not extensively examine external factors or trends influencing CSR decisions. Despite these limitations, the study offers valuable insights into SMEs' CSR practices during a challenging period, paving the way for further research and practical applications in promoting responsible business practices.

Investigating the characteristics of SMEs engaged in CSR activities provides valuable insights into the types of businesses, industries, and demographics that are more likely to prioritize socially responsible actions. By identifying key attributes such as business type, industry, employee count, years of operation, and CSR engagement duration, we can gain a comprehensive understanding of the SME landscape and how it intersects with CSR practices. In addition, characteristics of SME owners, including age, sex, marital status, and educational attainment, are factors that can influence decision-making, business strategies, and CSR initiatives. Studying these owner attributes alongside their life attitudes provides a holistic view of the individual motivations and perspectives that drive SMEs towards engaging in socially responsible actions during a crisis like the pandemic.

While existing research has shed light on the CSR responses of SMEs to the COVID-19 pandemic, this study contributes by examining these responses in a specific regional context, considering SME heterogeneity, evaluating the long-term impact of CSR initiatives, focusing on employee-centric approaches, and offering practical insights and recommendations for SMEs in Bulacan. The examination of SME owners' life attitudes allows for a deeper exploration of how personal beliefs and values may influence CSR decisions and responses to challenges. Understanding how these attitudes may change or evolve in the face of a pandemic can shed light on the resilience and adaptability of SME owners as well as the potential for long-term shifts in CSR priorities. Moreover, by examining the specific CSR initiatives implemented by SMEs, including those directed towards employees, customers, and the community, the study can highlight innovative approaches that have proven effective in addressing pandemic-related issues. The identification of best practices within the SME sector offers practical insights that can guide other businesses looking to enhance their CSR efforts during times of crisis. Furthermore, developing a comprehensive map of CSR activities specific to SMEs in Bulacan serves as a practical tool for businesses in the region. This map can guide SMEs in their decision-making processes by showcasing a range of viable CSR actions that have been successful for others, thereby aiding them in contributing positively to their communities and society at large.

5. References

- [1] Bapuji, H., Patel, C., Ertug, G., & Allen, D. (2020). Corporate social irresponsibility and COVID-19. *Journal of Business Research*, 116, 214-227.
- [2] Barnett, M. L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of management review*, 32(3), 794-816.
- [3] Guan, Y., Hao, B., & Lechner, C. (2020). Responsible and irresponsible business responses to the COVID-19: Actions by Chinese large enterprises. *Corporate Social Responsibility and Environmental Management*, 27(5), 2412-2424.
- [4] Guerriero, A., Guido, G., & Mattia, G. (2020). How the COVID-19 pandemic influences on corporate social responsibility, reputation, and firm performance: Some empirical evidence. *Sustainability*, 12(17), 7000.
- [5] He, H., & Harris, L. (2020). The impact of Covid-19 pandemic on corporate social responsibility and marketing philosophy. *Journal of business research*, 116, 176-182.
- [6] Kucharska, W., & Kowalczyk, R. (2019). How to achieve sustainability? —Employee's point of view on company's culture and CSR practice. *Corporate Social Responsibility and Environmental Management*, 26(2), 453-467.
- [7] Lindgreen, A., & Swaen, V. (2010). Corporate social responsibility. *International journal of management reviews*, 12(1), 1-7.
- [8] Mahmud, A., Ding, D., & Hasan, M. M. (2021). Corporate social responsibility: Business responses to coronavirus (COVID-19) pandemic. *SAGE open*, 11(1), 2158244020988710.
- [9] McLennan, S., & Banks, G. (2019). Reversing the lens: Why corporate social responsibility is not community development. *Corporate Social Responsibility and Environmental Management*, 26(1), 117-126.
- [10] Vu, K. A., & Buranatrakul, T. (2018). Corporate social responsibility disclosure in Vietnam: A longitudinal study. *DLSU Business & Economics Review*, 27(2), 147-165.

Legitimacy in Consumer Behaviour: Using Semiotic Square in the Context of the Evolution of the E-cigarette Market

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Legitimacy in Consumer Behaviour: Using Semiotic Square in the Context of the Evolution of the E-cigarette Market

Abstract

This study makes a contribution to the field of consumer research by examining the practices by which consumption practices gain legitimacy. Building on institutional theory, the mechanisms via which legitimacy is established and modified are presented through semantic associations and through changes in regulatory, cognitive and normative structures. The context of the study is the market for e-cigarettes. Sales of e-cigarettes have increased dramatically since they were first introduced to the US market in the mid-2000s. E-cigarette sales in six Southeast Asian nations reached \$595 million in 2019; sales are predicted to reach \$766 million by 2023. The e-cigarette industry is currently centred on Southeast Asia because of the region's high smoking rate and expanding e-cigarette market. Considerable variation exists between different countries that is seen in the discourse operating at national levels: countries such as Indonesia have national discourses heavily shaped by social media and corporate interventions. Other countries have largely proscribed e-cigarettes and this has also worked to shape the national discourses. The study tracks the discursive evolution on e-cigarettes. Using a Greimasian or semiotic square as a tool for mapping the semiotic relationships, and their development, is set out in semantic frames. The study demonstrates that distinctive discourses characterised by opposing binaries of meaning can be found in regulatory, cognitive and normative structures. National data is used to illustrate the shifting discourses that have emerged in recent years within Southeast Asian countries. The role of government as well as social media is examined to illustrate the evolution of the discourse.