Department of Finance
Hong Kong Institute of Business Studies

Lingnan University 嶺南大學 香港 Hong Kong

Postgraduate Seminar Series

Large Language Models as Zero-Input Return Forecasters: Evidence from Cross-Sectional Predictability

- **Date:** 28 May 2026
- **Time:** 10:30 – 12:00
- **Venue:** SEK206
- **Presenter**: Cui Aixin (PhD Student of Finance）

Abstract: This study examines whether large language models (LLMs) contain incremental predictive information about future cross-sectional stock returns when provided with zero firm-specific input. We elicit return forecasts from a set of frontier LLMs using a strict zero-information prompt and construct a panel of forecasts at the (ticker, date, model) level. We then evaluate forecast performance across multiple horizons (1-, 3-, and 12-month ahead) using both directional accuracy and magnitude-based error metrics, benchmarked against economically meaningful nulls. In particular, we compare LLM absolute forecast errors to a historical baseline that predicts each stock's future return using its own trailing returns, thereby isolating whether LLM priors outperform simple time-series extrapolation. We further study heterogeneity by firm size (high vs. low market capitalization) and model features (e.g., web-enabled vs. non-web models), and estimate panel regressions with appropriate fixed effects and lagged return controls. Overall, the project provides a clean "zero-information" test of whether LLM priors embed return-relevant structure beyond purely historical benchmarks, and informs the broader debate on forecasting skill versus memorization in LLM-generated economic predictions.

All are welcome

Contact:

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