

Lecture 1. The Exchange Rate System & Macroeconomic Policy

1. Some Basic Concepts on Exchange Rate

(1) The determinants of exchange rates

The demand for foreign exchange is derived from the demand for foreign goods and services (including financial assets). The supply of foreign exchange is derived from foreign residents' demand for domestic goods and services. The equilibrium of exchange rate is determined by:

- Changes in real interest rates
- Changes in productivity
- Changes in consumer preferences
- Perceptions of economic stability

(2) Purchasing-power-parity (PPP)

PPP --- in the absence of government intervention and significant transportation costs and tariffs, internationally traded similar goods should sell for the same effective price when converted into the same currency.

Domestic price level of traded goods = foreign price level of traded goods x nominal exchange rate

Implication: holding nominal exchange rate constant means domestic price level cannot be diverged too far away from the foreign price level.

(3) Interest-rate- parity (IRP)

IRP --- the interest rate differential between two nations should be equal to the expected percentage change in the nominal exchange rate.

Foreign interest rate – domestic interest rate = expected

percentage change in nominal exchange rate

Implication: holding nominal exchange rate constant means domestic interest rate should be equal to the foreign interest rate.

2. The Choice of Exchange Rate Regimes

(1) The types of exchange rate regimes

- Hard pegs: arrangement with no separate legal tender, currency board, other conventional fixed pegs
- Soft pegs: pegged rate in horizontal band, crawling peg, rates within crawling bands
- Floating: managed float with no pre-announced exchange rate path, independently floating

(2) Factors affecting the choice of exchange rate regimes

- Exchange rate stability
- Freedom to pursue domestic policies
- Openness of the economy
- Control of inflation
- Risk of speculative attack on currency

(3) Changing international trend of exchange rate regimes

In the last decade, the share of both hard pegs and floating has been gaining at the expense of soft pegs among all countries. According to Stanley Fischer, the main reason for this change, among countries with open capital account, is that soft pegs are crisis-prone and not viable over long periods due principally to the impossible trinity --- a fixed exchange rate, capital mobility, and a monetary policy dedicated to domestic goals.

3. A brief history of exchange rate arrangement in Hong Kong

See attached Table

4. The linked exchange rate system in Hong Kong

(1) What is a linked exchange rate system in Hong Kong?

The linked exchange rate system in Hong Kong is a currency board system, which requires both the stock and flow of the monetary base to be fully backed by the foreign reserves. This means that any change in the monetary base is fully matched by a corresponding change in foreign reserves at a fixed exchange rate. In Hong

Kong, the monetary base comprises:

- Certificates of Indebtedness (as backing for banknotes) and coins issued;
- the net balance of clearing accounts (known as the Aggregate Balance) of the licensed banks held with the Hong Kong Monetary Authority (HKMA) for the purpose of effecting the clearing and settlement of transactions between the banks themselves and also between the HKMA and the banks;
- the outstanding amount of Exchange Fund Bills and Notes.

The latest balance sheet of the Exchange Fund:

http://www.info.gov.hk/hkma/eng/press/press_f.htm

(2) What does a linked exchange rate system do and how?

It basically fixes HK dollar exchange rate with US dollar at US\$1=HK\$7.8. It does so through the following factors:

- government economic discipline and full reserve backing for currency issues
- two automatic stabilizers:

specie flow --- an outflow of capital, as a result of lacking confidence in the exchange rate, would lead to a contraction of the money supply. Interest rates then go up and a counter-flow of funds is induced.

currency arbitrage --- to make profit by exchanging one

currency for another at the officially fixed rate when the market exchange rate diverges from the official rate.

The main feature: fix the exchange rate using market forces.

(3) Why a linked exchange rate for Hong Kong?

It was established in 1983 during the deadlock of Sino-British negotiation of the future of Hong Kong primarily to restore people's confidence in HK dollars. It also helps a small open economy, such as the Hong Kong's, to reduce the cost of exchange rate volatility. The exchange rate can be very volatile particularly for Hong Kong as it has no control over capital movement.

5. The impact of a linked exchange rate system on HK's Macroeconomic policy

(1) Monetary policy

Due to the linked exchange rate system, Hong Kong's interest rate cannot diverge from the US interest rate by a significant margin. The government cannot use open market operations to influence money supply. So Hong Kong loses its independent monetary policy.

(2) Fiscal policy

The Hong Kong government has to maintain a huge reserve in order to make people confident in its linked exchange rate system, and hence it has to keep a budget balance in a medium term.

(3) Other constraint

Hong Kong has to keep a very flexible economic system.

Conclusion: due to the constraints on both its monetary and fiscal policies, the Hong Kong government has limited power to control business cycles.

(4) Summary: the Pros and Cons of Linked Exchange Rate System

I. Pros

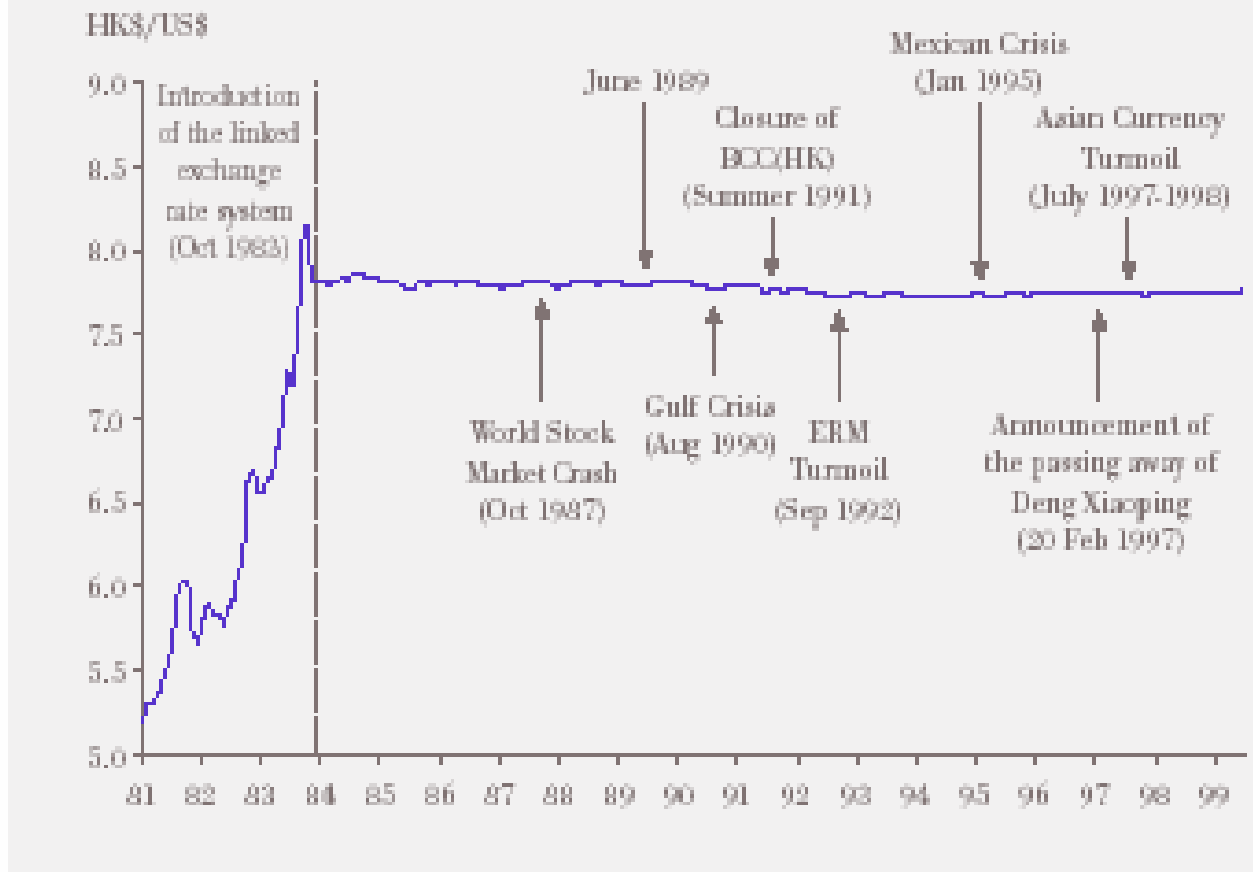
- Bring more stability and confidence to the HK economy and government
- To keep the real sector of the economy more flexible
- Help HK to compete as an international financial and trade center
- Keep the banking system under tight control

II Cons

- Less means to defend HK economy from “shocks”
- Inability to adjust and huge risk of exit
- The absence or lack of a lender-of-last resort
- The cost of keeping a large foreign reserves

EXCHANGE RATE REGIMES FOR THE HONG KONG DOLLAR		
<i>Date</i>	<i>Exchange Rate Regime</i>	<i>Reference Rate</i>
1863 – 4 November 1935	Silver Standard	Silver dollars as legal tender
December 1935 – June 1972	Link to Sterling	£1 = HK\$16 (December 1935 – November 1967)
	Link to Sterling	£1 = HK\$14.55 (November 1967 – June 1972)
6 July 1972	Link to the US dollar with ± 2.25% intervention bands around a central rate	US\$1 = HK\$5.65
14 February 1973	Link to the US dollar	US\$1 = HK\$5.085
25 November 1974	Free float	Exchange rates on selected dates US\$1 = HK\$4.965 (25 November 1974) US\$1 = HK\$9.600 (24 September 1983)
17 October 1983	Link to the US dollar	US\$1 = HK\$7.80

Hong Kong Dollar Exchange Rate



Readings:

<http://www.imf.org/external/np/speeches/2001/010601a.pdf>

<http://www.hkbu.edu.hk/~econ/web986.html>

http://www.info.gov.hk/hkma/eng/public/hkmalin/hkmalin_eng.pdf

<http://www.hkbu.edu.hk/~sktsang/esem99.PDF>