



Enhancing the Safety of Foreign Exchange Settlement - Hong Kong's experience

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Global foreign exchange market

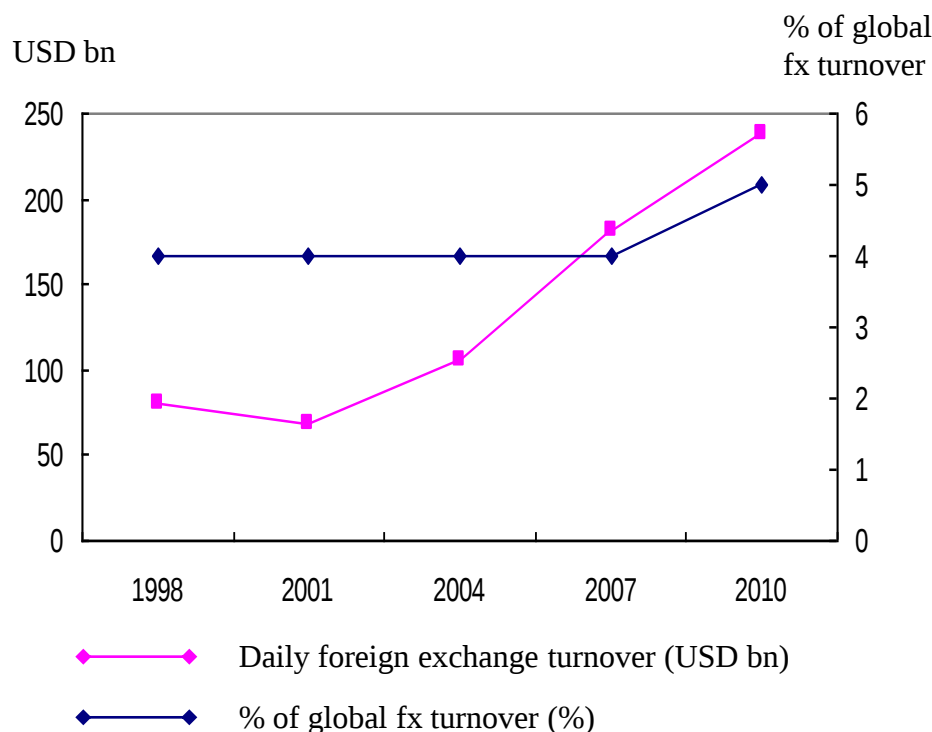
- Highlights of the Triennial Central Bank Survey – Report on global foreign exchange market activity in 2010 :
 - Global foreign exchange market turnover was 20% higher in April 2010 than in April 2007, with average daily turnover of \$4.0 trillion compared with \$3.3 trillion
 - Foreign exchange market activity became more global, with cross-border transactions representing 65% of trading activity in April 2010
 - UK continued to be the most active foreign exchange trading centre which accounted for 37% of all foreign exchange market turnover, followed by US (18%), Japan (6%), Singapore (5%), Switzerland (5%), Hong Kong (5%) and Australia (4%)



Foreign exchange market in Hong Kong

- Similar to the trading pattern observed in other economies, fx transactions conducted in Hong Kong showed a rapid growth in the past 10 years.
- In April 2010, daily average fx turnover in Hong Kong reached USD 238bn.
- Hong Kong continued to be one of the most active fx trading centres and accounted for 6% of global fx turnover in 2010 (up from 5% as reported in the previous four triennial surveys).

Daily foreign exchange turnover in Hong Kong



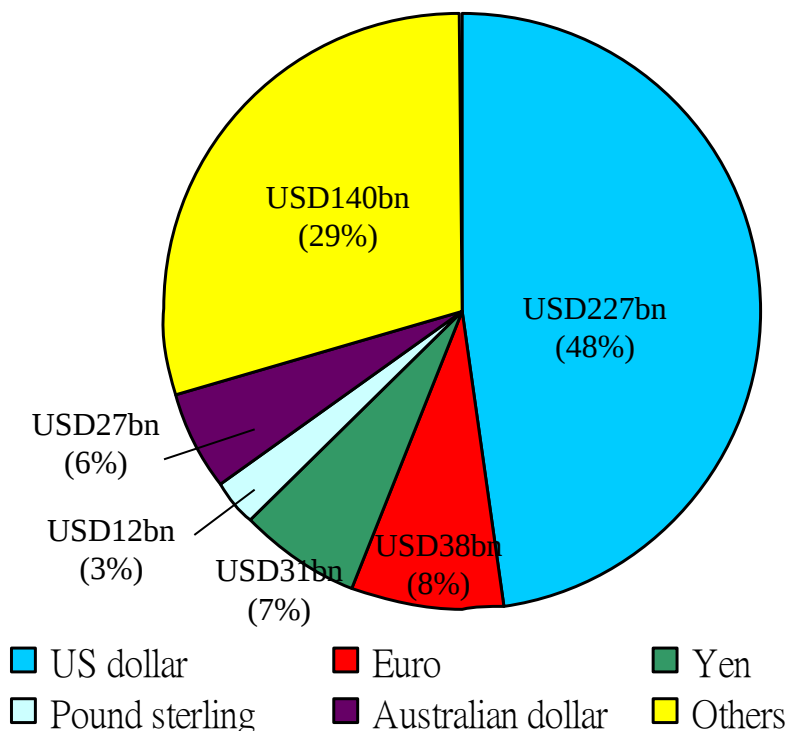
Source: Triennial Central Bank Survey 2010



Currency composition of the foreign exchange transactions in Hong Kong

- The two most active currencies traded in Hong Kong were USD and Euro, which amounted to USD227bn and USD38bn per day in April 2010.
- RMB fx transactions recorded substantial growth since the liberalization of RMB business in Hong Kong in July 2010.
- The daily average value of RMB fx transactions increased from negligible amount before July 2010 to around USD1bn in January 2011.

Daily average fx turnover by currency in Hong Kong in April 2010 (in USD equivalent)



Note: As two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Source: Triennial Central Bank Survey 2010



Foreign currency RTGS systems in Hong Kong

- As USD, Euro and RMB contribute to a large portion of fx trades in Hong Kong, it is important to have the necessary financial infrastructure to ensure safe and efficient settlement of the three foreign currencies.
- In addition to HKD RTGS system which was established in 1996, Hong Kong has USD, Euro and RMB RTGS systems which are summarised below:

	USD RTGS system	Euro RTGS system	RMB RTGS system
Launch date	August 2000	April 2003	June 2007*
Settlement institution/ Clearing Bank	HSBC	Standard Chartered Bank (Hong Kong)	Bank of China (Hong Kong)
Participant no. as of end 2010	231	50	96
Daily average turnover in 2010	USD10.9bn	Euro581mn	RMB5bn
Major features:			
Settlement of real-time payment	Yes	Yes	Yes
Bulk settlement	Yes	Nil	Yes
Intraday and overnight repo	Yes	Yes	Yes
Intraday and overnight overdraft	Yes	Yes	Nil

* Upgraded from RMB Settlement System which was launched in March 2006



Payment-versus-payment (PvP) links

- Having USD, Euro and RMB RTGS systems in Hong Kong cannot help banks reduce their fx settlement risks unless PvP links are in place.
- Six PvP links between Hong Kong's RTGS systems were established:
 - USD/HKD (established in 2000)
 - USD/Euro, Euro/HKD (established in 2003)
 - RMB/HKD (established in 2006)
 - USD/RMB, Euro/RMB (established in 2009)
- Under PvP arrangement, settlement of two currency legs of a fx transaction will take place simultaneously in the respective RTGS systems. Once settled in Hong Kong's RTGS systems, payments become final and irrevocable in all circumstances.
- PvP arrangement efficiently eliminates the risk of having one currency of a fx transaction settled but not the other.



Cross-border PvP links (1)

- USD accounted for the majority of fx transactions not only in Hong Kong, but also in other Asian countries such as Malaysia and Indonesia. According to the Triennial Central Bank Survey 2010,
 - in Malaysia, USD6.7bn out of USD7.3bn daily average fx transactions involved USD
 - In Indonesia, USD3.2bn out of USD3.4bn daily average fx transactions involved USD
- Under the conventional arrangement, Malaysian Ringgit or Indonesian Rupiah leg of a fx transaction is settled in Asian time zone whereas the USD leg is settled in the US time zone. The duration gaps for settling USD/MYR and USD/IDR fx transactions are:

	<u>Range</u>	<u>Average</u>
Buy USD/MYR	34 to 38 hours	36 hours
Sell USD/MYR	15 to 25 hours	17 hours
Buy USD/IDR	28 to 55 hours	34 hours
Sell USD/IDR	15 to 42 hours	20 hours



Cross-border PvP links (2)

- The longer the duration gap for settling a fx transaction, the higher exposure risk to the bank's counterparty.
- Taking advantage of the fact that Hong Kong is located in the same time zone of Malaysia and Indonesia, PvP links between Hong Kong's USD RTGS system and Malaysia's RENTAS and Indonesia's Rupiah RTGS system can effectively help banks reduce their fx settlement risks.
- USD/MYR PvP link was established in 2006, and USD/IDR PvP link in 2010.

Illustration – Benefits of using PvP link?

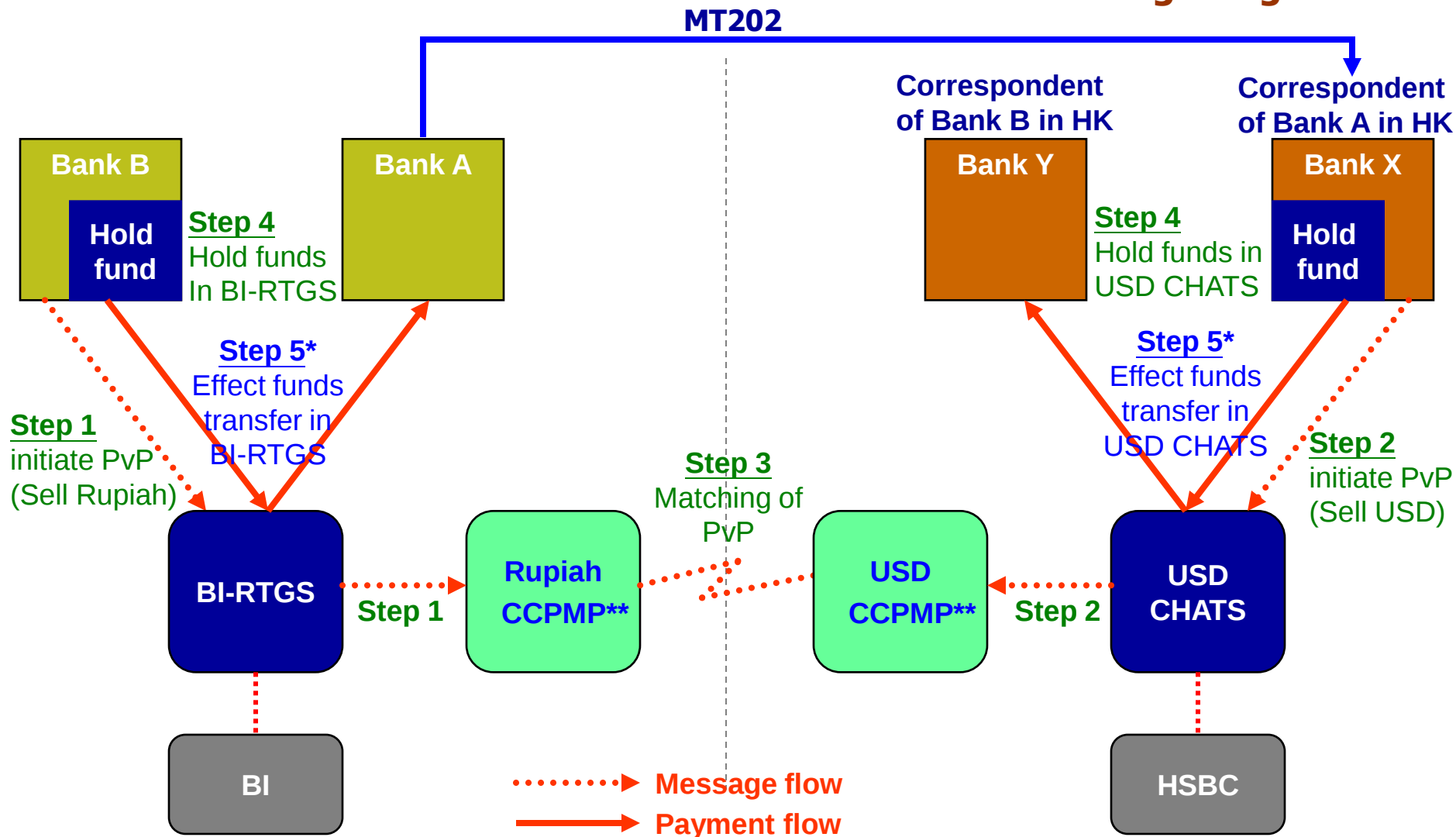
- Assume Bank A sells Ringgit to Bank B in return of USD. Under the PvP arrangement, Ringgit payment will be settled in Malaysia's RENTAS with Bank A's account debited and Bank B's account credited. USD payment will be settled in Hong Kong's USD RTGS system with Bank B's correspondent bank's account debited and Bank A's correspondent bank's account credited.
- Both Ringgit and USD payments are settled simultaneously.
- USD funding received can be immediately used in Asian time zone.



Mechanism of a PvP transaction

Indonesia

Hong Kong



* Step 5 will be done in the Rupiah and US dollar RTGS respectively in a synchronised manner.



Other measure taken by the HKMA to help banks reduce foreign exchange settlement risks

- Apart from establishment of PvP links, HKD has become one of the CLS currencies since 2004.
- As of today, there are 17 CLS currencies including Mexican Peso, Canadian dollar, Pound Sterling, Israeli Shekel, Japanese Yen, Korean Won, Danish Krone, Euro, US dollar, Hong Kong dollar, Singapore dollar, Norwegian Krone, Australian dollar, New Zealand dollar, South Africa Rand, Swedish Krona and Swiss Franc.
- Any fx transactions with both currency legs being CLS currencies can be settled through CLS, thus eliminating fx settlement risks.



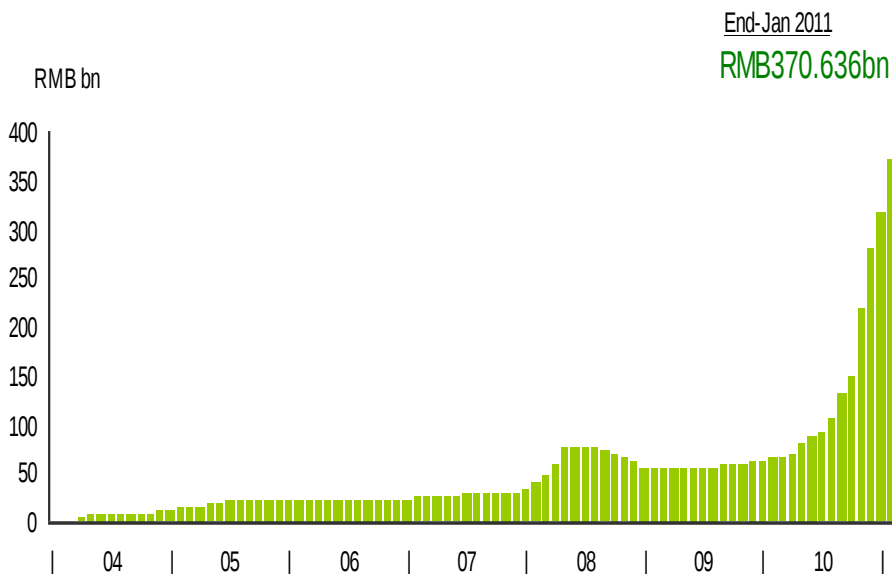
Policy changes that lead to the RMB business developments in the offshore market

- July 2010: Clearing Agreement revised
 - **FI participants:** opened up to all types of financial intermediaries (banks – HK and overseas, securities & investment houses, asset managers, insurance companies, etc.)
 - **Product range:** banks are free to offer all types of RMB products (eg. fx, investment products, wealth management, insurance policy)
 - **Client coverage:** extended to all corporates; overseas banks can provide services to individuals in the overseas markets
 - **RMB conversion:** no restrictions between banks or with clients; conversion with Clearing Bank have to be trade-related, or if otherwise, meeting the Mainland's requirements
 - **Two-tier clearing structure:** participating banks in the RMB RTGS system in Hong Kong can offer all types of Renminbi services to other banks and financial institutions



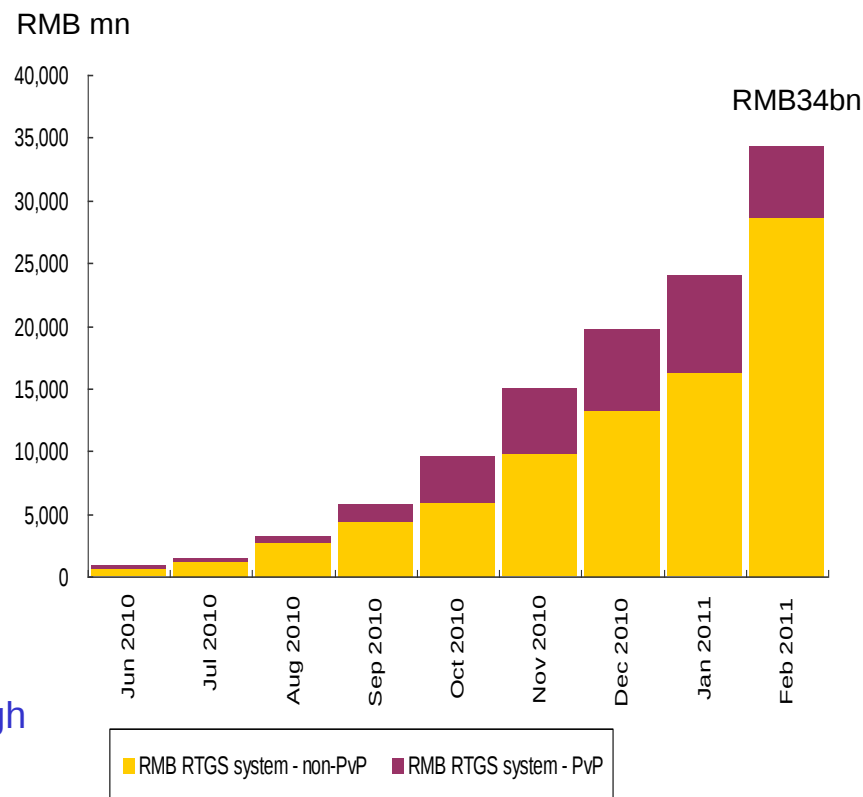
RMB liquidity and fx activities in Hong Kong

RMB deposits in Hong Kong



- As of end Jan 2011, RMB deposits reached RMB370 bn which accounted for 11% of foreign currency deposits or 5.3% of all deposits in Hong Kong.
- In Feb 2011, the average daily turnover settled through Hong Kong's RMB RTGS system totalled RMB34 bn, of which RMB5.6 bn was done on PvP basis (which gives a rough estimate of the size of the RMB fx market in Hong Kong).

RMB RTGS system – average daily turnover





Potential developments in Hong Kong

- Considering that (i) Hong Kong is the only economy outside Mainland China to operate a RMB RTGS system; and (ii) there shows an increasing use of RMB worldwide for trade settlement purpose, the HKMA is exploring the feasibility of the following to help banks manage their fx settlement risks:

riding on existing infrastructure, to build

- PvP link between Hong Kong's RMB RTGS system and Malaysia's RENTAS
- PvP link between Hong Kong's RMB RTGS system and Indonesia's Rupiah RTGS system

establishing new infrastructure

- PvP link between Hong Kong's RMB RTGS system and the RTGS systems of any interested countries



Thank you