



## Media Workshop on HKEx's RMB Products RMB Currency Futures

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Trading Division  
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## Overview of Offshore RMB Market

# Key Milestones in Development of Offshore RMB Market in Hong Kong



Statistics<sup>^</sup>

## Personal RMB Business

- RMB deposit-taking, cheque, credit / debit card and remittance services

RMB Deposit RMB563 bn (as of end of Jul 2012)

## RMB Bond Market

- 1<sup>st</sup> RMB bonds by Mainland financial institution (CDB)
- 1<sup>st</sup> RMB sovereign bond (MOF)
- 1<sup>st</sup> RMB bond by overseas corporate (McDonald's)
- 1<sup>st</sup> RMB bond by Mainland non-financial institution (Baosteel)

Bond Issuance >RMB100 bn (Year 2011)

## RMB Trade Settlement

- Pilot scheme kicks off in five pilot Mainland cities
- Expanded to 20 provinces and cities in the Mainland
- Further expanded to entire Mainland

RMB1,915 bn (Year 2011)

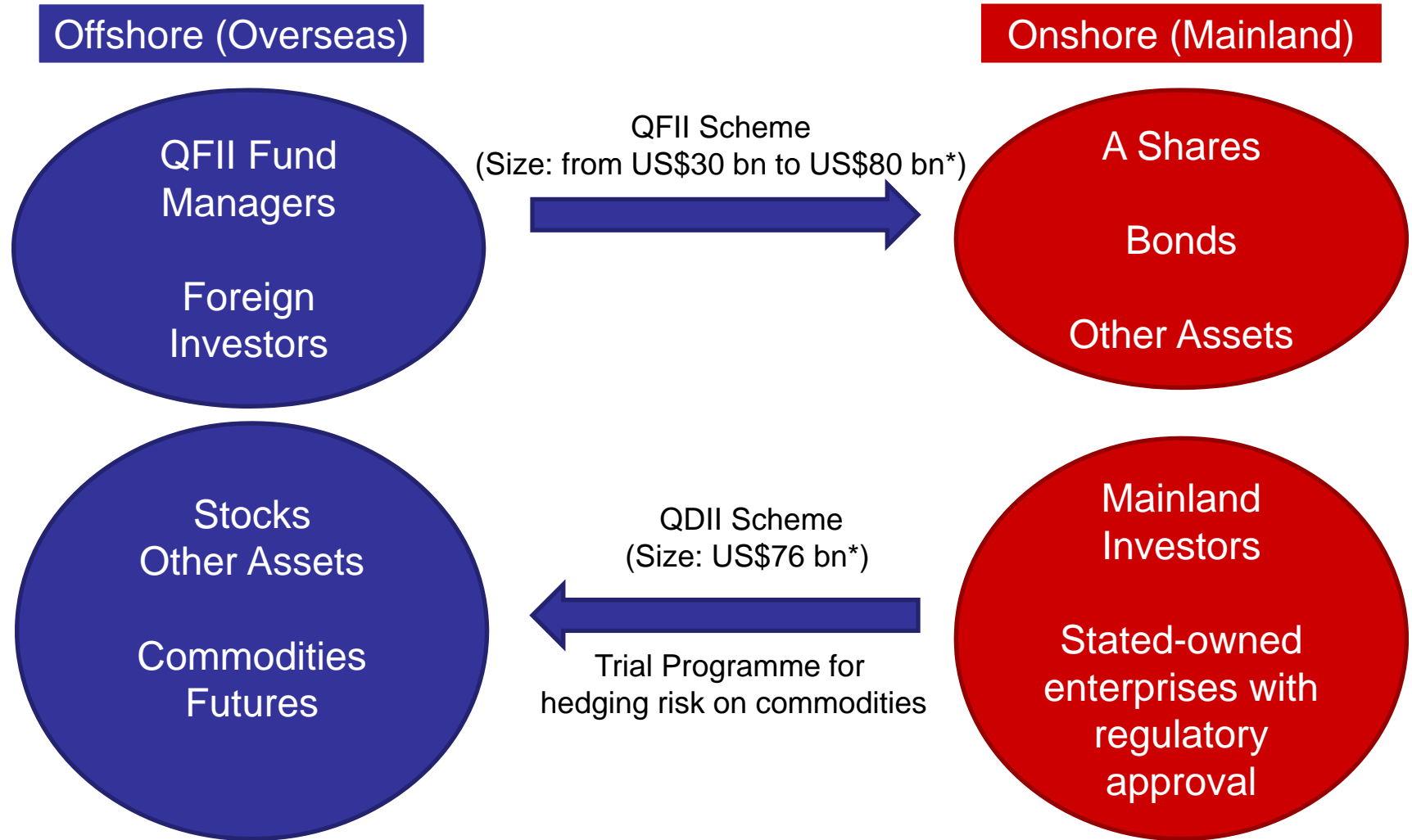
## RMB Investment

- RMB ODI and RMB FDI\*
- RMB Gold ETF
- RQFII scheme
- RQFII A-share ETFs
- RMB REIT

RQFII Quota RMB70bn (as of end of Apr 2012)

\*ODI – Overseas Direct Investment, FDI – Foreign Direct Investment <sup>^</sup>Source: HKMA and CSRC

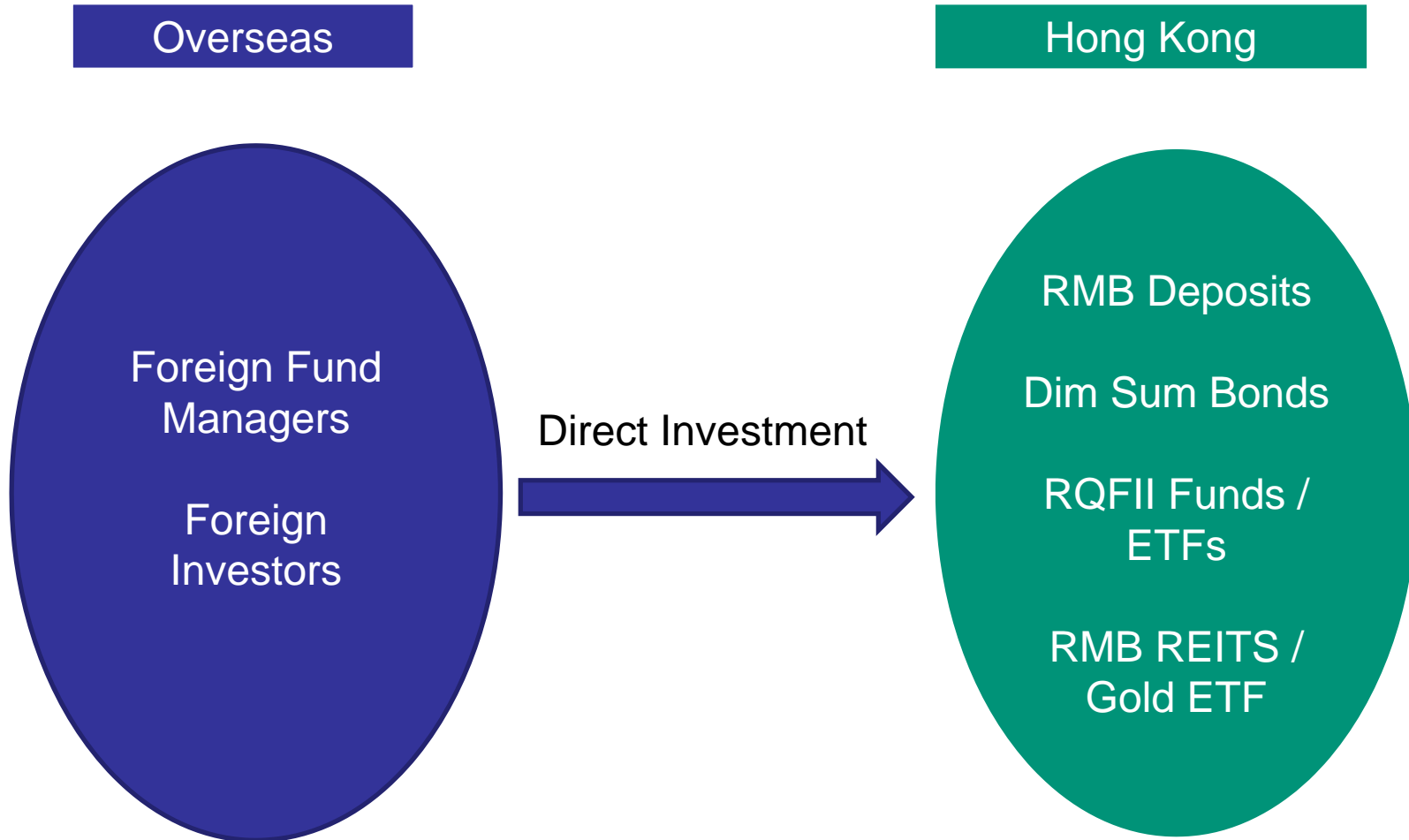
# Demand to Hedge RMB Currency Risk



**RMB Currency Futures tap the demand to hedge RMB currency risk**

\*As of April 2012

# Demand to Hedge RMB Currency Risk



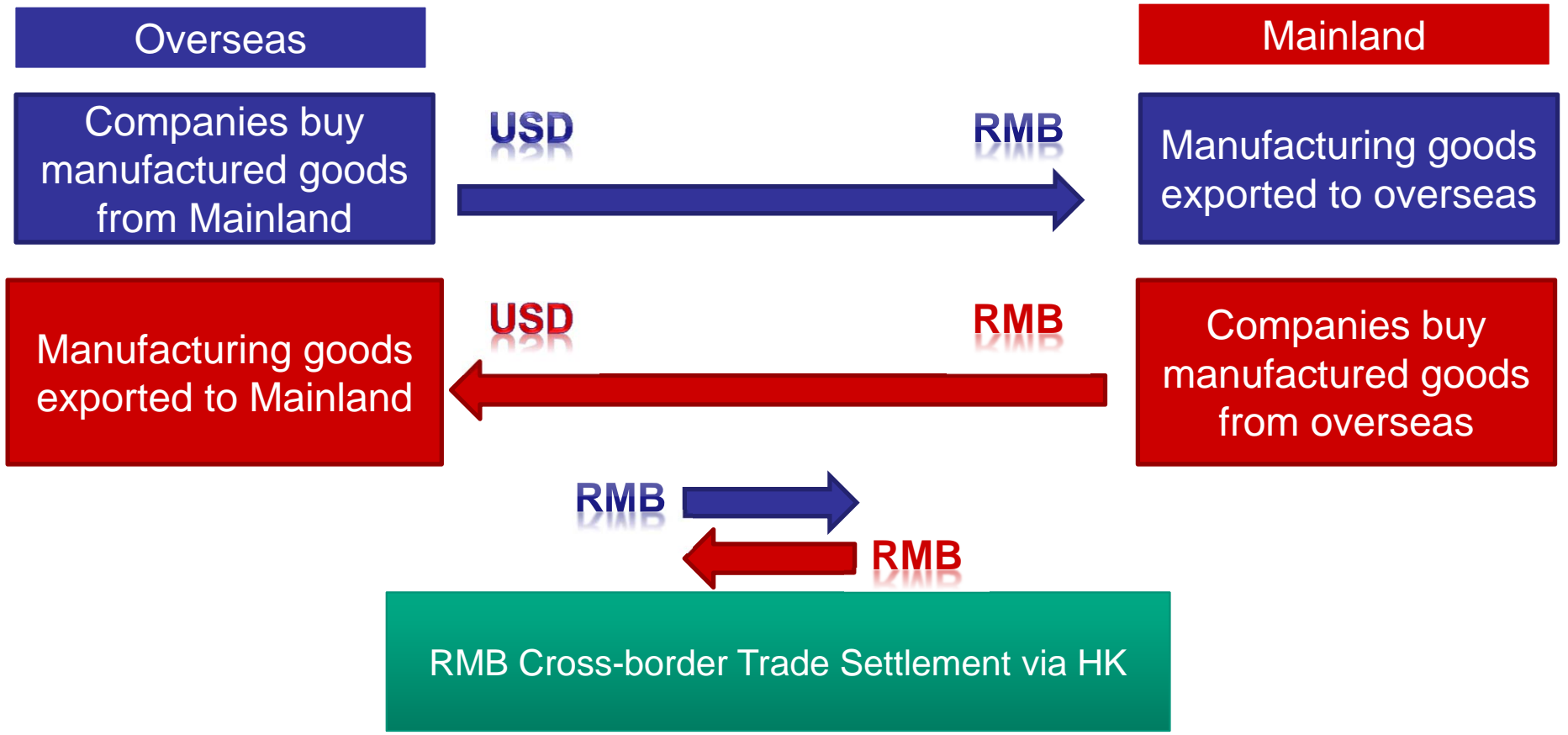
***RMB Currency Futures tap the demand to Hedge RMB currency risk***

\*As of April 2012

# Demand to Hedge RMB Currency Risk



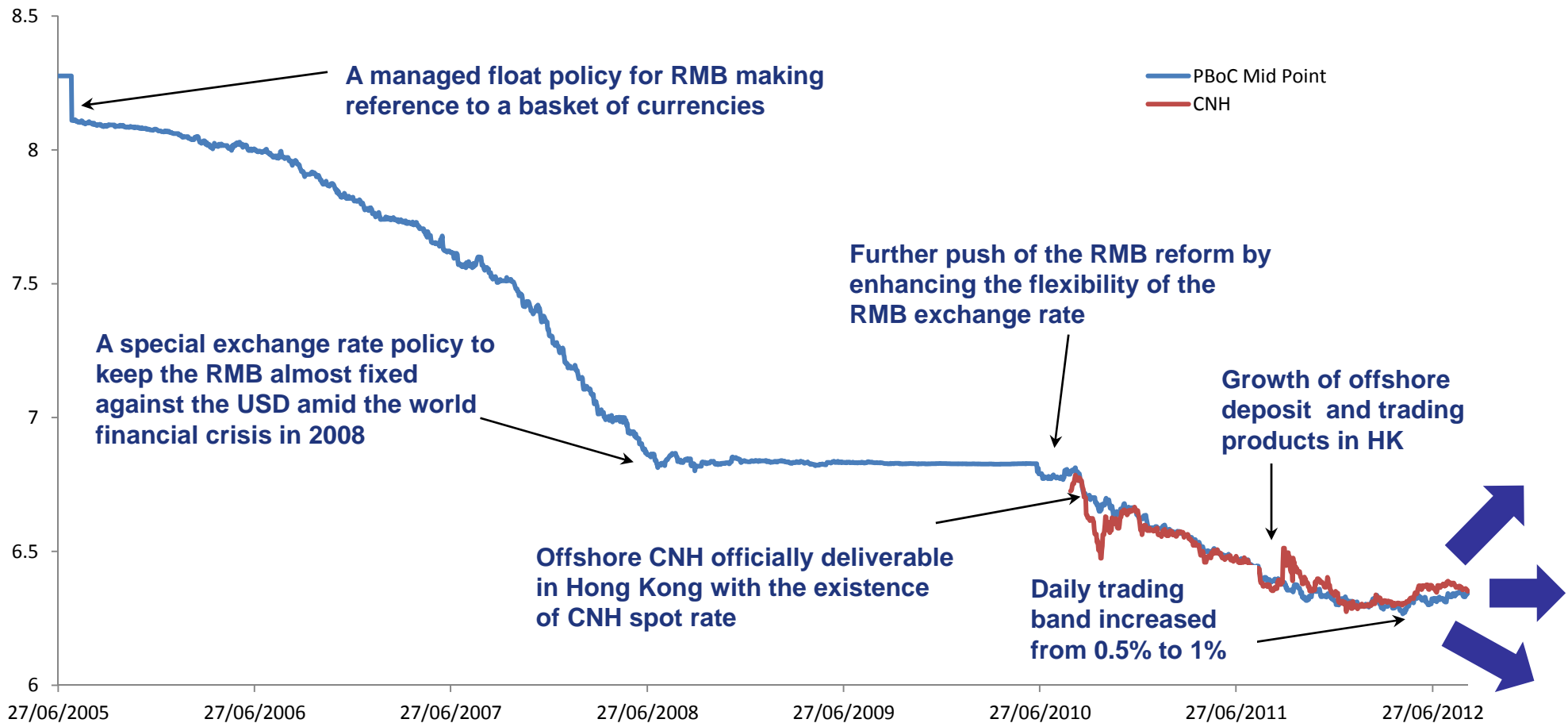
## Trade Finance and Cross-border Trade Settlement in RMB



**RMB Currency Futures tap the demand to Hedge RMB currency risk**

# Trend of RMB Spot Rate

**PBOC Official Exchange Rate (USD/RMB) & Offshore RMB Spot Rate (USD/CNH)**  
 (Period : 27-June-2005 to 30-August-2012)





# Trend of Offshore RMB NDF and Deliverable Forward

**Offshore 12 month RMB NDF, Deliverable Forward and Spot Rate**  
(Period : 1-January-2011 to 30-August-2012)



# RMB Currency Futures Useful as a Risk Management Tool

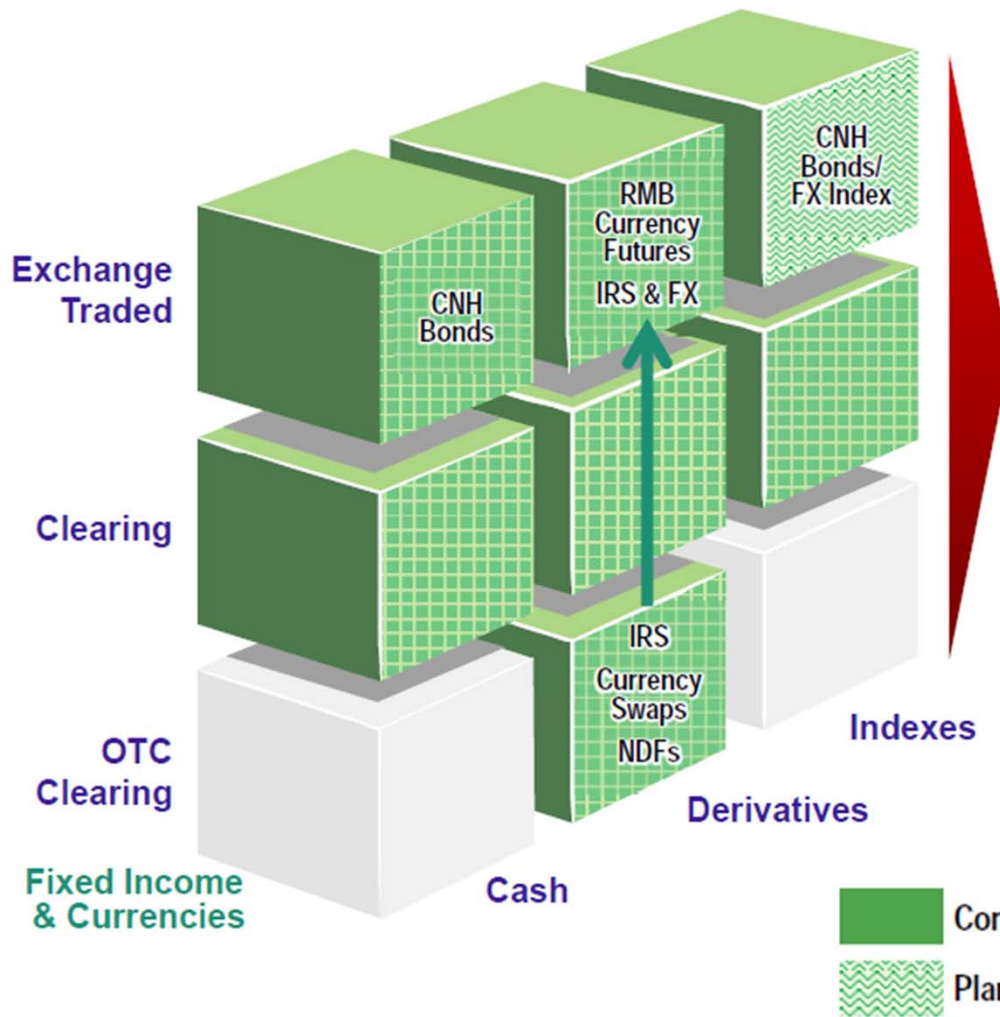


***RMB Currency Futures will encourage a virtuous cycle of development to advance the chain of CNH product development in HK***

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## HKEx's Fixed Income and Currencies Strategy

# Fixed Income and Currencies Strategy



## Organic Business Model

- Market entry leveraging on
  - Offshore RMB
  - OTC clearing as an enabler
- Currency futures as the first derivatives product

## Key Growth Drivers

- RMB internationalisation – liquidity
- Mainland banks’ risk management
- Development of benchmarks

**Organic development from small base. Offshore RMB and OTC clearing for Mainland banks to drive growth**

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## RMB Currency Futures Features

## What are RMB Currency Futures?



- RMB currency futures are futures contracts based on the exchange rates between RMB and other currencies (HKEX's first RMB currency futures contract is based on the currency pair USD / CNH)
- CNH [i.e. CNY(HK)] refers to the RMB circulated in Hong Kong
- The first deliverable RMB currency futures contract traded on an exchange
- Open and transparent market for all investors
- Cleared and settled through HKFE Clearing Corporation Limited (HKCC), a central counter-party, so counter-party risk is mitigated

# Why is there a need for RMB Currency Futures?



- HKEx's RMB Currency Futures are offshore risk management tool for RMB currency risk
- Investors and companies may be subject to RMB currency risk for the following situations:
  - Buy USD denominated assets while base currency is RMB (e.g. Mainland institutions, foreign commodities, foreign bonds, overseas property, etc)
  - Invest in A-shares market by converting foreign currencies to RMB
  - Handle import and export business between Mainland and foreign companies – payable and receivable amount in USD versus RMB
  - Direct investment in Mainland China

# Contract Specifications of RMB Currency Futures - USD/CNH Futures



| Item                                      | Contract Feature   |
|---|--|
| Contract Size                             | USD 100,000  |
| Trading Code                              | CUS  |
| Quotation Style                           | RMB per USD<br>(e.g. RMB 6.2486 per USD)   |
| Minimum Fluctuation                       | RMB 0.0001 (4 decimal places)  |
| Contract Months at launch date (17 Sep)   | Oct, Nov, Dec 2012<br>Jan, Mar, Jun, Sep 2013<br>Total 7 contract months                                       |
| Settlement Method and Settlement Currency | Delivery of US dollar against RMB with full principal amount at the Final Settlement Price                     |
| Trading Hours                             | 9:00 am - 4:15 pm (No lunch break)<br>(Trading hours on the Last Trading Day are from 9:00 a.m. to 11:00 a.m.) |



# Contract Specifications of RMB Currency Futures - USD/CNH Futures



| Item                   | Contract Feature  |
|------------------------|---|
| Final Settlement Day   | Third Wednesday of the Contract Month   |
| Last Trading Day       | Two Hong Kong Business Days prior to the Final Settlement Day   |
| Final Settlement Price | Spot USD/CNY(HK) fixing published at 11:15 a.m. on the Last Trading Day by Hong Kong Treasury Markets Association (TMA) (Website: <a href="https://www.tma.org.hk/en_market_info.aspx">https://www.tma.org.hk/en_market_info.aspx</a> ) |
| Position Limit         | 8,000 net contracts (i.e. USD 800 mil) in all Contract Months combined;<br>No more than 2,000 open contracts (i.e. USD 200 mil) in the spot month contract during the last five trading days up to expiration                           |
| Large Open Position    | 500 open contracts, in any one Contract Month   |
| Holiday Schedule       | The product will be open for trading according to Hong Kong holiday schedule  |

# Fee Structure



| Fee Item             | Details    |
|----------------------|------------|
| Exchange Fee         | RMB 8.00   |
| Commission Levy      | Nil        |
| Brokerage Commission | Negotiable |

# Market Making Scheme

## Market Makers Provide Continuous Quotes (CQ) as follows

|                          |  |
|--------------------------|--|
| Assigned Contract        | All contract months  |
| Maximum Bid/Offer Spread | Not greater than 0.0030 or 30 minimum fluctuations                           |
| Minimum Quote Size       | Not less than 10 contracts (USD 1 mil)                                       |
| Trading Requirement      | Provide CQ for not less than 70% of the trading hours in each calendar month |

# Benefits in Trading RMB Currency Futures



## Hedge or gain RMB exchange rate risk flexibly

- Investors can hedge or take on RMB exposure with USD/CNH futures. There is no restriction on the use of CNH, so the CNH market is a good reflection of supply and demand.

## Principal exchange at expiry facilitating currency payment arrangement

- USD/CNH futures will be settled at expiration by exchanging principal.

## Transparent pricing

- USD/CNH futures are traded on HKEX's electronic derivatives trading platform, so market participants can enjoy transparent pricing in a fully transparent and centralised trading environment.

# Benefits in Trading RMB Currency Futures



## Level playing field in an open trading platform

- Individual traders, banks, hedge funds and corporations have equal access to the same trading platform and the same prices.

## Counterparty risk minimised

- Trades are cleared and settled by HKFE Clearing Corporation Limited, an HKEx subsidiary, acting as central counter-party in every transaction of Exchange Participants.

## Continuous two way liquidity provided by market makers

- Market makers provide continuous two sided markets throughout the trading day to enhance liquidity.

## Leverage

- USD/CNH Futures contracts are traded on a margin basis, so only a small fraction of the total exposure is required upfront. Capital cost in trading and hedging is reduced.

# Applications - Basic Principles



## Buy or Sell?

| USD/CNH Futures Contracts | Price                       |
|---------------------------|-----------------------------|
| Dec-2012                  | 6.3600 (1 USD = RMB 6.3600) |

### Investor View

RMB to *Appreciate*

### Action

**Sell 10 Contracts (Dec-12) @ 6.3600**

### Anticipated Outcome

**Close Out Contracts in Dec @6.3200**

6.3600



6.3200

**Profit / Loss**  
**Gain RMB 40,000\***  
 \*  $(6.36-6.32) \times \$100,000 \times 10 \text{ contracts}$

# Applications - Basic Principles



## Buy or Sell?

| USD/CNH Futures Contracts | Price                       |
|---------------------------|-----------------------------|
| Dec-2012                  | 6.3600 (1 USD = RMB 6.3600) |

### Investor View

RMB to *Depreciate*

### Action

*Buy* 10 Contracts (Dec-12) @ 6.3600

### Anticipated Outcome

Close Out Contracts in Dec @ 6.4000

6.4000



6.3600

Profit / Loss  
 Gain RMB 40,000\*  
 \* (6.40-6.36) x \$100,000 x 10 contracts

# Applications – Example 1

## Applications – Hedging for Companies Using RMB to Buy Commodities in USD

| Hedging              |   |
|----------------------|---|
| <b>User</b>          | Mainland company which buys overseas commodities in USD             |
| <b>Outlook</b>       | Anticipates appreciation of RMB over the next 6 months              |
| <b>Risk Exposure</b> | The gain in overseas commodities may be reduced by RMB appreciation |
| <b>Strategy</b>      | Sells USD/CNH Futures contract for protection from RMB appreciation |



# Applications – Example 1



## No Hedging Case

Now

Converts RMB 6.36 mil to USD @ 6.3600 and uses USD 1 mil to buy overseas commodities



6 Months Later

Sells overseas commodities and gets USD 1.02 mil  
 -----  
 Converts back to RMB @ 6.1600 and gets RMB 6.28 mil\*

\* USD 1.02 mil x 6.16 = RMB 6.28 mil

## Hedging Case

Now

Converts RMB 6.36 mil to USD @ 6.3600 and uses USD 1 mil to buy overseas commodities

Sells 10 USD/CNH Futures contracts @ 6.3800



6 Months Later

Sells overseas commodities and gets USD 1.02 mil  
 -----  
 Converts back to RMB @ 6.1600 and gets RMB 6.28 mil

Closes out @ 6.180 and gains RMB 0.2 mil profit\*

**Total amount = RMB 6.48 mil#**

\* Profit of USD/CNH Futures = (6.38 – 6.18) x 100,000 x 10 contracts = RMB 0.2 mil

# RMB 6.28 mil + RMB 0.2 mil = RMB 6.48 mil

# Applications – Example 1

## Comparison

|   | No hedging case<br>(Without USD/CNH Futures) | Hedging case<br>(With USD/CNH Futures) |
|---|--|--|
| Profit/Loss (RMB)                         | Loss 0.08 mil                                | Gain 0.12 mil                          |
| Investment return for<br>RMB 6.36 mil (%) | -1.25  | 1.88                                   |

**Summary:** RMB currency risk can be reduced and enhanced the investment return.

## Applications – Example 2

### Applications – Hedging for Companies Paying RMB and Receiving USD

| Hedging       |   |
|---------------|---|
| User          | Company which buys products from Mainland companies in RMB and sells them to overseas markets |
| Outlook       | Anticipates appreciation of RMB against USD over the next 6 months                            |
| Risk Exposure | Products costs may increase and hurt profit margin  |
| Strategy      | Sells USD/CNH Futures contract for protection from higher product costs                       |

#### No Hedging Case

##### Now

Expects USD/CNH after 6 months to be 6.3000

Expects to receive USD 1 mil for payment 6 months later

Agrees to pay RMB 6.3 mil 6 months later



##### 6 Months Later

USD/CNH = 6.2000

Receives USD 1 mil

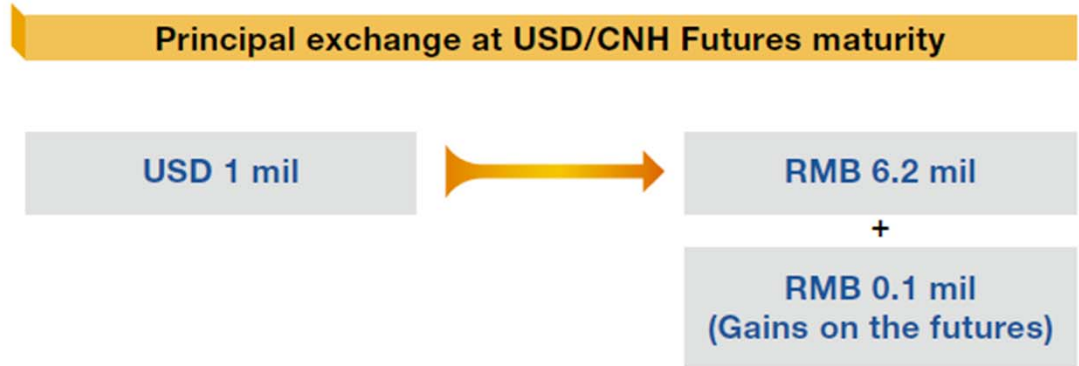
Converts to RMB 6.2 mil

**Summary:** RMB 0.1 mil short of the agreed payment.

# Applications – Example 2

## Hedging Case

| Now   | 6 Months Later                                       |
|---|--|
| Expects USD/CNH after 6 months to be 6.3000             | USD/CNH = 6.2000                                     |
| Expects to receive USD 1 mil for payment 6 months later | Receives USD 1 mil                                   |
| Agrees to pay RMB 6.3 mil 6 months later                | Converts to RMB 6.2 mil                              |
| Sells 10 USD/CNH Futures contracts @ 6.3000             | USD/CNH = 6.2000<br>Gains RMB 0.1 mil on the futures |



**Summary:** Risk of RMB exchange rate fluctuation can be mitigated.

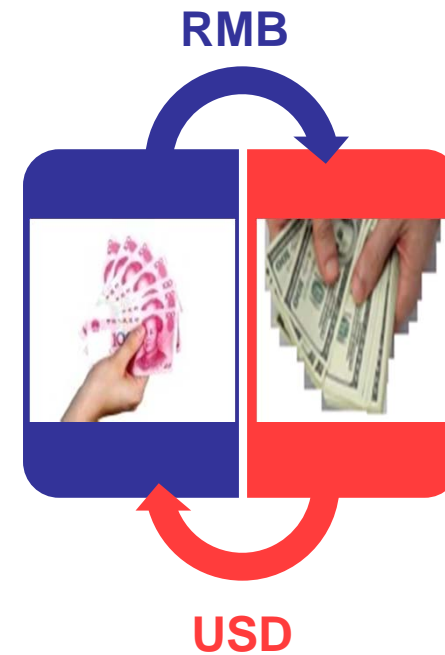
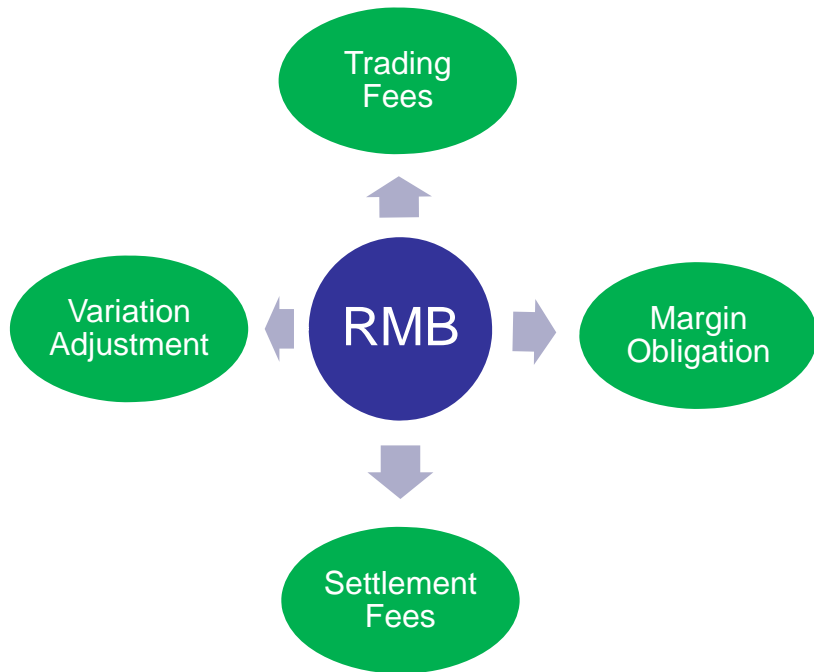
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## Clearing and Risk Management

# Clearing and Settlement Arrangements

## Daily Settlement

## Final Settlement



***Both RMB & USD are involved in settlement***

# Final Settlement Process



## Last Trading Day (LTD)

## LTD + 1

## Final Settlement Day (LTD+2)

Trading Hours  
(09:00 – 16:15)

Set CQ  
~18:00

Day-end Processing  
After 18:45

1. **Final Settlement Price will be determined around 11:15 a.m.**

2. **DCASS Report - Delivery obligations**

3. **Buyer – Pay RMB  
Seller – Deliver USD**  
  
*Delivery and payment obligations will be netted by currency with other settlement obligations*

4. **CCMS Report - Settlement amounts**

5. **Any resulting Shortfall to be settled by 9:15 am**

6. **Clearing Participants can withdraw any resulting surplus on Final Settlement Day**

# Clearing, Settlement and Risk Management



## Settlement Currency

- Variation adjustment, margin obligations, trading and settlement fees will be settled in RMB

## Settlement Bank Accounts

- Clearing participants need to maintain house and client bank accounts in both RMB and USD with appointed settlement banks

## Final Settlement Process

- Participants are required to settle full principal amount by making and taking deliveries of USD and RMB
- Delivery of USD will be made by short position holders (i.e. sellers) and payment of Final Settlement Value in RMB by long position holders (i.e. buyers) on Final Settlement Day.

## Minimum Settlement Currency Requirement

- At least 50% of the margin requirement must be covered by cash in the settlement currency (i.e. RMB)