

RMB Currency Futures

Risk Management and Trading Applications





TMA's Spot USD/CNY(HK) Fixing

https://www.tma.org.hk/en_market_info.aspx

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Futures involve a high degree of risk. Losses from futures trading can exceed your initial margin funds and you may be required to pay additional margin funds on short notice. Failure to do so may result in your position being liquidated and you being liable for any resulting deficit. You must therefore understand the risks of trading in futures and should assess whether they are right for you. You are encouraged to consult a broker or financial advisers on your suitability for futures trading in light of your financial positions and investment objectives before trading.

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Buy or Sell?

USD/CNH futures contract	Price
Sep-15	6.5000 (USD 1 = CNH 6.5000)

Investor view

**RMB
Appreciation**

Action

**Sell 10 Contracts
(Sep-15) @ 6.5000**

Anticipated Outcome

Close out @ 6.4600

6.5000



6.4600

Profit / Loss

Gain RMB 40,000*

*** (6.50-6.46) x 100,000 x 10 contracts**



Buy or Sell?

USD/CNH futures contract	Price
Sep-15	6.5000 (USD 1 = CNH 6.5000)

Investor view

**RMB
Depreciation**

Action

**Buy 10 contracts
(Sep-15) @ 6.5000**

Anticipated Outcome

Close out @ 6.5400

6.5400



6.5000

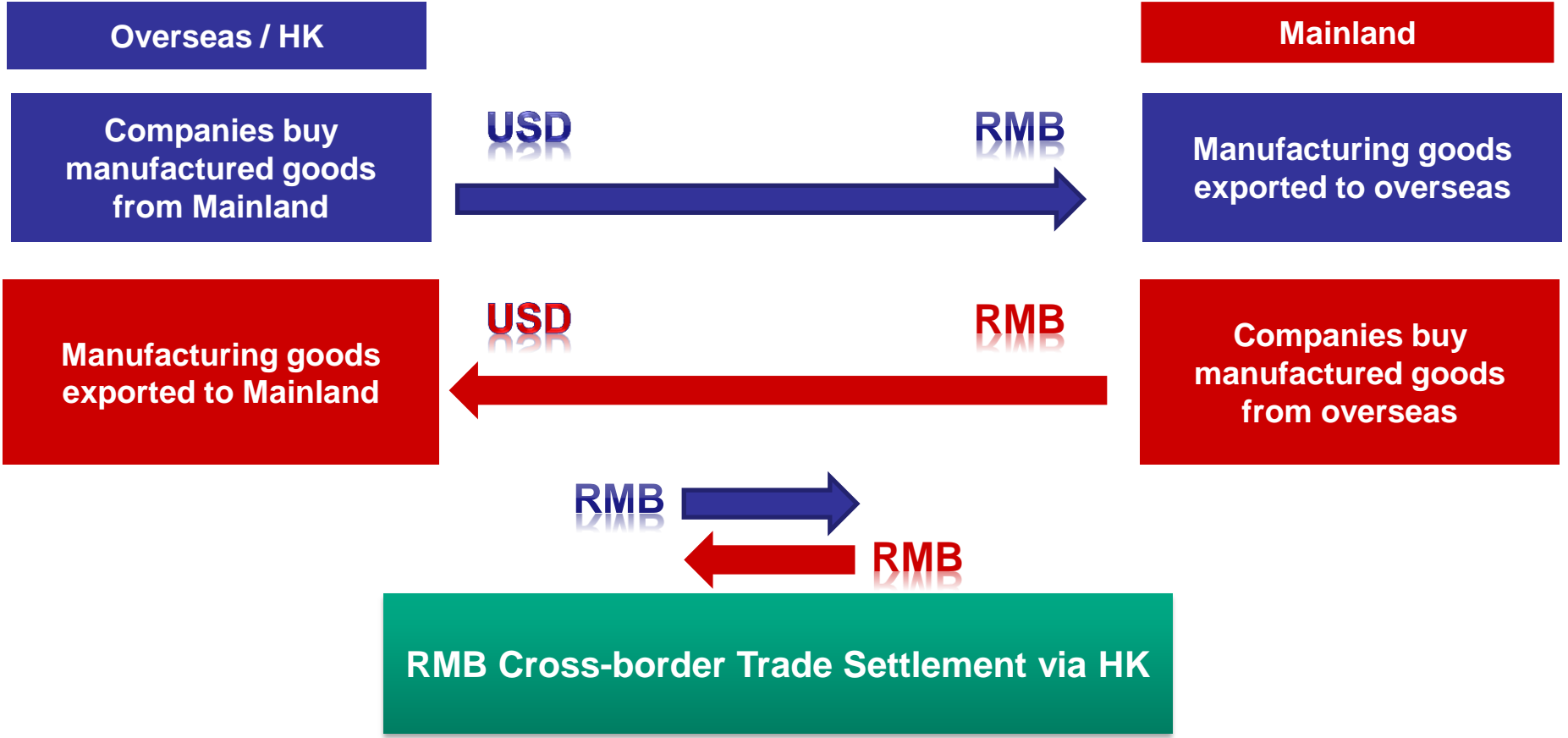
Profit / Loss

Gain RMB40,000*

*** $(6.54 - 6.50) \times 100,000 \times 10$ contracts**

RMB Currency Futures as a Risk Management Tool

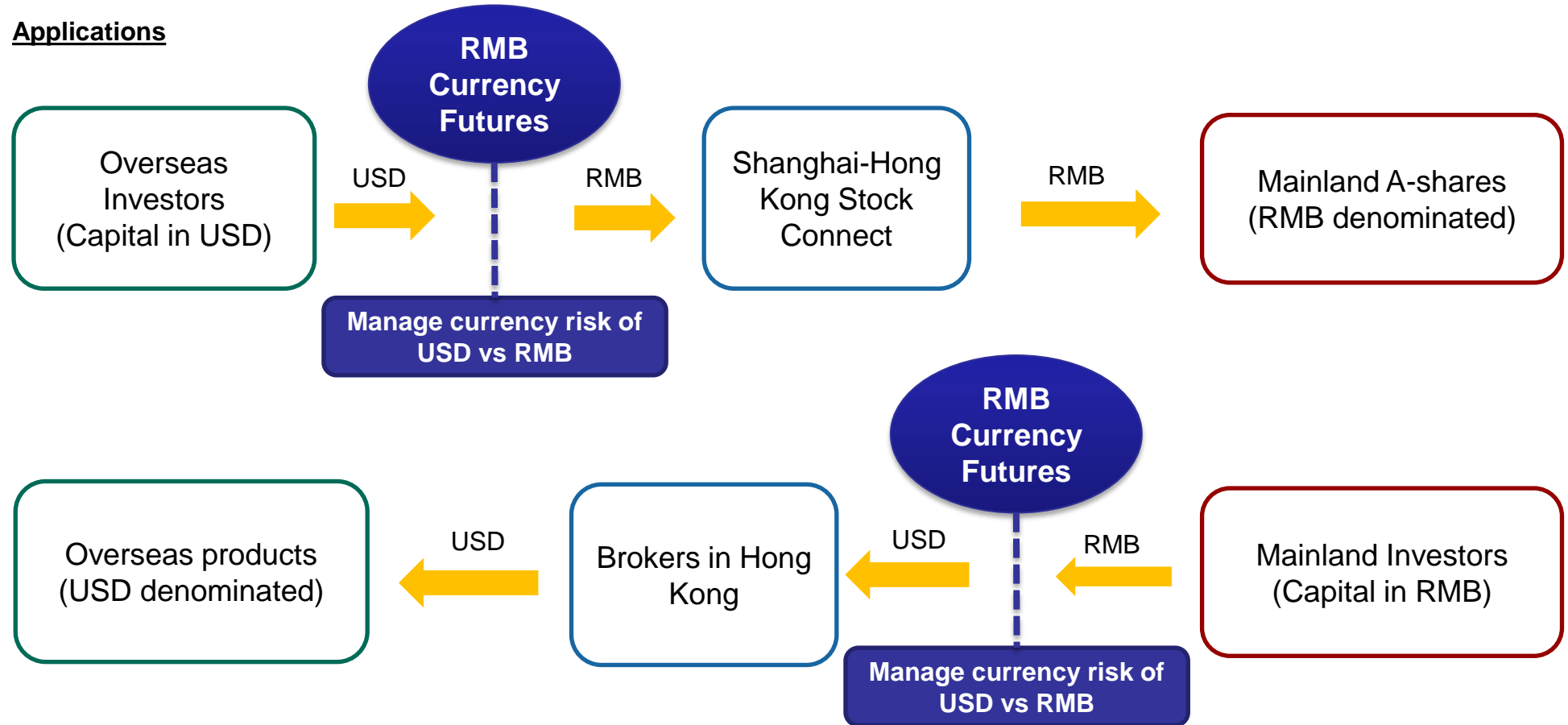
Trade Finance and Cross-border Trade Settlement in RMB





RMB Currency Futures as a Risk Management Tool

Applications



RMB currency futures is an effective tool for managing RMB currency risk for both overseas and mainland investors

Hedging Example (1)

Against RMB depreciation



User

Investors who invest in Mainland A-shares to capture the stock appreciation

Outlook

Anticipate depreciation of RMB over the next 6 months

Risk Exposure

The gain in Mainland stocks may be reduced due to the loss in RMB exchange rate

Strategy

Buy USD/CNH futures to hedge RMB depreciation

Hedging Example (1)

Against RMB depreciation



Scenario 1: No Hedging

Now

- Convert USD 10 mil to RMB 62 mil @ 6.2000 and buy mainland A-shares



6 months later

- 5% stock price increase and sell stocks to get RMB 65.1 mil
- RMB depreciated from RMB 6.2000 per USD to RMB 6.500 per USD
- Convert it back to USD 10.02 mil @ 6.5000

Result: Gain only USD 0.02 mil even A-shares stock prices increase

5% Gain in A-shares was reduced to 0.2% due to RMB depreciation

Hedging Example (1)

Against RMB depreciation

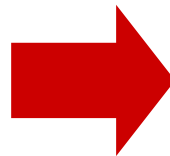


Scenario 2: Hedging by buying RMB Currency Futures

Now

- Convert USD 10 mil to RMB 62 mil @ 6.2000 and buy mainland A-shares

- Buy 100 USD/CNH Futures contract @ 6.2200



6 months later

- 5% stock price increase and sell stocks to get RMB 65.1 mil
- Convert it back to USD 10.02 mil @ 6.5000

- Closes out @ 6.5000 and gets RMB 2.8 mil Profit

Result:

- 1) Gains USD 0.02 mil on A-shares stocks
- 2) Gains RMB 2.8 mil in RMB Currency Futures (i.e. USD 0.43 mil)

Using RMB Futures as the hedging tool can cover the loss in RMB depreciation and keep the gain in A-shares

Hedging Example (2)

Against RMB appreciation



User

Mainland companies buy overseas USD denominated commodities products

Outlook

Anticipate appreciation of RMB over the next 6 months

Risk Exposure

The gain in commodities products may be reduced due to the loss in RMB exchange rate

Strategy

Sell USD/CNH futures contracts to hedge RMB appreciation

Hedging Example (2)

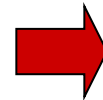
Against RMB appreciation



Scenario 1 : No Hedging

Now

- Convert RMB 6.2 million to USD @ 6.2000 and buy USD 1 million worth commodities products



6 months later

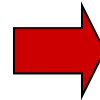
- Sell commodities products and receive USD 1.02 million
- Convert back to RMB @ 6.0500 and receive RMB 6.17 million*

* USD 1.02 mil x 6.05 = RMB 6.17 mil

Scenario 2: Hedging by RMB Currency Futures

Now

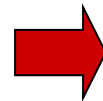
- Convert RMB 6.2 million to USD @ 6.2000 and buy USD 1 million worth commodities products



6 months later

- Sell commodities products and receive USD 1.02 million
- Convert back to RMB @ 6.0500 and receive RMB 6.17 million*

- Sell 10 RMB currency futures contracts @6.2500



- Close out @ 6.0800 and Gain RMB 0.17 million

Total Amount = RMB 6.17 mil + RMB 0.17 mi
= RMB 6.34 mil

* Profit of RMB Currency Futures = $(6.25 - 6.08) \times 100,000 \times 10$ contracts = RMB 0.17 million

Hedging Example (2)

Against RMB appreciation



Comparisons of using RMB Currency Futures to hedge

	Scenario 1 (Not using RMB Currency Futures)	Scenario 2 (Using RMB Currency Futures)
Profit / Loss (RMB)	Loss 0.03 mil	Profit 0.14 mil
Investment Return of RMB 6.2 million	-0.48%	2.26%

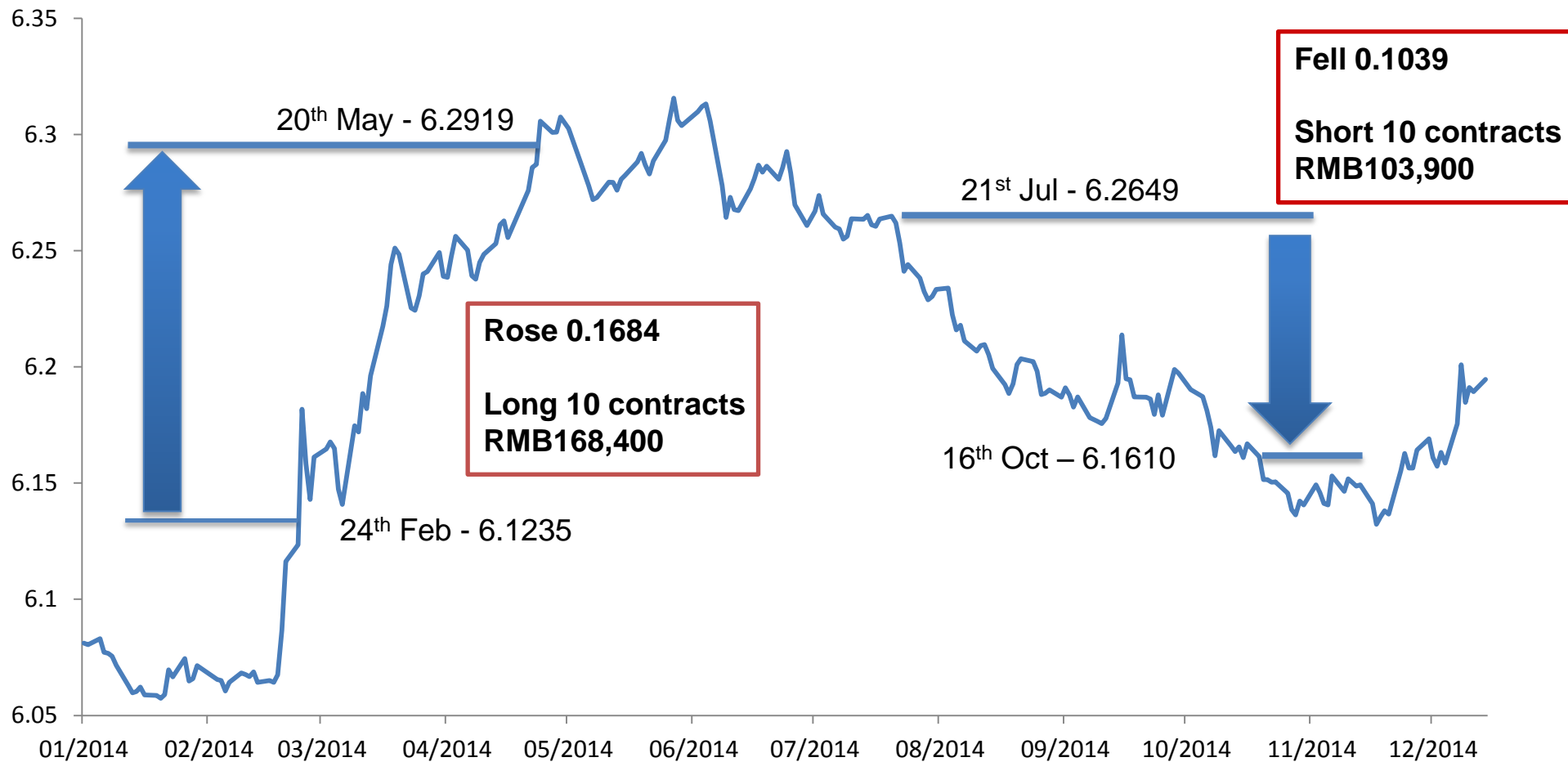
***RMB Currency Futures can hedge RMB currency risk and
increase the investment return***

Capture Two-Way Movement

For Illustration Only



Dec-14 Futures – Price Trend in 2014

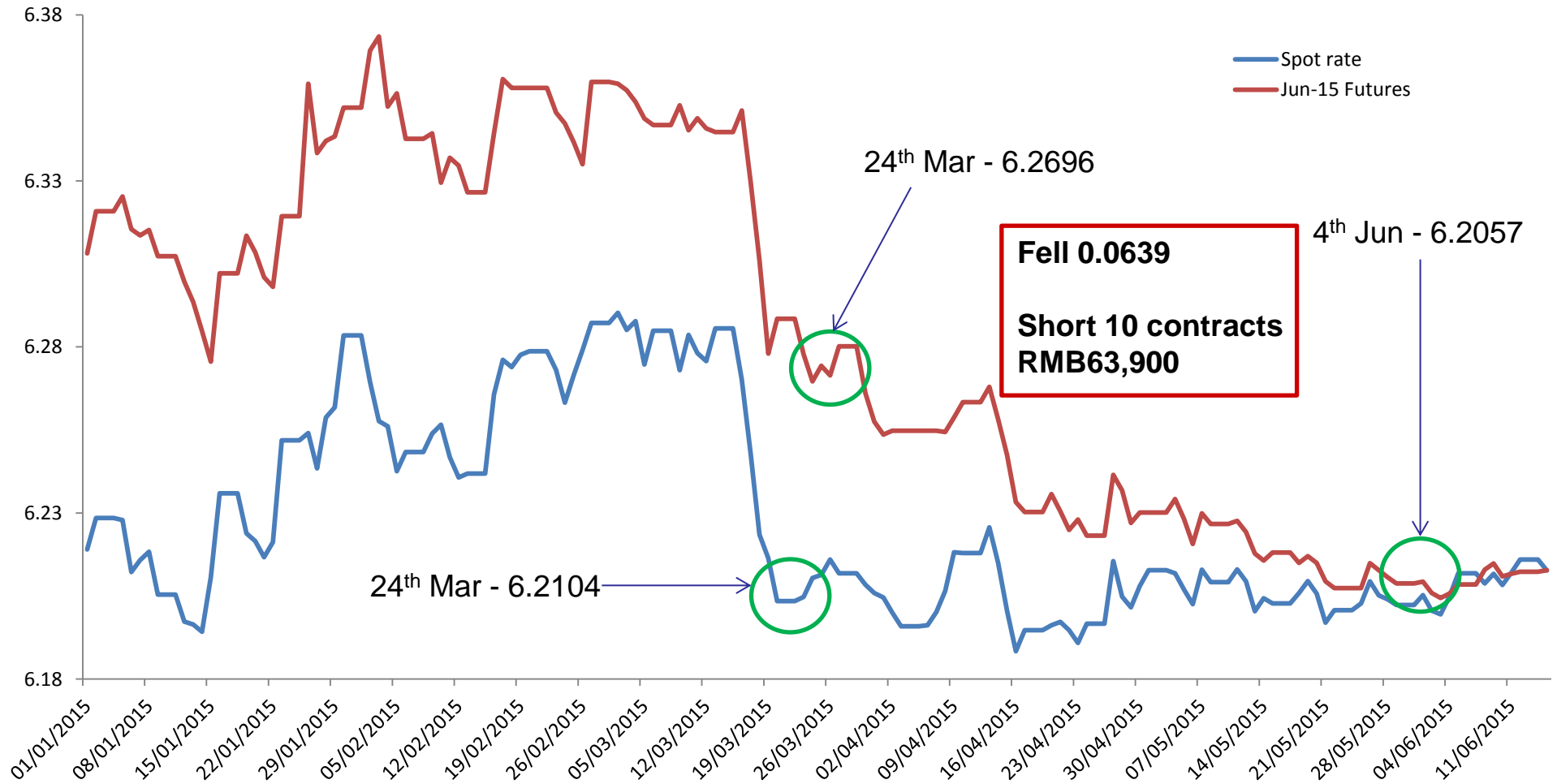


Capture Trading Opportunity in Stable Market

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Jun-15 Futures – Price Trend in 2015

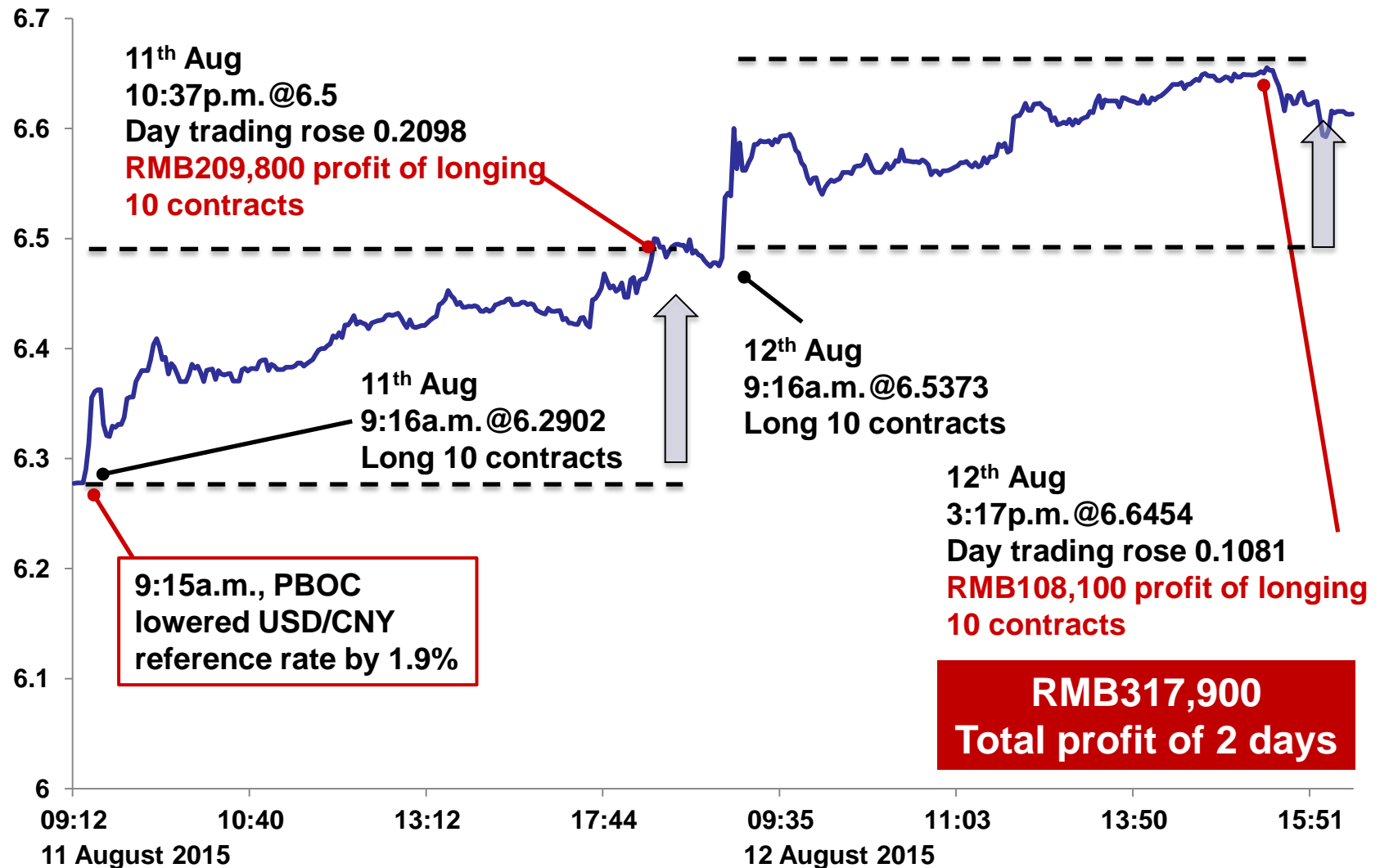


Capture Trading Opportunity in Volatile Market

For Illustration Only



Dec-15 Futures – Price Trend on 11 & 12 August 2015

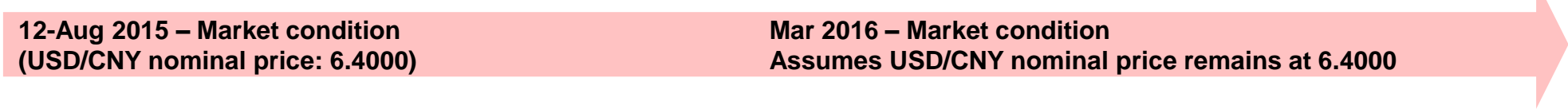


Case Study – Carry Trade Strategy using Futures

For Illustration Only



RMB carry trade strategy	
User	Retail investors
Forecast	High level of profit under stable RMB exchange rate
Risk Exposure	Lost profit
Strategy	Use USD/CNH futures contract jointly with RMB certificate of deposits (CD)
Initial Investment	RMB73,000



6-months RMB CD (3% annual rate)

Cost	RMB73,000 deposit	➔	Net profit	$73,000 \times 3\% \times 180/365$ = RMB1,080 (1.5%)
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Use USD/CNH futures and 6-months RMB CD

	USD/CNH futures	6-moths RMB CD (3% annual rate)	➔		USD/CNH futures	6-moths RMB CD (3% annual rate)	Total return
Trade	Short a Mar-16 futures contract @6.6032	RMB deposit		Trade	Close-out Mar-16 futures contract @6.4000	RMB deposit	-
Cost	Margin RMB16,920 ⁽¹⁾	Deposit amount RMB56,080		Net Profit	$(6.6032-6.4) \times 100,000$ = RMB20,320	$56,080 \times 3\% \times 180/365$ = RMB830	RMB 21,150 (29%)

(1) Margin rate as of 12 October 2015, and is subjected to change

Case Study – Calendar Spread Strategy

For Illustration Only



RMB calendar spread trading strategy

User	Retail investors
Forecast	Neutral view / range-bound forecast of the USD/CNH spot price
Strategy	Combo trade of different calendar month contracts (long 10 Jul-15, short 10 Dec-15)
Initial Investment	RMB101,500 ⁽¹⁾

18 Mar to 7 July 2015 – Market Condition
(USD/CNH spot rate range bound at 6.19 – 6.22)

USD/CNH Futures Calendar Spread Trade

	Trade Initiation (18 Mar 2015)		Close Positions (7 July 2015)	Total return
Trade	Short 10 Dec-15 futures contracts @6.4201 Long 10 Jul-15 futures contracts @6.3251	➔	Long 10 Dec-15 futures contracts @6.2763 Short 10 Jul-15 futures contracts @6.2188	-
Cost	Margin RMB101,500 ⁽¹⁾		Net Profit [(6.4201-6.2763)-(6.3251-6.2188)]x100,000x10 =RMB37,500	RMB 37,500 (37%)

(1) 40% discount from standard margin. Margin assumed to be RMB16,920/contract

Comparison – Futures and Forward Contracts

	HKEx Futures	OTC Forward
Risk management tool	✓	✓
Physical settlement	✓	✓
No credit limit required from banks	✓	✗
Central matching	✓	✗
Central counterparty clearing	✓	✗
Standardised contract	✓	✗
Better than retail exchange rate	✓	?
Ease of trading	✓	?

USD/CNH Futures – Vendor Access Codes



Information vendor access codes

Vendor name	Code
AASTOCKS.com Ltd.	221355
AFE Solutions Ltd.	870799
Bloomberg	UCAA CRNCY CT <GO>
Capitalvue Ltd.	CUS
CES Capital Ltd.	CUS
ET Net Ltd.	CUS / Index Futures Quotation
Hithink Flush Information Network Co., Ltd.	CUS
Infocast Ltd.	Derivatives->Futures
Interactive Brokers LLC	CUS
QuotePower International Ltd.	P11020
Reuters	0#HCUS:
Shanghai Qianlong Advanced Technology Co., Ltd	450013
Shanghai Wind Information Co., Ltd	CUSF
Telequote Data International Ltd.	CUSmy
Tele-Trend Ltd.	CUFC, CUmyy

USD/CNH Futures – Contract Specifications



Items	Contract Features
Contract Size	USD 100,000
Quotation Style	RMB per USD (e.g. RMB 6.2486 per USD)
Minimum Fluctuation	RMB 0.0001 (4 decimal places)
Contract Months	Spot month, the next three calendar months and the next four calendar quarter 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 (Day Session) 5:00 pm - 11:45 pm (AHFT Session) (Trading hours on the Last Trading Day are from 9:00 a.m. to 11:00 a.m.)
Final Settlement Day	The 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: https://www.tma.org.hk/en_market_info.aspx)
Holiday Schedule	According to Hong Kong holiday schedule