

**Fudan Financial Online Public Lecture #54:**

**复旦金融公开课 #54**

***One Currency, Two Markets: China's Attempt  
to Internationalize the Renminbi***

**一币两市：人民币国际化之路**

by Edwin L.-C. Lai (黎麟祥)

*Hong Kong University of Science and  
Technology*

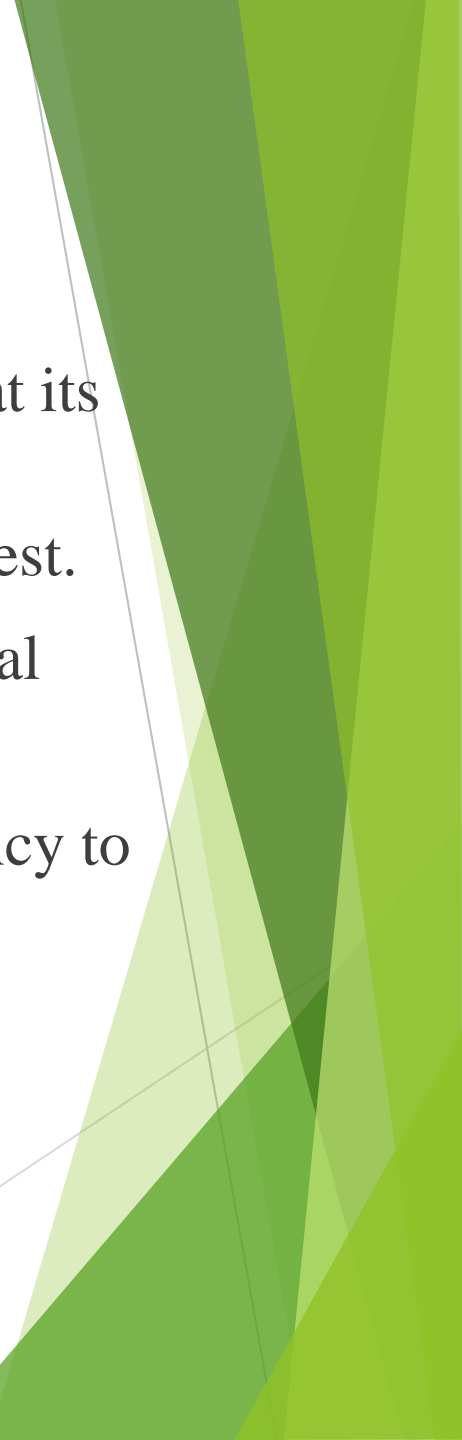
(香港科技大学)

26 November 2020

Personal Homepage: <http://elai.people.ust.hk/>

# Ch 1 Introduction

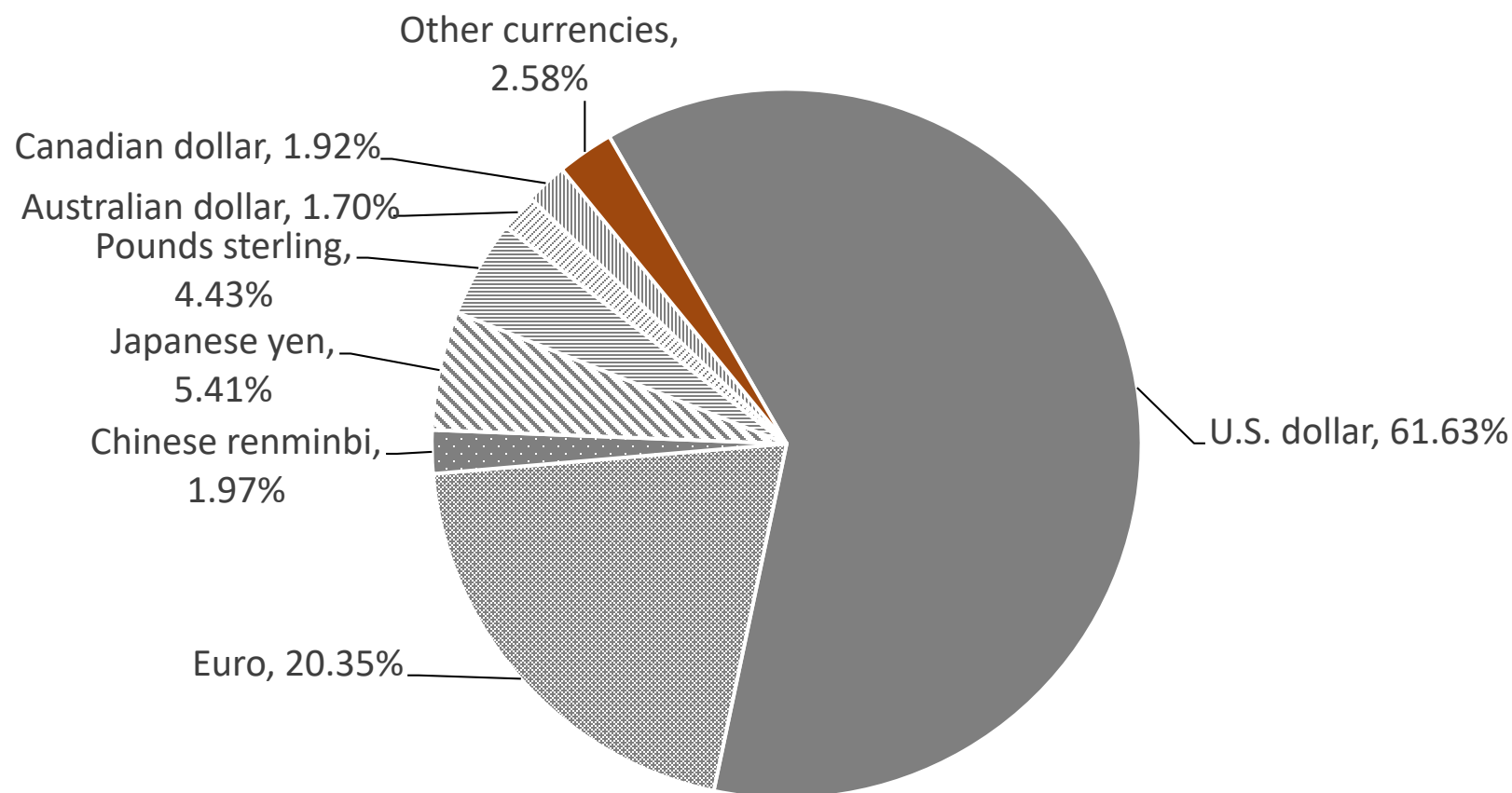
- ▶ The Chinese government is trying to internationalize the RMB. **But what are the real reasons for doing it?** Will it succeed? What are the factors working in its favor? What are the impediments? What are the implications for the rest of the world?
- ▶ The international monetary system since the demise of the Bretton Woods system and the recent global financial crisis prompted China to seek independence from the dollar standard.
- ▶ One way is to promote the use of the RMB internationally.

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- ▶ China is still an emerging economy, meaning that its financial and legal institutions are still immature compared with the more advanced system in the West.
  - ▶ China does not want to fully integrate its financial system with the West any time soon.
  - ▶ Currency internationalization requires the currency to be largely convertible in the capital account

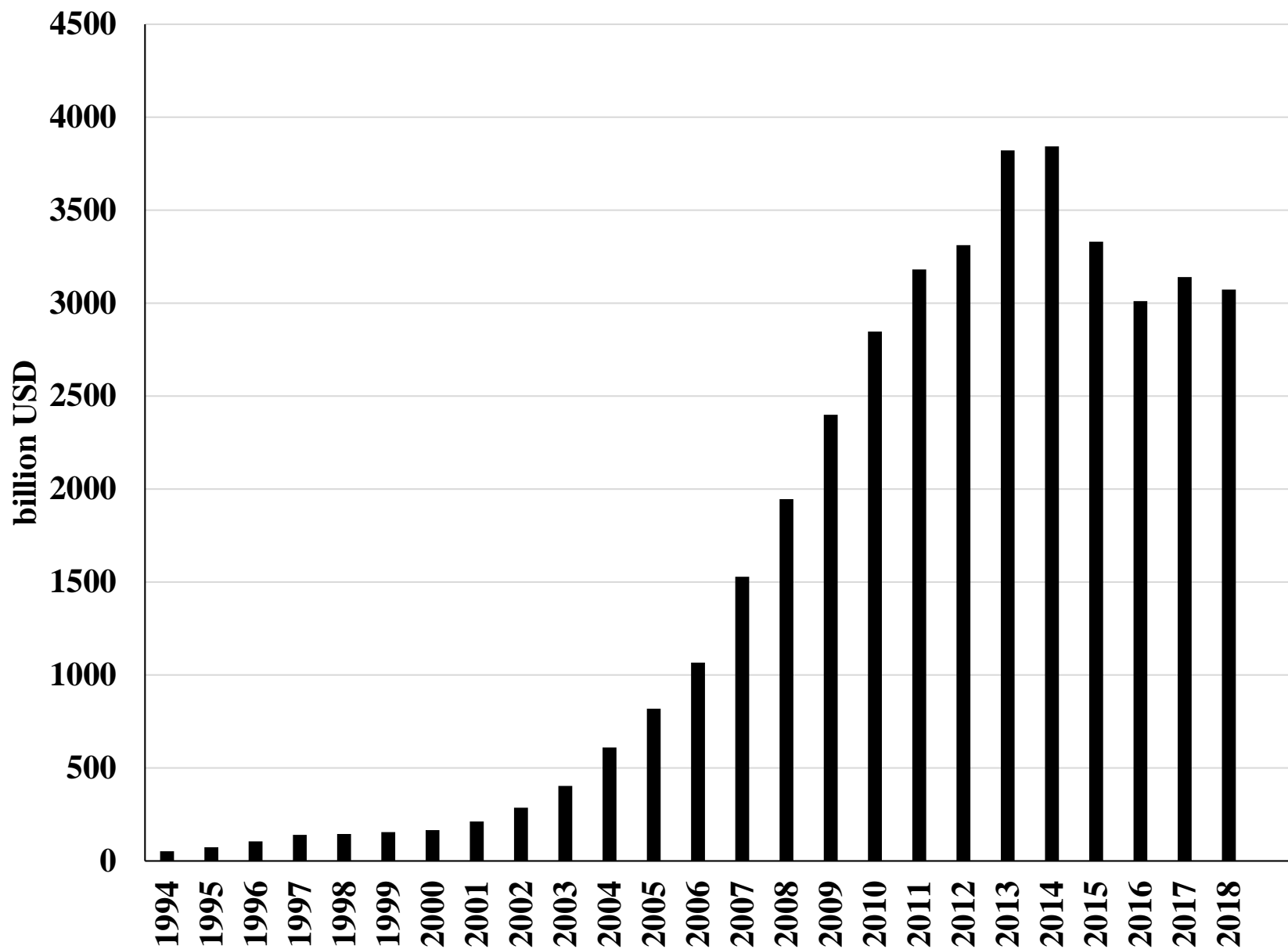
- ▶ Thus, China launched RMB internationalization in its own unique way, i.e. by adopting the “**one currency, two markets**” approach, which entails establishing a global offshore RMB market.
- ▶ Through this strategy, China sets up a firewall between the onshore and offshore markets, allowing **full convertibility of RMB in the offshore market but partial convertibility in the onshore market.**
- ▶ But RMBI requires more than the offshore market. It requires capital account opening, financial market development, and other things ...

# The Background

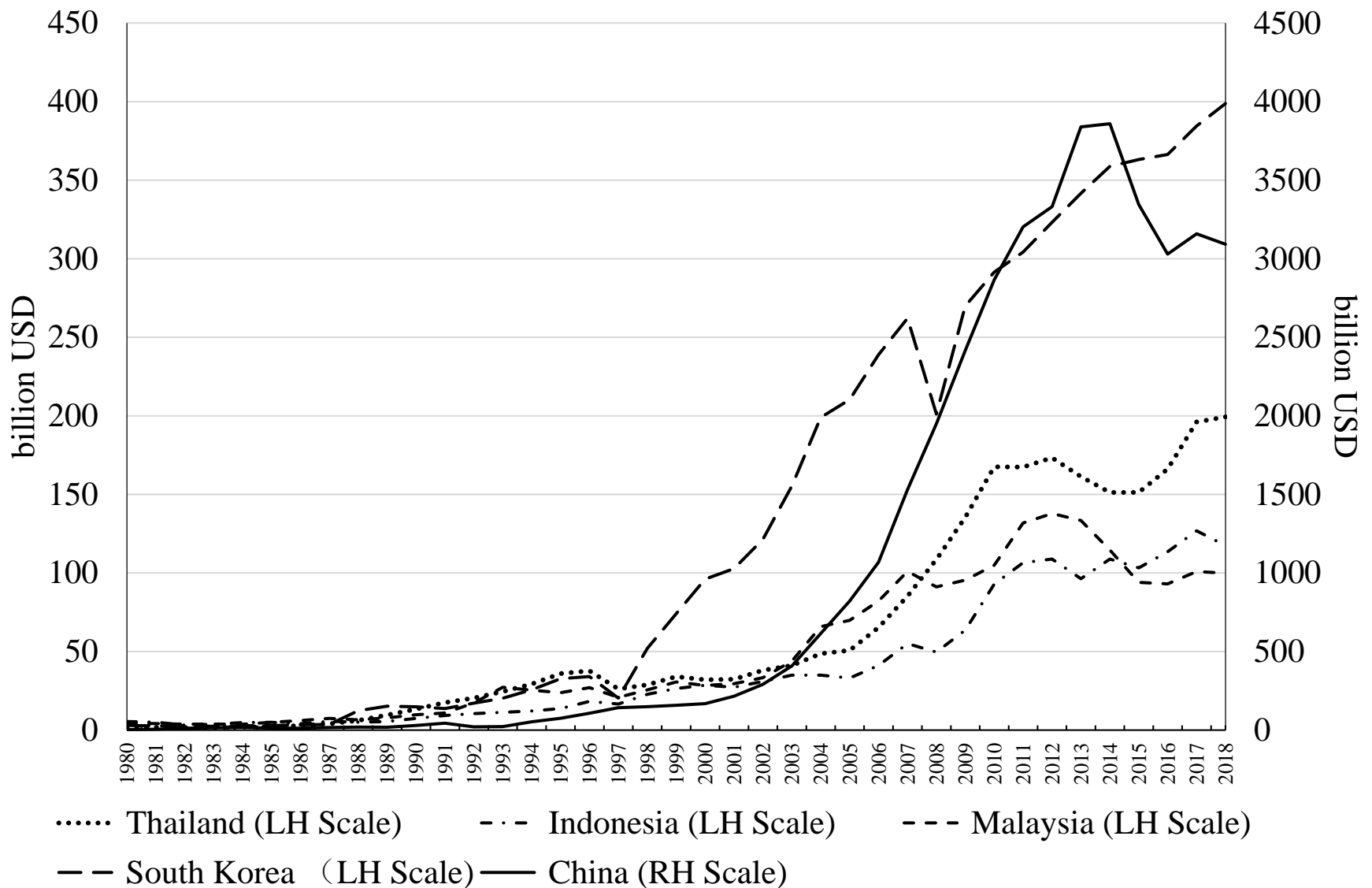
- ▶ **The Dollar Standard** – In the post-Bretton Woods International Monetary System (IMS), the USD is the main reserve currency.
  - ▶ Many developing countries adopt fixed or managed exchange rate and peg their currency to the USD (either loosely or tightly).
  - ▶ **The Dollar Trap** --- Countries that peg to the USD have no better choice but to stay in the peg, and have to accumulate huge quantities of USD-denominated foreign reserves.
- ▶ The Exorbitant Privilege of the US – The USD-denominated foreign reserves (e.g. US Treasury bonds) yield very low interest rates.



*Figure 1-3: Shares of currencies in the total amount of allocated foreign exchange reserves across the globe by 2019Q2.*



*Figure 1-5: China's foreign exchange reserves 1994-2018*

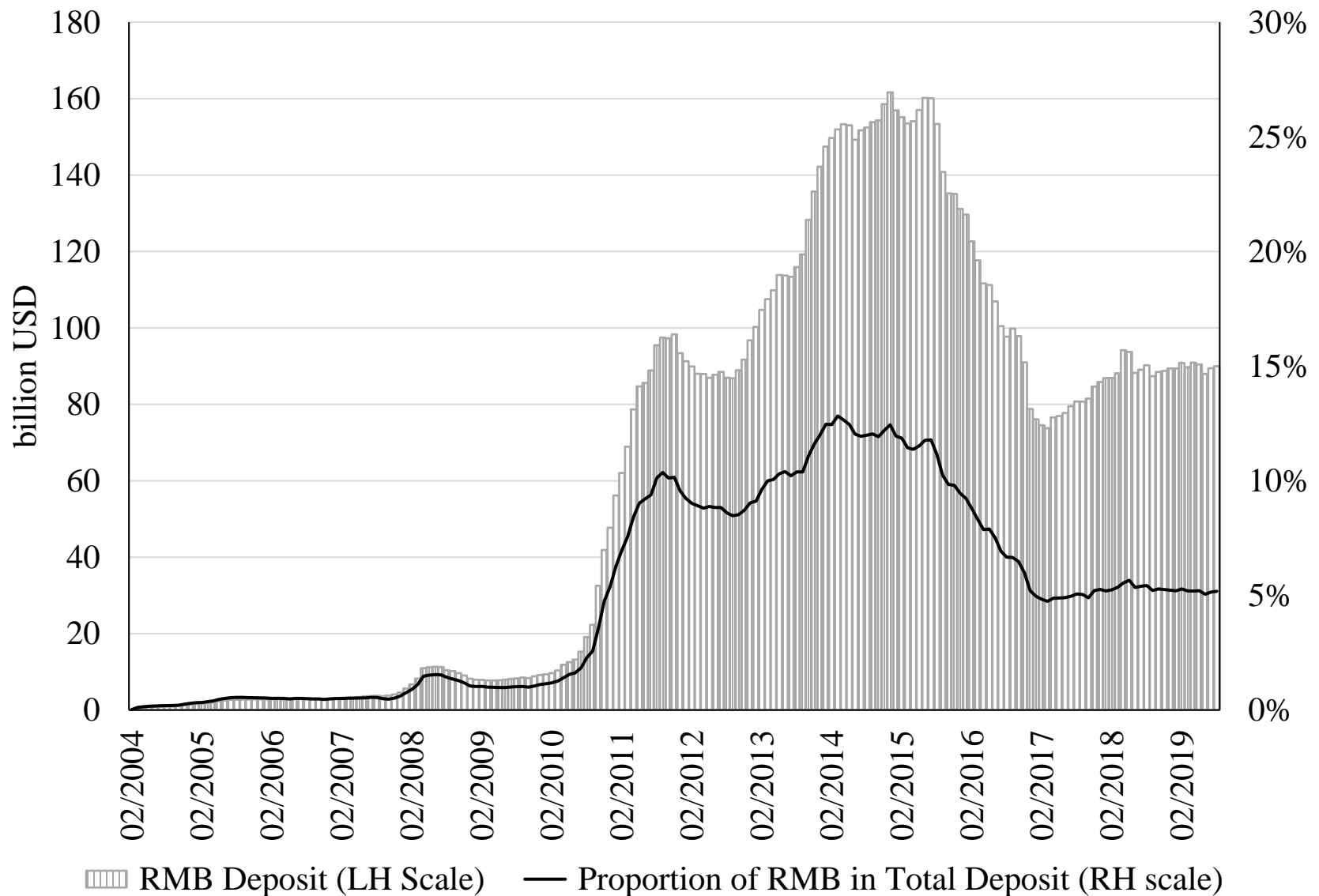


*Figure 2-4: Foreign exchange reserves (excluding gold) of selected countries*



# The Background (cont'd)

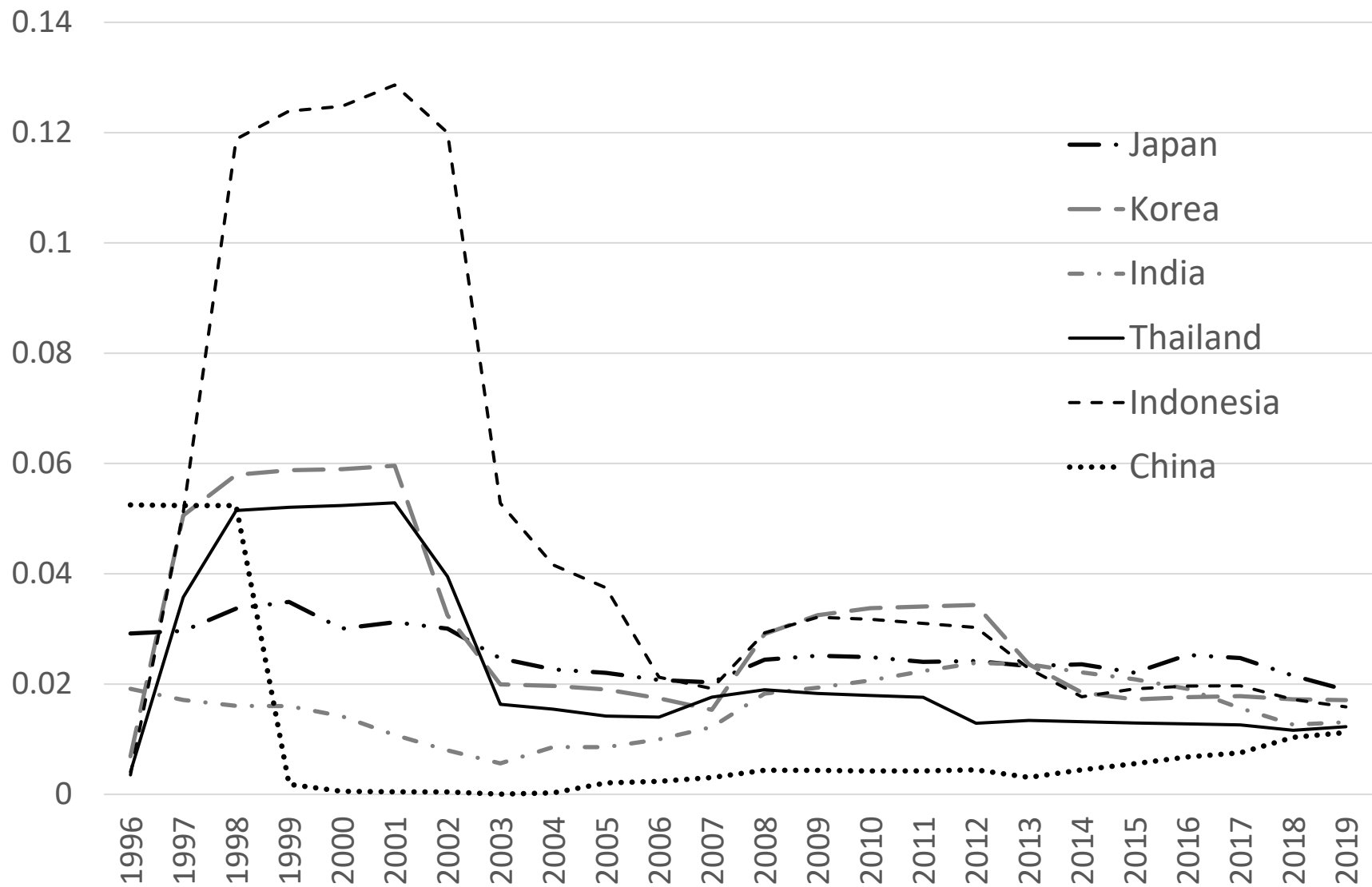
- ▶ The collapse of Asian trade due to shortage of USD for trade finance during the GFC in 2007-2009
- ▶ This is part of the reason for China to seek RMB Internationalization. But there are other reasons...



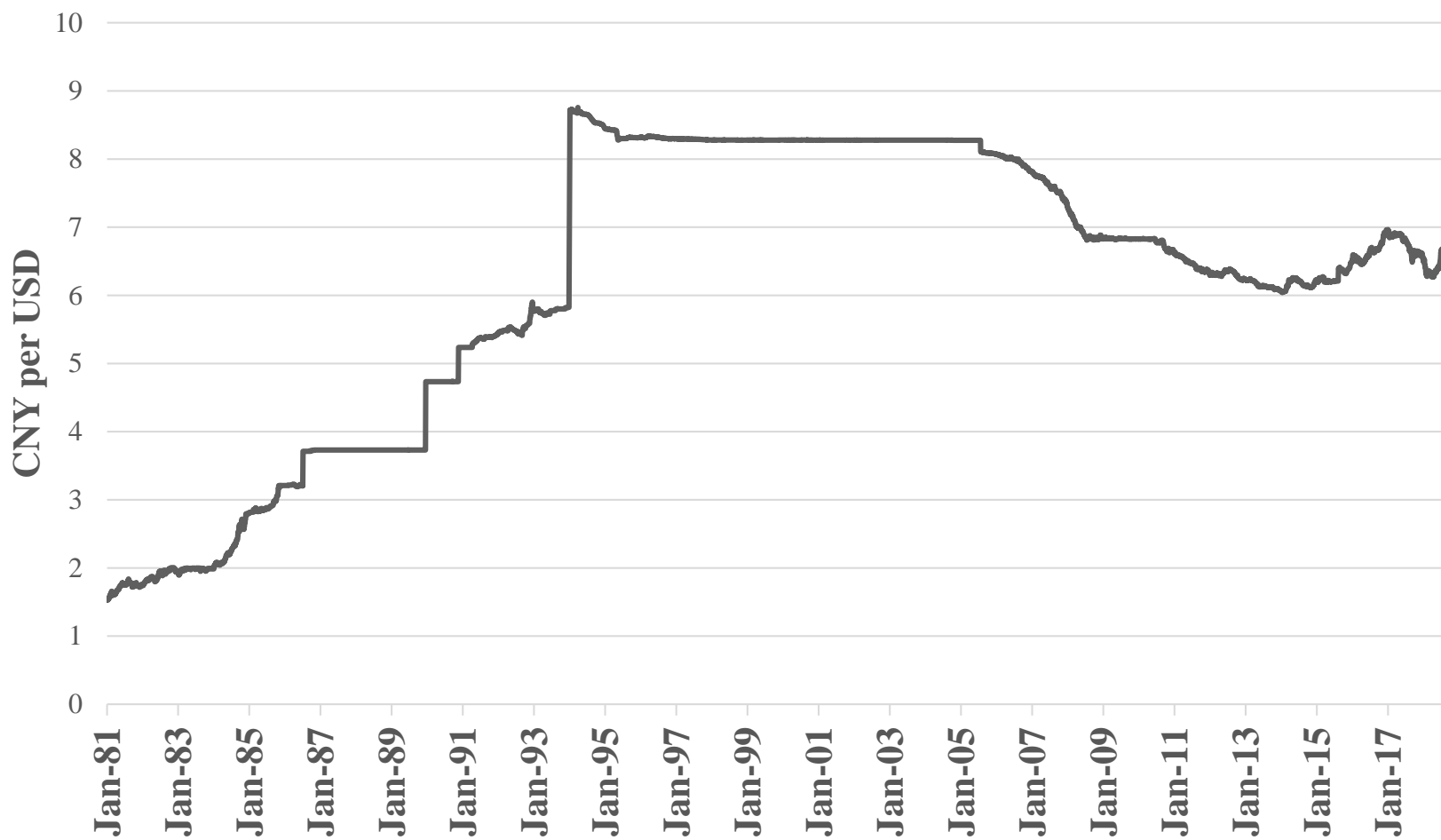
*Figure 1-2: Monthly RMB Deposits in Hong Kong in billion USD (excluding certificates of deposit). An indicator of the size of the HK offshore market. There was a great setback in 2015.*

## Ch 2 China's Aversion to a Floating Exchange Rate

- ▶ China's exchange rate volatility is very low even by developing-country standard



*Figure 2-5: Exchange Rate Volatility against the USD*



*Figure 2-1: Historical CNY/USD exchange rate 1981-2018*

► The Open Economy Trilemma (only 2 out of 3: autonomy in monetary policy, exchange rate stability, free capital mobility) → **RMBI requires increase in capital mobility**, which implies that exchange rate will be more volatile → **China may have to give up a considerable degree of exchange rate stability for RMBI**

# Ch 3 Why Does China Want to Internationalize the RMB?

## Benefits of RMBI to China:

- ▶ Use the capital account liberalization and financial markets liberalization required for RMBI to force domestic financial sector reform.
- ▶ Financial sector liberalization is crucial for the next stage of China's development. Yet these reforms are met with strong domestic resistance by vested interests, and so it is necessary to use RMB internationalization to “daobi” (倒逼) domestic financial reform and opening. I believe that this is one important motivation of internationalizing the RMB.

# Benefits of RMBI to China (cont'd)

- ▶ With the help of RMB internationalization as a catalyst, the capital account and the financial markets can be liberalized in tandem, but in a gradual and interactive fashion so as to exploit the synergy between the two kinds of liberalization. In fact, this is more or less what Zhou Xiaochun, the former governor of the PBC, suggested in an interview with Cai Jing, a Chinese online business magazine.



## Benefits of RMBI to China (cont'd)

- He said, “对外开放、汇率制度改革、减少外汇管制要整体推进，不管各自速度如何，整个大方向是要往前的。这就需要注意时间窗口，有些改革遇到了合适的时间窗口就可以加速推进，有些改革没有时间窗口就可能稍微缓一些”.

## Benefits of RMBI to China (cont'd)

- ▶ **Less reliance on foreign currencies such as the USD** and the associated institutions such as the **payment system**.
  - ▶ For example, avoid the legal reach and sanctions of foreign countries (e.g. US through SWIFT)
- ▶ **Being able to borrow and lend internationally in China's own currency** provides more financial security.
- ▶ Escape from the “dollar trap” (to peg to the USD and to accumulate a huge amount of foreign reserves)
- ▶ Be able to borrow abroad large amounts at low interest rates in the country's own currency.

# Benefits of RMBI to China (cont'd)

- ▶ Minimize the exchange rate risks in trade, investment and financial transactions
- ▶ Wide international use of the RMB would provide more business for the banking and financial sectors of China.
- ▶ Earn seigniorage from foreign countries (issuing RMB to foreigners in exchange for real goods).
- ▶ Political influence

# Costs of RMBI to China

- ▶ The demand for RMB will be more volatile as foreign demand for the RMB increases.
- ▶ An increase in the average demand for the RMB.
- ▶ The increase in international responsibilities.

# Benefits to the world:

- ▶ As the US's GDP share of the world is set to fall continuously because of the fast growth of the developing countries, the fiscal capacity of the US would eventually not be able to **supply the assets for reserves and payments needed by the world**. Some other currency(ies) is needed to fill the gap.
- ▶ **Provides the world with an alternative medium of exchange** (for trade settlement), which is a global public good.

## Ch 4 China's strategy of internationalizing the RMB

- ▶ **RMB trade settlement** – pilot scheme started in mid-2009 → **milestone in RMBI**, as there are large-scale outflows of RMB offshore for the first time.
  - ▶ The large pool of offshore RMB enables the formation of the offshore RMB market.
  - ▶ It was followed soon after by the formation of the offshore RMB FX market in HK in 2010

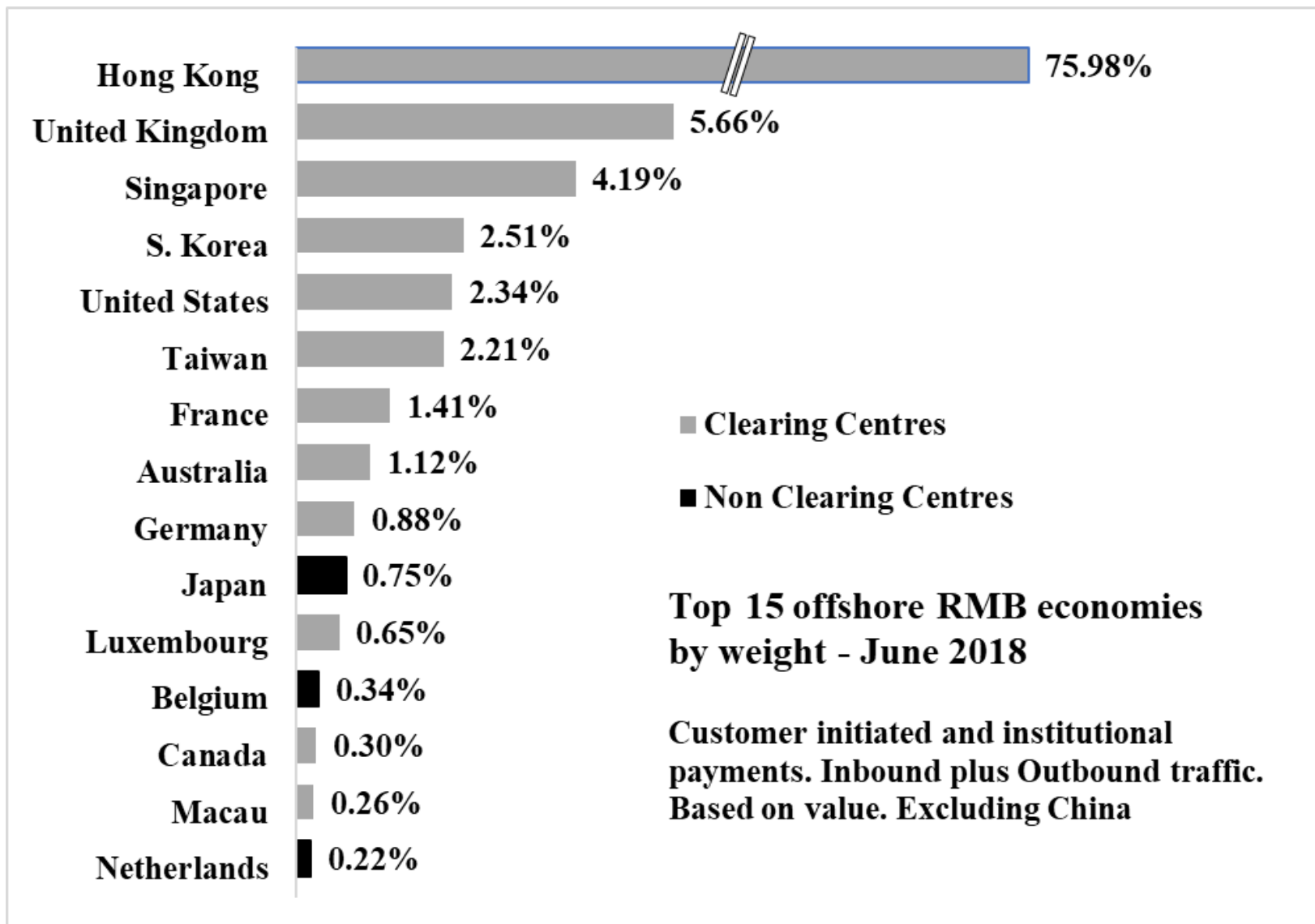
## Ch 4 China's strategy of internationalizing the RMB (cont'd)

- ▶ Offshore RMB Centers (e.g. HK, Singapore, Taipei and London)
  - ▶ - Settlement and clearing of offshore RMB payments, e.g. trade settlement
  - ▶ - RMB bank deposits
  - ▶ - Dim Sum bonds and RMB loans

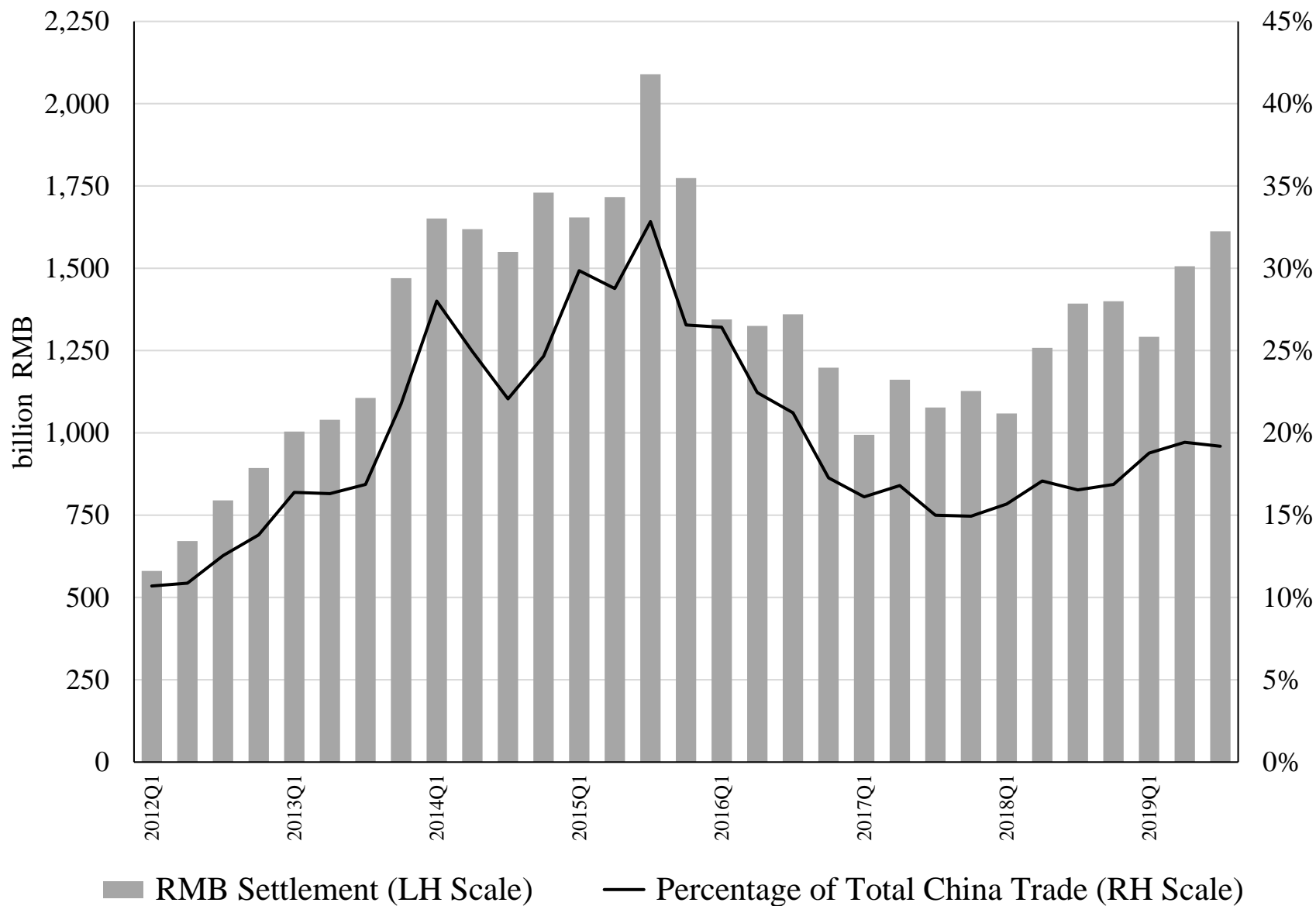
## Ch 4 China's strategy of internationalizing the RMB (cont'd)

- ▶ Capital account and financial markets opening:
  - ▶ Liberalization of Capital Flows: QFII, QDII, RQFII, Stock Connects, Bond Connect
- ▶ Bilateral currency swap agreements between central banks

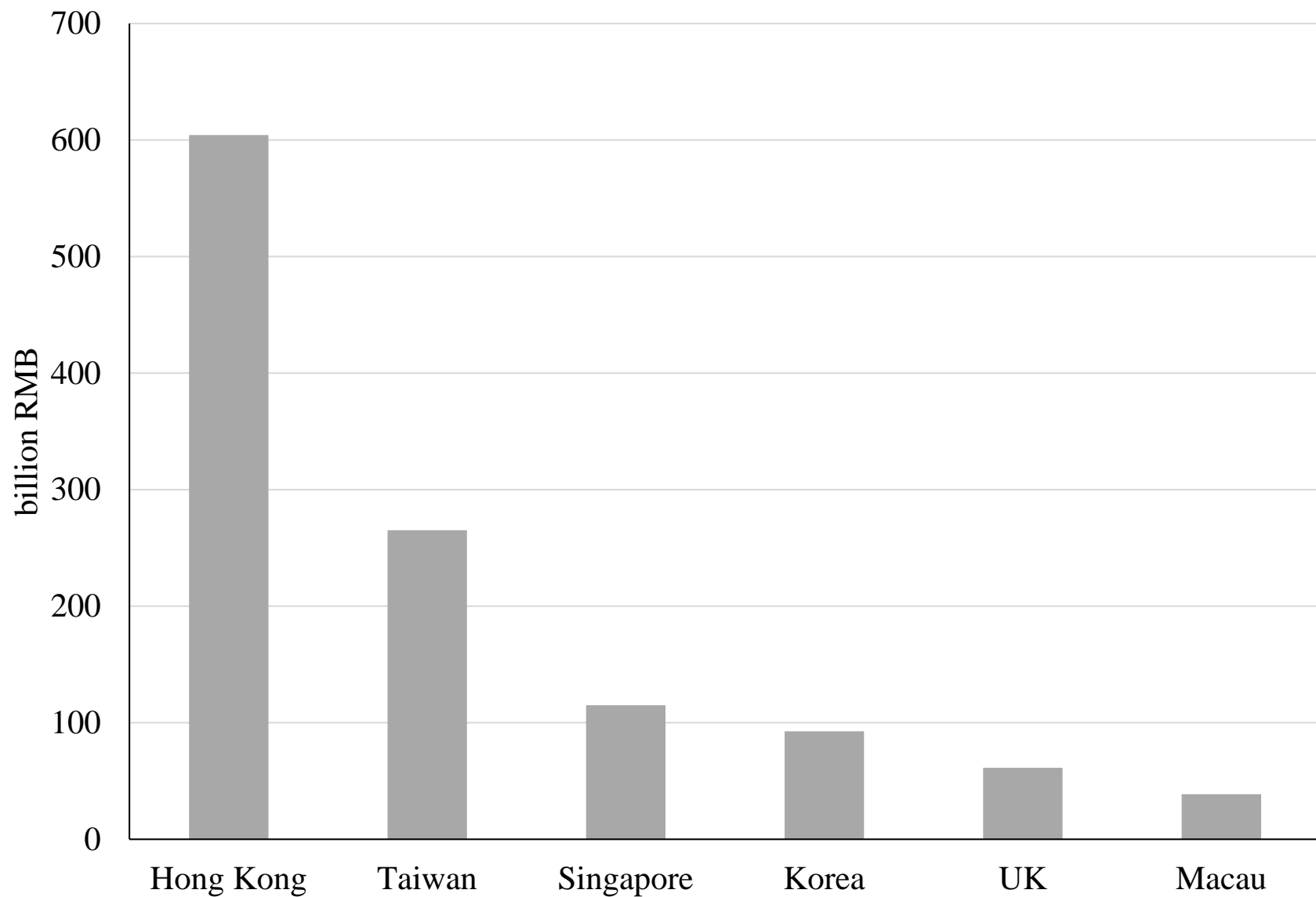




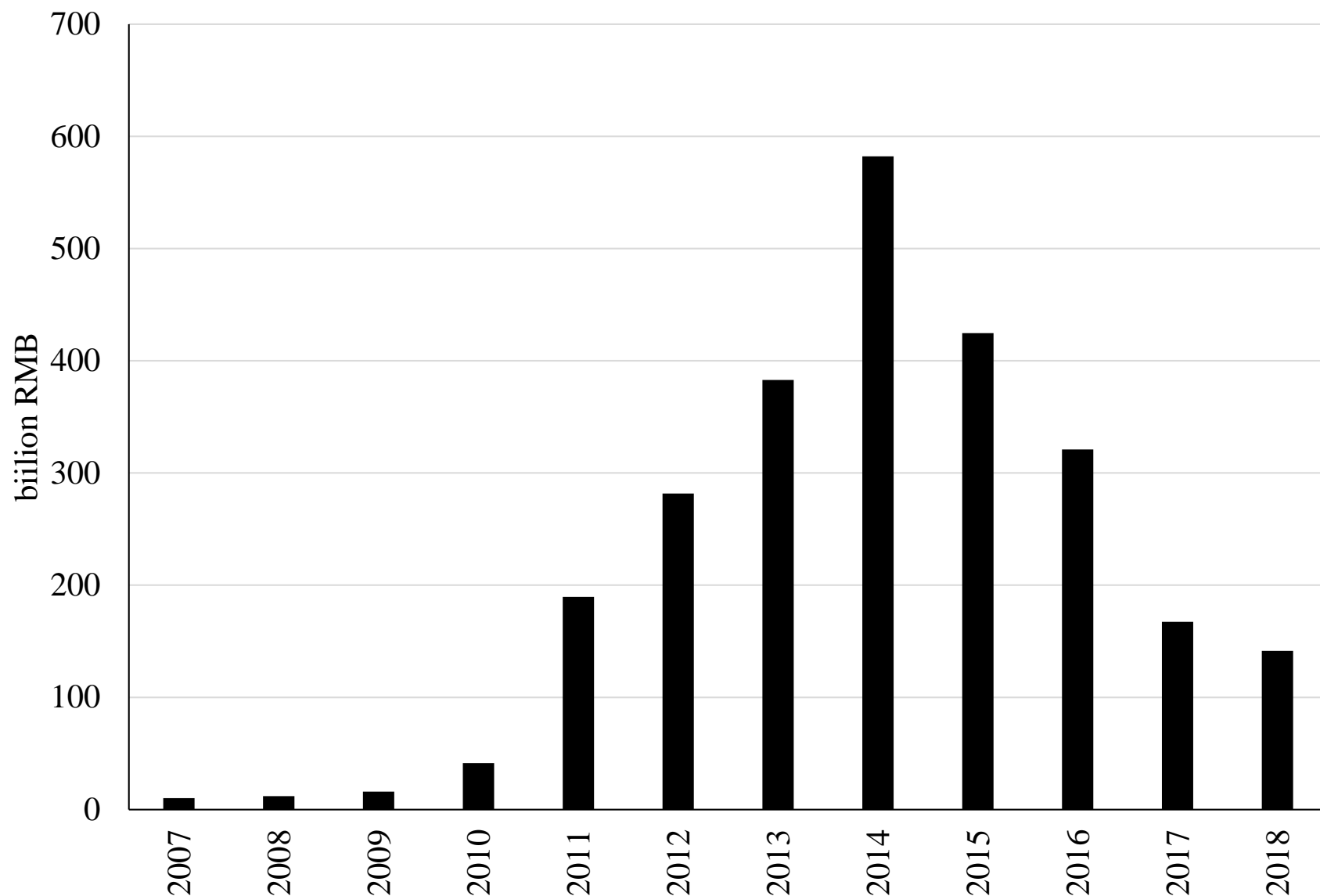
*Figure 4-1: Top 15 offshore RMB economies (in terms of payment) by weight as of June 2018*



*Figure 4-7: Cross-Border RMB Trade Settlement (Quarterly)*



**Figure 4-2: Offshore RMB Deposits by Region as of 2019 Q2**  
(excluding certificates of deposits)



*Figure 4-6: Amount of Global CNH Bonds (Dim Sum Bonds) Issued*

<b>America</b>		<b>EMEA (Europe, Middle East and Africa)</b>				<b>Asia</b>	
Country	RMB (bn)	Country	RMB (bn)	Country	RMB (bn)	Country	RMB (bn)
<b>Canada</b>	200.0	<b>ECB</b>	350.0	<b>Hungary</b>	10.0	<b>Hong Kong</b>	400.0
<b>Argentina</b>	70.0	<b>England</b>	350.0	<b>Morocco</b>	10.0	<b>South Korea</b>	360.0
<b>Chile</b>	22.0	<b>Switzerland</b>	150.0	<b>Pakistan</b>	20.0	<b>Singapore</b>	300.0
<b>Suriname</b>	1.0	<b>Russia</b>	150.0	<b>Belarus</b>	7.0	<b>Australia</b>	200.0
<b>TOTAL</b>	293.0	<b>Qatar</b>	35.0	<b>Kazakhstan</b>	7.0	<b>Malaysia</b>	180.0
		<b>UAE</b>	35.0	<b>Iceland</b>	3.5	<b>Thailand</b>	70.0
		<b>South Africa</b>	30.0	<b>Tajikistan</b>	3.0	<b>New Zealand</b>	25.0
		<b>Egypt</b>	18.0	<b>Albania</b>	2.0	<b>Mongolia</b>	15.0
		<b>Nigeria</b>	15.0	<b>Serbia</b>	1.5	<b>Sri Lanka</b>	10.0
		<b>Turkey</b>	12.0	<b>Armenia</b>	1.0	<b>TOTAL</b>	1,560
Total Volume: RMB 3063.0 billion				<b>TOTAL</b>	1210.0		

*Table 4-5: Bilateral Currency Swap Agreements between PBC and Foreign Central Banks (as of May 2018).*

# Ch 5 The importance of capital account liberalization

- ▶ China's capital account openness is low even by developing-country standard
  - ▶ - Capital outflows from residents are greatly restricted
  - ▶ - Foreign ownership of domestic bonds, including central government bonds, is very low
- ▶ There are many capital controls measures, and often through administrative means

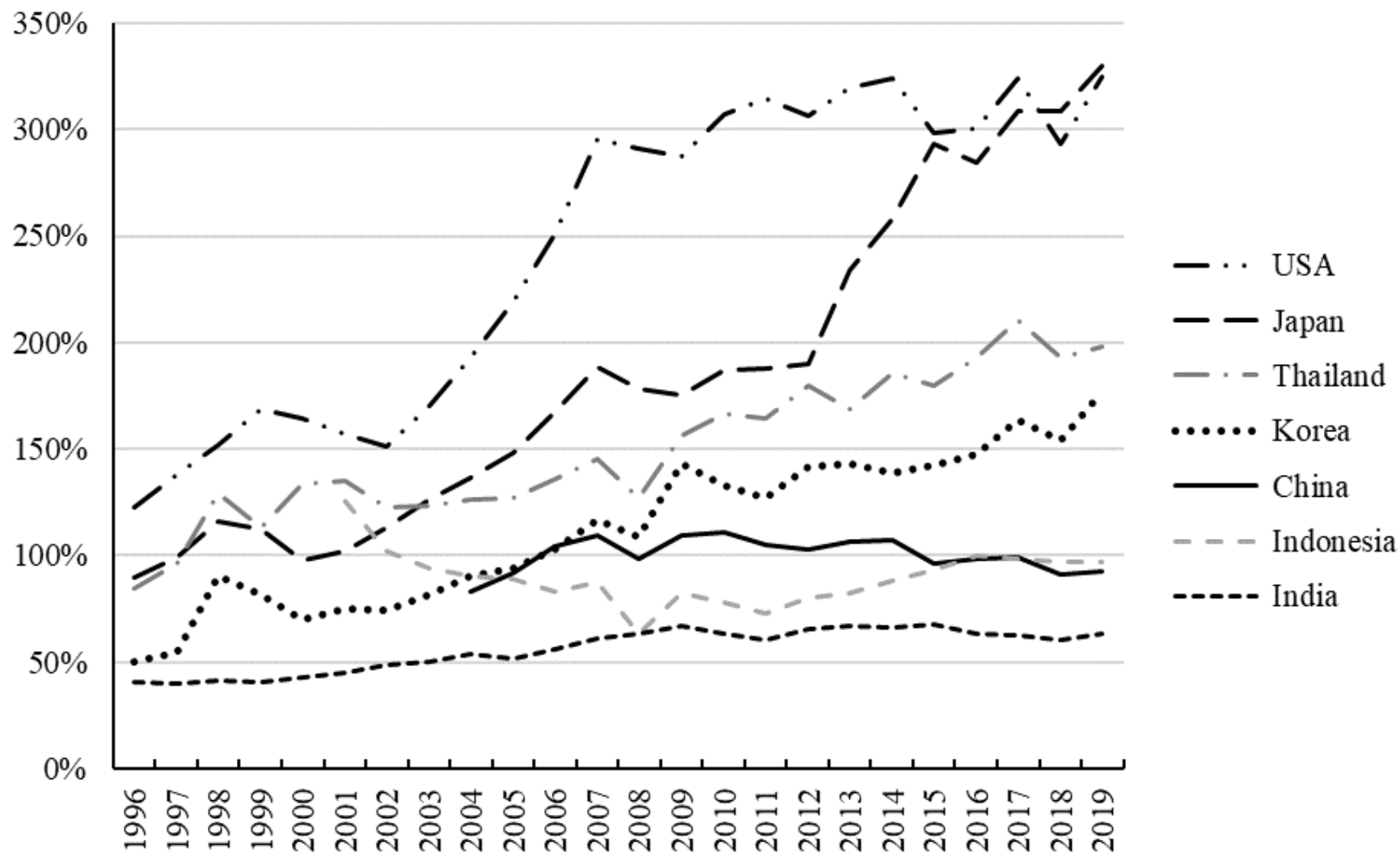


Figure 5-2: Gross international investment position as a percentage of GDP (De facto measure of capital account openness). *China's openness is less than 1/3 those of the USA and Japan.*

# Why is capital account opening important for RMBI?

- ▶ Capital account opening → more capital inflows and outflows → higher FX turnover → **thicker market** → lower transactions costs → higher FX turnover, and so on → **invoicing and settlement currency**
- ▶ Free capital mobility and deep, broad and liquid financial markets → RMB assets become international **store of value**



# The benefits of capital account liberalization

- Opening the financial markets to entry by foreign companies helps to **discipline domestic firms** and make them more efficient through competitive pressure and through imitation.

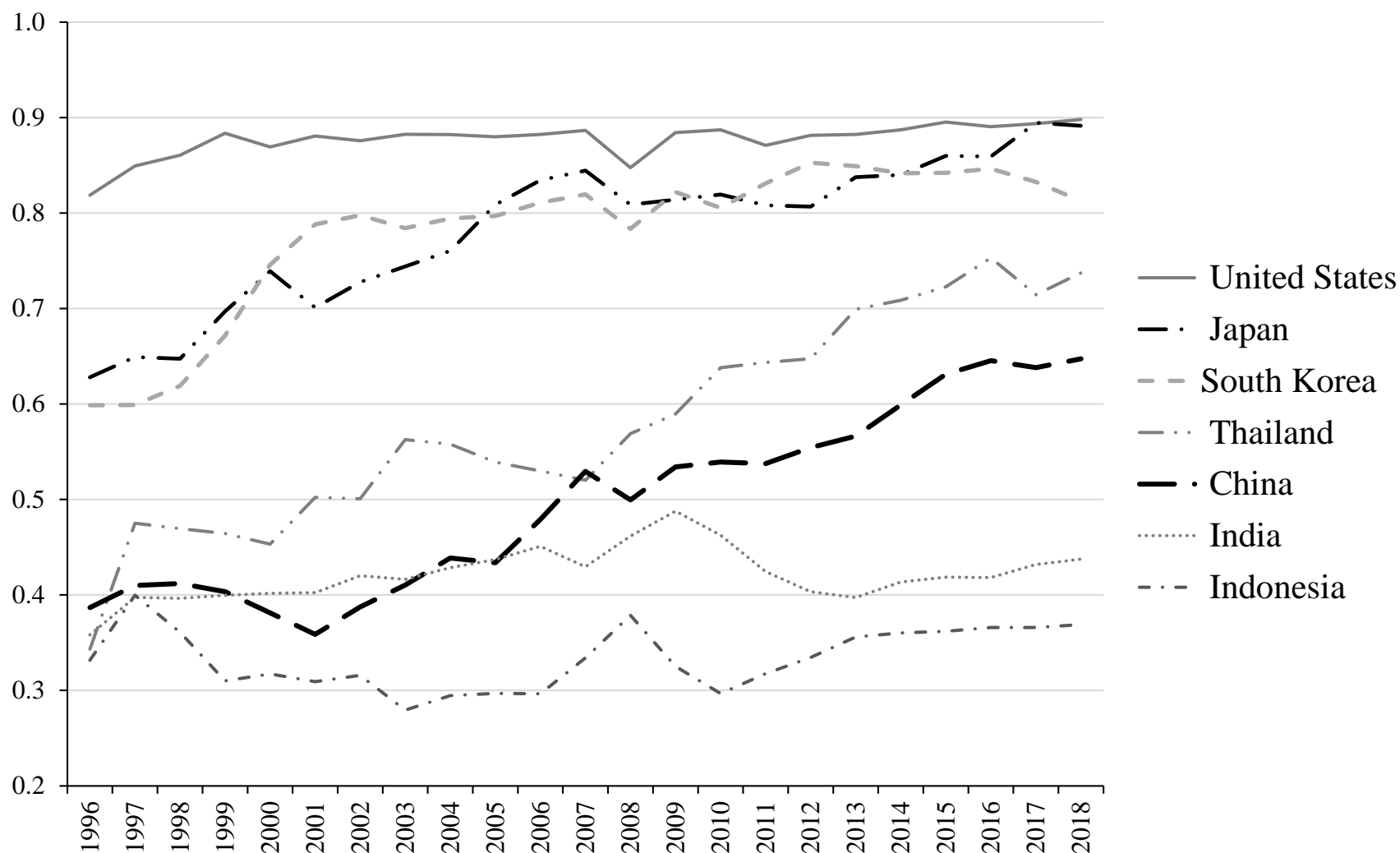
# The costs of capital account liberalization

- ▶ - Sudden reversal of **short term capital flows** can be detrimental to economy, leading to currency crisis, widespread bank failure and bankruptcy of firms
- ▶ - The **open-economy trilemma** dictates that China may need to **give up a considerable degree of exchange-rate stability** for capital mobility and autonomy in monetary policy

# Ch 6 The importance of financial sector liberalization

- ▶ Financial development leads to broader, deeper and more liquid financial markets → amplifies the effect of capital account opening → more cross-border capital flows → higher FX turnover → **thicker market** → RMB becomes **invoicing, settlement and investment currency**
- ▶ China's financial development index is low even by developing-country standard

## China's financial development index is lower than that of Thailand



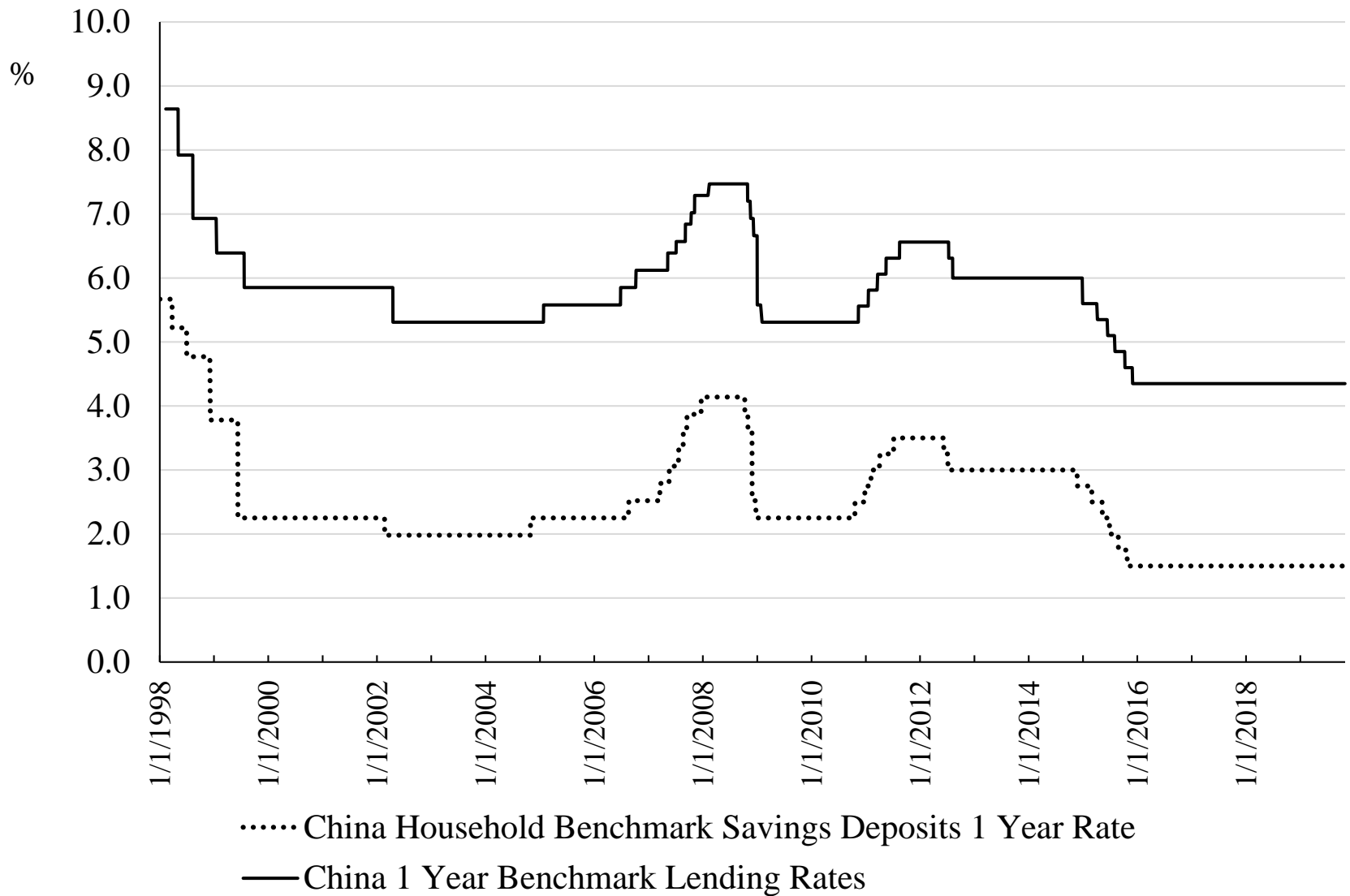
*Figure 6-1: IMF Financial Development Index*

# Structure of China's financial sector


- ▶ The structure of the financial sector of China is **lopsided**. The banking sector is disproportionately large compared with the bond market and the stock market.
- ▶ An underdeveloped financial market cannot be **broad, deep and liquid**. It also cannot be open, as it is too risky to open the financial market to foreigners when banks are not market-oriented, competitive, well-managed and well-regulated.

# Financial Repression in Chinese banking sector:

- ▶ - interest rate controls → low lending rates led to credit rationing to the SOEs; low deposit rates disadvantaged the households
- ▶ - dominance of state-owned banks, e.g. the “big four” banks: ICBC, BOC, CCB, ABC.
- ▶ - controls of credit allocation to favor SOEs, many of which are unprofitable
- ▶ - financial repression → capital misallocation (large but less profitable SOEs get capital more easily but small and medium enterprises harder)



*Figure 6-2: PBC Benchmark One-year Deposit and Lending Rates from 1998 to 2020*

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- ▶ The biggest problem with the financial system is the banking sector and the existence of a large number of unprofitable SOEs.
  - ▶ Recent interest rate reform: Market-based Loan Prime Rate (LPR) --- attempt to make the loan market more competitive and make the monetary transmission mechanism more effective.



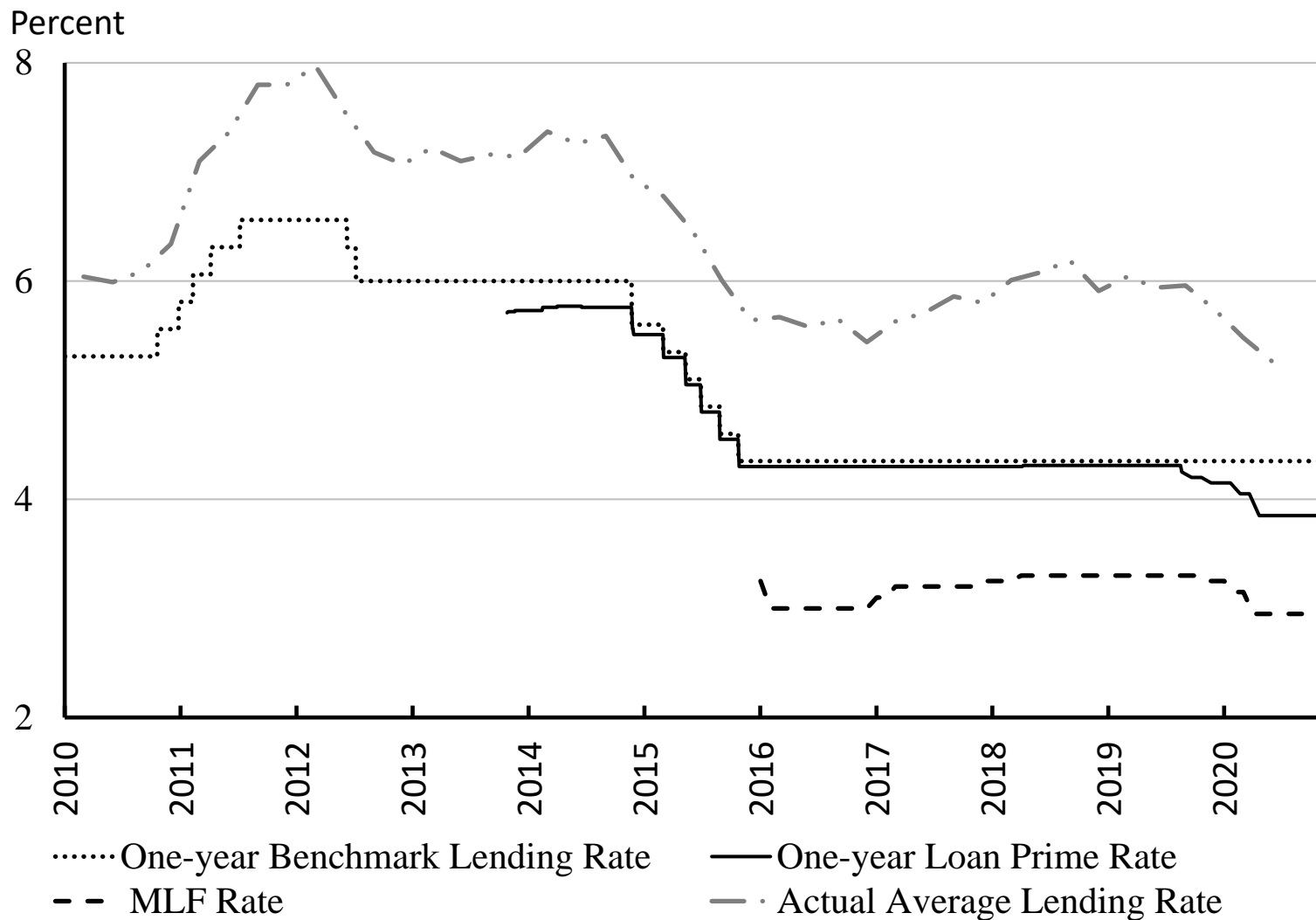
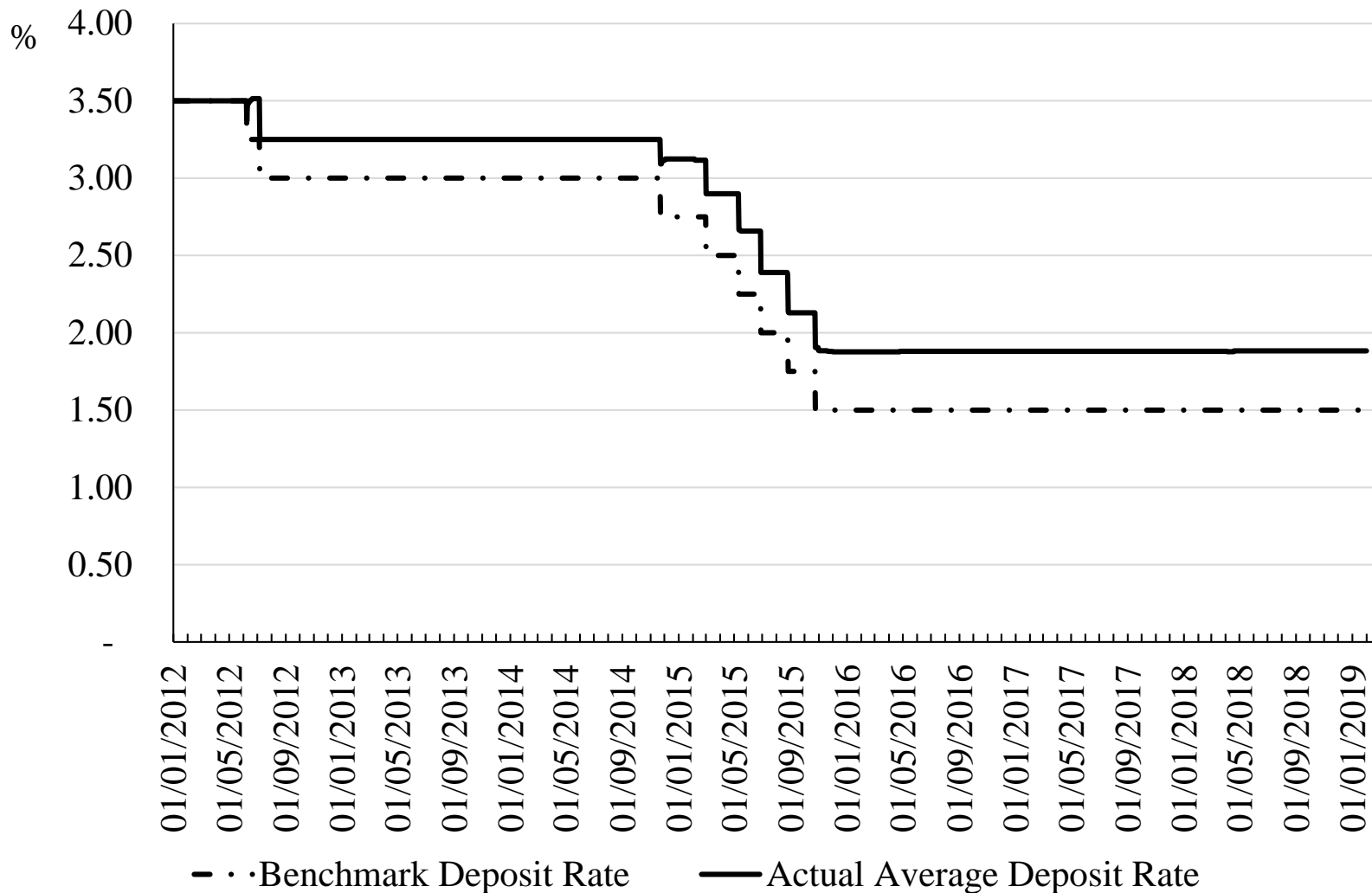


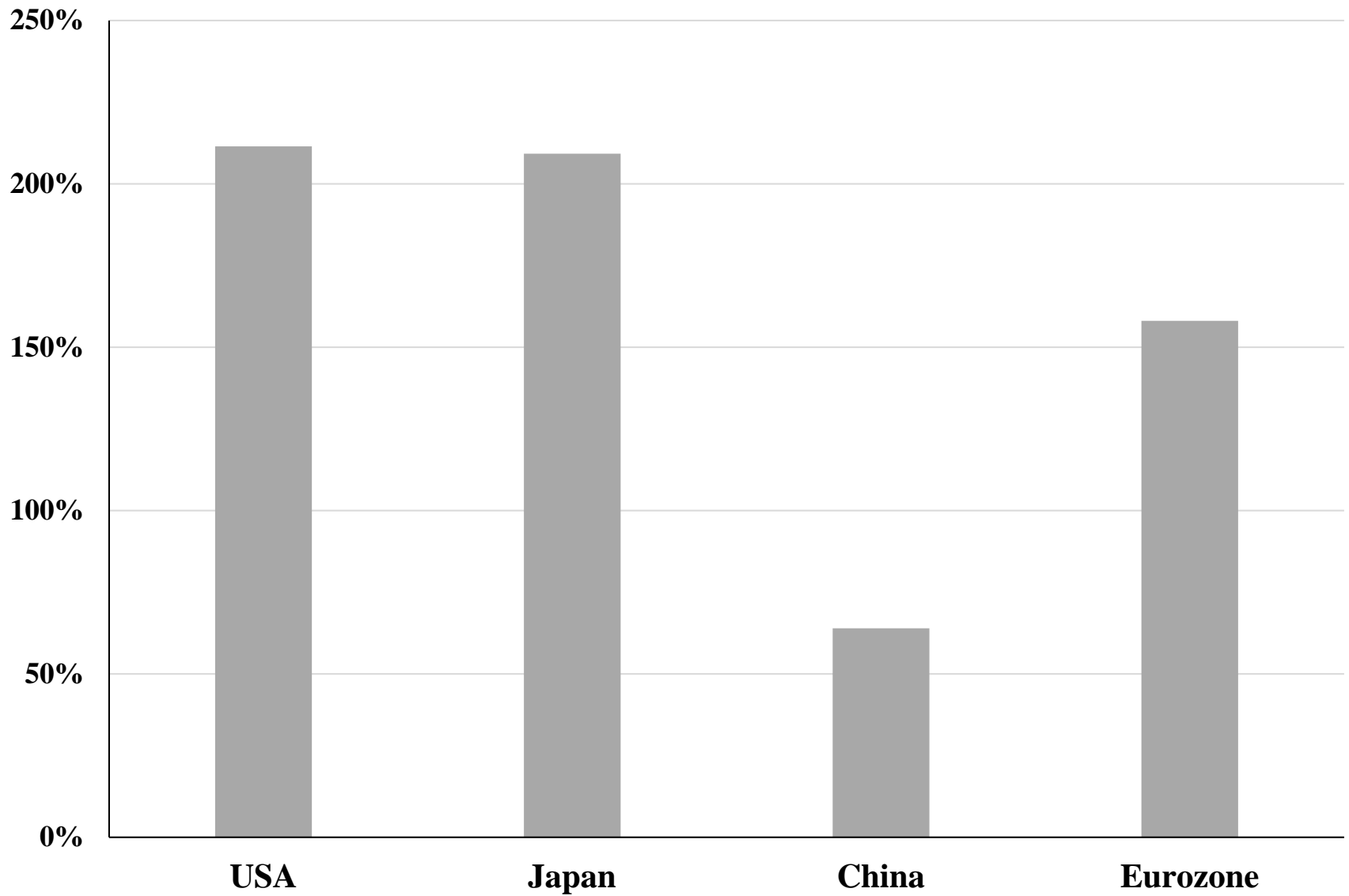
Figure 6-4: One-Year Actual Average Lending Rate, Benchmark Lending Rate, Loan Prime Rate and Medium-term Lending Facility (MLF) Rate. **Actual lending rates are more liberalized over time, but still not market-determined.**



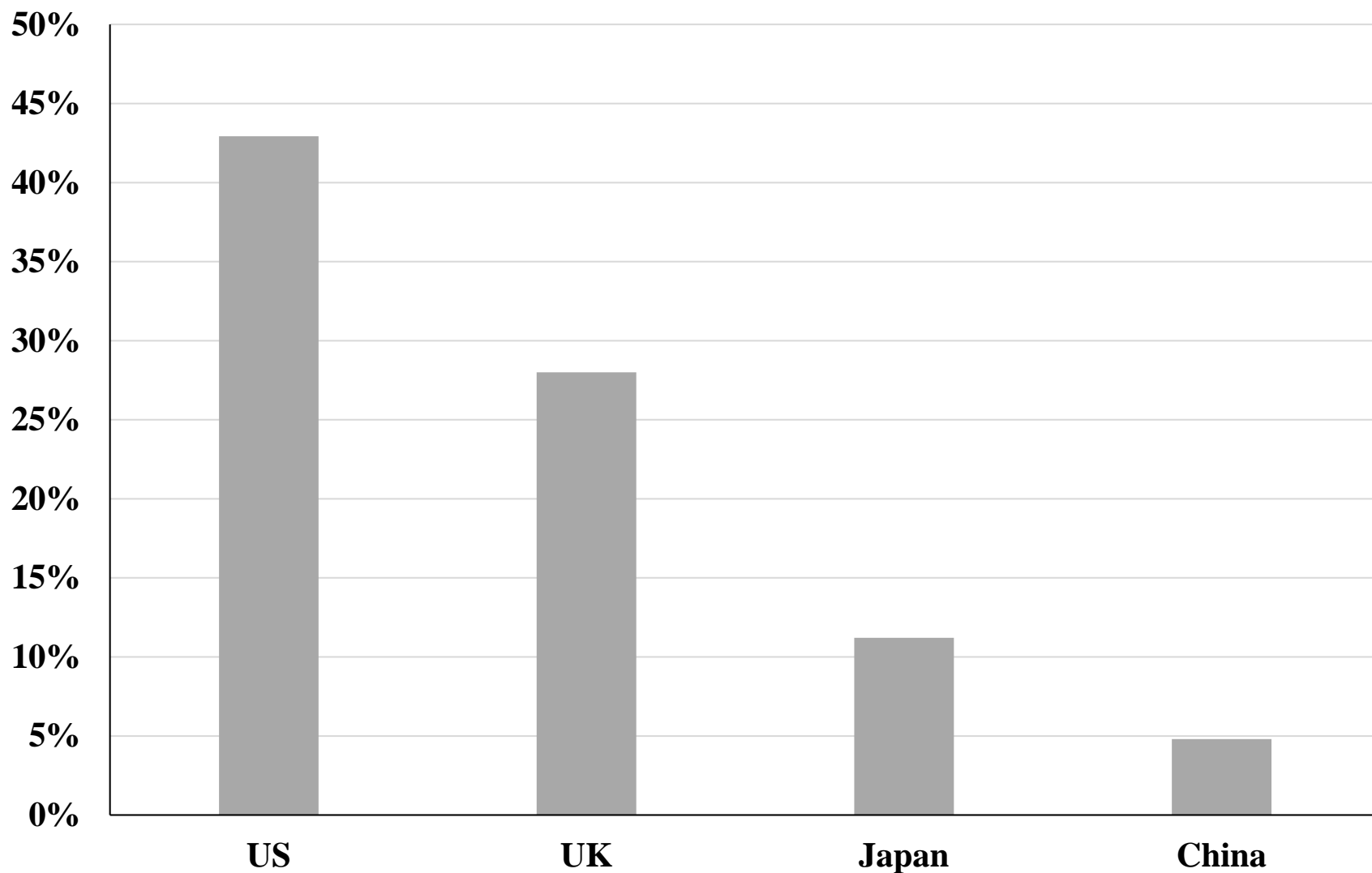
*Figure 6-5: Actual Average Deposit Rate and the Benchmark Deposit Rate (1-year). Actual deposit rates almost strictly followed the benchmark rates – far from market-determined.* (Dates are of the format dd/mm/yyyy.)

# The bond market

- ▶ - The development of the bond market, especially the central government bond market, is crucial to making the RMB a truly global currency.
- ▶ - However, there are many obstacles, such as its small size, lack of liquidity and the small share of foreign ownership.



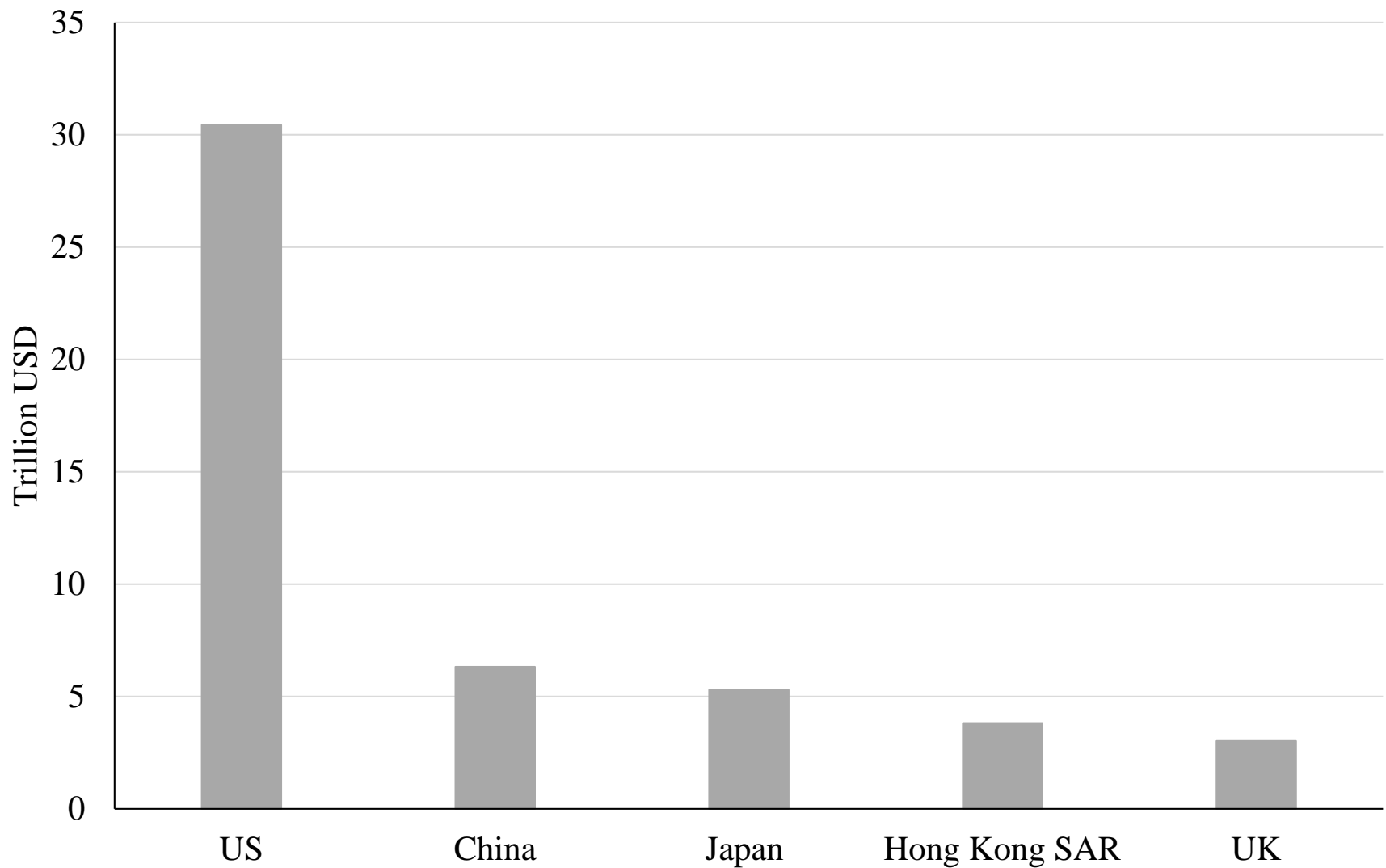
*Figure 6-6: Total Bond Outstanding as Percentage of GDP in 2017*



*Figure 6-9: Foreign Ownership of Domestic Central Government Bonds as of End of 2017*

# The stock market

- The track record of government intervention, the lack of transparency, capital controls, corporate governance, and other issues



*Figure 6-10: Market Capitalization of the Five Largest Stock Markets by Country/Territory as of December 2018*

# Bond index inclusions

- ▶ On 28 February 2020 , **J.P. Morgan Chase** would gradually include nine Chinese government bonds to the **Government Bond Index**-Emerging Markets index series.
- ▶ **FTSE Russell** announced that it would include the Chinese government bond (CGB) in its **World Government Bond Index** (WGBI) in October 2021.



# Stock index inclusion

- ▶ Global index compiler **MSCI** included 226 China large-cap A-shares on its MSCI Emerging Markets Index and other global and regional composite indexes in June 2018.

# Ch 7 The importance of the offshore RMB market

► One currency, two markets: Offshore RMB is fully convertible while onshore is not, and there is a firewall for capital flows → Internationalizing the currency while opening the onshore capital account at China's own pace.

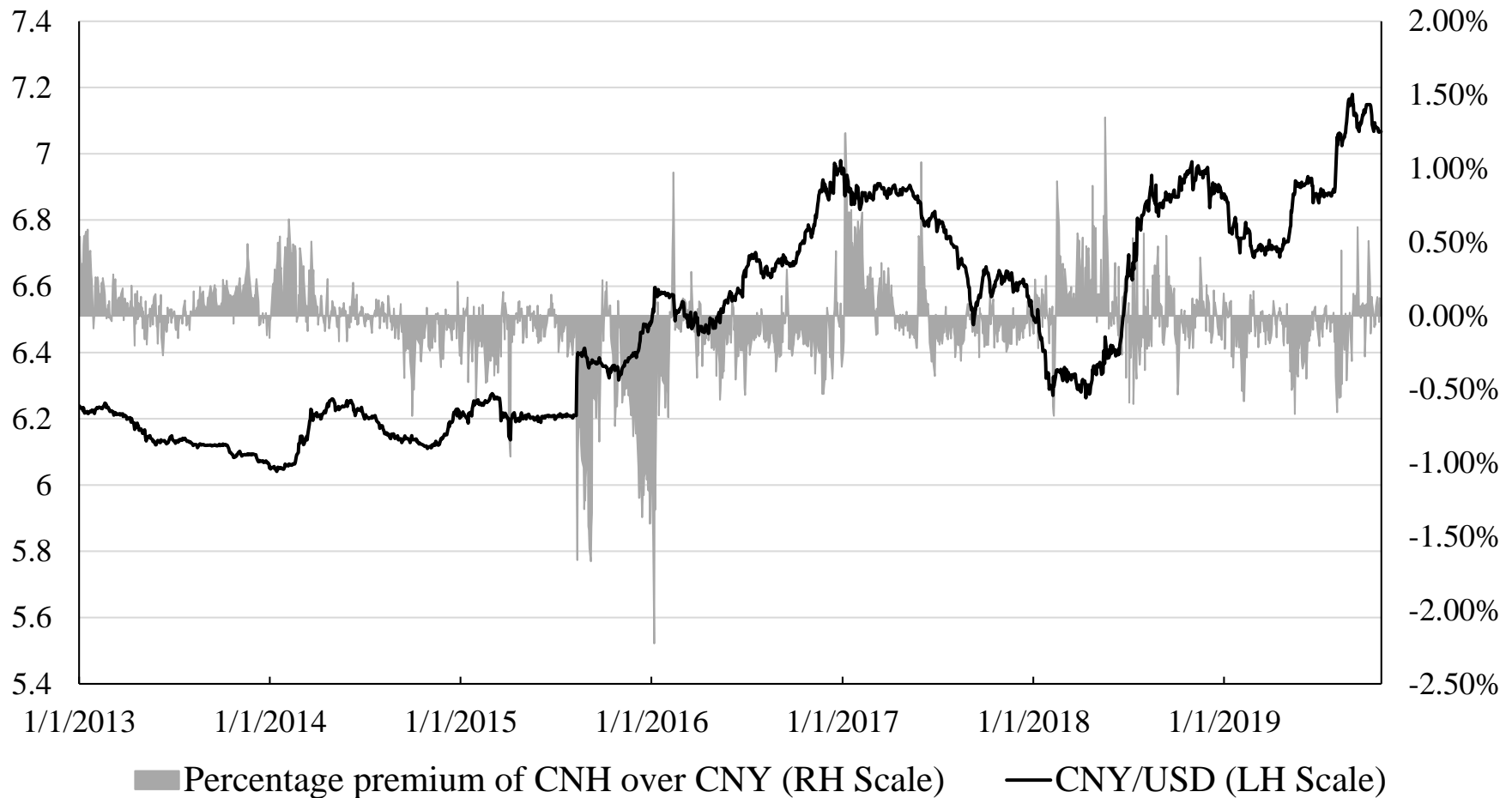
# Functions of the offshore market:

- ▶ Offshore market **separates the currency risks from the country risks** of the financial assets being transacted → offshore RMB-based financial markets → use of RMB outside China as **store of value**
- ▶ The **credibility and the well-developed financial infrastructure of the offshore centers** facilitate international payments flows and the development of the offshore financial markets → enhances the impacts of onshore financial development and capital account liberalization on the international use of RMB.

# Offshore market not main driver

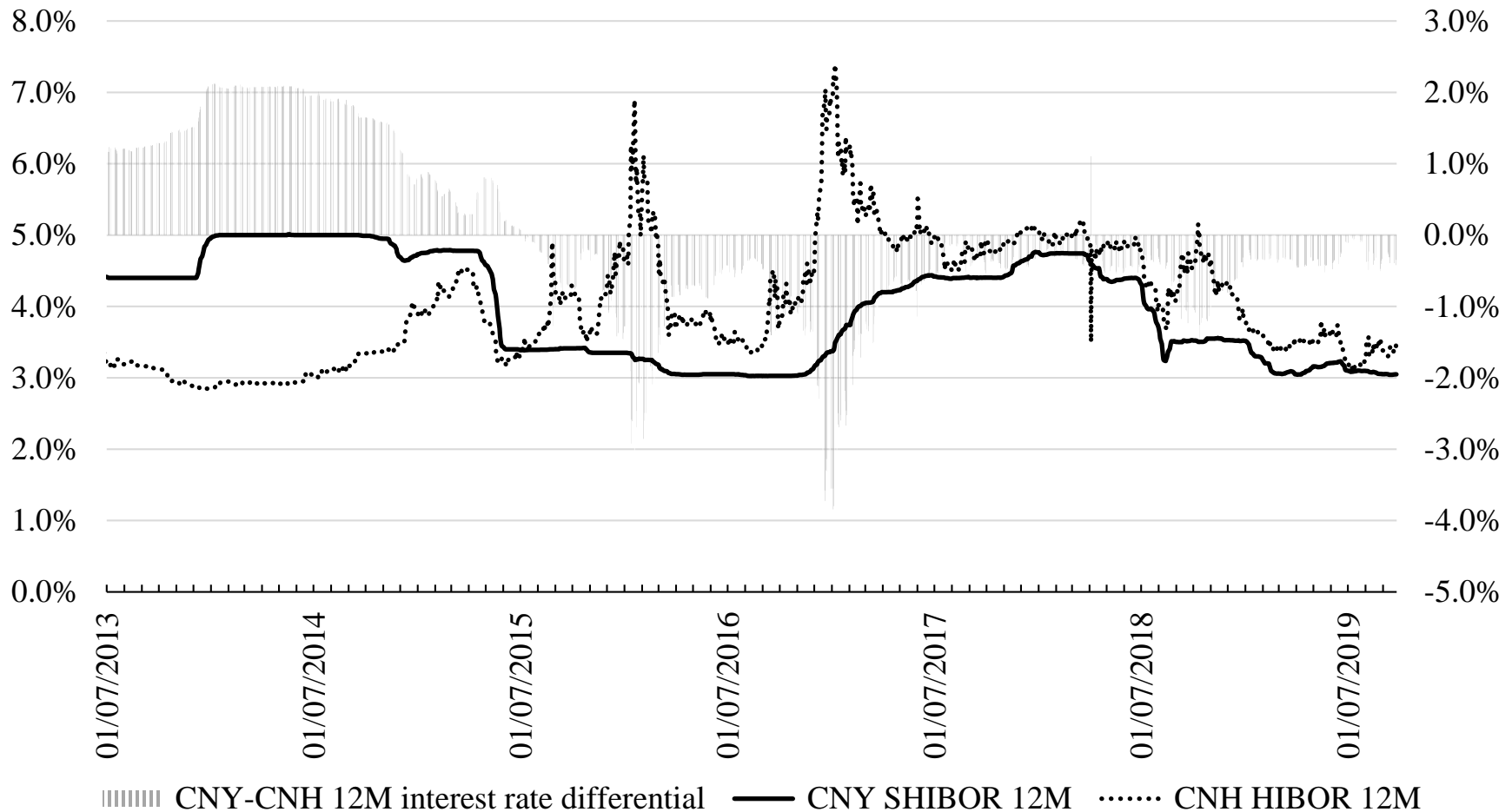
► However, the existence of the offshore market alone cannot be the main driver of RMB internationalization. **The main drivers are still onshore financial development and capital account openness.**

# One currency, two markets – exchange rate



*Figure 7-1: CNY/USD exchange rate and percentage premium of CNH over CNY.  
The CNH exchange rate is more volatile than the CNY exchange rate  
as the former is subject to less government intervention.*

# One currency, two markets – interest rate



*Figure 7-2: CNY SHIBOR 12-month interest rate and CNH HIBOR 12-month interest rate are on the LH scale. CNY-CNH 12-month interest rate differential is on the RH scale. The CNH interest rate is more volatile than the CNY interest rate as the former is subject to less government intervention.*

# One currency, two markets - FX markets

- ▶ The onshore RMB foreign exchange market
  - ▶ Subject to more intervention, e.g. central parity fixing, direct intervention
- ▶ The offshore RMB foreign exchange market
  - ▶ Less intervention (no central parity fixing or direct intervention), more volatile, **larger in size**, deliverable forward market exists
  - ▶ **Offshore FX turnover was 64% of total global RMB turnover in April 2019** (out of a global total turnover of about USD 285 billion per day, with Hong Kong accounting for USD 107.6 billion per day [38%]).

# One currency, two markets – the “Connects”

- ▶ SH-HK Stock Connect
- ▶ SZ-HK Stock Connect
  - ▶ Offshore RMB must be used in the Northbound investments for both Stock Connects
- ▶ Bond Connect
  - ▶ Either offshore RMB or foreign currency can be used in Northbound investments



# The Cross-Border Interbank Payment System (CIPS)

- ▶ Phase 2 launched in May 2018
- ▶ Offshore foreign banks can send and receive RMB payments directly to/from China.
- ▶ The importance of the clearing banks will greatly diminish
- ▶ In the LR, the CIPS can potentially enable Chinese international payment flows to avoid the legal reach of foreign countries, e.g. US.


# Problems of the offshore RMB market

► The development of the offshore market is constrained by the **insufficient opening of the onshore capital account and insufficient onshore financial development**. The relative size of the RMB offshore to onshore market is 1/44 of that the USD market.

# Ch 8 The potential of the RMB as a payment currency

Currency	Payment share in 2016 (%)	GDP share of issuing country in 2016 (%)	Issuing country
<b>USD</b>	<b>55.31</b>	<b>24.53</b>	<b>USA</b>
EUR	20.52	15.72	Eurozone
JPY	5.86	6.52	Japan
GBP	5.28	3.49	UK
CAD	3.23	2.02	Canada
<b>RMB</b>	<b>1.62</b>	<b>14.74</b>	<b>China</b>

*Table 8-1: Payment shares and GDP shares in 2016, excluding settlements of FX market transactions and intra-Eurozone payments.*



► A gravity model is used to carry out counterfactual thought experiments to gauge the potential of the RMB as a significant payment currency

► Conclusion: China must greatly speed up its financial development and open its capital account if it wants the RMB to become a significant international payment currency. Economic size alone will not catapult the RMB into the league of major payment currencies.

# Ch 9 The Prospects of RMB Internationalization


- ▶ One should put RMBI in perspective, neither over-emphasizing nor under-estimating its importance.
- ▶ There should be **an optimal degree for each of the following areas:**
  1. RMB internationalization,
  2. capital account opening,
  3. financial sector liberalization,
  4. exchange rate flexibility.
- ▶ The degrees of opening of all four areas are inter-related, and they should all increase over time as China's financial sector develops.
- ▶ **Thus, financial development is the key bottleneck of the development of the four areas.**

► The four key factors for the success of RMB internationalization:

1. China's economic size,
2. its commitment to free capital mobility,
3. the development of a deep, broad and liquid financial market,
4. foreigners' confidence on the RMB and the Chinese government

► China has economic size on its side, but it needs to work on the other three factors.


- ▶ It is not at all clear whether and when China would achieve a sufficiently high degree of capital mobility and financial market development in the near future.
- ▶ My conjecture, supported by my econometric study, is that, **in the intermediate term, the RMB would only be a distant third payment currency** (behind the USD and the euro).
- ▶ It may be especially hard for the RMB to become a safe-haven currency, even in the long run, as strong international trust of the Chinese institutions is required.



► **In the long run**, because of China's large GDP and continuing reforms and opening, and the world's central banks' demand for safe assets for foreign exchange reserves, the world may become a **multi-reserve-currency system**, with the USD, Euro and RMB being the three main reserve currencies.

► However, **the road for the RMB to get there may be quite long and uncertain.**





► Nonetheless, even if RMB does not become a significant international currency in the near future, but if the process of seeking **RMB internationalization serves as a catalyst for financial development and capital account opening**, the initiative should still be considered a success. RMB internationalization needs not be an end by itself.

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THE END  
THANK YOU!