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Financial Development

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Topics

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1 What is the role of a financial sector?

3 major issues about the financial sector?

- What role does the financial sector play?
- How does the financial sector evolve?
- What are the optimal depth and structure of a financial sector

The functions of a financial system

- The provision of a medium of exchange and a payment system: the supply of money and credit to achieve price stability Central bank/commercial banks/other financial players
- Financial intermediation: channeling funds from savers to investors through banks and markets
- Risk pricing and trading: insurance and derivatives markets

Medium of exchange

- The central bank is in charge of supplying a fiat money
- Banks are also involved because they supply checkable deposits and credit cards
- Money has a special property: it is a debt that is never repaid
- The central policy issue is not to oversupply money so as to cause inflation and currency depreciation
- Another policy issue is the robustness and stability of the payments system

Financial intermediation

- Financial intermediaries move funds from lenders to borrowers, mirroring saving and investment and linking the present to the future
- Financial intermediaries may range from banks, quasi-banks, investment banks, bond and stock markets
- A major policy issue is to ensure that funds are invested productively
- Defaults and performing loans are signs of poor performance
- Bubbles of asset prices also signal a failing intermediation channel

Pricing and trading risks

- Finance and insurance both deal with the future, and are intricately related
- Derivatives are financial contracts that transfer risks, often exchanging a stream of uncertain future payouts for another stream of currently known future (fixed) payouts
- Derivatives markets have become a growing part of the financial system, especially in advanced economies

Aggregate indicators of financial performance

- The (real) interest rate should be at a level consistent with full employment equilibrium
- The supply of credit and money is appropriate, avoiding financial booms and busts In the real economy, saving and investment are optimized to generate high returns and economic growth
- The variety of financial products and services meets the demand consistent with the level of income and wealth: money/discretionary saving/pension plan

Financial development

- Phase I: The financial system is dominated by commercial banks
- Phase II: The financial sector becomes segmented with specialized institutions Banking, securities, insurance, and real estate are usually segmented
- Phase III: The segmentation of a financial system becomes breaks down with innovations, deregulation, and globalization

What does a good financial sector look like?

- Financial depth:
  - the size or depth of a financial sector is measured by the ratio of the total assets of a financial sector to GDP
  - In general, the deeper, the better, provided that all financial assets are of good quality
  - But a deep financial sector can also be a bloated one with extensive bad lending
- Financial structure:
  - Banking
  - Nonbanking:
    * bond and stock markets, and shadow banks
    * Contractual savings institutions
    * Asset management companies
    * Derivatives markets and the foreign exchange market

Key points

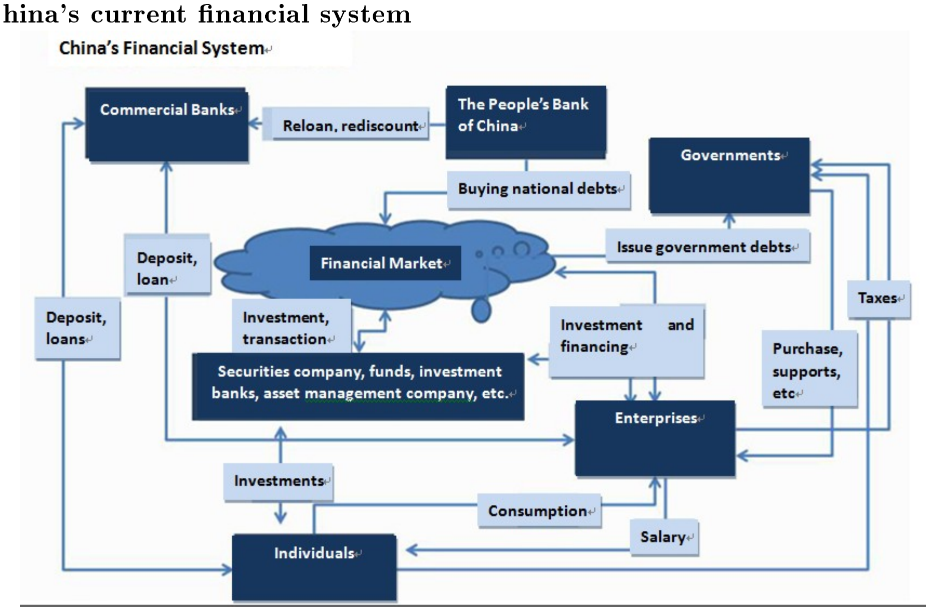
- The financial sector plays a critical role in a market economy via:
  - supply money
  - channel funds from savers to investors
  - price and transfer risks
- The financial sector evolves over time
- Since 1980, the financial sector has undergone profound changes in expanding non-bank financial institutions and being globalized
- There are no definitive answers about the depth and structure of an optimal financial sector

2 Financial reform and development

The Chinese financial system before 1978

- There was only one state-owned bank, the People's Bank of China
- The main functions of the mono-bank were:
  - perform the payment function
  - supervise the financial flows of central planning
  - regulating personal saving
- The mono-bank was not the main conduit of intermediation between saving and investment

China's current financial system

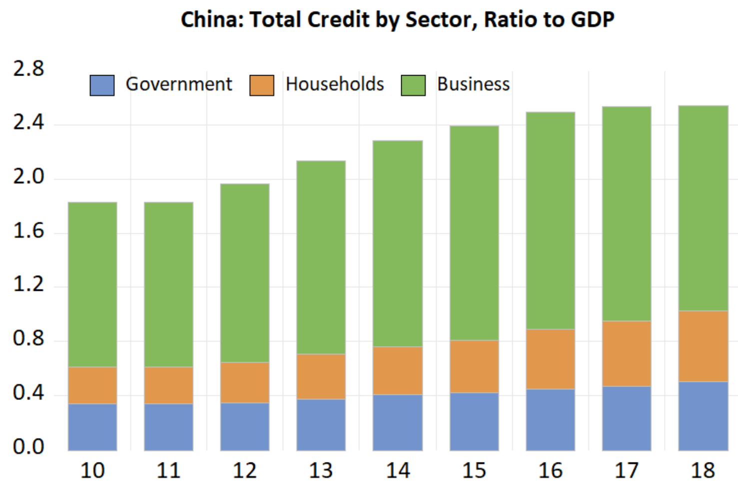


The assets of China's financial sector in December 31, 2018, trillion RMB

Institutions	Assets	% of total
Total	329.14	100.0
Central bank	37.25	11.3
Banking	268.24	81.5
Securities companies	5.32	1.6
Insurance companies	18.33	5.6

Source: PBC

The depth and structure of China's financial sector



Source: NBS and BIS

International comparison of total credit to nonfinancial sectors, 2018Q4, % of GDP

	China	United States	Canada	Japan	Germany	South Korea
National	254.6	249.2	302.2	374.7	177.9	224.2
Government	49.8	99.0	83.8	215.2	67.2	36.6
Households	52.6	75.8	100.7	58.4	53.5	91.9
Business	152.2	74.4	117.8	101.0	57.2	95.7

Source: BIS

How developed is China's financial sector?

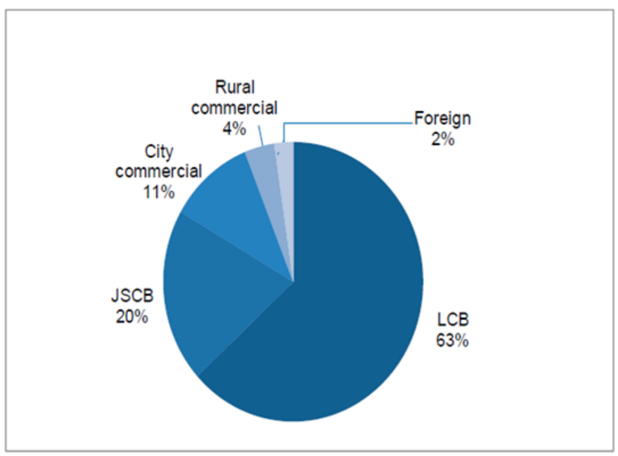
- By global standards, China's financial sector is already very deep or large
- Banking is large and provides most modern financial services Consumer finance is relatively small
- The stock market is large but not mature
- The bond market is small, in comparison with the US and UK
- Shadow banking was large in recent years

Banking development

- China's banking is composed of 4 large state-controlled banks, and other national and local banks
- Most banks have diversified ownership There are a few private banks Most global banks have their presence, but their collective market share is still small
- The government affects banking through interest rate controls and guidance on lending
- Officially, nonperforming loans appear to be small

The structure of China's commercial banking

Figure 11. China: Commercial Banking System Structure by Assets, 2010



Sources: CEIC; and IMF staff calculations.

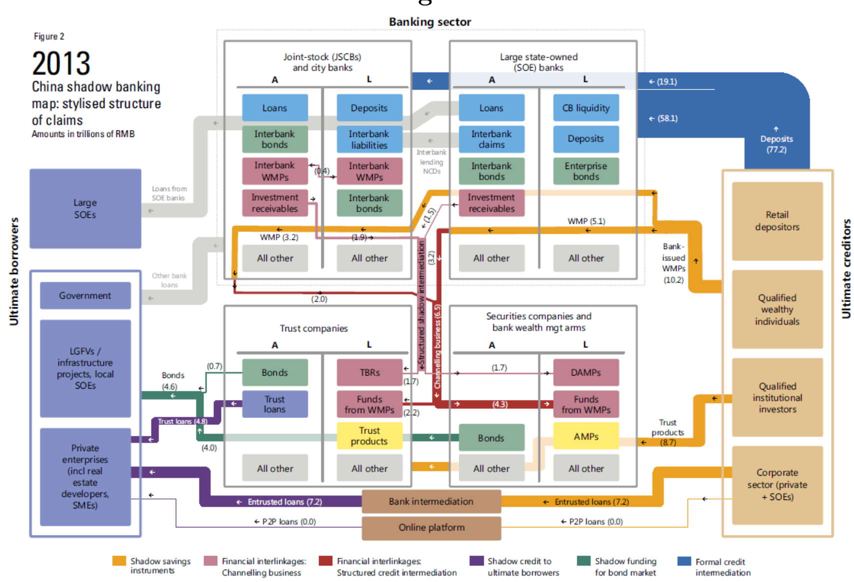
Major banking developments

- 1978-84: Decentralization: the mono-bank was divided into four specialized state banks
- 1985-93: Diversification (The PBC became a central bank; rural and urban credit cooperatives; trust and investment companies)
- 1994-2001: Commercialization (policy lending was separate out; risk management strengthened)
- 2001-present: banking was opened to foreign competition

Shadow banking

- Shadow banking is the non-bank but bank-like channel of financial intermediation
- In China, it is composed of mainly trust and entrust deposits (wealth management products) as well as undiscounted bank acceptances
- The main difference from bank deposits is that they are not explicitly guaranteed by the government through banks
- Shadow banking expanded rapidly after 2009 when banking lending was tightened
- Accordingly, credit supply measure is now extended to total credit to nonfinancial sectors (社融)

China's banks and shadow banking

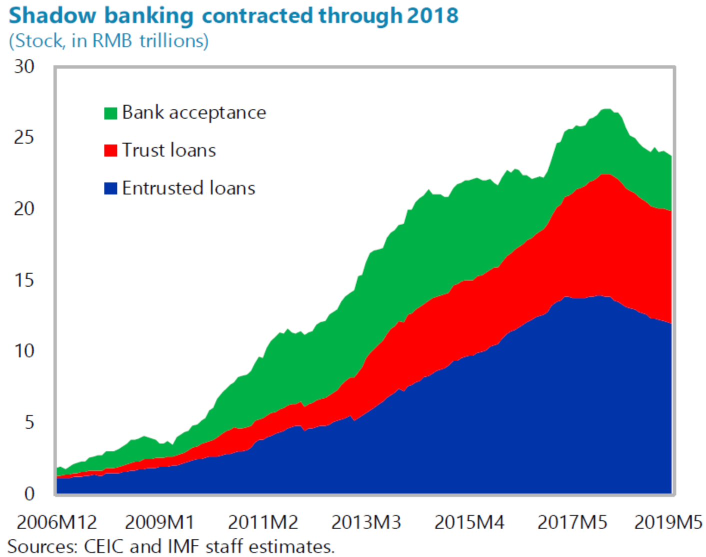


Asset management funds by March 2019

	Trillion RMB
Banks' WMP	21.4
Trust companies' WMP	19.0
Mutual funds	13.9
Securities companies' funds	21.1
Insurance companies' products	2.6
Total	79.3

Source: PBC

Shadow banking measured from the side of source of funds



The flow of total credit to nonfinancial sectors in 2019

	Trillion RMB	% of total
Total credit	25.575	100.00
RMB loans	16.883	66.01
Foreign currencies loans	(0.127)	(0.50)
Entrusted loans	(0.940)	(3.67)
Trust loans	(0.347)	(1.36)
Undiscounted bank acceptances	(0.476)	(1.86)
Government bonds	3.242	12.68
Corporate bonds	4.720	18.46
Funds raised in equity by nonfinancial businesses	0.348	1.36
Asset-backed securities of depository financial institutions	0.403	1.58
Loans written off	1.055	4.13

Source: PBC

Note: GDP in 2019 is 99.086 trillion RMB

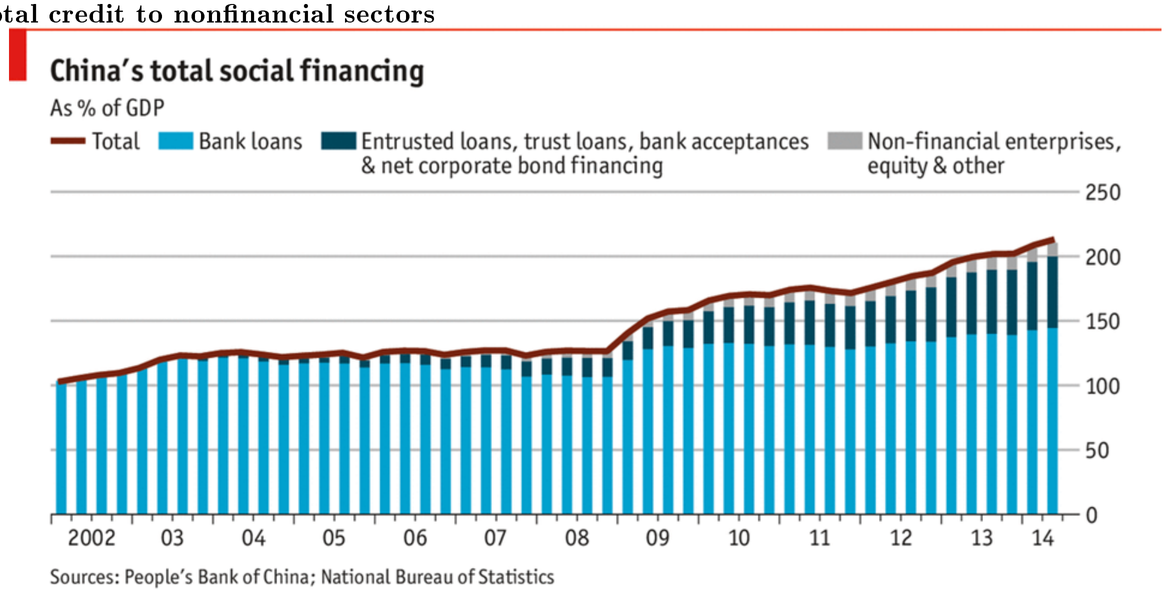
The stock of total credit to nonfinancial sectors by end of 2019

	Trillion RMB	y/y growth
Total credit to nonfinancial sectors	251.31	10.7
RMB loans	151.57	12.5
Foreign currency loans (RMB equivalent)	2.11	-4.6
Entrusted loans	11.44	-7.6
Trust loans	7.45	-4.4
Undiscounted bankers' acceptances	3.33	-12.5
Corporate bonds, net	23.47	13.4
Government bonds	37.73	14.3
Equity funds raised by nonfinancial enterprises	7.36	5
Asset-backed securities of depository financial institutions	1.68	31.5
Loans written off	4.07	35.1

Source: PBC

Note: GDP in 2019 is 99.086 trillion RMB

Total credit to nonfinancial sectors



The bond market in 2019

	New issues	Outstanding stock
Government	8.519	37.727
Financial institutions	25.936	36.462
Nonfinancial companies	10.706	24.618
International institutions	0.047	0.166
Total	45.207	98.995

Source: PBC
Note: GDP in 2019 is 99.086 trillion RMB

The Shanghai and Shenzhen stock market in 2019

Number of listed companies at year end	3,777
Total funds raised, trillion RMB	0.686
Market capitalization at yearend, trillion RMB	59.294
Shanghai Stock Exchange Composite Index at year end	3,050
Shenzhen Stock Exchange Componet Index at year end	10,431

Source: PBC
Note: GDP in 2019 is 99.086 trillion RMB

Stock market developments

- Two stock exchanges were set up in Shanghai and Shenzhen in 1991
- By the end of 2006, market capitalization reached 8940 trillion yuan, appreciated 176% over 2005, from 176% to 427%, the third largest in Asia 246 billion yuan was raised, 73 times the amount raised in 2005
- A-shares: shares in yuan traded in Shanghai and Shenzhen; B-shares: shares in dollar sold to overseas investors; H-shares: shares traded in Hong Kong stock exchanges

Current issues of the stock market

- Low contestability
- Merit-based v disclosure-based system of IPOs
- Thin markets
- Weak disclosure and regulation
- Insider control and manipulation
- Policy news-driven market

Institutional investors

- The presence of institutional investors are regarded to critical for market maturity
- Mutual funds have expanded rapidly
- By 2006-end, net assets rose to 857 billion yuan
- QFII have been allowed in Their net assets reached 97 billion yuan
- Insurance companies and pension funds held 30% of tradable shares

Key points

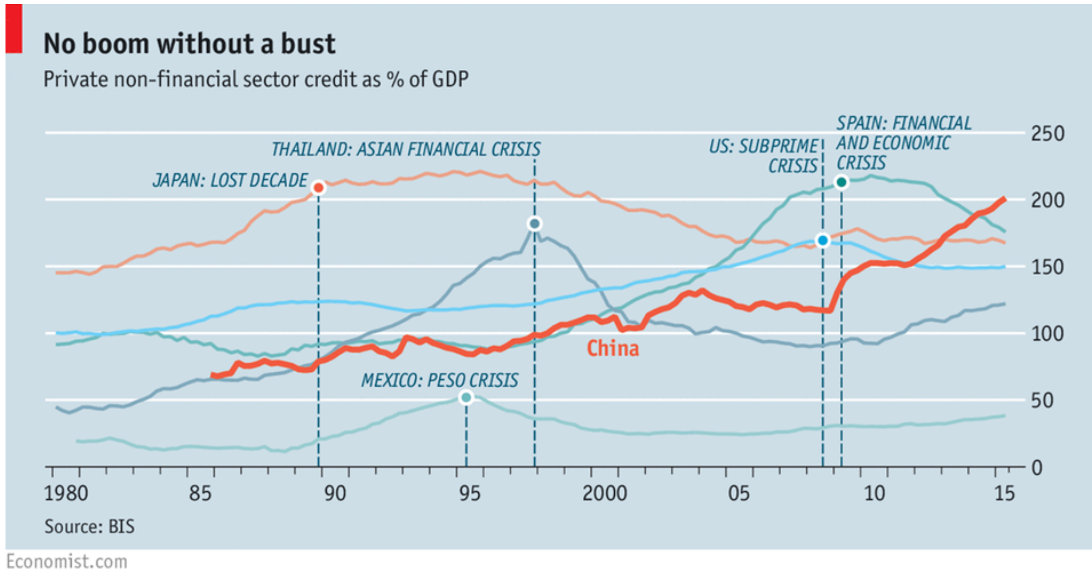
- In 1978, China had only a very primitive financial system
- By 2019, the Chinese financial system has become a very deep one to the extent that the level of debt is precarious
- In the 80s and 90s, banks were the main conduit of financial intermediation
- Subsequently, the capital market (bonds and stocks) expanded significantly
- After the global financial crisis of 2008, shadow banking and local government debt ballooned, pushing up the debt level dangerously
- Overall, the Chinese financial sector is heavily restricted to foreign competition and cross-border capital flows hindered, especially outward flows

3 Current issues

High leverage

- In 2014Q2, total debt was 286% of GDP, exceeding that of the US
- Excluding financial institution debt, it was 217% of GDP
- By the end of 2018, total credit to nonfinancial sector was 255% of GDP
- Who are heavily in debt? Local governments, their financing vehicles, developers and many industries with excess capacity such as steel and cement
- Has it reached the crisis level? Very close, so the government wants to engineer a smooth deleveraging

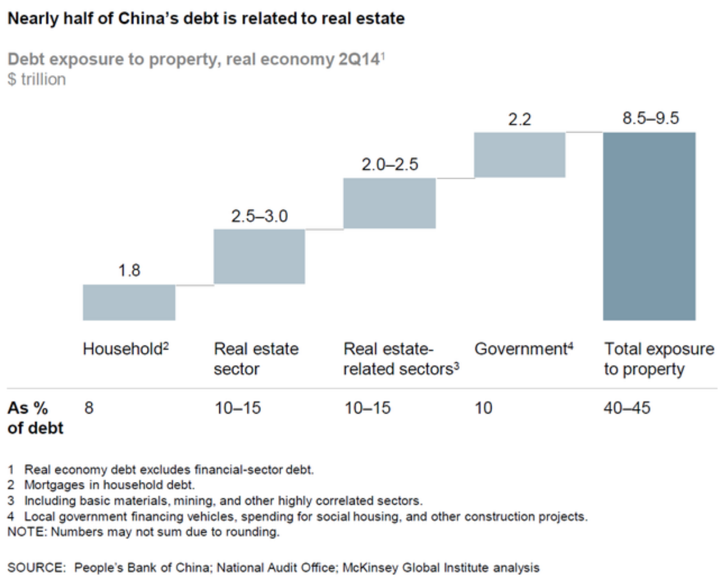
The risk of a financial crisis



Where does debt risk lie?

- Local governments: too many infrastructure projects which are not financially viable
- State-owned enterprises (SOEs): excess capacity and low profitability/loss making
- Large non-state enterprises: excessive debt to fund asset expansion, especially overseas
- Developers: tied up to bubbly property and house prices
- Small and medium-sized enterprises (SMEs): illiquid/insolvent due to the cronavirus crisis
- Households: dangerously indebted, especially with annual income below 100,000 yuan

Exposure to real estate properties



The illusion of a bubbly economy

- Local governments: hope to reap more revenue from selling land
- Developers: rising house prices would induce more buyers
- Households: hope to keep and accumulate wealth through house appreciation
- Central government: supply more money and credit to keep the bubble bubbling

Smooth landing for local government debt?

- The financing vehicles of local governments have been frozen
- Banks are not allowed to lend to them and developers
- Local governments are allowed to issue bonds under a new legal framework unfolding this year
- As most loans are secured against land, the government would not allow a sharp fall in property prices
- The PBC is in a dilemma in setting the interest rate

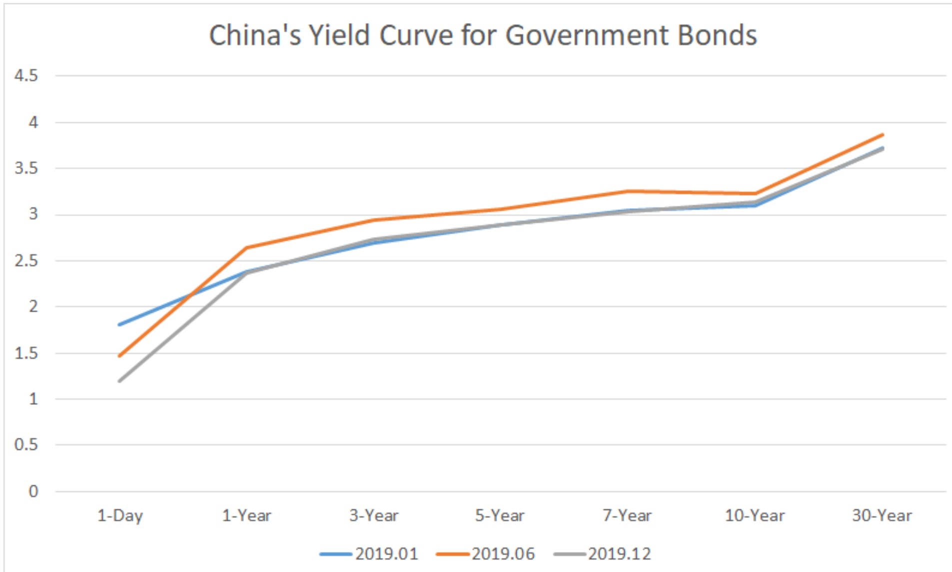
What has been done to defuse the financial crisis?

- New debt to fund the old debt
- Tighten financial regulation to squeeze shadow banking
- Implement a common regulatory framework for asset management funds licensed by multiple regulators
- Debt for equity swaps, especially for SOEs
- Use ABS (asset backed securities) to offload loans into bonds (0.403 trillion yuan in 2019)
- Loan writeoffs (1.055 trillion yuan in 2019)

Expand market-based financial intermediation

- China's banking is already very large by global standards But market-based finance is still small
- What is market-based finance? Mainly the bond and money market and other non-bank channels
- Who supplies funds to the market? Institutional investors, including foreign financial institutions
- Who uses funds? Corporations, central and local governments, and foreign financial institutions
- In recent years, securitization of PPP (public-private partnership) debt has become a idea in vogue

Yield curve



Interest rate liberalization

Why is it important?

- It may break the grip over deposits of large state banks, if price competition is allowed in banking
- The central bank wants to move on an interest-rate based monetary control regime
- The control on deposit rate is a major stimulant for the expansion of risky and opaque shadow banking

Why is it difficult?

- New entrants and competition may eat away easy profits of large banks
- Competition may lead to more risk-taking

Internationalization of the renminbi

What motivates the internationalization of the renminbi?

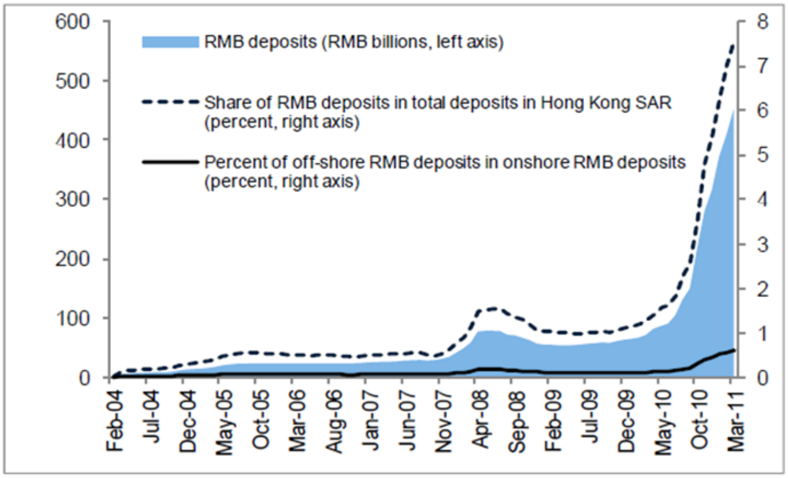
- It is strategically important for China as the second largest economy
- The dollar's exorbitant privilege is abused by the US

How is it being done?

- Swap agreements with other central banks
- Promote the use of renminbi in regional trade
- Expand offshore financial centers for RMB

Offshore RMB

Figure 13. China: RMB Deposits in Hong Kong SAR



Sources: CEIC; and IMF staff calculations.

Capital-account liberalization

- The Chinese yuan is convertible for the current account (trade and FDI) but not yet fully for the capital account (bonds and stocks)
- Why is it important to consider capital account liberalization?
  - All advanced economies have adopted it
  - It may boost profits in the financial sector
  - It is essential if the yuan is to become a major reserve currency

Key points

- The debt level is too high, and China is on the verge of a financial crisis
- Excessive leverage is due to soft budget constraint, unrealistic target for GDP growth and excessive monetary expansion
- Deleveraging is critical, but so far it results in expansion of SOEs and contraction of private enterprises and is achieved through squeezing non-bank financing
- Interest rate liberalization helps to correct the distortion between bank and non-bank intermediation so as to improve the quality of credit allocation
- Foreign competition in financial services would enhance competition and improve the quality of financial services

- Liberalizing cross-border capital flows is a necessary condition for internationalize the use of the renminbi and develop a international financial center in Shanghai

Review questions

- What are the main functions of a financial system?
- How has the Chinese financial sector evolved ?
- What are the major current issues?