Introduction to China Banking Industry

Antai Global Summer Program 2018
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www.nanlifinance.org
Overview

• Now and Then of China Banking Industry
  – Ancient Time
  – Bank Reform
  – New Century
    • Mobile Payment in China

• Financial Intermediation and Economy Growth
  – Credit Growth and Quality
  – Shadow Banking
China Banking Industry

• The banking sector is the pillar of China's financial system.

• In 2017, four Chinese banks, including Bank of China and China Construction Bank, made it to the Financial Stability Board list of 30 global systemically important banks.

• 126 Chinese banks were included in the 2017 top 1,000 ranking, seven more than the previous year.
# Largest Banks in 2017 by Total Asset

<table>
<thead>
<tr>
<th>Rank</th>
<th>Bank name</th>
<th>Total assets (US$ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Industrial and Commercial Bank of China</td>
<td>3,473.09</td>
</tr>
<tr>
<td>2</td>
<td>China Construction Bank Corporation</td>
<td>3,016.45</td>
</tr>
<tr>
<td>3</td>
<td>Agricultural Bank of China</td>
<td>2,815.92</td>
</tr>
<tr>
<td>4</td>
<td>Mitsubishi UFJ Financial Group</td>
<td>2,626.29</td>
</tr>
<tr>
<td>5</td>
<td>Bank of China</td>
<td>2,611.43</td>
</tr>
<tr>
<td>6</td>
<td>JPMorgan Chase &amp; Co.</td>
<td>2,500.00</td>
</tr>
<tr>
<td>7</td>
<td>HSBC Holdings PLC</td>
<td>2,374.15</td>
</tr>
<tr>
<td>8</td>
<td>BNP Paribas</td>
<td>2,189.27</td>
</tr>
<tr>
<td>9</td>
<td>Bank of America</td>
<td>2,187.70</td>
</tr>
<tr>
<td>10</td>
<td>Wells Fargo &amp; Co.</td>
<td>1,930.12</td>
</tr>
</tbody>
</table>

Src: 2016 S&P Global Market Intelligence, May 2017
China has the world's largest total banking sector assets of **$39.9 trillion USD** (252 trillion CNY) with **$26.54 trillion USD** in total deposits.

By the end of 2017, there were 4,549 institutions in the sector.

The non-performing loan ratio of commercial banks stood at **1.74% at the end of 2017**, with outstanding bad loans at **1.71 trillion yuan**.

Chinese commercial banks capital adequacy ratio was **13.65%**, higher than the international minimum standard by two to three percentage points, and liquidity coverage ratio was **123.26%**.
China Economy Growth

![Graph showing the growth of China and USA economies over time](image-url)
History of Banks

- Origin of different functions of Banks
  - Storage
  - Exchange (Mediterranean countries, ancient Greek)
  - Loan (South and North Dynasty China A.D. 220–589)

- “Bank” and “Bankrupt”
  - “Banco”

- First bank: Venice, Italy, 1171, emerged from insurance company

- First commercial bank, England 1694
Money and Banking in Early China

- What is Money
  - Commodity money
    - B.C. 3000, Shang Dynasty, shell money
    - B.C. 256 Zhou Dynasty, commodity money (copper)
    - B.C. 211 Qin Dynasty, standardize commodity money
  - In 1024, the first **paper money** was issued by the state in Sichuan.

Jiaozi (交子), the world's first paper money, an innovation of the Song era (960-1279)
What is Money?

- Commodity money
- Paper money
- Fiat money: no connection with the commodity
  - August 15, 1971 Nixon discontinued converting U.S. dollars into gold at $35 per ounce.
- Digital Currency
  - Closely related to the development of mobile payment, one of the ”new four inventions of China”
Digital Currency

• China’s central bank has begun cautiously testing a digital currency
  – Appears to be the first in the world.

• Designed to scale to the number of transactions made every day across the country

• Introduce the digital currency alongside China’s renminbi
  – Currently no timetable, and I proceeding cautiously.
Mobile Payment in China

![Image of mobile payment device]

**China mobile payments dwarf US**

Transaction value of third-party payments ($tn)

- **US**
- **China**

![Bar chart showing transaction values](chart)

- Post-2015 figures are forecasts: renminbi values converted to US$ at current exchange rate
- Source: Forrester Research (US), iResearch (China)
Mobile Payment in China

Figure 5. Selected Countries: E-Wallets’ Market Share Relative to Mobile Subscription Per Capita and Internet Penetration, 2015

Figure 10. China: Market Share of Third-Party Mobile Payment Providers, 1Q16

E-wallet market share as of 2015; mobile and Internet penetration as of 2014
Source: Worldpay Global Payment Report/World Bank/Fung Global Retail & Technology

Source: iResearch/Fung Global Retail & Technology
Mobile Payment in China

Figure 13. China: Mobile Payment Use by Category and Share, 2014

- E-Commerce: 94.3%
- Mobile Top-Up: 93.2%
- Transfer: 91.7%
- Airline Ticket: 83.0%
- Food and Beverage: 73.6%
- Pay Credit Card: 71.8%
- Financial Product: 69.0%
- Buy Lottery: 65.8%
- Leisure: 62.2%
- Utilities: 61.6%
- Education: 59.1%
- Online Game: 55.2%
- Beauty: 55.1%
- Financial Analysis: 48.9%
- Insurance: 48.1%
- Overseas Transfer: 41.0%

Mature uses (used by 70%-90% users)
Developing uses (used by 60%-70% users)
Emerging uses (used by 40%-60% users)

Source: iResearch/Fung Global Retail & Technology
Mobile Payment in China

• Threat or opportunity for banking industry in China?
Early Chinese Banks

• First “Bank”
  – As early as Tang Dynasty (A.D.713), “柜坊”
• By the Song Dynasty (960-1279), all major banking functions
  – acceptance of deposits, making of loans, issuing notes, money exchange, and long-distance remittance of money.
• The two major types of indigenous Chinese financial institutions, 
  *piaohao* (票号) and *qianzhuang* (钱庄),
  – more often cooperated than competed in China's financial market.
Piaohao 票号 (1823-1911)

- Also known as Shanxi banks
- The first Piaohao Ri Sheng Chang (日升昌) originated from the Xi Yu Cheng Dye Company (西裕成颜料庄) of Pingyao (平遥) Shanxi
- To transfer large amounts of cash from one branch to another, the company introduced drafts, cashable in the company's many branches around China

Bank Draft of Ri Sheng Chang on 1838-08-30, Mr. Ye, Silver of 8800 Liang (两)

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Qianzhuang 钱庄

• First appeared in the Yangzi Delta region, in Shanghai, Ningbo, and Shaoxing. The first Qianzhuang can be traced to at least the mid-eighteenth century.

• Most Qianzhuang were local and functioned as commercial banks by conducting local money exchange, issuing cash notes, exchanging bills and notes, and discounting for the local business community.

• Independent of the nationwide network of Piaohao

• It is estimated that there were around 10,000 Qianzhuang in China in the early 1890s.
Entry of foreign banks

• British and other European banks entered China around the middle of the nineteenth century to service the growing number of Western trade firms. The British enjoyed a virtual monopoly on modern banking for forty years.
• The first foreign bank in China was the Bombay-based British Oriental Bank (东藩汇理银行), which opened branches in Hong Kong, Guangzhou and Shanghai in the 1840s.
• The Hong Kong and Shanghai Banking Corporation (香港上海汇丰银行), now HSBC, established in 1865 in Hong Kong, later became the largest foreign bank in China.
• By the end of the nineteenth century there were nine foreign banks with forty-five branches in China's treaty ports.
Government Banks

- In 1897, Officer Sheng Xuanhuai (盛宣怀) founded the Imperial Bank of China (中国通商银行), the first Chinese owned commercial bank modeled on the Western banking system.
  - headquartered in Shanghai
  - had the authority to issue notes from the Qing government.
  - organised as a joint-stock firm.
  - adopted the internal regulations of HSBC, and its senior managers were foreign professionals.
  - After the proclamation of the Republic of China, the bank changed its English name to the Commercial Bank of China in 1912.
Sheng Xuanhuai (盛宣怀)
Government Banks

• On September 27, 1905, China's first central bank was established as the Bank of the Board of Revenue (大清户部银行).
  – Three years later, its name was changed to the Great Qing Government Bank (大清银行).
  – Following the Xinhai Revolution (辛亥革命) of 1911, Great Qing Bank was renamed the Bank of China (中国银行) on February 5, 1912 in Shanghai.
  – the central bank of the Republican government at that time.
Government Banks

• Bank of Communications (交通银行), was organised in 1908 by the Ministry of Posts and Communications to raise money for the redemption of the Beijing-Hankou Railway from Belgian contractors.
  – The bank’s aim was to unify funding or steamship lines, railways, as well as telegraph and postal facilities.
Private Banks

- Private banks appeared in the late Qing period, all created by private entrepreneurs without state funding.
Golden Age of Chinese Banking

• The decade from the Northern Expedition around 1897 to the Second Sino-Japanese War in 1937 has been described as a "golden decade" for China's modernisation as well as for its banking industry.
  – There were about 390 private banks in China, 226 out of business.
  – 1917-23, 131 newly established, with 95 out of business,

• Modern Chinese banks extended their business in scope, making syndicated industrial loans and offering loans to rural areas.
Golden Age of Chinese Banking

- The Nationalist government created the Central Bank of China in 1928, with Song Ziwen (宋子文) as its first president.
- The Bank of China was reorganised as a bank specialising in the management of foreign exchange while the Bank of Communications focused on developing industry.
- The Bureau of Financial Supervision was set up under the Ministry of Finance, to supervise financial affairs.
- Confronted with imminent war with Japan, the Chinese government took control of over 70 percent of the assets of modern Chinese banks through the notorious banking coup.
What is a Bank?

- Is bank a firm?
  - What are the products of banks?
  - How do banks make profit?
  - What are the objectives of bank managers?

- The bank is a special corporation that provide CREDIT services
Example 1

• A firm needs $100,000 to initiate a project. The payout of this project is $120,000 with 99% prob. and $0 with 1% prob. in 2 years.

• 100 small investors each with $1000 to lend.

• If the project is initiated, only the firm knows the result of the project while the small investors can not see the results.

• Suppose the project is the only investment opportunity you have. Would you invest? Why and why not?
Without FIs

• Low level of fund flows.
  – High Information/monitoring cost
  – Less liquidity
    • Mismatch between lenders’ & borrowers’ desires
  – Substantial price risk
  – High transaction cost
Without Banks and Other FIs

Households (net savers) \[\rightarrow\] Equity \[\rightarrow\] Debt Claims \[\leftarrow\] Cash \[\leftarrow\] Corporations (net borrowers)
With FIs

Households

Cash

FI (Brokers)

FI (Asset Transformers)

Corporations

Equity & Debt

Deposits/Insurance Policies

Cash
Special Roles of FIs

• Channeling the funds from suppliers of funds to users of funds.
  – Reduce information costs
  – Provide liquidity and reduce price risk
  – Reduced transaction costs
  – Reduce market friction costs
  • maturity intermediation

• Through Diversification
Other Special Services

• Transmission of monetary policy.
  – M1, M2, M3.
  – Open market operation, discount rate, reserve requirement

• Credit allocation
  – areas of special needs: residential real estate, farming and etc

• Intergenerational transfers or time intermediation.

• Payment services (FedWire and CHIPS in US, Unionpay in China).

• Denomination intermediation.
## Example of Simple Bank Balance Sheet

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>Deposits</td>
</tr>
<tr>
<td>5</td>
<td>90</td>
</tr>
<tr>
<td>Marketable Securities</td>
<td>Subord L.T. Debt</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Loans</td>
<td>Equity Capital</td>
</tr>
<tr>
<td>80</td>
<td>5</td>
</tr>
<tr>
<td>Fixed Assets</td>
<td>Total</td>
</tr>
<tr>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

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Risks of Financial Intermediation

- Corporate
- Banks
- Sovereign
- Retail
- Special Loans

**Internal Procedure**
- People
- System (IT)
- External

**Operational**

**Credit Risk**

**Market Risk**
- Interest rate
- Exchange rate
- Stocks
- OBS

**Other Risks**
- Liquidity Risk
- Legal Risk
- Reputational Risk
- Country Risk

No minimum requirement by BASEL

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Financial Institutions in China

- Banking (Depository) Institutions
  - State-Owned Commercial Bank 大型商业银行
  - Joint-Stock Commercial Bank 股份制商业银行
  - City Commercial Bank 城市商业银行
  - Rural Financial Institution 农村金融机构
    - Rural Commercial Bank, 农村商业银行
    - Rural Cooperative Bank, 农村合作银行
    - Rural Credit Cooperatives, 农村信用社
    - three-type rural Financial Institution (rural county bank, 三类新型农村金融机构)
  - Postal Savings Bank of China 中国邮政储蓄银行
  - Private Bank 民营银行
  - Foreign Bank 外资银行
Financial Institutions in China

• Non Depository Financial Institutions
  – Policy Bank (政策性银行)
  – State-Owned Asset Management Corporation (国有资产管理公司)
    • Deals with the non-performing loans of state owned commercial banks

• Non-banking Financial Institutions
  – Trust Company 信托公司
  – Finance Company 财务公司
  – Financial Leasing Company 金融租赁公司
  – Motor Finance Company 汽车金融公司
  – Consumer Finance Company 消费金融公司
  – Money Broker Company 货币经纪公司
<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Number of Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Bank (政策性银行)</td>
<td>3</td>
</tr>
<tr>
<td>State-Owned Commercial Bank (大型商业银行)</td>
<td>5</td>
</tr>
<tr>
<td>Joint-Stock Commercial Bank (股份制商业银行)</td>
<td>12</td>
</tr>
<tr>
<td>Postal Savings Bank of China (中国邮政储蓄银行)</td>
<td>1</td>
</tr>
<tr>
<td>City Commercial Bank (城市商业银行)</td>
<td>162</td>
</tr>
<tr>
<td>Rural Financial Institution (农村金融机构)</td>
<td>976+48+940+1381 = 3345</td>
</tr>
<tr>
<td>Private Bank (民营银行)</td>
<td>6</td>
</tr>
<tr>
<td>Foreign Bank (外资银行)</td>
<td>50+</td>
</tr>
<tr>
<td>State-Owned Asset Management Corporation (国有资产管理公司)</td>
<td>4</td>
</tr>
<tr>
<td>Non-Bank Financial Company</td>
<td></td>
</tr>
<tr>
<td>Trust Company (信托公司)</td>
<td>77</td>
</tr>
<tr>
<td>Finance Company (财务公司)</td>
<td>261</td>
</tr>
<tr>
<td>Financial Company (金融公司) (Financial Leasing (金融租赁), Motor Financial (汽车金融), Consumer Finance (消费金融), Money Broker (货币经纪))</td>
<td>58+25+15+5 = 103</td>
</tr>
</tbody>
</table>
Banking Reform

• Before 1979
  – People’s Bank of China (PBC) was a monopoly

• Collected household deposit with the nation-wide branch network
• Facilitated the financing of economic plan, but not channel deposit to profitable projects
• Provided settlement of firms’ transaction and administered funding for working capital and short-term investment
Banking Reform

• 1st phase: 1979 – 1993
  – Transformed PBC to be the central bank
  – Established 4 State Owned Banks
    • Industrial and Commercial Bank of China (ICBC) took over lending and deposit taking in the cities
    • Agricultural Bank of China (ABC) did the same in the countryside
    • China Construction Bank (CCB) focused on project financing
    • Bank of China (BOC) handled foreign-trade and foreign exchange transactions
  – Mandated to give loan to government project
    • Loss making and resulted in rising NPL
Banking Reform
----Phase II 1994 onwards

• The People Congress issued The Law of PBC in March 1995
  – Allowed the PBC to play an increased regulatory role

• The PBC reorganized 31 provincial branches into 9 regional centers
  – Reduce political interference from provincial leaders
  – Analogous to the Fed System of the USA

• The Functions of the PBC
  – To promote economic growth and stabilize the price
  – To supervise the financial system (Transferred the banking supervision to China Banking Regulatory Commission (CBRC) in 2003)
  – To make monetary policy under the leadership of the State Council
Banking Reform
----Phase II 1994-2003

• Established 3 policy banks
  – China Development Bank focused on large-scale infrastructure projects
  – Export-Import Bank focused on export promotion
  – Agricultural Development Bank focused on supporting rural economy
• Commercial Banking Law 1995
  – State Owned Banks are responsible for profit and assessing credit by themselves
  – The power of national bank headquarters was strengthened: Personnel power centralized in Beijing to reduce political interference from provincial leaders
• Entry deregulation
  – New banks emerge, such as Minsheng Bank was formed in 1996
  – Foreign banks
Banking Reform
----Phase II 1994 onwards

- Cleaning up the NPL
  - 1998: Ministry of Finance (MoF) issued special bonds and injected the bond proceeds as equity in the State Owned Banks
  - 1999: Transferred NPL to four asset management companies (AMCs)
  - NPL transfer is a major step before the State Owned Banks proceed with corporate restructuring by introducing foreign strategic investors and IPO
Banking Sector 1994

- **Policy Banks (3)**
  - Market Share > 70%
  - Most important source of capital for firm

- **State Owned Banks (4)**

- **Other Commercial Banks (100+)**
  - Joint stock banks (JSBs), City commercial banks (CCBs), urban and rural credit cooperatives

- **Non-bank Financial Institutions (1000+)**
Reforming the State Owned Banks
-----Phase III 2004 onwards

- 2004, Reform of state owned banks started, Bank of China and Construction Lt. Corp. established, → state-owned commercial banks
- Capital stakes from strategic foreign investors
  - To improve governance, management and efficiency
  - IPO: In 2005, 3 SCBs were prepared for IPO
- Credit allocation and interest rate deregulation
- 2015/10/1: 75% of Loan-to-Deposit Ratio abandoned → Macro Prudential Assessment from 2016 to control liquidity risk
- Foreign competition
Reforming the State Owned Banks
-----Phase III 2004 onwards

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  – To improve governance, management and efficiency
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• Credit allocation and interest rate deregulation
• Foreign competition
Reforming the State Owned Banks
-----Phase III 2004 onwards

**Table 2.6** Deposit interest rate marketization progress

<table>
<thead>
<tr>
<th>Time</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2004</td>
<td>Lift control over the lower bound, upper bound is benchmark deposit rate</td>
</tr>
<tr>
<td>June 2012</td>
<td>Upper bound is 1.1 times benchmark deposit rate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2004</td>
<td>Upper bound: 1.7 times benchmark loan rates</td>
</tr>
<tr>
<td></td>
<td>Lower bound: 0.9 times benchmark loan rates</td>
</tr>
<tr>
<td>October 2004</td>
<td>Upper bound: no limitations</td>
</tr>
<tr>
<td></td>
<td>Lower bound: 0.9 times benchmark loan rates</td>
</tr>
<tr>
<td>October 2008</td>
<td>Lower bound of personal housing mortgage loans interest rage: rise from 0.85 to 0.7 times benchmark loan rates</td>
</tr>
<tr>
<td>June 2012</td>
<td>Lower bound: 0.8 times benchmark loan rates</td>
</tr>
<tr>
<td>July 2012</td>
<td>Lower bound: 0.7 times benchmark loan rates</td>
</tr>
<tr>
<td>July 2013</td>
<td>Lower bound cancelled</td>
</tr>
</tbody>
</table>
Reserve Ratio

75% Loan-to-Deposit Ratio Abandoned

Small and Medium DI

Large DI

1985-01
1986-08
1989-10
1991-05
1992-12
1994-07
1996-02
1997-09
1999-11
2000-06
2002-06
2004-01
2005-08
2007-03
2008-10
2010-05
2011-12
2013-07
2015-02
2016-09

75% Loan-to-Deposit Ratio Abandoned
Assets and Liabilities in Banking Financial Institutions China

Trillions RMB

Total Asset  Total Liability


2827 3230 3736 4442 5350 6359 8075 9589 113106 134125 151141 172160 199184 232215
Market Share of SCBs remain large after a decade of reform.
Total Asset

- Policy banks & the CDB
- Large commercial banks
- Joint-stock commercial banks
- Non-bank financial institutions
- Foreign banks
Profit after tax

Policy banks & the CDB
Large commercial banks
Joint-stock commercial banks
Non-bank financial institutions
Foreign banks
Rural
China Credit Growth 2006-2016
Growing Debt in China

The country’s debt as a percentage of economic output has been growing steeply since the global financial crisis, and is expected to continue rising at least through next year.

Source: Fitch Ratings, from People’s Bank of China, Bank for International Settlements, Hong Kong Monetary Authority and commercial banks data
Economic Growth

The country's statisticians have been reporting uncommon stability in economic growth for the last several years, raising questions about the reliability of official data.

Note: Data reflects quarterly reports | Source: China's National Bureau of Statistics, via CEIC Data
China’s Credit Growth May Be Faster than Official Data Suggest

- Corporate bonds
- Shadow credit (official data)
- Household (mortgage loans)
- Corporate bank loans

**Composition of Credit**

<table>
<thead>
<tr>
<th>Year</th>
<th>Corporate</th>
<th>Shadow</th>
<th>Household</th>
<th>Corporate Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>100</td>
<td>50</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>2008</td>
<td>120</td>
<td>70</td>
<td>120</td>
<td>70</td>
</tr>
<tr>
<td>2010</td>
<td>150</td>
<td>90</td>
<td>150</td>
<td>90</td>
</tr>
<tr>
<td>2012</td>
<td>180</td>
<td>110</td>
<td>180</td>
<td>110</td>
</tr>
<tr>
<td>2014</td>
<td>200</td>
<td>130</td>
<td>200</td>
<td>130</td>
</tr>
<tr>
<td>2016</td>
<td>220</td>
<td>150</td>
<td>220</td>
<td>150</td>
</tr>
</tbody>
</table>

**Total Credit Growth**

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>25</td>
</tr>
<tr>
<td>2013</td>
<td>20</td>
</tr>
<tr>
<td>2014</td>
<td>15</td>
</tr>
<tr>
<td>2015</td>
<td>10</td>
</tr>
<tr>
<td>2016</td>
<td>5</td>
</tr>
</tbody>
</table>

Sources: CEIC; People’s Bank of China; Moody’s.

Notes: “Total credit” comprises the following components of the People’s Bank of China’s “total social financing” aggregate: bank loans, off-balance-sheet financing, trust loans, and net corporate debt issuance; equity issuance is excluded.
Composition of Debt

- Corporations: 246.8
- Households: 165.1
- Government: 40.5
- Banks: 22.1

Debt as % GDP

- 2005: 22.9
- 2015: 19.1
Debt level vs. economic advancement (2005 to 2015)
As with Japan, China’s debt is largely locally funded and is backed by a huge hoard of domestic deposits. That makes any Asian financial crisis-style blow-up unlikely.

<table>
<thead>
<tr>
<th>Country</th>
<th>Debt Level</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>251.5%</td>
<td>391.9%</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>205.7%</td>
<td>254.8%</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>137.8%</td>
<td>265.5%</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>90.3%</td>
<td>250.6%</td>
<td></td>
</tr>
</tbody>
</table>

Figures for 2015, except Japan (2014)
Often overlooked, too, is the other side of the balance sheet: assets. China’s state companies – which are responsible for so much of the debt – also own assets that can be sold, with proceeds going to repay loans, if needed.

Corporate assets 552% of GDP
Households 332%
Foreign Exchange 39%
Public Sector 17%

Figures for 2013
Chinese Banks: Wealth Management Products and Asset Growth
2013:Q3-2016:Q2

Asset growth (annual percentage change)

Sources: CEIC; People's Bank of China; China Central Depository & Clearing Co., Ltd.
Notes: Bubbles are scaled by total bank assets, in U.S. dollars; figures reflect total bank assets in 2016:Q2; WMPs are wealth management products; JSBs are joint stock commercial banks; CCBs are city commercial banks.
Emerging Market Economies: Nonfinancial Credit

Trillions of U.S. dollars

China
Other EMEs
China
Other EMEs

Source: Bank for International Settlements.

Note: The "Other Emerging Market Economies" (EMEs) grouping comprises Brazil, the Czech Republic, Hong Kong, Hungary, India, Indonesia, Malaysia, Mexico, Poland, Russia, Singapore, South Africa, South Korea, Thailand, and Turkey.
China: Credit Impulse and GDP Growth

Source: People's Bank of China.
Note: Credit impulse measures the change in flow of new credit as a share of GDP.
Non-Performing Loan Ratio


Total NPL  substandard  Doubtful  Loss
Non-Performing Loan Ratio in China
China Non-Performing Loans

China Non-Performing Loans (Y/Y Growth)

2009 2010 2011 2012 2013 2014
Shadow Banking

**Margin Call | Growing debt in China’s stock market**

Margin trading remains resilient despite regulators’ attempts to reduce growth...

<table>
<thead>
<tr>
<th>Margin loans outstanding, year to date, in billions of yuan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,200</td>
</tr>
<tr>
<td>1,000</td>
</tr>
<tr>
<td>800</td>
</tr>
<tr>
<td>600</td>
</tr>
<tr>
<td>400</td>
</tr>
<tr>
<td>200</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Balance of trusts investing in stocks, in billions of yuan</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
</tr>
<tr>
<td>500</td>
</tr>
<tr>
<td>400</td>
</tr>
<tr>
<td>300</td>
</tr>
<tr>
<td>200</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

...and trust products investing in stocks have also jumped higher.

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**How an umbrella trust works:**

**BANKS**
Banks sell wealth-management products (WMP) to retail clients.

**THE UMBRELLA TRUST**
The umbrella trust takes cash from the WMP and puts it into a pool called the senior tranche.

**THE HEDGE FUNDS**
The umbrella trust also takes cash from sophisticated investors such as hedge funds and puts it into a subordinated tranche.

The subordinated tranche pays the senior tranche an annual interest return for borrowing the cash.

7%-8% interest

**SENIOR TRANCHE**
Cash

With the extra borrowed money, the subordinated tranche makes leveraged bets on stocks.

*Sources: Wind Info (balance of funds, margin trading); J.P. Morgan*

*The Wall Street Journal*
Progress against shadow banking

- Interbank assets, a major carrier of shadow-banking activities, fell 13.8 percent year on year at the end of August 2017, while interbank liabilities went down 1.6 percent.
  - It was the first since 2010 that the two indicators dropped at the same time, and joint-stock commercial banks, which had been more brisk in interbank activities, saw the sharpest decline.

- Growth of wealth management products (WMPs) continued to slow.
  - The outstanding WMP balance to have declined by around 10 percent this year.

- In regard to concerns on liquidity triggered by dropping shadow-banking activities
  - The central bank's cut of reserve requirement may prevent tighter liquidity from having adverse effects on the real economy.
Going Forward

- In recent years, the Chinese government has tightened regulation over the industry as defusing major risks is one of the three tough battles the country has vowed to fight.
- China has made progress in financial risk control thanks to better regulation in 2017.
  - Growth in off-balance-sheet businesses saw a continued decline and many banks saw lower bad loan ratios.
Going Forward

• China's banking regulator to step up risk control in 2018
  – preventing risks such as high corporate debt and household leverage
  – reduce the debt ratio of companies, and control the financing of companies with heavy debt
  – speed up the disposal of non-performing loans, while curbing household leverage by cracking down on the improper use of consumer loans.
  – Household borrowing for stock market or housing market investments will be strictly controlled
Going Forward

• China regulator pledges steady opening-ups in banking sector
  – give foreign investors national treatment in the banking sector
  – will abolish foreign ownership restrictions in Chinese banks, which limited a single foreign investor's stake to 20 percent or less and that of total foreign ownership to 25 percent.
  – at the end of November 2017, China had 210 foreign banking institutions.