

Discussion of
**“Banking and the Macroeconomy in China:
A Banking Crisis Deferred?”**

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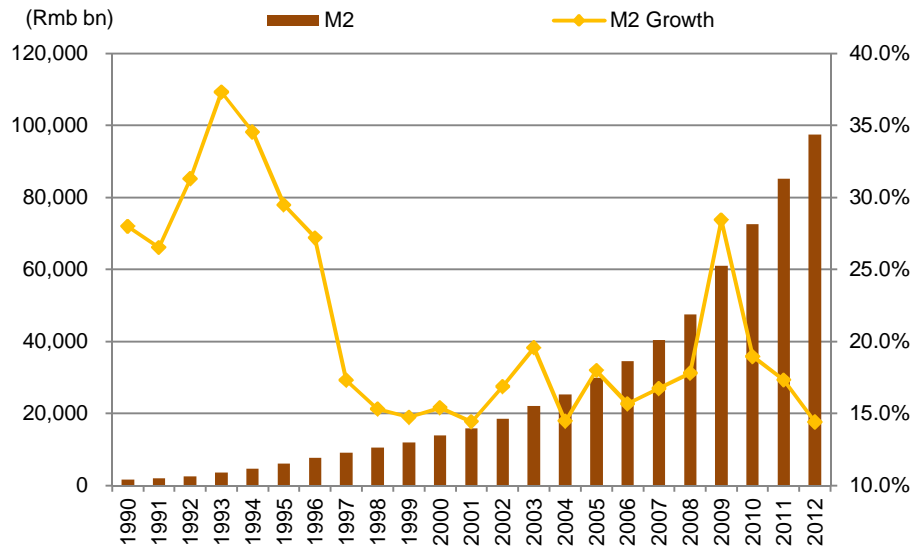
Chapter 1

The Chinese Banking Sector Review

China's economy seemed to be enjoying a monetary feast over the past decade

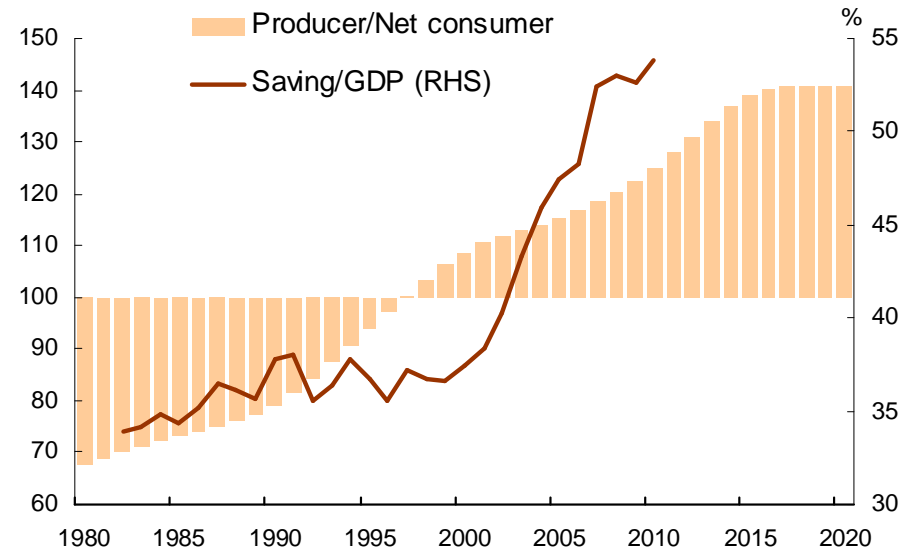
- China's money growth experienced three phases over the past three decades. The first phase was the monetization process from the start of reform and opening-up to the mid-1990s. The second phase was 1995~2003 during which money growth slowed significantly and stayed low. The third phase was 2003~2010 which saw another round of rapid money growth.
- The rapid money growth in the early 2000s was closely related to the high savings rate.

M2 growth accelerated in 2003~2010



Source: Wind, CICC Research.

Demographic changes pushed up savings rate

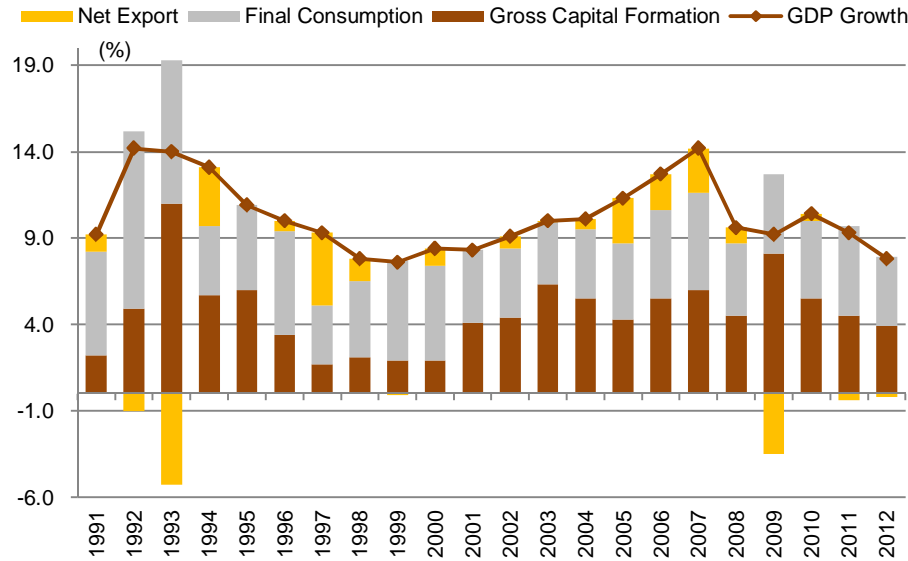


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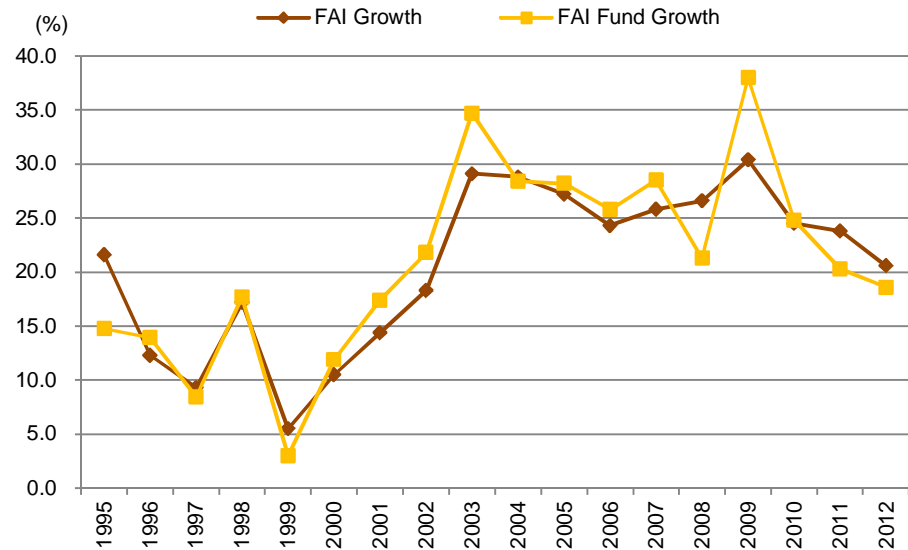
- Investment was the most important driver to GDP growth in the past decade. Since 2001, the contribution of investment to GDP growth is 5.2ppt on average, with a high of 8.1ppt and a low of 3.9ppt.
- The biggest determinant of FAI growth is the growth of funding sources.

Investment was the most important driver to GDP growth in the past decade



Source: Wind, CICC Research.

YoY growth of FAI and funding sources

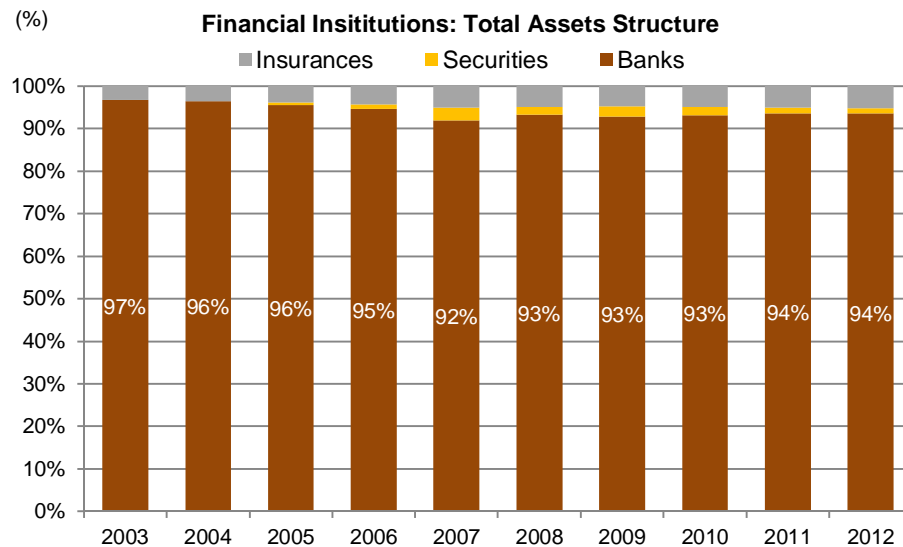


Source: Wind, CICC Research

Banking sector plays a pivotal role in China's financial intermediation

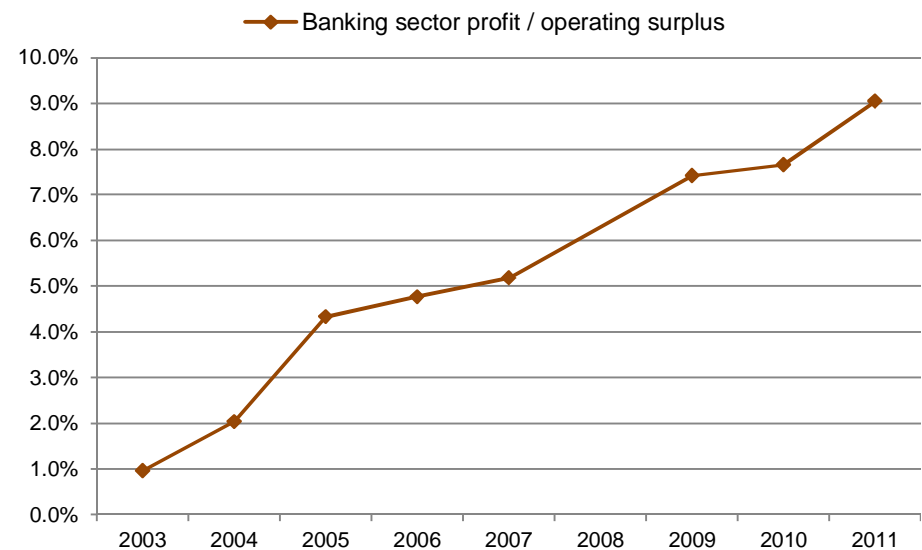
- Banking sector took more than 90% of total financial institutions assets.
- Banking sector took nearly 10% of operating surplus (income approach component of GDP).

Banking sector took more than 90% of total financial institutions assets



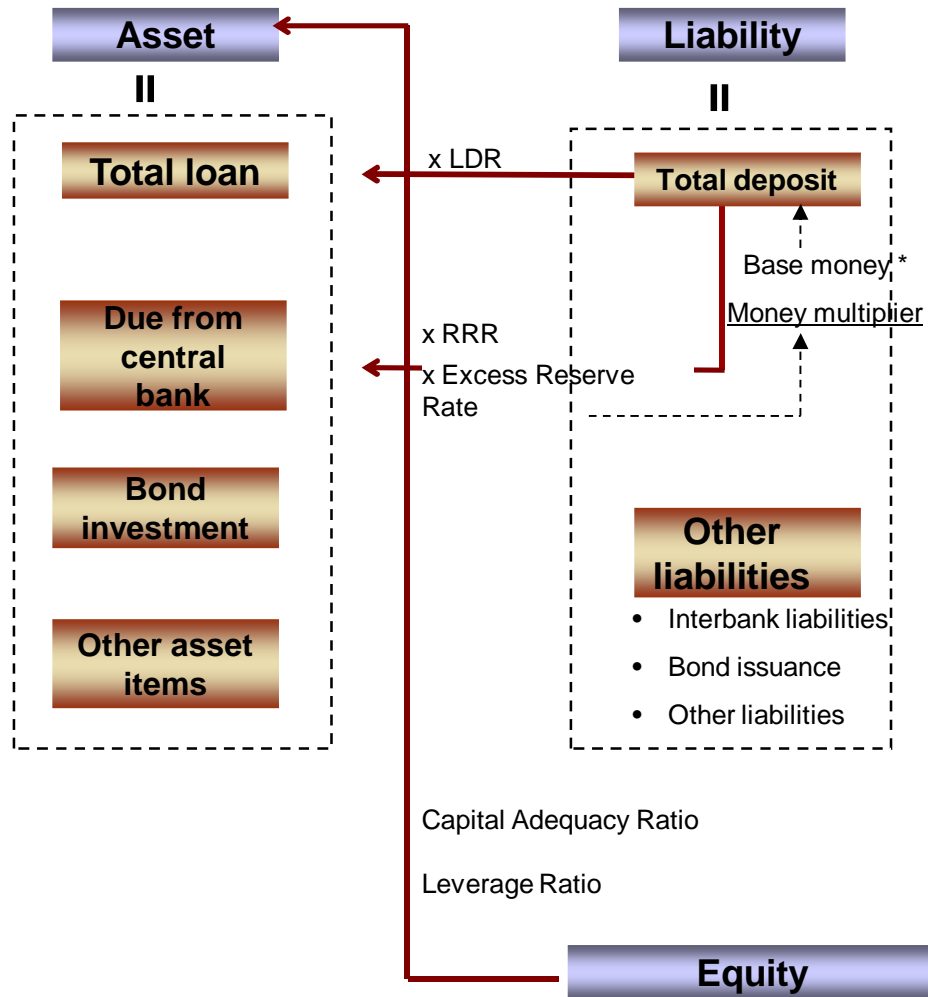
Source: Wind, CICC Research.

Banks took nearly 10% of operating surplus (income approach component of GDP)

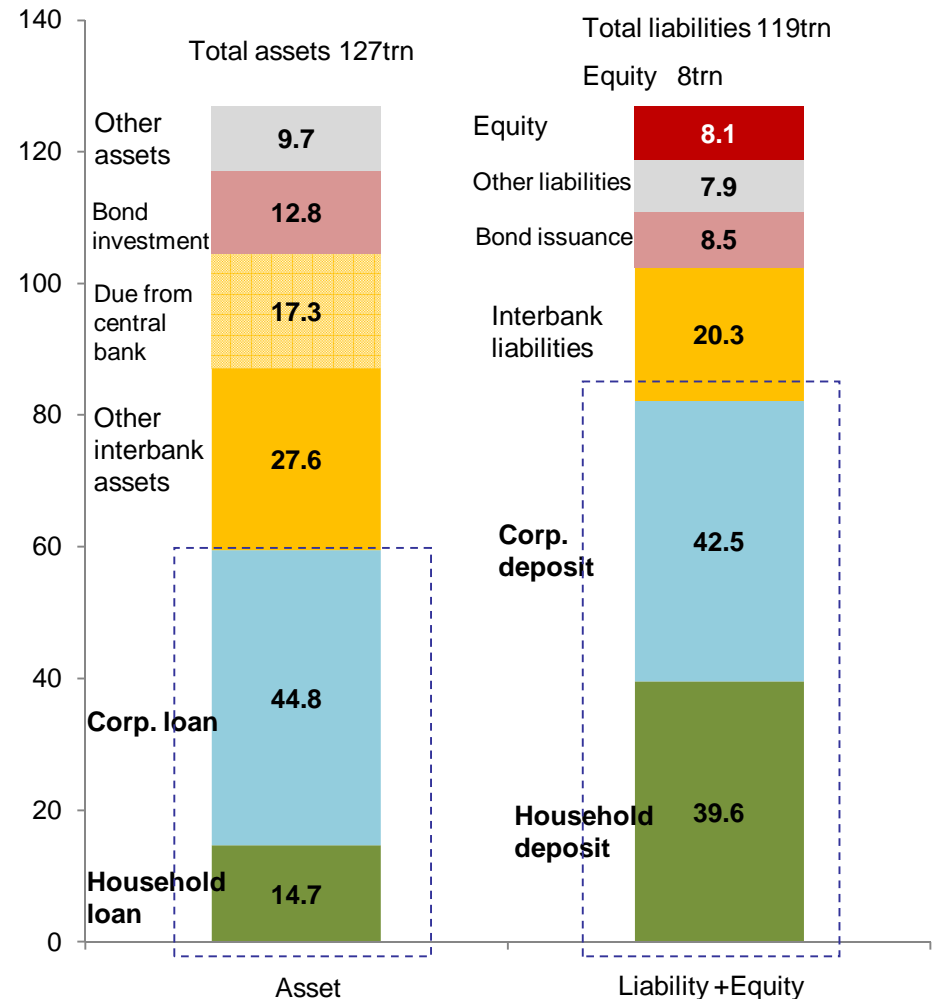


Source: Wind, CICC Research

Total bank assets reach 127trn



The balance sheet of China banking sector as of 1H12

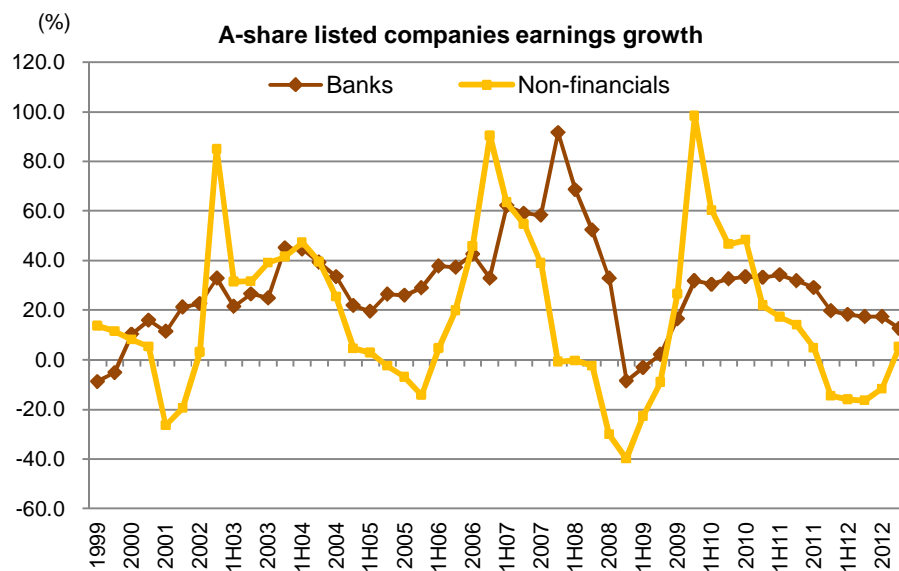


Profitability improves

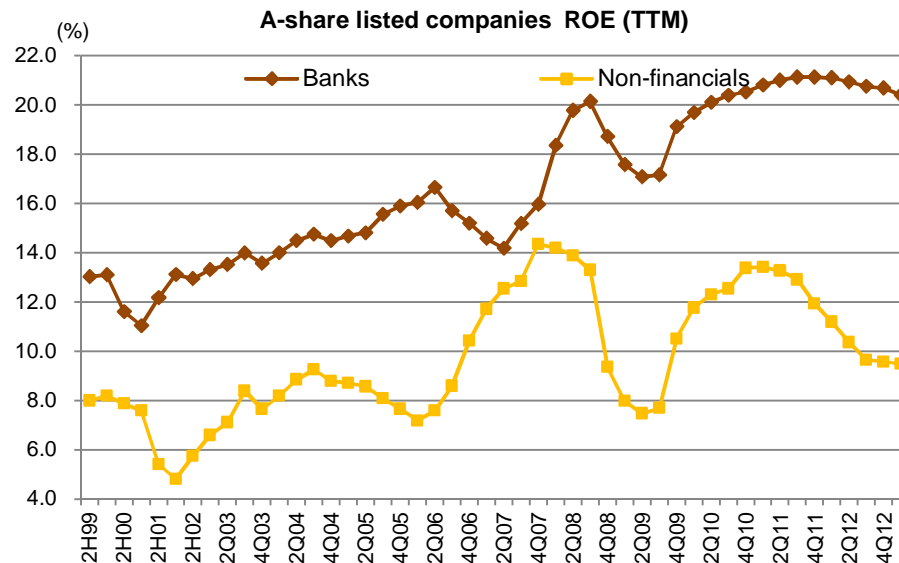
- We see the listed China banks profitability have improved since their IPO. ROE for listed banks rose significantly, thanks to the improvement of NIM, intermediary business and operating efficiency.
- In 2012, banking sector earnings increased by 17.4%, while non-financials decreased by 11.7%. Banking sector took more than 50% of total listed companies' net profit.

Banking sector earnings increased by 17.4%, while non-financials decreased by 11.7% in 2012

Banking sector ROE at historical high, while non-financials still in the down trend



Source: Wind, CICC Research.

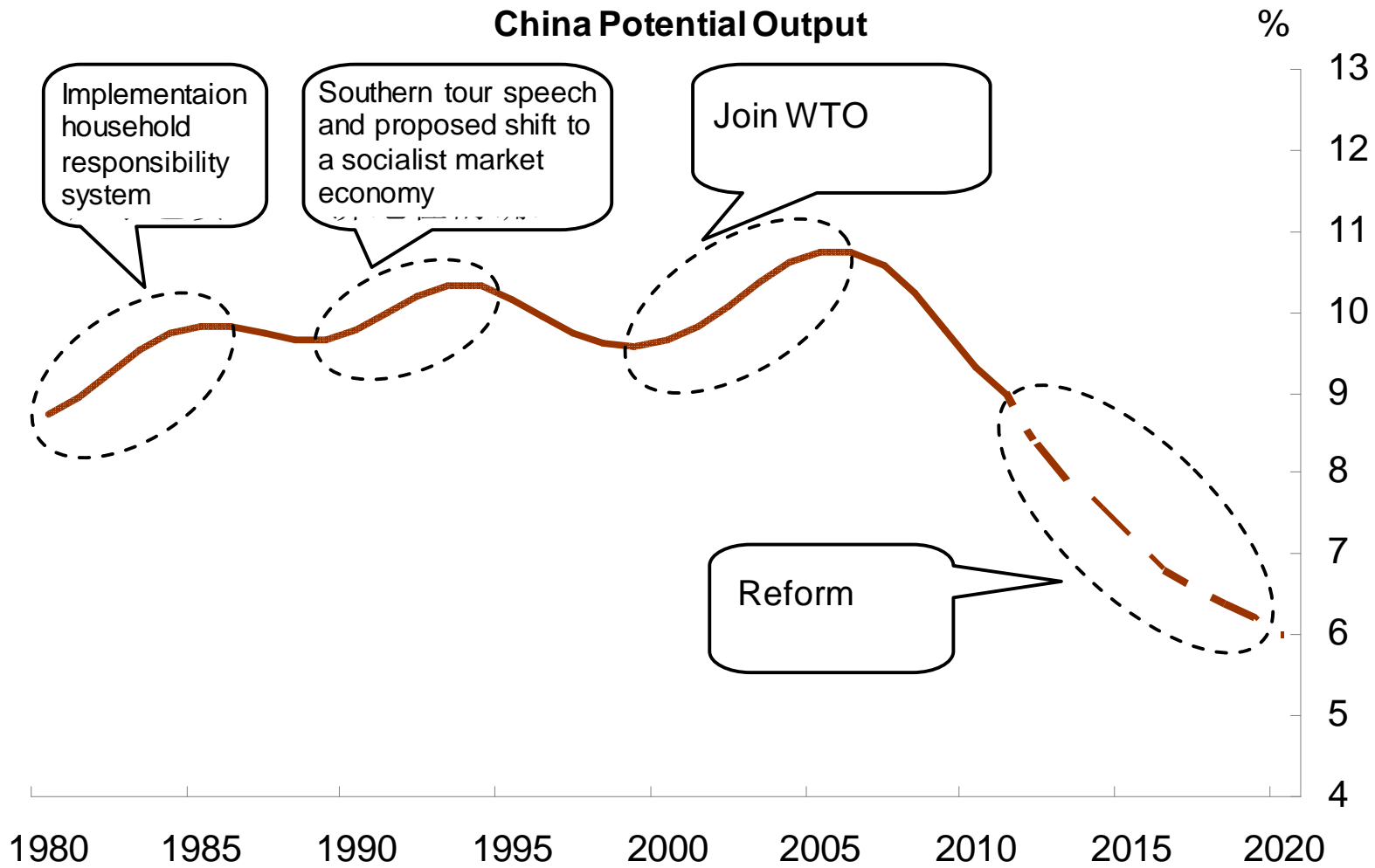


Source: Wind, CICC Research

Chapter 2

The major problems and risks for China banking sector

China's potential growth rate is slowing down

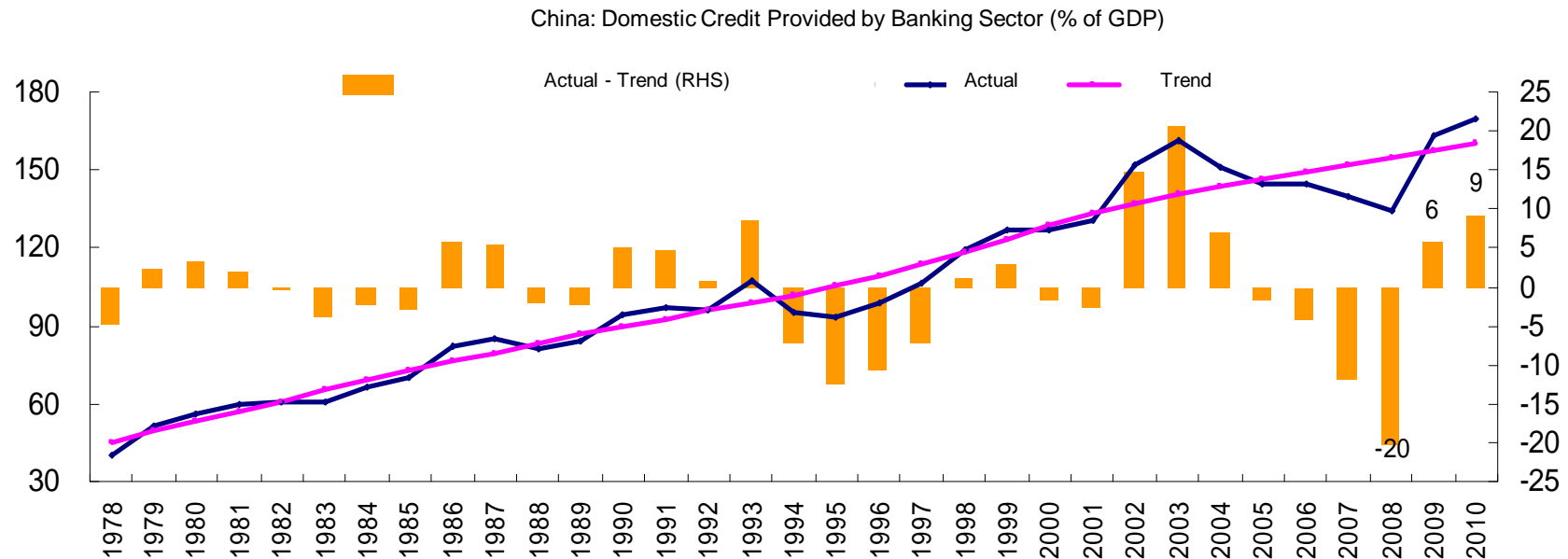


Source: CEIC, CICC Research

Further credit expansion might be limited

- On the asset side, the expansion of indirect financing makes risks concentrate in the banking system, and the corporate finance cost hovers high
- Domestic credit/GDP was 9% higher than the historical trend derived by the H-P filter as of 2010, which may limit the further expansion of domestic credit in short-term

Domestic credit/GDP was 9% higher than historical trend derived by the H-P filter as of 2010

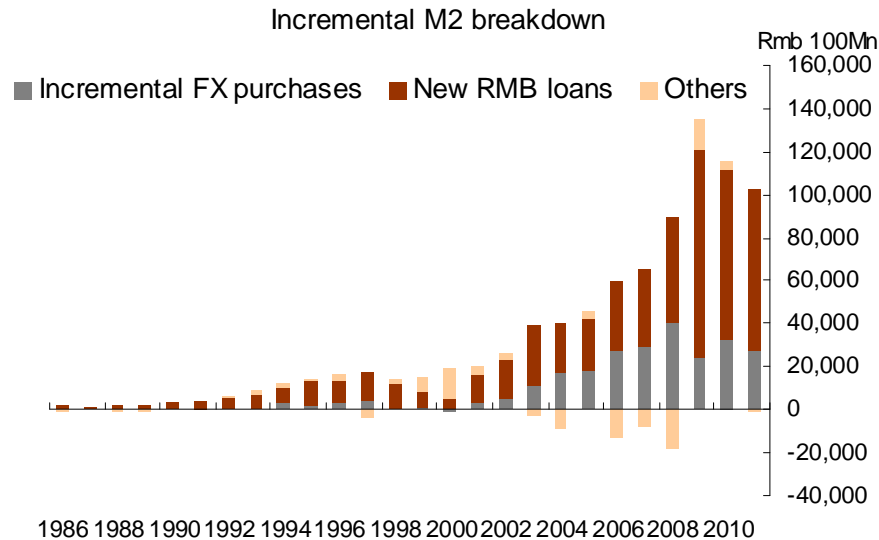


Source: WDI, Haver Analytics, CICC Research

Further credit expansion might be limited

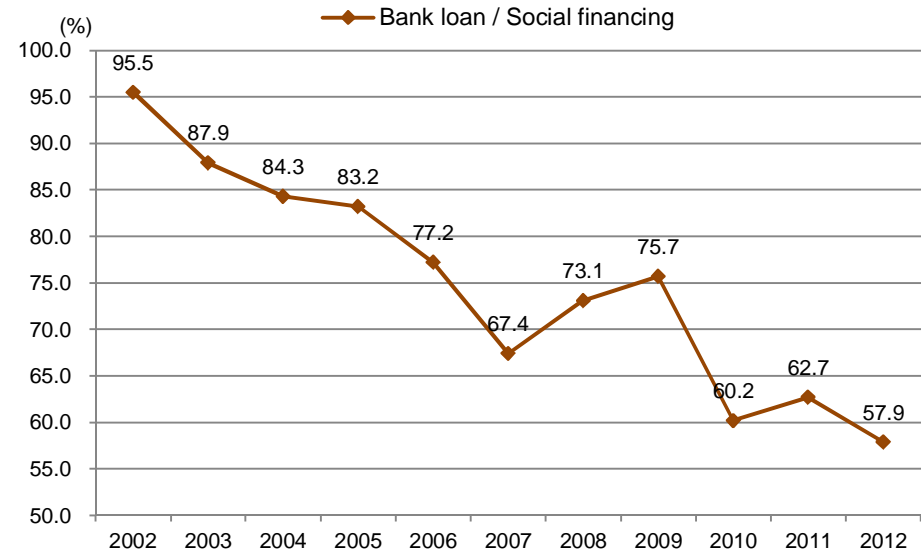
- On the liability side, the slowing down of foreign exchange purchase growth rate and the emerging trend of financial disintermediation may bring long term pressure to deposit growth, and may further limit the credit expansion

FX purchases were previously a more important driver of M2 growth



Source: Wind, CICC Research.

Bank loan as % of social financing

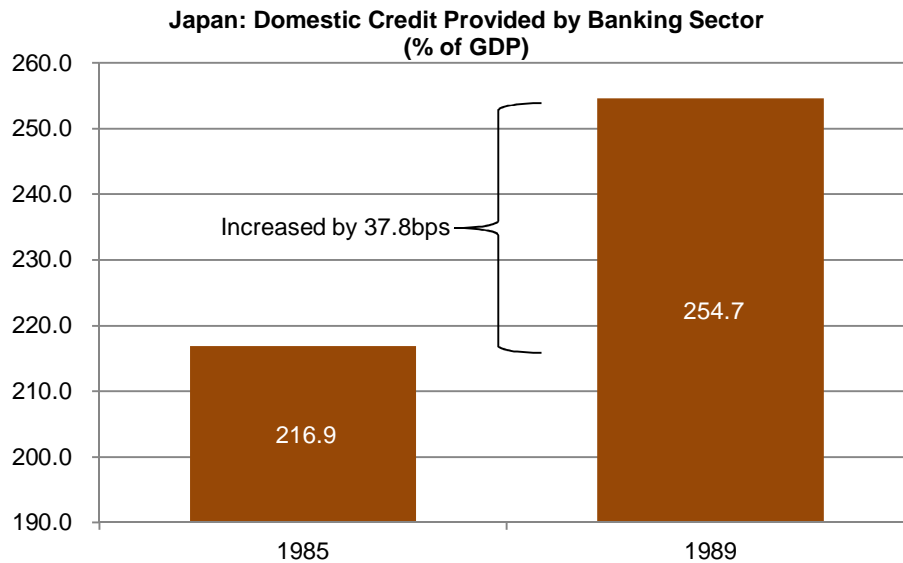


Source: Wind, CICC Research

Facing the pressure of de-leverage

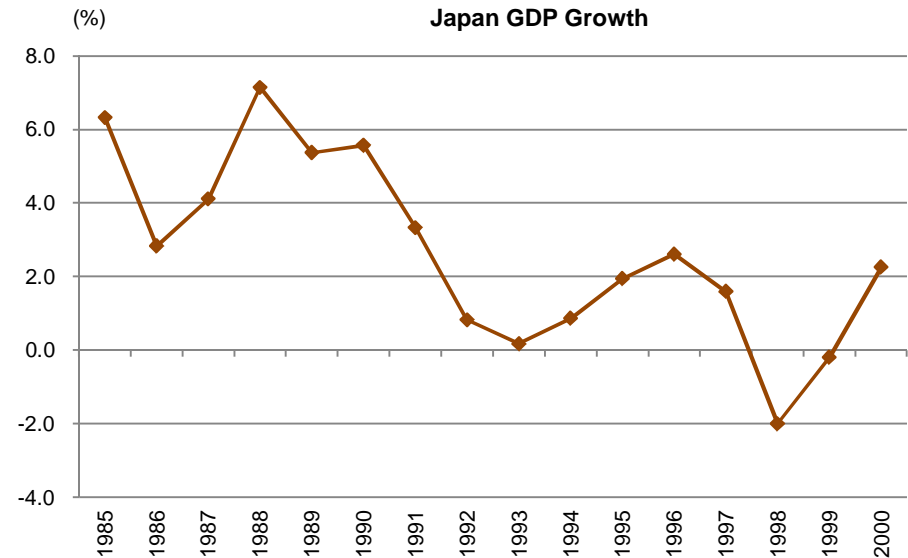
- The 5-30 Rule: the phenomenon of surging leverage, when domestic credit % of GDP (DCG) may expand by 30% in the 5 years before crisis
- Japan's DCG jumped from 205.9% in 1985 to 237.4% in 1989, with stock market peaked on Dec 1989, followed by the "Lost Decade", when average GDP growth rate dropped to 2% in 1989~1998 from 4.4% in 1979~1988

Domestic credit provided by banking sector/GDP (Japan)



Source: WDI, Haver Analytics CICC Research.

Japan GDP Growth (1985-2000)

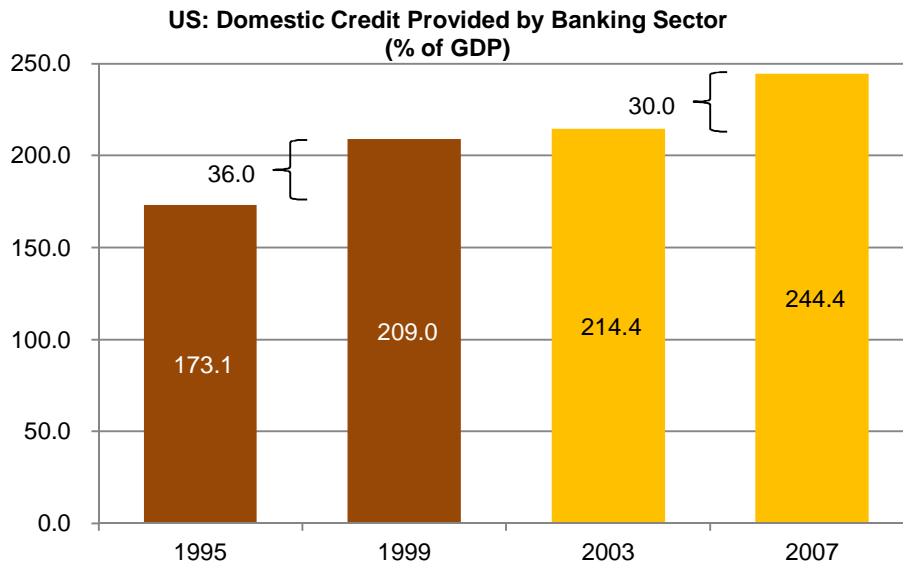


Source: WDI, Haver Analytics, CICC Research

Facing the pressure of de-leverage

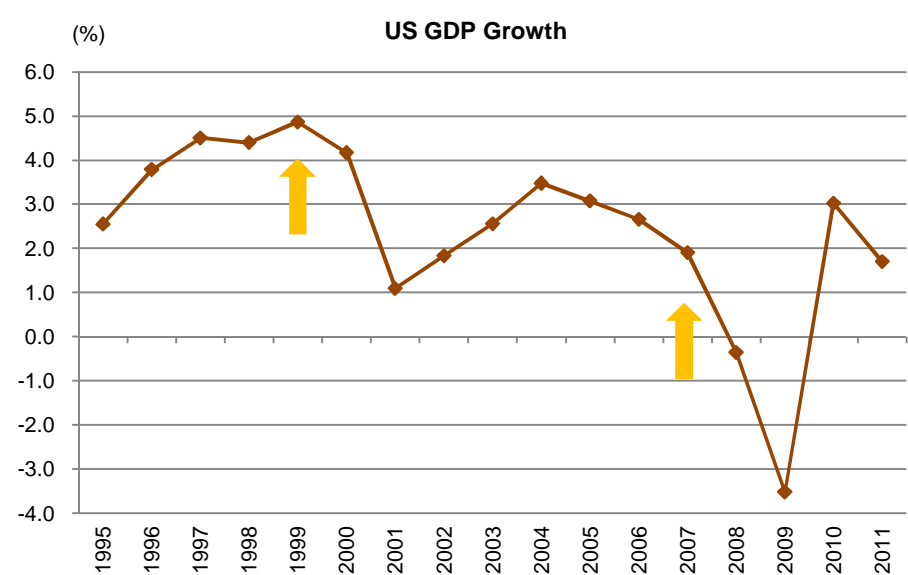
- The 5-30 Rule also applied to US. In the crisis of internet bubble, DCG increased 36% to 209% in 1999 from 173% in 1995, followed by the 3 ppt GDP growth rate decline in 2001. Fed maintained the low interest rate environment to boost economy recovery while the DCG jumping to 244% in 2007 from 214% in 2003 led to the 2008 financial crisis.

Domestic credit provided by banking sector/GDP (US)



Source: WDI, Haver Analytics CICC Research.

US GDP Growth (from 1995)



Source: WDI, Haver Analytics, CICC Research

Facing the pressure of de-leverage

- According to World Bank, China's domestic credit provided by banking sector/GDP increased to 155% in 2012 from 121% in 2008, by 34ppt.
- Considering shadow banking system, adjusted credit/GDP ratio increased by 62bps, from 145% in 2011 to 207% in 2012.

China: Domestic credit provided by banking sector/GDP

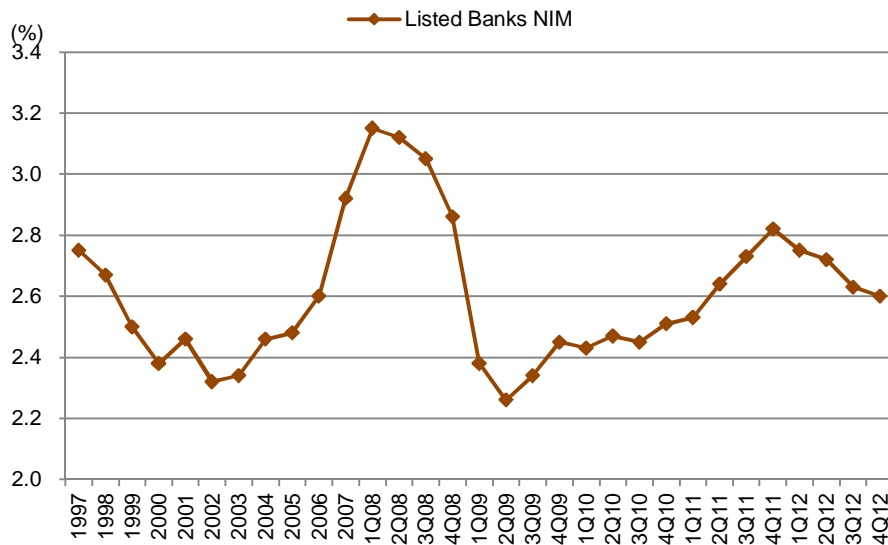


Source: WDI, Haver Analytics, CICC Research

Interest rate liberalization may weigh on NIM

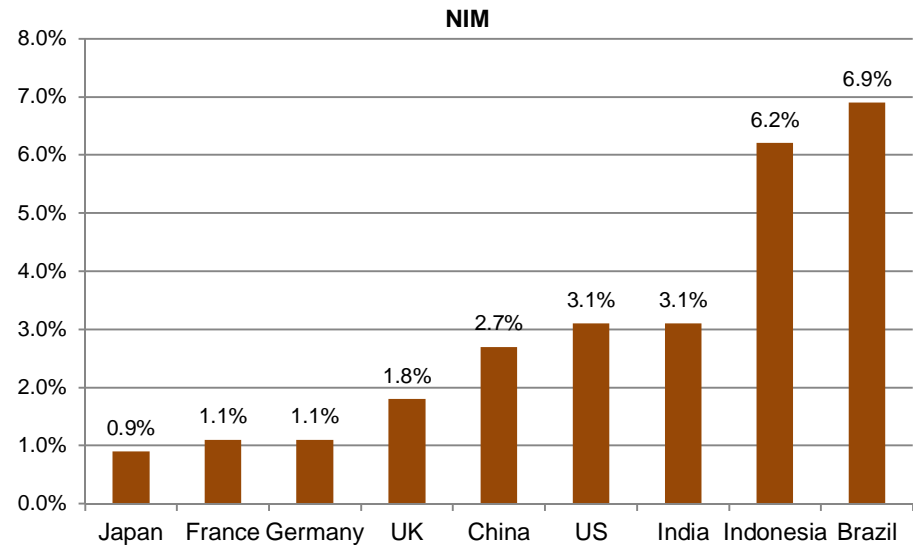
- The NIM of China's commercial banks reached 2.7% in 2011 due to the protected interest rate pricing mechanism, much higher than the major developed countries
- The NIM is expected to ease to ~2% after the progress of interest rate liberalization, and the profit model highly relying on interest may not be sustainable

NIM is facing downward pressure



Source: Wind, CICC Research.

The NIM of China's commercial banks is higher than the DMs with liberalized interest rates

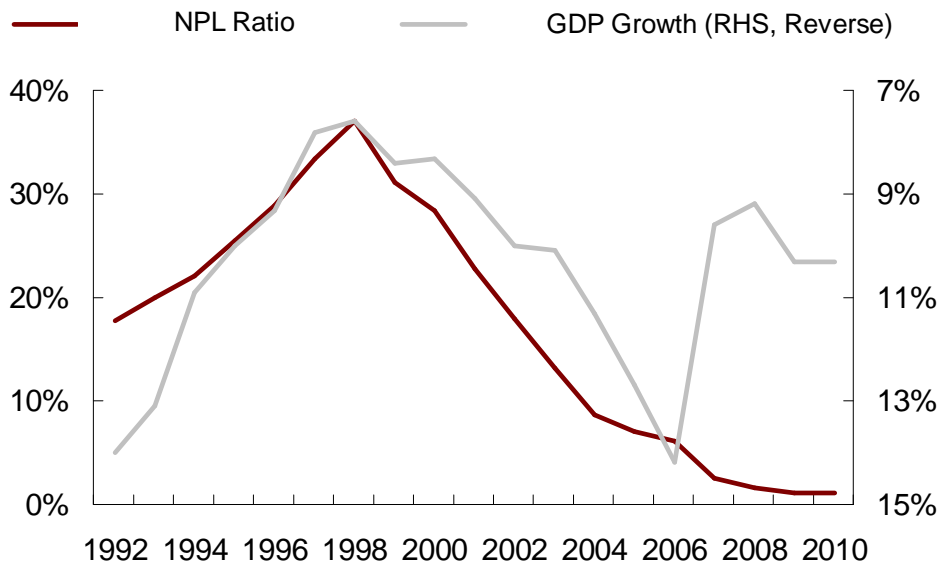


Source: Wind, Haver Analytics, CICC Research

Long-term pressure for asset quality

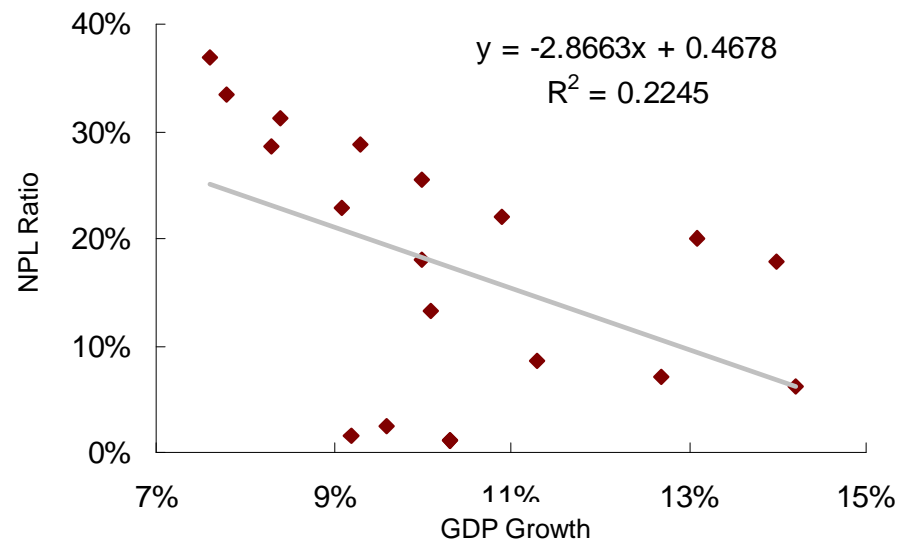
- The NPL ratio of China's banking sector is only 1%, close to historical low, and lower than major DMs, thanks to the historical reason of asset divestiture and the high economic growth in the past decade
- In long-term the asset quality might be under pressure as the risk emerges from the rapid development of LGFV, property and shadow banking.

The NPL ratio of China's banking sector has decreased substantially



Source: Wind, CICC Research.

The NPL ratio shows correlation with China's GDP growth rate

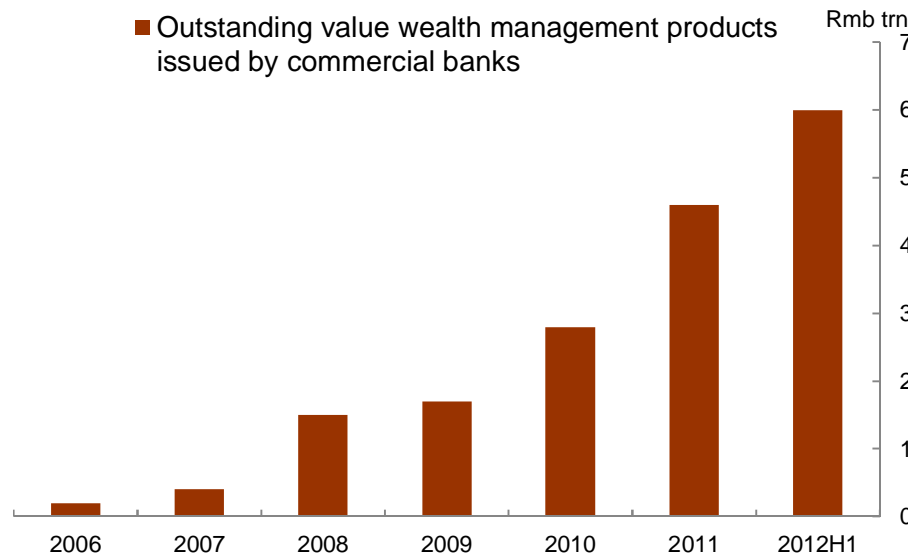


Source: Wind, CICC Research

Change of client base as the development of financial disintermediation

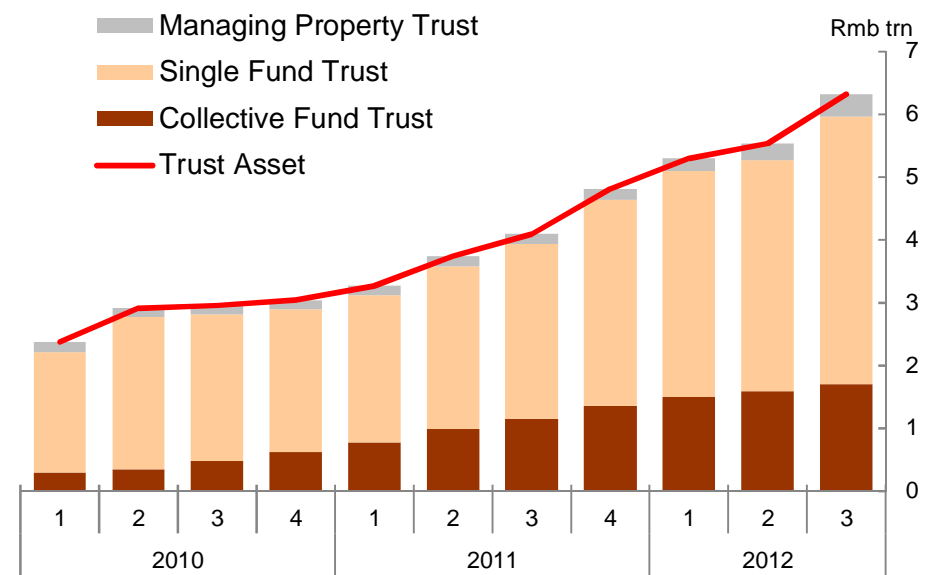
- The proportion of bank loan as % of total social financing is declining, and direct financing is developing rapidly as the tightening credit regulation and loosening capital market requirements
- The commercial banks may face the long-term problem of change of client base as large corporate may turn to direct financing with lower costs

Expanding size of wealth management products



Source: Wind, CICC Research.

Expanding size of trust assets



Source: CEIC, CICC Research

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