Assessing China's Debt Overhang: Risks and Policy Responses

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Economic policy challenges facing the top Chinese leaders

1. Maintain strong growth
2. Deal with industrial over-capacity (steel, mining,…)
3. Manage risks in fx and domestic financial markets
4. Manage risks in Chinese debt markets

- *We focus on 4. But 1 is the top priority for China. And all four inter-relate.*

Chinese capital markets are opening to international investors

- Steps in opening to portfolio investors:
  - 2002: Qualified Financial Institutional Investors Scheme
  - 2014: HK-Shanghai Connect, HK-Shenzhen Connect (retail stock market investors, two-way flows)
  - 2015: Renminbi joins SDR . Currency meant to be “freely usable” internationally.
  - 2016 :20 major international institutions given access to domestic interbank market where bonds are actively traded.
  - 2017: Bond connect (initially inward flow only)
- But international fund managers hesitate about whether they should enter and if so where and when? Views often expressed (WSJ, FT, ..)
  - Chinese debt levels are unsustainable or will soon be.
  - Chinese debt markets are opaque and foreigners are at a disadvantage with respect to (a) information and (b) treatment.
- Conclusion: China has a debt problem and something needs to be done about it.

What policy actions are need to address China’s debt problem?

- One view (the “liberal market consensus”)
  - Reinforce market foundations (e.g., international ratings)
  - Use bankruptcy to discipline firms and shut down zombies
  - Allow two-way flow of capital in bond markets
  - Remove subsidies from SOEs and let private firms compete on a level playing field for credit.

- *“Key elements (of the strategy) should include identifying companies in financial difficulties, proactively recognizing losses in the financial system, burden sharing, corporate restructuring and governance reform, hardening budget constraints, and facilitating market entry.”*(IMF, 2016).

China’s mixed strategy

- Bankruptcy laws have been revised but only a relatively small percentage of distressed firms are resolved through court procedures.
- Loss making SOE’s are restructured outside of bankruptcy. Preferred approach: strong firm takes over weak and restructures it and reallocates workforce.
- Cautious approach to market liberalization. Continued capital controls .
- Still rely on investment led growth. Will tolerate relatively high leverage. But give strong guidance (intervention) on a case by case basis to curb excesses and identify bad examples (eg. WANDA, HNA, Fosun, Anbang…)

Understanding and assessing China’s debt strategy

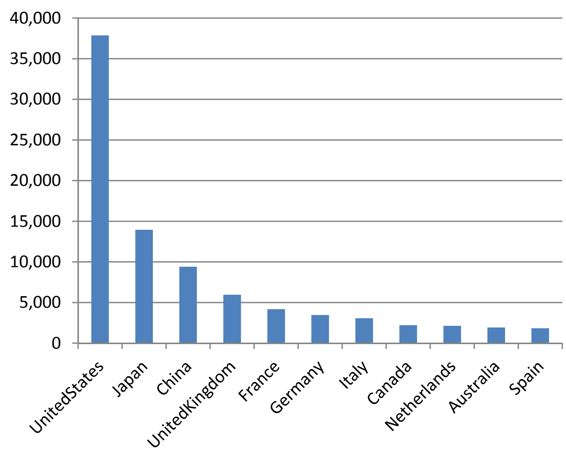
- We review the main features of Chinese debt capital markets and their relation to
  - local public finance and
  - Chinese approach to reform of state owned enterprises.
- We assess the debt containment strategy that has been undertaken since 2014 and document the effect it is having on
  - The structure of China’s debt markets
  - The pricing of risk on those markets

Some important steps in the growth of China's credit markets

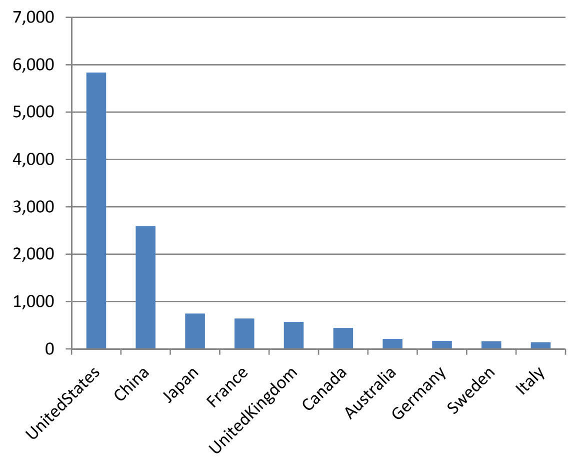
- 1981 Central government bond issued
- 1983 Enterprise bonds introduced
- 1986 First bankruptcy law for SOEs
- 1990 Shanghai and Shenzhen stock exchanges open
- 1993 Shanghai Pudong construction bond (start of LGFV's)
- 1998 Law on securities. Chinese Securities Regulatory Commission created (CSRC) 1999 Company Law
- 2006 Law on creditor rights
- 2007 Revised bankruptcy code

China's bond markets are large on a global scale. Concentrated in non-financial corporate paper.

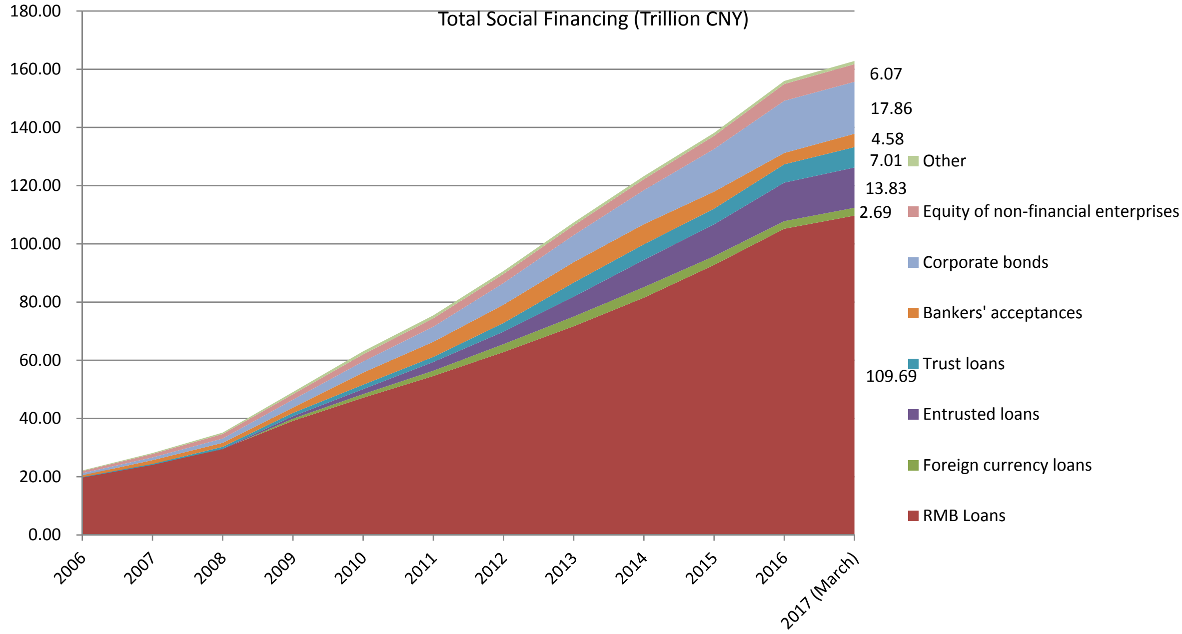
World's top bond markets 2016 Q3 (Billion USD)



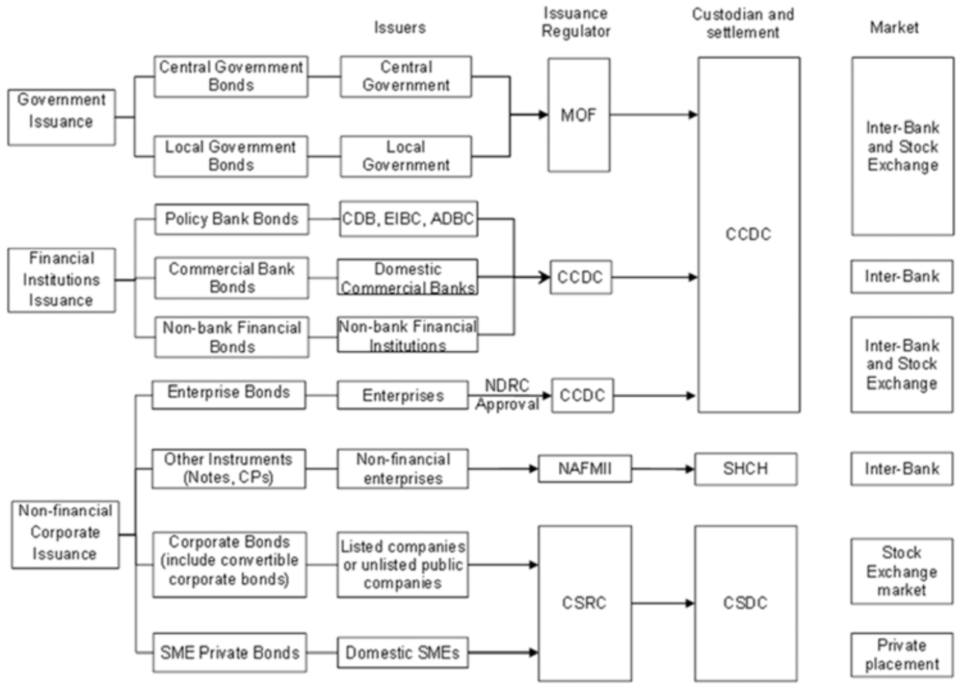
World's top non-financial corporate bond markets 2016 Q3 (billion USD)



China's bond market is still relatively small compared to bank and non-bank credit creation



Architecture: debt securities of non-financial enterprises enter through 3 channels



Regime for Chinese Bond Issuance

Total Financial and Non-Financial Bonds Outstanding at Depository Institutions, January 2017 (Billion CNY)

	CCDC	SHCH	CSDC	Total
Financial	2,732	6,276	-	9,008
of which				
CDs	-	6,276	-	6,276
Commercial Bank	1,636	-	-	1,636
Tier-two Capital Instruments	886	-	-	886
Non -bank Financial Institutions	210	-	-	210
Non-financial	4,563	7,735	6,268	18,566
of which				
Enterprise Bonds	3,536	-	946	4,482
Corporate Bonds	-	-	4,128	4,128
SME Private Bonds	-	-	1,194	1,194
Medium Term Notes	1,026	3,431	-	4,457
CPs	-	2,124	-	2,124
Private Placement Notes	-	2,180	-	2,180

Source: WIND and author's calculations

Non-financial Domestic Issues of Corporate Bonds and Related Securities February 2017, By Entity Type

Company type	Number	Amount Outstanding (Billion CNY)
Central SOE	1,764	4,330
Collective Company	54	34
Foreign Company	328	408
Local SOE	12,229	11,477
Other Company	73	72
Private Company	1,981	1,715
Public Company	111	137
Sino-Foreign Joint Venture	167	171
Not Disclosed	471	134
Total	17,178	18,478

Source: WIND and author's calculations

Chinese characteristics

- Chinese SOE reform. Gradualist. Corporatisation.
- Understanding importance of local SOEs. Many are LGFVs.
- Role of the party and delegation of decision making. (see Chenggang Xu JEL 2011)
  – Central government has great power but typically decentralizes to province or municipal level.
  – Party cadres are engaged in a tournament. The metric is economic growth and economic and political stability.
  – Experimentation is tolerated and even encouraged. Failures can be repudiated by the centre. Successes can be rolled out on a wider scale.
    - *Example: special economic zones*

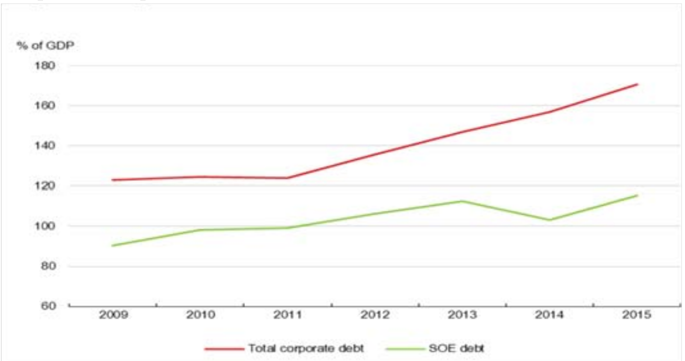
Resolution of distressed borrowers

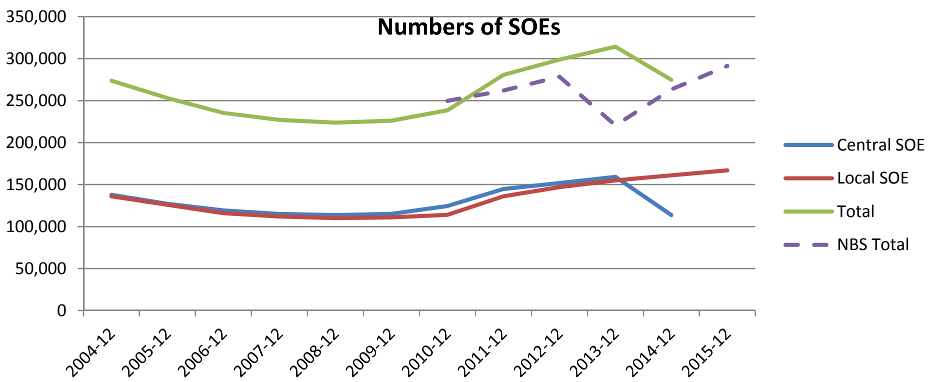
- Despite development of bankruptcy laws, there is limited use of legal bankruptcy proceedings
- Administrative resolution is meant to balance interests of diverse stake-holders.
  – Case by case
  – Opaque: difficult to know priority of claims *ex ante*. *This makes risk evaluation by creditors difficult.*
- Weak social safety net creates caution in imposing financial discipline
- Rely mostly on growth, job creation.

Costs of debt overhang

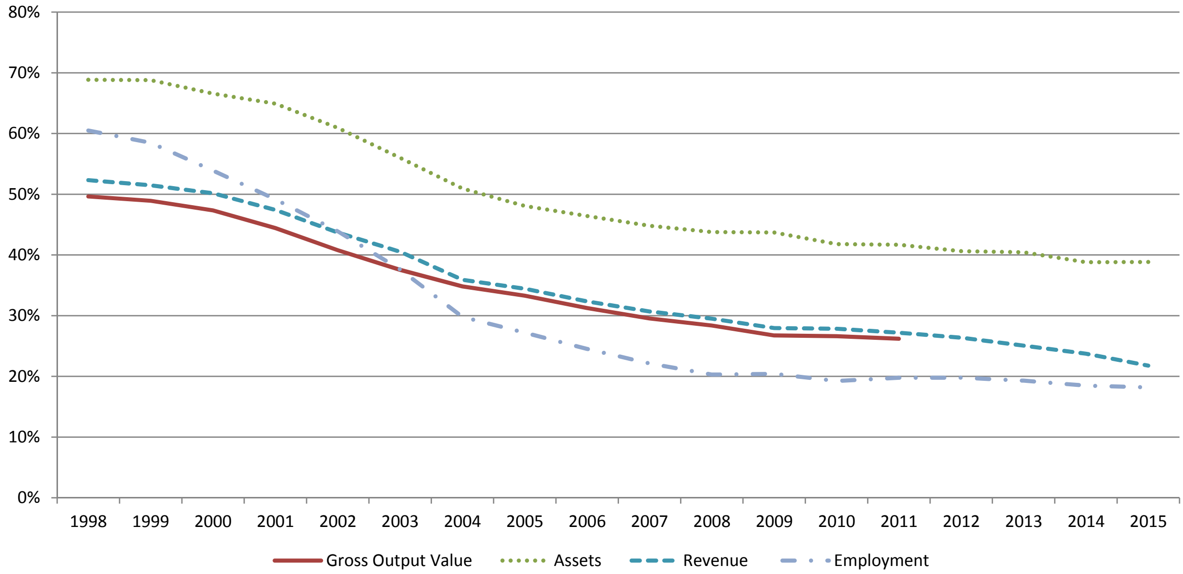
- In a market economy excessive use of debt can be an obstacle to growth.
- Growth will be sustained by investing in good investment projects– those with positive NPV
- But a highly indebted firm with a positive NPV project may not be able to fund its investment because
  - Creditors will not buy more debt because it is too risky relative to the expected return
  - Investors will not buy shares because many of the benefits of the good investment will accrue to the existing creditors.
- Excessive debt may mean that firms have an incentive to take on too much risk.
  - Creditors will lend only at very high rates of interest.
  - Some firms with good low risk investment projects will decide not to invest.

SOEs play a crucial role in maintaining growth. They rely on debt issues for funding.





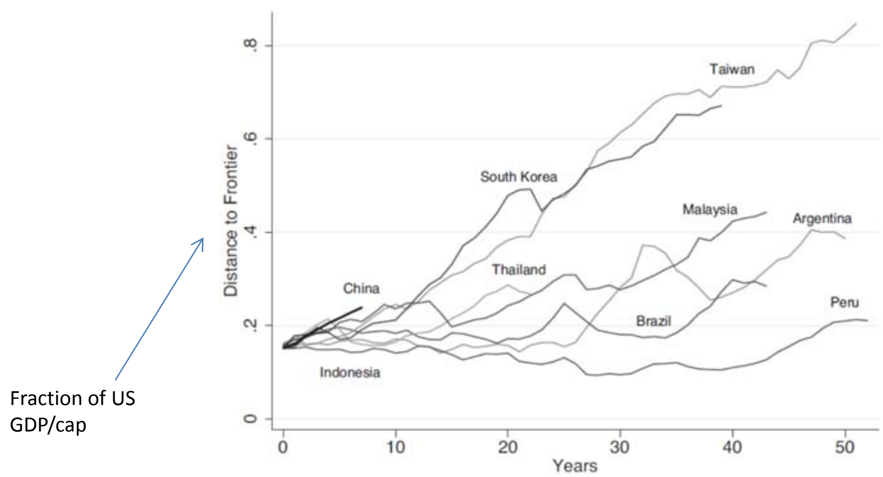
However SOEs account for declining share of employment and activity as private sector grows strongly



SOEs' Share within Industrial Sector

Will China fall into the middle income trap?

- After an initial phase of rapid growth some emerging countries slip into slow growth paths.
- Is China investing in the high NPV projects that will sustain growth?



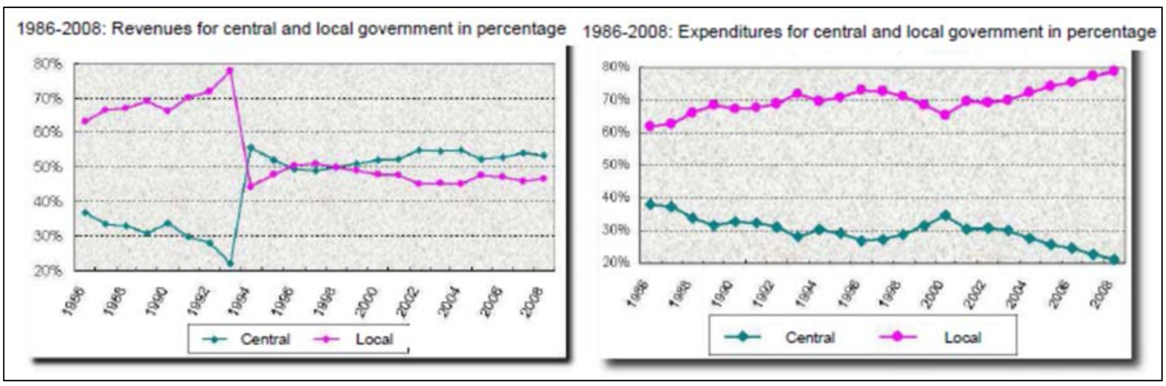
since reaching 15% of US GDP/cap

Assuring both strong growth and financial stability

- Two-phase growth model (Acemoglu, Aghion, Zilibotti)
  1. Investment and imitation
     - Favouring incumbents may overcome credit constraints
  2. Innovation
     - Needs entrepreneurship and competition
- Advocates of renewed enterprise reform believe this will foster transition from 1 to 2.
- Big question—how to balance the stability of benefits of incumbent advantage to SOEs with competitive forces.
- China's strategy
  - Continued investment led growth emphasizing infrastructure domestically (e.g. Guizhou) and abroad (Belt and Road)
  - Encourage private sector innovation but with an element of state leadership. e.g.,
    - Public/private model (minority holdings of private firms in SOEs)
    - Reaffirm party leadership in HK listed SOEs

Local public finance and local SOEs

- 1994 Budget Law fundamentally shifted revenue collection in favour central government.
- However, the burden of provision of public services remained with local government, creating a structural deficit.



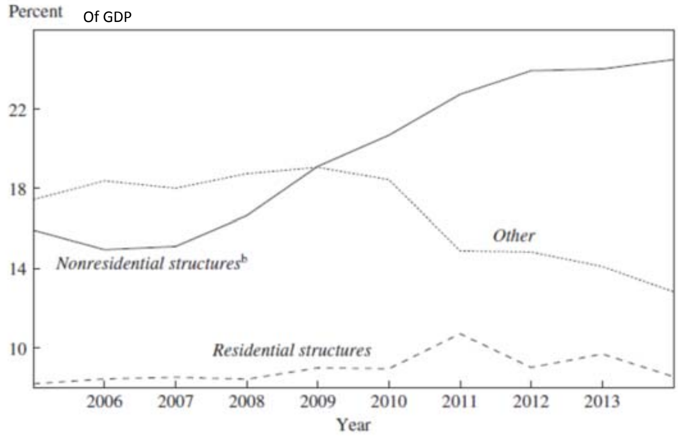
Source: Lu Hua

Local government response to structural deficits in public finance and it relation to local SOEs

- 1994 Budget Law also made it illegal for local governments to borrow in order finance operating budget deficits.
- Local governments could seeks revenues from central government. But limited and typically for special programmes.
- Following the example of Shanghai Pudong development they could undertake infrastructure development projects via a Local Government Financing Vehicle (LGFV)
  - Organized as a Local SOE
  - LG capital contribution could be commitment of proceeds from land grant (l.t. lease) of land taken out of agricultural production
  - LGFV could borrow using land as collateral.
  - Can issue corporate bonds, enterprise bonds, etc in the market
- Local SOE's generate revenues from tolls, subway tickets etc but also from commercial activities developed by the firm (mixed public and commercial purpose).

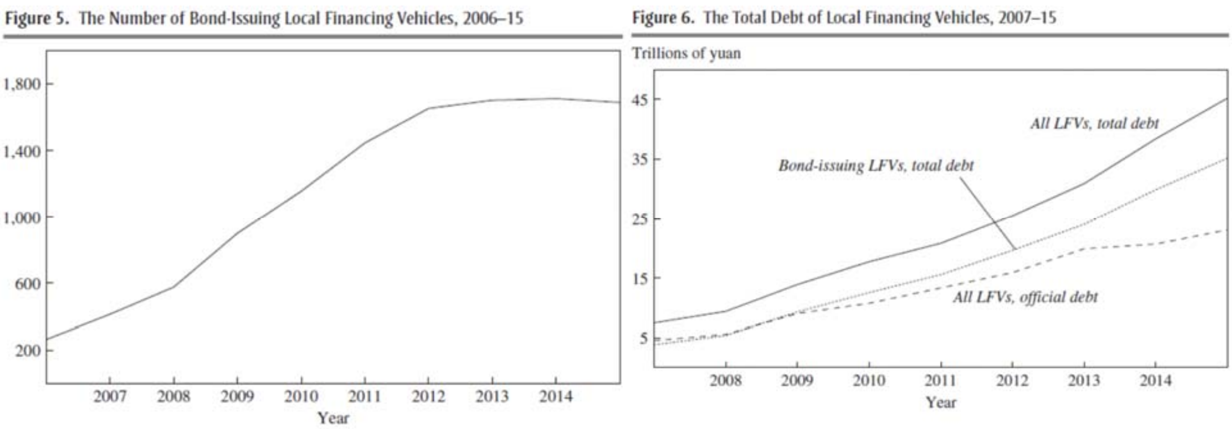
China's Keynesian response to the GFC made the consequences of local public finances clear.

- In the face of the threat to economic growth posed by the unfolding GFC the Chinese authorities announced a huge stimulus programme of 4 trillion CNY of which the largest component was infrastructure investment. This called for implementation in 2009 and 2010.



Bai, Hsieh and Song, Brookings Papers 2016

The by-product of the stimulus was the growth of local SOE's and their debt.



Bai *et al* Brookings (2016)

Dealing with the maturity miss-match of infrastructure funding

- Rollover of loans starting in 2011-12
- Funding pecking order
  - Bank loans
  - Debt securities: enterprise bonds, corporate bonds, medium term notes,
  - Non-bank credit (shadow banking):
    - trust loans, entrusted loans, bankers acceptances
    - Often repackaged in "wealth management products "
- Many believed that debt of LGFV's carried an implicit government guarantee.

China's debt containment strategy since 2014

- Strategy set out in State Council Guidance (2014 No. 43) on management of local government debts
  - Authorise some local governments to issue debt directly or through the Ministry of Finance (not through LGFV)
  - Constrain local governments from giving debt guarantees to enterprises (including LGFV's)
  - Create debt management systems (impose budget discipline)
  - Start muni bond/ city construction bond swaps to reduce interest cost of existing debts
  - Encourage PPP to support remaining infrastructure investment
- Reaffirmed repeatedly by MOF, NDRC etc in 2015-2018

Solvency of local governments heavily dependent on urbanization policy as reaffirmed in the 13th Plan

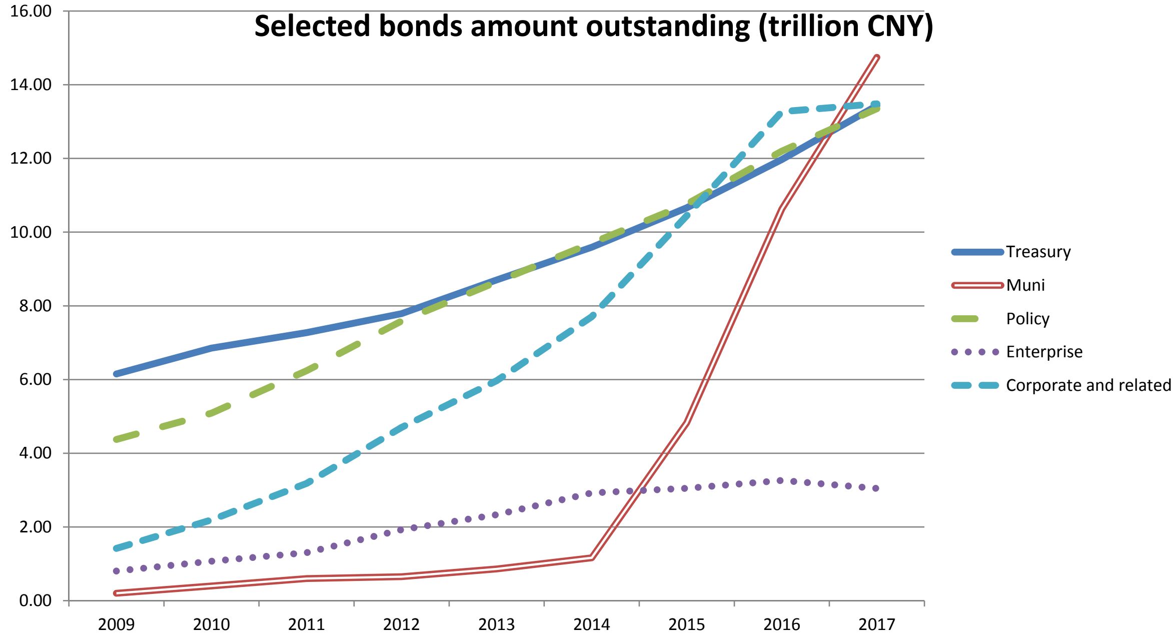
Local government Balance Sheet (2012-2014)

in RMB trillions

	2012	2013	2014		2012	2013	2014
Cash	3.3	4.2	4.6	Borrowed funds	12.7	14.2	15
Treasuty deposits	1.3	1.9	2	Local funding vehicle	9.3	9.7	10
Oversea investment	16.1	19.8	24.6	Construction trust loans	1.7	2.6	2.8
State-owned companies	15.7	19.3	24.1	Construction insurance funds	0.2	0.3	0.4
National social security fund	0.2	0.2	0.2	Local sovereign debt	0.4	0.4	0.4
PP&E	5.6	6.1	6.7	Bonds	3.2	4.1	5
Construction in progress	0.02	1.4	1.9	Local government bonds	0.7	0.9	1.2
Inventory	0.2	0.3	0.4	Investment bonds	2.5	3.2	3.8
Account receivables and Prepaids	2.8	3.3	4	Account payables and Advances	3	3.4	4
Land	57.2	62	65.4	Secured debts	2.5	2.7	2.9
Intantible assets	0.06	0.08	0.1	Bank non-performing loans	0.6	0.6	0.6
Other assets	0.8	0.4	0.5	Implicit pension debts	2.5	2.5	2.5
				Other liabilities	0.02	0.06	0.08
				Total liabilities	24.52	27.56	30.08
				Net assets	61.56	70.02	77.92
Total assets	86.08	97.58	108.2	Total liabilities and net assets	86.08	97.58	108.20

Source: Li Yang et al 2015

2014-15 reforms of local public finances have led to major restructuring of bond markets.



Source: WIND and authors' calculations

What accounts for growth of debt since 2015?

- Enterprise bonds issuance has levelled off.
- There has been a huge growth of municipal bonds driven by the Muni Bond/ City Construction Bond swap programme.
  - Actively facilitated by the MOF
  - But this is available only to higher level local governments (provinces, province level municipalities). Smaller l.g.'s are still funding through their LGFV's.
- This may be driving the growth of policy bank debt and corporate bonds.

Containment strategy for government guarantees of heritage liabilities

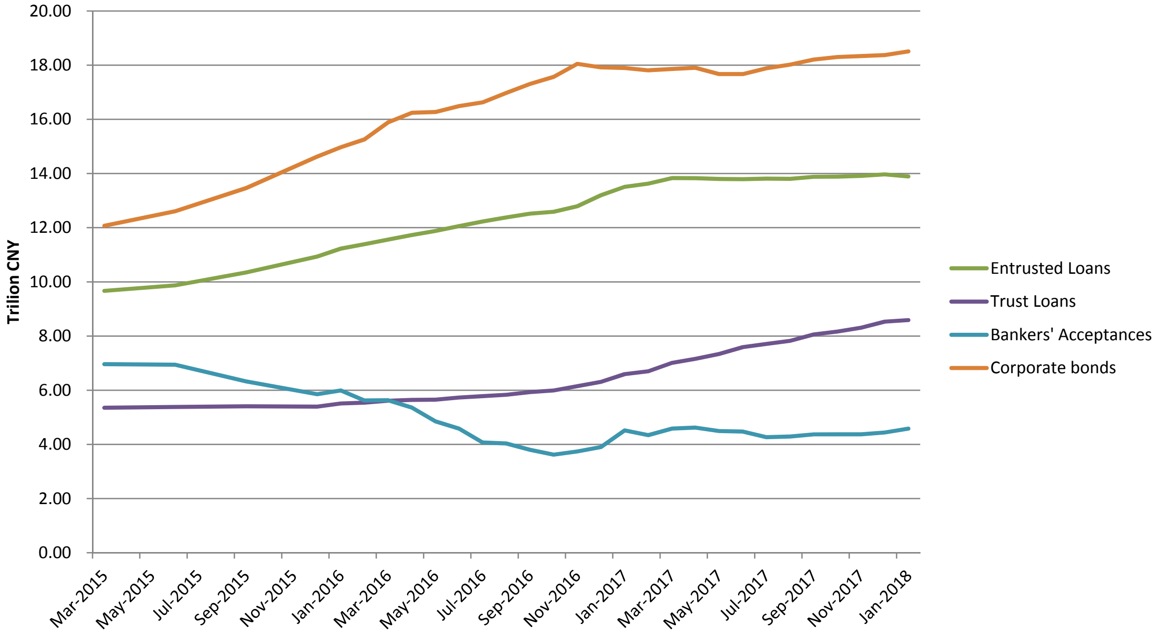
	Enterprise	Corporate	CP	MTN	Total
Number	2,929	1,994	483	3,596	9,002
City construction	2,421	323	167	1,637	4,548
Non-city construction	508	1,671	316	1,959	4,454
Amount outstanding (trillion RMB)	4.36	2.70	0.43	4.91	12.40
City construction	2.25	0.39	0.13	1.74	4.51
Non-city construction	2.11	2.31	0.30	3.17	7.89

Bonds outstanding February 2018, Source: WIND

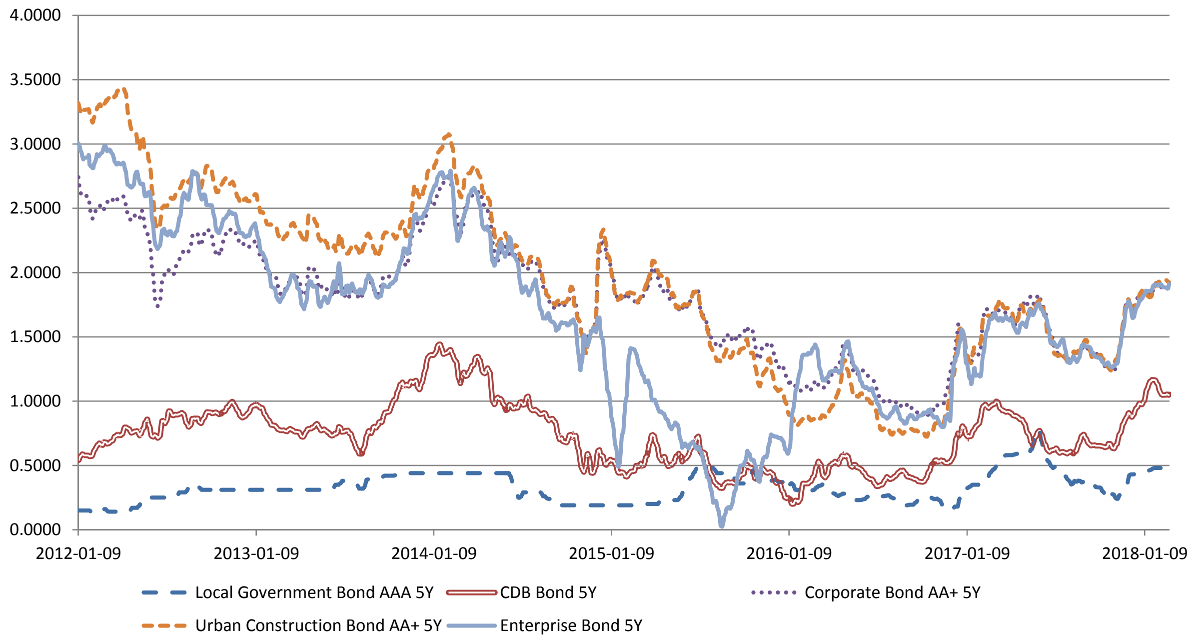
PPP, debt growth, and the issue of government guarantees

- As of 2017 Q3, there have been PPP projects with a total cost of 17.8 tr. CNY approved or under review.
- A typical PPP project might finance project costs with 20% social capital contributed by the partner of the local government and 80% debt.
- Thus approximately 14.2 tr. CNY of new debt coming from PPP projects.
- Does this debt carry a government guarantee?
- According to State Council Guidance (2014 No. 43)
  - local government commitment is limited to what is specified in the approved PPP contract,
  - Local governments are not allowed to give further reassurances or commitments of proceeds from future land sales etc.
- Reaffirmed repeatedly by MOF, NDRC etc in 2015-2018
- November 2017 MOF order to withdraw approval of non-conforming PPP projects.

The growth of China's shadow banking has slowed in some sectors but not in trust loans.

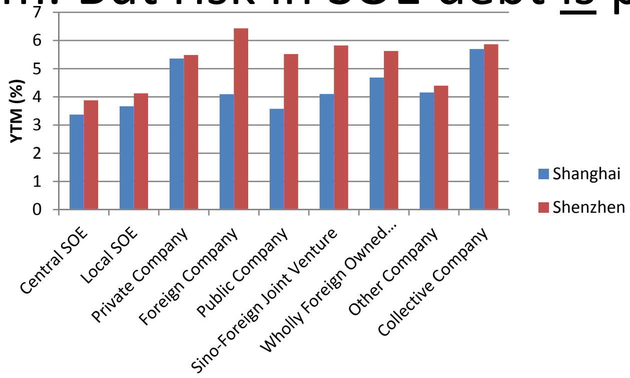


Yields reflect the main phases of China's strategy to reform local public finance and restrict scope of government guarantees



Yield spreads versus treasury bonds. Source: WIND and authors' calculations

Private borrowers pay a relatively high risk premium. But risk in SOE debt is priced.



		Central SOE	Collect. Company	Foreign Company	Local SOE	Other Company	Private Company	Public Company	Sino-Foreign Joint Venture	Wholly Foreign Owned Company
Liability Asset Ratio	Coef	0.025	0.154	-0.072	0.017	0.003	0.204	-0.024	1.257	-0.074
	t-stat	6.498	2.965	-1.531	4.159	0.216	0.520	-3.066	1.761	-0.294
cons	Coef	2.896	-2.338	11.171	4.263	4.628	1.664	6.651	-68.257	13.800
	t-stat	10.863	-0.679	3.536	16.919	4.940	0.067	12.772	-1.429	0.824

Cross sectional regression of yield on leverage, February 2017

Summary of conclusions

- China is not in a debt crisis and is not inevitably approaching one.
- The expansion of non-financial debt is a consequence of (a) market oriented reforms put in place long ago and (b) a vigorous Keynesian response to the GFC that relied on infrastructure investment.
- The stimulus was channelled largely through regional infrastructure projects.
- The way this operated was affected by particularities of the organization local public finance which forced local governments to borrow through LGFV's.

Summary of conclusions (2)

- Debt ballooned as LGFV's struggled to roll-over debts. Fed through: bank loans, corporate bonds and related, shadow banking.
- Since 2014 central authorities have been pushing through a series of changes which step by step are making a major reform of local finances.
- This is reshaping Chinese debt markets. Increasingly firms will be allowed to default on their debts and fail.
- Reforms have robbed the LGFV's of their traditional core business. The reforms will be complete and sustainable only when they have dealt with the restructuring of these 12,000 firms.

References

R.W. Anderson "Chinese Debt Capital Markets: An Emerging Global Market…with Chinese Characteristics"
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3005392

R.W. Anderson and H. Lu, "Sustainable Local Public Finance in China: Are Muni Bonds the Structural Solution?" March 2018

Questions?