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Resolving China's Corporate Debt Problem

INTERNATIONAL MONETARY FUND

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Asia and Pacific Department

Resolving China's Corporate Debt Problem

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Authorized for distribution by James Daniel

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Abstract

Corporate credit growth in China has been excessive in recent years. This credit boom is related to the large increase in investment after the Global Financial Crisis. Investment efficiency has fallen and the financial performance of corporates has deteriorated steadily, affecting asset quality in financial institutions. The corporate debt problem should be addressed urgently with a comprehensive strategy. Key elements 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. A proactive strategy would trade off short-term economic pain for larger longer-term gain.

JEL Classification Numbers: E22; L16; K22

Keywords: Corporate Debt Overhang; Credit; Restructuring; Hardening Budget Constraints

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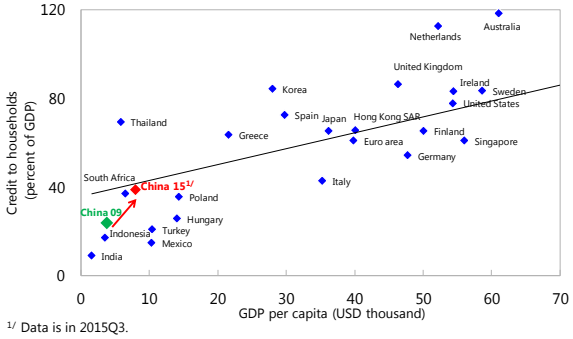
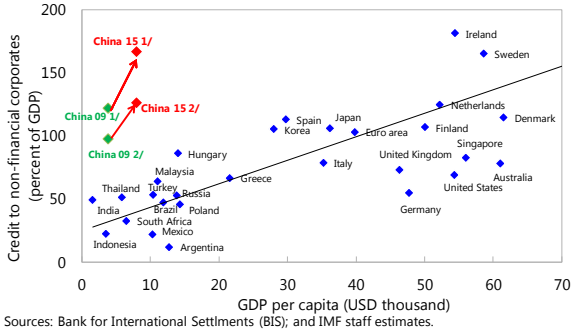
The corporate sector has been the main driver of the excessive credit creation. Credit to households is consistent with the ratio for countries at a similar level of development. In contrast, credit to the corporate sector is well above the level in emerging market peers (exceeding even the level typical for developed economies) and growing fast.[2]

Credit to Households in Line wtih Peers
(Selected economies, 2014)



1/ Data is in 2015Q3.
Sources: Bank for International Settlements (BIS); IMF *World Economic Outlook*; and IMF staff calculations.

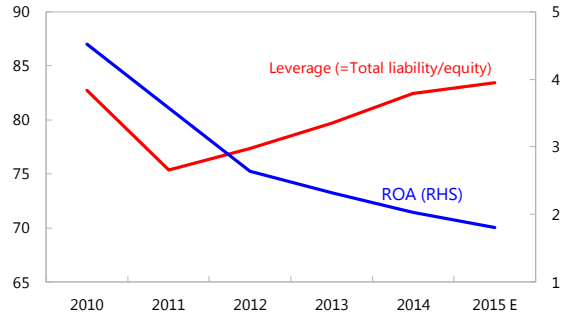
Credit to Nonfinancial Corporates much Higher
(Selected economies, 2014)



Sources: Bank for International Settlments (BIS); and IMF staff estimates.
1/ Calculated as total social financing minus equity and household loans.
2/ Calculated as total social financing minus equity, LGFV borrowing and household loans.

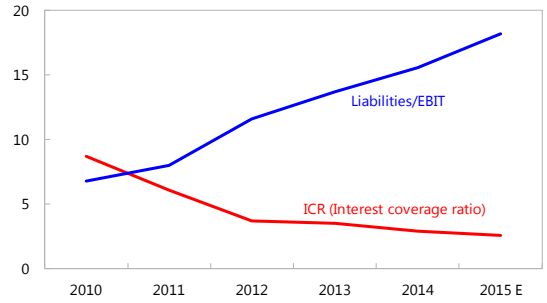
The financial performance of the corporate sector has also been deteriorating. After the initial deleveraging phase, the leverage ratio has been rising while profitability has been steadily falling, suggesting deteriorating debt servicing capacity. This is further illustrated by the rising ratio of liabilities to earnings (EBIT) and the falling interest coverage ratio (ICR = EBIT / interest expenses).

Increasing Leverage and Falling Profits 1/
(In percent))



Sources: S&P Capital IQ; and IMF staff estimates.
1/ Listed non-financial companies.

Deterioration in Debt-servicing Capacity 1/
(In percent)



Sources: S&P Capital IQ; and IMF staff estimates.
1/ Listed non-financial companies.

[2] Importantly, standard measures of credit in China classify credit extended to LGFVs as credit to the corporate sector. While formally classified as state-owned enterprises (SOEs) and not part of the public sector, many LGFVs perform fiscal functions and a sizeable part of this credit should be classified as public debt. However, even after stripping the effect of LGFV borrowing, credit to the corporate sector is still very high by the cross-country norm and rising fast.

The quality of bank assets has worsened as a result. Loan quality statistics show only a modest increase in nonperforming loans (NPLs) and special mention loans, but alternative estimates suggest more deterioration in asset quality:

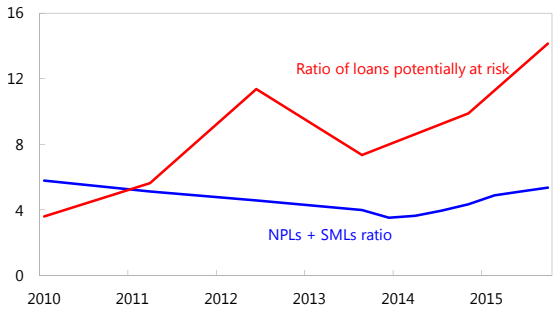
- Reported NPLs and special mention loans have reached about 5½ percent of total loans as of end-2015.

- Bottom-up estimates from corporate data point to a sharper deterioration in repayment ability. 'Loans potentially at risk' are estimated at 15½ percent of total commercial bank loans to the corporate sector (they are defined as loans to borrowers that have an interest coverage ratio below one; estimated sector-wise based on individual corporate balance sheets). Assuming a 60 percent loss ratio suggests that potential bank losses on these loans could amount to 7 percent of GDP (IMF, 2016).

- Top-down estimates based on the credit gap is another indicator of brewing problems. The estimated relationship between the peak credit gap and subsequent NPLs (in a sample of crisis-stricken economies) yields relatively large projected loans potentially at risk (about 10½ percent of GDP) and write-offs (5 percent of GDP). It is smaller, but still in line with the bottom-up estimates.

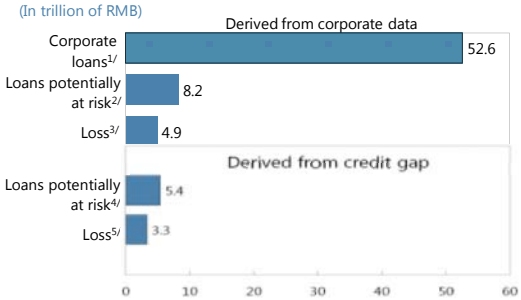
Low NPLs/ Speical Mention Loans (SMLs), but Loans Potentially at Risk Much Higher

(In percent)



Bottom-up and Top-down Estimates Consistent

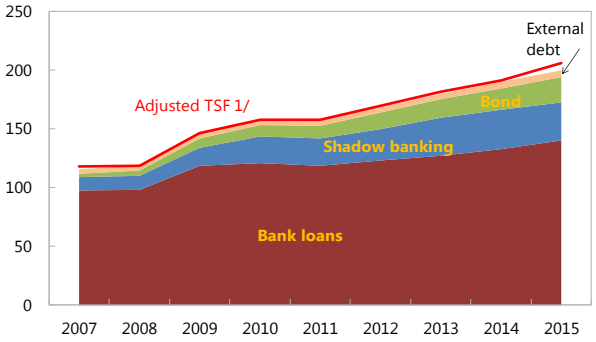
(In trillion of RMB)



1/ Excluding LGFVs and policy banks.
2/ Share of loans with ICR<1.
3/ Assuming 60 percent loss rate
4/ From the relationship between credit gap and subsequent NPLs.
5/ From the relationship between credit gap and subsequent write-offs.

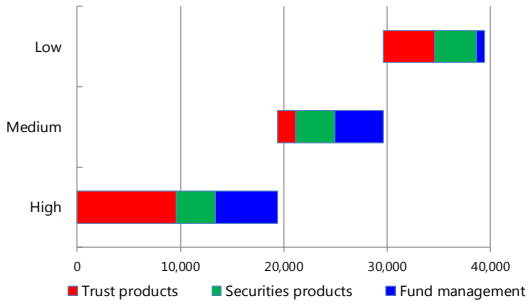
The quality of corporate debt could be even worse in 'shadow' credit products. These products comprise investment instruments structured by trust, securities or asset management companies, with mainly loans or other credit as underlying assets. They have been growing rapidly, by 48 percent in 2015 to reach RMB 40 trillion, which is equivalent to 58 percent of GDP or 40 percent of banks' corporate loans (although the overlap with regular corporate credit is hard to estimate; Caparusso, 2016). The rapid growth has been stimulated by capital, liquidity and regulatory constraints after the GFC. Shadow products are generally higher-risk than loans, and losses associated with them could thus be sizeable.

High and Evolving Shadow Banking
(In percent of GDP)



Sources: Haver Analytics; and IMF staff calculations.
1/ Including external debt but excluding equity.

Shadow Products: by Risk Level and Product Type, 2015
(In billion of RMB)



Source: Caparusso (2016).

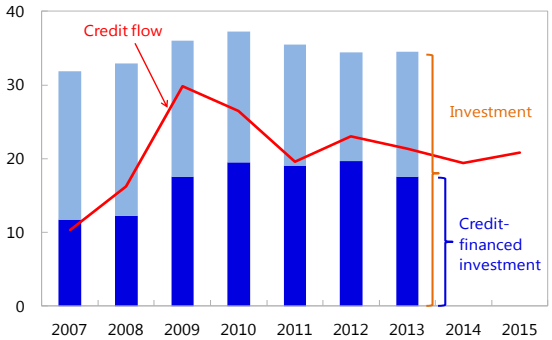
III. What is Behind the Rapid Credit Growth?

Flow of funds data allow identification of the main credit flows:

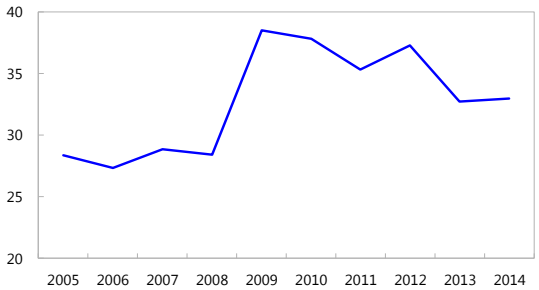
- Higher and less profitable corporate investment required credit financing. The rise in investment associated with the post-GFC stimulus was not matched by a commensurate increase in profits. In fact, profits have been steadily falling, limiting room to finance investment internally. China's high household saving provided room to finance the additional investment, but the increased flow of funds from households to corporations ('credit-financed investment' in the chart) required intermediation by the financial system. This has been reflected in the sharp and persistent increase in credit growth.

- Credit increased even by more than what was needed to finance investment. The additional financing (the difference between 'credit flow' and 'credit-financed investment' in the chart) has led to the expansion in corporate balance sheets, largely cash buffers. While more difficult to explain, the higher demand for cash appears to coincide with the concurrent sharp increase in long-term payables. Lengthening of credit chains—for example, the rise in entrusted loans—could have played a role too.

Corporate Credit and Investment
(In percent of GDP)



Borrowing Conincided with the Jump in Long-term Payables
(Days > 45; percent of corporate debt)



Sources: Standard & Poor's Capital IQ; and IMF staff estimates.

As a result, the use of credit has become less efficient at the macro level. The increase in investment could be growth-enhancing and could generate additional profits for corporates. This would ensure that the associated credit financing is sustainable. But the rapid scaling up in investment has reduced its efficiency, as reflected in lower profitability and, at the macro level, in the lower growth payoffs from additional capital spending (falling Incremental Capital to Output Ratio). Combined with additional borrowing to finance the expansion of corporate balance sheets, this reduced credit efficiency (or alternatively increased 'credit intensity'—amount of new credit needed for additional GDP). Worryingly, these dynamics in credit and investment efficiency is similar to pre-crisis behavior in countries experiencing debt crises (e.g., Spain and Thailand).

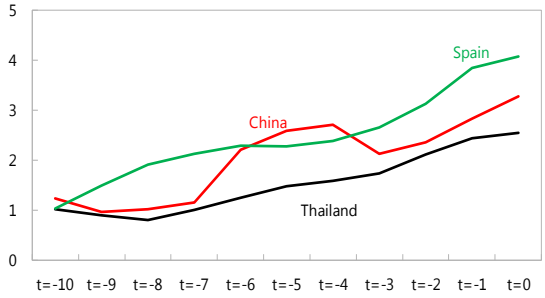
Investment Efficiency Has Fallen

(ICOR=investment share in GDP/GDP growth)

Sources: *World Economic Outlook(WEO);* and IMF staff calculations.
Note: t=0 is the year of peak credit boom.

While Credit Intensity Has Increased 1/

(In percent, new credit per unit of additional GDP)

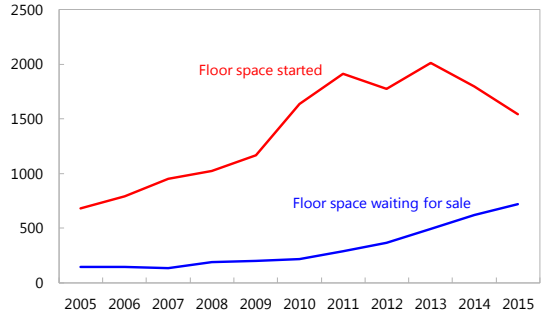


Sources: Bank for International Settlments (BIS); *World Economic Outlook (WEO);* and IMF staff calculations.
Note: t=0 is the year of peak credit boom.
1/ Caclulated on a 3-year window.

Inefficiencies in credit allocation stemmed from the structure of the post-crisis stimulus. Credit financed a broad-based scaling up of infrastructure spending and real estate investment. While real estate may appear more commercially oriented (and therefore more efficient) than infrastructure, nonmarket orientation of state or local government-linked corporates in this sector may have led to overbuilding and severe overhang of unsold properties. The stimulus-driven construction boom has also supported rapid development in upstream industries such as steel, cement and coal. They now face overcapacity problems as the construction activity has slowed.

Booming Construction Has Left Real Estate with Overhang

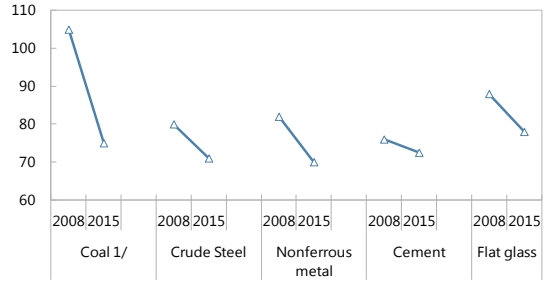
(In thousand of squaer meters)



Source: CEIC Data Company Ltd.; and IMF staff calculations.

Capacity Utilization across Sectors

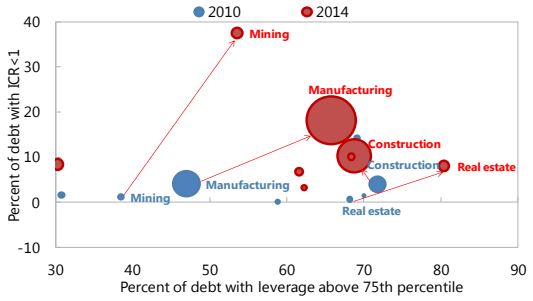
(In percent of total legal designated capacity)



Sources: European Chamber of Commerce, Goldman Sachs, and staff estimates.
1/ Coal capacity exceed 100 percent because coal mines produced over legal designed capacity level in earlier years.

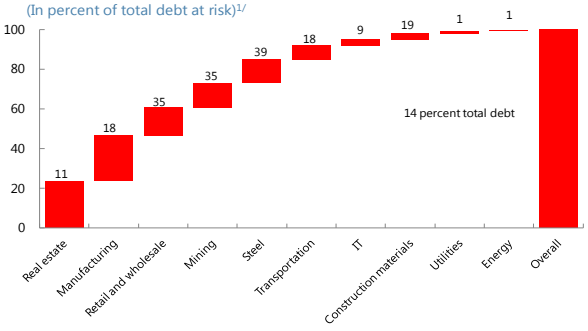
Heavy borrowing combined with falling profits have left corporates with a debt overhang. Corporates in real estate, construction and related upstream activities have rapidly increased leverage. As a result of the inefficient expansion, they are now suffering from an excessive debt burden, as reflected in the high share of companies with a low interest coverage ratio.

Deterioration of Financial Results in Manufacturing, Mining, Constuction and Real Estate



Sources: WIND database; and IMF staff calculations.
Note: Dot size indicates the size of debt in the sector.

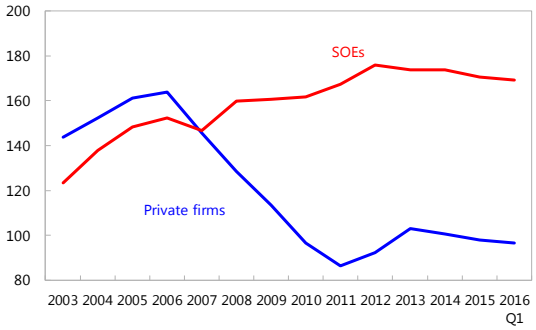
Contributed Most to Debt-at-Risk by Sector
(In percent of total debt at risk)[1/]



Sources: Standard & Poor's Capital IQ; and IMF staff estimates.
[1/] ICR<1.

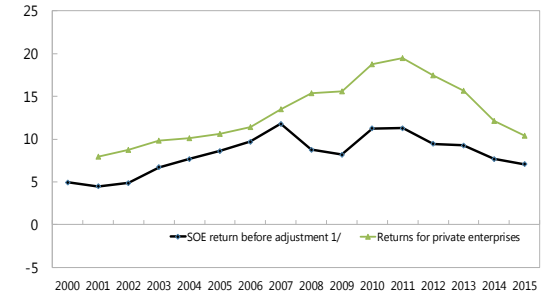
SOEs have been more leveraged and less profitable than private enterprises. SOEs have been the bulwark of government industrial policy, used to reach development and strategic goals. They have been the key policy instrument used by the central and local governments in the post-GFC response to mitigate growth slowdown (Baston, 2016). Acting partly as a conduit for policy-driven investment, mostly in resources-intensive industries, they have reported higher and rising leverage compared to the private enterprises, and significantly weaker profitability (Lam and Schipke, 2016).

Leverage Ratios (Average Mean)
(In percent)



Sources: WIND database; and IMF staff estimates.

Returns on Equity
(In percent)

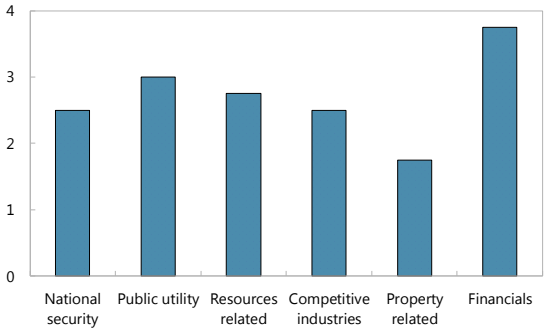


Sources: Statistical Yearbook (2015), Unirule Institute of Economics (2015), and staff estimates.
1/ Based on nominal profits of industrial SOEs .

Inefficiency has been linked to soft budget constraints. The policy role of SOEs is enhanced by preferential access to financing. This includes financing provided by state-owned banks, but extends to other forms of borrowing. The privileged access has been underpinned by substantial land endowment (that can be used as collateral) and implicit government guarantees. In addition to industrial policy objectives, social and financial stability objectives play a role in extending the guarantees (Baston, 2016; IMF, 2016). The central or local governments may therefore stand behind not only SOEs, but even private large strategically or socially important corporates. The preferential access to finance and implicit government guarantees translate to a 2–3 notches upgrade in credit ratings, and appear to lower borrowing costs by about ½-1 percentage points.

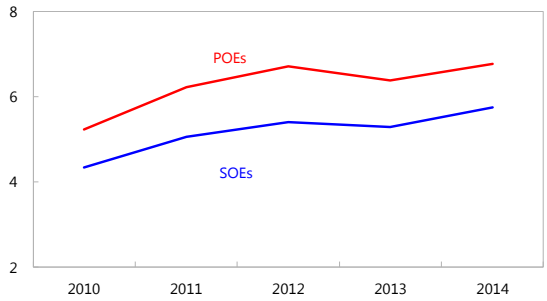
Borrowing costs not commensurate with returns and risks, together with easy access to financing, are key features distorting the allocation of resources and promoting inefficiency.

Uplift in Ratings for SOEs
(Average notches uplift for SOEs)



Source: Moody's and Morgan Stanley Research.

Implied Interest Rate[1/] is Lower for SOEs
(In percent)



Sources: WIND database; and IMF staff estimates.
[1/] Derived as interest payment/total debt.