

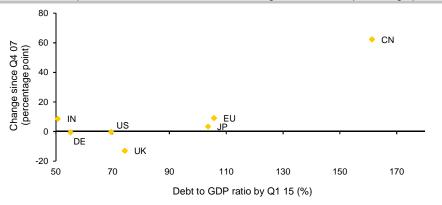
15 January 2016

EM Briefing

China's corporate debt – The Elephant in the room?

China's corporate debt increased massively since the financial crisis such that by 2015, non-financial corporate debt amounts to 161% of GDP. As the economy slows this debt build up is a key risk to financial and economic stability in China. Our analysis shows that a large part of the increase of debt is located in the real estate and manufacturing sectors. If the authorities engage in the 'extend and pretend' game, which we expect, this implies a lack of productive investment in China over the coming years which confirms our below consensus forecast for Chinese GDP growth.

CHART 1: China's non-financial corporate debt rose sharply since GFC
Non-financial corporate debt to GDP ratio in % vs Change since GFC in percentage point



Source: BIS, Commerzbank Research

EM corporate debt in perspective

It is no secret that corporate debts in EM constitute a risk to economic growth over the coming years. Recent papers from the BIS¹ and the IMF² highlight that EM corporates in particular illustrate elevated debt profiles. Of itself, the fact that EM corporates illustrate high debt levels should not concern investors in that this is a typical feature of EM development. In order to capture market share, corporates expand quickly and do so with large amounts of leverage. As asset prices rise and markets mature, what were once elevated levels of corporate debt normalize. However, what we can clearly see in a general sense in EM is that corporates increased their borrowings despite the fact that both economic growth rates and overall corporate profitability fell in recent years. Basically, EM corporates increased their borrowings just as the EM party came to an end. Moreover, in LatAm especially we can see that corporates borrowed heavily in USD, meaning that real debt payments increase as the USD appreciates.

We proceed with an examination of how overall levels of corporate debt increased since the Great Financial Crisis and we then undertake an analysis of the sectoral composition of this debt profile at the firm level. We illustrate the risks to this large increase in debt, namely the large increase in leverage, significant declines in profitability and excess inventories which flatter balance sheets. We address the likely policy response by PBoC and the Chinese authorities which will ultimately entail looser monetary policy. Finally, we argue that in time we are likely see a zombification of large parts of the SOE sector.

¹ BIS working paper 483 – Global dollar credit: links to US monetary policy and leverage

For important disclosure information please see page 7.

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² Mali Chivakul and W. Raphael Lam, 2015, "Assessing China's Corporate Sector Vulnerabilities", IMF working paper, No. 15/72. Note that the IMF report use total liabilities/Common equity as a measure of leverage.

CHART 2: Debt is concentrated in a few sectors



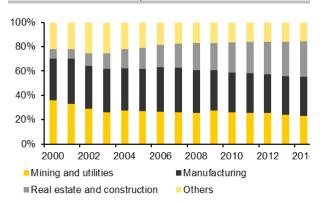
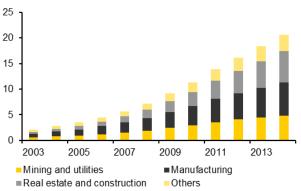


CHART 3: Debt in absolute terms skyrocketed

Total debt in non-financial corporates listed in China, in CNY, trn



Source: WIND, Commerzbank Research

Source: WIND, Commerzbank Research

Corporate debts increased massively

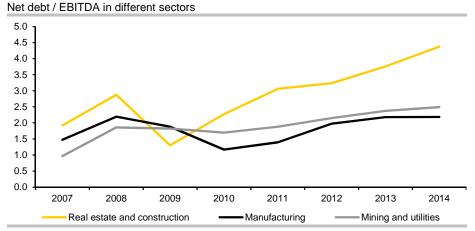
Chart 1 illustrates how Chinese corporate debt increased in the period since the Great Financial Crisis. Aggregate data compiled by BIS suggests that non-financial corporate debt surged following the government's CNY 4 trn stimulus program. At present the ratio of non-financial corporate debt to GDP stands at a tremendous 161%. This represents an increase of 62.3 percentage points between end 2007 and Q1 2015. In the same period we can see that corporates in the US, the UK, Germany and India barely increased their debts. So, it's clear that we see a rapid and large build-up of debt for non-financial corporates in China.

The large debt increase is concentrated in only a few interlinked sectors

Charts 2 and 3 illustrate the sectorial composition of non-financial corporate debt in China. What we can see is that 3 sectors account for more than 80% of non-financial corporate debt. Manufacturing makes up 32% of the debt share, real estate and construction make up 29.3% and mining and utilities makes up 23.3%. The clearest take away from this is that non-financial corporate debt is highly concentrated. What is also apparent is that we see that the largest increase in absolute terms came from 2011 to 2014, just when Chinese GDP growth began to decline.

The IMF found that most of the debt is concentrated in the SOE's assets are about two-thirds of the total assets of listed companies, they borrowed 80% of the total

CHART 4: Leverage ratio surged in property sector



Source: WIND, Commerzbank Research

³ State Owned Enterprise



corporate debt. Furthermore, although Chinese private listed firms have scaled back their leverage ratio since the financial crisis, SOE's leverage at the tail end of the distribution has significantly increased.

What are the risks to this enormous debt increase?

We have to consider whether these highly indebted corporates can pay down their debt. We measure corporate leverage as net debt / EBITDA, which shows how many years it would take for a company to pay back its debt if both net debt and EBITA are held constant. We found that the leverage ratio illustrates an upward trend in all highly-indebted industries since the global financial crisis. In particular, this ratio more than doubled in the real estate and construction sector since the financial crisis and printed at 4.38 by end 2014, way above the 2007 measure of 1.92. The manufacturing sector and mining and utilities sectors illustrate a similar, albeit less pronounced leverage trajectory.

CHART 5: Real estate and construction: Leverage ratio increased, profits declined

Profit growth y/y in % vs Leverage ratio

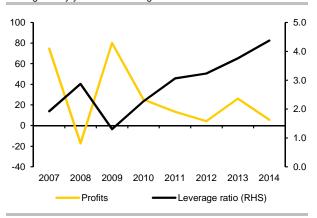
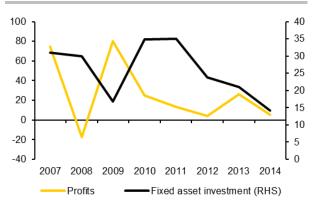


CHART 6: Large increase in Fixed Asset Investment Real Estate and construction profit growth & Fixed Asset Investment growth y/y in %



Source: WIND, Commerzbank Research

Source: WIND, Commerzbank Research

Profitability declines...

Given that we see a large increase in indebtedness alongside declining profit growth, the increase in overall corporate leverage should not entirely surprise us. What is perhaps more worrying from our perspective is that corporates increased their fixed asset investments significantly as profit growth declined. The result is that the corporate sector is left with large overcapacity which is by no means highly profitable.

The real estate sector offers a perfect example of this phenomenon. Profit growth in the real estate and construction sector slowed to 5.6% y/y in 2014, down from an average growth rate of 45.8% in 2007-2009. Indeed, we can see that overall profit growth illustrates a near secular decline since 2009. Admittedly we can also see that fixed asset investment growth rates also illustrate a decline from the levels reached in 2010, but even still, annual growth rates here were in double digits and still are.

A similar dynamic is also seen in the manufacturing sector. This finding has 2 implications. First, it raises serious questions about the decision making processes of corporates who increased investment significantly despite rapidly falling profitability. Second and perhaps more importantly, the huge increase in borrowing illustrates that the banking system did not discriminate or even undertake basic financial prudence checks.

One would expect that a market based financial system would increase interest rates as overall risk exposures increased, or at the very least ration credit to particular sectors. This clearly did not happen to any meaningful extent. This poses a number of problems for China and by corollary for corporate debts in the years ahead. First, as China opens its capital account it means that Chinese depositors can invest their savings abroad. The huge level of individual and corporate savings which exist in China at present obviously cannot find a reasonable return on investment in China. Consequently there is every chance that capital flight can become a long standing affair.



The implication is that when these corporates have to rollover their debts, and a large part of these debts are owed by the SOE sector, the banking system will have to rollover these debts rather than the market. This means that the decision to rollover debts will essentially

CHART 7: Net debt is by no means negligible for corporates

Net & Gross debt in CNY trn

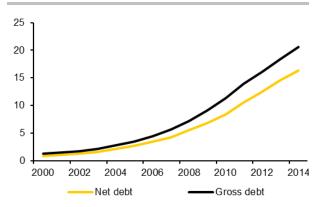
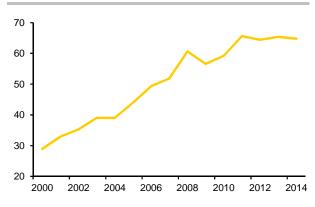


CHART 8: Large inventory overhang

Real Estate corporates share of inventories in total assets in %



Source: WIND. Commerzbank Research

Source: Commerzbank Research, WIND

become a political rather than an economic one. What this episode illustrates is that China will have difficulty making the transition towards a market based economy.

Excess inventories clearly evident

What we know from property bubbles elsewhere is that as bubbles expand, increasing leverage is used by companies. The increasing use of leverage also flatters balance sheets because assets appreciate in value, oftentimes quite significantly. When leverage is removed, the same process works in reverse. As a result we have to maintain some scepticism regarding asset values on balance sheets, because it's in the interests of all stakeholders (banks and corporates) to appraise assets with unrealistically high values and postpone the inevitable day of reckoning. What we can see from the data is that for real estate corporates, inventories account for the largest part of their balance sheet (Chart 8). Notably, the share of inventories in total assets increased to 65% by end 2014, versus 50% at end 2007. In the years before the financial crisis, inventories accounted for around 35% of total assets. Clearly, we have a situation where corporates hold large amounts of non-performing assets which are likely marked at inflated values.

The immediate risks: A profit shock or an interest rate shock?

In many respects there are similarities between the Chinese property bubble and the property bubble in the euro zone's periphery. We see a large expansion of the real estate and construction sector and massive over-investment / misallocations of capital. However, one key difference lies with respect to overall interest rate policy. The IMF's study of Chinese non-financial corporate debt highlighted interest rates and profit shocks as being potential risks. Clearly, interest rate shocks are unlikely to be an issue due to PBoC's rate cutting cycle, as distinct from the euro zone's experience during the ECB's tightening cycle between 2006 and 2008.

We see clear evidence of a decline in profitability and no sign that this situation is going to improve anytime soon. PPI prints now illustrate a decline for 4 consecutive years, which illustrates clear over capacity in the Chinese manufacturing sector. The situation in the property market is not much better. China's property prices started to pick up from Q2 2015, led by first tier cities, due to relaxed monetary policy and lower down payment requirements. However, property investment remains sluggish due to significant inventory overhang. In the first ten months of 2015, property investment only grew 2.0% y/y, compared with a 10.5% growth for 2014 as a whole. The IMF estimates that if China's housing investment growth

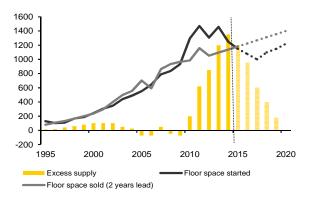
CHART 9: Property investment continues to slow down despite rising prices

Housing investment, y/y YTD in % vs Property price index, y/y in %



CHART 10: China needs a multiyear correction in property investment

Residential property oversupply, in mn sq meter



Source: WIND, Commerzbank Research

Source: Commerzbank Research .IMF

dropped to show a negative profile during 2015-17, from levels around 10% in 2014, a multiyear correction in real estate investment is necessary to reduce the new housing supply in the market. More importantly, this means a continued decline in housing construction, which has obvious consequences for overall Chinese GDP growth projections.

Policy implications

As property investment is likely to remain soft amid a (hoped for) de-leveraging process, we think there is every chance that China's growth will print at levels below official and market consensus expectations in the coming years (2016 / 2017). Consequently we maintain our view that Chinese GDP growth will print at 6.3% in 2016 and 6% in 2017. From a policy perspective this implies that PBoC will cut RRR and interest rates again in the coming months and maintain a broadly accommodative monetary policy. Such a loose policy mix will inevitably manifest in a weaker CNY exchange rate.

Zombies stalk the land

The next implication is that these corporates and to a lesser extent the banking system, will find a situation in which all revenues and profits are devoted to debt repayment rather than productive capex investment. Essentially, the problem is so large that we can quite easily see a zombification of large swathes of the SOE sector. The corollary of this is that the banking system will also struggle for profit growth because its cost of capital could increase due to increased international competition for deposits / funds, at a time when large amounts of capital are tied up in what are effectively unproductive investments. However, the government can roll back its commitment towards opening the capital account, so this issue has more importance for corporates than the banking system per se.

Why focus on Chinese corporate debts?

Given China's economic weight in international trade and investment, any large scale issue for Chinese corporates has implications for both Asia and for developed markets. Slower Chinese growth implies lower demand for key commodity exports and it has deflationary implications for developed markets as a whole. Put simply, the Chinese corporate debt problem is an issue which developed markets cannot afford to ignore.



Box 1: Firm level data are consistent with BIS data

We conducted a comparison between data from the BIS and the WIND database. The BIS data covers lending and credit exposures from the bank and non-bank financial sector to the corporate sector, while the WIND data covers all listed firms in Shanghai and Shenzhen. Essentially, we want to see whether the micro level firm data are consistent with the macro level BIS data. Both databases show that overall nominal debt is clearly rising over time. On average, aggregate debt rose by 21% annually from 2008 until 2014, while company level debt increased by 20.5% during the same period and the overall trajectory of the increase in indebtedness is consistent between both databases. In simple terms, increasing aggregate indebtedness is fully explained by developments at the micro / firm level.



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