ECONOMIC ANALYSIS

China | The quest for a structured approach to deleveraging and SOE reform

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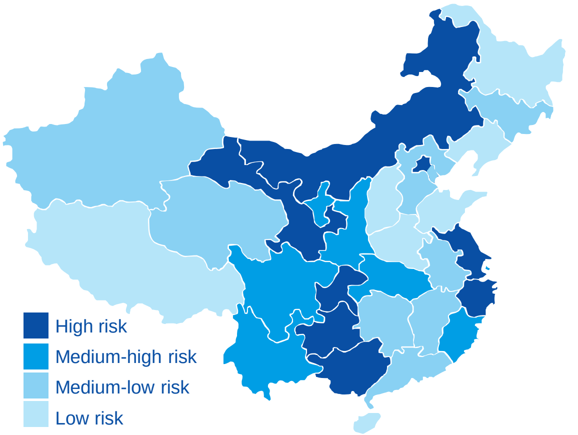
Summary

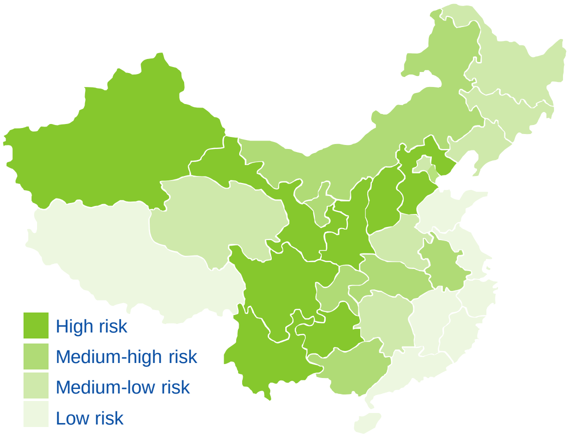
- **Mounting indebtedness no longer delivers extra growth:** China's total debt as a percentage of GDP is extremely high, on the back of unprecedented levels of corporate debt, which now stands at almost 150% of GDP. The main driver behind China's massive pileup of corporate debt is extraordinary levels of leveraging by the state, following form the authorities' stimulus package in 2008.
- **Debt is becoming harder to service:** Corporate debt is becoming increasingly hard to service, especially in the case of SOEs, as evidenced by Debt/EBITDA and EBITDA/Interest ratios. The reason for this divergence may lie in the performance of SOEs versus their peers, with ROE and ROA ratios falling since 2009. In the absence of structural reforms, the latest round of stimulus measures could aggravate financial vulnerabilities looking forward.
- **The quest for a structured approach to deleveraging and SOE reform:** Many Chinese firms, in particular SOEs, have operated in an environment of low efficiency and excess capacity for a long time. This is something that needs to change, meaning that some of these companies will have to close. Whether or not to allow defaults will be decided on a case by case basis, but most likely the authorities will take into consideration the following factors: Employment, output as a % of GDP, overcapacity and local debt burden.
- **Which provinces are at higher risk of default?** Based on these four factors, we constructed a simple index to measure the likelihood of foreclosures taking place at a regional level. According to this methodology, the likelihood that the central government will allow an enterprise to default on its debt and file for bankruptcy is highest amongst landlocked provinces (Figures 1 and 2).

Figure 1
Coal



Source: Wind, CEIC, Bloomberg, NBS and BBVA Research

Figure 2
Steel



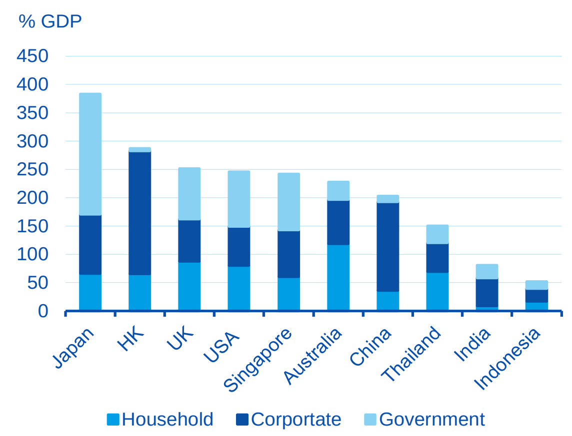
Source: Wind, CEIC, Bloomberg, NBS and BBVA Research

Debt is piling without boosting growth

China's total debt as a percentage of GDP is extremely high, especially when compared to other emerging economies (Figure3). Corporate debt, at almost 150% of GDP, warrants the most attention. The surge in corporate over-borrowing can be traced back to 2008, when the Chinese authorities embarked on a massive stimulus package, estimated to be RMB 4 trillion (USD 650 billion), in a wide ranging effort to offset adverse global economic conditions and boost domestic demand.

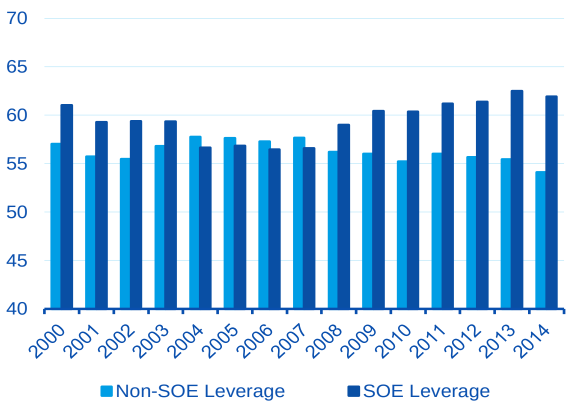
These measures proved a success at shielding China from a faltering global demand. But easy money, in combination with implicit guarantees to state owned companies (SOEs), could have led to a misallocation of assets as well as a mispricing of risks. Not surprisingly, the main driver behind China's massive pileup of corporate debt is extraordinary levels of leveraging by the state (Figure 4).

Figure 3
China debt levels amongst the highest in Asia...



Source: BIS, IMF, Haver and BBVA Research

Figure 4
…On the back of leveraging by the state sector



Source: NBS and BBVA Research

But is this level of corporate indebtedness sustainable? While there is some degree of controversy surrounding this topic, what is certain is that excessively high debt levels are known to slow growth. The reason is that every unit of new credit has a harder time finding a productive project to invest in.

This may well be the case in China, where the economy now needs more credit to produce one unit of investment and nominal GDP growth has fallen behind credit growth. Total social financing in the economy, including loans, bonds and shadow banking activities, increased by 15.8% compared to a year earlier in March, while fixed asset investments grew by 11.2% during the same period. With nominal GDP growing at a mere 7.2% in Q116, it looks like Beijing's drive for growth will have to come at the expense of higher corporate indebtedness.

Growing indebtedness raises risks to the banking sector

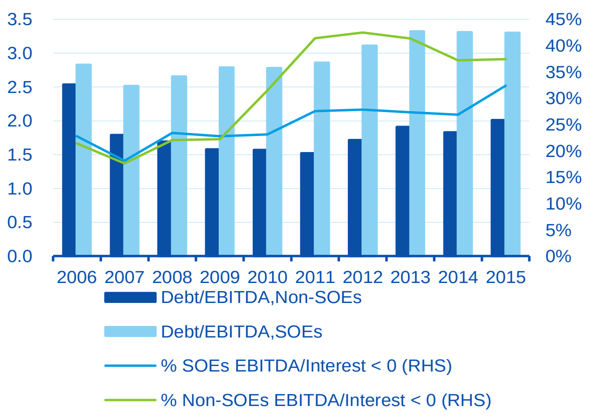
This is an issue that needs addressing over the medium term because it poses risks to the banking sector. ***Corporate debt is becoming increasingly hard to service, especially in the case of SOEs.*** For example, the ratio of debt to EBITDA, a measure that evaluates a company's ability to repay its debt, has increased overboard since 2009. Moreover, this increase has been more pronounced among SOEs (Figure 4), pointing towards higher levels of stress in debt service. Another simple measure of stress in debt service, the ratio of EBITDA to interest expense, further confirms this trend. The proportion of listed companies with EBITDA/Interest rations below 1 has increased tremendously since 2009. However, notwithstanding favourable interest rates stemming from implicit guarantees by the government, the proportion of SOEs with EBITDA/Interest rations <1 has increased very rapidly in the past year.

The reason for this divergence may lie in the performance of SOEs versus their peers. Returns on Assets (ROA) of listed companies in China have been declining since 2009 but then again, this deterioration is more pronounced in the case of SOEs. ROAs are now below the 5% threshold for Chinese listed SOEs according to our methodology (Figure 5).

In the absence of structural reforms, the latest round of stimulus measures will continue to favour SOEs – which already account for over half of total outstanding loans – further widening the performance gap with productive sectors. This could translate into higher risks in the banking sector. Non-performing loans reached a 10-year record of RMB 1.27 Tn (1.67%) at the end of 2015 according to official sources, although external observers, including the IMF, claim this figure could be much higher.

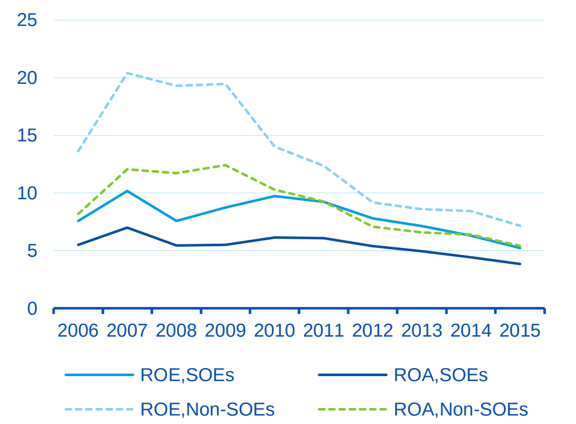
The government's proposed solution is a debt-to-equity swap (DES) program, which is expected to clear approximately RMB 1 Tn of bad debt in 3 years. The DES may help to alleviate some of the stress in debt service for Chinese corporates, particularly SOEs, stabilizing growth in the short term. However, the trade-off is that converting "bad debt into bad equity" could impact bank's profitability and lower core tier-1 capital adequacy ratios.

Figure 4
Stress in debt servicing on the rise



Source: Wind and BBVA Research

Figure 5
Diminishing returns, particularly amongst SOEs



Source: Wind and BBVA Research

The quest for a structured approach to deleveraging and SOE reform

Many Chinese firms, in particular SOEs, have operated in an environment of low efficiency and excess capacity for a long time. This is something that needs to change, meaning that some of these companies will have to close. This would not only enable banks to write off their bad debt, it also supports growth in the new sectors. Having said that, a repeat of the large-scale layoffs that took place in the late 1990s is unlikely for political reasons, so the approach this time ought to be more cautious.

The good news is that the government acknowledges this dilemma. In his annual Working Report on the Work of the Government, presented at the NPC, Premier Li Keqiang's need to "eliminate overcapacity in a planned way (and) address the issue of 'zombie enterprises' proactively yet prudently by using measures such as mergers, reorganizations, debt restructurings, and bankruptcy liquidations". A RMB 100 Bn fund to facilitate the transition between industry and service employment was earmarked and two sectors were identified: coal and steel.

Coal and steel both feature high levels of overcapacity, so it makes sense to start by testing approaches to deleveraging and reform in these two sectors. The question remains, how to decide which companies to let go? We think that whether or not to allow defaults will be decided on a case by case basis, and in the context of China's planned economy, productivity considerations alone will not be sufficient. Most likely the authorities will take into consideration the following factors:

1. **Employment:** GDP growth and employment go hand in hand. We expect that the impact of foreclosures on regional employment will be of paramount importance. Defaults in provinces where mining and manufacturing account for a big chunk of total employment could lead to higher unemployment and social instability. On the other hand, the opportunity cost in areas where mining and manufacturing account for a less significant proportion of total employment is lower.
2. **Output as a % of GDP**: The need to address overcapacity is more pressing in provinces where coal and steel account for a larger proportion of total value added. Policy makers and analysts alike should focus on the big coal and steel producers, where issues related to overcapacity and the need to consolidate capacity are more prevalent.
3. **Overcapacity:** It is possible that a province specializing in the production of coal and/or steel is also doing so productively. Output as a percentage of GDP by itself is not an accurate predictor of default risk. It is important to understand where the low hanging fruits lie, and for this it is imperative to look at both size and performance.
4. **Local debt burden**: Finally, overcapacity may be less sustainable in provinces with high local debt burdens. According to media reports, numerous provinces have been trying to keep employment buoyant by subsidizing underemployment (keeping workers employed part time or earning lower wages while they look for jobs in the service sector). This situation can't continue indefinitely, especially in provinces that can't afford the subsidies indefinitely.

Based on these four factors, we constructed a simple index to measure the likelihood of foreclosures taking place at a regional level. According to this methodology, the likelihood that the central government will allow an enterprise to default on its debt and file for bankruptcy is highest amongst landlocked provinces. In the case of coal, the provinces with the highest rank are: Beijing, Inner Mongolia, Zhejiang, Guangxi, Chongqing, Guizhou and Gansu. In the case of steel, these are: Hebei, Shanxi, Sichuan, Guizhou, Yunnan, Gansu and Xinjiang (Figures 1 and 2).

What are the implications looking forward?

China needs to do more in order to clean up balance sheets, avoid systemic risks to the banking sector and channel capital towards productive sectors. We don't see how this is possible without mergers and acquisitions but also bankruptcies. For this reason, we think that defaults should be allowed in cases where the opportunity cost of foreclosures is low.

It may be too costly to allow enterprises to default in provinces where coal and steel account for a significant proportion of total output and, more importantly, employment. The Northeast (Heilongjiang, Jilin and Liaoning) as well as Shanxi in the case of coal are good examples. Funds could be deployed to try to aid workers from these provinces to shift into service sector jobs. However, service sector jobs are concentrated in coastal urban regions and migration won't be possible without an overhaul of China's *hukou* system.

In the short term, investors should watch out as corporate bond risks remain tilted to the upside, which could have while the finance sector risks are expected to rise.

Appendix 1

Table 1
Key provincial indicators

	Output as a % of GDP: Coal	Output as a % of GDP: Steel	Mining as a % of total employment	Manufacturing as a % of total employment
Shanxi	25	0.23	0.81	13.23
Inner Mongolia	19	16.55	2.25	40.27
Ningxia	11	39.21	4.15	22.51
Shaanxi	10	19.04	21.79	15.29
Guizhou	7	5.23	6.76	15.35
Xinjiang	5	12.77	4.70	25.09
Qinghai	3	5.26	4.27	25.92
Gansu	2	1.73	7.97	13.60
Anhui	2	4.70	0.01	31.76
Heilongjiang	2	9.77	0.73	38.21
Henan	1	4.00	0.08	31.79
Yunnan	1	7.44	6.01	23.50
Chongqing	1	5.46	0.39	37.47
Sichuan	1	8.37	1.67	28.70
Hebei	1	7.01	5.62	33.62
Shandong	1	5.89	5.08	30.40
Jilin	1	6.41	1.10	27.35
Hunan	1	3.92	2.11	21.85
Jiangxi	1	2.06	0.15	51.45
Liaoning	1	9.26	0.95	19.48
Fujian	0	0.40	0.69	9.56
Hubei	0	4.01	2.17	21.54
Guangxi	0	4.92	2.91	21.69
Jiangsu	0	3.23	5.77	14.47
Beijing	0	7.67	4.13	17.18
Tianjin	0	0.03	1.71	3.36
Shanghai	0	4.17	6.99	20.55
Zhejiang	0	8.66	4.76	14.15
Guangdong	0	3.25	6.66	17.82
Hainan	0	3.22	8.64	17.67
Tibet	0	7.91	6.06	11.38

Source: Wind, CEIC, NBS and BBVA Research

Appendix 2

Table 2
Main listed companies in the steel and mining sectors by province

Name	Province	Industry
HYMD	Anhui	Mining Industry
SDIC XINJI	Anhui	Mining Industry
MAS C.L.	Anhui	Steel industry
BSGCO	Beijing	Steel industry
CHINA SHENHUA	Beijing	Mining Industry
HAOHUA ENERGY	Beijing	Mining Industry
CHINA COAL ENERGY	Beijing	Mining Industry
CISC	Chongqing	Steel industry
SANSTEEL MINGUANG	Fujian	Steel industry
JSHX	Gansu	Steel industry
JINGYUAN CE	Gansu	Mining Industry
SGSS	Guangdong	Steel industry
LIUSTEELCO	Guangxi	Steel industry
PJRC	Guizhou	Mining Industry
HEBEI STEEL CORP.	Hebei	Steel industry
WISCO,LTD	Hebei	Steel industry
JZEG	Hebei	Mining Industry
KEC	Hebei	Mining Industry
VALIN STEEL	Henan	Steel industry
AYIS	Henan	Steel industry
SHENHUO	Henan	Mining Industry
ZCE	Henan	Mining Industry
DAYOU ENERGY	Henan	Mining Industry
PINGMEI COAL	Henan	Mining Industry
DAYE	Hubei	Steel industry
BSU	Inner Mongolia	Steel industry
PINGZHUANG ENERGY	Inner Mongolia	Mining Industry
OPENCUT COAL	Inner Mongolia	Mining Industry
SHAGANGGUFEN	Jiangsu	Steel industry
CHANGBAO	Jiangsu	Steel industry
NISCO	Jiangsu	Steel industry
ACIG	Jiangxi	Mining Industry
BSP	Liaoning	Steel industry
ANSC	Liaoning	Steel industry
LING STEEL	Liaoning	Steel industry
FSSS	Liaoning	Steel industry
XSS	Qinghai	Steel industry
JINRUN MINERAL	Qinghai	Mining Industry
SHCI	Shaanxi	Mining Industry
SHANDONG STEEL	Shandong	Steel industry
LUYIN INVEST	Shandong	Steel industry
YANZHOUCOAL	Shandong	Mining Industry
BAOSTEEL	Shanghai	Steel industry
SHANGHAI ENERGY	Shanghai	Mining Industry
STSS	Shanxi	Steel industry
TCGC	Shanxi	Mining Industry
XSCE	Shanxi	Mining Industry
SHANXI LANHUA	Shanxi	Mining Industry
WTECL	Shanxi	Mining Industry
YQMY	Shanxi	Mining Industry
DTCI	Shanxi	Mining Industry
LU'AN EED	Shanxi	Mining Industry
BYIS	Xinjiang	Steel industry
JIULI INC.	Zhejiang	Steel industry
YONGXINGSPECIALSTEEL	Zhejiang	Steel industry
HZIS	Zhejiang	Steel industry

Source: Wind and BBVA Research

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