ECONOMIC ANALYSIS

China | SOE reforms could unlock the potential of unproductive sectors and boost growth

Carlos Casanova / Betty Huang / Le Xia

Summary

- China's RMB 4 trillion (about USD 570 billion) stimulus plan announced on November 2008 may have helped the country to wither the global financial crisis relatively unscathed, but it has also created inefficiencies such as indebtedness and overcapacity, especially amongst SOEs. These have started to weigh on economic growth.
- SOE reforms are not only indispensable for China's economic rebalancing away from investment and towards domestic consumption; they could also be the antidote to growth headwinds like protracted PPI deflation and overcapacity. However, the effective implementation of SOE reforms could cause short-term pain, particularly in the form of higher unemployment.
- SOEs now account for 30% of the country's total corporate assets and receive 80% of total bank loans (equivalent to US$16 trillion or roughly 150% of China's GDP). However, SOEs contribute to a much smaller proportion of profits (22%) and employment (17%) in the country. Furthermore, SOEs posted an 8.2% decline in profits in the first three quarters of this year, meaning that SOEs' operational efficiency may have significantly decreased despite their rising levels of debt.
- Rising debt levels among SOEs are prevalent and worrisome. Debt levels of SOEs appear to be less sustainable than that of private enterprises due to their subpar profitability. The return-on-assets of state firms are 33% that of private firms and 50% that of foreign enterprises. Returns on equity (ROEs) are also lower for SOEs compared to non-SOEs. ROEs in the SOE sector are currently around 6%, reflecting bloated investments.
- The overcapacity problem among SOEs is acute too. The average capacity utilization rate for industry in China was 72%, lower than the average rate in Europe (81%). Overcapacity concerns are most obvious amongst sectors with large shares of public capital.
- China's SOE reform process in ongoing, but it has slowed in recent years. In October this year, the State Council issued a set of measures that aim to "modernize SOEs, enhance state assets management, promote mixed ownership and prevent the erosion of state assets". Among these measures we see some positive elements including: (i) Promotion of the mixed-ownership model as a basic principle of reform; (ii) Push for the creation of State Capital Management Companies (SCMCs); and (iii) consolidation in the number of SOEs and differentiation between SOEs that need to be more commercially focused from those which are natural monopolies or providers of public services. We don't exclude the possibility of some defaults, as the government withdraws funding from inefficient commercially focused sectors.
- However, effective implementation remains the primary concern for almost every reform measure on the authorities' agenda. All the more so for SOE reforms given strong resistance from vested interest groups. On top of demonstrating their resolution, the authorities also need to press ahead with the SOE reforms in coordination with the reforming measures in other areas (in particular the labor market and capital market).

Are we nearing the end of China's investment-led growth model?

On November 2008, China announced that it would loosen credit conditions, cut taxes and embark on a massive infrastructure spending program in a wide-ranging effort to offset adverse global economic conditions by boosting domestic demand. The stimulus package, estimated at RMB 4 trillion (about USD 570 billion), not only enabled the economy to weather through the global financial crisis (GFC) unscathed, it also facilitated positive spill-overs to other emerging markets. China's investment glut fuelled global demand for commodities, exerted upward pressure on prices and, in turn, provided growth momentum for commodity exporters in the emerging world – Latin America is a great example.

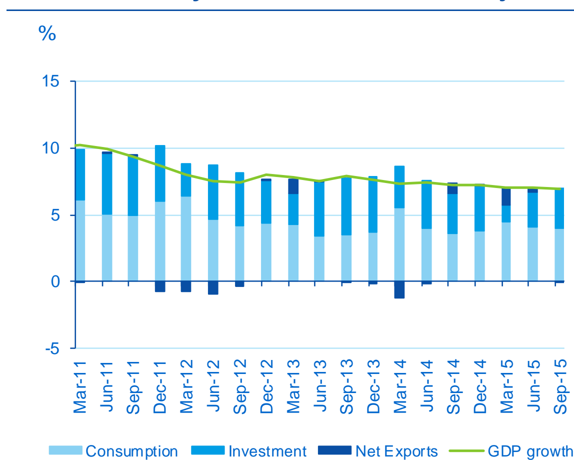
However, the stimulus package led to inefficiencies that have started to take a toll on the economy (Figure 1), highlighting the limitations of the current growth model. Industrial Production growth in the third quarter of this year was 6.9%, the lowest reading since the apex of the GFC in 2009, while PPI deflation has remained in negative territory for the last 44 months, underscoring weakness in the country's manufacturing sector.

A series of recent events have brought the need to address these inefficiencies to the fore. A weakening macroeconomic picture, in combination with concerns about excessive leveraging, triggered a collapse of the stock exchange market earlier this year, which fell by approximately 40% from the highest level this June. In addition, the unexpected reform of the mechanism to determine the RMB's midpoint, which triggered a devaluation of 5% after August 11, has accelerated capital outflows from China and other emerging markets. Approximately US$ 150-200 billion in foreign reserves have fled the country since the start of 2015, exacerbating liquidity concerns and exerting pressure on the central bank to impose stricter capital controls.

Finally, weak global demand has led to recessionary trade surpluses amongst all Asian manufacturing powerhouses (Figure 2). This is part of a broader structural picture of weaker global demand, a trend which is not specific to China alone. However, it does imply that one of China's main growth levers in the past, export growth may no longer be capable of providing a significant boost to the economy.

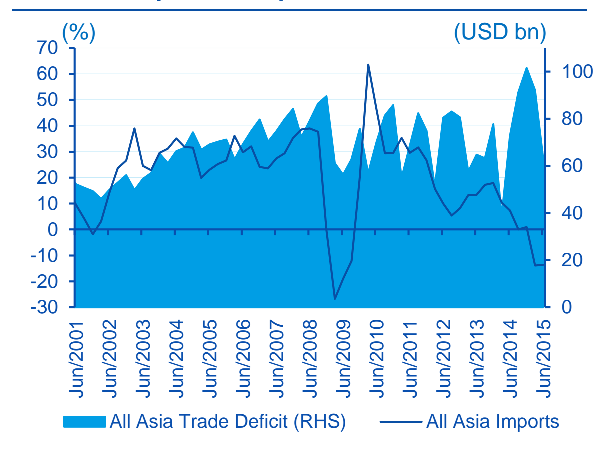
Despite these headwinds, China managed to avert a hard landing in the third quarter of this year, with GDP growing by 6.9% y/y. Furthermore, Premier Li Keqiang stressed the need to achieve average growth rates of 6.5% y/y in order to meet China's target to double per-capita GDP rates by 2020. While it is clear that China needs a background of relatively high levels of stable economic growth in order to implement its structural shift away from investments and towards consumption, there are some concerns regarding the quality of this growth in the near term.

Figure 1
China's economy has started to lose its mojo



Source: CEIC and BBVA Research

Figure 2
Recessionary trade surplus in Asia



Source: Haver and BBVA Research

SOE reforms are not only indispensable for China's economic rebalancing away from investment and towards domestic consumption; they could also be the antidote to growth headwinds like PPI deflation and overcapacity. However, the effective implementation of SOE reforms could cause short-term pain, particularly in the form of higher unemployment. In this Watch, we take stock of the situation regarding SOE performance and look at some of the reforms that could be implemented looking forward.

SOE performance and the question of resource misallocation

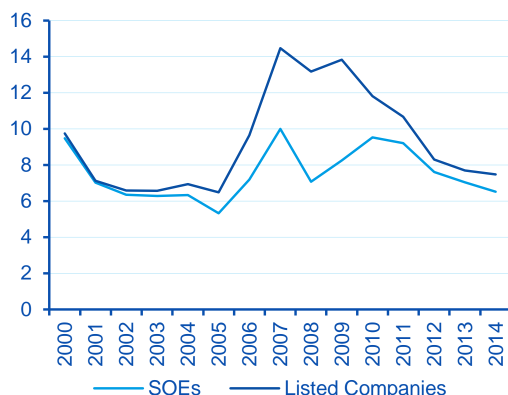
China has about 150 000 SOEs which employ over 30 million people. SOEs now account for 30% of the country's total corporate assets and receive 80% of total bank loans (equivalent to US$16 trillion or roughly 150% of China's GDP). However, SOEs contribute to a much smaller proportion of profits (22%) and employment (17%) in the country. Furthermore, SOEs posted an 8.2% decline in profits in the first three quarters of this year, meaning that operational efficiency may have significantly decreased despite rising levels of debt, thus widening the gap between state-owned and private sector enterprises. We highlight three aspects that confirm fears about the efficiency of SOEs:

1. **Rising debt levels among SOEs remain unsustainable**

China's corporate debt has soared since the global financial crisis and is now bigger than it was in 2007, equivalent to 157.2% of GDP in 2014 compared to 102.7% in 2007. To a large extent, the surge in debt was driven by increased leveraging by Chinese agents. A broad measure of the ratio of credit to GDP extended to households and corporations shows an increase from 121.3 percent in 2007 to 193.3 percent in 2014. This rapid build-up is a risk to the financial system, especially in the context of a depreciating Yuan, as much of this debt is denominated in foreign currency, provided by ultra-low interest rates in the developed world.

The issue of rising debt levels is more pronounced in the case of SOEs. Although SOEs today only account for half of all outstanding corporate loans, these loans are less sustainable than loans to private enterprises. The return-on-assets of state firms are 33% that of private firms and 50% that of foreign enterprises. Returns on equity (ROEs) are also lower for SOEs compared to non-SOEs (Figure 3). ROEs show how effectively a firm can deploy its investments to generate earnings. An ROE of around 15% is generally considered acceptable; however, ROEs in the SOE sector are currently around 6%. Similarly, price-to-book ratios are also lower for Chinese SOES (Figure 4). Low price-to-book ratios can be interpreted as a signal that SOEs are unable to create more value from existing assets.

Figure 3
Non-SOEs outperform SOEs in terms of ROE (%)



Source: Wind and BBVA Research

Figure 4
Price-to-book ratio also higher for non-SOEs

Source: Wind and BBVA Research

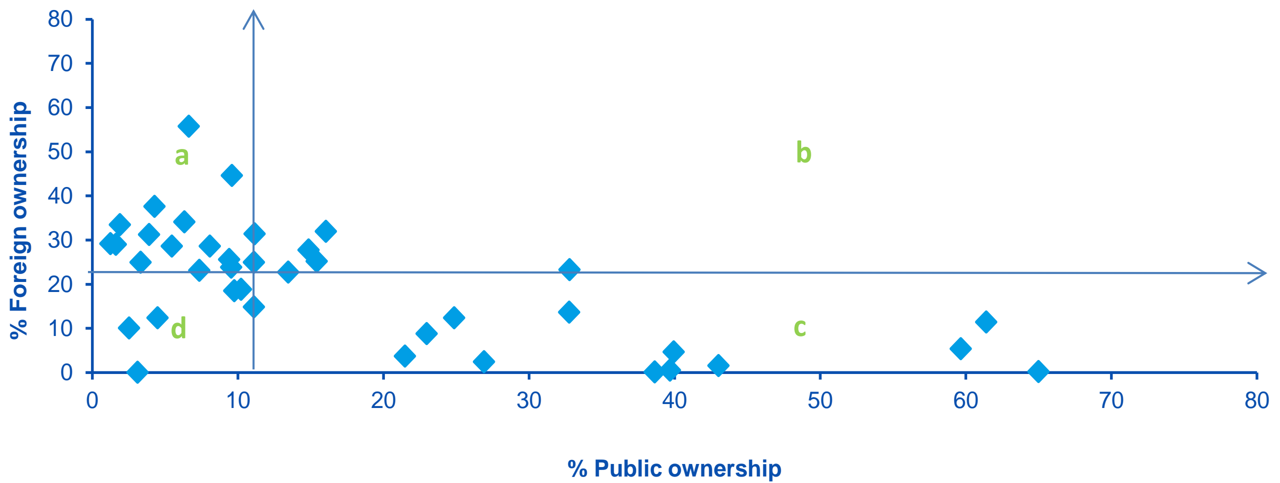
More importantly, China is reforming its financial sector, which could eventually lead to the elimination of deposit interest rate controls, resulting in higher lending rates. As economic growth continues to slow, profits will shrink and as a result highly leveraged corporations will face growing solvency risks. This will most likely put additional pressure on less profitable firms, many of which are SOES, as we will examine in the next section.

2. Profitability and productivity has been lower on a per employee basis for sectors with high proportion of public ownership and a low proportion of foreign investment

Using data from China's Third National Economic Census, published by the National Bureau of Statistics (NBS) in December last year, we are capable of looking at the profitability of the different sectors on a per employee basis. We devise a Matrix that divides all sectors into four categories; differentiating between sectors depending on whether they are publicly or privately owned and foreign or domestically invested (Figure 5). We then compare the changes in profits per employee and output per employee for the years where data is available (2004, 2008 and 2013).

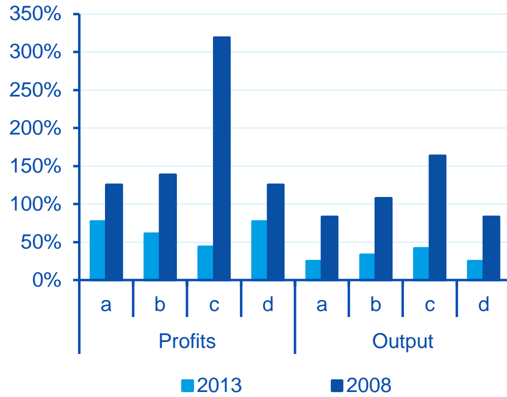
Overall, profits and outputs per employee grew between 2004 and 2008, in line with an increase in global growth. However, the growth rate of profits and output per employee slowed between 2008 and 2013 (Figure 6). The slowdown in profits per employee was most obvious in sectors with a large proportion of public ownership and domestic investment, labeled as "c", whereas the fall was less pronounced in sectors with high private ownership regardless of the proportion of foreign investments, "a" and "d". Outputs per employee also grew slower in 2008-13 compared to 2004-08. Again, the fall was most apparent in sectors with higher proportion of public ownership and domestic investment "c".

Figure 5
Chinese sectors according to whether they are private/publically owned, foreign/domestically invested in 2013



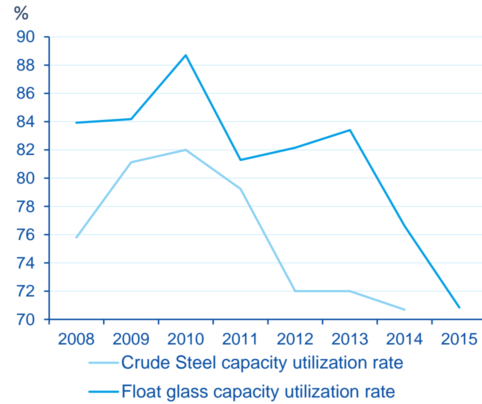
Source: NBS and BBVA Research

Figure 6
Worst performance on a per employee basis for sectors with high public ownership



Source: NBS and BBVA Research

Figure 7
Overcapacity highest amongst sectors associated with China's investment glut



Source: Wind and BBVA Research

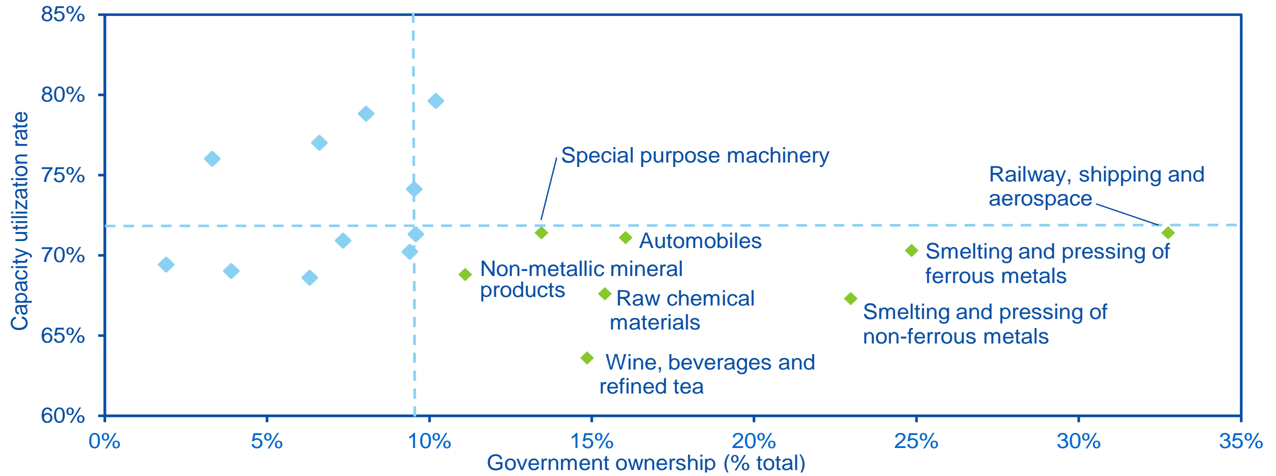
3. Overcapacity concerns are most obvious amongst sectors with large shares of public capital

Capacity utilization rates are used to measure the extent to which enterprises use their production capacity efficiently. It is defined as the actual output as a proportion of total installed production capacity. Higher capacity utilization rates mean that enterprises are producing as much as they can; a signal of buoyant demand. On the contrary, low capacity utilization rates are a signal of "idle capacity" and oversupply.

An industry is regarded as being in overcapacity if its capital utilization rate is lower than 78% for a prolonged period of time. In developed countries, average capacity utilization rates oscillate around 80% (EU average; 81%). According to this standard, most industries in China are experiencing overcapacity concerns. The most obvious examples can be found in sectors related to China's construction boom. For example, the capacity utilization rate of crude steel slipped from 82% in 2010 to 71% at the end of 2014; while that of floating glass dropped from more than 88% to 71% (Figure 7).

According to a recent study by the China Development Research Foundation, the average capacity utilization rate for industry in China was 72%. The figure was lower for the manufacturing sectors, standing at 70.8%. 19 out of 29 industries covered by the survey showed signs of overcapacity. Eight sectors in particular showed signs of severe overcapacity: rail, shipping, aerospace and other transport equipment manufacturing, smelting and pressing of ferrous metals and smelting and pressing of non-ferrous metals. Coincidentally, these sectors also featured the highest proportion of public capital, meaning they are mostly SOE dominated (Figure 8). This occurrence has led to the emergence of the term "zombie enterprises" – SOEs with overcapacity which continue to operate even though they may be unable to meet their financial obligations.

Figure 8
Resource misallocation amongst China's 19 sectors with overcapacity most pronounced in those with large government ownership rates



Source: Asian Development Bank, China Development Research Foundation and BBVA Research

Unfinished business: China's impending SOE reforms

The ongoing SOE reform process (Appendix 1) could be instrumental in enabling China to address its looming debt concerns, unlock the productivity and profitability of industry and curb overcapacity issues. Let's not forget that China's fastest spurts of growth came after periods of reform and consolidation. These include Deng Xiaoping's "opening and reform" as well as efforts to secure China's accession to the World Trade Organization under Jiang Zemin and Zhu Rongji. For example, between 2001 and 2004, the number of centrally controlled SOEs decreased by almost 50%. Jiang and Zhu also implemented a series of reforms to reduce remove barriers to trade and streamline the role of the People's Liberation Army[1]. Consequently, the economy grew by an average of 10.5%.

By far, the most ambitious set of reforms were proposed as part of the Third Plenum of the 18th Central Committee on November 2013, in a communique entitled: "A Decision on Major Issues Concerning Comprehensive and Far-Reaching Reforms". The goals of the blueprint include:

1) Reducing administrative interference in the operations of SOEs;
2) Developing a unified supervision mechanism for state-owned assets in order to encourage a market-oriented approach;
3) Encouraging diversified SOE ownership through attracting private sector participation.

In addition, China's State-owned Assets Supervision and Administration Commission (SASAC), the supervisory body responsible for overseeing SOEs in China, announced four pilot programs in July 2014 to further deepen SOEs reforms in China. An overview of these reforms as well as the four pilot schemes can be found in Table 1.

[1] Xi Jinping is also pushing for an FTA in the Asia Pacific Region and recently announced a move to cut 100 000 jobs from the PLA.

Table 1
Reforms for Central and Local SOEs

Reforms	Details
Economic reforms in Third Plenum	• Define functions between government and markets • Allow the market to play a decisive role in resource allocation • Separate government functions of SOEs from enterprise management, injecting autonomy and innovation into SOEs. • Create room for private companies and allow them to enter competitive sectors in state-owned energy monopoly industries.
Pilot Scheme 1:Creation of state capital management companies (SCMCs)	• Establish state capital management companies and support the transformation of SOEs into state-owned capital investment companies. • **Pilot SOEs:** China National Cereals, Oils and Foodstuffs Corporation (COFCO), State Development & Investment Corporation (SDIC) • SDIC and COFCO will hold ownership rights of SOES to represent SASAC, serving country's strategic interests • SASAC will scrutinize the state capital management companies. The basic function will be shifted from operating SOEs to pure capital management.
Pilot-Scheme 2: Granting authority for board of directors to hire, evaluate and compensate senior managers.	• Give SOEs more autonomy to appointment senior executives and compensate them based on their performances. • **Pilot SOEs:** China National Building Materials Group (CNBMG), Sinopharm, China Energy Conservation and Environment Protection Group (CECEPG), Xinxing Cathay International Group (XCIG) • Aligning the SOE's management with shareholder's interests and business goals.
Pilot Scheme 3: Developing mixed ownership structures	• Develop mixed ownership structures to enhance the efficiency and profitability of SOEs by inviting private capital. • **Pilot SOEs:** CNBMG, Sinopharm • Provide positive effect on SOEs' earnings and thus improve economic growth,
Pilot Scheme 4: Sending disciplinary inspection teams into central SOEs	• Strengthen government supervision of SOEs

Source: SASAC and BBVA Research

Looking forward: What SOE reforms will feature during the 13th FYP period?

China's SOE reform process is on-going, but it slowed in recent years. The upcoming 13th Five Year Plan (FYP) gives the authorities another chance to clarify their plan for reform, thereby reinforcing people's confidence. In October this year, the State Council issued a set of measures that aim to "modernize SOEs, enhance state assets management, promote mixed ownership and prevent the erosion of state assets". Among these measures we see some positive elements including:

1. Promoting the mixed-ownership model as a basic principle of reform

The guidelines issued by the State Council last month elevate the "mixed-ownership" model as the basic principle of SOE reform. The objective is to provide support for private sector investments in traditional state dominated sectors. In addition, the government will also encourage transfers of capital from SOEs into promising private sectors which are struggling to meet their financing needs. Private firms will be encouraged to join the process through various means, including buying stakes and convertible bonds from SOEs or conducting share rights swaps with SOEs.

The measures will most likely also extend to foreign capital. China has already implemented a number of reforms to liberalize foreign direct investments (FDI), including the establishment of channels such as QFII and RQFII. It is quite likely that these will be further liberalized in order to attract a higher proportion of FDI. Attracting more foreign capital also has strategic implications in the context of mounting capital outflow

pressures. Coincidentally, during the week's APEC meeting in Manila, Chinese President Xi Jinping pledged to "substantially cut" restrictions on market access for foreign investors and boost the ownership shares of foreign enterprises in order to stimulate economic growth.

But which sectors will SOE reform focus on? Our classification of Chinese enterprises based on their share of foreign ownership and public ownership (Figure 5), may help to shed some light on this issue. According to our analysis, sectors with above average rates of public ownership and below average rates of foreign ownership saw the biggest decline in profits and outputs on a per employee basis between 2004-08 and 2008-13. It would therefore be advisable to allow more private capital in these sectors in order to facilitate better resource allocation and boost productivity. Finally, it makes sense to encourage more foreign capital into sectors which already have above average rates of private ownership but below average rates of foreign ownership in order to facilitate better governance and technological transfers (Table 2).

2. Creating state capital management companies (SCMCs)

According to the new guidelines, China will set up a number of State Capital Management Companies (SCMCs). The SCMCs will function as investment firms, acting as intermediaries between SASAC and the SOEs. They will be responsible for state-owned capital allocation and SOE restructuring. The SCMCs will manage China's almost US$ 16 billion in SOE assets either by transferring state equity and budgets to a new company or assigning the tasks to a qualified wholly state-owned enterprise that already exists.

In addition, SCMCs can increase the value of state capital by operating equities, conducting value-based management and handling fund movements. They can also optimize the capital's layout through investment and financing, industrial support and capital integration. Finally, in the process of establishing investment firms and restructuring SOEs, the government will transfer some state equity into the hands of social security funds, so that proceeds from those equities can be used to make up shortfalls in pension funds.

3. Consolidating the number of SOEs

A number of SOEs have been kept afloat despite overcapacity concerns and low profitability. These companies are now known as "zombie enterprises". In order to boost growth and ensure an efficient allocation of resources, the Chinese authorities need to eliminate outdated and excessive capacity and dispose of inefficient assets amongst SOEs. This could happen in various ways; state capital could be removed from some SOEs, allowing for a larger share of private ownership, while others may be restructured or upgraded. We don't exclude the possibility of some defaults, which could prove beneficial to the economy if managed in an orderly way. Inevitably the outcome will be a contraction in the total number of SOEs.

The State Council's guidelines distinguish between two categories of SOEs, those that need to be more commercially focused, and those which are natural monopolies or providers of public services. For the latter, consolidations will most likely take place through commercial operations such as restructuring and mergers and acquisitions. We envision a greater participation of the private sector via public-private partnerships (PPP) in some industries (e.g. infrastructure and healthcare). For profit-driven SOEs, private sector participation under the mixed-ownership model will be more aggressive. State capital may even be removed completely in some cases; opening these sectors to private capital entirely. Foreign companies may have more opportunities these sectors.

The bottom line is that effective implementation remains the primary concern for almost every reform measure on the authorities' agenda. All the more so for SOE reforms given that these face strong resistance from vested interest groups. On top of demonstrating their resolution, the authorities need to forge ahead with the SOE reforms in coordination with measures in two key areas. The first of these areas is the labour market. SOE reform will inevitably lead to higher levels of structural unemployment in the short-term. This could prove to be a sensitive issue unless measures that facilitate labour mobility and create opportunities

for workers are already in place. The government may therefore be more willing to withdraw state support amongst sectors were SOEs account for a less significant proportion of regional employment and GDP. Finally, as the government starts to lift its support amongst certain SOEs, this could lead to defaults, which will increase bank's non-performing loans. In order to minimize the impact of the defaults on capital markets, the government needs to step-up its efforts to clean up bank's balance sheets ahead of the SOE reform process/

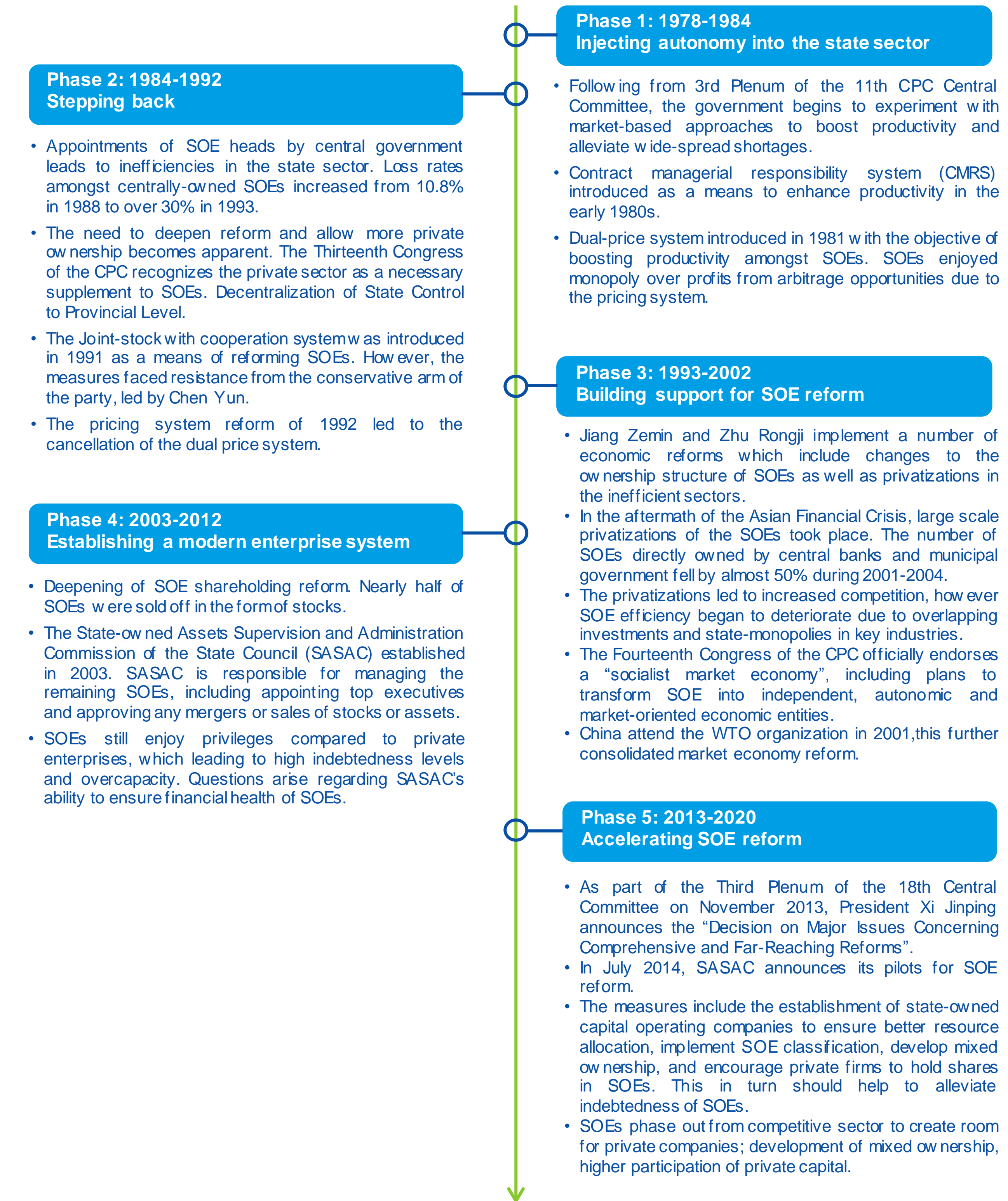
Table 2
Sectors with sub-par performance in terms of per employee profits and output could be good candidates for higher shares of private and foreign capital according to our classification

Sectors where the government may seek a larger share of both private and foreign investments	
• Agro-food processing	• Electrical machinery and equipment manufacturing
• Wood processing and wood, bamboo, cane, palm, grass products	• Waste resource management
• Pharmaceuticals	
Sectors where the government may seek a larger share of private investment	
• Coal mining and dressing	• Non-metallic mineral products
• Oil and gas mining	• Ferrous metal smelting rolling and processing
• Ferrous metals mining and dressing	• Non-ferrous metal smelting, rolling and processing
• Non-ferrous metals mining and dressing	• Special equipment manufacturing
• Non-metallic mining industry	• Rail, ship, aerospace and other transportation equipment manufacturing
• Tobacco	• Power and heat generation and supply
• Oil processing and nuclear fuel processing	• Water production and supply

Source: NBS and BBVA Research

Appendix I

Figure 9
China's SOE Reform Timeline



Source: BBVA Research

DISCLAIMER

This document has been prepared by BBVA Research Department, it is provided for information purposes only and expresses data, opinions or estimations regarding the date of issue of the report, prepared by BBVA or obtained from or based on sources we consider to be reliable, and have not been independently verified by BBVA. Therefore, BBVA offers no warranty, either express or implicit, regarding its accuracy, integrity or correctness.

Estimations this document may contain have been undertaken according to generally accepted methodologies and should be considered as forecasts or projections. Results obtained in the past, either positive or negative, are no guarantee of future performance.

This document and its contents are subject to changes without prior notice depending on variables such as the economic context or market fluctuations. BBVA is not responsible for updating these contents or for giving notice of such changes. BBVA accepts no liability for any loss, direct or indirect, that may result from the use of this document or its contents.

This document and its contents do not constitute an offer, invitation or solicitation to purchase, divest or enter into any interest in financial assets or instruments. Neither shall this document nor its contents form the basis of any contract, commitment or decision of any kind.

In regard to investment in financial assets related to economic variables this document may cover, readers should be aware that under no circumstances should they base their investment decisions in the information contained in this document. Those persons or entities offering investment products to these potential investors are legally required to provide the information needed for them to take an appropriate investment decision.

The content of this document is protected by intellectual property laws. It is forbidden its reproduction, transformation, distribution, public communication, making available, extraction, reuse, forwarding or use of any nature by any means or process, except in cases where it is legally permitted or expressly authorized by BBVA.