Chapter 16

The Role of State-Owned Enterprises in the Chinese Economy

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Executive Summary

China's state-owned enterprises (SOEs) have a long history. When the People's Republic of China was established in 1949, the country had been devastated by a long period of war and underdevelopment. As there was neither private wealth nor any organized structure to take on the huge task at hand, it was the state enterprises that gradually undertook all the nation-building tasks. In addition to their historical function of rebuilding the country, they have been playing an important role in providing for the livelihood of many people. SOEs provide not just employment, but also a range of social services, education, medical care and healthcare and retirement protection.

Since economic reform and opening-up policies began in 1978, China's SOEs have undergone a long process of gradual and progressive transformation. To reduce their claim on budgets and/or bank loans, many inefficient and smaller SOEs have been closed down, merged or sold. The resulting unemployment and restructuring problems were painful. The transitional difficulties were made less disruptive because China maintained rapid economic growth and established basic social security, medical services, education, housing and other safety-net arrangements. Concurrently, and more positively, many large SOEs in key and strategic sectors have been successfully transformed, from inefficient production units operating under the state's economic plan, into profitable, incorporated business entities, for which appropriate corporate governance structures are being gradually implemented.

The relative economic weight of the state sector has declined substantially as successive reforms have increasingly opened up more industrial sectors to competition from non-state enterprises. The share of SOEs in the country's gross industrial output, for example, fell from one half in 1998 to one quarter in 2011. The number of SOEs owned by the central government has fallen from 196 in 2003 to 115 in March 2013. But many smaller SOEs are still owned by different levels of sub-national (local) government, many of which adopt policies that still discriminate in favor of local companies.

Despite the dramatic restructuring of Chinese enterprises, the subsequent successes of the large Chinese SOEs have become a source of friction between China and some of its trading partners, as these companies have become increasingly formidable competitors in both the Chinese and global markets. The U.S. business community has complained about the unfair competition arising from government policies that favor SOEs in the China market. In addition, the Chinese government's encouragement of overseas ventures by large SOEs is also seen to disadvantage other companies competing in the global market.

Some complaints are justified. For example, SOEs do enjoy some preferential treatment, including in licensing and in winning government procurement contracts in the China market, particularly at the local government level. However, some complaints – such as the argument that China's SOEs benefit from access to preferential financing – are subject to debate. Furthermore, many SOEs compete against each other very aggressively, and they should not be seen simply as government-controlled monopolies.

China's central government has reaffirmed its determination to accord national treatment for all foreign-invested companies. At the fourth meeting of the U.S.-China Strategic and Economic Dialogue held in May 2012, China committed to developing a market environment of fair competition and treating all enterprises without discrimination. In line with the longstanding strategy of implementing reforms in a gradual manner, China issued a set of directives in mid-2012 to encourage the development and growth of China's non-state enterprises. China also introduced further measures in late-2012 to allow more market competition in vital industries, including financial services, healthcare and telecommunications. China now needs to demonstrate that its actions validate its statements of intent.

Given the long history of SOEs and the enormous social responsibilities imposed on them, China's gradual approach to SOE reform is understandable. Today, deficiencies in China's market infrastructure continue to prevent the government from fully allowing free market forces to run the economy. The government will continue, therefore, to have an important role to play in resolving these transition problems in China's development. Our study proposes that the Chinese governments at all levels should focus on providing public goods; developing and maintaining an efficient market infrastructure; and ensuring fair competition, including national treatment for all enterprises, regardless of the nature and background of ownership.

China's main SOEs will continue to play a major role in both the domestic and global markets, particularly in strategic industries and sectors. But China's SOE and market reform should continue, as the government has pledged. Our study suggests that the government's shareholding in SOEs could fall below 50% without compromising the need for the state to remain a major and controlling shareholder. In the longer term, state ownership of SOEs could be confined to non-contestable sectors only. Meanwhile, reform of the governance of the SOEs should continue. Recent initiatives – such as the requirement for SOEs to increase their dividend payouts, the introduction of proper recruitment and appointment systems for top-level executives and external directors, and efforts to address interconnected party transactions – are steps in the right direction. Above all, greater transparency is needed in the decision-making processes of the SOEs, along with assurances that they are operating independently and at arm's length from the government.

The Role of State-Owned Enterprises in the Chinese Economy

Introduction

In recent years, issues surrounding SOEs have become growing sources of friction between China and some of its trading partners, including the U.S. The disputes reflect the rising clout of some of China's SOEs at home and abroad, and have come to the fore due to some high-profile cases involving acquisitions and mergers. The main complaint from the U.S. business community is the perceived unfair advantages given to China's SOEs by the government, with the playing field tilted against foreign companies in the Chinese market. The global advance of China's large SOEs, with support from the government, is also seen to be putting pressure on foreign competitors or even placing them at a disadvantage in the global market.

Concerns about the rising importance of China's SOEs were also heightened by the debates in China in recent years about a perceived phenomenon described as 'the state advances, the private (sector) retreats' (国进民退). This debate was triggered by various developments, including:

China's deployment of a RMB4tr fiscal stimulus package to counter the economic downturn triggered by the global financial crisis in 2008. Most of these funds and the RMB10tr bank loans that supported this fiscal measure, at the end, were allocated to SOEs. This happened at a time when many non-SOEs were seriously affected by weak markets and rising costs.

The large-scale restructuring and consolidation of the coal mining industry in Shanxi province – after many coal mine accidents with high death tolls – led to the closing down of a lot of small and mid-size private mining firms or their mergers with SOEs in 2009 and 2010.

There have been many subsidiaries of SOEs involved in real estate businesses that have bid aggressively for land in public auctions in recent years, benefitting from the abundant low-cost capital and bank loans they could get. These actions are seen by the public to have fuelled housing prices that were already too high.

In its annual report to the U.S. Congress in 2012, the U.S.-China Economic and Security Review Commission (USCC) argued that the past five years have witnessed a reversal of the trend towards less government control of the economy and greater market openness[1]. Whether this assessment is true or not, both the U.S. and China could benefit from measures that would alter perceptions about how Chinese SOEs compete in domestic and foreign markets.

Historical Overview and the Evolution of China's SOEs

State ownership of enterprises is not a China-specific phenomenon. According to a study by the Organization for Economic Co-operation and Development (OECD), in the 27 reporting member countries in 2009, there were 2,057 SOEs, with an estimated value exceeding US$1.3tr and employing close to 4.3 million people[2].

1 "Report to Congress", U.S.-China Economic and Security Review Commission, November 2012.
2 "The Size and Composition of the SOE Sector in OECD Countries", OECD, 2011. Some respondents only reported SOEs that are under the supervision of the segments of general government. Data are missing or partially missing for Japan, Turkey and the U.S., which have substantial SOE sectors.

History and origin of China's state enterprises

When the People's Republic of China was established on 1 October 1949, the country was on the verge of bankruptcy. No infrastructure to speak of existed, industrial capability was minimal, education and healthcare were scarce and social security was nonexistent. China was a country with 20% of the world's population and 7% of the world's arable land, but its agriculture and energy resources were underdeveloped. At that time, Western aid was nonexistent, while aid from the Soviet Union ceased when economic ties ended in 1960. Although aid from the World Bank and other donors was gradually and gratefully received subsequently, the enormous task of nation building was left to the Chinese people.

In the beginning, as there was hardly any private wealth to speak of, nor any other organized structure to take on the huge tasks at hand, the government essentially undertook all nation-building tasks. Gradually, state enterprises began to take over the work of the government in the rebuilding of the nation.

In China, the term 'state enterprises' used to mean enterprises that were owned fully by the state and run as government units under the direct control of line ministries. Following rules set by the government, state enterprises fulfilled the output targets assigned by state planners and sold their products at predetermined prices. At a time when China was poor and devastated by a long period of war and underdevelopment, state enterprises were the main form of economic organization that built China's economy and they met the cradle-to-grave needs of a large proportion of the urban population.

Progressive reform in the past few decades

Reforming the state enterprises has been an important component of China's transformation into a socialist market economy since 1978. As competition emerged in the Chinese economy and prices increasingly became market determined, many SOEs found their profitability eroding. By the mid 1990s, in aggregate, China's industrial SOEs no longer provided net revenues for the government, but absorbed fiscal and quasi-fiscal resources that were estimated to be as large as 5% of gross domestic product (GDP). Moreover, meeting their obligations to past and current workers put the SOEs at a competitive disadvantage compared with new entrants with no such welfare constraints. It was plain to China that state enterprises needed to be revitalized by giving them increased autonomy and different incentives, as many of them had become inefficient production units functioning like government departments. The term 'state-owned enterprise'[3] came to be used after China decided to reform state enterprises by separating ownership and management. While the state retains ownership or majority control, it gives increasingly more autonomy to SOEs' managers to run the business.

SOEs are owned by central, provincial or municipal governments. After being registered under the Company Law that was introduced in 1994, SOEs began to transform themselves into limited liability companies or shareholding companies. The pace of reform gathered momentum in the late 1990s. Guided by the principle of 'grasping the big, letting go of the small' (抓大放小), the central government maintained control over the largest and most important SOEs, and granted local governments the authority to restructure smaller SOEs through employee buyouts, open sales, leasing, joint ventures, mergers or bankruptcy. Many small SOEs were closed and millions of workers were laid off at that time. On the other hand, the government spent a lot of effort to turn around the inefficient, loss-making, large SOEs, particularly in the strategic and key sectors of the economy.

3 Corporatization reform in China has produced many different ownership structures for SOEs. The term 'state-owned and state-holding enterprises' is sometimes used in the *China Statistical Yearbook* to include a broad range of enterprises where the state has ownership stakes. Also see footnote 9.

Reform of the institutional arrangements governing the state's ownership of the SOEs owned by the central government took an important step forward in 2003 when the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council and Central Huijin Ltd. were set up as investors on behalf of the state. Ownership of many SOEs was transferred away from line ministries to SASAC and Central Huijin. This has helped to foster the transformation of the line ministries into policy-making bodies and the government into regulators, and to avoid the conflict of interest government units had when they owned and ran enterprises. Under this framework, most major industrial SOEs are now owned on behalf of the state by SASAC, while state-owned financial institutions are owned by Central Huijin. This reform is incomplete as some SOEs remain under the control of central government ministries such as the Ministry of Industry and Information Technology, the Ministry of Agriculture and the Ministry of Education[4]. SASAC and Central Huijin have broad oversight over the protection of SOEs' state assets and the further reform of the SOEs, but they are not involved in the day-to-day business operations. There are sub-national SASACs at provincial, municipal and county levels, with their roles running parallel to those of the central SASAC.

Improvement of corporate governance through corporatization and Initial Public Offerings

Corporatization and improving corporate governance of SOEs

Corporatization is designed to separate ownership from management so that the company can be run on a commercial basis while ownership of the company could be diversified or otherwise changed by trading shares in the company. More than 80% of central SOEs, including their subsidiaries, have implemented shareholding reform through corporatization[5].

In 2005, a pilot program to establish standard boards of directors was launched by several wholly state-owned enterprises. By introducing external directors, delegating the nomination rights of top executives to the board[6], and setting up board committees for nomination, remuneration and audit, this reform helped to strengthen the system of checks and balances between the board of directors and management of the SOEs. By the beginning of 2012, 42 central SOEs had standard boards of directors, with external directors occupying more than half of all seats. SASAC has also improved managerial incentives by introducing monitoring systems and contracts that link compensation of senior management to performance.

Initial public offerings

According to the "Trade Policy Review" published by the World Trade Organization, by the end of September 2011, there were 1,047 SOEs listed on the Shanghai and Shenzhen stock markets, accounting for 44.7% of companies listed in China[7]. Many SOEs have also been listed in the Hong Kong stock market and other overseas stock markets such as New York, London and Singapore.

Large SOEs are often organized in a pyramid.

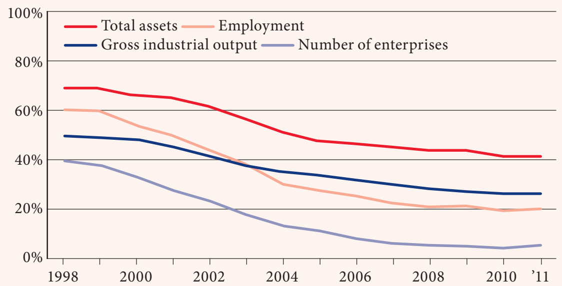
4 The railway business was controlled by the Ministry of Railway until the government reforms of March 2013. A wholly state-owned China Railway Corporation, funded by the Ministry of Finance, has been set up to manage all the enterprises in the railway system, while the Ministry of Transportation has taken over the supervision and administration of the railway business from the Ministry of Railway which has since been dissolved.

5 "Trade Policy Review: Report by China", World Trade Organization, 2012.

6 In 2008, a trial program was launched to allow boards of directors to recruit and nominate top executives. Nevertheless, SASAC and the Central Organization Department (COD) of the Chinese Communist Party still appoint the majority of senior managers in central level SOEs.

7 A speech delivered by SASAC's Chairman Wang Yong at the National State-owned Assets Supervision and Administration Working Conference revealed that, by the end of 2012, there were 953 SOEs listed on the Shanghai and Shenzhen stock markets, accounting for 38.5% of companies listed in China's 'A' share market. Their market capitalization was worth RMB13.71tr in 2012, 51.4% of market capitalization of all listed companies in the 'A' share market (http://www.sasac.gov.cn/n1180/n1566/n259760/n264785/15106589.html). These numbers differ from those reported by the WTO.

Figure 1: The Share of SOEs in All Industrial Enterprises



Source: China Statistical Yearbook 2012

At the top are a number of holding companies controlled by SASAC and Central Huijin. In a typical initial public offering (IPO), the holding company carves out its most valuable assets and most profitable businesses to form a financially strong company that meets listing requirements. A certain percentage of this company's shares are sold to the public in an IPO, while the holding company retains a controlling stake in the listed company. Ownership structure and transparency of the listed SOEs have improved as they are required to disclose operational, financial and other relevant information in a timely manner. Governance of the listed SOEs has also improved as they have to satisfy various requirements of the stock exchanges and the regulators[8].

Diminishing role of the state sector in China's economy

Declining weight of the state sector

According to the *China Statistical Yearbook*, the number of state-owned and state-holding enterprises[9] decreased from 39.2% of all industrial companies in 1998 to 5.2% in 2011. During the same period, their proportion of gross industrial output dropped from 49.6% to 26.2%, their share of total industrial assets fell from 68.8% to 41.7%, while their share of employment declined from 60.5% to 19.8% (see Figure 1).

The "China 2030" study of the World Bank and the Development Research Center of the State Council envisages a continuation of this trend with the share of SOEs in industrial output dropping further – to around 10% by 2030[10]. The 2030 study views this continuing structural change as a desirable consequence of eliminating most barriers to entry in virtually all sectors (except for a few viewed as 'natural monopolies') and of fostering competition for SOEs from domestic and foreign private firms[11].

Expanding role of the private sector

In contrast to the declining weight of the state sector, the private sector has become a vibrant force that powers economic growth and generates employment, and is also the most dynamic source of innovation. Private firms accounted for around 60% of fixed asset investment in 2011, while their proportion of total employment exceeded 75%. In addition, more than 60% of research-and-development (R&D) spending and 65% of patent applications came from private enterprises[12]. For example, private enterprises are dominant in the highly competitive IT sector, with prominent successes demonstrated by private companies such as Alibaba, Tencent, Huawei, Sina and Baidu. Similarly, many private companies are now dominant in the real estate sector, including

8 According to a survey on the corporate governance standards of companies listed in Hong Kong – conducted by the Hong Kong Institute of Directors and Hong Kong Baptist University in 2012 – more than half of the top-10 firms with the best corporate governance practices are state-owned or backed with funding from China (for more information on the survey, go to http://www.hkiod.com/scorecard.html).

9 The term 'state-holding enterprises' includes state-owned enterprises, state-funded corporations and state-owned joint-operation enterprises, and enterprises in which the percentage of state assets (or shares held by the state) is larger than any other single shareholder of the same enterprise.

10 "China 2030", World Bank, 2012.

11 "China 2030" also asserts that "to sustain rapid GDP growth, China will need to extract more productivity from its currently protected services and utilities sectors" (op. cit. Page 110), essentially by the same strategy of facilitating private entry and deregulating to encourage international competition.

12 'China Statistical Yearbook 2012'. The term 'private enterprises' in the Yearbook is used to describe enterprises that are funded only by natural persons. A broader definition of private enterprises is applied in this chapter, which are domestic enterprises exclude those state-owned (and state-holding), collective-owned, cooperatives, joint ownership and self-employed.

Figure 2: **SOEs in Selected Industries (%)**

	Number of firms		Gross industrial output		Total assets	
	1998	2011	1998	2011	1998	2011
Mining and washing of coal	49.5	11.5	81.9	53.6	92.7	72.0
Extraction of petroleum and natural gas	81.7	40.2	94.5	92.1	98.9	94.7
Manufacture of food	44.1	4.1	29.7	5.8	41.1	9.9
Manufacture of tobacco	87.2	79.1	98.3	99.3	98.2	99.3
Manufacture of textiles	24.0	1.2	32.2	2.4	46.2	5.0
Printing, reproduction of recording media	58.0	8.0	37.9	11.5	51.2	18.2
Processing of petroleum, coking and nuclear fuel	28.3	10.9	91.0	68.6	90.3	58.8
Manufacture of chemical products	32.3	5.0	50.4	18.7	69.5	29.1
Manufacture of medicines	45.3	7.1	49.6	11.8	60.8	20.3
Manufacture of rubber	21.0	3.1	34.3	12.1	50.7	16.2
Manufacture of general machinery	29.6	3.2	38.4	12.5	60.7	22.3
Manufacture of special machinery	40.9	5.2	41.2	20.5	63.3	32.2
Manufacture of transport equipment	40.1	7.6	67.0	44.0	78.2	53.2
Manufacture of communication equipment	29.8	5.2	37.7	8.3	51.0	19.6
Production and supply of electric power and heat power	85.6	66.4	85.4	93.0	89.1	90.7
Production and supply of water	92.6	61.4	87.8	69.4	90.3	79.6
Production and supply of gas	84.0	29.9	71.6	44.4	93.7	54.3

Source: China Statistical Yearbook 1999 and 2012

Dalian Wanda Commercial Properties, Vanke, Evergrande Group and Country Garden. Even in the energy sector, some private enterprises such as ENN Energy and China Gas – are now providing domestic gas supply to hundreds of cities in China. There are now also indigenous private automakers in China, including Geely and BYD[13].

SOEs retreating from contestable industries

After three decades of reform and market liberalization, SOEs no longer play dominant roles in many labor-intensive and contestable industries such as the manufacture of textiles, rubber, medicines, general machinery and printing (see Figure 2).

The number of central SOEs directly controlled by SASAC decreased from 196 in 2003 to 115 in March 2013[14]. Central SOEs are encouraged to focus on their core business and improve their business structure. For example, in March 2010, SASAC announced that 78 central SOEs whose core business is not real estate should gradually retreat from the real estate sector[15]. Generally, most of the remaining central SOEs are in strategic industries that are perceived to be of vital importance to national security and/or people's livelihoods, such as defense, petroleum and petrochemicals, electricity generation and distribution, telecommunications, shipping, and civil aviation.

Compared to central SOEs, the results of local SOE reform are more mixed. On average, local SOEs, which are under the direct control of local (sub-national) SASACs, tend to be much smaller than central SOEs. Their presence varies significantly across regions. They tend to be less prevalent and less important in regions that have a more de-

13 "China Top 500 Private Enterprises 2012", http://www.acfic.org.cn/zt/12/sgm/161213002302.htm

14 See the Appendix to this chapter for the list of central SOEs controlled by SASAC.

15 Refer to http://www.sasac.gov.cn/n1180/n1566/n259730/n264168/11674985.html

Figure 3: **Top 10 Retail Operators in China, 2011**

Rank	Company	Sales volume (RMB billions)
1	Bailian Group Co., Ltd	118.2
2	Suning Appliance Co., Ltd.	110.0
3	Gome Electrical Appliance Group	110.0
4	China Resources Vanguard Co., Ltd.	82.7
5	RT-Mart Shanghai	61.6
6	Chongqing Commerce (Group) Ltd.	47.8
7	Carrefour China Inc.	45.2
8	Yum! Brands Inc., China Division	43.4
9	Wal-Mart (China) Investment Co., Ltd.	43.0
10	Wumart Group	41.1

Source: China Chain Store & Franchise Association

Figure 4: **Top 10 Steel-Producing Companies in China, 2004 vs. 2011**

(Million tons crude steel production)

Company	2004	Share	Rank	Company	2011	Share
Baosteel Group	21.4	21.9%	1	Hebei Group*	44.4	15.4%
Anshan	11.3	11.6%	2	Baosteel Group	43.3	15.0%
China Steel	10.9	11.1%	3	Wuhan Group	37.7	13.1%
Wuhan	9.3	9.5%	4	Shagang Group	31.9	11.1%
Shougang	8.5	8.7%	5	Shougang Group	30.0	10.4%
Maanshan	8.0	8.2%	6	Ansteel Group	29.8	10.3%
Shagang	7.6	7.8%	7	Shandong Group	24.0	8.3%
Tangshan	7.1	7.3%	8	Maanshan	16.7	5.8%
Jinan	6.9	7.1%	9	Benxi	16.5	5.7%
Handan	6.8	7.0%	10	China Steel	14.0	4.9%
Total	97.8	100.0%		Total	288.3	100.0%

Source: World Steel Association
** Hebei Group was created as Handan Steel consolidated with Tangshan Steel in 2010.*

veloped private sector or have more foreign investments, such as Zhejiang and Guangdong provinces.

SOEs in many industrial sectors face severe competition

Competition between SOEs and private firms

As the market-oriented reforms proceed, SOEs have been facing increasingly stiff competition in the domestic market from private firms and foreign-invested enterprises, particularly in highly contestable sectors. For instance, among the top 10 retail-chain operators, subsidiaries of SOEs – such as Bailian Group and China Resources Vanguard – are facing intense competition from private companies such as Suning and Wumart, as well as foreign competitors such as Carrefour and Wal-Mart (see Figure 3). Even in the steel-making industry, numerous privately owned steel producers such as Shagang Group have emerged among the top producers in China, posing challenges to SOEs. Shagang's share in total crude steel production climbed from 7.8% in 2004 to 11.1% in 2011 (see Figure 4). The rapidly changing competitive landscape reflects how competition is increasing across many sectors in China. The competitive advantages SOEs once enjoyed – by being close to or part of the government – have been eroded rapidly in most sectors.

Inter-SOE competition

Even in sectors where central SOEs remain dominant – such as telecom services, petroleum and petrochemicals and financial services – inter-SOE competition is intense. As illustrated by the distribution of 3G licenses in 2009, there was fierce competition among three central SOEs in the telecommunications industry. Eventually, China Mobile was required to deploy the Chinese 3G standard – TD-SCDMA – which was less mature than the CDMA license awarded to China Telecom and the WCDMA standard awarded to China Unicom. The state-owned banks are widely known to be competing aggressively with each other in most lines of banking business. These examples highlight the fact that, while SOEs are majority owned by the government, they operate as independent commercial entities. This fact is insufficiently appreciated by SOEs' foreign competitors and critics, partly because the government still intervenes appreciably and the companies' accounts lack the transparency necessary to convince competitors and their governments that Chinese SOEs are competing fairly.

Prospects for China's further SOE reforms

The reform of SOEs is inevitably a gradual process, given their long history and the many people who would be affected. SOEs are saddled with enormous economic and social obligations. Even for the listed SOEs, their parent companies have taken on the legacy responsibilities such as healthcare and retirement benefits for their hundreds of thousands of retirees. By the end of 2011, there were still more than 8,000 social institutions, including workplace hospitals and schools, run by central SOEs, which incur billions in costs each year. Apart from being relied upon as a stabilizing force during difficult times or economic downturns, and a provider of public goods and services, SOEs are also dependable partners of the government in promoting industrial transformation and upgrading, and in the construction of the country's infrastructure. They also help to bridge the development gap across regions and industries by taking up projects that are unprofitable in the short term, but necessary for the development of the country in the long term.

Nevertheless, the Chinese government has expressed its determination to continue market-oriented reforms. For example, in the 12th Five Year Plan, the Chinese government stated that:

"We will … create an institutional environment in which economic entities under all ownership forms use factors of production as equals in accordance with the law, compete as equals in the market and are equally protected by law."[16]

In the fourth meeting of the U.S.-China Strategic and Economic Dialogue (S&ED) in May 2012, China committed to "developing a market environment of fair competition for enterprises of all kinds of ownership and to providing non-discriminatory treatment for enterprises of all kinds of ownership in terms of credit provision, taxation incentives, and regulatory policies". China also made a commitment to steadily raise the dividend payout ratio of SOEs and increase the number of both central and provincial SOEs that distribute part of their profits as dividends[17]. Foreign competitors will be watching closely to see how effectively the government makes good on these assurances.

According to the October 2012 "Report of the State Council on State-Owned Enterprises Reform

16 "Adhere to and Improve the Basic Economic System", 12th Five-Year Plan for National Economic and Social Development of the People's Republic of China, State Council of China.
17 "Joint U.S.-China Economic Track Fact Sheet – Fourth Meeting of the U.S. China Strategic and Economic Dialogue (S&ED)", U.S. Department of the Treasury, May 2012.

Figure 5: **Breakdown of China's Bank Loans**

	Bank loans to (RMB trillion)				Total Bank assets (RMB trillions)	SOE loans as Percentage of		Household loans as Percentage of	
	Non-SOEs	Households	SOEs	Total		Total bank loans	Total bank assets	Total bank loans	Total bank assets
2000	5.08	0.00	4.86	9.94	13.74	48.89	35.35	0.00	0.00
2001	5.95	0.00	5.29	11.23	15.94	47.06	33.15	0.00	0.00
2002	7.11	0.00	6.02	13.13	20.44	45.83	29.44	0.00	0.00
2003	9.13	2.33	6.77	15.90	24.40	42.55	27.73	14.65	9.54
2004	10.59	2.92	7.15	17.74	27.98	40.32	25.56	16.47	10.44
2005	12.00	3.25	7.46	19.47	32.40	38.34	23.04	16.71	10.04
2006	13.99	3.87	8.54	22.53	44.13	37.90	19.35	17.16	8.76
2007	16.45	5.07	9.72	26.17	54.12	37.13	17.96	19.36	9.36
2008	19.57	5.71	10.77	30.34	64.15	35.51	16.80	18.81	8.89
2009	22.30	8.18	17.67	39.97	80.98	44.21	21.82	20.46	10.10
2010	29.07	11.25	18.85	47.92	96.16	39.33	19.60	23.49	11.70

Source: The People's Bank of China

and Development"[18], market access will be eased further in sectors such as electricity, telecommunications, and petroleum and petrochemicals, and the government's administrative function would be separated from enterprises' management in the railway, postal service and salt industries.

An Analysis of the Complaints about China's SOEs

To what extent do SOEs get preferential treatment?

One common complaint about China's SOEs is that they enjoy preferential treatment from the government, for example, in securing licensing approvals, government contracts and low-cost bank financing, thus giving them an unfair competitive edge. In making this case, a report of the U.S.-China Economic and Security Review Commission stated that SOEs still tend to benefit from lower cost of and better access to funds from state-owned banks[19]. This was especially the case with the government's economic stimulus package in 2008-09, when a large proportion of the bank loans used to support the fiscal stimulation package were allocated to SOEs to jump start state-approved projects. Figure 5 shows that SOEs still receive a share in bank loans that is disproportionate to, albeit declining in, their diminishing share in the economy. The sharp jump in SOEs' loan share in 2009 testifies to the impact of the stimulus and its transmission primarily through the SOEs[20].

Furthermore, credit practices in China's immature banking market make it viable and legitimate for SOEs to re-lend the low-cost funds from bank loans to their subsidiaries or to private companies through commercial banks via the so-called 'entrusted loan' arrangements. Thus, some SOEs may generate another source of revenue by profiting from the interest margin, while many private firms complain that their development is stifled due to the shortage and high cost of funding.

According to the "Economic Survey of China" released in 2010 by the OECD, the Chinese government has substantially reduced subsidies to state enterprises in recent years. But the survey also argues

18 Report delivered by Chairman of SASAC, Wang Yong, to the Standing Committee of the National People's Congress on October 2012.

19 "Report to Congress", U.S.-China Economic and Security Review Commission, 2011.

20 Figure 5 also shows the rising share in lending to households, mainly as mortgages, from zero in 2002 to 23.5% in 2010, which is a positive development for the banking system and the economy.

that China's SOEs are much more capital intensive than their private counterparts, which is "indicative of a lingering lending bias towards SOEs in the predominately state-owned banking sector".[21] The clear inference is that the Chinese economy would benefit if more formal finance found its way to the higher productivity activities of private firms.

However, what is unclear is whether China's SOEs do have privileged access to bank loans and whether they have been granted bank loans at preferential interest rates. Loans made to SOEs are commercial decisions made by the banks. Except for the government-backed nature of SOEs, large-scale asset holdings and having a long track record are two key factors on which banks base their credit decisions. In this regard, as SOEs are relatively less risky than private firms and therefore are more creditworthy, banks tend to lend more to them and at lower interest rates. Such lending considerations and decisions are common, not only among the state-owned banks in China, but also the foreign banks that operate in China. Syndicated loans made to Chinese enterprises in overseas markets with participation by many foreign banks also reflect the credit pricing pattern in the domestic market. The fact that many private firms fail to obtain loans or have to pay for funds at high interest rates is due more to the inadequacies of China's banking system and the associated business, legal and financial infrastructure. Such inadequacies raise the risks for banks that lend to small and medium-size firms and private enterprises. A priority for the government is to remove the disincentives to lend to non-SOEs by comprehensively improving the infrastructure that supports the financial system.

The financial market backdrop in recent years should also be borne in mind when analyzing complaints by U.S. firms that Chinese SOEs derive an unfair advantage through the low interest-rate loans they borrow from state-owned banks. In the past few years, U.S. firms are operating in an environment of exceptionally low interest rates with the federal funds rate[22] close to zero, whereas in China the benchmark one-year lending rate is around 6%.[23] The probability is high that SOEs and major companies in the U.S. both are benefitting from a cost of capital too low to be sustained over the long run.

Another aspect to consider in evaluating the preferential treatment SOEs receive from the government is the preferential treatment foreign-invested enterprises (FIEs) in China enjoyed in the past. For many years, to attract foreign investors China extended a host of preferential treatment to foreign investors; many local governments still compete for foreign investors through offering different kinds of incentives. For example, profit tax rates for foreign firms were lower than those for local enterprises, and there were various tax exemption arrangements given to foreign enterprises, such as the exemption from duties on imports of machinery and equipment. Such 'super-national treatment' given to foreign firms, however, was gradually phased out in recent years as China has adopted a national treatment approach for all kinds of enterprises. On 1 January 2008, the government eliminated the preferential income tax rate for FIEs. They are now subject to a 25% tax rate, the same as domestic enterprises. Since 1 December 2010, FIEs have been required to pay urban maintenance and construction taxes and education levies at the same rates as domestic enterprises. These commendable measures to ensure firms are treated equally irrespective of ownership need to be extended to eliminate remaining concessions that favor domestic SOEs.

Market access by foreign companies

From the perspective of U.S. businesses, many SOEs

21 "Product Market Regulation and Competition", OECD Economic Survey of China (2010), pp. 109-110.

22 The Federal funds rate is the overnight interbank offered rate for depository institutions to trade balances held at the Federal Reserve. It is an important benchmark in the financial markets. The bank prime loan rate – one of several base rates used by banks to price short-term business loans – has remained at the 3.25% level since January 2009. See http://www.federalreserve.gov/releases/h15/data.htm

23 Refer to the People's Bank of China, http://www.pbc.gov.cn/publish/zhengcehuobisi/631/2012/20120706181352694274852/20120706181352694274852_.html

in China are market incumbents that continue to benefit from a legal or natural monopoly in their industrial sector, with various regulatory privileges and preferential treatment. China's industrial policies, they believe, create state monopolies and national champions in industries that are strategic and important.

In 2006, SASAC identified seven 'strategic industries' in which the state would keep absolute control and five 'pillar industries' where the state would retain strong influence. Strategic industries include defense, electricity generation and distribution, petroleum and petrochemicals, telecommunications, coal, civil aviation and waterway transport. Pillar industries include machinery, automobiles, information technology, construction, steel, base metals and chemicals.

But the strategic industries or pillar industries as stated above are too broadly defined. Foreign investment in many sub-sectors of these industries is indeed encouraged, according to the recently revised "Catalogue for the Guidance of Foreign Investment Industries".[24] However, in some industries, investment in the form of a joint venture is still required, and in some sectors, the foreign partner(s) are not allowed to be the controlling shareholder(s). The Chinese economy could benefit if the government considered how to ease foreign entry requirements further.

Market access by foreign investors is also subject to changes in China's industrial policies as economic circumstances and development strategies change. For example, foreign investment in car-making used to be encouraged, but this has been changed from 'encouraged' to 'permitted' due to potential overcapacity and excessive investment in the sector in recent years. However, foreign investment in alternative-energy automobiles is favored. Similarly, given China's immense need for energy, the construction and operation of hydroelectric stations and combined heat and power stations by foreign investors are encouraged and entail no foreign equity ceilings, while foreign investments in new energy sources – including shale oil – are also welcomed[25].

U.S. businesses complain that foreign companies are excluded from the markets reserved for strategic industries and are heavily regulated in those designated for the pillar industries[26]. The "OECD Economic Survey" also argued that, although some of these sectors are technically open to foreign investors, discriminatory treatment or red tape discourages them from participating[27]. Such complaints highlight the need for China to continue improving the procedures and processes in vetting and approving foreign investments.

But from a macro perspective, compared to other transitional economies and developing countries, China is relatively open to foreign investment, as reflected by the high level of inward FDI China has attracted over the years (see Chapter II-13 for a more in-depth analysis of foreign direct investment in China).

A related issue about market access to foreign investors is the need for China to improve its market infrastructure and regulatory capacities further before allowing more market competition. The Chinese government's recent reform initiatives have indicated a greater willingness to create a more level playing field for all competitors. The Anti-Monopoly Law, which took effect in August 2008, is a significant step towards better regulation of market competition. Private investment will be supported in sectors that are currently dominated by SOEs, such as financial services, railroads and health-

24 The latest catalogue was issued in December 2011 and effective since 30 January 2012.

25 See, for instance, "China Shifts Foreign-Investment Focus", http://online.wsj.com/article/SB10001424052970204720204577130011797163488.html

26 "Report to Congress", U.S.-China Economic and Security Review Commission, 2011.

27 "Product Market Regulation and Competition", OECD Economic Survey of China, 2010, pp. 120-21.

care[28]. For instance, in March 2012, the government approved a broad package of financial reform measures, which include allowing private lending in Wenzhou, a city known for entrepreneurship and underground lending. This is an experimental step towards liberalizing further the country's financial system[29]. In May 2010, the announcement of "Certain Opinions on Encouraging and Guiding the Sound Development of Private Investment"[30], known as the "new 36 clauses", signals that future reform will focus on encouraging market competition, even in some strategic industries.

Unfair competition arising from local protectionism

Complaints about unfair competition and the existence of barriers to market access do arise from time to time with regard to local governments protecting or favoring local enterprises, including local SOEs. Such complaints come not only from foreign companies, but also from local Chinese companies. Local governments generally welcome FDI, which adds to local GDP growth, fiscal revenue and employment. When it comes to government procurement and market regulations, however, there are instances when local governments tend to favor local enterprises and locally made products, especially during an economic downturn. Some municipal governments, for instance, may provide consumption subsidies for indigenous automobiles or household appliances. Some may support local enterprises with lower land costs, preferential licensing and approvals, as well as better access to government contracts and bank loans. Such behavior impedes competition not just from foreign competitors, but all non-local companies. However, given the size of China and the wide disparities in the level of development of different regions, in addition to the inadequacies of China's institutions and capabilities, such problems are complex and difficult to resolve. They do need to be tackled in the interests of both creating efficiency in an integrated Chinese economy and assuring foreign firms that government assurances are genuine.

Over the past two years, the central government has reaffirmed that national treatment would be provided to FIEs. In the document "Several Opinions on Better Utilization of Foreign Investment"[31], the government acknowledges that FIEs are an important part of China's economy and play a positive role in promoting innovation, upgrading industries and bridging the development gap among regions. The government has also clarified some of its contentious policies. For instance, the industrial restructuring and revitalization plan as well as identification standards of indigenous innovative products are now applicable to FIEs. The government procurement policy favoring indigenous innovative products has also been removed to avoid allegations of unfair treatment. Still, full implementation of national treatment for all foreign companies largely rests on the effectiveness of enforcement by local governments.

Concerns about China's 'go global' strategy

Chinese enterprises are rapidly expanding their footprint around the globe in an effort to purchase natural resources, develop overseas markets and acquire much-needed technologies. A significant proportion of overseas investment made by Chinese companies has come from large central SOEs[32]. Benefitting from the rapid growth of China's economy and restructuring efforts in recent

28 "Factbox: Private Investment in China", Reuters, 28 May 2012, http://www.reuters.com/article/2012/05/28/us-china-energy-fact-idUSBRE84R01U20120528

29 "China Tests Financial Relaxation in Wenzhou", *Wall Street Journal*, 28 March 2012, at http://online.wsj.com/article/SB10001424052702303404704577309051957346004.html

30 This was issued by State Council of China in May 2010 (see http://www.gov.cn/zwgk/2010-05/13/content_1605218.htm). Corresponding measures were released by early July 2012 (see http://finance.people.com.cn/n/2012/0728/c70846-18617776.html).

31 In 2010, the State Council of China issued the document "Several Opinions on Better Utilization of Foreign Investment", in which 20 specific policy measures were put forward.

32 In terms of number of investing enterprises, however, SOEs represent only a small proportion, which reflects the large number of individual private investment.

years, increasingly more Chinese SOEs have gained a place among the largest companies in the world. In 2011, three of them were in the top 10 Fortune Global 500 list of companies, with more than 40 others included in the top 500[33]. The rising profile of China's SOEs has raised worries among some U.S. and other businesses about the unfair advantage these government-supported SOEs enjoy in global competition. There are also allegations that some investments made by SOEs in the U.S. were driven by strategic rather than commercial objectives.

China has long been a prominent recipient of FDI, but its level of outbound investments was insignificant in the past and has only started to increase rapidly in recent years. China and its SOEs have entered the stage of development when expanding their footprints in the global market is inevitable. So long as such investments and the operations of China's enterprises abide by the laws and regulations of the countries involved, the rise in Chinese outward investments could be dealt with on normal legal and commercial considerations. Politicizing this development is counter to the long-term interests of the countries involved as well as China.

Just like investments from elsewhere, FDI from China to the U.S. generates employment and growth in the U.S. economy. China Ocean Shipping (Group) Company (COSCO), for example, has been recognized in Massachusetts for its contribution to the American economy and job market. This appreciation comes a decade after COSCO opened a direct link between China and Boston in 2002 after the Danish shipping giant Maersk Line closed its service. According to David Mackey, the interim CEO of the Massachusetts Port Authority, COSCO's decision to invest saved more than 34,000 jobs over the last decade[34]. (A more detailed discussion of the economic impact of Chinese FDI on the U.S. is given in Chapter 13 on FDI.)

33 Refer to Fortune Global 500, 2012.
34 Refer to *China Daily,* 6 March 2012.

Recommendations

SOEs play an important role in many economies. But a large state sector typically harbors inefficiencies, stifles market competition, frustrates innovation and hinders the growth of the private sector[35]. As China becomes a more developed and more diversified economy, a vibrant private sector that liberates entrepreneurial energies and mobilizes the innovation, initiatives and ingenuity of millions of people is crucial to enhancing China's innovative capacity and productivity growth. The Chinese government needs to focus more on its role in providing a wider range of public goods and services such as education, healthcare and social security, as well as providing the proper institutions and regulations for competitive markets to function efficiently. As China integrates more with the world, the need to reform the government and restructure the SOE sector becomes more imperative so as to avoid unnecessary conflicts with other economies.

Refine government's role and improve transparency

The dividing line between government and enterprises should continue to be delineated more clearly. In the long term, the government would do well to focus on providing public goods and services and ensuring a level playing field for all types of enterprises. The state could pursue its macroeconomic strategies and achieve its goals through industrial policies, effective regulations and law enforcement, without having to be involved in the management of enterprises. State control of SOEs could also be gradually reduced to a desired minimum.

To ensure that market competition works properly, China's regulatory and supervisory capabilities, the system of laws and regulations, and hardware

35 According to the World Bank's report "China 2030", the average return on equity of non-state firms was 9.9 percentage points above that of SOEs. If the artificially high rate of return from a few monopolies is excluded, the gap between the profitability of private firms and that of SOEs would be even larger.

and software institutions need to be improved. The Anti-Monopoly Law should be applied to and enforced equally among SOEs, domestic private firms and foreign companies. The development of China's financial, accounting, taxation, legal and other governance institutions should create a rules-based system that fosters healthy market competition.

Enterprise performance could be improved further by complementary reforms of these institutions that support mature market economies. In particular, despite some extraordinary progress in the financial and capital markets since the mid 1990s, the government clearly still lacks trust in the ability of the banks and securities markets to allocate financial resources in their best interests. As recent events in the U.S. have demonstrated, all governments reserve the right to intervene to rescue systemically important enterprises that find themselves in – presumably temporary – financial distress. In less extreme situations, however, the financial system ensures that firms that use resources poorly are compelled to enter bankruptcy or otherwise exit their markets. China experiences recurring examples of excess capacity in diverse industries due, in part, to the enthusiasm of sub-national governments for investment in centrally identified priority sectors. In a more mature financial system – less subject to influence from bureaucratic direction – analysts would conclude that many projects which are in a position currently to find finance would be unlikely prospects for funding. An important contributor to efficiency in enterprise investment would be the development of greater expertise in credit analysis within the banks and the financial system in general.

Doubts about China's intentions and policies often arise because of the opacity of its decision-making processes and the inadequacies of its consultative procedures. A priority for the government should be making these processes and procedures transparent, by creating, in particular, a process that disseminates government policy intentions, laws and regulations, and how administrative measures should be implemented. The practice of soliciting comments from all stakeholders before draft regulations and rules are finalized should be improved and formalized, particularly at the local government level. Government procedures that affect businesses, such as those in licensing and government procurement, should also be improved and made transparent.

Deepen SOE reform gradually

The current range of industries and sectors where state ownership exists is too broad. As recommended by the World Bank[36], to tackle 'administrative monopolies', Chinese authorities could review the lists of strategic and pillar industries, and cancel the explicit or implicit barriers to competition in sectors or sub-sectors where the rationale for state ownership is weak. To enable private entities to flourish, state ownership's focus should be on the provision of public goods in strategic industries and in non-contestable sectors, such as national defense and key infrastructure. In contestable and competitive sectors such as real estate and construction, the state should gradually retreat[37]. A reduction in the scope of state ownership would help reduce the incentives for governments at all levels to intervene in businesses and help boost investor confidence.

To reduce unnecessary conflicts with other countries that could impede the efforts of China's SOEs to go global, the Chinese government should consider reducing gradually the share of state ownership to below 50%. The state could still remain a major shareholder or could exercise its influence through other less direct ways. Given the large size of these SOEs, selling shares could be a challenge as this could depress stock market sentiments. But these shares could be transferred to the country's social security fund so as to enable it to better cope

36 Refer to "China 2030", World Bank, 2012.
37 In the interests of transparency, where 'gradual' might involve some years and an explicit timetable for government withdrawal from the sector could be agreed and publicized.

with China's aging population in coming decades. At the same time, the government's efforts should continue to improve disclosure standards for listed enterprises, irrespective of ownership structure.

The dividends paid by SOEs to the Chinese government from their profits after tax have increased since 2011 to 15% of profits for energy, telecom and tobacco companies, and 10% for transportation and metal-producing companies, with the remaining holding companies paying 5%. The level of dividends paid by China's SOEs is low compared with listed companies in other countries. In a fully functioning market economy, how much to pay as dividends is a matter for the enterprises to decide[38]. But as agreed in the fourth S&ED, China will steadily increase the coverage and amount of dividends payable by SOEs to the government. This would help reduce the low-cost capital available to the SOEs that tends to encourage inefficient investment and overexpansion. This should also help to lower entry barriers for private competitors and increase fiscal revenue.

National treatment for all

While some U.S. companies lodge complaints about the discriminatory treatment they have experienced in China, a number of Chinese investors are confronted with barriers and political pressure in their investments and businesses in the U.S. There would be benefits for both the U.S. and Chinese governments in maintaining a level playing field for all enterprises, regardless of nationality and types of ownership.

Apart from exceptions arising from sensitive issues such as national security concerns, both the U.S. and Chinese governments should ensure that all policies, including market access and incentives, are implemented in a fair manner without discrimination against foreign companies. In government procurement, both the U.S. and Chinese governments should ensure that goods and services provided by all legal entities in their respective countries are treated equally, unless there are clear grounds for exceptional treatment. In all of these areas, for China to aspire to gain international recognition as a 'market economy' it would do well to review its approach in this respect.

38 Of course, governments influence the decision to the extent that they tax dividends differently to capital gains.

Appendix

List of Central SOEs Controlled by SASAC

	Name
1	China National Nuclear Corporation (CNNC)
	中国核工业集团公司
2	China Nuclear Engineering Group Corporation (CNEC)
	中国核工业建设集团公司
3	China Aerospace Science and Technology Corporation (CASC)
	中国航天科技集团公司
4	China Aerospace Science & Industry Corporation (CASIC)
	中国航天科工集团公司
5	Aviation Industry Corporation of China (AVIC)
	中国航空工业集团公司
6	China State Shipbuilding Corporation (CSSC)
	中国船舶工业集团公司
7	China Shipbuilding Industry Corporation (CSIC)
	中国船舶重工集团公司
8	China North Industries Group Corporation(NORINCO GROUP)
	中国兵器工业集团公司
9	China South Industries Group Corporation (CSGC)
	中国兵器装备集团公司
10	China Electronics Technology Group Corporation (CETC)
	中国电子科技集团公司
11	China National Petroleum Corporation (CNPC)
	中国石油天然气集团公司
12	China Petrochemical Corporation (Sinopec Group)
	中国石油化工集团公司
13	China National Offshore Oil Corp (CNOOC)
	中国海洋石油总公司
14	State Grid Corporation of China (SGCC)
	国家电网公司

15	China Southern Power Grid Corporation (CSG) 中国南方电网有限责任公司
16	China Huaneng Group (CNHG) 中国华能集团公司
17	China Datang Corporation(CDT) 中国大唐集团公司
18	China Huadian Corporation (CHD) 中国华电集团公司
19	China Guodian Group 中国国电集团公司
20	China Power Investment Corporation (CPI) 中国电力投资集团公司
21	China Three Gorges Corporation (CTG) 中国长江三峡集团公司
22	Shenhua Group Corporation Limited 神华集团有限责任公司
23	China Telecommunications Corporation (China Telecom) 中国电信集团公司
24	China United Network Communications Group Co., Ltd. (China Unicom) 中国联合网络通信集团有限公司
25	China Mobile Communication Group Co. (China Mobile) 中国移动通信集团公司
26	China Electronics Corporation (CEC) 中国电子信息产业集团有限公司
27	China FAW Group Corporation (FAW) 中国第一汽车集团公司
28	Dongfeng Motor Corporation (DFM) 东风汽车公司
29	China First Heavy Industries Group (CFHI) 中国第一重型机械集团公司
30	China National Erzhong Group Co. (China Erzhong) 中国第二重型机械集团公司
31	Harbin Electric Corporation (HE) 哈尔滨电气集团公司
32	Dongfang Electric Corporation (DEC) 中国东方电气集团有限公司
33	Anshan Iron and Steel Group Corporation (Ansteel) 鞍钢集团公司
34	Baosteel Group Corporation (Baosteel) 宝钢集团有限公司

35	Wuhan Iron and Steel (Group) Corporation (WISCO) 武汉钢铁（集团）公司
36	Aluminum Corporation of China (CHINALCO) 中国铝业公司
37	China Ocean Shipping (Group) Company (COSCO) 中国远洋运输（集团）总公司
38	China Shipping (Group) Company (China Shipping) 中国海运（集团）总公司
39	China National Aviation Holding Group (CNAH) 中国航空集团公司
40	China Eastern Air Holding Company (CEAH) 中国东方航空集团公司
41	China Southern Air Holding Company (CSAH) 中国南方航空集团公司
42	Sinochem Group Corporation (Sinochem) 中国中化集团公司
43	China National Cereals, Oils & Foodstuffs Corp. (COFCO) 中粮集团有限公司
44	China Minmetals Corporation 中国五矿集团公司
45	China General Technology (Group) Holding, Limited (Genertec) 中国通用技术（集团）控股有限责任公司
46	China State Construction Engineering Corporation (CSCEC) 中国建筑工程总公司
47	China Grain Reserves Corporation (Sinograin) 中国储备粮管理总公司
48	State Development & Investment Corporation (SDIC) 国家开发投资公司
49	China Merchants Group 招商局集团有限公司
50	China Resources (Holdings) Company, Ltd. 华润（集团）有限公司
51	China Travel Service (HK) Group Corporation (HKCTS) 中国港中旅集团公司[香港中旅（集团）有限公司]
52	State Nuclear Power Technology Corporation Ltd. (SNPTC) 国家核电技术有限公司
53	Commercial Aircraft Corporation of China, Ltd. (COMAC) 中国商用飞机有限责任公司

54	China Energy Conservation and Environmental Protection Group (CECEP) 中国节能环保集团公司
55	China International Engineering Consulting Corporation (CIECC) 中国国际工程咨询公司
56	China Huafu Trade & Development Group Corp. 中国华孚贸易发展集团公司
57	China Chengtong Holdings Group Ltd. 中国诚通控股集团有限公司
58	China National Coal Group Corp. (ChinaCoal) 中国中煤能源集团公司
59	China Coal Technology & Engineering Group Corp. (CCTEG) 中国煤炭科工集团有限公司
60	China National Machinery Industry Corporation (SINOMACH) 中国机械工业集团有限公司
61	China Academy of Machinery Science & Technology 机械科学研究总院
62	Sinosteel Corporation (Sinosteel) 中国中钢集团公司
63	China Metallurgical Group Corporation (MCC) 中国冶金科工集团有限公司
64	China Iron and Steel Research Institute Group (CISRI) 中国钢研科技集团公司
65	China National Chemical Corporation (ChemChina) 中国化工集团公司
66	China National Chemical Engineering Group Corporation (CNCEC) 中国化学工程集团公司
67	Sinolight Corporation (Sinolight) 中国轻工集团公司
68	China National Arts & Crafts (Group) Corporation (CNACGC) 中国工艺（集团）公司
69	China National Salt Industry Corporation (CNSIC) 中国盐业总公司
70	Huacheng Investment & Management Co., Ltd. 华诚投资管理有限公司
71	China Hi-Tech Group Corporation Ltd. 中国恒天集团公司
72	China National Materials Group Corporation Ltd. (SINOMA) 中国中材集团公司

73	China National Building Materials Group Corporation (CNBM) 中国建筑材料集团有限公司
74	China Nonferrous Metal Mining (Group) Co. Ltd. (CNMC) 中国有色矿业集团有限公司
75	General Research Institute for Nonferrous Metals (GRINM) 北京有色金属研究总院
76	Beijing General Research Institute of Mining & Metallurgy (BGRIMM) 北京矿冶研究总院
77	China International Intellectech Corporation (CIIC) 中国国际技术智力合作公司
78	China Academy of Building Research (CABR) 中国建筑科学研究院
79	China CNR Corporation Ltd. (CNR) 中国北方机车车辆工业集团公司
80	CSR Corporation (CSR) 中国南车集团公司
81	China Railway Signal & Communication Corporation (CRSC) 中国铁路通信信号集团公司
82	China Railway Engineering Corporation Group (CRECG) 中国铁路工程总公司
83	China Railway Construction Corporation Group (CRCCG) 中国铁道建筑总公司
84	China Communications Construction Company Ltd. (CCCC) 中国交通建设集团有限公司
85	Potevio Company Ltd. (Potevio) 中国普天信息产业集团公司
86	Datang Telecom Technology & Industry Group 电信科学技术研究院
87	China National Agricultural Development Group Corporation (CNADC) 中国农业发展集团总公司
88	Chinatex Corporation Limited 中国中纺集团公司
89	Sinotrans & CSC Holdings, Co., Ltd. (SINOTRANS Group) 中国外运长航集团有限公司
90	China Silk Corporation 中国中丝集团公司
91	China Forestry Group Corporation 中国林业集团公司

92	China National Pharmaceutical Group Corporation (SINOPHARM)
	中国医药集团总公司
93	CITS Group Corporation
	中国国旅集团有限公司
94	China Poly Group Corporation
	中国保利集团公司
95	Zhuhai Zhen Rong Company
	珠海振戎公司
96	China Architecture Design & Research Group (CAG)
	中国建筑设计研究院
97	China Metallurgical Geology Bureau (CMGB)
	中国冶金地质总局
98	China National Administration of Coal Geology (CNACG)
	中国煤炭地质总局
99	Xinxing Cathay International Group Co., Ltd.
	新兴际华集团有限公司
100	China TravelSky Holding Company (TravelSky)
	中国民航信息集团公司
101	China National Aviation Fuel Group Corporation (CNAF)
	中国航空油料集团公司
102	China Aviation Supplies Holding Company (CAS)
	中国航空器材集团公司
103	Power Construction Corporation of China
	中国电力建设集团有限公司
104	China Energy Engineering Group Co., Ltd.
	中国能源建设集团有限公司
105	China National Gold Group Corporation
	中国黄金集团公司
106	China National Cotton Reserves Corporation
	中国储备棉管理总公司
107	China Guangdong Nuclear Power Holding Co., Ltd. (CGNPC)
	中国广东核电集团有限公司
108	China Hualu Group Co., Ltd
	中国华录集团有限公司
109	Alcatel-Lucent Corporation Limited
	上海贝尔股份有限公司
110	FiberHome Technologies Group
	武汉邮电科学研究院
111	OCT Group
	华侨城集团公司
112	Nam Kwong (Group) Company Limited
	南光（集团）有限公司
113	China XD Group
	中国西电集团公司
114	China Railway Materials Commercial Corporation (CRMCC)
	中国铁路物资总公司
115	China Reform Holdings Corporation Limited
	中国国新控股有限责任公司

Source: SASAC website, March 2013

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