

CHINA'S STATE-OWNED ENTERPRISES: HOW MUCH DO WE KNOW? FROM CNOOC TO ITS SIBLINGS

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SUMMARY

China's state-owned enterprises (SOEs) are sometimes compared to Canadian Crown corporations, such as VIA Rail or the CBC. But that comparison is not only profoundly inaccurate, it can also be a dangerous assumption to make when crafting Canadian economic policy. China's SOEs have been actively buying up interests in major Canadian resource firms. But that phenomenon has much more serious implications for Canada than if these were, say, state-owned European firms, such as Norway's Statoil. China's SOEs do not operate by the normal rules of commerce. They are, in fact, a very powerful tool of the Chinese government's industrial policy, which is aimed at a ruthless expansion of its global economic empire.

The spectacular growth of China's SOEs over the last two decades, at a rate unrivalled by virtually any other sector on earth, has been driven by the will of the Chinese government, which provides cheap or free inputs — such as access to capital and real estate — in order to create globally dominant corporate powers. There is also the Chinese competitive advantage that comes with not just lower wages for workers but also behaviour that would be considered irresponsible in a Western context. Placing a lower priority on human rights, the environment, social justice and corporate rectitude give China and its SOEs an edge that have helped them in their goal of leapfrogging competing world economic powers, including Canada. Without these explicit and implicit subsidies, China's SOEs have actually proven to be far less economically competitive than their private-sector rivals.

Chinese SOEs are not publicly accountable the way that Crown corporations in Canada are. Chinese SOEs are run by appointees of the Communist party, whose first duty is to the state, the majority or even sole shareholder of SOEs. Unlike Canada's Crown corporations, which are designed to fill in market-failure gaps or provide public service, China's SOEs are permitted to chase profits in sectors that do not even fall within their primary mandate. And unlike Canada, China jealously guards the sectors in which its SOEs exert absolute or strong control, disallowing any private-sector competitors — domestic or foreign — free entry.

When Canada's federal government last December granted approval to the takeover of Nexen Inc. it made it clear that this would be the "end of a trend" of foreign SOEs controlling acquisition of major Canadian energy firms. Such takeovers would be allowed only in exceptional circumstances from now on. That is how it should be. However, that does not mean shutting our door for capital investment from foreign SOEs in general. What we need is adequate government regulation to guard our national interest, including the integrity of our free-market system.

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DE CNOOC À SES ENTREPRISES SŒURS: QUE SAVONS-NOUS DES ENTREPRISES D'ÉTAT CHINOISES?

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RÉSUMÉ

Il arrive que l'on compare les entreprises d'État chinoises aux sociétés de la Couronne canadiennes, notamment VIA Rail ou CBC. Pourtant, non seulement cette comparaison est erronée, elle peut être lourde de conséquences quand vient le moment de définir la politique économique canadienne. Depuis quelque temps, les entreprises d'État chinoises acquièrent une participation dans d'importantes sociétés canadiennes du secteur des ressources. Mais cela comporte des conséquences beaucoup plus graves pour le Canada que si ces entreprises appartenaient à des gouvernements européens, par exemple la norvégienne Statoil. Ces entreprises chinoises ne sont pas régies par les règles normales du commerce. En fait, elles constituent un outil très puissant de la politique industrielle du gouvernement chinois, laquelle vise une expansion impitoyable de son empire économique mondial.

La croissance spectaculaire des entreprises d'État chinoises au cours des deux dernières décennies, à un taux pratiquement inégalé dans n'importe quel autre secteur sur terre, s'explique par la volonté du gouvernement chinois qui leur fournit gratuitement ou à peu de frais un accès à des outils – notamment des capitaux ou des biens immobiliers – pour créer des entreprises qui dominent le marché international. Celles-ci jouissent aussi d'un avantage concurrentiel non seulement parce que les salaires sont plus bas, mais en raison de comportements qu'on jugerait irresponsables dans un contexte occidental. En accordant peu de place aux droits de la personne, à l'environnement, à la justice sociale et à la responsabilité des entreprises, la Chine et ses sociétés d'État se dotent d'un avantage indu qui leur permet de damer le pion aux puissances économiques mondiales concurrentes, y compris le Canada. La preuve a été faite que sans les subventions explicites ou implicites dont elles profitent, elles seraient beaucoup moins compétitives que leurs rivales du secteur privé.

Ces sociétés d'État ne sont pas responsables devant la population comme c'est le cas au Canada. Leurs dirigeants sont nommés par le Parti communiste et rendent avant tout des comptes au gouvernement qui représente l'actionnaire majoritaire, sinon l'unique actionnaire de ces entreprises. Contrairement aux sociétés de la Couronne du Canada, conçues pour combler des lacunes dans le marché ou pour fournir un service public, elles sont autorisées à engranger des profits dans des secteurs qui n'ont rien à voir avec leur mission première. Et contrairement au Canada, la Chine protège jalousement les secteurs dans lesquels ces entreprises exercent un contrôle absolu ou prédominant et interdit toute concurrence libre du secteur privé – national ou étranger.

Quand le gouvernement fédéral a approuvé la prise de contrôle de Nexen Inc., en décembre dernier, les responsables gouvernementaux ont indiqué que cela marquait la « fin d'une tendance » : les entreprises d'État étrangères ne pourraient plus contrôler l'acquisition de grandes sociétés du domaine de l'énergie au Canada. Désormais, ces prises de contrôle n'auraient lieu que dans des circonstances exceptionnelles. C'est ainsi que les choses devraient être. Toutefois, cela ne signifie pas qu'il faille fermer la porte à tous les investissements de sociétés d'État étrangères. Nous avons besoin d'une réglementation gouvernementale adéquate afin de protéger notre intérêt national, y compris l'intégrité de notre système de libre-échange.

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INTRODUCTION

On December 7, 2012, the federal government approved Nexen's takeover by the state-owned China National Offshore Oil Corporation (CNOOC), and decisively referred to this approval as "the end of a trend." In a related statement, Industry Canada noted that due to "the inherent risks posed by foreign SOE [state-owned enterprise] acquisitions in the oil sands," future controlling acquisitions by foreign SOEs would be granted "on an exceptional basis only."¹ This ruling closed the case on one controversial takeover, but the core of the debate lingers on.

The camp expressing views that oppose the government's clear shutdown of future "controlling acquisitions by foreign SOEs" is broad, ranging from newly elected Liberal leader Justin Trudeau to the editorial board of the *National Post*. The latter bluntly stated: "the bottom line is that we need the foreign capital" and the fact that the nature of the foreign capital may come from foreign SOEs is "simply not enough reason in itself for our government to meddle in the free market and block the deals."²

In this debate, this author sides with Prime Minister Stephen Harper's government in support of closing the door to future *controlling* acquisitions³ by foreign SOEs. That is not to say that we do not welcome SOE investment in general, and investment from China in particular. Instead, we need to learn how to live with China's SOEs as regular foreign investors as well as business rivals for a long time to come. But, in the meantime, we need to firmly block their *controlling* acquisitions except "on an exceptional basis," which no one can fully predict before such occasions occur.

The debate has to start with the basic question: what is a state-owned enterprise (SOE) in the Canadian sense, and what is an SOE in the Chinese sense? Furthermore, would we want our oil sands, or any other industry, to be controlled by Canadian SOEs or Chinese SOEs? The answers to the first parts of these two questions have long been clear. That is, in the Canadian sense, SOEs, or Crown corporations, "are generally created to fill a need the government feels is not being met by the private sector, which is either unable or unwilling to provide certain services the government deems necessary or in the national interest."⁴ Obviously, in the case of the oil sands, our government does not see the need to enter a market where the private sector has been running the business from Day 1 when, to everyone except venture capitalists, the oil sands appeared to be a no man's land.

¹ Refer to Laura Payton, "Government OK's Foreign Bids for Nexen, Progress Energy," CBC News, December 7, 2012, <http://www.cbc.ca/news/business/story/2012/12/07/cnooc-nexen-takeover.html>.

² *National Post*, "National Post Editorial Board: Half a cheer for Harper's CNOOC-Nexen decision," December 8, 2012, <http://fullcomment.nationalpost.com/2012/12/08/national-post-editorial-board-half-a-cheer-for-harpers-cnooc-nexen-decision/>.

³ For the definition of controlling acquisition or "acquisition of control," refer to Industry Canada: <http://www.ic.gc.ca/eic/site/ica-lic.nsf/eng/lk00064.html#p4.2>. It is noteworthy that the qualitative consideration by Industry Canada regarding "acquisition of control" is whether "an asset essential to the continuance of the business" is acquired.

⁴ Kazi Stastna, "What are Crown corporations and why do they exist?" CBC News, April 1, 2012, <http://www.cbc.ca/news/canada/story/2012/03/25/f-crown-corporations.html>.

Then, why shouldn't the answer be the same when the possible SOEs controlling our oil sands come from China, or another foreign country? One *National Post* columnist has bluntly asserted that “the minute Nexen changes hands, from its present Canadian (and foreign) shareholders to CNOOC, the potential for mismanagement and value destruction ceases to be a concern for us, and instead becomes a concern for them: the taxpayers of China.”⁵ This assertion implies that the only problem with China's SOEs is the technical inefficiency within themselves — the same as that perceived for Canadian Crown corporations — and such technical inefficiency within China's SOEs, would do no harm, through their controlling acquisitions, to our allocative efficiency.⁶ Some commentators also feel it is acceptable to let China's SOEs take over and control Nexen (and the like) as long as a reciprocal treatment of Canadian investment in China is allowed.

In my view, equating China's SOEs to those in western economies, such as Canadian Crown corporations, is a huge mistake — not to mention that it ignores the potential harm the controlling acquisition by a Chinese SOE might bring to our market's allocative efficiency.⁷ Moreover, expecting China's approval of a similar but reverse takeover by Canadians in China is a daydream in any foreseeable future.

This paper aims to set the record straight by revealing the contrasting distinctiveness of China's SOEs from their counterparts in Canada. My analysis is based on publicly accessible materials including official statistics. I draw general observations based on a historical review of China's SOE sector as a whole and case studies of CNOOC and the other Chinese top 10 non-financial SOEs in particular. I demonstrate that, unlike our own government's “meddling”, the unintended consequence of letting any of China's SOEs “meddle” through controlling acquisitions in our free market will be beyond our public supervision. Therefore, our bottom line regarding China's SOE investment should be: China's capital is welcome, but China's controlling acquisition of any of our firms that would fall within the list of industries classified as being under the Chinese government's “absolute” or “strong” control⁸ — meaning no free

⁵ See *National Post*, “National Post Editorial Board: Half a cheer for Harper's CNOOC-Nexen decision,” December 8, 2012.

⁶ Technical efficiency and allocative efficiency are the two aspects of economic efficiency. Technical efficiency concerns only management efficiency within a firm or even within an industry; it can be defined as producing a certain good or service at the lowest cost possible under a certain market condition. Allocative efficiency concerns market efficiency; it is possible only with a competitive market where price equals the marginal cost, such that resources are allocated according to their most efficient uses. When an acquisition represents a power of monopoly and/or is backed by government subsidies, it can offer a premium price above the cost determined purely by market competition and, hence, can distort acquisition markets. For a discussion of how outbids by tax-advantaged foreign wealth sovereign funds may distort our Canadian acquisition market and impair our economic efficiency, refer, for example, to V. Jog and J. Mintz, “Sovereign Wealth and Pension Funds Controlling Canadian Businesses: Tax-Policy Implications,” *SPP Research Papers* 6, 5 (February 2013).

⁷ See footnote 6 for the concept of allocative efficiency. Given that CNOOC's price tag for taking over Nexen was over 60 per cent above the market price to preempt possible counterbids by other market players, it is not unreasonable to feel concerned about the integrity of our free market. For details of CNOOC's pricing for acquiring Nexen, see: *National Post*, “CNOOC faces backlash over Nexen deal, ratings hit 3-year low,” December 13, 2012, <http://business.financialpost.com/2012/12/13/cnooc-faces-backlash-over-nexen-deal-ratings-hit-3-year-low/>.

⁸ Refer to “SASAC: The State Economy Should Maintain Its Absolute Control of Seven Industries” (September 18, 2006) at http://www.gov.cn/ztlz/2006-12/18/content_472256.htm. The seven industries under the state's “absolute control” are “defense, power grid and generation, petroleum and petrochemicals, telecommunications, coal, air transportation and water transportation.” The nine industries under the state's “strong control” are “equipment manufacturing, automobiles, electronic information, construction, steel, non-ferrous metal, chemicals, geological survey, and science and technology.”

entry for competitors — is not. My logic is also simple: no double standard should be allowed in a cross-border relationship.⁹

The rest of the paper is structured as follows. The next section identifies the general “distinctiveness” of China’s SOEs based on a brief historical review and a quick comparison with our Canadian Crown corporations (CCCs). As a reference, Appendix A provides a chronology of China’s SOE reform over the past three decades and Appendix B provides a classification of official Chinese statistics covering SOEs. I then provide a more detailed story about CNOOC, focusing on how CNOOC grew out of the shell of a government bureaucracy to become an internationally reputable oil producer, while religiously serving China’s state interests. The following section further combs through China’s Top 10 centrally controlled non-financial SOEs (including CNOOC) that are on the list of Fortune’s Global 500 companies, to outline their common features as Chinese SOEs. The final section summarizes what we know about China’s SOEs and their general policy implications.

For the reasons explained in the next section, this paper is focused on the centrally controlled, non-financial Chinese SOEs that are directly supervised by the State-Owned Assets Supervision and Administration Commission of the State Council (see below).

CHINA’S SOES — A QUICK BACKGROUND CHECK¹⁰

Unlike Canadian Crown corporations, which were established sporadically as remedies for market failure,¹¹ China’s SOE sector was born after the communist takeover of China in 1949 and resulted from a systematic, seven-year-long nationalization and confiscation of private capital and businesses.¹² It was not intended simply to intervene in the market but to replace the market, following the industrialization model of the Soviet Union’s centrally controlled economic system.

⁹ According to *The Economist* (“Nice to see you, EU,” April 20, 2013), one of the two recent trends in China’s outward foreign direct investment (FDI) is “the increasing willingness to take minority stakes,” believed to partly be “a pragmatic response to local hostility at outright takeovers.”

¹⁰ Unless otherwise noted, this section draws historical facts mainly from the following three sources: (1) Wu Li and Xiao Xiang, “Developing and Reforming SOEs: The CCP’s Path,” in *Human Social Science* 2, 2011 <http://www.iccs.cn/contents/401/11928.html>, (2) Jin, Chang-Feng, “System Innovation: the Solution to the Dilemma in SOE Reform,” in *China Administration of Industry and Commerce* 4, 2011 http://qyj.saic.gov.cn/llyj/201105/t20110505_105827.html and (3) Junyeop Lee, “State Owned Enterprises in China: Reviewing the Evidence,” OECD Occasional Paper, January 26, 2009, <http://www.oecd.org/corporate/corporateaffairs/corporategovernanceofstate-ownedenterprises/42095493.pdf>.

¹¹ Refer to The Treasury Board of Canada Secretariat, “Review of the Governance Framework for Canada’s Crown Corporations, Report to Parliament,” Section 3.1, for a brief history of Crown corporations (<http://www.tbs-sct.gc.ca/report/rev-exa/gfcc-cgse-eng.pdf>).

¹² Based on Wu Li and Xiao Xiang, “Developing and Reforming SOEs: The CCP’s Path,” 2011.

China's reform of its SOE sector was forced upon the government by the imminent collapse of the national economy, following the end of the disastrous "cultural revolution," in the late 1970s. The reform, initially aimed only at increasing the productivity and vitality of SOEs, started at a slow pace mainly because the then ideological dogma did not allow any ownership changes in non-farming sectors of the economy. It was only in the early 1990s, when the massive insolvency of SOEs threatened the very sustainability of SOEs and the national economy, that ownership reform was finally unleashed with the intention of "reinforcing the large SOEs while releasing the small ones (zhuada fangxiao)."¹³ The concrete measures of this ownership reform initially included financial infusions, huge layoffs, debt reduction, debt-equity swaps, non-government buyouts¹⁴ and public listings.¹⁵ By the late 1990s and early 2000s, facing potential foreign competition and legal challenges arising from China's imminent entry to the World Trade Organization (WTO), the SOE reform was actively moulded into "improving corporate governance and establishing a modern enterprise system."¹⁶ Unfortunately, this liberal boost for SOE reform cooled down soon after China's entry into the WTO, partly due to fears of losing state-owned assets to the non-state sector. This led to the establishment of the State-Owned Assets Supervision and Administration Commission of the State Council (SASAC)¹⁷ in early 2003 and the subsequent declaration of the state's "absolute control" of seven industries and "strong control" of nine industries in 2006.¹⁸ The SOE reform was fundamentally reversed after the eruption of the global financial crisis in 2008 when confidence in free-market vitality was shaken around the world.¹⁹ In fact, at the height of the cry about the supposed death of the capitalist system, talk of the China model, or Beijing consensus, suddenly came into vogue.²⁰ Since then, the Chinese government's conviction in the ultimate dominance of SOEs and/or their leading role in the economy has been markedly reaffirmed. (In Appendix A, I provide a chronology of China's SOE reform, with some official records, since pre-1979.)

¹³ This commonly used phrase summarized a proposal contained in the official document, "Proposal of the Central Committee of the Communist Party of China on design of the 9th 5-Year Plan for National Economic and Social Development and the Long-range Goal by 2010" (September 28, 1995) <http://www.china.com.cn/ch-80years/lici/14/14-5/1.htm>

¹⁴ Refer to Junyeop Lee, "State Owned Enterprises in China: Reviewing the Evidence," 2009.

¹⁵ China's two stock exchanges, the Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange (SZSE), were formally opened for trading in December 1990 and July 1991 respectively.

¹⁶ Li Tie-Yin (president of the Chinese Academy of Social Science, 1998-2002), "WTO and China," A Speech at The Russian Science Academy, June 18, 2002, available at http://bic.cass.cn/info/Arcicle_Show.asp?ID=2643&Title=WTO%D3%EB%D6%D0%B9%FA.

¹⁷ For the main functions of SASAC, see www.sasac.gov.cn/n2963340/n2963393/2965120.html.

¹⁸ Refer to "SASAC: The State Economy Should Maintain Its Absolute Control of Seven Industries" (September 18, 2006) at http://www.gov.cn/ztlz/2006-12/18/content_472256.htm.

¹⁹ According to James McGregor, the author of *No Ancient Wisdom, No Followers* (Westport, CT: Prospecta Press, 2012), which presents China's economic system as "authoritarian capitalism," there were three stages that lurched SOE reform backwards: 1) Forming SASAC to bring the state shares under central control (2003); 2) taking about two dozen key industrial and technology sectors under full or majority state control (2006); and 3) flushing money into SOEs through a \$600 billion stimulus program (2008-2009).

²⁰ Refer to *The Economist*, "China Model: The Beijing Consensus is to Keep Quiet," May 6, 2010, in which the China Model is described as: "one-party rule, an eclectic approach to free markets and a big role for state enterprise being among its commonly identified ingredients."

Along with this generally perceived thread in SOE reform, over the same period industrial planning and reform within the government itself resulted in the creation or transformation of some of China's most powerful SOEs today.²¹ First, starting in the early 1980s, several new SOEs were established almost from scratch and were fully funded by the government. Among these newly established SOEs were CNOOC (1982) and Sinopec (1983), both under the authority of the Ministry of Petroleum Industry (MPI). And second, starting in the late 1980s, many previous government ministries were eliminated gradually with their business entities and assets being directly transferred into newly established SOEs. Among these SOEs that were transformed from previous government ministries is CNPC, in 1988, which was the direct replacement for MPI²² and is the parent of PetroChina. Examples similar to CNPC include the 10 most powerful SOEs in the defense industry, all of them resulting from the transformation (through elimination) of the four former defense-industry ministries into SOEs²³ and which now make up the top 10 spots on the current SASAC list of its 116 SOEs.²⁴ It is worth noting that the seemingly small number of SOEs on the SASAC list (only 116) should not be taken lightly, as they are all conglomerates controlling numerous subsidiaries within China, and a majority of them also have overseas subsidiaries.²⁵

As a result of the aforementioned path of general SOE reform and the parallel creation and transformation of centrally controlled SOEs, the total number of SOEs nationwide dropped significantly over the past two decades or so while the number of centrally controlled SOEs grew steadily with their average market power being strengthened substantially. Based on the official statistics available, from 2001 to 2010, while the total number of non-financial SOEs nationwide dropped by over 34 per cent from 174,000 to 114,000, the total number of centrally controlled non-financial SOEs grew by almost 56 per cent, from 16,890 to 26,319. Their per-firm total assets more than doubled from below 500 million yuan to almost 1.3 billion yuan and per-firm gross revenue more than tripled from over 210 million yuan to nearly 700 million yuan. Overall, the total value-added (including total compensation for labour and profits and taxes paid) associated with the central SOEs more than quadrupled from 2001 to 2010, and as a share of GDP, grew from nearly eight per cent in 2001 to nearly 10 per cent in 2010.²⁶ Unfortunately, there are no adequate statistics upon which one can base comparable estimates across SOE and non-SOE sectors; neither are there comparable data for sub-national SOEs that allow an estimate of the overall SOE share, or the share of sub-national SOEs, in GDP. (See below for an explanation of such data inadequacy.)

²¹ For the periodical reform/restructuring program designed by the State Council, refer to <http://cpc.people.com.cn/GB/64162/64168/64568/65445/4429253.html>.

²² Refer to the CNPC website: <http://www.cnpc.com.cn/cn/gywm/dsj/#>.

²³ Refer to: http://www.360doc.com/content/12/1106/15/0_246199994.shtml.

²⁴ For the SASAC list of its SOEs, see: <http://www.sasac.gov.cn/n1180/n1226/n2425/index.html>.

²⁵ The SASAC list (see footnote above for the link) is linked to the websites the 116 SOEs, which provide information for their overseas subsidiaries.

²⁶ My estimate is based on *Finance Yearbook of China*, "Enterprise Economic Operation" section, in the 2011 and 2008 editions.

So, what is the true vitality of China's SOEs? According to the Unirule Institute of Economics, an independent Chinese think tank, taking the SOE sector as a whole between 2001 and 2009, the government monopolies attained by means of China's SOE protectionism and favouritism were the sole source of the SOE sector's profitability and hence its growing power. More specifically, such monopoly profits and government favouritism may be categorized as arising from the following: virtually free use of land and natural resources; substantially subsidized financing costs; and government subsidies including price controls, tax rebates and direct cash infusion (for both capital investment and operational expenses). According to Unirule's calculations, by taking into account only the unpaid rent for using public land and natural resources, the average real return on equity of China's industrial SOEs as a whole was in the red (-1.47 per cent) for the period 2001-2009, compared to its reported return on equity of 8.2 per cent, which is still below the 12.9 per cent achieved by the non-SOE industrial sector in the same period.²⁷ A recent essay²⁸ by Wang Yong at Hong Kong University of Science and Technology further pointed out that the viability of the SOEs' monopoly in upstream industries lies in the support of the rapid growth of non-SOEs in China's downstream industries, which in turn have long relied on global demand and cheap labour. Such a (state capitalist) vertical structure (i.e., the upstream SOEs and downstream non-SOEs) is not sustainable and, hence, neither are SOE profits. In other words, the problem with China's SOEs goes far beyond the usual sense of technical efficiency associated with Canadian concerns about Crown corporations: it is a problem arising from the state capitalist system itself.²⁹

Table 1 summarizes the principal difference between China's SOE sector and Canadian Crown corporations (CCC). Given the gigantic number of SOEs extending throughout China, this table and the analysis throughout this paper is focused on only the SOEs belonging to the central government and having their main business in the non-financial sectors.³⁰ This specification is also due to data limitations. That is, there is no one-stop shop for official statistics about China's SOEs. For example, in the *China Statistics Yearbook*, the "industrial" sector is the only sector within which the SOEs, along with those non-SOEs having per-firm gross revenue exceeding 5 million yuan, is vaguely categorized with major financial statistics being presented. And "industrial" here includes extraction (mining and oil and gas), manufacturing and public utilities (electricity, gas and water). In the same publication, the other sector for which some indicators for SOEs, along with their non-SOE counterparts, are made available is "construction," but no comparable financial statistics are provided for construction so as to allow a consistent analysis of SOEs across "industrial" and "construction" sectors. Less detailed financial data by industry within the SOE sector, but not compared with the non-SOE sector, are provided in the *Finance Yearbook of China*. (Appendix B provides some details on the official statistics covering the SOEs.) Correspondingly, the Canadian Crown corporations categorized in Table 1 are only those under the authority of the federal government and operating in the non-financial sector of the economy.

²⁷ Refer to Unirule Institute of Economics, "The Nature, Performance, and Reform of the State-owned Enterprises" (April 12, 2011); this study is published in Chinese (with an abstract in English), http://www.usc.cuhk.edu.hk/PaperCollection/webmanager/wkfiles/8067_1_paper.pdf.

²⁸ Wang Yong, "Where is the Way out for China's SOEs," *Caijing Magazine*, April 9, 2012 <http://comments.caijing.com.cn/2012-04-09/111805205.html>.

²⁹ According to Ian Bremmer — in his 2010 book, *The End of the Free Market* (New York: Penguin, 2010), 43 — "state capitalism is a system in which the state dominates markets, primarily for political gain." Also see Gao Ming, "The Development Features of China's State Capitalist," 2012 <http://carnegieendowment.org/files/2003-2012.pdf>. For views against labeling China as a "state capitalist," refer to Pen Gang at <http://theory.people.com.cn/n/2012/0704/c112851-18442991.html>.

³⁰ For a general classification (in Chinese) of the SOEs belonging to the central government, refer to: <http://baike.baidu.com/view/481701.htm>.

TABLE 1: CENTRALLY/FEDERALLY CONTROLLED NON-FINANCIAL SOES OR CROWN CORPORATIONS: DIFFERENCES BETWEEN CHINA AND CANADA

	China's SOEs	Canadian Crown Corporations (CCC)
Business Purpose	Backbone of the national economy.	Instruments of public policy.
Historical Trajectory	The Communists took over China in 1949. The next 30 years saw a tightly central-controlled economy with SOEs emerging as the main form of ownership and with "collective ownership" dominating the rural economy. Since the early 1980s, SOE reform went through three principal stages: enhancing autonomy to improve productivity (pre-1993), preserving the large and strong SOEs while shedding the small unproductive ones (1993-2003), and reaffirming the dominant role of SOEs in the economy by making them bigger and stronger (2003-present).	Since 1922 when the first federal Crown corporation (NRC) was created, ³¹ CCCs have been established sporadically to execute public policy when the government has considered the private sector incapable of adequately satisfying the needs and interests of Canadians. While all CCCs operate under the Financial Administration Act (FAA), Part X, Schedule III, Parts I and III, ³² each CCC was established pursuant to a specific constituent act. ³³
Operational Discipline	Communist party leadership is the ultimate CEO of the SOEs. The legal framework is rudimentary with no meaningful judicial enforcement. Accountability and transparency are only paid lip service.	Legitimacy, accountability and transparency.
Governance System	The accountability structure from the bottom up is: CEO → board of directors → SASAC → the party leadership.	The accountability structure from the bottom up is: CEO → board of directors → responsible ministers → Parliament.
Industrial Coverage	Official specification of goals covers "national security, critical infrastructure and important minerals, important public goods and services and key enterprises in pillar industries and high-tech industries." In reality, SOEs have entered a far broader range of industries (e.g., real estate) simply to chase profits. ³⁴	Mainly transportation, agriculture, culture, communications, postal service and international trade administration and facilitation.
Total Number of Units and their Economic Share	In 2010, there were 26,319 centrally controlled non-financial SOEs and their total value-added (i.e., the sum of gross profit net of the 25-per-cent income tax, total taxes paid and total labour compensation) accounted for nearly 10 per cent of GDP. ³⁵	In 2011, there were about 40 non-financial CCCs reporting to the federal government, ³⁶ and their income accounted for virtually zero per cent of GDP. ³⁷

Sources:

For China's SOE, refer to the website of the State-Owned Assets Supervision and Administration Commission of the State Council (www.sasac.gov.cn), other government websites and the Finance Yearbook of China (2011).

For Canadian Crown corporations, refer to the Treasury Board of Canada Secretariat's Report to Parliament, "Review of the Governance Framework for Canada's Crown Corporations," 2005 (<http://www.tbs-sct.gc.ca/report/rev-exa/gfcc-cgse-eng.pdf>), and the websites of Finance Canada and Statistics Canada.

³¹ Refer to the Treasury Board of Canada Secretariat's Report to Parliament, "Review of the Governance Framework for Canada's Crown Corporations," 2005, page 9.

³² See <http://laws-lois.justice.gc.ca/eng/acts/F-11/index.html> for the Financial Administration Act.

³³ See <http://www.tbs-sct.gc.ca/gov-gouv/legislation/ca-lc-eng.asp> for these acts.

³⁴ According to the Unirule study (page 97), in 2009, among the 137 SOEs under SASAC, 16 had major business in real estate and over 80 had subsidiaries involved in real estate.

³⁵ This is the author's estimate based on data published in *Finance Yearbook of China* 2011, pages 491 and 492.

³⁶ The total number of CCCs, including financial entities, is 49. For the complete list of CCCs, see <http://www.tbs-sct.gc.ca/gov-gouv/rc-cr/links-liens-eng.asp#ftn1>.

³⁷ Based on Statistics Canada's Cansim Tables 3850030 and 3780121.

As shown in the table, compared to Canadian Crown corporations, China's SOEs are totally different entities. They are not simply a policy instrument, but a real economic power of the government based on its belief in an evolving degree of central planning; they are openly aimed at creating a government monopoly or dominance in those industries with so-called strategic importance; they are allowed to enter any industries through their subsidiaries to chase profits and obtain a competitive edge over private rivals; and they have grown much faster and more easily in recent years with full government support. For example, while China's share in the global economy grew from eight per cent in 2008 to 10 per cent in 2011, the number of China's SOEs in the Fortune 500 more than doubled from 26 in 2008 to 66 in 2012, with their share of total assets growing from five per cent to 15 per cent, and their share of total revenue from four per cent to over 10 per cent.³⁸

Today, the official slogan in China for its SOE sector is that of making it bigger, stronger and superior ("zuoda, zuoqiang, zuoyou") so as to "form an optimal structure (of the SOE sector), strengthen national innovative capacity and international competitiveness, and help develop other forms of capital alongside it."³⁹ According to Hu An-gang, a Chinese expert on China's so-called distinctiveness and an advocator of advancing SOEs, "bigness" is measured by gross revenue and total assets, "strength" by profitability and "superiority" by innovative capacity and power of resource allocation, which is mainly gauged by the overseas asset size of an SOE.⁴⁰ Given China's substantial and growing share in the world economy, the implication of a bigger, stronger and superior SOE sector in China's economy as defined above is obviously well beyond the usual efficiency concern associated with the creation of Canadian Crown corporations.

In the following two sections, by looking at CNOOC and the other top 10 centrally controlled non-financial SOEs in the Fortune 500, I investigate how China's SOEs were able to have grown "bigger, stronger and superior" over the last decade or so.

THE CNOOC STORY⁴¹

CNOOC is one of the 116 centrally controlled SOEs on the SASAC list. As mentioned above, all of these 116 SOEs are conglomerates, or more accurately holding companies, each having numerous subsidiaries. Therefore, the official names of these SOEs mostly include either the word "group" (jituan) or "general company" (zonggongsi) to differentiate them from their subsidiaries or any other single-entity companies. For example, the official name of CNOOC

³⁸ Hu An-Gang, "SOEs are the Leading Sheep in China's Economic Upsurge", *Red Flag*, No. 19, October 11, 2012, http://www.qstheory.cn/hqwg/2012/201219/201210/t20121011_185632.htm. Note that Red Flag is a semi-monthly journal associated with the Central Committee of the Chinese Communist Party.

³⁹ Liang Jun, "System of Super-sized State Enterprise: A New Way of Thinking on Supervising State Assets," *Southern Daily*, December 27, 2012, available at <http://www.sasac.gov.cn/n1180/n1271/n20515/n2697175/15042645.html>.

⁴⁰ Refer to interview with Hu An-Gang, "The Ten Golden Years: A Great Leap of China's SOEs' Competitiveness," in *Economic Daily* (October 8, 2010), available at <http://www.sasac.gov.cn/n1180/n1271/n20515/n2697175/14864970.html>.

⁴¹ This section, unless otherwise noted, is mainly based on the following sources: the websites of CNOOC www.cnooc.com.cn and CNOOC Ltd. www.cnooc.com and *The Story of Growth: CNOOC Case Study*, The Petroleum Industry Press (chengzhang de gushi: zhongguo haiyou qiye anli, shiyou gongye chubanshe), January 2004.

as it appears on the SASAC list in Chinese is CNOOC General Corporation (zhonghaiyou zonggongsi). All of its six subsidiaries, each having further subsidiaries, consist of a core business ranging from offshore drilling and offshore engineering construction to petrochemical manufacturing and financial services. Among them, four are listed on stock markets, including CNOOC Ltd., the very company that took over Nexen. CNOOC Ltd. constitutes the core business of CNOOC — offshore oil investment and production (and its oil businesses can be onshore if they are located on foreign soil)⁴² — and is the largest among CNOOC’s six subsidiaries.

In this section, I tell the CNOOC story focusing on CNOOC *Ltd.* in relation to its parent CNOOC General Corporation (hereafter CNOOC). My account aims to sort out CNOOC’s distinctiveness as a Chinese SOE compared to our usual perception of what an SOE is in Canada, namely Canadian Crown corporations (CCC).

CNOOC was established in February 1982 by the central government, with a direct capital appropriation of 95 billion yuan (or about US\$48 billion based on the 1982 exchange rate). It was given the mandate of the newly promulgated “Regulations of the People’s Republic of China Concerning Exploitation of Offshore Petroleum Resources in Cooperation with Overseas Partners” (hereafter: the “offshore drilling regulations”).⁴³ In fact, the very first top executives of CNOOC were the drafters of the offshore drilling regulations. Therefore, it is fair to say that CNOOC and China’s offshore drilling regulations were twins whose birth marked the true beginning of China’s offshore oil industry.⁴⁴ CNOOC was intended as a commercial arm of the government in speedily growing its offshore drilling industry within Chinese territory through joint ventures with foreigners. As stated in the “offshore drilling regulations,” clause six, CNOOC is a state company with full authority and exclusive rights in charge of China’s offshore drilling business. The first CEO of CNOOC was the deputy minister of the Ministry of Petroleum Industry (MPI). After MPI was replaced by CNPC in 1988 (see the previous section), CNOOC was reassigned to the Energy Industry Ministry until 1999 when CNOOC, along with its big brothers CNPC and Sinopec, were placed directly under the State Council and given ministerial rank.

CNOOC’s initial business plan was to open up China’s offshore drilling to foreign companies for exploration and development using their advanced technology. Several regional subsidiaries were established according to the geographic division of offshore fields, all of which contained some internalized social services (e.g., schools and hospitals) according to the standard logistic structure of a pre-reform SOE in China. Still, as a newcomer, CNOOC did not have the financial burden of the aged large SOEs that were associated with having a massive unproductive labour force inherited from the pre-reform era. In the meantime, because of its original mandate and business nature (i.e., initiating and running cross-border joint ventures in

⁴² Within China’s territory, oil investment and production are exclusively the business of the three SOEs including CNPC, Sinopec and CNOOC. Among them, CNOOC has the exclusive right for offshore drilling while the other two divide onshore drilling. The fourth company that entered onshore oil production in recent years is Sinochem, which is one of the top 10 SOEs to be discussed in the next section.

⁴³ This document is available at http://www.chinaacc.com/new/63_64_201110/11ch95562103.shtml.

⁴⁴ Based on *The Story of Growth* (page 3), China’s offshore oil and gas exploration started in the 1950s but drilling did not start until 1970 when the country imported basic drilling equipment. By 1978, its annual offshore production of oil was below 90,000 tonnes.

offshore drilling that require intensive use of capital and modern technology), CNOOC was able, at a much earlier stage than most pre-existing SOEs, to observe how its foreign partners operated and to recognize the need to compete on the global scene. Therefore, “establishing a modern enterprise system” was a well-accepted vision of CNOOC’s leadership even in the early 1990s.

By 1998, CNOOC was actively preparing to publicly list its core business — offshore drilling — on both the Hong Kong and New York stock exchanges. The goal of its initial public offering (IPO) was to raise funds for rapid business expansion both vertically and horizontally, the need for which, in turn, was intensified by the following two mutually reinforcing factors.

First, the prospect of entry into the WTO placed tremendous pressure on CNOOC’s ambitious leadership, which foresaw the capacity gap between CNOOC and its foreign rivals in the extremely competitive global oil industry. To CNOOC’s leadership, a public listing in the overseas market was the only way to shape the company up to make it a performance-oriented enterprise, meeting international standards, rather than one based on outdated central-planning concepts.

Second, CNOOC’s limited business scale and scope, compared not only with the international giant oil companies but also with its two domestic big brothers, CNPC and Sinopec, was seen as a bottleneck. By 1999, CNOOC was the smallest of the world’s top 50 oil companies, with negligible natural gas reserves and hardly any downstream business to help even out the risk of oil price fluctuations.⁴⁵ The latter was even more detrimental since CNOOC, by government designation, has to sell all its domestic oil production to CNPC and Sinopec at the price set by the government, which fluctuates along with international prices but with an arbitrary time lag set by the government.

To ensure a successful IPO, in August 1999 CNOOC established CNOOC Ltd. in Hong Kong. It transferred all of its offshore drilling business and most valuable assets, along with its most productive labour force, into CNOOC Ltd. While the parent CNOOC retained the burden of supporting 7,000 largely under-productive employees, it transferred all its debt to CNOOC Ltd., which resulted in an initial 66-per-cent debt-to-asset ratio for CNOOC Ltd. However, largely because CNOOC Ltd. employed only those who were directly involved in offshore drilling along with a small but competent team of financial and management staff (1,500 in total), CNOOC Ltd. became the most “slender” and productive SOE in the eyes of Chinese investors.

More importantly, the listing of CNOOC Ltd. in 2001 on both the Hong Kong and New York stock exchanges did not change the prestigious status associated with its parent, CNOOC. The privileges the government granted to CNOOC have been well preserved for CNOOC Ltd. and helped substantiate the value of CNOOC Ltd. The most valuable of these privileges is the exclusive right to obtain a 51-per-cent controlling share of any joint venture with foreign partners for offshore drilling within Chinese territory. Note that, according to the offshore drilling regulations, in any such joint venture, the foreign partner has to bear all the exploration cost and risk and take full operational responsibility for developing the finds in the production fields until CNOOC takes control of production, and then the foreign partner may recoup its

⁴⁵ That is, rising oil prices increase the profit of oil production but burden downstream manufacturing where oil products are used as inputs, and vice versa. Therefore, an oil company owning both upstream and downstream oil businesses copes better with oil price fluctuations than those carrying out only upstream or downstream business in oil-oriented industries.

investment and operational cost, based on the contract, from oil produced.⁴⁶ These kinds of privileges associated with being a central-government-SOE helped lift CNOOC's market power, and the public listing helped CNOOC and CNOOC Ltd. obtain much needed investment funds to grow their businesses rapidly.

Today, CNOOC has 98,750 employees (versus 8,500 in 1999) with total assets of over 700 billion yuan (versus 73 billion yuan in 2001); six subsidiaries covering vertically integrated businesses ranging from drilling to financial services in a corporate empire (versus a single line of offshore drilling business in 1982); and geographic coverage extending over all five continents (versus China's originally undeveloped offshore fields). As a result, CNOOC's daily oil production reached 909,000 equivalent barrels in 2011, compared to barely 660,000 barrels from offshore drilling in China for the entire year prior to the birth of CNOOC. While CNOOC is the smallest and youngest of the only three oil companies in China, CNOOC Ltd., which accounts for only half of CNOOC's size measured by asset value, is number 13 on the Platts Top 250 Global Energy Company Rankings, following its big brothers PetroChina Ltd (number 9) and Sinopec Ltd (number 12).⁴⁷

Table 2 provides some details of CNOOC's business scope and corporate structure.⁴⁸ It is noteworthy that the total number of SOEs within this empire is more than 50, while on the SASAC list, only one company, CNOOC, is counted.⁴⁹

TABLE 2: CNOOC: BUSINESS/CORPORATION STRUCTURE THROUGH ITS SUBSIDIARIES

Company Name	Public listing	CNOOC share	Assets In ¥billion	Number of subsidiaries
CNOOC, under which:	None	71.4%	718 (2011)	6
CNOOC Ltd.	HK, NY	64.43%	314 (2011)	6
China Offshore Oil Engineering Co. Ltd.	SH/2002	56.67%	19 (2011)	7
China Blue Chemical Ltd.	HK/2006	59.41%	9 (2006)	9
CNOOC Energy Technology & Services Ltd.	None	100%	17 (2008)	19
China Oilfield Services Ltd.	HK, SH	99.99%	65 (2011)	13
Zhonghai Trust Co., Ltd.	None	95%	3 (2011)	None

Sources: Individual company websites.

⁴⁶ Refer to clause eight in the offshore drilling regulations, http://www.chinaacc.com/new/63_64_201110/11ch95562103.shtml.

⁴⁷ Refer to: <http://top250.platts.com/Top250Rankings>.

⁴⁸ For a chronology of CNOOC, see: http://en.cnooc.com.cn/data/html/english/channel_114.html.

⁴⁹ It is unclear as to how the number of SOEs is counted for the official statistics publications such as the *China Statistics Yearbook* and the *Finance Yearbook of China*.

Based on the above account, CNOOC's distinctiveness in comparison with our common perception of an SOE in Canada may be categorized as follows:

- First, unlike all Canadian Crown corporations, whose business purpose is to address market failure or provide a public service, CNOOC was established to serve a Chinese government industry policy aimed at leapfrogging global economic powers. For example, as expressed by a former CEO of CNOOC, as a state-controlled giant company CNOOC should firmly implement the government strategy of “going out” to control foreign resources for the purpose of obtaining national energy security.⁵⁰ The 30-year history of CNOOC, including 20 years with CNOOC Ltd., prove that the company has fulfilled its mandate as set out by China's government.
- Second, unlike all Canadian Crown corporations, which are involved in only a single line of business to target market failures (e.g., VIA Rail) or to provide a public service (e.g., the Canadian Broadcasting Corp), CNOOC is a conglomerate involved in a broad range of business and both chases profits through its monopoly power and serves government industry policy, including the goal of ambitious global expansion.
- Third, unlike CCCs whose funding appropriation has to follow strict parliamentary approval controls (e.g., being subject to the Financial Administration Act), the initial capital infusion for CNOOC was a result of the execution of the will of the executive branch controlled by the party leadership, which can direct such funding in the blink of an eye. Such unchallengeable capital power has far-reaching implications for global market structure and free-trade principles. For example: does the free-trade principle work if state capitalists are allowed unrestricted entry into the free market abroad, while giving non-SOE firms no free entry to numerous domestic business sectors?
- Fourth, unlike CCCs that are regularly subject to parliamentary review aimed at providing good governance, including the principle of attaining competitive neutrality, CNOOC played a key role in government control of China's domestic oil industry, in which neither transparency nor accountability has been a concern for the government or CNOOC. For example, under government command, CNOOC has to sell all its crude oil only to Sinopec and CNPC at the price set by the government, and Sinopec and CNPC are the only two companies that can import and sell oil in China. Through this “supply-chain,” these three petro-oligopolies tightly control the domestic oil market on behalf of the government in the name of “energy security” and at the cost of consumers.⁵¹
- And finally, but not of least importance, as a normal practice in China, the leadership of both CNOOC and CNOOC Ltd. consists of direct government appointees. In fact, the two companies always share a majority of board members (five of the six in 2011, for example) including the chairman of the board. Note that the chairman of the board of both companies is also always the party chief for the company, which is the most powerful position in any Chinese government entity including all SOEs. Such a chain of command aims to ensure

⁵⁰ Refer to *The Story of Growth*, CNOOC Case Study (2004), page 89.

⁵¹ Anecdotes on various Chinese websites indicate that, in addition to the generally poor quality of gasoline products compared to international standards, the price of gasoline in China has risen more than dropped compared to crude price fluctuations on the international market, and its downward adjustment, during periods of falling crude oil prices, is often insufficient to match that in Hong Kong. For one such anecdote, refer to: <http://star.news.sohu.com/s2012/youjia/index.shtml>.

the absolute protection of government interest in the SOEs. There is no ear for any concerns of minority shareholders, although their profit goals might well be taken care of by the controlling party — the government — whose ambition is to grow China’s economic power through enriching state-owned capital.

In summary, the CNOOC story indicates that China’s SOEs, specifically those controlled by the central government, are very different from Canadian Crown corporations. Unlike CCCs, China’s SOEs are for-profit conglomerates that also serve as an instrument of government industry policy through their controlling share in so-called “strategically critical” industries. Their rapid global expansion has gone far beyond the imagination of that of any Canadian Crown corporation. The next section combs through the top 10 centrally controlled non-financial companies (including CNOOC) in the global ranking of Fortune 500 firms, to ascertain their similarities with CNOOC and their distinctiveness from CCCs.

CHINA’S TOP 10 CENTRALLY CONTROLLED NON-FINANCIAL SOES⁵²

As mentioned earlier, the pace at which China’s SOEs grew over the past several years, as measured by their respective global shares, was much faster than China’s GDP growth rate. All of China’s top 10 centrally controlled non-financial SOEs including CNOOC are among the top 169 firms of the Fortune Global 500, as measured by their gross revenue. They collectively climbed in their Fortune ranking by more than 200 spots (which can be seen by comparing the rankings for 2012 and 2011 as shown in Table 3). These top 10 centrally controlled non-financial SOEs are Sinopec Group, China National Petroleum (CNPC), State Grid, China Mobile, China State Construction Engineering (CSCEC), CNOOC, China Railway Construction (CRC), China Railway Group (CRG), Sinochem Group and China Minmetals. Based on their core business activities, these top 10 SOEs can be classified into six industrial sectors: oil and gas (Sinopec, CNPC and CNOOC), electricity distribution (State Grid), mobile network operations (China Mobile), construction (CSCEC, CRC and CRG), chemicals (Sinochem) and resource trade (China Minmetals).

Note that within the ranks of these top 10 centrally controlled non-financial SOEs in the Fortune Global 500 (i.e., from No. 5 to No. 169), there are nine other Chinese SOEs: five centrally controlled financial SOEs (including four banks and one life insurance company) and four non-financial SOEs belonging to local governments. The total number of Chinese firms (including those in Hong Kong) in the Fortune Global 500 for 2012 is 73, of which 66 are SOEs.

As Table 3 shows, among these centrally controlled top 10 non-financial SOEs (hereafter: top 10), three have occupied the top five to seven positions of the Fortune 500 since 2011, five climbed in their Fortune ranking by six to 61 spots from 2011 to 2012, and only two have dropped in their ranking by six and 17 spots respectively.

⁵² Unless otherwise noted, this section is based on the websites of the top 10 non-financial SOEs presented.

TABLE 3: CHINA'S TOP 10 CENTRALLY CONTROLLED NON-FINANCIAL SOES IN THE FORTUNE GLOBAL 500: A GLANCE

Company Name (State ownership*)	Fortune 500 ranking 2012/2011	Revenue (\$M)	Assets (\$M)	Employees (000)
Sinopec Group (>93%)	5/5	375,214	277,297	1,022
CNPC (>86%)	6/6	352,338	481,074	1,668
State Grid (100%)	7/7	259,142	351,381	1,583
China Mobile Communications (>74%)	81/87	87,544	184,821	217
China State Construction Engineering (>62%)	100/147	76,024	82,362	188
CNOOC (>64%)	101/162	75,514	114,162	99
China Railway Construction (>61%)	111/105	71,443	68,963	292
China Railway Group (>56%)	112/95	71,263	74,473	295
Sinochem (>63%)	113/168	70,990	41,021	47
China Minmetals (100%)	169/229	54,509	36,637	115

Source: <http://money.cnn.com/magazines/fortune/global500/2012/countries/China.html>.

* Based on individual 2011 financial reports.

All the top 10 SOEs are conglomerates with numerous subsidiaries covering a great variety of business activities, and they are all spread out over many geographic locations. The rest of this section examines these top 10 SOEs in terms of their histories and business coverage, their business goals in relation to their government mandates, their business efficiency as measured by key financial ratios, and their leadership formation under Communist party (hereafter: party) control.

Development Paths

As described earlier, CNOOC was established almost from scratch along with the promulgation of China's offshore drilling regulations in 1982. It was initially under the authority of the Ministry of Petroleum Industry (MPI) and then assigned to the Ministry of Energy in 1988 when MPI was transformed into Sinopec. In 1998, CNOOC, along with CNPC and Sinopec, was reorganized into a conglomerate with its business expanding from offshore drilling to downstream petroleum-product manufacturing, and from domestic to global oil production.

Before their reorganizations in 1998, CNPC (China National Petroleum Corporation) and Sinopec took different paths of development from that of CNOOC. CNPC was established in 1988 and, on the basis of MPI, was in charge of mainly oil and gas upstream operations, while Sinopec was established in 1983 by combining all the existing assets and SOEs involved in petrochemical manufacturing across three ministries and 20 provincial jurisdictions.⁵³ The 1998 reorganization made all three companies conglomerates by broadening their business scope to cover both upstream and downstream petroleum-oriented production and expanding their geographic footprint globally. In the early 2000s, all three oil companies spun off their core businesses as subsidiaries in the form of limited-liability companies and listed them on stock exchanges. The resulting offspring are CNOOC Ltd., Sinopec Ltd. (Sinopec) and PetroChina (CNPC), which are all majority-controlled by their parent companies.

⁵³ Refer to Chen Jin-hua, "Sinopec's Thirty Years," February 18, 2013, <http://energy.people.com.cn/n/2013/0218/c71661-20512391.html>.

Among the centrally controlled super-size SOEs, Sinopec, CNPC and CNOOC may represent three different types of enterprise development: (1) like Sinopec, some of them were an outcome of merging pre-existing assets and SOEs in the same line of business, (2) like CNPC, some of them were transformed from a former government body, and (3) like CNOOC, some of them were created from scratch to fill in an industrial blank spot (e.g., offshore drilling in the case of CNOOC). Others might take some combination of these three different development paths but with unique trajectories. For example, China Mobile Ltd. was created anew (like CNOOC), registered in Hong Kong in 1997 and started acquiring existing provincial mobile companies in China. Its parent company, China Mobile Communication, was established later, in 2000, purely as a controlling entity, while China Mobile Ltd. continued its acquisition activities until 2004 when it owned all provincial mobile network operators. Table 4 provides some further details about these top 10 SOEs in terms of their development path, business scope and number of subsidiaries.

TABLE 4: CHINA'S TOP 10 CENTRAL NON-FINANCIAL SOES: DEVELOPMENT PATH AND BUSINESS SCOPE

Company Name (initial development path)	Establishing Year	Core subsidiary (IPO year)	Business Scope*	Number of subsidiaries
Sinopec Group (combining existing assets)	1983	Sinopec Ltd. (2000)	O,C,T,M,F,S	Over 90
CNPC (transformed from a former ministry)	1988	PetroChina (2000)	O,C,E,T,M,F,R	About 120
State Grid (like Sinopec)	2002	N/A	P,C,F	50-60
China Mobile (like a CNOOC-Sinopec mix)	1997/2000	CM Ltd. (1997)	U	Over 30
CSCEC (like CNPC)	1982	CSCEC Ltd. (2009)	C,R,E,M	Over 30
CNOOC (started from scratch)	1982	CNOOC Ltd. (2001)	O,M	99
China Railway Construction (like CNPC)	1984	CRCC Ltd. (2008)	C,M,T,N,F,R	Over 30
China Railway Group (like CNPC)	1989	CRG Ltd. (2007)	C,E,M,T,N,F,R	46
Sinochem (like CNPC)	2003	Sinochem HK (1989)	M,O,R,F,A	Over 100
China Minmetals (like CNPC without a name change)	1950	Minmetals Ltd (2001)	N,M,F,R,T	About 90

Sources: Individual company websites.

* A=agricultural service, C=construction, E=engineering service, F=financial service, M=manufacturing, N=natural resources, O=oil and gas production, P=public utility, R=real estate, S=transportation and storage, T=trade, U=communication.

The above information shows that almost all the top 10 SOEs are relatively young in terms of their current corporate structures. They grew fast by using unrivaled amounts of resources allocated by the government to reach the national goal of growth. As pointed out recently by the first CEO of Sinopec, Chen Jin-hua, they took merely a generation to accomplish what some major western multinational companies only achieved in about a century.⁵⁴ Speed of growth has been an obvious strength of these top SOEs. But is such unusual speed of growth, supported by unusual means, sustainable?

⁵⁴ Refer to Chen Jin-hua, "Sinopec's Thirty Years." 8 February 2013, <http://energy.people.com.cn/n/2013/0218/c71661-20512391.html>

Government Mandates and Business Goals

Like CNOOC, all the centrally controlled SOEs are mainly outcomes of specific government mandates and planning. Such government mandates and planning determine the business goals of these SOEs. Table 5 summarizes the initial government mandate and/or business goals for each of these top 10 SOEs.

TABLE 5: CHINA'S TOP 10 CENTRAL NON-FINANCIAL SOES: THE GOVERNMENT MANDATES*

Government Mandate and/or Business Goal	
Sinopec	As an effective means of increasing government revenue to fund national economic growth. Increase petrochemical manufacturing products so as to both lift citizens' living standards and increase government revenue and capital. ⁵⁵
CNPC	As China's chief player in oil and gas exploration and production, both domestically (onshore) and abroad, to safeguard China's energy security. ⁵⁶
State Grid	A key central SOE with an essential mission of safeguarding a secure, economical, clean and sustainable power supply.
China Mobile	As the leading mobile services provider in China, the company boasts the world's largest mobile network with the largest mobile customer base; it aims to become a full service provider.
CNOOC	As a state company (guojia gongsi), with exclusive rights, in charge of China's offshore drilling through joint ventures with foreign oil companies and implementing the government strategy of "going out" to control foreign resources for obtaining national energy security. ⁵⁷
China State Construction Engineering	Engaging in "competitive construction and real estate business" as its core business, while taking political, economic and social responsibility as a central SOE, and aiming to become the most competitive global construction and engineering group.
China Railway Construction	Aiming to become the leader of China's construction industry and the most competitive construction enterprise globally.
China Railway Group	Protecting shareholders' interests, enhancing social welfare, strengthening business competitiveness, expanding globally to become a sector leader and the most competitive and influential global construction group.
Sinochem	Creating value for shareholders, fulfilling social responsibilities and becoming a globally respected company.
China Minmetals	A full-fledged mineral trading company that also engages in other businesses to increase value-added, and strives to become a global provider of quality services.

* Based on my reading of official documents and relevant web statements of individual SOEs, unless otherwise noted.⁵⁸

⁵⁵ Chen Jin-hua, "Sinopec's Thirty Years."

⁵⁶ Refer to Peter Nolan, "Institutional Reform of China's Petroleum and Natural Gas Industry," in *Strategy and Management* (a Chinese magazine), No.1, 2000. Available at <http://www.usc.cuhk.edu.hk/PaperCollection/Details.aspx?id=170>

⁵⁷ Refer to the Offshore Drilling Regulations, http://www.chinaacc.com/new/63_64_201110/11ch95562103.shtml, and *The Story of Growth, CNOOC Case Study* (2004), page 89.

⁵⁸ Such web statements often appear under the heading of "company overview" (gongshi jianjie), or "firm culture" (qiye wenhua), or "social responsibility" (shehui zeren), or any combination of these three headings.

As the table shows, every one of these top 10 SOEs aims to be an industrial leader both domestically and globally, even if they are in the same industry (e.g., China Railway Construction and China Railway Group), and to generate financial gains for the government, their controlling shareholder.

Central planning might be a natural choice for the Chinese government given its ruling history, which has never been encumbered by beliefs in the value of private property and free markets. But mandating that its SOEs take the lead in ensuring the national economy leapfrogs competing nations *at any cost* can be a dangerous choice. For example, the recent unprecedented smog in Beijing revealed many problems related to not only the operations of CNPC and Sinopec, but also with China's strategy for economic growth. These problems include, but are not limited to, filthy oil refineries and lax regulation in environmental protection (in relation to gasoline standards).⁵⁹ They also exposed the conflict between the desired speed of growth of some SOEs in the petroleum and auto industries and sustainable development of the economy as a whole. Obviously, the mandate that is fully geared to economic growth can only be rebalanced by the mandate for sound development. Signs of such a rebalancing strategy have emerged lately, as indicated in the latest government report delivered by China's former premier Wen Jiabao.⁶⁰

Financial Performance

Efficiency has been a general concern with respect to government-owned companies around the world. This concern is also widespread in China. As mentioned above, a widely quoted study of SOEs by the Unirule Institute pointed out that, had China's SOEs as a whole paid rent for using public land and natural resources, their average real return on equity would have been below zero for the period 2001-2009, instead of the officially reported rate of return of 8.2 per cent.⁶¹

Table 6 provides a glance at the top 10 SOEs' profitability, as measured by net profit as a percentage of gross revenue, total assets and total equity, and their financing structure, as measured by their debt-to-asset ratios. The table also provides the average of these ratios for the global top 10 non-Chinese, non-SOE and non-financial companies on the list of Fortune Global 500 companies. Note that, to provide comparability, this list of the top 10 foreign companies has been adjusted to one with an industrial mix matching that of the industrial mix of China's top 10 SOEs.⁶²

⁵⁹ Refer to both *Radio Free Asia* (<http://www.rfa.org/mandarin/yataibaodao/huanjing/wu-01302013151134.html>) and *The Economist*, "Oil and China: Smog and mirrors," February 16, 2013.

⁶⁰ This report is available at <http://wenku.baidu.com/view/61c668f0fab069dc502201b7.html>.

⁶¹ See footnote 27.

⁶² For example, the original foreign top 10 list includes Wal-Mart, Toyota and Volkswagen but no construction and mobile network operating firms similar to those that appear on the China's list. This original list for the foreign top 10 companies also includes BP — which has been coping in recent years with its unprecedented offshore oil-spill disaster. I therefore replaced these four foreign firms with the three largest foreign construction firms (i.e., Vinci, ACS and Bouygues) as listed in *The Economist* (October 27, 2012) and Vodafone, the world second-largest mobile network operator after China Mobile. All these four replacements are also on the list of Fortune 500 companies. I also chose Total, which is smaller than ConocoPhillips, on the original list of the top 10 foreign companies, to match Sinochem, China's second-largest chemical company, after Sinopec (which is also involved in oil production in recent years), since Total (rather than ConocoPhillips) is also among the world's top 10 chemical companies.

As the table shows, the average return on equity for the top 10 SOEs is 10.1 per cent for 2009-2011, which is slightly higher than the aforementioned 8.2 per cent for the overall SOE sector over the period 2001-2009. Among the top 10 SOEs, CNOOC is the most profitable with a 15-per-cent rate of return to equity while State Grid, the national electricity distributor fully owned by the government, merely managed a return on equity below three per cent. Within these two extremes are the other top 10 SOEs, with CNPC close to the low end and China Minmetals close to the high end.

TABLE 6: CHINA'S TOP 10 CENTRAL NON-FINANCIAL SOES: KEY FINANCIAL RATIOS, 2009-2011*

Company Name (core business)	Net Profit as Percentage of:			Debt/ Asset Ratio
	Revenue	Assets	Equity	
Sinopec Group (oil and gas)	2.9	3.3	9.8	66.5
CNPC (oil and gas)	5.6	3.4	6.4	46.6
State Grid (electricity distributor)	1.3	1.0	2.6	63.9
China Mobile (mobile network operator)	14.2	6.9	11.9	41.8
China State Construction Engineering (construction)	2.2	1.9	11.3	82.4
CNOOC (oil and gas)	12.5	6.7	14.9	54.9
China Railway Construction (construction)	1.2	1.4	9.2	85.3
China Railway Group (construction)	1.8	1.8	10.4	82.6
Sinochem (chemical)	1.9	2.7	11.1	75.8
China Minmetals (resource trader)	1.2	1.8	13.5	86.7
Average of China's Top 10 non-financial SOEs	4.5	3.1	10.1	68.7
<i>Average of top 10 non-Chinese/non-SOE/non-financial companies on Fortune Global 500**, adjusted to match China's Top 10 Industrial Mix, by sector:</i>	7.7	6.5	19.2	64.4
Oil and gas	8.8	11.4	22.3	48.8
Electricity distributor	14.7	4.3	22.0	80.5
Mobile network operator	15.0	5.0	9.0	44.9
Construction	3.9	2.9	20.2	82.6
Chemicals	7.4	8.0	19.3	58.5
Resource trader	2.2	4.7	13.8	66.0

* Adapted from or estimated based on the individual company sheets linked to the list of Fortune Global 500 firms for the years 2010-2012 on <http://money.cnn.com/magazines/fortune/global500/>.

** Including Royal Dutch Shell, Exxon Mobile, Chevron, Total, Glencore International, Vodafone, Vinci, ACS, Bouygues, and National Grid.

On the global stage, average profitability (as measured by all of the three profit ratios in relation to gross revenue, total asset and total equity) is significantly lower for China's top 10 SOEs compared to their foreign non-SOE counterparts, while their debt-to-asset ratios are slightly higher than those of their foreign non-SOE counterparts. At the sectoral level, only China Mobile, CNOOC and, to a lesser degree, China Minmetals display a close match with the profitability of their foreign non-SOE counterparts. All of the other seven of the top 10 SOEs appear to be much less profitable compared to their foreign non-SOE counterparts.

The relatively low financial efficiency of China's SOEs, in isolation, does not concern us much since we are not among their shareholders. The real question arising from such low financial efficiency is this: why are China's SOEs so powerful in their global expansion if they do not

perform as well as their foreign non-SOE peers? A valid answer to this question will require investigating issues associated with China's SOEs that extend far beyond that of their economic efficiency.⁶³

Party-appointed Top Executives

Communist party control in China is a visible hand touching every corner of society, and the central SOEs, mainly through party appointees, are among the most tightly controlled areas. According to James McGregor, the Communist party's central organization department appoints the three top executives of the most important of the central SOEs. "In most cases, this includes the party secretary, chairman of the board, and the CEO." Moreover, the top executives of central SOEs are often shuffled around at the party's will. And the party is also "increasingly inclined to move SOE bosses into top government posts."⁶⁴

The top 10 SOEs in my study are all among these most important central SOEs. My online research shows that their top executives have indeed been directly appointed and often shuffled around and promoted by the party's central organization department.

For example, among the past five CEOs of CNOOC, the first was the deputy minister of the Ministry of Petroleum Industry before heading CNOOC, the third became a provincial governor in 2003 and the fifth became the CEO and party secretary of Sinopec in 2011, while the current CNOOC chairman of the board and party secretary was from CNPC, and was promoted to be one of the 205 members of the Central Committee of the Communist Party in 2012.⁶⁵

Similarly, among the other nine top executives of the top 10 SOEs, there is a former deputy provincial governor (CNPC),⁶⁶ a former CEO of CNOOC (Sinopec), a former deputy minister of the central government (China Mobile), a former Chinese economic and commercial counsel in Spain (China Minmetals), and a former CEO of another major central SOE (Sinochem). The other four top executives were promoted internally. And all these top executives are the party secretaries in the company.

Such party control of the top executives of central SOEs has ensured that those who are ambitious in climbing the government and party ladders must obey party orders more than ensuring the economic efficiency of the SOEs under their watch.⁶⁷ As presented earlier, the party goal over the past 10 years and at present is that of making China's SOEs "bigger, stronger and more superior" so as to expand globally more rapidly.

⁶³ For example, according to Qin Hui, a Chinese scholar in economic thought, "besides the traditional competitiveness associated with low wage and low welfare," China's unmatched global competitiveness is rooted in "low human rights" that provided a foundation for the government to "artificially suppress the prices of labour, land, financial funding and non-renewable resources" available to SOEs. Refer to Qin Hui, "Who has the upper hand in China: the Left Wing or the Right?" A speech at an international symposium on "China: Problems, Prospects and Choices," September 15, 2006, <http://aisixiang.com/data/detail.php?id=11061>.

⁶⁴ James McGregor, *No Ancient Wisdom, No Followers: The Challenges of Chinese Authoritarian Capitalism* (2012), 72.

⁶⁵ These former and current top executives of CNOOC are Qin Wencai, Wei Liucheng, Fu Chengyu and Wang Yilin.

⁶⁶ This is Jiang Jie-min, who was appointed to head SASAC in March 2013.

⁶⁷ For an example of how two top Chinese bankers fared in their official careers by, respectively, pursuing market efficiency and by obeying party orders, refer to Lingling Wei and Bob Davis, "For a Top Chinese Banker, Profits Hinder Political Rise," *The Wall Street Journal*, February 18, 2013.

In summary, among China's 114,000 non-financial SOEs, over 26,000 are controlled by the central government; this paper covers only the 10 most powerful of the latter. Based on 2010 financial data, of the overall non-financial SOE sector in China, the top 10 SOEs covered in my paper accounted for 25 per cent of the gross revenue, 15 per cent of the total assets and 15 per cent of the net profits.⁶⁸ This rough comparison shows that a few of the most important central SOEs are truly the economic champions in the Chinese government's "absolute control of seven industries including defense, power generation and distribution, petroleum and petrochemicals, communications, coal, airlines, and water transportation and strong control of equipment manufacturing, autos, electronic communications, construction, steel, non-ferrous metal, chemical, geologic survey and design, and science and technology."⁶⁹ It is therefore only natural that policy makers outside of China, including our own Canadian ones, are vigilant in scrutinizing controlling acquisitions of their "strategically important" firms by any Chinese SOEs; no one wants such an acquisition to enhance the economic controlling power of the Chinese government.

CHINA'S SOES: WHAT DO WE KNOW, AND WHAT SHOULD WE DO?

This study shows that Chinese SOEs are the backbone of their national economy. They were initially a child of the marriage of communist ideology, which is against private property rights, and Soviet-style central planning, which is against the operation of the free market. Around the period that China was entering into the WTO (from the late 1990s until 2003), there were high hopes that Chinese SOEs might be further reformed and integrated into the free market and join the global economy as rule-abiding citizens. Instead, they became the strong arm of the Chinese government in controlling the domestic economic structure (as defined by the ownership distribution across industries) and expanding its global economic power ruthlessly. Although the Chinese government may not be intentionally harming any of its economic partners and/or rivals through its SOEs, the government's desire to race against time at any cost prompted its SOEs into some wishful thinking and much bad behaviour.⁷⁰ The unintended consequences are emerging, at least within Chinese borders, ranging from environmental damage and income disparities to social injustice and systematic corruption. It is because of these unwelcome consequences that the Chinese people are now vigorously debating the direction that their SOEs should follow.⁷¹

⁶⁸ These are the author's estimates based on the top 10's financial data (in U.S. dollars) reported in Fortune Global 500 and the financial data (in yuan) for the overall non-financial SOE sector published in the *2011 Finance Yearbook of China* by the Chinese Ministry of Finance, and the average exchange rate between the yuan and the U.S. dollar (http://www.360doc.com/content/12/03/13/16/0_194029297.shtml).

⁶⁹ Refer to "SASAC: State Economy should Keep Absolute Control of Seven Industries", Xinhua News Agency, December 18, 2006 http://www.gov.cn/ztl/2006-12/18/content_472256.htm.

⁷⁰ For a wealth of cases about the bad behaviour of Chinese SOEs, refer to James McGregor, *No Ancient Wisdom, No Followers: The Challenges of Chinese Authoritarian Capitalism*.

⁷¹ One can observe this heated debate online simply by searching the words "the SOE share" or almost anything including SOEs, albeit in Chinese. More interestingly, such debates are open and have clear lines of division: the party line stands firmly on advocating a bigger, stronger, and more superior SOE sector, while opinions among the public are very specific and against all the evils associated with SOE monopolies. Academics and even some reform-minded government bodies are the most constructive in articulating why, how and by how much the SOE sectors should or should not be shrunk in the near future.

We Canadians are also debating about China's SOEs, albeit mainly after the CNOOC-Nexen deal emerged. Attracting capital funds and profiting from trade and investment is a legitimate goal in any free-market economy. But for these legitimate goals to be sustained, we need a global free-market system that is protected by all the tested rules, or ancient wisdom, including legitimacy, equal opportunity, accountability, transparency and competitive neutrality. We therefore wish Chinese SOEs would behave like us in terms of believing in property rights and free markets and respecting all the WTO rules that guard free trade as well as intellectual property. But we know that they are not behaving like us yet, according to the open statements of the Chinese government. That is, the Chinese government wants to exert its absolute control and strong control of many "strategically important" industries through SOEs, and the government also allows its SOEs to chase profits in non-strategic industries ranging from real estate to tourist accommodations. Within Chinese borders, there is little room for non-SOEs, whether they are Chinese or Canadian, to compete with SOEs; on the global stage, not many multinational firms can compete with Chinese SOEs in pure financial, or even political terms.⁷²

Accordingly, we need to be very cautious in dealing with Chinese SOEs because they are clearly not behaving as we desire, and we do not yet know the real-world implications of controlling acquisitions made by China's SOEs. It is in this respect that there appears to be market failure. That is, as individual investors or companies, we are not equipped to deal with a national strategy (i.e., the Chinese government strategy in global economic expansion through its SOEs) that is foreign to us. It is here that we need the protection of our government in guarding our free market for the generations to come. We also need our government to provide information services so that we can be familiar with what is going on outside our borders, or with potential foreign SOE investment in our economy, to make informed decisions in growing our profit-maximizing businesses both domestically and abroad. This author is therefore glad that, in checking and approving the CNOOC-Nexen deal, our government took its responsibility as a gatekeeper to ensure the integrity of our free-market system. Also encouraging is that, as a result of our government's tight scrutiny, along with the heated, national debate on the CNOOC-Nexen deal, CNOOC appears to have studied hard on how to behave as a good corporate citizen on the global stage.⁷³ It would be good to keep our national debate alive, along with the ongoing debate in China, on the real-world implication of Chinese SOE expansion.

⁷² For example, according to Ian Bremmer — *The End of the Free Market* (2010), 185 — having no political clout to compete directly with the larger national oil companies, "Exxon Mobil has gradually become more a natural gas and technology firm than an oil company."

⁷³ For example, according to *The Globe and Mail* (February 28, 2013), CNOOC's CEO, Li Fanrong, "stressed the company's commitment to Canada." According to Reuters (February 27, 2013), Li also promised to "fully empower the management team here to get the operation right, to prioritize the strategy for the future."

APPENDIX A. CHRONOLOGY OF CHINA'S SOE-SECTOR REFORM OR CHANGE

Year	Existing Condition, or Reform Event, or Policy Change	Reference (and website)
Pre-1979	SOEs were fully controlled by the government with little autonomy. The SOEs were actually named as state-run-enterprises (guoying qiye) since the government took all profits while funding all capital investment and operational expenses (tongshou tongzhi).	See Sources (1) and (2) below this table.
1979-	SOEs were to become semi-autonomous entities as a result of the government's granting autonomy to and sharing profits with SOEs (fangquan rangli); also starting from 1979, the government gradually replaced previous direct funding with bank lending (bo-gai-dai) to SOEs for capital investment and operational expenses.	《关于扩大国营工业企业经营管理自主权的若干规定》1979年7月13日 http://sdc.wenming.cn/sdc/content/2008-09/30/content_3000.htm
1983-1984	SOEs gained partial financial autonomy as a result of the policy switch from remitting profit to paying tax to the government (li-gai-shui), with a tax rate of 55 per cent for large and medium-sized firms, which should remit a portion of their after-tax profit to the government, and eight-tier progressive tax rates (ranging from 10% to 55%) for small firms, which were largely in control of their after-tax profits.	《关于国营企业利改税试行办法》(1983年1月1日生效) http://fgk.chinalaw.gov.cn/article/xzfg/198304/19830400268565.shtml 《国营企业第二步利改税试行办法》(1984年9月18日生效) http://law.lawtime.cn/d658227663321.html
1987-	Implementation of a contract system that allows SOE managers full control of business operations (chengbao zerengzhi and/or changzhang fuzezhi)	《关于深化企业改革，增强企业活力的若干规定》1986年12月 http://www.bjld.gov.cn/LDJAPP/search/fgdetail.jsp?no=330
1994	SOEs are largely exempted from remitting after-tax profits, as a result of the State Council's decision to exempt SOEs from remitting after-tax profit to the government.	《关于实行分税制财政管理体制的决定》(1994年1月1日生效) (http://www.ibookba.com/book/12/16807.html).
1995-	Restructuring the SOE sector by "reinforcing the large SOEs while releasing the small ones" (zhuda fangxiao), establishing the "modern enterprise system through corporatization (including implementing modern accounting standards) and market capitalization."	《中共中央关于制定国民经济和社会发展"九五"计划和2010年远景目标的建议》(1995年9月28日通过) http://www.china.com.cn/ch-80years/lici/14/14-5/1.htm .
1999	Reforming SOEs' ownership and raising capital by partially listing their profitable business on stock exchanges both overseas and domestically, according to the Company Law and the Special Regulations on the Overseas Offering and Listing of Shares by Joint Stock Limited Companies on November 5, 1999.	The latest version of the PRC's Company Law is available at http://www.gov.cn/ffg/2005-10/28/content_85478.htm .
1999	Defining the industries for SOEs as those concerning national security, natural monopoly, important public goods and services and "key enterprises" in "pillar industries" and high-tech industries.	Unirule Study, Ch. 5, Sec. 3 (http://www.usc.cuhk.edu.hk/PaperCollection/wbmanager/wkfiles/8067_1_paper.pdf).
2003	Established SASAC, in representing the State Council – the owner of the SOEs – to manage all the central-government-owned non-financial SOEs, with sub-national SASACs managing SOEs belonging to the corresponding levels of government.	《企业国有资产监督管理暂行条例》 http://news.xinhuanet.com/zhengfu/2003-06/04/content_903749.htm

Year	Existing Condition, or Reform Event, or Policy Change	Reference (and website)
2006	While introducing the SASAC's "Guidance on restructuring the State-owned Assets and Enterprises," the head of SASAC declared that the state should absolutely control seven industries including defence, power generation and distribution, petroleum and petro-chemicals, communications, coal, airlines, and water transportation and the state should dominate (strongly control) equipment manufacturing, autos, electronic communications, construction, steel, non-ferrous metal, chemical, geologic survey and design, and science and technology.	《国资委：国有经济应保持对七个行业的绝对控制力》 Xinhua News Agency, December 18, 2006, (http://www.gov.cn/ztl/2006-12/18/content_472256.htm) 《关于推进国有资本调整和国有企业重组的指导意见》 (http://www.gov.cn/gongbao/content/2007/content_503385.htm).
2009	The State Council introduced a revitalization program for the 10 vital industries including steel, autos, ships, petrochemicals, textiles, light manufacturing, non-ferrous metals, equipment manufacturing, electronic products and transportation and storage. One of the main components of the revitalization program is supporting and encouraging industrial reorganization through mergers and acquisitions by large and strong firms, of which most are SOEs.	CCTV report on the State Council's meetings that passed the program by industry, dated from February 2 -26, 2009 (http://finance.cctv.com/special/10dazhenxingjihua/01/index.shtml)

Sources:

- (1) Xiao Qing-Wen, "Capitalization of State Assets and Optimization of State Capital," Observer of China Development (December 2008) (肖庆文: 国有资产的资本化和国有资本的调整, 源于《中国发展观察》) <http://theory.people.com.cn/GB/49154/49155/8487552.html#>.
- (2) Wu Li and Xiao Xiang, "Developing and reforming SOEs: The CCP's Path," Hu-Nan Social Science 2 (2011). (武力, 肖翔: 《中国共产党关于国有企业发展与改革的探索》 刊于《湖南社会科学》 2011年第2期) <http://www.iccs.cn/contents/401/11928.html>
- (3) Jin, Chang-Feng, "System Innovation: the Solution to the Dilemma in SOE Reform," China Administration of Industry and Commerce 4 (2011)(金长峰: 坚持制度创新 破解国有企业改革困局, 刊于《中国工商行政管理》 2011年第4期) http://qyj.saic.gov.cn/llyj/201105/t20110505_105827.html
国家工商总局企业注册局 (State Administration of Industry and Commerce of the People's Republic of China, Enterprise Registration Bureau).
- (4) Hunyeop Lee, "State Owned Enterprises in China: Reviewing the Evidence," OECD Occasional Paper, January 26, 2009, <http://www.oecd.org/corporate/corporateaffairs/corporategovernanceofstate-ownedenterprises/42095493.pdf>.

APPENDIX B. OFFICIAL STATISTICS COVERING SOES IN NON-FINANCIAL SECTORS

Publication	Coverage	Year of its first publication
<i>Finance Yearbook of China</i> (中国财政年鉴), by Ministry of Finance	<p>Its 2011 edition provides the following:</p> <p>(1) Annual data for 2001-2010: Number of SOEs by level of government; total assets/debts/equity of SOEs by level of government, total assets by main component, and key financial ratios.</p> <p>(2) Annual data for 2004-2010: Total number and key financial data for local SOEs by jurisdiction, more detailed financial data for SOEs under central government departments, and number of SOEs and their total assets, debts, equity, gross revenue, profit and tax payment, and total number of employees, by industry.</p>	1992 ⁷⁴
<i>China Statistics Yearbook</i> (中国统计年鉴), by National Bureau of Statistics	<p>Its 2011 edition provides the following:</p> <p>(1) For industrial sectors: Total number of SOEs, key financial data and total number of employees by industrial sector (2010); key financial ratios for local SOEs by jurisdiction (2010); total number and key financial data for local SOEs (1998-2010).</p> <p>(2) For the construction sector: Total number of employees and some operational (e.g., completed construction area) and financial data for SOEs compared to other types of ownership (2010); number of SOEs, number of employees and gross revenue associated with SOEs in comparison with other ownership (1980-2010).</p>	1982 ⁷⁵

⁷⁴ According to the editor's notes on *Finance Yearbook of China*, 2011.

⁷⁵ Refer to http://www.stats.gov.cn/tjsujia/zgtj/t20111220_402773519.htm.

About the Author

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