

CHINA'S OUTWARD FDI AND ENERGY SECURITY

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Introduction

China is facing an energy imbalance resulting from its surging appetite for oil and gas as against a continuously dwindling supply from domestic market. As a result, the country has a growing reliance on foreign oil and gas resources. Other than oil imports from abroad, China has worked out a “go out” strategy. Under that strategy, the national oil companies (NOCs) are encouraged to step up efforts to invest abroad in order to acquire more oil and gas resources. Their all-out efforts have often been pictured as “China Inc”, denoting that the Chinese government agencies have formed a coherent and monolithic body that could act consistently in foreign policy formulation and implementation, and that its NOCs would stand in line with the government and follow its directives in any given situation.

Such a conception has been challenged as more and more scholars have eventually come to realize that the coherent and risk-taking image of China's foreign oil and gas quest is not representative of China.¹ Given that market reform and China's integration with the world economy have transformed both its internal and external environment, and corporatization has changed the NOCs' incentive structure, it is conceivable that different actors within China may have different interests and standpoints on various issues including outbound FDI.

This paper aims to open the black box by examining the internal dynamism within China in the process of its foreign oil and gas quest. It is argued that China's foreign energy quest is far from being coherent and well-coordinated, and the interest disaccords between the government and the NOCs may not augur well for China's energy security. The paper will first introduce the balance of oil and gas in China and its outbound FDI efforts, followed by an analysis of government-NOCs relationship. The last three sections elaborate on why the “China Inc” characterization can hardly hold water when analyzed from the following three perspectives: the ad hoc institutional framework, inter-ministry struggle, and government-NOCs uncoordinated actions. The conclusion section analyzes the implications.

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¹ See, for example, Lieberthal and Herberg (2006), International Crisis Group (2008), Houser (2008), Gill and Reilly (2007).

Oil and Gas Demand and Supply in China

China's increasing reliance on foreign hydrocarbon resources has forced the country to go abroad to look for new oil and gas supplies. Although domestic oil output has been on the rise, such an increase cannot catch up with domestic demand. As shown in Chart 1, domestic oil production went up 27 percent between 1990 and 2006, whereas domestic consumption skyrocketed 137 percent, far outstripping supply. The constant decline of the self-sufficiency ratio, defined as the proportion of domestic production in gross oil consumed, from 119 percent to 53 percent between 1990 and 2006 indicated that China has become more dependent on foreign oil imports (see Chart 1).

China will be more constrained by oil deficit owing to the limited indigenous endowment and the growing trend of oil consumption. Its appetite for oil is projected to soar owing to the rapid economic growth, low per capita oil consumption, surging demand from the transport sector, low energy efficiency, and so on. However, the prospect of boosting oil production within China in the future is not so sanguine. According to International Energy Agency (IEA), China's net oil imports were 3.5 million barrels per day (mb/d) at end 2006; the projected net imports would reach 7.1mb/d by 2015 and 13.1mb/d by 2030 in its reference scenario, implying that 64 percent and 79 percent of the total demand would have to depend on oil imports respectively. In IEA's high growth scenario, the two rates would capture 65 percent by 2015 and 80 percent by 2030.²

As a matter of fact, there is little likelihood that domestic endowment of oil is able to prop up future economic development. Table 1 shows that the proven oil reserves in China are less than 1.5 percent of world's total. According to BP, at the production rate of 2006, the proven oil reserves can only last 12.1 years. Therefore, in whatever sense, China has to be more dependent on foreign oil resources to meet its surging demand.

Likewise, increasing demand for natural gas would drive China to rely more on foreign gas imports. Total consumption rose 102.5 percent from 16.8 billion cubic meters (Bcm) in 1993 to 67.3 Bcm in 2007.³ During that period, indigenous natural gas output was able to meet domestic consumption (see Chart 2). According to IEA, imports will reach 37 Bcm by 2030, constituting 29 percent of total natural gas consumption (162 Bcm).⁴

The enlarging oil and gas deficit is a daunting challenge to China which has to enhance its energy security against the backdrop of oil price spikes. Besides expanding domestic exploration and exploitation as well as enforcing demand moderating measures, Beijing has worked out a "going out" strategy, whose central goals are to encourage NOCs to secure more foreign oil and gas equities, diversify import sources, build pipelines and sign long-term provision contracts with energy producing countries.

² See International Energy Agency (2007), p. 168.

³ See BP (2008).

⁴ IEA figures from International Energy Agency (2002), p.110 and p.257.

China's Outbound FDI on Oil and Gas

Government-backed major NOCs in Chinese oil diplomacy include China National Petroleum Corporation (CNPC), China Petroleum and Chemical Group (Sinopec) and China National Offshore Oil Corporation (CNOOC).⁵ CNPC is the largest player in China's oil and gas industry; it is the largest producer and supplier of crude oil and a major supplier of refined oil products and petrochemicals in China. As the largest refinery and petrochemical manufacturer, Sinopec is the second largest oil and gas producer in China; CNOOC has an exclusive prerogative to carry out offshore oil and gas exploration and production (E&P), and cooperate with foreign investors offshore as an agent of the Chinese economic entity.

The profit-centered NOCs are proactive in venturing abroad for their own sustained development. They were forced to take responsibility for their own balance sheets after China embarked on marketization and corporatization in the late 1990s and when the government temporarily held back on direct fiscal transfer to the NOCs.⁶ The situation was aggravated by the state's control over refined oil prices which for a long time have been set below international prices causing the NOCs to suffer substantial financial losses downstream (refining and marketing). The loss downstream to some extent can be compensated by profits upstream. However, the shrinking reserve-to-production ratios in the domestic market have limited the NOCs' growth potential. They thus have strong incentives to go abroad for the sake of their own coffers and long-term development.⁷ This is also conducive to improving the performance of the NOCs, putting their management teams in a good stead for promotion by the central government.

The NOCs' ambitions conform with the government's "go out" strategy. Beijing also expects the NOCs to further develop themselves abroad by competing with foreign oil multinationals.⁸ The bid for an oil block in Thailand by CNPC in 1993 signaled the initial step taken by the Chinese oil companies to go abroad. By mid 2006 the Chinese oil companies had invested in 139 projects in 30 countries with over US\$7 billion (see Table 2).⁹

The NOCs are all out for more oil and gas abroad under the aegis of the government. In 2006 CNPC's foreign oil and gas output reached 59.14 million metric tons of oil equivalent, an increase of 51.5 percent over the previous year. During the same year, Sinopec gained 5.5 million tons of equity oil production, more than twice the figure of 2005. By the end of 2006, CNOOC's overseas net

⁵ In recent years, other Chinese state-owned enterprises like Sinochem and CITIC have embarked on foreign oil and gas acquisition as well.

⁶ See Houser (2008).

⁷ International Crisis Group (2008), p. 11.

⁸ See Chen (2008b).

⁹ Also see Yang & Teng (2007), p. 11.

production captured 1.2 million tons of crude oil, condensate and natural gas liquids as well as 130.3 million cubic feet of natural gas.¹⁰

The NOCs have also striven to diversify oil and gas import sources. They have made every effort to acquire hydrocarbon resources from a spate of countries. Though the Middle East has become the primary source of Chinese oil imports, China sees the risk of over-relying on that region in view of the long-term instability there. It is said that the Iraq war has aggravated China's sense of urgency to diversify its import sources to countries all over the world, including those shunned by western multinational oil corporations (MOCs), such as Iran, Myanmar, Libya, and Sudan. Thus far, China has defined three strategic areas for oil E&P: Russia-Central Asia, Middle East-North Africa, and South America. Special focus has been placed on Russia, Kazakhstan, Turkmenistan, Iran, Iraq, Sudan, Venezuela and Indonesia.¹¹

By 2007 China's foreign equity oil production has reached 50 million tons, accounting for 7% of its annual oil consumption.¹² Among the 30 countries with Chinese oil investments, Kazakhstan and Sudan are the two largest production bases, which together account for about two thirds of China's foreign oil production (see Chart 3). Underlying this high concentration is the fact that most of the NOCs' projects are incapable of making significant contribution to the bolstering of their reserves and profits.

Both the government and the NOCs seem to have common stakes in venturing abroad. However, that does not amount to say that the Chinese team, consisting of the Chinese energy policy making apparatus and the NOCs, is an iron plate which sees no schisms. On the contrary, not only do the Chinese ministries and government agencies lack coordination, but the NOCs have their own calculations which may deviate from the government's directives. Moreover, the overall institutional framework in China with regard to outbound FDI is not so well defined for that task. The following will further expound on these problems.

Institutional Framework of China's FDI: A Fragmented Structure

Rosenbaum argued that energy policy making is made within constraints imposed by the character of energy resources and by the nature of the political institutions and actors involved.¹³ Likewise, the progress and success of China's reform has been profoundly influenced by the nature of its institutions.¹⁴

¹⁰ Data used are cited from the three NOCs' websites respectively. Available at: <http://www.cnpc.com.cn/eng/cnpcworldwide/OilGasOperations/>, <http://english.sinopecgroup.com/business/19.shtml>, <http://www.cnooc.com.cn/yvww/hzsy/dwhz/242019.shtml> (accessed November 13, 2007).

¹¹ Development Research Center of the State Council of P. R. China (2003).

¹² Cao, Cai, and Xue (2008).

¹³ Rosenbaum (1981).

¹⁴ Andrews-Speed (2004), p. 48.

At the top of the power centers are the Politburo, the Standing Committee of the State Council, the Secretariat of the CCP, senior military commanders and provincial leaders.¹⁵ In particular, the supreme power vests in the Standing Committee of the Politburo (SCP) of 9 members instead of the 5-7 members in the past. In general, any Chinese grand strategy which includes energy strategy must be approved by the top leadership first before it could be implemented. It is the top leadership who plays a decisive role in defining the framework of China's domestic and foreign strategies.

As the highest executive organ of State power and the highest organ of State administration, the State Council is responsible for dealing with such affairs as China's internal politics, diplomacy, national defense, finance, economy, culture and education. As such, it has the authority to formulate China's energy policy and strategy, oversee energy policy implementation, and even override any energy regulation by its ministries or local governments. Currently any foreign investments of more than US\$200 million must be approved by the State Council. Though vested with such immense authority, the State Council often has to balance different vested interests in its policy making.

Under the State Council, the important axes of bureaucratic power concerning outward FDI include the National Development and Reform Commission (NDRC)/National Energy Bureau (NEB), Ministry of Commerce (MOC), Ministry of Foreign Affairs (MFA), the State-owned Assets Supervision and Administration Commission (SASAC), Ministry of Finance, the State Administration of Foreign Exchange (SAFE), China's commercial banks and policy banks, and so on. With the setup of a new National Energy Committee (NEC) in March 2008, the National Energy Leading Group (NELG) established in 2005 has been removed (see Chart 4).

Government apparatus directly in charge of the administrative work of China's FDI include NDRC/NEB, the MOC, the SASAC, the People's Bank of China and local governments (see Chart 5). As the three major NOCs are centrally administrated state-owned enterprises, their foreign investing projects do not need to go through local governments' administrative procedures.

Historically the NDRC was the key institution to administering the Chinese economy. Though the NDRC is playing a less influential role in the whole economy, it still predominates over energy price, foreign investment, energy plan and so forth. The NDRC is tasked to administer the macro level of economic and social development issues, to organize, implement, oversee and coordinate the work related to national strategies and policies including energy, long- and medium-term energy plans, import and export plans, comprehensive economic and social development, economic restructuring, energy conservation and so on. As far as Chinese firms' outbound FDI is concerned, any overseas investment greater than US\$30 million must be approved by the NDRC before it can be kicked off. For projects less than US\$30 million, they may be required to be registered with the NDRC. Hence, the NDRC has exerted great influence over China's economic and social development.¹⁶

¹⁵ Lieberthal and Oksenberg (1988), pp. 35-41.

¹⁶ Based on the introduction of the NDRC's functions, <http://www.ndrc.gov.cn/jj/default.htm>.

The National Energy Bureau (NEB) whose predecessor was the Energy Bureau under the NDRC has been promoted as a vice-ministry level agency in China's 2008 super-ministry reform even though it remains under NDRC. The new organization has incorporated all the functions of the previous National Energy Leading Group (NELG), most of the energy-related functions of the NDRC, and the nuclear power management of the previous Commission of Science, Technology, and Industry for National Defense (COSTIND). Other than that, the NEB has been authorized to represent the Chinese government in carrying out international energy cooperation, and negotiating and signing agreements with foreign energy departments and international organizations. Moreover, the NEB is tasked to manage China's strategic petroleum reserves.

The Ministry of Commerce is responsible for formulating and implementing policies and regulations on foreign economic cooperation, guiding and monitoring the regulation of overseas contract projects, labor cooperation and consulting businesses. It is in charge of working out administrative measures and specific policies guiding China's overseas investment, approving investments and overseas establishments (excluding financial companies) of Chinese enterprises, and supervising their operations. Hence, it is within the MOC's administrative purview to regulate the energy downstream market and the oil companies' foreign investment activities. Since 2004 the MOC, along with the MFA and NDRC,¹⁷ has published a *Countries and Industries for Overseas Investment Guidance Catalogue* to assist domestic firms to venture abroad.

Two departments within MOC stand out in governing China's outbound FDI. One is the Department of Foreign Economic Cooperation (DFEC), which is responsible for regulating all Chinese outward FDI and Chinese overseas labor corporations. All Chinese enterprises with FDI exceeding \$10,000 are required to register with it before investing abroad. The DFEC can impose fines on or revoke overseas investment license of violators of Chinese laws and relevant regulations. The other department is the office of the Economic and Commercial Counselor (ECC), which is stationed at and administratively subject to Chinese embassies or consulates abroad, delegates the MOC to monitor Chinese firms' foreign investment activities.

Many large state-owned enterprises come under the SASAC. It has authority to manage overseas state-owned assets, decide whether and what acquisitions and mergers they can pursue, whether and in what percentage they should pay dividends to the government, and so on. Its functions per se, however, are self-contradictory. Because the SASAC's performance is directly linked to the SOEs' account books, its role as the largest shareholder has weakened its willingness to exercise strict regulations over the SOEs' profit-seeking efforts. Rather, it is often inclined to encouraging their venturing abroad, even running the risks of losing national assets.

Chinese firms have to apply to the SAFE under the central bank (People's Bank of China) for their foreign exchange. The People's Bank of China has been empowered to hold and manage the state's foreign exchange and gold reserves, make payment and settlement rules in collaboration with relevant departments,

¹⁷ The NDRC was involved starting in 2007.

monitor money-laundering related type of suspicious fund movement, and participate in international financial activities at the capacity of the central bank. Under the central bank, the SAFE is responsible for promulgating regulatory measures governing foreign exchange transactions under current account, supervise and monitor foreign exchange transactions under capital account, including inward and outward remittance and payments, and provide the People's Bank of China with propositions and references for the formulation of exchange rate policy.

As Downs notes, the energy security issue has offered a stake for many actors, such as the Ministry of Finance, Ministry of Foreign Affairs, China's four commercial banks and three policy banks, other government agencies, as well as foreign area specialists at universities and research institutes.¹⁸ They can exert their influence over the NOCs' foreign investment activities in one way or another. In particular, the People's Liberation Army (PLA) may hold sway on some occasions.

The Ministry of Finance is responsible for preparing and implementing China's annual budget and foreign exchange quotas allocated to support Chinese companies' FDI, fiscal and taxation policies, laws and regulations concerning Chinese businesses abroad, manage state-owned capital gains and central finance used to bolster enterprises, and supervise the finance of central firms. It also sends Chinese delegates to participate in foreign-related tax and international tariff negotiations, and signing of foreign-related taxation agreement.

The Ministry of Foreign Affairs takes care of China's foreign policy and strategy, and works to create a friendly international environment for the rejuvenation of the dragon. With the implementation of China's "going out" strategy, the ministry has been tasked to facilitate Chinese companies' business deals abroad, help preserve the interests and protect the safety of Chinese citizens and Chinese companies in foreign countries. Securing oil blocks and equity stakes is a priority of the ministry in hydrocarbon-rich countries.

The Chinese government may render financial support to the NOCs via its three policy banks and four state-owned commercial banks through loans or infrastructure investment and aid to oil producing states. The three state-directed banks are China Development Bank (CDB), Export-Import Bank of China (EIBC), and the Agricultural Bank of China. One of their key functions is to support the state's "go out" strategy by assisting qualified enterprises to expand their international businesses. For instance, the CDB's total outstanding foreign currency loans reached US\$30.49 billion as at the end of 2007, and it has established a China-Africa Development Fund with US\$5 billion specifically for investing in Africa. The EIBC is mandated to promote the export of Chinese mechanical and electronic products and high- and new-tech products, to support Chinese companies in their ventures with foreign partners and overseas investment projects, to develop and strengthen relations with foreign countries, and to enhance Sino-foreign economic and technological cooperation and exchanges. These banks' financial business is subject to the directives and supervision of the Ministry of Finance, the MOC and the People's Bank of China. They are willing to lend to the NOCs not only because

¹⁸ Downs (2004), p. 39.

they think it is profit rewarding, but also because they are keen to show their endeavor to enhance the party-state's interest in securing more overseas oil and gas resources.¹⁹

Repeated energy shortage crises in recent years have prompted the government to set up the NELG in May 2005 with an aim of reinforcing leadership over energy-related strategies and inter-agency coordination. This agency, however, had not resolved the problems of dispersed and uncoordinated energy power usage and disconnection between energy policy formulation and its actual implementation.

A new NEC, as a compromised proxy of an energy ministry, has taken shape in March 2008. Nonetheless, it exercises no jurisdiction over the energy giants including the NOCs.²⁰ This is largely a compromised arrangement as the government has divided authority between the NEC and an expanded Energy Bureau under the NDRC to take the responsibilities for administration and oversight. Such an arrangement is likely to evolve into a new energy ministry, but not for several years.²¹

Therefore, the regime governing China's outward FDI is ad hoc and fragmented among different institutions. There is no specific agency responsible for coordinating the departments' policies and behaviors. Neither is there any specific law to look after China's foreign investments. Though the NDRC appears to be the dominant power, it mainly takes the responsibility for mid- and long-term energy plans, macro energy policies, price setting, and so on. Understaffed, NDRC is unable to work out any forward-looking energy strategy for China. In contrast to the Department of Energy of the US which houses a workforce of 14,000,²² the China's Energy Bureau has less than 30 people to administer about RMB1 billion energy assets and annually 1 trillion energy investments in China.²³ These staffs are overwhelmed with the work of examining and approving energy projects.

Even if the Energy Bureau has the workforce, it faces various difficulties in managing and coordinating its work on energy, in view that the NDRC is hierarchically equal to other Chinese commissions, ministries, and the two NOCs (CNPC and Sinopec) and has no "leverage necessary to push through its agenda".²⁴

¹⁹ Yang Zilin (president of EIBC), "Guanyu jiakuai shishi 'zouchuqu' de sikao" (Some reflections about accelerating the implementation of the "going out" strategy), *Qiushi (Seeking Truth)*, Vol. 7, 2005, pp. 47-49.

²⁰ Yardley (2008).

²¹ Yardley (2008).

²² REUTERS (2004).

²³ Zhang (2004).

²⁴ *Platts Energy in China* (2008).

Even within the NDRC, energy administration has been divided.²⁵ The fragmented administration power may be conducive for relevant departments to figure out the viability of a FDI project from the dimensions of their professional expertise and department interests. However, it has not only whittled the government's regulatory and monitoring capacity over the NOCs, but also resulted in an ill-coordinated policy with regard to FDI, in contrary to what many international observers assumed.²⁶

The roles of government ministries and departments remains ambiguous, which leaves many Chinese firms disorientated as to the proper way to go through these administrative procedures. The division of labor in outward FDI administration is particularly unclear between the NDRC and the MOC. Theoretically both are involved in working out China's FDI strategies and policies and the annual plan for foreign exchange uses, but their duties are unclearly defined.

Nominally the SASAC represents the government as the primary stakeholder of the NOCs, but it has no say in the NOCs' foreign investment decisions. As a matter of fact, its role as a primary shareholder has often been supplanted by the NDRC and or MOC, since the latter has the authority to allow or forestall NOCs' FDI activities.

The fragmented nature of the institutional power is set to influence the government's capabilities in energy policy making, regulating and monitoring China's energy market. Before expounding that, it is necessary to know the on-paper relationship between the government and the NOCs, a basis for their interactions.

Government-NOCs Relationship on Paper: Control and Autonomy

After the restructuring of the petroleum industry in the late 1990s separating business functions from administrative ones, the NOCs, being state-owned enterprises which must follow market principles, are on paper also subordinate to government controls. Hence, the NOCs have two identities with more than one goal. On the one hand, they are firms with a central goal of profit maximisation and self expansion; on the other hand, they are obliged to undertake special political missions to ensure energy security and serve state strategies.

²⁵ For instance, The Energy Bureau takes the major responsibility of examining and approving energy projects, as well as laying out energy strategies and policies; The Department of Pricing sets the prices of oil, gas, electricity etc.; The Department of Resources is in charge of the development and comprehensive utilization of minerals, while the Economic Operation Bureau is responsible for coordinating industries such as energy and transportation, management of electricity demands, and the finished oil market construction; In the meantime, some energy investment projects must be approved by the Department of Investment; The management of downstream refining plants is under the Department of Industry; The Economic and Trade Department plans the export and import volumes; and energy transportation is in the hands of the Department of Transportation.

²⁶ Downs (2007), pp. 42-68.

The Chinese government tries to discipline the NOCs in three major ways: regulation, ownership and personnel.²⁷ As the owner of natural resources in China, the government possesses a wide range of instruments to regulate the domestic energy market.²⁸ Any government decision is set to influence the Chinese petroleum market structure and oil companies' behaviours. Of particular importance among the instruments is the commonly used fiscal and taxation means, which directly affect the revenues of the NOCs. For instance, while the low resource tax on crude oil has encouraged NOCs to expand their oil and gas production,²⁹ the government's price control over refined oil has woefully affected their incentives to process more crude against the backdrop of oil price surges, thus resulting in the phenomena of repeated oil shortage crises in China.

Besides market-oriented instruments, the Chinese government has resorted to adopt a state-controlled approach to regulate the domestic energy market. The state-controlled approach denotes greater government involvement in the energy sector characterised by a panoply of measures such as "setting detailed, quantitative targets for the energy sector, subsidies and other financial incentives including support for mega projects, price controls, government deals for the purchase of oil and other barriers to free trade."³⁰ The on-going marketisation in China's oil sector has not stalled the government's proclivity to use such an approach, such as the launching of mega energy projects like the West-East-Gas pipeline project, the imposing of import bans and price controls, the offering of huge subsidies, and so forth.³¹

The government also directly intervenes in the NOCs' pricing and investment decisions. Thus far, it is still up to the NDRC to decide when and how to adjust domestic refined oil prices notwithstanding the integration of domestic crude oil prices with international ones. As aforementioned, any foreign energy projects conducted by Chinese firms must be approved by either the State Council or NDRC and MOC, depending on the size of the project. The NOCs also need to send in their applications if they need to rely on foreign exchanges to bankroll their foreign investments.

The government exercise control through personnel management. In spite of corporatization, hierarchically, the NOCs are still part of the Chinese *nomenklatura* system. The appointment, promotion and dismissal of the senior management of the NOCs, who holds concurrent key positions in the board of directors of their listed companies, are decided by the government's Central Enterprise Work Commission. These top executives are likely candidates to the Chinese leadership. For example, Zhou Yongkang, one of the nine members of the Standing Committee of the Political Bureau, used to be the CNPC president, and Wei Liucheng, current

²⁷ Houser (2008), pp. 141-166.

²⁸ For a discussion of these instruments, see International Energy Agency (IEA) 1996.

²⁹ China's rate (RMB 8-30/ton since 1993, and RMB 14-30/ton since July 2005) is in stark contrast with those of the US and Russia which surpass \$130/ton and \$180/ton respectively. Wu (2007), and Jiang (2008).

³⁰ IEA (1996), p. 14.

³¹ For an in-depth analysis of China's use of state-controlled approach, see Chen (2006).

Secretary of Hainan province, was the president of CNOOC. They are evaluated based on not only their performance in running the NOCs, but also their loyalty to the CCP.

Despite the government's strong hand in the oil industry, it has granted considerable autonomy to the NOCs as part of the marketization and corporatization efforts. NOCs are pushed to take responsibility for their balance sheets. The government has shifted the responsibility of output decisions to the firms, and increasing the share of profits that the firms could retain.³² The NOCs can also make decisions on personnel management (except senior management in the headquarters), corporate strategy, project selection, and other business activities.

Partial privatization and corporatization has created conditions that will motivate the NOCs into maximizing their commercial interests. The advent of the market economy leaves much room for firms and individuals to pursue their own interests. The management's and employees' welfare is now closely associated with the NOCs' performance. As listed companies, they are accountable to their shareholders. In that sense, the NOCs have a propensity to be market actors with strong incentives to maximize profits. By building their economic muscles, the NOCs aspire to become strong competitors, emulating their counterparts across the globe.

The autonomy enjoyed by the NOCs has given them considerable influence over the government in their pursuit of commercial interests. As Guthrie argues, "firms are not passive recipients of top-down policy – rather, they interpret, adapt, modify, and even subvert the formal measures that come from [above]." ³³ Groombridge went so far as to argue that "state-owned enterprise is misleading in some cases", and "it is more accurate to use the term of 'enterprise-owned state'".³⁴

One such kind of influence is reflected in the maintenance of their monopoly status in the Chinese market. The four NOCs have long enjoyed some kind of monopoly privileges since their setup, and the 1998 overhaul has reinforced their monopoly status. One purpose of the overhaul was to separate government functions assumed by CNPC, Sinopec and CNOOC from their business operations, but the separation does not amount to impairing their influence over the government. After the revamp, many companies have been excluded from the industry. As a consequence, previous competition has been stifled. There is no doubt that without the government's protection, their prerogatives in the domestic market would be undermined or even lost.

³² Groves (2006), p. 263.

³³ Guthrie (1999), p. 5.

³⁴ In his research, *asset specificity* is "the level of specific investment in an asset" or "the degree to which the value or rate of return on an asset depends on its use in a particular circumstance or relationship". Thus, highly specific assets have a higher cost if switched to different uses. *Industry concentration* is "the distribution of firms within an industry in terms of the total output of market share or 'the extent to which market power is vested in a few firms';" According to the above definition, in stark contrast with textile, the oil industry has highly specific assets, and is a highly concentrated industry. See Groombridge (1998).

A second aspect of the NOCs' influence rests on garnering government support. Domestically, they have gained the strategic support of the government for their market monopoly status, which provides them with fiscal guarantees and paves the way for their takeoff. The Chinese NOCs have drastically enhanced their global competitiveness as evidenced by their elevated rank in *Fortune Global 500* and their surging revenues and profits in 2005-2007 (see Table 3). Furthermore, the NOCs have been directly bolstered by state coffers.

Progressive market openness of China's petroleum market after its accession to the WTO has indeed posed some challenges to the NOCs. However, under the aegis of the government, the NOCs have taken some measures to reinforce their monopoly. Particularly, they have snapped up domestic gas stations before the opening of China's oil retail market.

Externally, since the government and the NOCs have common stakes in the latter's "go out" efforts to acquire oil and gas equities, Beijing has rendered various forms of support to the NOCs. Government support ranges from policy support, diplomatic support, and market strategy support to financial support.³⁵ Although government support is not so decisive as to determine the success of every NOC's foreign deal, in every sense, it has facilitated their venture abroad.

As to be discussed in the following, the NOCs can also exert their strong influence over the government's energy policy making. As a matter of fact, a lot of energy policies are elicited, studied, drafted and or formulated by the NOCs. One of the reasons for the NOCs' strong influence is the government's fragmented nature.

The Chinese Government: Who and Where?

China's foreign oil and gas quest has often been labeled as "China Inc", or a kind of mercantilism where the NOCs are directed by the center for the purpose of "locking up" oil and gas around the world to solely supply to China. Such an allegation, apparently, presumes that there exists a coherent center, and that the NOCs will always follow mandates from the center even on occasions when their commercial interests are jeopardized. Both assumptions, however, are problematic.

Indeed, the authoritarian regime often leaves a rigid image that each government agency speaks in one voice and acts towards the same goal. On most occasions, if not some, this stands true, particularly when it comes to foreign affairs, because of party discipline or national interests. However, as illustrated earlier, the fragmented administrative regime often results in divided interests. Government agencies may maximize their department interests rather than national interests. For instance, in conjunction with the NOCs, the MOC, the SASAC and Ministry of Finance, the three agencies primarily responsible for economic matters, may prioritize Chinese companies' profit making over China's overall strategic and diplomatic interests as pursued by the MFA. As such, any dispute between any of

³⁵ For a detailed analysis of various forms of Chinese government support for the NOCs and China's motivations behind its oil diplomacy, see Chen (2008b).

them, which enjoy equivalent rank in the Chinese bureaucratic system, calls for the State Council to mediate.³⁶

It is true that the Chinese government has worked out a “going out” strategy, but that strategy per se is dubious. The NOCs’ going out or venturing abroad is a fait accompli, which took place much earlier than the promulgation of that strategy. The government’s “going out” strategy is at most an ex post enshrining of the efforts of the NOCs. In particular, it is unclear who is the initiator, coordinator and implementer of the “going out” strategy. Seemingly many government departments are involved, but execution is doubtful. Theoretically, such a strategy should be able to promote efficiency; however, thus far, the Chinese government has maintained a strict foreign reserve quota system, and Chinese enterprises have to go through a prolonged examination process and a series of approval procedures before they can start a business abroad. The “going out” strategy is thus very much driven by market principles and market behaviors pursued and practiced by the Chinese enterprises.³⁷

As a matter of fact, on and off the fragmented nature of Chinese institutions has resulted in uncoordinated government actions and more than one voice from the Chinese camp. As a result, outsiders are wondering who dictates the Chinese government.

The Sudanese case may help illustrate this divisiveness within the Chinese government. With more than US\$ 4 billion investment in Sudan, CNPC has been the largest investor with several oil exploration concessions in that turbulent country since 1996. Around 47 percent of Sudanese oil production went to the Chinese market in 2006. Despite the civil war and human rights crises there, Beijing for long had maintained a hands-off policy by firmly abiding by its long-held non-interference stance, and capitalizing on its membership in the Security Council of the United Nations to preserve its interests in Sudan. Deterioration in the Darfur region and increasing international pressure forced China to adjust its foreign policy towards Sudan. However, when China started to approach Khartoum, “all Chinese actors involved in Sudan did their bit to strengthen their position, but not always with the same endeavors in mind, and certainly not in the synchronized manner one could expect from a development state like the People’s Republic.”³⁸

Specifically, the Chinese oil company is dedicated to continuing its oil businesses as usual in Sudan, standing aloof from the confrontations in Sudan. The Foreign Ministry tried to persuade the Sudanese regime to accept outside supply of humanitarian aid and resolve the Darfur bloodshed. The Chinese military, however, attempted to maintain its influence with its arms sales to the Sudanese regime.

Likewise, the NOCs, under the aegis of the Chinese Foreign Ministry, strove hard for oil and gas pipelines from Russia to China in the hope that these pipelines not only can quench its oil and gas thirst, but also can be utilized to warm bilateral strategic partnership. Nevertheless, it was said that some PLA commanders had

³⁶ Gill and Reilly (2007), pp. 37-52.

³⁷ The author would like to thank Professor Huang Jing for this point.

³⁸ This paragraph is based on Holslag, (2008), pp. 71-84.

reservations about such pipelines. They worried that China's energy and national security would be undermined as it would be susceptible to any oil or gas cutoffs by Russia.³⁹

In the acquisition battle between CNOOC and Chevron for Unocal in 2005, it was widely believed that the Chinese company failed largely due to the blockage from Capitol Hill. But this was only a partial story. As a matter of fact, another important reason was that Fu Chengyu, CNOOC's president failed to garner sufficient support from the Chinese ministries and adopted an inappropriate strategy. Fu's rejection of the involvement of China Development Bank was said to have exasperated the bank. The latter discredited CNOOC's deal before China's pertinent ministries. It was opposition from the bank and NDRC that changed the mind of the top leadership. The Chinese leadership later requested CNOOC to withdraw from the deal so as to avoid further damage to the Sino-American relationship.⁴⁰

It is worth noting that the Chinese government does not stand behind every energy deal by the NOCs. Confined by the lack of human resources and energy expertise, the government has largely left the NOCs very much on their own in their ventures abroad. It is the NOCs which have taken the initiative to assess and select their foreign projects. Government support may sometimes show up in some projects that can warm bilateral relations, or evoke intense competition from other countries, or mammoth enough to necessitate government negotiations. In most cases government support has indeed facilitated the NOCs foreign energy deals, but some, if not all, have been controversial.

In other cases where government support or services are necessitated, they are missing. This is particularly so when compared to other countries like Japan and Singapore. Take Singapore as a case, the city-state has set up an International Enterprise (IE) Singapore under the Ministry of Trade and Industry. The chief missions of this agency are clear, that is, to help Singapore-based enterprises export, develop business capabilities, find overseas partners and enter new markets, as well as attract foreign businesses to Singapore. In a word, IE Singapore's primary goal is to assist Singapore-based enterprises in their overseas growth and international trade.

In contrast, except for ex ante administrative examination and approval, the Chinese government paid little attention to help Chinese firms identify potential business opportunities in the past. In recent years though, gradual changes are under way. More attention has been paid to ex post facto assistance to the Chinese firms including the NOCs. On most occasions, the Chinese enterprises have to do the necessary homework on their own before investing abroad, such as ascertaining possible business opportunities, learning foreign market, finding partners, identifying the possible risks and so on. The consequences of the Chinese way of underestimating ex ante support are the high percentage of failures of Chinese foreign investments and disputes with local partners or governments in foreign markets. According to statistics by the Ministry of Foreign Trade and Economic Cooperation of China (the Ministry of Commerce at present), 7000 Chinese firms

³⁹ Downs (2000).

⁴⁰ Based on Huang (2008).

were approved to invest abroad by end 2002, with the overall contractual Chinese capital being in the neighborhood of US\$10 billion. Among these foreign projects, 67% of them made losses.⁴¹ As a matter of fact, many offices or branches set up abroad by these enterprises with overseas investments are not profit departments, but merely cost-incurring departments responsible for receiving management or bureaucratic officials from China.⁴²

Besides the ex ante problem, a second problem is that the current FDI regime has placed more emphasis on examining and approving investment projects, but paid little attention to monitoring their operations. It was the absence of oversight that resulted in great losses by China Aviation Oil in Singapore. The company, holding a monopoly of jet fuel supply in China, boldly violated the Chinese government's regulations prohibiting enterprises with overseas futures permit from being engaged in speculative transactions and over-the-counter futures transactions. Consequently, its violation directly resulted in a US\$554 million loss.⁴³

The oil companies also complain that the prolonged examining and approving process has often led to the elapse of optimal opportunities for clinching deals in foreign markets. In the process of lodging their applications for foreign investments, the Chinese enterprises are required to submit a variety of documents, including reports on project feasibility analysis and commercial risk analysis of their investments. Government meddling in micro project management may help stalk some irrational projects and avoid wastage of state wealth by the SOEs, but apparently it has exceeded the NDRC and MOC's duties, which could be conducted by professional firms or institutions.

Government and NOCs: Overlapping Interests?

Both the Chinese government and the NOCs have common stakes in "going out," and both prefer the form of "equity oil" (fen'e you) so that China can have an ensured supply of oil and gas.⁴⁴ To that end, Beijing thinks it imperative to render state support to the Chinese NOCs, which are believed to be unable to emulate the MOCs. Apparently government's support has been applauded by the NOCs. Despite that, both differ in their primary goals, which may lead to NOCs' "defection" from the state.

First, the government and the NOCs have different interests regarding foreign oil quest. The NOCs are primarily concerned about their long-term development and global competitiveness. To that end, they expect the government to render the necessary support. In terms of the government, its overarching concern is to ensure China's energy supply security, so it has rendered both diplomatic and financial support to the NOCs, expecting them to forsake their commercial interests

⁴¹ *Nanfang Zhoumo (Southern Weekend)* (2004).

⁴² *Ibid.*

⁴³ For an analysis of the China Aviation Oil incident, see *People Daily* (Beijing) (2004).

⁴⁴ For a detailed analysis of the underlying reasons, see Chen (2008b).

if necessary. However, it is the NOCs that take the helm when deciding where to invest, whereas the government is often taken “for the ride with little idea of the final destination”.⁴⁵ The difference in goal priorities means that the NOCs may run counter to the state’s mandates whenever they are required to relinquish their windfall profits. For instance, they may be reluctant to ship oil back home whenever they expect higher returns in the foreign markets. Such cases did happen. Regardless of political pressure from Beijing, CNPC continued to transport oil from its main oilfield in western Kazakhstan to the Caspian port of Atyrau and sold it overseas rather than ship it home.⁴⁶

Second, competition among the Chinese NOCs over foreign oil and gas assets is another scenario that goes against the will and expectation of the Chinese government. Against the backdrop of a hike in world oil prices in recent years, Chinese enterprises are more enthusiastic about going abroad to acquire more oil and gas equities. Not only are the three largest Chinese oil giants, CNPC, Sinopec and CNOOC, striving hard to venture across the world, other SOEs and even private firms, are also attracted by the potential returns and are joining in the quest for foreign oil and gas. For instance, China Citic Group, whose major business lies in financial services, has embarked on upstream oil and gas E&P business as well. The company successfully acquired the Kazakhstan oil assets of Canada’s Nations Energy Company Ltd. for US\$1.91 billion in December 2006. Competition is so fierce that sometimes the Chinese NOCs even bid against each other over some foreign projects. Regardless of the government’s directives not to do so, contests between PetroChina and Sinopec in Sudan and Libya as well as between CNOOC and Sinopec in Brazil exemplify such cases.⁴⁷ Beijing obviously is reluctant to see such a situation as their overbid can only lead to state asset dissipation. Zeng Qinghong, former vice president of China, wrote a special article in *Study Times*, calling for the Chinese firms to avoid face-to-face competition in foreign bids and requiring them to pay heed to China’s political and strategic interests.⁴⁸ Therefore, in recent years the government has made efforts to reconcile their foreign bids, but it remains to be seen whether the government’s coordination efforts will be foiled by the NOCs.

Third, the NOCs’ business practices may do harm to China’s foreign strategy or image as a responsible power in their endeavor to seek profits in foreign countries. Related to the above point, fierce inter-corporate competition has often forced the Chinese companies to curtail costs through reducing wages, and neglecting working conditions and safety standards, irrespective of local customs and laws. Such practices are set to incur local grievances and even protests. For instance, Sinopec was accused of desecrating the forest in its exploration at the Loango National Park

⁴⁵ Downs (2007).

⁴⁶ Cornelius and Story (2007), p. 12.

⁴⁷ Wu and Han (2005).

⁴⁸ *Zhongxinwang (China News Net)* (2005).

in Gabon in October 2006.⁴⁹ Also, anti-China sentiment permeated some developing countries due to the competition from cheaper China-made commodities. The Chinese government hence issued a new regulation calling for Chinese companies to practice “localization” (in the sense of abiding by local laws, customs and regulations) in their overseas business in order to protect China’s national interests.⁵⁰

Fourth, the strong bargaining power of the NOCs vis-à-vis the government agencies has weakened the latter’s regulatory and monitoring capability. Their strong influence over the state derives from their monopoly status, close liaisons with the government, big largesse to the government, as well as the dispersed and understaffed administrative organs of the government. The monopoly status means not only a series of policy privileges, but also the advantages in garnering market information. The management has close contact with the central leadership, implying they have far more chances of influencing the policy makers. The government often turns to the NOCs for policy consultations,⁵¹ providing them with an informal channel of influencing policies. Furthermore, “the separation of government from enterprise functions is far from complete” considering that many energy-related department staff originally came from the state energy industries.⁵² The NOCs even successfully frustrated the government’s attempts to sub-divide them into a number of competing companies; although the government exhorted competition among the NOCs, there are no rules to govern that competition.⁵³

In practice, the tax contribution by the three NOCs has often outshone many other SOEs. In 2002, total profits made by 510 China’s key companies was RMB250 billion, among which the petroleum and petrochemical industry accounted for one third, with CNPC, the major contributor, reaping RMB379.2 billion sales revenue and paying RMB64.4 billion in taxes.⁵⁴ As the then vice Premier Wu Bangguo said, “our two large corporations (CNPC and Sinopec) have played an extremely important role in our national industrial economy. If your profit falls, then no one can make it up.”⁵⁵ Such dominance has usually enabled them to successfully lobby the government to defend their profit advantages.

The asymmetrical power and the fragmented administrative power have contributed to the weakening of the regulatory and monitoring capability of the state over the NOCs. The government, particularly the MOC, has to depend on the office of the Economic and Commercial Counselor (ECC office) based in the local Chinese embassy to ensure the timely flow of information and rigorous enforcement

⁴⁹ Gill and Reilly (2007).

⁵⁰ See MOC, MFA, and SASAC (2005).

⁵¹ See Asia Research Centre (2001), p. 12.

⁵² Andrews-Speed, Liao and Dannreuther (2002), p. 51.

⁵³ Andrews-Speed, (2004), p. 56.

⁵⁴ Zhong (2004).

⁵⁵ Speech made by Vice Premier Wu Bangguo in the Inauguration of the Two Largest Corporations, 27 July 1998. See CNPC (2000).

of regulations on the Chinese companies' outward FDI. In a strictly hierarchical regime with unit (*danwei*) politics,⁵⁶ CNPC and Sinopec are the ministry-level units and CNOOC is a vice-ministry level unit, whereas the ECC office is below the vice-ministry level. The status of supervisor is thus lower than those being administered, and when the former has to mandate the latter, it could easily lead to non-enforcement or the latter's "selective implementation", that is, the NOCs might choose to implement only those policies that are beneficial to their interests while evading those unfavorable ones. As all the three giants possess tremendous assets, it is quite difficult for the MOC to manage them well.⁵⁷

Lastly, the differences in interests of the government and the NOCs are also in their risk recognition as well as risk management in foreign countries. China has to deal with unstable regimes or governments with fickle regulations where they have extensive business operations, namely, Sudan, Myanmar, Angola, Ecuador, Nigeria, Kazakhstan, and so on. While the western MOCs have shunned away from these countries, the Chinese NOCs have boldly undertaken the risks despite their lack of competitiveness. Take Nigeria for example, oil multinationals, including Shell and Mobil, have withdrawn their businesses in view of the deteriorating political situation after their petroleum facilities had been attacked. CNPC and CNOOC, instead, went on to start their operations there. Were they ignorant of the risks involved? Obviously not. China's NDRC and Ministry of Commerce also acknowledged such risks in their compiled *Countries and Industries for Overseas Investment Guidance Catalogue*; notwithstanding their pre-warning of high risks in Sudan, Nigeria, Angola, and so on, the NOCs have insisted on venturing into those countries and even making additional investments. As a result, Kazakhstan, Sudan, Ecuador, Angola and Nigeria have become the major sources of the NOCs' equity oil. It is true that the NOCs' entry into these countries is due to their inability to access other most easily extractable regions now under the dominance of the western MOCs or exclusive to foreign investors at all. However, much has to be blamed on their belief that they are backed by the government and can be bailed out anytime. Hence, it can be seen that the NOCs sometimes merely go after profits regardless of the potential risks, as evidenced by the aforementioned China Aviation Oil incident. Although this case highlights the absence of a supervisory mechanism and institution for controlling the NOCs, it shows that the government and the NOCs sometimes hold different perceptions of market risks. As a matter of fact, the NOCs have the propensity to let the government undertake the risks engendered by their foreign oil and gas quest.

The likelihood of the NOCs' "defection" tends to be larger with ongoing marketization. This situation is aggravated by the problem of asymmetric information between the government and the NOCs regarding the costs and profits of their foreign operations, and the high costs to monitor their overseas behaviors.

⁵⁶ In China, the most basic organization is unit (*danwei*), which takes the responsibility for one's political rights, social welfare, education etc. Examples of a unit include a primary school, a hospital, police station, CNPC, education ministry etc.

⁵⁷ See Yu (2005).

Conclusion

China's foreign energy quest has often been portrayed as "China Inc." The monolithic mercantilism image to a large extent has been a result of misperception and/or misunderstanding. The Chinese government ministries are hardly able to coordinate their policies and actions, while the NOCs are not always obedient to the government mandates.

The NOCs have behaved in a manner similar to private firms in their investments overseas. They are more concerned about their development and profit maximization. However, differences are apparent between the two types of economic ownerships. Contrast to private firms which regard profit maximization as an end, the NOCs, particularly their management team, use profit maximization as a means for other goals, such as further promotion of the executives, fulfilling so-called social obligation, boosting employment to avoid social unrest, and so on. It is natural for firms, whatever the ownership, to pursue monopoly status in the market. Successful private companies may attain that goal through technological innovation, management improvement, sales expansion, and so forth, while the oligarchic monopoly status enjoyed by the NOCs is not a result of free competition but a deliberate arrangement by the Chinese government. As a result, private firms may be more cautious than the NOCs when making a foreign bid.⁵⁸

Despite all the efforts that China has made in its quest for oil and gas abroad, its energy thirst can hardly be quenched due to China's surging oil demand. In fact, most oil and gas resources produced by the NOCs abroad are sold in the international market and not shipped back home. Even if the NOCs are willing to do so, it is questionable whether China has the capability to transport them safely during times of emergency. Nonetheless, China's quest for foreign energy resources has already aroused the grave concern of other countries. China would do better if it could concentrate efforts on energy conservation and energy efficiency improvement.

⁵⁸ Of course, it is worth noting that oil price expectation should be taken into account when blaming some for overbidding.

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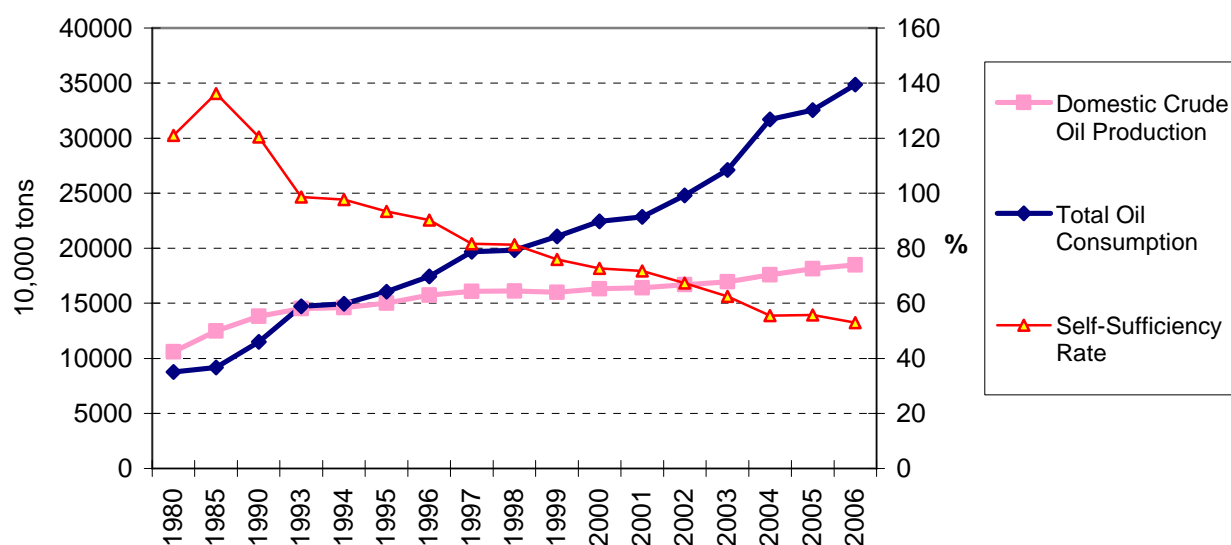
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<http://www.china.com.cn/chinese/PI-c/964520.htm>

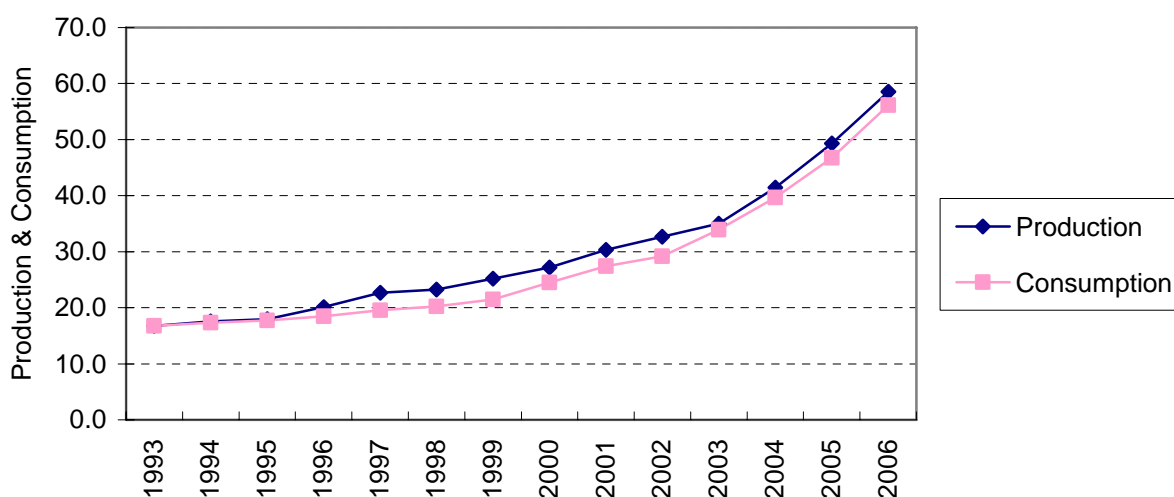
Chart 1: Oil Production & Consumption in China



Note: Data on oil production refer to the output of crude oil. Self-sufficiency rate is the proportion of domestic crude production in total oil consumption.

Source: National Bureau of Statistics of China, *China Statistical Yearbook 1996-2007*.

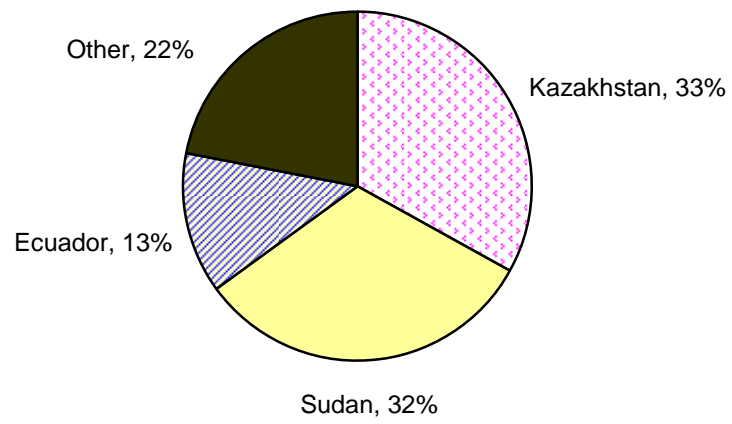
Chart 2: China's Natural Gas Production & Consumption
(billion cubic metres)



Source: BP Statistical Review of World Energy June 2008.

Chart 3: Foreign Equity-Oil Production, 2006

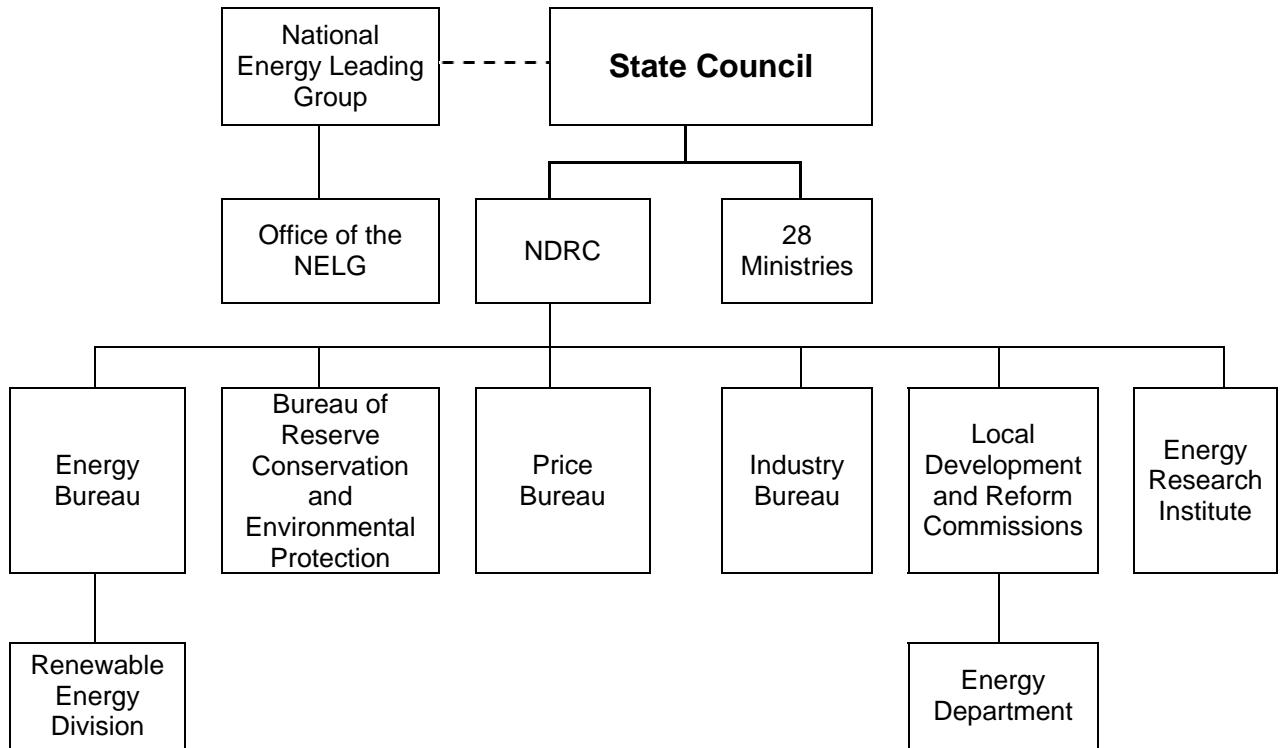
Total: 0.68 mb/d



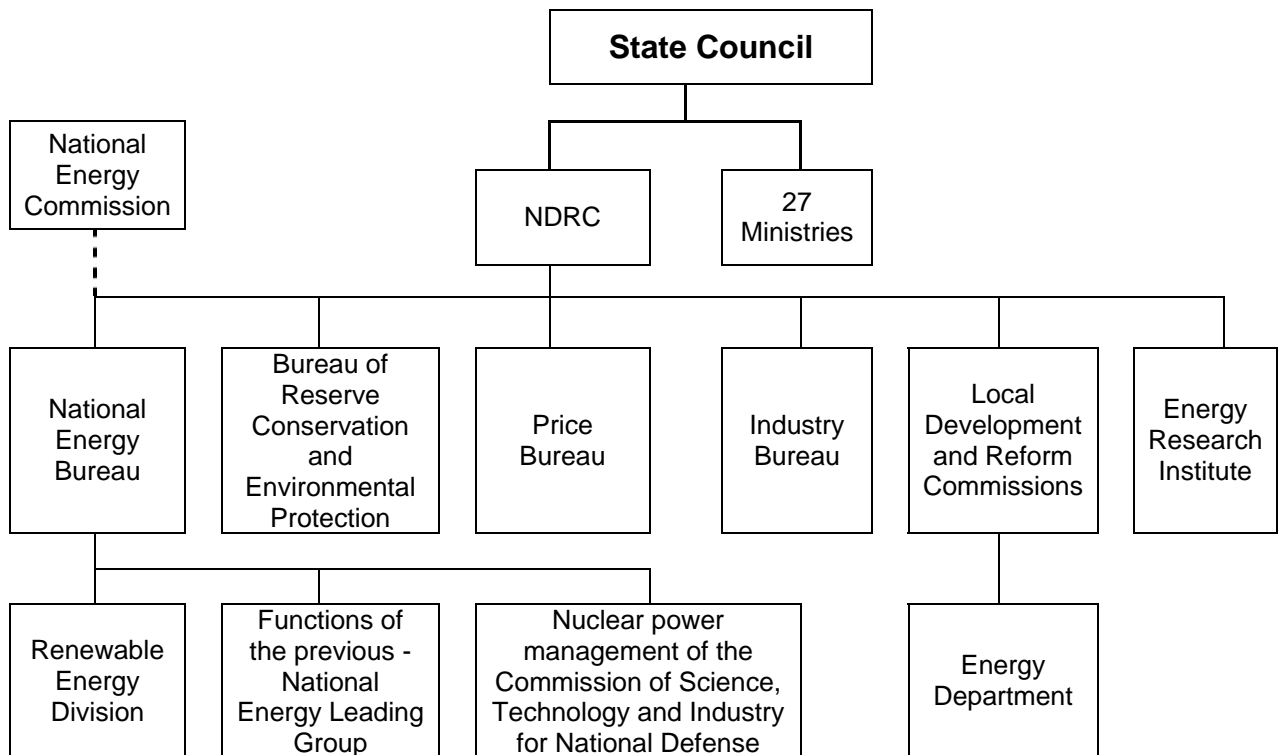
Source: Adapted from Downs (2008), pp. 27-31.

Chart 4: China's Energy Policymaking Bodies

Chinese Policymaking Bodies before March 2008 Reforms

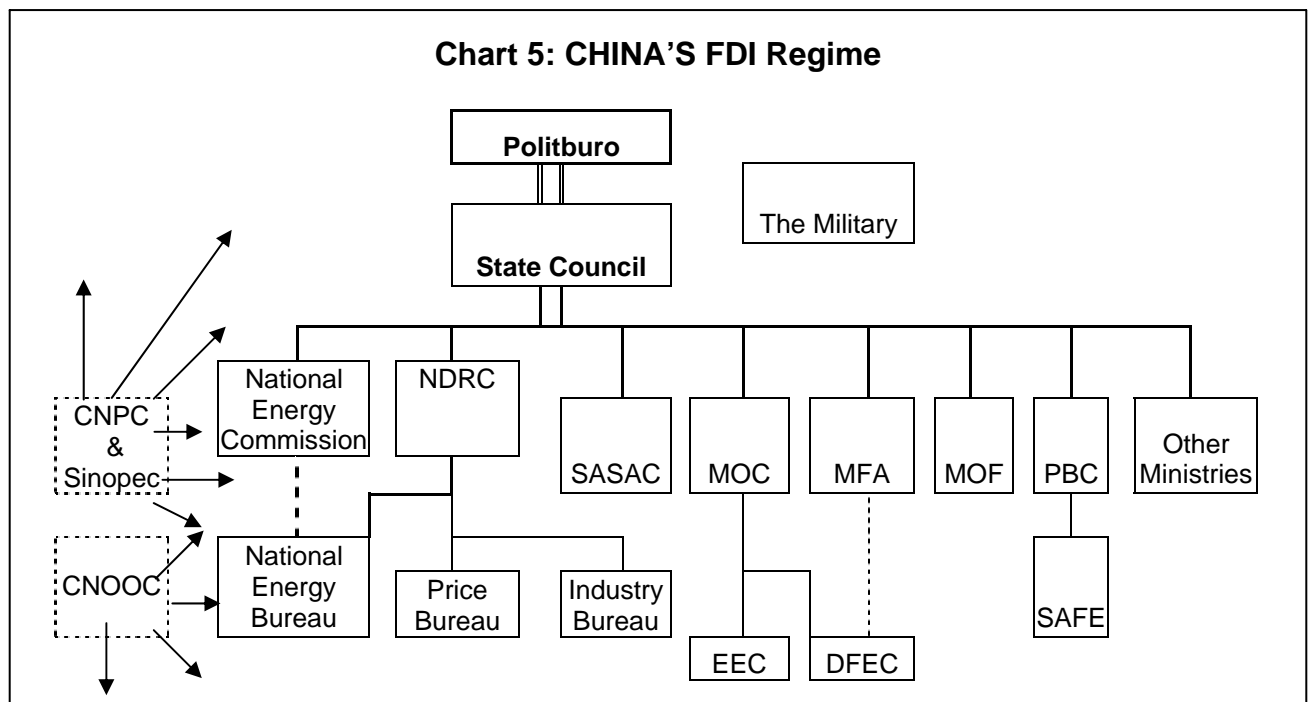


Chinese Policymaking Bodies After March 2008 Reforms



Source: adapted from International Crisis Group (2008), p. 41.

Chart 5: CHINA'S FDI Regime



Note: → denotes the NOCs can exert influence on various levels of government apparatus, even including the Politburo and the military.

Table 1: Proved Reserves of Oil and Gas

Unit: oil: billion barrels

gas: trillion cubic feet

	Organization	Crude Oil	Share of world total (%)	R/P ratio (end 2006)	Natural Gas	Share of world total (%)	R/P ratio (end 2007)
China	<i>BP Statistic Review</i> , year-end 2007	15.5	1.3	11.3	66.54	1.1	27.2
	<i>Oil & Gas Journal</i> , 1 Jan. 2007	16	1.21		80	1.3	
	<i>World Oil</i> , year-end 2005	16.2	1.45		55.6	0.9	
Total World	<i>BP Statistic Review</i> , year-end 2007	1237.9	100	41.6	6263.3	100	60.3
	<i>Oil & Gas Journal</i> , 1 Jan. 2007	1317.5	100		6182.7	100	
	<i>World Oil</i> , year-end 2005	1119.6	100		6226.6	100	

Note: Reserves-to-production (R/P) ratio– If the reserves remaining at the end of any year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that rate.

Source: R/P ratio: BP Statistical Review of World Energy June 2008; other data are cited from Energy Information Administration (2008).

Table 2: Distribution of Overseas Investments by Chinese Oil Companies

	CNPC		Sinopec		CNOOC		Others*	Total		Major Countries
	Projects No.	%	Projects No.	%	Projects No.	%	Projects No.	Projects No.	%	
Europe	16	22	3	9	0	0	2	21	15	Russia, Kazakhstan, Uzbekistan
Middle East	8	10	11	34	0	0	6	25	18	Saudi Arabia, Yemen, Iran
Africa	19	26	11	34	4	25	3	37	27	Sudan, Angola, Algeria, Nigeria
Northeast Asia	1	1	0	0	1	6	1	3	2	Mongolia
Southeast Asia	15	20	3	9	11	69	2	31	22	Indonesia, Australia, Malaysia, Papua New Guinea
Latin America	11	15	3	9	0	0	2	16	11	Venezuela, Brazil, Ecuador, Peru
North America	4	5	1	3	1	6	0	6	4	Canada
In Total	74	100	32	100	17	100	16	139	100	

Note: * The other companies primarily include Sinochem, Zhuhai Zhenrong, China Aviation Oil, China National Oil & Gas Exploration and Development Corp., China National Power Equipment Corp., China Oilfield Services Ltd.

Source: *Zhongguo Hangye Yujing Wang* (China Industry Warning Net) (2006).

Table 3: Chinese Oil Companies in *Fortune Global 500*

Company	2007			2006			2005		
	Rank	Revenues (\$ millions)	Profits (\$ millions)	Rank	Revenues (\$ millions)	Profits (\$ millions)	Rank	Revenues (\$ millions)	Profits (\$ millions)
Exxon Mobil	2	347,254.0	39,500.0	1	339,938	36,130.0	3	270,772.0	25,330.0
Royal Dutch Shell	3	318,845.0	25,442.0	3	306,731	25,311.0	4	268,690.0	18,183.0
BP	4	274,316.0	22,000.0	4	267,600	22,341.0	2	285,059.0	15,371.0
Sinopec	17	131,636.0	3,703.1	23	98,784.9	2,668.4	31	75,076.7	1,268.9
China National Petroleum	24	110,520.2	13,265.3	39	83,556.5	12,950.0	46	67,723.8	8,757.1
Sinochem	299	23,109.2	344.7	304	21,089.0	260.2	287	20,380.7	229.7
China National Offshore Oil	469	16,038.9	3,007.1	/			/		

Source: *Fortune Global 500*, 2005-2007.