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Outward Foreign Direct Investment by Chinese National Oil Companies

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Developed countries have become increasingly suspicious about the rapid growth of Chinese investments in their home countries and abroad, commonly citing potential threats to national security and global governance as the main sources of anxieties. As a result, policy measures in some developed markets have been put in place to create additional regulation and oversight, specifically in highly regulated and strategic industries, such as the oil sector. This article refutes a number of popular myths about Chinese investments in the global oil industry, and suggests a more rigorous dialogue with the Chinese authorities relating to their integration into international institutions.

KEYWORDS *emerging markets multinationals, energy security, OFDI, oil companies, state-owned*

INTRODUCTION

The fear concerning China's increased outward foreign direct investment (OFDI), particularly in energy and other natural resources, is fueled by arguments laced with underlying theoretical assumptions. In the West, politicians

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and media outlets have directed their concerns and focus particularly towards Chinese national oil companies (NOCs) which has led to speculation about the potential threats these oil companies pose to world energy security and the possible harm they may bring to global economic development. While there may be valid reasons to be concerned about China's increased OFDI in the energy sector, some arguments are more dubious in their veracity.

Five common misperceptions are especially prevalent and need to be examined so that policy considerations could be founded on reality, rather than perceptions:

1. Chinese oil companies are simply agents of the State with political motivations above all,
2. Chinese oil companies are immune to political risks,
3. Chinese oil companies threaten energy security,
4. Chinese oil companies hurt the developmental prospect of resource rich countries,
5. Chinese oil companies don't care about global governance and the environment

BACKGROUND ON COMMON THEORETICAL APPROACHES

A large portion of the literature on energy, particularly that focused on the potential for conflict and cooperation, is implicitly theoretical. Two theoretical approaches of international relations theory, realism and liberalism, seem to be the most commonly adopted approaches in the arguments against the increase in China's OFDI in oil. In order to understand the current arguments of international energy issues, it is important to be familiar with the underlying theoretical assumptions of each approach and the suggested implications on potential outcomes.

The key underlying assumptions and arguments of the "realist approach" are; one, access to and control of oil is a key ingredient of national power and national interest; two, energy resources are becoming more scarce (drawing often from the "peak oil" thesis); three, state competition for access and control to these resources will increase and therefore conflict and war are increasingly likely. The far-reaching and provocative nature of this approach should be appreciated even by those who may disagree with its underlying assumptions because of the strong influence it has in the decision-making of political leaders. Such topics as the "scramble for Africa," which focuses on the increased global interest in the natural resources of Africa, create zero-sum scenarios in which every country is out for themselves. This approach can also be seen in Western concerns about China's rapid-rise to a global economic power and the expansion of its influence across the world. But such an approach has evident shortcomings.

It overemphasizes the military dimension of power and focuses on state-to-state relations, while neglecting other sources of power such as “soft power” and the roles of non-state actors such as multinational corporations (Nye 2004). The realist approach tends to be overly deterministic, with the assumption that resources scarcity and inter-state conflict are a given.

The key underlying assumption and argument of the “liberal approach” is that intervening variables such as transparency measures, legal frameworks, regulations, and international institutions can take actions that have transformative power. In terms of international energy issues, the “liberal approach” tends to specifically focus on uncovering the structural flaws and corruption present in the international energy industry, which have produced theories such as the “resource curse” and the “rentier state.” The “liberal approach,” unlike the “realist approach,” does offer prescribed policies that could be arranged to open, correct, and increase cooperation in the international energy industry, but such prescriptions are dependent on accuracy of the assumptions previously mentioned. Such prescriptions call for increased transparency, the adoption of corporate social responsibility, increased cooperation with good governance, and the promotion of regional and international institutions. The liberal approach is generally criticized for being overly optimistic about the power and reasoning of international bodies (Dannreuther 2010).

BACKGROUND ON OIL SECURITY OF CHINA AND OVERSEAS ACTIVITIES OF CHINESE NOCS

It is important to have a background understanding of the oil industry in order to better comprehend the arguments made against increased Chinese OFDI in the energy sector. Crude oil, the input of the oil industry, is a globally sought-after commodity, but is concentrated in a few geographic areas and currently has no substitutes, especially in transport and military uses. The temporal aspect, the conversion of carbon materials such as plants and animals into what is commonly referred to today as “fossil fuels,” adds another dimension to crude oil’s scarcity. The wide use of oil throughout several industries and functions, as well as its transportability, in combination with the lack of substitutes, the geographic concentration and the temporal scarcity of oil, make it a globally valuable and strategic asset.

The world oil industry tends to have an oligopolistic structure, with imperfect competition at both global and regional levels. Actors in the market are highly interdependent, therefore decisions by one actor affects the rest (Percival, Van Geuns, and Valk 2009). There are high barriers to entry in the oil industry due to capital intensity, but there are large economies of scale to be gained by existing firms, which have often received government support.

Governments and national energy firms often appear to have a principal-agent relationship, where the nation's resources are owned by the government (principal) and managed by the national energy firm (agent). The principal and agent, however, could at times have different respective interests. In China, national oil companies, such as PetroChina and Sinopec, have been corporatized and commercialized since the late 1990s, but do remain majority owned by the state. These companies are backed by state-owned banks and energy prices are strongly influenced by the government. But the closing gap between domestic and international oil prices and the drive for profits by Chinese oil companies are elements of a competitive market, which shows signs that the interests of the Chinese government and the interests of NOCs are not necessarily the all the same (Andrews-Speed 2012). The principal-agent relationship can be furthered examined by focusing on the organizational structure of the national energy sector and relative strength of the institutions responsible for the oversight of those investments. Cheon (2014) examined the comparative efficiency of OFDI by National Oil Companies by using the bargaining structure of the national energy sector to explain the outcomes of national energy investment strategies. China was a prime example of a country that, due to the decentralized structure of the energy sector, lacked the capacity to restrain bad investments, and additionally lacked institutional veto power, leading to a lack of will to oppose these bad investments. In a decentralized national energy sector that lacks institutions with veto power, state firms tend to dominate the energy policy process opening the system up to the most inefficient investments driven by firm objectives rather than a coordinated national strategy.

Chinese Oil Security

There are several evident reasons for increased OFDI from Chinese oil companies, the largest and most interwoven being growing domestic demand. Oil demand from Chinese consumers has increased strongly since the early 1990s as the economy has grown and developed. Economic growth has driven rapid development in the industrial and transport sectors in China, and thus has fueled a surging domestic demand for oil (Leung 2010). The world's largest energy consumer, China, is now the second largest oil consumer.

As the statistics show, oil has not traditionally played a dominant role in the energy consumption mix of China. In 2013, China's total primary energy consumption reached 2852.4 million tons of oil equivalent (mtoe), of which only 17.8% was oil (BP 2014). Despite the minority role oil plays in China's energy consumption mix, oil has still traditionally been at the center of the debate of energy security in China for five reasons.

First, the Chinese leaders have conventionally regarded oil as a strategic commodity, as there is no substitute for oil in transport and military use in the short and medium terms (Leung 2011; Leung, Cherp, Jewell, and Wei 2014).

Second, China's dependence on foreign oil has deepened over time. China had traditionally been an important Asian oil exporter before it turned into a net importer in 1993. That China has had to rely on oil supplied by foreigners has refreshed the frustrating memories of the Chinese energy crisis when the Coordinating Committee for Multilateral Export Controls (COCOM) placed it in an oil embargo in the 1950s, and after a deteriorating relationship turned hostile, the Soviet Union added insult to injury by cutting oil supplies in the 1960s. In 1993, China only imported 7.6 barrels out of every 100 barrels of oil consumed, but since then the oil gap, in tandem with domestic industrial growth and development, has expanded, but not without notice. On March 27, 1994, the phrase "energy security" appeared in a newspaper for the first time since the launch of China's economic reforms. In 2013, China was importing over 60 barrels out of every 100 barrels consumed (CEIC 2014). In September 2013, China's crude oil imports overtook the US to become the world's largest oil importer (Hornby 2013). It is estimated that by 2020, China's imports will grow to 8 million barrels per day (mbpd). The vast majority of oil imports will need to come from the sea and from lines of communication which are presently controlled by the US Navy. Given the tense geopolitical relations between the US and China, it is perhaps not surprising that the Chinese state has serious strategic concerns over its energy security and has looked to increase the size and capability of its own Navy (Lieberthal and Herberg 2006; Dannreuther 2011).

Third, despite dedicated supply-side efforts to diversify sources (from the going-out strategy of China's national oil companies to the transnational oil and gas pipeline projects), the Middle Kingdom still heavily depends on Middle Eastern crude oil. The proportion of Middle East oil to China's total imports peaked in 1998 at 61% and since 2002 it has hovered between 45 and 51% (Leung, Li, and Low 2011). A challenge for Chinese leaders today is the need to foster economic and political positions in this combustible region, where historically China has rarely played an influential role (Philip Andrews-Speed and Roland Dannreuther call this the "Persian Gulf Dilemma") (Andrews-Speed and Dannreuther 2011). As can be seen from Table 2, the Chinese are part of many international and regional institutions governing energy.

Fourth, the geographic reality of modern sea routes appear to trap China in the "Malacca Dilemma," which arises from both the fact that about 80% of China's crude oil imports go through the narrow and congested waterway of the Malacca Strait in Southeast Asia, and the perception that this Strait is controlled by "certain major powers," according to an explanation provided by President Hu Jintao in November 2003 (Storey 2006).

Finally, the growing importance of the road transport sector, the main source for mobility in modern economies, which is almost entirely dependent on oil. Road transport currently accounts for about 80% of total transport oil use in China (International Energy Agency 2013). The emergence of the road transport sector as a dominant oil consumer is an institutional

consequence. One year after becoming a net oil importer, Beijing released its' automobile policy which regarded the domestic auto industry as a strategic industry and a pillar of economy. The government trusted that the auto-industry would create jobs, create demand for raw and intermediate materials, and stimulate the economy via its spill-over effect. And since then, the car has represented a symbol of modernity in China. In addition to government encouragement of car ownership, the increase in Chinese personal income has made vehicles increasingly affordable and desirable. China overtook the United States to possess the biggest stock of vehicles in 2010. Despite that fact, the 2010 passenger car stock per capita in China was only 45.7 per 1000 persons, a figure similar to that in the US back in 1917 (Leung, Li, and Walls 2012). In China, highways have been constructed and lengthened at a pace much faster than railways. While this falls in line with encouraging personal car ownership, it also has caused an insufficient capacity in rail transport, especially for cargo logistics (Gallagher 2006). The rapid growth in China's industrial output has generated huge needs for freight transport. Since China's freight rail system is seriously insufficient, organizations all over the country have had to rely heavily on road transport, therefore we can see that the increasing importance of the road transport sector is stimulated by two growing demands.

From these five points, we can clearly see the economic, military, and political significance that oil has played and continues to play in Chinese energy policy and energy security.

Overseas Activities of Chinese NOCs

Chinese investments in energy assets are essentially for China's energy security, especially in oil, for the above reasons. Within China, the crude oil and natural gas mining industry is heavily regulated and highly concentrated by the government due to the importance of the resources. Today, most survey and exploitation rights belong to the top three participants, China National Petroleum Corporation (CNPC), China National Offshore Oil Corporation (CNOOC), and China Petrochemical Corporation (Sinopec). These three contributed to a combined 93% of the total industry revenue in 2012 in China (IBIS World Industry Report 2012). CNPC, CNOOC and Sinopec operate in different sectors and in different roles within sectors industry in order to control competition and conserve capital resources. CNPC traditionally mines for crude oil and natural gas on land within China. CNOOC is mainly focused on offshore crude oil and natural gas mining. And Sinopec Group transports, markets, wholesales and retails crude oil, and operates in the petrochemical industry.

From 1992 to 1995, as Chinese oil consumption was rising with economic growth and domestic oil sources were becoming evidently limited, CNPC made small investments in existing oil fields in Canada, Thailand and Peru, while CNOOC bought shares in a producing field in Indonesia.

All of these investment projects were comparatively small for the industry and were all directed at fields with proven reserves, making them low-risk and low-profit ventures. These initial investments can therefore be seen as a learning phase for Chinese NOCs (Andrews-Speed and Dannreuther 2011, 71–75).

In 1996, a series of major investments were made by CNPC in Kazakhstan, Venezuela, and Sudan. While these investments were much larger in scale than the investments of the early 1990s, they would still be considered low-risk and low-tech investments. But here also emerges another unique factor in Chinese NOCs OFDI. Many of these investment opportunities, such as oil in Sudan, were not equally available to all investors, as the position of Western countries on trade with some of these countries made these investment opportunities either unattractive or unavailable to Western companies. As some African leaders have voiced, not entirely void of their own personal interest, Chinese investment has naturally filled the space left by Western influence, with their politically condition-less trade approach. As of 2012, these three countries have continued to be the most significant sources of equity oil for Chinese NOCs, accounting for over half of the foreign oil directly controlled by Chinese companies (Jiang and Sutton 2011, 18).

In 1998, the Chinese government, perhaps in hopes of stimulating the NOCs to become more competitive and profitable, began the restructuring of CNPC, resulting in the formation of the joint-stock company PetroChina. PetroChina, which conducts business in upstream explorations and production as well as downstream marketing and wholesaling, as of today is still majority-owned by CNPC.

From 2002 to 2006, an estimated US \$20 billion was committed by Chinese NOCs to oil projects in more than 30 countries, including the former Soviet Union, Africa, the Middle East, and Latin America (Andrews-Speed 2010). Chinese NOCs demonstrated greater ambition than in previous investment projects by targeting exploration areas with unproven reserves and by adopting a more aggressive acquisition strategy. These later investments can be seen as a medium- to high-risk learning phase in preparation for investments that would take place at the end of the decade. Through these investments, Chinese NOCs would be learning how to become more technically proficient in oil extractions as well as acquisition negotiations in an overall effort to gain a group of high-quality foreign oil reserves.

During 2009 and 2010, China's national oil companies spent more than \$45 billion in major acquisitions and license deals. The principal geographical targets for these investments were the Middle East and Latin America, with Canada also playing a small role. It is estimated that in 2010, Chinese companies accounted for about 20% of global deal value (Wood Mackenzie 2010).

Worldwide mergers and acquisitions in the oil industry were 50% higher in 2012 to a record value of US \$254 billion, largely due to three mega-deals. CNOOC spent \$17.9 billion acquiring Nexen in July 2012. Other big Chinese

deals included Sinopec's purchase of Nigerian assets from the French oil company Total for \$2.5 billion, PetroChina's \$1.6 billion investment in a joint venture with Canada's Encana, PetroChina's purchase of a \$1.6 billion stake in Australia's Browse liquefied natural gas (LNG) project, and CNOOC's acquisition of \$2 billion stake in Australia's Queensland Curtis LNG project (Lehane 2012).

Today, Chinese oil companies operate in thirty different countries and have equity production in twenty of them, with the lion-share still being in Kazakhstan, Sudan, Venezuela, and Angola. Equity shares, contracting, long-term loans, and pipelines are the four forms of investment that have been the main vehicles for Chinese investment in the oil sector. By the end of 2010, the total loans that China had extended to resource-rich countries had reached approximately \$77 billion. The investments in transnational oil and gas pipelines included oil pipelines from Russia and Kazakhstan and a gas pipeline from Kazakhstan and Turkmenistan, as well as projected oil and gas pipelines from Myanmar (Dannreuther 2011). Figure 1 summarizes the M&A activities of Chinese national oil companies in our sample.

WRONGFUL ASSUMPTION ABOUT CHINESE INTERNATIONAL INVESTMENTS IN OIL

Chinese Oil Companies are Simply Agents of the State with Political Motivations Above All

One of the main fears of the rapidly growing OFDI of Chinese NOCs is the perception that they are following a clearly choreographed strategy, dictated centrally down from the Chinese party-state. This so-called "China, Inc" argument is still ungrounded (Downs 2007). In practice, the Chinese NOCs are, to a significant degree, powerful and autonomous actors, even if they are formally owned by the state (Andrews-Speed 2012). Much of the oil produced



FIGURE 1 M&A activity: Chinese NOC activity, 2001–2010. (Source: Wood Mackenzie 2010 and IEA 2011).

overseas by Chinese NOCs is sold on international markets, where Chinese NOCs can get higher profits compared to the domestically controlled market. Chinese NOCs' OFDI is driven not only by the government's desire to enhance security of the energy supply, but also by the ambitions of the NOCs themselves to become major international oil companies. This ambition involves gaining access to oil and gas assets overseas as well as developing commercial skills, technical expertise, and gaining access to the best available technologies. The leaders of oil companies also wish to preserve their autonomy because of the high level of access and influence to state leaders.

But it would be incorrect to say that Chinese NOCs are completely autonomous from government pressure and the interests of state. Chinese oil companies are not in a position to resist direct government interventions, although these government interventions are more often in the form of general policy objectives rather than everyday managerial decisions (Andrews-Speed 2012). In part, this is an internally driven discipline as the CEOs of Chinese NOCs and other large state-owned companies also tend to be leading communist party officials with political ambitions of their own; a perfect example of this being former CNPC Chairman Mr. Jiang Jiemin. Mr. Jiang, once deputy governor of Qinghai province and former Chairman of CNPC and PetroChina, was appointed Chairman of the powerful State-Owned Asset Supervision and Administration Commission (SASAC). Mr Jiang was later brought down in what has come to be one of the largest anti-corruption campaigns in recent Chinese history, bringing down former oil leader and party-state security head Zhou Yongkang, former head of overseas operations for PetroChina, Bo Qiliang, as well as several other energy-related officials.

In 2011 and 2012, we surveyed nine energy and resource-based companies during a seminar for their leaders in Pudong, Shanghai. This convenient sample gave us a better understanding of these companies' motivations and plans. Figures 2 and 3 summarize their reported motivations to go global, both presently and in the future. What can be seen from the figures is that economic and strategic motivations for globalization are as strong as the political and governmental ones.

Chinese Oil Companies are Immune to Political Risks

The rise of Chinese investments abroad has captured the attention of researchers, practitioners and policy makers in recent years (Alon, Fetscherin, and Gugler 2012). Exactly why and how Chinese multinationals invest is still elusive. Particularly problematic among developed nations is the government ownership of the Chinese companies who are doing the investing and recipient countries are concerned about the possible political motivations behind these investments. This is especially the case when these investments are in natural resources and energy sectors. The failed attempt

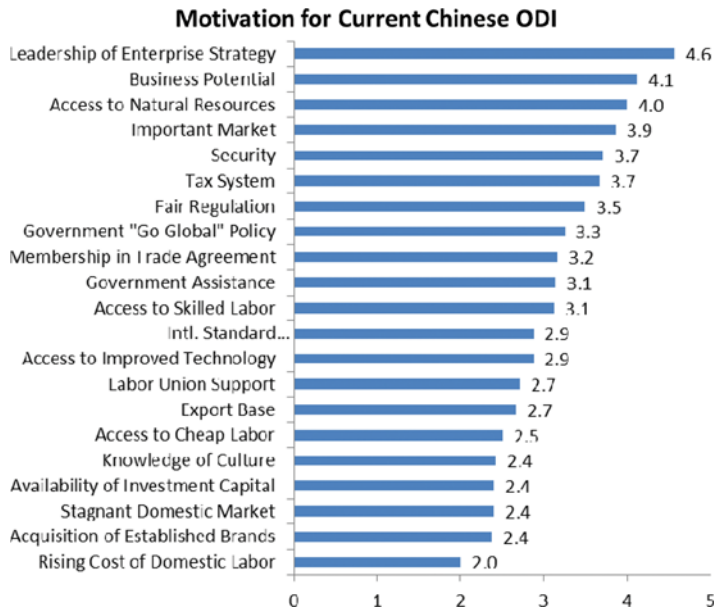


FIGURE 2 Chinese energy companies motivations to go global.

by CNOOC to purchase Unocal in 2005 can be largely attributed to such worries. By one estimate, 90% of China's 300 overseas mergers and acquisitions from 2008 to 2012 ended up unsuccessful (Shambaugh 2012).

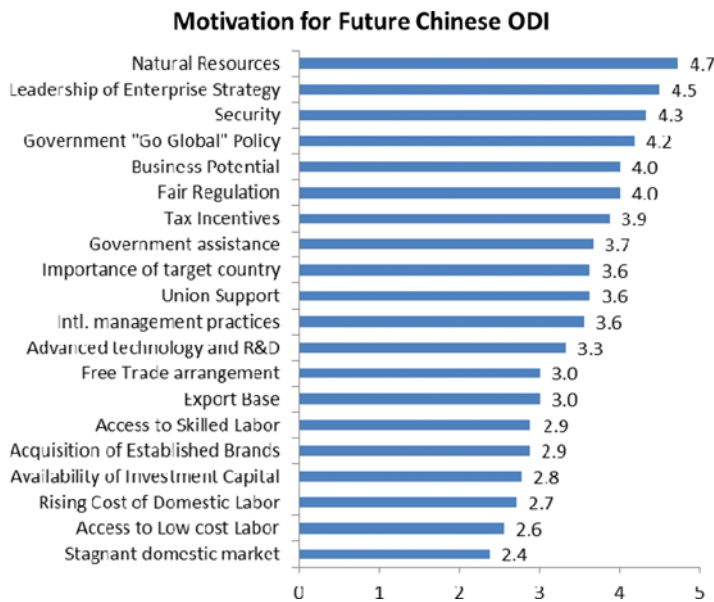


FIGURE 3 Chinese energy companies motivations for future expansion.

China is often seen as a strategic competitor of the US and its nominally communist government conjures up images of the Cold war among some geopolitical and military analysts. If we use this frame-of-mind, containment of China's acquisition of oil resources would be warranted. But what would it require to cut China off from the oil it needs to function? China currently has only one operational transnational oil pipeline, the Kazakhstan-China Oil Pipeline. Additionally, a large majority of oceanic oil transportation coming from Africa and the Middle East must pass through Malacca Strait, a bottle-neck point at which the US Navy could effectively blockade oil shipments and starve the nation from this much needed resource. While more investments are expected in Russia, Myanmar, Pakistan, and Africa that could possibly diversify Chinese access to oil, these investments all carry their own political risks and logistics problems, and thus have not produced any fruitful strategic solutions as of yet. Therefore, China's strategic threat to the US over oil resources seems to be one that is largely overstated and unrealistic, as these "threats" could be easily eliminated in the event of a crisis or military confrontation. Further, China's investments in the oil sands of Canada and oil companies in the USA and Europe could ultimately be nationalized or expropriated in the event of a war, eliminating the perceived military risks of Chinese acquisitions (Leung 2011).

Figures 4 and 5 below show the regional distribution and modes of entry used by Chinese energy firms abroad, based on the authors survey described earlier. What can be seen from these figures is that much of the Chinese investment is in volatile areas of the developing world (Asia, Africa, Middle East and Latin America), and in modes of entry that are not easily retractable, making these investments vulnerable to political risks.

Chinese Oil Companies Threaten Global Energy Security

It has been argued that by making these investments, the Chinese government is securing supplies of oil to the detriment of other oil importing

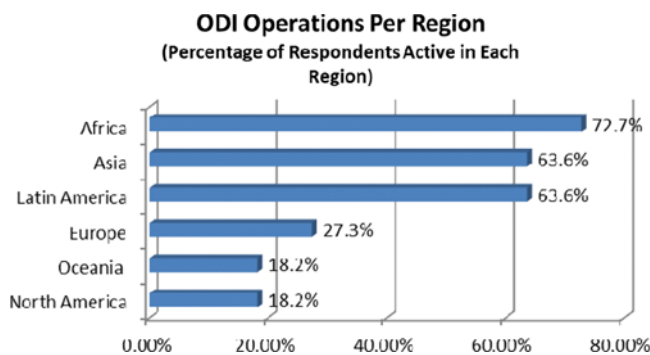


FIGURE 4 Chinese energy companies regional distribution of investment.

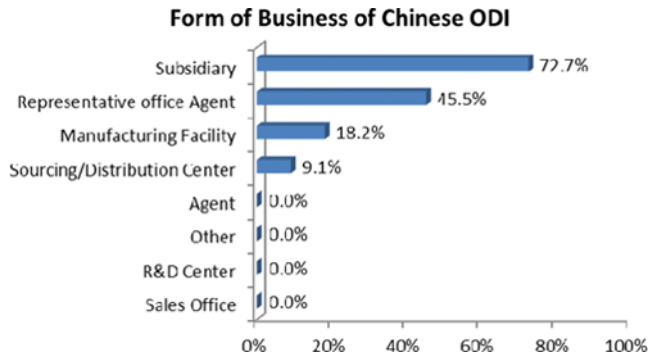


FIGURE 5 Chinese energy companies modes of entry.

nations. As already covered, the Chinese NOCs and the Chinese state do not work in lockstep, but even regardless of this reality, any oil produced, no matter who is producing it or where they are producing it, will add to the global supply of oil. If Chinese NOCs were sending all of the oil they were producing overseas back to China, it would only reduce China's consumption of other oil imports and thereby have no real net impact on the overall global supply of oil. But as previously mentioned, Chinese NOCs are not sending all of the oil they produce overseas back to China. Coinciding with this point, in the event of a world crisis where access to strategic resources becomes a critical matter to the state, the investments of Chinese NOCs would be as vulnerable to nationalization as any other foreign oil investment. Therefore, the argument that Chinese OFDI in oil is a threat to global energy security falls short on many points.

Arguably, China's investments in the Middle East and Africa can help bolster security in the Strait of Malacca. The Strait is the main shipping channel between the Indian Ocean and the Pacific Ocean, linking not only China, but also Japan, South Korea, and India to important commodities: oil, coffee, and other manufactured goods (Freeman 2003). A strategic interest by China in protecting the Strait of Malacca has the potential to decrease the many pirate attacks which stymied global trade to the benefit of the entire region. But such security interests would benefit from the establishment of cooperative mechanisms with the existing security establishment in order to integrate and coordinate efforts, as well as decrease possible mishaps.

Chinese Oil Companies Hurt the Developmental Prospect of Resource-Rich Poor Countries

Observers of Chinese overseas investments in oil are often concerned with what came to be known as the Angola mode: state-to-state links, concessionary aid, and preferential loans in return for resource exports headed for China (Kaplinsky 2012). These types of investments came to be seen by some

as new forms of colonialism (Yang 2012), by locking up national resource supplies, gaining preferential access to output and controlling the world's extractive industries (Moran, Kotschwar, and Muir 2012). However, the evidence shows that Chinese resource companies operate no differently than their Western counterparts, often shipping and selling resources mined to local customers to maximize profitability, rather than sending them back home to China. The Chinese investments in natural resources may in fact diversify oil resources and the geography of production and boost the competitive structure of the industry as a whole since Chinese NOCs can sometimes invest in production where other oil companies are unwilling or unable for political or economic reasons. A comprehensive study of thirty Chinese natural resource investments in Latin America, for example, showed that twenty-five of them helped diversify and boost competitiveness of Latin American resources (Moran, Kotschwar, and Muir 2012). Greenfield investments in oil fields, as another example, increase the overall capacity of the oil industry and the energy security of the entire world. According to the IEA, there is a significant underinvestment in oil resources and China's addition to the foray should, thus, be welcomed.

What can be seen from Table 1 and Figures 6 and 7 below are that the Chinese NOCs surveyed intend to continue to invest in the developing world, and that these investments will come in the form of direct investment (enhancing capacity), mergers and acquisitions (enhancing efficiency), and in supporting industries (trade, agriculture, and services), in addition to resource extraction.

Chinese NOCs Don't Care About Global Governance and the Environment

The second major issue concerning Chinese NOC's OFDI is the apparent willingness to embrace any foreign state in order to satisfy their resource

TABLE 1 Estimated Future ODI by Regions

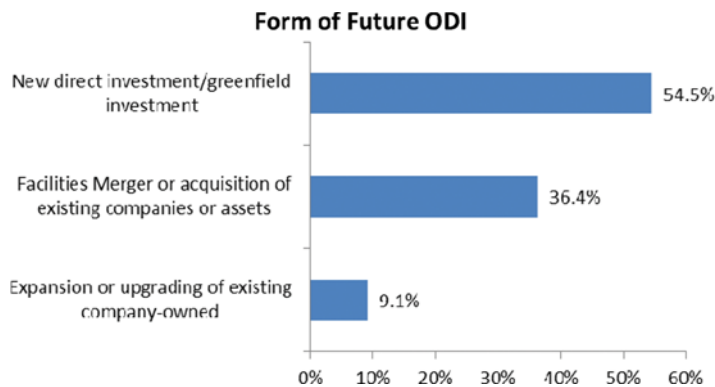
	In 12 months		In 2–5 Years	
	Number of companies responding	Average share of ODI (%)	Number of companies responding	Average share of ODI (%)
Asia	2	25	2	25
Europe	3	17	3	30
North America, of which:	1	10	1	10
US	0	0	0	0
Canada	1	40	1	40
Mexico	0	0	0	0
Africa	5	38	4	31
Latin America	5	33	3	38
Oceania	2	45	2	33
Don't know	3		4	

TABLE 2 China's Membership in Regional and International Institutions

Institution	Role of institution	China's status
International institutions		
World trade organisation	Trade	Member
International energy agency	Energy market information and support	Active non-member collaborator
International energy forum	Producer-consumer dialogue, information	Member
Energy charter treaty	Investment promotion and protection	Observer
UN framework convention on climate change	Climate change mitigation	Annex 2 Party
Extractive industries transparency initiative	Transparency of revenue flows	No direct involvement
Regional institutions		
ASEAN +3	Regional economic, political and security cooperation	Member
East Asia summit	Regional economic, political and security cooperation	Member
Shanghai cooperation organisation	Regional security and economic cooperation	Member

needs. Chinese companies are widely perceived as not fully respecting international norms of good governance, whether in terms of political conditionality or environmental sustainability, and thus harm the development of resource-rich countries (Andrews-Speed and Dannreuther 2011, 152–153).

By investing in Sudan, Myanmar, and Iran, it appears that Chinese NOCs are ignoring the international standards and regulations set up by the U.N. and other international bodies. But it must also be recognized that on the global stage, China's historical and current role in foundation and function

**FIGURE 6** Chinese energy companies future modes of entry.

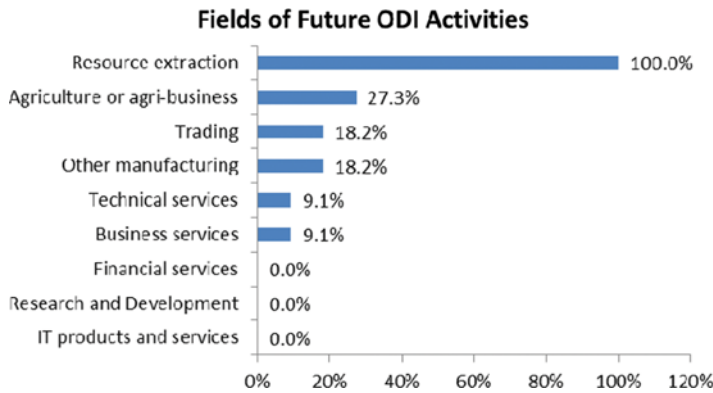


FIGURE 7 Chinese energy companies future fields of activity.

of these international bodies has been minor, and thus we are seeing several China-lead international groups which present potential alternatives to the U.N., World Bank, and Asia Development Bank. Additionally at the firm level, as a latecomer to the oil industry, Chinese NOCs have missed out on many of the more attractive investment opportunities that have been long exploited. Chinese NOCs investing in areas of high political risk can be attracted to the idea of untapped opportunities, especially when these opportunities are uniquely available to them. Chinese NOCs have a history of political non-interference, which is criticized for lacking genuine interest in the success of foreign states. But it appears that Chinese NOCs approach is to adapt to local conditions rather than dictate them. In countries with strong institutions that have strict laws and regulations, Chinese NOCs have complied with the local standards. In countries with weak institutions with weak laws and regulation, Chinese NOCs have complied with the local standards. This approach falls in line with research done on the power of institutions within resource rich countries and the correlation with the “resource curse” that seems to plague those endowed with highly demanded natural resources but weak institutions. In resource rich countries with strong institutions, the likelihood of falling into the “resource curse” trap is much less. Therefore, Chinese NOCs cannot be solely blamed for the social dysfunction of a foreign state, although it could be argued they do little to ameliorate it.

Most cases of poor environmental practices by Chinese companies have been related to minerals rather than oil, and in general, the environmental and labor record of Chinese NOCs overseas appears to be no worse than that of many other oil companies operating internationally (Andrews-Speed 2012). The importation of Chinese labor by Chinese NOCs can be used to further criticize Chinese companies and build upon the idea that what is going on is a type of post-modern Imperialism in Africa. But the issue is more complex and less clear. Many of the countries in which Chinese NOCs have made investments lacked a sufficiently trained labor force to meet the labor

demand. Additionally, China has an abundance of unemployed Chinese oil field workers and therefore can potentially justify the need for NOC to import Chinese labor, with the motivation to speed up the development and production process of these investment projects, which most IOCs would agree, makes good business sense. But as previously noted, Chinese NOCs and their leadership are not completely out from under the will of the party-state. Employment directives are highly- important to the party-state's core mission of maintaining social stability. Retaining low-unemployment rates may be one of several indicators that determines the future careers of promising party leaders, therefore giving them a large motivation to employ Chinese nationals whenever possible.

CONCLUSIONS AND IMPLICATIONS

We agree that China's national energy investment strategy is one of diversification aimed to weaken potential dependence and leverage energy supplying nations may gain, to mitigate exposure to potential shocks in the energy markets, and to gain leverage over energy suppliers to negotiate on energy prices (Myers Jaffe, Medlock, and O'Sullivan 2015). Worries over these investments and their potential threat to global energy security, the developmental prospects of resource-rich countries, and global governance are perhaps overstated. The world may, in fact, benefit from Chinese investments in energy because Chinese energy security corresponds closely with the world's energy security.

China and its NOCs are not always following market principles and international regulations in their quest for overseas petroleum assets and sources of oil and gas. As is the case with the domestic governance of oil and energy, the overseas activities are run on a state capitalist foundation rather than a free market. Overall, the picture that emerges from China's foreign engagement in international oil markets is of an increasingly important and influential actor with a significant surge in the scope and scale of its investments since the financial crisis of 2008. As with any rising power, such dynamic economic changes will present challenges to the incumbent power. China's companies are composed differently, with different relationships with the government and the government has a different set of practices when dealing with foreign nations. "But none of this means that China's international search for investments in natural resources needs to represent a direct threat to Western interests and concerns" (Andrew-Speed 2012, 14).

Chinese companies do benefit in a number of ways from being state-owned. The access to financial support, as well as the support of foreign policy initiatives by the state, give the Chinese NOCs a leg up in the industry. Even with these advantages, International Oil Companies

(IOCs) still have major strengths which make them formidable competitors compared to their Chinese counterparts. IOCs have proprietary control of some of the most advanced technology, where Chinese NOCs still fall short. IOCs also have rich experience in managing large-scale, capital-intensive projects, which includes a long history of working in producer countries with a diverse range of social, economic and political challenges. Chinese NOC have much less experience and have only worked in a limited number of producer countries. Chinese NOCs suffer from the general problem of all “late developers” in that most of the best deals and investments have already been made by those earlier to the scene. Complementing that fact, overall the accumulated overseas assets controlled by Chinese companies are still modest and limited. It is estimated that China accounted for less than 1% of total oil production worldwide in 2009 (Ericsson 2011, 2). As seen in Figure 8, while China’s oil production remains relatively stable, consumption is rising dramatically faster.

Chinese companies often face the same sorts of industry challenges as western companies, such as resource nationalism in the Global South and regional instability in the Middle East. Chinese oil companies are also still young players and not fully capable of competing against the more experienced Western players. The key question will be whether China’s reluctance to engage with these international principles in the international oil arena arises from a profound philosophical rejection of these principles or from

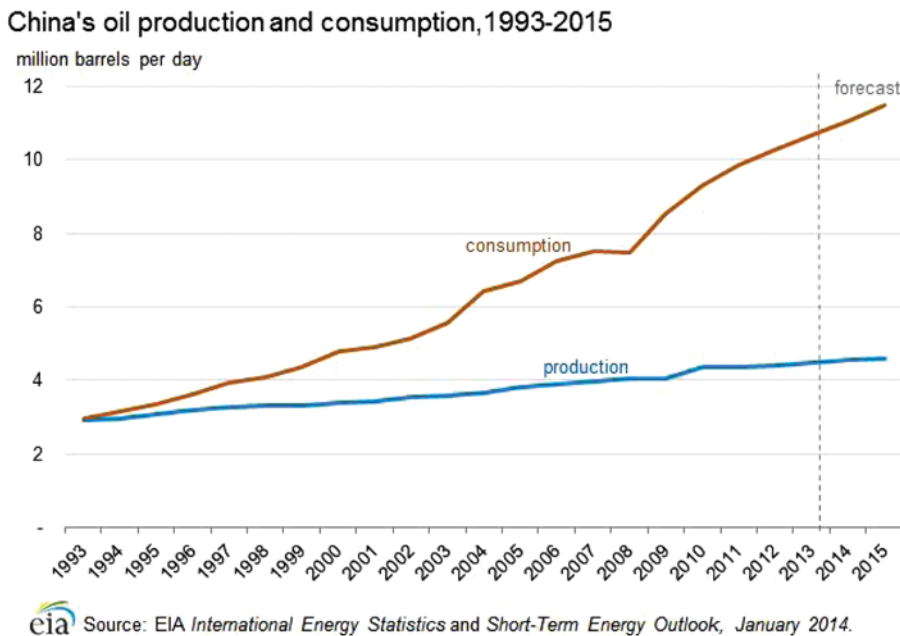


FIGURE 8 Chinese energy production and consumption.

a reluctance to be seen as subordinating its strategies to the principles of other powerful state actors.

While Chinese NOC have been able to leverage the powerful Chinese state diplomatic relations in order to establish investments in new and existing reserves, overland pipelines, and shipping routes, China is no longer the backseat giant of the geopolitical world. Playing a major role in regional and international organizations, China is adhering to more international policies and standards. This will mean that Chinese NOCs, as well as Chinese IOCs, will find it more difficult to invest in predator states that threaten the stability of the international system. China is already engaged with a number of international and regional institutions relating to oil and energy. The most important of these from the point of view of oil markets is the International Energy Agency (IEA). Unfortunately, under the current rules of the IEA China cannot become a formal member as it is not a member of the OECD. Nevertheless, China is one of the most important non-member states with which the IEA collaborates. China is also a member of many other regional and international organizations that collaborate on global issues (see Figure 3).

The economic benefits and costs of Chinese investments in oil resources are clearly positive. The oil industry of early and late 2000 lacked the necessary continued investments that would keep oil prices down. The major wave of Chinese investments in oil resources have not only been a major contribution, but they also bring more oil to international markets. Chinese NOCs have taken a cautious approach to their investments, beginning with well-established reserves, acquiring more skills, knowledge, and technology, and moving into investments with un-established reserves. Investing in countries such as Sudan, Iran, and Myanmar, which have international regulations that keep most oil companies away, has produced oil consumed in China or sold on international markets that would have otherwise never existed.

Complaints have been made that Chinese oil companies import Chinese labor into the foreign countries they are investing in, where the local domestic population could use the employment. But Chinese oil companies have made the argument that the local populations lack the necessary skills, where there is an abundance of Chinese oil workers who have been laid-off with the decrease in domestic production. For state-owned companies, employment of Chinese nationals has been, and is still, a key factor company leadership must be mindful of.

With increased outward forward direct investment, Chinese national oil companies are acquiring more advanced technology for discovery and extraction. With these advances, Chinese NOCs can more efficiently extract existing reserves, are capable of extracting from once out-of-reach reserves, and can extract more safely.

Increased investment in oil does directly allow for increased use of this scarce natural resource as an energy source. The burning of fossil fuels such as oil leads to an increased amount of CO₂ in our atmosphere, which has been

attributed with the global warming of our planet. There is an upside to increased investment by Chinese NOC in a sense. By acquiring more advanced technologies and knowledge, Chinese NOC are discovering and extracting more efficiently, are less hazardous operations that cause less damage than they previously were. Chinese oil companies also have a good record of environmental safety that is comparable to their Western counterparts.

In a broader context, the greatest challenge facing IOCs is not Chinese NOCs but rather the re-emergence of resource nationalism (Bremmer 2009). For IOCs and their Chinese counterparts, the challenge of resource nationalism is a shared one. Chinese companies do have certain inherent advantages when facing resource nationalism, such as experience working with authoritarian regime, the lack of a historical “imperialist” label, and a relative lack of legal constraints. But Chinese companies are far from immune from the impact of resource nationalism. In countries like Kazakhstan, Venezuela, and Libya, Chinese assets have been nationalized. Increasingly, there is evidence that Western and Chinese companies see a mutual interest in cooperating and working together to secure the access to oil, gas, and minerals that they require. For example, in Iraq CNPC joined up with BP to secure a deal to develop the Rumaila oil field. And so policy makers should recognize that China’s energy security policy and the OFDI of Chinese NOCs aligns very similar with most oil importing countries. Collaboration and cooperation should become a more prevalent way to look at the current state of world energy security, rather than conflict and competition.

Although we have covered military and zero-sum “crowding out” concerns, there are, of course, other concerns over the rise of Chinese SOEs investments in oil around the world. First, oil is a dwindling resource and its extraction and production is limited. Ultimately, the world will run out of oil and alternative energy sources should be found. By funding oil exploration and extraction, much needed resources are, perhaps, diverted from investments in alternative energy resources. Second, investments in rogue nations protect their despot leaders and delay them from making needed changes in governance. It may be in China’s best interest, however, to see these rogue nations stabilize and integrated to the world’s trading system. Third, by subsidizing energy investments and securing supply channels, China is also, in turn, subsidizing the use of oil, a scarce resource which is also not climate friendly. Finally, as the price of oil goes up in the long term, as shown by most trend lines, developing nations whose income is limited may suffer the most.

Several recommendations follow. There has been an overemphasis by China on the supply side of oil, and an under emphasis on the demand side. By subsidizing oil, China has, in effect, encouraged energy consumption. Leaders in China should think about how to wean off the demand for oil by, for example, producing more energy efficient cars, manipulating the price of oil, and encouraging industry to conserve. Further, China should lead the world in finding solutions for greenhouse emissions, rather than use the excuse of

a developing country. As a more responsible stakeholder in the international system, it should actively participate in global energy governance and encourage countries, like the USA, to limit energy intensity in production, cap greenhouse emission, and control the growth in per capita energy use.

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REFERENCES

- Alon, I., M. Fetscherin, and P. Gugler. ed. 2012. *Chinese international investments*. New York: Palgrave MacMillan.
- Andrews-Speed, P. 2010. China's national oil companies build their presence in North and South America. <http://www.andrewsspeed.com/china-s-national-oil-companies-build-their-presence-in-north-and-south-america/>.
- Andrews-Speed, P., and R. Dannreuther. 2011. *China, oil and global politics*. Oxon: Routledge.
- Andrews-Speed, P. 2012. *The governance of energy in China: Transition to a low-carbon economy*. London: Palgrave Macmillan.
- BP. 2014. *BP statistical review of world energy 2014*. London: BP. <http://www.bp.com/content/dam/bp/pdf/Energy-economics/statistical-review-2014/BP-statistical-review-of-world-energy-2014-full-report.pdf>.
- Bremmer, I. 2009. The rise and fall of resource nationalism. *Survival* 51 (2): 149–158.
- CEIC. 2014. China premium database. Retrieved from: <http://www.ceicdata.com/countries/china>
- Cheon, A. 2014. Investing For Resources? An Empirical Analysis of Energy Sector Governance and National Oil Company Internationalization, In progress.
- CIA World Factbook. Country comparison: Electricity-consumption. Date of info 2011. Retrieved from: <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2233rank.html?countryName=China&countryCode=ch®ionCode=eas&rank=2#ch>.
- Dannreuther, R. 2010. *International relations theories: Energy, minerals and conflict*. POLINARES. Retrieved from: http://www.polinares.eu/docs/d1-1/polinares_wp1_ir_theories.pdf
- Dannreuther, R. 2011. China and global oil: Vulnerability and opportunity. *International Affairs* 87 (6): 1345–1364. doi: 10.1111/j.1468–2346.2011.01040.x.
- Downs, E. S. 2007. The fact and fiction in Sino-African energy relations. *The China Security* 3 (3): 21–41.
- Ericsson, M. 2011. Mineral supply from Africa: China's investment inroads into the African mineral resource sector. *The Journal of the Southern African Institute of Mining and Metallurgy* 111: 1–4.
- Freeman, D. B. 2003. *The straits of Malacca: Gateway or gauntlet?* Montreal, Canada: McGill-Queen's University Press.

- Gallagher, K. S. 2006. *China shifts gears: Automakers, oil, pollution, and development*. Cambridge: The MIT Press.
- Hornby, L. 2013. Record imports make China world's top importer of crude oil. Financial times. <http://www.ft.com/cms/s/0/75d94744-332b-11e3-bf1b-00144feab7de.html#axzz36Zkqto2e> (accessed July 5, 2014).
- IBIS World Industry Report. 2012. 0710: Oil & Gas Drilling in China.
- IEA. 2011. World energy outlook 2011. IEA
- International Energy Agency. 2013. *Energy statistics of non-OECD countries 2013*. Paris: OECD/IEA.
- Jiang, J., and J. Sinton. 2011. *Overseas investments by Chinese national oil companies*. Paris: International Energy Agency.
- Kaplinsky, R. 2012. No simple pattern to Chinese foreign investment. *East Asia Forum Quarterly* 4 (2): 24–26.
- Lehane, B. 2012. “M&A market soars 50% to hit \$254bn” Upstream. <http://www.upstreamonline.com/epaper/article1302050.ece> (accessed January 3, 2012).
- Leung, G. C. K. 2010. China's oil use, 1990–2008. *Energy Policy* 38 (2): 932–944. doi: 10.1016/j.enpol.2009.10.045.
- Leung, G. C. K. 2011. China's energy security: Perception and reality. *Energy Policy* 39:1330–1337. doi: 10.1016/j.enpol.2010.12.005.
- Leung, G. C. K., A. Cherp, J. Jewell, and Y.-M. Wei. 2014. Securitization of energy supply chains in China. *Applied Energy* 123:316–326. doi: 10.1016/j.apenergy.2013.12.016.
- Leung, G. C. K., R. Li, and M. Low. 2011. Transitions in China's oil economy, 1990–2010. *Eurasian Geography and Economics* 52 (4): 483–500. doi: 10.2747/1539-7216.52.4.483.
- Leung, G. C. K., R. Li, and W. D. Walls. 2012. Transitions in the Chinese market for refined petroleum products. *OPEC Energy Review* 36 (2): 349–372. doi: 10.1111/j.1753-0237.2012.00215.x.
- Lieberthal, K., and M. Herberg. 2006. China's search for energy security: Implications for US policy, NBR Analysis, 17.
- Moran, T. H., B. Kotschwar, and J. Muir. 2012. Resource procurement: Not just a zero-sum game. *East Asia Forum Quarterly* 4 (2): 28–30.
- Myers Jaffe, A., K. B. Medlock, III, and M. L. O'Sullivan. 2015. China's energy hedging strategy: Less than meets the eye for Russian gas pipelines. Cambridge, MA: The National Bureau of Asian Research. February 9.
- Nye, J. S. (2004). The decline of America's soft power. *Foreign Affairs* 83 (3): 16–21.
- Percival, B., L. Van Geuns, and B. Valk. 2009. Gambling in Sub-Saharan Africa: Energy security through the prism of Sino-African relations. Clingendael International Energy Paper. Retrieved from: http://www.cctr.ust.hk/materials/library/Sub-Saharan_Africa.Clingendael.2009.pdf
- Shambaugh, D. 2012. Are China's multinational corporations really multinational. *East Asia Forum Quarterly* 4 (2): 7–9.
- Storey, I. 2006. China's “Malacca Dilemma”. China Brief, 6. [http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews\[tt_news\]=3943&tx_ttnews\[backPid\]=196&no_cache=1#.UbGsiVOnloM](http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews[tt_news]=3943&tx_ttnews[backPid]=196&no_cache=1#.UbGsiVOnloM)
- Wood Mackenzie. 2010. Chinese NOC's step-up international expansion. Corporate Service Insight, May.
- Yang, Y. 2012. A new form of colonialism? *East Asia Forum Quarterly* 4 (2): 10.