

CONTRIBUTION TO KNOWLEDGE, POLICY IMPLICATIONS, AND HEURISTIC VALUE

Introduction

Based on the findings presented in Chapter 7, in this chapter I outline the ways in which this dissertation contributes to extant literature, both theoretically and empirically. The main way in which this study contributes to present knowledge is that, by developing a new model of studying host state-MNC bargaining power relationship, it suggests that IOCs' bargaining power vis-à-vis host governments has re-obsolced. This and various other contributions are discussed in some detail in the first section. In addition, based on the main findings from Chapter 7, in the second section I outline policy implications for major actors in the oil industry, paying particular attention to Western governments and IOCs, and to NOCs and their home governments. Finally, I propose various directions for further research.

8.1 The Original Contribution to Knowledge

I am unaware of anyone who attempted to study oil through examining bargaining relationships among various industry actors. Studying oil through a bargaining lens was crucial for understanding the contemporary balance of power between major players in the oil industry. Moreover, by outlining various theoretical propositions (see Chapter 7) this study has sought to establish a solid foundation for any further studies of this nature. The concept of issue linkage helped us appreciate that concerns related to oil are at the heart of world politics, intersecting with just about every significant contemporary global issue, which was evident from the vast ground that was covered in the case study chapters. For example, this was evident in the complexity of Russia's Far Eastern pipeline bargaining, or Iranian oil industry bargaining, which is 'nested' within the overall nuclear bargaining. It also showed how much can be learnt about the changing nature of politics through the

study of oil. Since it represents a crucible for exploring the intersection of political economy, development, foreign policy, and international cooperation, oil offers a starting point for asking more profound questions about the changing nature and conceptualisation of contemporary world politics.

Conceptualising the oil markets as politicised was clearly helpful, as political considerations were found to be least as important as economic considerations in all bargaining scenarios examined in this study. This was evident in both domestic and pipeline bargaining in Russia, oil industry bargaining in Venezuela, bargaining for UNOCAL, bargaining for drilling rights in the ANWR, and from oil and nuclear bargaining in Iran. This further reinforces the widely held view that oil is a highly politicised commodity, and leads one to stress the importance of including political considerations into any future analysis of oil markets.

Research on host state-MNC bargaining power relationship indicated that empirical findings on the specific determinants of MNC bargaining power are too divergent, and sometimes incomparable to draw systematic conclusions and provide meaningful implications. Different theoretical perspectives for predicting and explaining particular sources of bargaining power provide only partial slices of reality. Thus, there was a need for a more integrative theoretical framework within which the MNC (and IOC) bargaining power phenomenon can be understood. Furthermore, MNC bargaining power has not been systematically linked to MNC performance within the host country operations. On both theoretical and empirical fronts, the linkage between bargaining power and firm performance was not systematically investigated. This gap constituted a critical error of omission since MNCs seek a stronger bargaining power position in order to reach successful bargaining outcomes in the host country. Both aforementioned gaps – lack of a broader theoretical framework and lack of connection between bargaining power and firm performance – motivated me to propose a new theoretical model (Figure 2.3, and Appendix 1). With its explicit focus on firm's internal resources, and country and industry specific context as sources of, and factors affecting the bargaining outcome, this framework not only makes a theoretical connection between bargaining power and

performance, but also provides a coherent theory for understanding bargaining power relationship within a broader theoretical framework.

This model extends the implications of Vernon's 'obsolescing bargain' hypothesis in new ways. The gist of this hypothesis is that even if some firm-specific resources provide an MNC with a strong bargaining position initially, they may not do so in the future because the value of such resources may eventually diminish, as they are absorbed and/or replicated by host country partners, personnel, and government agencies. Accordingly, MNC investments and any advantages from such investments can be duplicated by host government agencies and local firms, leading to the erosion of MNC bargaining power. While my model converges with the obsolescing bargain hypothesis in recognising the dynamic nature of bargaining power, it also sheds additional light by introducing further conditions (industry competition, high commodity prices, lack of alternative options, etc.) under which an MNC's (or IOC's) bargaining power is likely to diminish, to be maintained or enhanced over time.

Although the focus of this thesis is on studying the political aspect of the relationship between actors in an economic issue area, and as such, it belongs to the field of the International Political Economy (IPE). By studying bargaining, this study also intersects with the International Business Studies (IBS), and international bargaining and negotiation analysis literature. Thus, since I study bargaining between various actors in the international political economy, this study provides a bridge between IPE and international bargaining and negotiation analysis. Given that I utilise various studies from the International Business Studies (IBS) literature in analysing the relationship between governments and multinational corporations, this study also provides an important and previously missing link between the IPE and IBS literature.

Further, after studying six oil industry bargaining scenarios in four different countries in order to test the hypotheses, the following theoretical propositions, all of which have been discussed in more detail in Chapter 7, can be put forward:

- 1) Due to their weak relative bargaining power, the IOCs have been on the losing side in their bargaining with oil exporting countries and/or their NOCs in the current

decade when compared to the late 1990s, and thus, we are witnessing the return of the obsolescing bargain.

- 2) The interests of American IOCs and the U.S. Government are not exclusively aligned. When they are aligned, the U.S. Government does not necessarily support American IOCs in bargaining with other actors. If American IOCs receive support from the U.S. Government from time to time, then this support does not always result in bargaining success against other actors.
- 3) The NOCs from China are gaining bargaining power at the expense of the IOCs.
- 4) When a major oil-importing government's oil supply security is perceived as threatened when bargaining with other actors, then this government would not necessarily emerge victorious from bargaining.
- 5) Oil-exporting states use oil, explicitly or tacitly, in their bargaining with other actors. When this is the case, they at most times gain concessions in other bargaining arenas.

These propositions advance both our empirical and theoretical understanding of the oil industry and bargaining literature in a number of ways. First, it is very likely that we are going to witness further decline, if not the end, of 'Big Oil', and that it may be very difficult for the major IOCs to rebound from their current lows. Second, we are able to analyse which exact factors are to be blamed for current IOC decline. Third, the bargaining model I established in order to assess temporal variation in IOCs' bargaining power vis-à-vis host states upgrades the obsolescing bargain model, and may be useful in testing temporal variation in bargaining power among MNCs and host states in various extractive industry scenarios. Fourth, since by using oil as a bargaining chip oil exporters are at most times able to gain concessions from actors in other bargaining arenas we may predict that under current market conditions, Iran may be able to continue its pursuit of nuclear technology, and Hugo Chávez may successfully spread his Bolivarian Revolution to the rest of Latin America. Fifth, assessing the relationship between the U.S. government and American IOCs, and how this relationship translates in bargaining outcomes for American IOCs, enabled us to disprove the 'urban myth', which assumes close connection between the U.S. government and Big Oil, and also furthers our theoretical understanding of home government-corporate relationship. Sixth, examining whether governments of major oil importing countries are successful in bargaining with other actors when their oil supply security is perceived as threatened helps us understand their actual bargaining power vis-à-vis oil exporters and other actors in both domestic and international politics. Finally, since China's NOCs are indeed gaining bargaining power vis-à-vis the IOCs, nationalisation, or at least closer home government-corporate alliance, may be the best way

forward to salvage major Western IOCs. In the following section, I suggest some future policy directions and implications for various actors in the oil industry, which follow from these findings.

8.2 Policy Implications

Western Governments and IOCs

In order to reduce strategic competition for oil with China, and increasingly India, some argue that a step Washington and other Western governments should take is to facilitate broader and deeper cooperation between the IEA and China and India.¹ However, because these states are not members of the OECD, they are not formally eligible for membership in the IEA, and they have not yet built up the minimum levels of stockpiled oil and petroleum products defined by the IEA for its members. Notwithstanding the existing barriers, one can suggest that it could be in the interest of the United States and its Western partners to establish much closer coordination between emerging Asian economies and the IEA. This would have particular importance so to influence these states to be more reliant on international markets and less on government-to-government supply deals to meet their energy needs.

However, a widely held perception within the Chinese establishment – that the international oil market is a foreign (primarily American) construction, operated by Western IOCs in accordance with their interests, and that China cannot bet its energy security on that construction – will be extremely difficult to change. Thus, the abovementioned cooperation between the IEA and China (and India) will be extremely difficult to achieve under current circumstances. This is particularly so when China considers the resistance from the U.S. Congress to CNOOC's potential acquisition of UNOCAL in mid-2005, and the fact that in May 2003 both CNOOC and Sinopec were blocked from participating in the development of an oil field in the Caspian Sea at the expense of mainly Anglo-American companies, who increased their stakes.²

¹ Xuecheng Liu, "China's Energy Security and Its Grand Strategy," p. 15.

² "China Oil Giant Dealt a Setback," New York Times, May 13, 2003.

In a perfect *laissez faire* world, all NOCs would be privatised and foreign investors treated the same as local companies.³ This is the U.S. government's 'dream' world. However, oil-exporting governments will never purposefully impoverish themselves and agree to this state of affairs. Thus, the U.S. policy should reflect this fundamental reality, and the U.S. government should accept the existence of NOCs as a fact. Rather than pressing oil exporters to free their NOCs from government interference and to increase the part played by foreign private investors, as this kind of pressure often alienates oil-exporting countries, the U.S. government should assume an alternative strategy.

The emerging trend of downstream and especially upstream internationalisation of NOCs is very threatening to IOCs. The NOCs are challenging the IOCs on their own turf, as most NOCs nowadays have international activities. As a result, there is a blurring of categories between IOCs and NOCs, as many NOCs are becoming 'hybrids', and are increasingly competitive with the IOCs. Therefore, the major question that the Western oil importing countries should ask themselves is - why not rely on NOCs to supply energy to markets? Instead of relying on NOCs (or NOC-hybrids) to supply energy to their markets, Western oil importing countries should strongly consider turning IOCs based in their countries into hybrids in order to be able to compete more successfully with NOCs from both oil-exporting and importing countries. A case in point is the support Chevron received from the U.S. Congress in its bid for UNOCAL. Major American IOCs, such as Exxon Mobil, Chevron, and Conoco Phillips, need higher U.S. Government control.⁴ Since some have suggested that "it is impractical for the U.S. government to reverse the trend toward national control [of oil industry],"⁵ then why not join this trend?

Western IOCs face a variety of problems: booking additional reserves; maintaining market share at home and internationally; establishing new overseas markets; protecting future demand for hydrocarbons; responding to new environmental regulations in the consuming

³ Barnes, "NOCs and U.S. Foreign Policy," p. 22.

⁴ The idea of an American NOC is not new. Internationally, the United States came close to creating its own NOC during World War II. Called the Petroleum Reserves Corporation, it was promoted by secretary of the Interior Harold Ickes and supported by the military as a means to ensure access to foreign oil reserves (particularly in Saudi Arabia) through direct ownership of the U.S. government. Yergin, *The Prize*, pp. 397-9.

⁵ Council on Foreign Relations, "National Security Consequences of U.S. Oil Dependency," p. 49

countries; and responding to increasing competition from NOCs and service companies. Valérie Marcel argued that in future, the “industry environment is set to become even more challenging for the IOCs.”⁶ In order to tackle this ever more challenging environment, Western governments should help their IOCs by limiting foreign oil company presence in both local upstream and particularly downstream operations. This would provide these IOCs with more certainty and security at home. Moreover, maintaining old overseas markets and establishing new ones, as well as booking additional reserves could be enhanced by home government control. The recent success of China’s NOCs vis-à-vis Western IOCs (see the Hypothesis 3 discussion) illustrates the need for increased government control in order to compete with the Chinese more successfully.

For example, hybrid and government-controlled IOCs would likely be more successful in their overseas bargaining with Central Asian and African countries, which are not fully closed to foreign investment.⁷ Moreover, the U.S. and U.K. governments could then apply some explicit pressure on the Iraqi government, so that their hybrids/IOCs get preferential and highly profitable deals when bargaining with the Iraqi government over new agreements. Simon Bromley argues that ‘regime change’ in Baghdad provides an opportunity to create a suitable investment climate for U.S. oil companies.⁸ If American or British IOCs invested in Iraq if the overall security situation improves,⁹ this would likely involve PSAs in which INOC retains legal title to the reserves and the foreign investor is remunerated by ‘cost oil’ – that is, oil sold at market prices to cover its costs – and by an

⁶ E-mail correspondence with Valérie Marcel, October 31, 2006.

⁷ I thank Valérie Marcel for this point.

⁸ Bromley, “Blood for Oil?” p. 426.

⁹ After the occupation of Iraq, oil companies made it clear that they would not commit themselves to invest because of the overall security situation, and the risk associated with it. Ibid, p. 428; and A.F. Alhajji, “The U.S. Energy Policy and the Invasion of Iraq: Does Oil Matter?” paper presented at the 30th Annual Energy Conference, Center for Energy and Development, Boulder, CO., April 2003, pp. 19-21. Political instability and fears about the safety of personnel have forced major oil companies to delay sending their representatives to Baghdad. Sir Philip Watts, chairman of Royal Dutch/Shell amplified these concerns in July 2003 by saying “The safety of our people is paramount. There has to be proper security, legitimate authority and legitimate process . . . by which we will be able to negotiate agreements that would be longstanding for decades. We would not go into that situation unless these conditions were satisfied because we are a long-term business doing long-term projects and we need the framework in which we can make this sort of investment decision.” Quoted in “Oil Groups Snub US on Iraq Deals,” *The Financial Times*, July 24, 2003. Additionally, US Energy Secretary Samuel Bodman said in July 2006 that US companies are not interested in investing in the country before the security situation improves and a new hydrocarbons law is passed. “News in Brief,” *Petroleum Economist*, no. 1, 2006, p. 11. For more on alternatives confronting Iraq in rebuilding its oil industry, see a forthcoming book, edited by Robert Springborg, *Oil and Democracy in Iraq* (New York: Saqi Books, 2007); and Thomas W. Wälde, “The Iraqi Scenario: The Impact of Fundamental Regime Change in Iraq on Acquired and New Contractual Titles in Iraq Oil Industry” *Oil, Gas, and Energy Law*, vol. 1, no 1, January 2003.

agreed share of the remaining 'profit oil.'¹⁰ Given the lack of link between U.S. government interests and Big Oil interests, there would be a high possibility that some future Iraqi government would bargain as tough as any other oil-producing state, unilaterally change the agreements, and possibly expropriate the IOCs' assets, similar to recent developments in Venezuela and Russia. Thus, governmental control over IOCs would increase IOCs' future chance of success in Iraq, as they would be directly supported by the U.S. and U.K. governments. Gaining access to overseas reserves in Iraq and elsewhere, and therefore improving their upstream position, would help Western hybrids to reduce operational imbalances, provide a basis for future cash flows and profits, and reduce the political power of the NOCs.

Besides exercising more control over their IOCs, Western governments should encourage and subsidise the long-term development and use of alternative, both renewable and non-renewable sources of energy. This is something the U.S. government, and Bush administration in particular, unlike many European governments, has not been pursuing to a great extent. According to Ran Goel, this is because "American oil companies are key players in limiting the enactment of domestic energy policy aimed at curbing fossil fuel use," and "consequently, the American government's ability to manage petroleum demand is severely restricted."¹¹ The U.S. government should strive to reduce American dependence on imported oil, not by opening up for drilling new, ecologically sensitive areas such as the ANWR to the IOC preference, but by encouraging energy efficiency and conservation, and investing in alternative energy. This would ultimately lead to a clash with IOCs, and most likely trigger conflict between the IOCs and the U.S. government. However, the conflict could be resolved by reaching a 'grand bargain'. In this bargain, on one hand, the U.S. government should set to support and protect its hybrid IOCs domestically, by monopolising upstream and downstream activities; and internationally (discussed in the previous paragraph). Moreover, the U.S. government should help them to bring Western service companies, such as Halliburton and Schlumberger, under IOC control. On the other hand, the hybrids should agree to higher gasoline taxes, and stricter and broader Corporate Average Fuel Economy (CAFÉ) standards. While this would open

¹⁰ Bromley, "Blood for Oil?" p. 429.

¹¹ Goel, "A Bargain Born of a Paradox," p. 467.

the door for future reduction in oil demand and reduced carbon emissions, something Western IOCs do not necessarily support, it would also give them a 'fair' standing against the NOCs, and reduce or eliminate competition from Western service companies.

Thus, in order to improve their IOCs' bargaining power vis-à-vis oil exporting and oil-importing governments and their NOCs; to expand their IOCs' upstream operations; to insulate their countries from military and political pressures of other governments; and to maintain the strength of the oil industry; Western governments should increase their intervention in the oil industry. Lukoil, a private Russian oil company, which has always acted in close coordination with the government, often presenting itself as a faithful servant of state, "could become a model for international majors seeking to redefine themselves and their roles in the new global landscape where state oil companies are gaining precedence over private ones."¹²

In 1981, Øystein Noreng argued that French, Italian, Norwegian and British NOCs, unlike IOCs, were operating under a *raison d'être* that largely carried them above market forces, as they were able to mobilise funding in the event of mistaken judgment. In addition, these NOCs were not subject to the same set of sanctions as are IOCs, since if the latter erred in judgment by expanding too fast or misusing funds, they were punished by the market, and hence they have had to reduce their rate of growth or, in extreme situations, declare bankruptcy.¹³ As a result, at the time, Western NOCs could permit themselves greater risks and higher rates of growth than IOCs, thus paying less attention to the most efficient use of resources and capital in deference to other goals. Noreng's suggestions support my suggestion that Western governments should seriously consider intervention and possibly ownership as a way forward in their oil industries. The bottom-line is that market forces and private enterprise do not appear to be the appropriate instruments for solving oil industry problems, which are of prime national importance. Establishing NOCs, or at least hybrids, could help in alleviating these problems.

¹² Gorst, "Lukoil: Russia's Largest Oil Company," p. 2. Lukoil is the only Russian oil company to have built up a diversified business empire that now spans the globe, and selection of foreign assets has been in part driven by state interests. The company has interests in the Caspian, Middle East, Central Europe, North Africa, North and South America. This unique international portfolio allows Lukoil to serve as an oil ambassador for the Russian government overseas. Unlike that of major IOCs, in recent years, Lukoil's oil reserves steadily increased. See Gorst, "Lukoil: Russia's Largest Oil Company."

¹³ Noreng, "State-Owned Oil Companies," pp. 141-2.

If the Western IOCs do not get more closely controlled by their home governments, their way to survive in the long-term, and to remain internationally competitive in the short-term, would be to continue with mergers and industry consolidation.¹⁴ However, mergers are often associated with firms in a declining, mature industry, and are defensive, short-term measures.¹⁵ Mergers would make the industry more concentrated, and we could witness a return to the days of Standard Oil Trust,¹⁶ particularly since antitrust regulators in the second Bush administration have given the green light and have favoured large-scale oil industry mergers. Booking additional reserves will remain a major problem encountered by the Big Oil, and upstream mergers, as in the 1990s, would be the major way to tackle this problem.¹⁷ In the short-run, larger units would be capable of competing globally, since “the bigger the player, the more likely it is to get a helping hand when contract negotiations get tough.”¹⁸

Alternatively, if they do not merge, or if they do not get increasingly controlled by their home governments, the Big Oil companies might ‘atomise’ and turn into a number of ‘niche’ non-integrated companies, which would concentrate on specific products or pieces of the value chain, similar to what several service companies already practice.¹⁹ If this were the case, IOCs would act as service subcontractors to NOCs.²⁰ By focusing on fewer aspects of the oil business, they would have a less complex balance of costs and risks to manage. However, whether they continue with mergers, or become niche companies, IOCs are most certainly going to play a diminished role in future.

¹⁴ While in 1990, five largest IOCs controlled 69% of reserves held by “top 25” and produced 45% of output, in 2005, five largest IOCs controlled 82% of reserves and 88% of output of “top 25.” Amy Myers Jaffe and Ronald Soligo, “IOCs: Investment and Industry Structure,” paper prepared in conjunction with an energy study sponsored by Japan Petroleum Energy Center and the James A. Baker III Institute for Public Policy, Rice University, March 2007, p. 10. *Petroleum Economist* hinted at rumours of a BP swoop for Shell in summer 2007. See “Supersize Me,” *Petroleum Economist*, No. 1, 2007, p. 9.

¹⁵ Jaffe and Soligo, “IOCs: Investment and Industry Structure,” p. 11.

¹⁶ For more on oil industry mergers see Adam Sieminski and J. J. Traynor, “Mergers, Size and Value,” *Oxford Energy Forum*, vol. 1, May 2000. For more on past oil industry mergers and acquisitions, see Parra, *Oil: A Modern History of Petroleum*, pp. 324-6.

¹⁷ For U.S. oil industry merger trends and effects see United States General Accounting Office, “Energy Markets: Effects of Mergers and Market Concentration in the U.S. Petroleum Industry,” Report to the Ranking Minority Member, Permanent Subcommittee on Investigations, Committee on Governmental Affairs, U.S. Senate, May 2004.

¹⁸ Stephen Glain, “The Next Big Deal,” *Newsweek*, Special Edition, December 2006-February 2007, p. 51.

¹⁹ Philip K. Verleger Jr. suggested that if the IOCs were car companies, their future would probably look something like that of Mercedes: a famous label holding its own in a high-end but small niche. See Verleger, “The Mercedes Model,” *Newsweek*, Special Edition, December 2006-February 2007, p. 39.

²⁰ Myers Jaffe and Soligo, “IOCs: Investment and Industry Structure,” p. 11.

Entry into alternative energy may be a possible way forward for major IOCs. Driven by the pressure to replace reserves, many of the major IOCs, except for Exxon Mobil, have begun shifting their businesses in response to the changing landscape and hostility of numerous host states. Royal Dutch/Shell's expensive and challenging Sakhalin gas project; Shell's and Chevron's multibillion-dollar investments in Canada's oil and tar sands;²¹ BP's entry into solar power and hydrogen projects; Chevron's purchase of UNOCAL; and many IOCs' entry into biofuels, are all reflections of IOCs' desperation as they are investing where they can. These investments are driven by the strong belief that high oil prices are here to stay. However, with today's technology, biofuels, tar sands, and shale oil are much more expensive to exploit than conventional oil pumped in OPEC and many non-OPEC countries. Oil price at which biodiesel is economically viable is \$80 a barrel, for U.S. corn-based ethanol it is \$60 a barrel, for shale oil it is \$50 a barrel, while for tar sands, Brazilian cane-based ethanol, gas-to-liquids and coal-to-liquids is \$40 a barrel.²² According to analysts from McKinsey & Company, "dangers await companies that place too large a bet on a fundamental structural change by investing in projects that will be profitable only if the [oil] market has altered for good." They suggest that major IOCs would do better if they "exercise discipline over capital spending and to invest in opportunities to build sources of competitive advantage that they can sustain regardless of whether prices shift structurally or revert to levels closer to the long-term averages."²³

If they diversify into alternative energy, they will most likely be unsuccessful, as business history suggests that firms in 'maturing' industry do not easily adapt to new substitutes.²⁴ Moreover, history of the oil industry is long on boom-and-bust cycles in crude prices and refining margins, and short on examples of capital discipline. During booms, IOCs behave as if the world had changed permanently, investing in projects that could make a profit only if prices stayed high. The industry has wrestled this problem for more than 150 years:

²¹ See "Shell in Canadian Oil Sands Deal," BBC News, May 8, 2006, <http://news.bbc.co.uk/go/pr/fr/-/2/hi/business/4751357.stm>, [May 9, 2006]; and "Lure of the Sands," *Petroleum Economist*, June 2006.

²² "Steady as She Goes," *The Economist*, April 22, 2006, p. 67. For example, Canada's Energy Board estimated that to produce a barrel of synthetic crude oil from Canada's oil sands would cost approximately \$39. See National Energy Board, "Canada's Oil Sands: Opportunities and Challenges to 2015: An Update," National Energy Board, June 2006.

²³ Richard Dobbs, Nigel Manson, and Scott Nyquist, "Capital Discipline for Big Oil," *The McKinsey Quarterly*, December 2005.

²⁴ Myers Jaffe and Soligo, "IOCs: Investment and Industry Structure," p. 11.

in the early 1860s, for example, over-investment in Oil Creek, Pennsylvania, pushed down the price of crude oil from \$10 a barrel to 50 cents in less than six months and to 10 cents within a year.²⁵ Some of the majors, namely BP, Exxon Mobil, and Royal Dutch/Shell, did show capital discipline, as they made strategic investments in assets and technologies, including oil fields and deep-water drilling that demanded specialist capabilities and large amounts of capital.²⁶ Nowadays, however, major IOCs are unable to make strategic investments in large oil fields, as those are out of their reach due to political circumstances.

By investing in alternative fuels, many major IOCs are actually contributing to the chance of a future bust in oil prices. The longer crude oil prices remain high, the greater the incentive for major IOCs to invest in alternative fuels and technologies, and the more price-competitive these technologies become as a result of scale effects. However, if IOCs' investment in alternative fuels and technologies increases, the result would be excess capacity and capital losses across the value chain. Increasing demand for alternative fuels would result in weaker oil demand, which would in turn result in much lower oil prices. Cheap oil would certainly be cheaper than alternative fuels, and demand for the latter would decrease, thus making IOCs' investments in alternative fuels and technologies highly unprofitable in the long-term. This would in turn, result in hard landing for IOCs that invested in alternative energy. If diversification into alternative energy continues at fast pace, Exxon Mobil may be the only major IOC to survive. Rather than spending extra cash on projects that require high oil prices, it is resisting the pressure to invest more. When asked why Exxon Mobil was spending so little on alternative sources of energy, such as ethanol, the new CEO Rex Tillerson, who succeeded Lee Raymond in late 2005, said, "We are investing heavily in conventional oil and natural gas, which is the business we are in. We are not in those other businesses."²⁷ It is clear that Exxon Mobil executives are reluctant to empty their coffers for new development, fearing that prices will trend lower in the future and hammer their profit margins. Between 2006 and 2009, unlike many other IOCs, Exxon Mobil is expected to bring online a number of new major projects. Although a number of these projects are located in areas that have peaked in production – Alaska,

²⁵ See Yergin, *The Prize*.

²⁶ Dobbs, Manson, and Nyquist, "Capital Discipline for Big Oil."

²⁷ Quoted in Schwartz, "The Biggest Company in America is also a Big Target," p. 53. Also see Joseph Contreras, "Multiple Personality," *Newsweek*, Special Edition, December 2006-February 2007, pp. 36-8.

Gulf of Mexico, the North Sea, and Australia – many are located in potentially lucrative, although not the most attractive areas, such as Nigeria, Angola, Azerbaijan, Kazakhstan and Qatar.²⁸

NOCs and their Home Governments

NOCs are the most dynamic force shaping the future direction of the oil industry. They are competing with IOCs in bidding and bargaining for projects and investment opportunities, long the preserves of the majors. Companies from China, India, Russia, Malaysia and Brazil have won concessions to explore for and develop petroleum resources overseas, and some analysts have been quick to identify the ‘new Seven Sisters’.²⁹ In today’s high oil price environment, NOCs have also been able to leverage their influence to an extent not seen in recent years. As Big Oil scrambles to book more reserves in order to convince investors that they have room to grow, NOCs that control access to those reserves have bigger bargaining chips at the negotiating table. Meanwhile, NOCs are able to compete with IOCs in everything, from field development, to mergers and acquisitions. Although not the focus of this study, Saudi Aramco has silenced many sceptics by significantly boosting the kingdom’s output without the help of foreign partners. Chinese NOCs are steadily increasing their share of the world’s oil resources and expanding their range of oil-industry functions - from exploration, to refining, to distribution. In 2005, CNOOC was a serious contender to buy UNOCAL, and although it lost to Chevron due to U.S. government’s interference, in future, acquisitions of medium-sized independents in geographic proximity to their Asian operations remain likely for China’s NOCs. Overall, NOCs will most likely attempt further acquisitions on the scale of the UNOCAL bid, as they need to establish a strong international upstream platform to compete with IOCs.

Perhaps NOCs’ greatest asset is their unique long-term perspective. Since NOCs, as instruments of the state, have assured access to their countries’ reserves and do not have to think of the next financial quarter, they have the luxury to think strategically. Thus, unlike many IOCs, they have the time to implement their strategy. Internationally NOCs, just like

²⁸ See illustration in *ibid*, p. 56.

²⁹ They are Saudi Aramco, Gazprom, CNPC, NIOC, PdVSA, Petrobras, and Petronas. See Carola Hoyos, “The New Seven Sisters: Oil and Gas Giants Dwarf Western Rivals,” *Financial Times*, March 11, 2007.

IOCs, face problems with maintaining market share and establishing new markets, increasing competition, protecting future demand for hydrocarbons and responding to new environmental regulations in the consuming countries. These external challenges, however, are not high on the radar for most NOCs, and overseas expansion is much more a luxury than a necessity, with the exception of NOCs from net oil-importing countries such as China and India. Challenges in domestic upstream activities are the greatest concern for oil-exporting NOCs, as they are engaged in a constant drive to improve their managerial skills, technology and capital availability, so they can reduce the reliance on foreign companies and investors.

NOCs enjoy a number of additional advantages over Western IOCs. They are, for instance, able to operate in more politically sensitive environments. Security threats and political pressures that might preclude Western oil companies from investing in certain countries do not necessarily deter NOCs. Similarly, while IOCs are obliged to adhere to the standards of corporate social responsibility (CSR) set by their shareholders, NOCs are less subject to such pressures. For example, political pressure forced Canada's Talisman Energy to sell its assets in Sudan in 2003 to India's Oil & Natural Gas Corporation.³⁰ In addition, Beijing has improved access for its energy companies to overseas upstream projects by entering, in parallel, government-level trade agreements and by offering other governments financial support. In 2005, as part of a government-to-government package of financial and political co-operation, Sinopec signed a memorandum of understanding with Indonesia's Pertamina to build a \$2.5bn refinery in East Java. In exchange for this downstream investment, Sinopec expected access to upstream hydrocarbons reserves, and this illustrates how China's government is driving its energy firms to success. Hence, NOCs and their respective governments are likely to exploit their advantage over Western IOCs in order to pave way to oil industry domination.

The future looks bright for non-Western oil exporters and their NOCs as long as Western governments continue 'business as usual' approach to 'their' IOCs. NOCs are likely to become even more dominant in the upstream sector as oil production dwindles in areas which are open to all comers, such as the North Sea and the Gulf of Mexico. 'New' oil is

³⁰ "Unocal: A Bump in the Road."

most likely to be found in NOCs' territory, precisely because it is largely out of bounds to multinationals, and so has not yet been thoroughly raked over. In the future, therefore, oil production will be even more concentrated in the hands of the national firms of Russia and the Middle East.³¹ Domestic challenges, such as technological and managerial backwardness, and the lack of capital needed to develop existing and new fields, can be obtained from other NOCs, both from oil exporting countries (Sonatrach, Saudi Aramco, Petronas, Petrobras, Statoil, etc.) or oil importing countries (CNOOC, Sinopec, CNPC, etc.). NOCs are also banding together to help develop each other's reserves, leaving the oil industry growth in their own hands. Moreover, technological and managerial assistance, and capital can also be obtained from independent oil companies, service companies, or financial and consultancy firms. International players are highly unlikely to penetrate their national markets, as barriers to entry are very high. The doors are likely to remain closed for IOC penetration of their domestic markets as long as the oil prices remain high and there is a wide variety of actors competing with IOCs. IOCs are also unlikely to improve their upstream positions, as they seem unlikely to emerge victorious in their outright competition with NOCs. This is particularly so since NOCs are not compelled to vertically integrate in order to reduce their operational imbalances by gaining overseas downstream positions at all cost. By controlling the majority of world's upstream activities, and having *de facto* monopoly in domestic downstream activities, they already generate much economic rent.³²

By increasing competition in oil-importing countries, NOCs' downstream expansion would, besides putting them in a more direct relationship with end-user markets, also reduce IOCs' already low downstream economic rent. In addition, according to Luciani and Salustri, NOCs should vertically integrate because of their increasing control over crude prices. They would be able to increase their control of the crude prices, as they would be able to bypass the crude market and sell directly into the products market, and thus reduce their dependence on the whimsical movements of a small number of highly unrepresentative benchmark crudes (Brent and WTI) that dominate term-contract

³¹ "Oil's Dark Secret," *The Economist*, August 12, 2006, p. 56.

³² Traditionally, vertical integration has been the strategy preferred by oil companies serving large markets, to secure oil supplies and capture a larger part of the economic rent. See Luciani and Salustri, "Vertical Integration as a Strategy for Oil Security;" and Giacomo Luciani, "The Dynamics of Reintegration in the International Petroleum Industry," in Kate Gillespie and Clement Moore Henry (eds.), *Oil in the New World Order* (Gainesville: University Press of Florida, 1995).

pricing.³³ Majid Al-Moneef is also supportive of this proposition, arguing that vertical integration would help NOCs balance their operation and protect them from the inherent instability of the market, so when crude prices are low, refining and marketing margins can generally be expected to be positive. A further benefit of vertical integration for oil exporting NOCs would be the potential to secure market share and ensure its future growth.³⁴

Overall, the most logical cause of action for oil-exporting governments and their NOCs would be to exercise the following strategy. Even more emphasis should be placed on their already close relationships and partnerships with other ideologically close and neutral countries and their NOCs. This should be done with the goal of signing additional government-to-government long-term contracts with destination clauses (rather than relying on spot and futures markets), purchasing smaller private oil companies, improving technological and managerial skills, efficiency and attracting capital. Additionally, in order to improve their understanding of, and proximity to, the market; reduce their dependence on IOCs for market access; correct their operational imbalances; and successfully compete with IOCs, NOCs should attempt to increase their international upstream, transport, refining and retail facilities, both in Western and particularly non-Western (mainly Asian) countries. In order to respond to the challenge of global industry trends, such as possible future IOC mergers, NOCs may need to expand internationally and integrate their activities. As for those NOCs that are engaged in partnerships with IOCs, they should absorb as much knowledge as possible from IOCs, and should make knowledge transfer as one of the agreement requirements following the example of Iran and its 'buyback' agreements.

A mutually beneficial scenario could be pursued between Asian oil-importing NOCs and oil-exporting NOCs from the Middle East, Russia, Africa and Latin America.³⁵ Asian importing countries are highly dependent on crude imports from all of these regions, and

³³ Luciani and Salustri, "Vertical Integration as a Strategy for Oil Security," pp. 40-3.

³⁴ For more, see Majid A. Al-Moneef, "International Downstream Integration of National Oil Companies," in Paul Stevens (ed.), *Strategic Positioning in the Oil Industry: Trends and Options* (Abu Dhabi: The Emirates Center for Strategic Studies and Research, 1998), pp. 45-60.

³⁵ Keiichi Yokobori, "Strategic Options and Opportunities for Gulf Oil Companies in the Asian Markets," in Paul Stevens (ed.), *Strategic Positioning in the Oil Industry: Trends and Options* (Abu Dhabi: The Emirates Center for Strategic Studies and Research, 1998), pp. 61-79, explores such possibilities for Middle Eastern oil companies in East Asia.

as a result, many Asian governments support their NOCs' efforts to secure new sources of supply. There have been some indications of this development, as in December 2006, China announced that it wants to start direct negotiations and establish formal ties with OPEC to secure a stable oil supply and an equitable share of the oil market.³⁶ In a parallel move, oil-exporting NOCs have tried to gain entry to Asia's downstream markets, primarily in China and India, in order to secure outlets for their crude oil exports and to ensure security of demand. This interpenetration of upstream and downstream assets makes for a natural fit between importing countries concerned about security of supply and declining reserves, and exporting countries preoccupied with security of demand and seeking to expand their markets. Besides building close ties to oil exporting states and helping its NOCs in overseas bargaining situations, non-Western oil importing countries such as China and India should continue diversifying the sources of their oil. They should also intensify domestic oil exploration and production, establish strategic petroleum reserves, and increase energy efficiency and conservation, possibly through higher taxation, since they are currently at very low levels. Moreover, they should diversify their reliance on oil toward nuclear power, natural gas and other energy sources, the supply of which is less susceptible to sea-lane interdiction. Finally, they should centralise their energy agencies; reduce reliance on IOCs for oil transportation; and develop the military capability to protect their oil supplies.

Adopting such strategies would most likely reduce their vulnerability to international pressure concerning oil, and China already engaged some of these options. Besides being relatively successful in diversifying its sources of imported oil, in 2006 China began to store emergency supplies of oil in 'strategic reserves'.³⁷ In addition, the creation of a powerful new agency tasked with safeguarding China's energy security may be the right step towards centralised decision-making. This agency, provisionally called the State Energy Office (SEO), was inaugurated in May 2005, and it replaced a small Energy Bureau that had been working inside the National Development and Reform Commission

³⁶ "China Seeks Direct Talks with OPEC," *China Daily*, December 5, 2006.

³⁷ "A Cushion of Black Gold," *The Economist*, December 2, 2006, p. 87.

(NDRC). In future, SEO will report directly to the State Council, and this will in turn help in creating a coherent energy security strategy for China.³⁸

Many observers argue that NOCs should be privatised and that their governments and societies would benefit most from such a step. This view is heard in the halls of the World Bank and the IMF and is expressed by a number of IOC executives and government officials in the importing countries, as well as by Western media and consultants.³⁹ However, this cause of action would not be in the interest of their governments. NOCs serve state interests more directly than do private companies because they are instruments of the state. If they become private actors, just like IOCs, they would become distant from the governments, and their interests would often be conflictual rather than harmonious. In addition, there is no reason why their national status should prevent any of these companies from being highly competent and efficient. They can strive to excel within the NOC model by developing NOC and company-specific strengths. Their strengths come from their relationship with, and support from, their government and society. The state's assets are strengths of NOCs because they usually enjoy exclusive rights on the home territory. Besides natural resources, these assets include the government's network of alliances and relations with other countries and their NOCs. These features are absent from IOCs' relationship with their home governments, and this is likely to be detrimental for IOCs' future.

8.3 Heuristic Value for Further Research

This study carries much heuristic value for further research. Firstly, the same approach could be applied to studying different oil industry bargaining scenarios. For example, studying oil industry bargaining in Iraq, Saudi Arabia, Nigeria, Canada or Kazakhstan

³⁸ Goldstein and Kozyrev, "China, Japan, and the Scramble for Siberia," p. 166. I believe that this is a very important step, as according to Philip Andrews-Speed, for China, the threat from ineffective energy industry governance is probably as great as that from the international energy market. See Andrews-Speed, *Energy Policy and Regulation in the People's Republic of China* (The Hague: Kluwer Law International, 2004).

³⁹ See Marcel, *Oil Titans*, p. 231; Noreng, *Crude Power*, p. 212; "Really Big Oil," *The Economist*, August 12, 2006, p. 13; Wael Al-Mazeedi, "Privatizing National Oil Companies in the Gulf," *Energy Policy*, October 1992, pp. 983-94; and Al-Mazeedi, "'Back-door' Privatization Initiatives in the Gulf: An Inadequate Step in the Right Direction," in Paul Stevens (ed.), *Strategic Positioning in the Oil Industry: Trends and Options* (Abu Dhabi: The Emirates Center for Strategic Studies and Research, 1998), pp. 100-16. For a detailed study of privatisation and control of state-owned companies in developing countries, see Ravi Ramamurti and Raymond Vernon (eds.), *Privatization and Control of State-Owned Enterprises* (Washington, D.C.: The World Bank, 1991).

promises to be very interesting, and makes one wonder whether the same set of conclusions would be reached. A hypothetical study could also be attempted in order to study oil industry bargaining under the condition of 'peak oil', or at times of low oil prices, since this study was focused on studying oil industry bargaining under tight market conditions. One could assume the balance of bargaining power to change significantly under different conditions. Moreover, instead of studying exclusively oil scenarios, one could engage in studying scenarios involving bargaining over natural gas, another energy source, such as coal or uranium, or other extractive minerals, such as copper or nickel. One could also assess whether other countries', such as India and Japan's, NOCs are also gaining bargaining power at IOCs' expense. Finally, one could study how much international norms and the international law constrain various oil industry actors' bargaining behaviour. For example, are host governments, NOCs, or IOCs constrained by international norms and law in their behaviour vis-à-vis other actors? Historically, IOCs have been accused of complicity in human rights violations, of supporting undesirable political regimes, and of indifference to the environmental impacts of their operations.⁴⁰ This study found that oil importing countries' NOCs act in exactly the same manner,⁴¹ and that at times of high oil prices host governments tend to disregard previously signed contracts and unilaterally act to annul their validity.

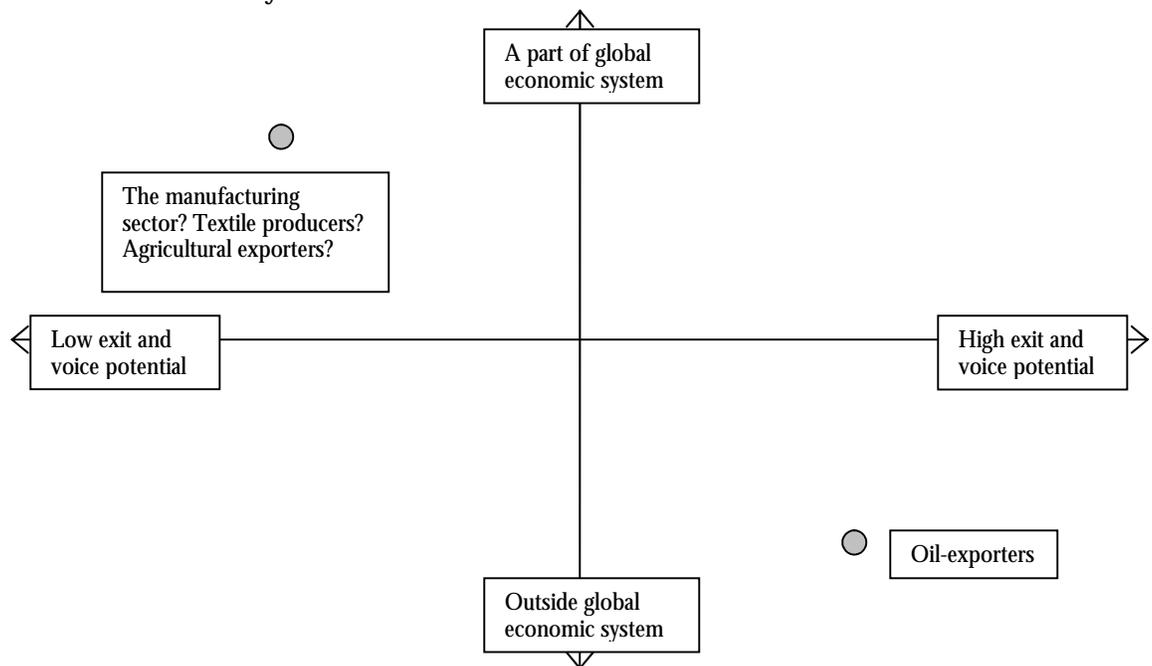
Various findings and conclusions from this study warrant further investigation. The framework developed to measure bargaining power of IOCs vis-à-vis host governments requires further scrutiny and application. Are there any variables that should have been included or excluded? Should variables carry different weight when compared to each other? For example, do oil prices matter more than availability of local allies in determining IOCs' relative bargaining power? Do political or economic factors matter more in determining bargaining outcomes? Furthermore, the link between home state and IOC interests, home state support for IOCs, and any influence that this support may have on IOCs' bargaining outcome vis-à-vis other actors, warrants further investigation, since this study found mixed results. Similarly, since I found that when a major oil-importing

⁴⁰ Imle, Jr., "Multinationals and the New World of Energy Development," p. 263; also, see Eide Asbjørn, Helge Ole Bergeson, and Pia Rudolfson Goyer (eds.), *Human Rights and the Oil Industry* (Antwerpen: Intersentia, 2000).

⁴¹ For the case of China and its NOCs, see Matt Chen, "Chinese National Oil Companies and Human Rights," *Orbis*, Winter 2007.

government's oil supply security is perceived as threatened when bargaining with other actors then this government would not necessarily emerge victorious from bargaining, one could examine under what conditions are oil-importing governments successful in bargaining with other actors. In addition, other bargaining scenarios could be examined in order to confirm whether, when oil-exporting states use oil, explicitly or tacitly, they gain concessions in bargaining with other actors. Finally, I found that exit and voice potential of IOCs is low as compared to the overall trend, as the IOCs have lost their influence over host states in this decade. A question that warrants further research is whether oil is the exception, and whether other industries witness similar development as opposed to common perceptions (see Figure 8.1).

Figure 8.1: Possible Matrix of Host Governments' Exit and Voice Potential from Global Economic System



Conclusion

After discussing the main findings in Chapter 7, in this chapter, I firstly outlined various reasons why this dissertation offers an original contribution to knowledge. Secondly, based on my findings, I proposed policy implications for major actors in the oil industry – IOCs, their oil-importing home governments, and NOCs and their oil-importing and oil-exporting owners. While this section was clearly not the primary objective of this study, it

was written with a belief that it may influence policy. Finally, based on the findings, I proposed various directions for future research.