1

EMPIRICAL FRAMEWORK

Introduction

Oil is not 'just another commodity'. It is "the world's most important traded commodity",[1] and "by far the most important energy source in the world economy."[2] Whatever the evolution of new international order, oil will remain the strategic commodity, critical to national strategies and international politics. Today, we are so dependent on oil, and oil is so embedded in our daily doings, that we hardly stop to comprehend its pervasive significance.[3] No other form of energy is used as widely or as intensively in the global economy today as oil,[4] which has maintained its prominence largely because it is the only energy source that has such a multiplicity of uses – for heating, as an industrial fuel supply, and to generate power – and most importantly because it continues to be unrivalled in the transportation sector.[5] Besides being a primary source of fuel, its derivatives are equally important because they appear in almost everything we use in our daily activities, such as products made of plastic or rubber, ranging from household utensils to clothing items.[6] Further, it remains abundant, relatively inexpensive and more readily and cheaply transported across long

---

[1] Øystein Noreng, *Crude Power: Politics and the Oil Market* (London: I.B. Tauris, 2002), p. 33. In this dissertation, when referring to oil, I am referring to many substances, including *crude oil* as such and crude oil combined with one or more of a number of substances namely *lease condensate*, *natural gas liquids* (NGL), *synthetic oil* and *other hydrocarbon liquids*. For definition and detail about each of these, see Jean H. Laherrère, "Oil as a Source of Energy: Present Realities and Future Prospects," in The Emirates Center for Strategic Studies and Research, *The Future of Oil as a Source of Energy* (Abu Dhabi, U.A.E.: The Emirates Center for Strategic Studies and Research, 2003), pp. 16-7; and Roger D. Blanchard, *The Future of Global Oil Production: Facts, Figures, Trends and Projections, by Region* (Jefferson, NC: McFarland & Company, 2005), pp. 3-7. For a good introduction to the technical side of the global oil industry, see Kate Van Dyke, *Fundamentals of Petroleum* (Austin: University of Texas Press, 1997); and Robert Anderson, *Fundamentals of the Petroleum Industry* (Norman: University of Oklahoma Press, 1984).

[2] Susan Strange, *States and Markets* (London: Pinter Publishers, 1988), p. 192.

[3] Daniel Yergin, *The Prize: The Epic Quest for Oil, Money & Power* (New York: Free Press, 1992), p. 14.

[4] In 2005, oil provided for 36.4 percent of all energy used in the world. British Petroleum, *BP Statistical Review of World Energy 2006*, June 2006.

[5] Edward L. Morse, "A New Political Economy of Oil?" *Journal of International Affairs*, vol. 53, no. 1 (Fall 1999), p. 2. In the U.S., 66 percent of oil is used for transportation, and over 95 percent of all transportation in the U.S. is fuelled with oil. Blanchard, *The Future of Global Oil Production*, p. 16.

[6] Toyin Falola and Ann Genova, *The Politics of the Global Oil Industry: An Introduction* (Westport, Connecticut: Praeger, 2005), p. 162.

distances than any of its competitors.[7] The availability of vast quantities of relatively inexpensive oil is indispensable to a whole host of industries, which besides transportation sector include automobile manufacture, road and highway construction, airlines, petrochemical, agriculture, tourism, and suburban commerce. Taken together, these sectors make up the heart of the economy, and without cheap oil, they – and the way of life they make possible – could hardly survive.[8]

The prices of oil and its refined products affect the cost of almost everything. They help determine not just the cost of driving to work or flying off on holiday, but also the cost of furniture, food and anything else, which has to be transported from factory to shop floor.[9] Oil and product prices affect inflation rates, trade balances, and even macro-economic policies of all countries, as well as governments' re-election chances,[10] and thus remain a key determinant of global economic performance. A painful reminder of the critical role of this dependence for the economy is the fact that nearly every economic recession in the West since World War II has come on the heels of an oil crisis.[11] The crucial importance of oil for global economy warrants that it should be at the centre of our academic inquiry.

In this chapter, I characterise the international oil market as a 'politicised' market, which allows for integration of political and economic aspects in influencing market and bargaining outcomes. Since the international oil industry is politicised, bargaining,

---

[7] Morse, "A New Political Economy of Oil?" p. 2.
[8] Michael T. Klare, *Blood and Oil* (New York: Metropolitan Books, 2004), p. xiv.
[9] "The Oiloholics," *The Economist*, August 27, 2005, p. 11.
[10] Oil market turbulence, according to Øystein Noreng, has contributed to Western presidents not being re-elected, as happened in the United States to Gerald Ford in 1976, to Jimmy Carter in 1980 and to George Bush Sr. in 1992, as well as in France to Valéry Giscard d'Estaing in 1981 and in Germany to Helmut Schmidt in 1982. Noreng, *Crude Power*, p. 5.
[11] The major characteristics of an oil crisis include global petroleum shortage and an accompanying surge in prices. Studies on oil crisis include the volume of essays edited by Raymond Vernon (ed.), *The Oil Crisis* (New York: Norton, 1976); the work by Robert J. Lieber, predominantly looking at the reactions of industrialised consumers of each of the oil crises of the decade 1973-83, *The Oil Decade: Conflict and Cooperation in the West* (New York: Praeger, 1983), and recent work by Fiona Venn, *The Oil Crisis* (London: Longman, 2002). Also, see James E. Akins, "The Oil Crisis: This Time the Wolf is Here," *Foreign Affairs*, vol. 51, no. 3, 1973; James Bamberg, *History of the British Petroleum Company, British Petroleum and Global Oil, 1950-1975: The Challenge of Nationalism* (Cambridge: Cambridge University Press, 2000), chapter 19; Yergin, *The Prize*, part V; Anthony Sampson, *The Seven Sisters: The Great Oil Companies and the World They Shaped* (London: Coronet Books, 1980); Robert J. Lieber, "America and Europe in the World Energy Crisis," *International Affairs*, October 1979, pp. 533-4; Joe Stork, *Middle East Oil and the Energy Crisis* (New York: Monthly Review Press, 1975); Louis Turner, "The Politics of the Energy Crisis," *International Affairs*, vol. 50, no. 3, 1974; Jack E. Hartshorn, "Two Crises Compared: OPEC Pricing in 1973-1975 and 1979-1980," in Ragaei El Mallakh (ed.), *OPEC: Twenty Years and Beyond* (Boulder: Westview Press, 1982); and Peter Cowhey, "The Crisis of October 1973 and Its Aftermath: The Transformation of the World Oil Market," chapter six in his *The Problems of Plenty: Energy Policy and International Politics* (Berkeley: University of California Press, 1985).

a process at the heart of all political and economic exchanges in contemporary society, plays the central role between various actors in such an environment. Thus, studying bargaining relationships among various oil industry actors is the most effective way to study the politics of oil. After introducing the major actors in the oil industry and outlining their characteristics and interests, it becomes obvious that the international oil industry can be characterised as a mixed actor model, as there are a number of key actors but none evidently predominant. Moreover, while surveying the contemporary oil industry, I argue that the oil industry is an industry in which large economic rents can be earned and bargaining determines the division of these rents. While the 1970s and early 1980s were the years in which oil produced for the international oil market was progressively brought under state control, and the 1980s and the 1990s can be characterised as a cooperative stage in which the IOCs managed numerous 'sweetheart' deals, the oil industry has in recent years shifted to a conflictual phase characterised by resource nationalism and the revival of energy security concerns among major oil importers. In the current decade, the IOCs find themselves in a particularly challenging situation, as they are struggling to replace their reserves, and as oil exporting governments and their NOCs reassert dominance over the industry. Oil exporters are helped by increased competition that the IOCs face from oil importing, and particularly China's NOCs, which are backed by unconditional financial and political support by their home governments. Finally, based on this analysis, I establish various research questions which are the focus of this thesis. The central question is concerned with the IOCs' future prospects in light of possibly insurmountable hurdles that they are currently facing.

1.1 Oil: Politicisation and Bargaining

Politicisation

The 'politicised' model is useful in understanding the functioning of the oil industry. According to Helge Ole Bergesen and Edward Wilson, politicisation is referred to as the interference of a government in the international oil market.[12] Oil market

[12] Ernest J. Wilson III, "World Politics and International Energy Markets," *International Organization*, vol. 41, no. 1, Winter 1987, p. 127; Helge Ole Bergesen, "The Impact of Oil on the Foreign Policies of the Superpowers – And Ramifications on the Oil Market," Working Paper, no. 3, Fridtjof Nansen Institute, 1988, p. 3. Also, see Cowhey, *The Problems of Plenty: Energy Policy and International Politics*, chapters 2 and 10.

politicisation entails that the price of oil is much more than merely the amount of money at which supply and demand meet. When looking at determinants of the price of crude oil, despite the importance of economics, "oil remains a political commodity."[13] According to Youssef Ibrahim, "[o]il is the one strategic commodity of the world that governments, from superpowers to minor states, will never allow to be free of political control."[14] According to Edward Morse, "If the history of the political economy of oil provides any lesson, it is that market factors have never been allowed to operate on their own," and thus, "there is no reason to expect that the future will change this situation."[15] In recent years the international oil industry has been as politicised as it was in the heyday of resource nationalism in the 1970s.[16]

Governments intervene in oil markets to serve their national interests regardless of ideology and pronounced economic preferences.[17] Governmental impact is inevitable in the realm of the oil industry and by which the working of the straight market economy is affected, and there is no country or region in which there is no trace of one or more forms of governmental impact.[18] Governments are involved in the following ways:

> • by safeguarding against 'abuses of power' by the biggest commercial units, hence making it more difficult for the most powerful operators in the industry to fundamentally affect the working of the market;
> • by imposing measures designed to further national security, which can safeguard and support some operations and/or operators, at home and/or overseas (buying equity oil), whose activities are deemed to be in the national interest, hence possibly constraining other operators;
> • by imposing taxes, which affect the price to the consumer and to the regime covering the production phase of the industry; in most OECD countries, high taxation of oil products puts upward pressure on prices of those products, even when market conditions try to drive them down;[19]
> • by setting up state-owned or –backed enterprises, which, though designed to follow industrial guidelines, often follow governmental policies, which might be in contradiction with free market principles;[20]

---

[13] Vaitheeswaran, *Power to the People*, p. 100.
[14] Youssef M. Ibrahim, "The 21st Century: A Time for New Oil Wars," *Daily Star*, Beirut, January 23, 2004.
[15] Morse, "A New Political Economy of Oil?" p. 29.
[16] Ibid, p. 1.
[17] For more on types and effects of government intervention and basis for intervention see Thomas A. Poynter, *Multinational Enterprises & Government Intervention* (London: Croom Helm, 1985), pp. 13-38.
[18] Paul H. Frankel, "Oil: 'Market Forces'", *Natural Resources Forum*, vol. 7, no. 1, 1983, p. 7.
[19] Today, most countries tax oil products, usually through a general sales tax, or value-added tax, and a special excise tax or duty. On average, in 2001, about two-thirds of the end-user price of oil products in the E.U. was tax, with oil exporters and refiners and distributors sharing the rest fairly equally. The major cost factor to European and Japanese motorists is their own government, not the oil producers or the oil industry. See Noreng, *Crude Power*, p. 182.
[20] The first four ways governments intervene in the oil markets have been proposed by Frankel, "Oil: 'Market Forces'," p. 7

• by implementing increasingly stringent environmental standards, they complicate investment in oil industry in general and refining capacity in particular;[21]
• by build-up of government-held or controlled oil inventories which are meant to serve as shock absorbers that significantly alleviate the need to adjust rapidly to supply shortfalls, and to keep a ceiling, or at least a downward pressure, on prices;[22]
• by imposing economic sanctions (particularly by the U.S.) or waging war against rogue oil producing states in order to use the oil weapon as a foreign policy tool;[23] alternatively, oil-exporting states can embargo their oil exports in order to achieve their foreign policy goals; and
• by signing strategic and often less profitable government-to-government, long-term supply contracts, often accompanied by destination clauses, which guarantee stability for both sellers and buyers, hence bypassing the most lucrative markets.[24]

It is imperative to note that although oil markets are politicised, they are also *markets* and it would thus be unwise to ignore the role of the economics. Since it is impossible to separate politics and economics in practice, neither governments nor markets alone can determine outcomes. While government actions clearly affect market outcomes, changing market outcomes also condition state behaviour. For example, the price of oil dictates the amount of investment in the oil industry, in what is commonly referred to as the 'long run investment cycle', or the 'petro-political cycle'.[25] The price spikes are usually followed by substantial overinvestment across the whole industry, which

[21] World refiners will not be able to manufacture sufficient gasoline, diesel fuel, and jet fuel that meet current environmental standards at price levels close to those that prevailed in 2003. The regulations that require sulphur removal from gasoline and diesel fuel (taking effect for US gasoline in 2004 and European diesel in 2005) caused difficulty to refiners who had to meet new requirements. Philip K. Verleger, Jr., "Energy: A Gathering Storm?" in C. Fred Bergsten and the Institute for International Economics, *The United States and the World Economy* (Institute for International Economics: Washington, DC, 2003), pp. 216 and 218. Also, see Stevens, *Strategic Positioning in the Oil Industry*, pp. 18-9.

[22] These "buffer stocks" come in two forms. Some of them are government-owned and held, as in the case of the United States' very large Strategic Petroleum Reserve (SPR), while others are mandated by governments but held by refiners. Morse, "A New Political Economy of Oil?" p. 20.

[23] For example, petroleum blockade of Japan in July 1941, oil embargo on Britain and France during the Suez crisis, the Iran-Libya Sanctions Act of 1996 or the 1990-91 Gulf War. Ibid, pp. 16-8; and Michael Wesley, "The Geopolitics of Energy Security in Asia," conference paper, Energy Security in the Asia Pacific, Griffith Asia Institute, Brisbane, August 31 – September 2, 2005, p. 7.

[24] Many oil-exporting governments sacrifice higher profits in order to maintain political relationships and to diversify their demand base. Valérie Marcel, *Oil Titans: National Oil Companies in the Middle East* (London: Chatham House, 2006), p. 203.

[25] Ernest Wilson's petro-political cycle (PPC) model posits that the likelihood and the direction of market politicisation are a direct function of the boom-and-bust phase of that market; thus, petro-politics at the peak of the market will differ substantially from politics at the trough. In rising markets, sellers, such as oil exporting governments, gain leverage; in falling markets, buyers, such as the IOCs or oil importing governments, gain leverage. In addition, in times of rising prices, developing governments, which occupy a subordinate position in the international system, have real incentive to alter the basic rules of the game and reverse this status quo. While their chances of doing so improve greatly in rising markets, they decline in falling ones. See Ernest J. Wilson III, "The Petro-Political Cycle in World Oil Markets," in Richard L. Enders and John Kim (Eds.), *Energy Resource Development: Politics and Policies* (Westport, CT: Greenwood Press, 1986); and Wilson, "World Politics and International Energy Markets," pp. 144-7.

eventually leads to the fall in oil prices as a consequence of the excess capacity stimulated by the earlier investment boom. In turn, low prices result in the period of underinvestment, which in the long run contributes substantially to sharp price increases, thus closing the cycle. Currently, however, despite the almost record high oil prices, the investment boom is not as evident as it was previously under similar market conditions. This is particularly so since most of the areas with the cheapest to produce oil reserves and largest assets, located in Russia and OPEC countries, are not in the hands of the most efficient and best-capitalised firms, Western IOCs, but non-Western governments and their NOCs, thus highlighting the importance of politics.

The famous British economist Alfred Marshall was once asked which side of the market determines price – supply or demand? He replied by asking which blade of scissors cuts a ribbon? The correct answer, of course, is *both*. If Marshall were alive today, we might ask him which force determines the price of oil – states or markets? Similarly, his answer would most certainly be 'both'. In reality, oil can be understood most effectively through integrating insights from both economics and politics. Without this synthesis there exists the kind of problem identified by Robert Gilpin, in which political scientists tend to overlook the role of markets, while economists often neglect the importance of power and the political context of events.[26] Conceptualising the oil market as 'politicised' avoids falling into the trap identified by Gilpin, as it allows for integration of political and economic aspects. Although political events are very important, the price of oil is also a very important factor in influencing bargaining outcomes in the oil industry.

Bargaining

Above, I established that oil is a politicised commodity since the oil markets are highly susceptible to strong political forces.[27] Thus, studying the contemporary oil industry by examining bargaining relationships among the major actors is the most effective way to approach it. Bargaining is a process at the heart of all *political and economic* exchanges in contemporary society and the very essence of politics itself. It encompasses many

[26] Gilpin, *U.S. Power and the Multinational Corporation*, pp. 4-5.
[27] Strange, *States and Markets*, p. 190.

activities in addition to formal negotiations.[28] For example, when the United States and the USSR threatened new deployments of nuclear weapons, announced peace initiatives, or broke off negotiations, they were bargaining. When a small, developing state sets terms for a multinational corporation to do business within its borders, the two are bargaining. When U.S. and North Korean troops fought battles over the line of demarcation, they were doing so as part of their governments' bargaining. Since bargaining between various actors is what shapes the political and economic exchanges, bargaining between various actors in the oil industry shapes the political economy of oil. Thus, studying bargaining is crucial for understanding the balance of power between major actors in the industry. Conflicting preferences of various actors (examined in more detail in the following section), as well as their power, make the oil industry a significant bargaining arena. Since oil is a commodity of utmost importance for most, if not all states and other actors in the global political and economic arena, it is also the political bargaining chip of last resort, which is commonly used by states and other actors in international relations and the international political economy.

It is important to note that both those who approach international relations from the realist tradition and those who use other approaches conceive of bargaining as a central process. Bargaining behaviour is an important component of realism.[29] It is also a key feature of the main rival to realism, liberalism. Keohane and Nye have noted that "Realism and liberalism both have their roots in a utilitarian view of the world, in which individual actors pursue their own interests by responding to incentives. Both doctrines view politics as a process of political and economic exchange, characterised by bargaining."[30] However, a bargaining perspective offers valuable correctives to both neorealism and neoliberalism. Whereas realism focuses on explaining conflict and struggles to explain cooperation, and liberalism focuses on explaining cooperation and

---

[28] I characterise a bargaining situation by the coincidence of cooperative and conflictual elements in addition to a limited degree of interdependence. Since the words bargaining and negotiation are frequently used interchangeably in the literature, I subscribe to the view of bargaining which includes the exchange of verbal as well as non-verbal communication, formal as well as informal exchanges. Negotiation thus refers to a formalised process relying on verbal communication, and as such, it is a sub-class of bargaining. For more on bargaining and negotiation, see Christer Jönsson, "Diplomacy, Bargaining and Negotiation," in Walter Carlsnæs, Thomas Risse and Beth A. Simmons (eds.), *Handbook of International Relations* (London: SAGE Publications, 2002).

[29] For example, see Glenn Snyder and Paul Diesing, *Conflict among Nations: Bargaining, Decision Making, and System Structure in International Crises* (Princeton: Princeton University Press, 1977), p. 22.

[30] Robert O. Keohane and Joseph S. Nye, "*Power and Interdependence* Revisited," *International Organization*, vol. 41 (Autumn 1987), pp. 728-9. Also see Keohane and Nye, *Power and Interdependence*.

struggles to explain conflict, bargaining theory highlights the conjunction of *cooperation and conflict* in most international relations.

1.2 The Characteristics of the Contemporary Oil Industry

1.2.1 Major Actors: Characteristics and Interests

This section answers the following questions: Who are the major actors in the contemporary oil industry, what are their major features, and what are their interests? Major actors in the oil industry are the oil importing and exporting states, both of which are sometimes organised into cartels or intergovernmental organisations (such as the Organization of Petroleum Exporting Countries or OPEC, and the International Energy Agency or IEA), and the oil companies, including international and state-run or national companies. Oil exporting states are usually in control of their own national oil companies (NOCs), and the interests of the two are identical most of the time. Some oil importing states have their own NOCs (for example China), with interests closely aligned to that of their state. Others use private international oil companies (IOCs), which sometimes have converging and, at other times, conflicting interests to those of oil importing states. Historically, these actors have had different levels of influence on the oil markets at different times. In separate accounts, Alessandro Roncaglia, Paul Stevens and Maurice Adelman describe the international oil market as a trilateral oligopoly made up of three groups of actors – exporting states and their NOCs; importing states; and the IOCs.[31] However, their conceptualisation outlived its usefulness, as some oil importing states have their own NOCs and should not be grouped with importing states that rely on the IOCs for their oil supplies.

One should guard against the assumption that members of each group are homogeneous, have identical interests, or concur in their optimal strategies. Explicit or tacit coalitions, which can lead to a certain degree of cooperation across these groups, are commonplace. Their interests, and particularly those of states, are often quite complex, clearly not as simple as interests of private oil companies, which are primarily concerned with profit maximisation. Below, I briefly survey the major actors.

---

[31] See Alessandro Roncaglia, *The International Oil Market* (Basingstoke: Macmillan, 1985); Stevens, *Strategic Positioning in the Oil Industry*; and Maurice A. Adelman, "The World Oil Market: Past and Future," *The Energy Journal*, special issue, 1994.

Governments

Rather than distinguishing between producers and consumers, I divide countries into net exporters and net importers, because some countries, such as the U.S., China, Russia, Canada, and Mexico, are in top ten of both consumer and producer categories. Thus, classifying them as net exporters (Russia, Mexico, and Canada) and net importers (the U.S., and China) adds clarity and removes ambiguity about their categorisation.

Exporters

Of ten largest crude oil exporters in the world, all but three (Russia, Norway and Mexico) are members of the Organization of Petroleum Exporting Countries, or OPEC (see Table 1.1).[32] Additionally, six countries with the largest crude oil reserves in the world are also all OPEC states, and all, but Venezuela, are located in the Middle East. These five countries control 59.6 percent of total world proven reserves. Although they produce 41.7 percent of world's crude oil, OPEC states possess 75.2 percent of total proven world oil reserves, which are adequate for about 73 years of production at current rates (see Table 1.2). This suggests that OPEC's already considerable market power will only grow in the future.[33]

Table 1.1: Net Oil Exporters and Importers (2005)

Net Exports		Net Imports	
Country	Million BPD	Country	Million BPD
Saudi Arabia	9.144	USA	13.825
Russia	6.798	Japan	5.347
Norway	2.756	China	3.361
Venezuela	2.454	Germany	2.532
Iran	2.390	S. Korea	2.308
UAE	2.375	France	1.930
Kuwait	2.363	India	1.701
Nigeria	2.305	Italy	1.691

[32] Currently, there are eleven members of OPEC: Saudi Arabia, Iran, Iraq, Kuwait, UAE, Qatar, Venezuela, Libya, Algeria, Nigeria and Indonesia.

[33] Daniel Yergin categorised "the asymmetry between oil consumption [in the OECD world] and its reserve base [in the Middle East]" as the "political geology" of oil, and argued that in the end it will not be denied, as rising dependence on Middle Eastern imports will emerge as a future problem for the OECD countries. See Yergin, "The Political Geology of the Energy Problem," in Dorothy S. Zinberg (ed.), *Uncertain Power: The Struggle for a National Energy Policy* (New York: Pergamon Press, 1983), p. 235.

Mexico	1.781	Spain	1.618
Algeria	1.761	Netherlands	1.041

Source: *BP Statistical Review of World Energy 2006* (OPEC in red, OECD in blue)

Table 1.2: OPEC, OECD, and non-OPEC Oil Reserves, R/P Ratio and Production (2005)

	OPEC	OECD	Non-OPEC	World
Reserves (billion barrels)	902.4	80.6	298.3	1200.7
% of World Total	*75.2%*	*6.7%*	*24.8%*	
Production (million bpd)	33.836	19.763	47.252	81.088
% of World Total	*41.7%*	*24.4%*	*58.3%*	
R/P Ratio (years)	73.1	11.2	17.3	40.6

Source: *BP Statistical Review of World Energy 2006*

In a country with substantial oil resources, which at the same time, is a net oil exporter, the state has several interests to consider and protect. These interests range from security of supply on the domestic market; health; safety; welfare and environmental interests; the conservation of oil resources for future needs; the training and employment of local labour in the oil industry; and finally, the generation of proper returns on the exploitation of oil resources for the state by the means of maximisation of gains from exports of crude oil or refined products.[34] In order to fulfil these goals states need sovereignty over their oil industries, a power that most oil exporting states legally achieved after the World War II. Pre-nationalisation foreign dominance of oil-exporting countries' oil industries implied a technological and commercial dependence, so that foreign actors took decisions of crucial economic and industrial importance for host countries. Additionally, foreigners were more responsive to consumer interests than to those of the producers, compromising national sovereignty in economic matters. As illustrated by the period following nationalisation of the oil industry in many exporting countries, domestic ownership and control of oil was essential in order to be use for host state's national interest, rather than the interest of IOCs and/or foreign governments.

Following nationalisations in oil exporting states, states became the primary agents of the economy and the generators and distributors of the oil rent. As 'rentier states,' many oil exporters are characterised by the capacity of the state to distribute large amounts of financial resources to society.[35] A common characteristic of all 'rentier

[34] R. Bentham, "Legal Status of State Petroleum Companies," in Nicky Beredjick and Thomas W. Wälde (eds.), *Petroleum Investment Policies in Developing Countries* (London: Graham & Trotman, 1988), p. 258.
[35] These resources did not come from taxes, and therefore give the state a degree of autonomy from society.

states' is that the regime's legitimacy "has been built around its capacity to distribute rent to different segments of society," both to a regime's allies but also to its potential challengers and the poorer segments of society.[36] In other words, many oil-exporting countries "buy" regime stability, and therefore maintain the status quo by redistributing oil income to society. Where a leader without revenue rents has to bargain with individuals and organisations that support him/her in order to stay in power; the electorates in countries with large oil revenues heavily depend on the leader's distribution strategies, and thus, have significantly less bargaining power against the leader.[37] While the political pact of the 'rentier state' eroded in many oil-exporting countries when oil prices fell in 1986, it is back on the agenda in the current decade, as oil prices have reached almost record levels.

Many have considered all Organisation of Petroleum Exporting Countries (OPEC) and many non-OPEC oil exporters (excluding OECD exporters) as 'rentier states' and 'petro-states', as oil abundance has been considered a curse for developing countries.[38] In other words, oil riches are far from the blessing they are often assumed to be.[39] In fact, countries with bad institutions[40] often end up poor and suffer what is known as 'resource curse', 'the Dutch Disease', or the 'paradox of plenty' precisely because they

---

[36] Marcel, *Oil Titans*, p. 107. Also, see Noreng, *Crude Power*, pp. 117-33.

[37] Bruce Bueno de Mesquita, Alastair Smith, Randolph M. Siverson and James D. Morrow, *The Logic of Political Survival* (Cambridge, MA: MIT University Press, 2003).

[38] See Dam, *Oil Resources*; Alan Gelb, *Oil Windfalls: Blessing or Curse?* (New York: Oxford University Press, 1988); Terry Lynn Karl, *The Paradox of Plenty: Oil Booms and Petro States* (Berkeley: University of California Press, 1997); Terry Lynn Karl, "The Perils of the Petro-State: Reflections on the Paradox of Plenty," *Journal of International Affairs*, vol. 53, no. 1 (Fall 1999), pp. 31-48; Michael L. Ross, "The Political Economy of Resource Curse," *World Politics*, vol. 51, 1999, pp. 297-322; Jahangir Amuzegar, *Managing the Oil Wealth: OPEC's Windfalls and Pitfalls* (London: I.B. Tauris, 1999); George Philip, *The Political Economy of International Oil* (Edinburgh: Edinburgh University Press, 1994); Paul Hallwood and Stuart Sinclair, *Oil, Debt and Development: OPEC in the Third World* (London: Allen & Unwin, 1981); James A. Robinson, Ragnar Torvik and Thierry Verdier, "Political Foundations of the Resource Curse," *Centre for Economic Policy and Research Discussion Papers*, no. 3422, 2002; and Pauline Jones Luong and Erika Weinthal, "Rethinking the Resource Curse: Ownership Structure, Institutional Capacity, and Domestic Constraints," *Annual Review of Political Science*, vol. 9, 2006, pp. 241-63. For a literature survey of "resource curse" see Paul Stevens, "Resource Impact – Curse or Blessing? A Literature Survey," International Petroleum Industry Environmental Conservation Association, March 25, 2003. For a list of "petro-states", see Nancy Birdsall and Arvind Subramanian, "Saving Iraq From Its Oil," *Foreign Affairs*, vol. 83, no. 4, July-August 2004, p. 77. The only oil exporters not included are all Western OECD countries: Norway, Canada, the UK, and Denmark. Arguably, the chances of overcoming the curse are greatest in countries with well-developed political and civic institutions, such as Norway or Canada. Jason Bush, "The Curse of $50 a Barrel," *Business Week*, May 16, 2005, p. 33.

[39] Philip, *The Political Economy of International Oil* is an excellent source for those wishing to understand why the vast oil revenue has not brought about substantial economic and social development in the member states of OPEC. This subject is also covered in Paul Hallwood and Stuart Sinclair, *Oil, Debt and Development: OPEC in the Third World* (London: Allen & Unwin, 1981). Amuzegar, *Managing the Oil Wealth: OPEC's Windfalls and Pitfalls*, looks at the oil producers on a country-by-country basis and argues that mismanagement played a significant part.

[40] Robinson, Torvik and Verdier, "Political Foundations of the Resource Curse," p. 1.

are oil rich.[41] Oil is considered as a 'fool's gold'[42] – bad for growth and bad for democracy, since it tends to impede the development of institutions and values critical to open, market-based economies and political freedom: civil liberties, the rule of law, protection of property rights, and political participation.[43] Moreover, an influx of foreign exchange attracted into a country as a result of mineral exports causes an exchange rate appreciation. This, in turn, renders other locally produced products uncompetitive in foreign markets.[44] Historically, states suffering from the Dutch Disease have been prone to outside interference by larger states wanting some control over either the price or supply of oil, and have been overspending during the times of high oil prices. However, following the recent oil price surge, indications are that Middle Eastern OPEC and other oil exporters have learnt their lessons from 1974 and 1980 and are saving and investing their oil revenues wisely. While past windfalls have been celebrated with budgetary blowouts and the abundance of money has encouraged the postponement of economic reforms, this time around, most Middle Eastern OPEC oil exporters, with the possible exception of Iran, seem to be spending less, repaying debts, building up assets due to an impressive transformation of the region's financial and economic base, and spending more on health, education and infrastructure.[45]

---

[41] Terry Lynn Karl defines petro-states as the countries where the petroleum sector is at the centre of economic accumulation, and where the central institutional feature is fiscal dependence on petro-dollars. The petro-states are economically dependent on a single resource (oil) that is a finite commodity "capable of generating extraordinary rents"; they depend on a capital-intensive industrial sector and they have oil rents accruing directly to the state. Oil exports create powerful organised groups in both government and the business community with strong interests to maintain the status quo by moulding institutions to serve this purpose. The government's reliance on oil revenues and taxes from the oil industry for its revenue base has two effects: firstly, the state fails to develop a culture of taxation similar to other countries. Secondly, a *rentier* mentality develops along with an institutional base that serves to perpetuate the state's reliance on oil. This creates high barriers to change, which later impede the structural readjustment needed as a response to declining revenues from oil exports. Karl, *The Paradox of Plenty*.

[42] Term coined by Daniel Yergin, *The Prize*, p. 14.

[43] Birdsall, "Saving Iraq," p. 77.

[44] J.D. Sachs and A.M. Warner, "Natural Resources and Economic Development: The Curse of Natural Resources", *European Economic Review*, vol. 45, 2001, pp. 827-38. The Dutch Disease received its name from economists who examined the impact of North Sea gas production on the Dutch economy. They noted that the guilder, backed by strong export revenues from natural gas, appreciated rapidly against other currencies; the results were the exposure of Dutch industry to foreign competition, deindustrialisation, and loss of employment. It is defined as a process whereby new discoveries or favourable price changes in one sector of the economy – for example, petroleum – cause distress in other sectors – for example, agriculture or manufacturing – provides a powerful explanation for the poor performance of the oil exporters. Karl, *The Paradox of Plenty*, p. 5.

[45] For example, it has been suggested that Saudi Arabian economy is moving beyond oil. See Stephen Glain, "Moving Beyond Oil," *Newsweek*, June 27, 2005, pp. 36-8; and M.A. Choudhury and M.A. Al-Sahlawi, "Oil and Non-oil Sectors in the Saudi Arabian Economy," *OPEC Review*, vol. 24, no. 3, September 2000. Michael Alexeev and Robert Conrad ("The Elusive Curse of Oil," *Working Paper Series*, Terry Sanford Institute of Public Policy, Duke University, August 2005) have shown that the effect of a large endowment of oil on long-term economic growth of countries has been positive. T. Ashby McCown, L. Christopher Plantier and John Weeks ("Petrodollars and Global Imbalances," Department of Treasury, Office of International Affairs, Occasional Paper, no. 1, February 2006, p. 2) have argued that in contrast to the last oil boom, some oil exporters have responded to the windfall by increasing reserves, retiring debt, financing productive

Oil-exporting countries may use a strategy of collective action, a perfect example of which is OPEC, which was established in 1960 by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela, at a time when the balance of power within the oil industry preponderantly favoured the consumer.[46] In economic terms, its intention was to establish a cartel arrangement between developing states in the oil industry to maintain a price structure that would reflect the perceived interests of its member states, rather than that of the United States with its import restrictions,[47] and oil companies, which had set prices and production levels hitherto. As a result, the main objectives of OPEC stress the importance of stable oil prices and income from oil export for the member states.[48] OPEC's move into the centre ground as the price-maker for crude oil came in the early

---

investments intended to support growth, and setting aside money for future generations, measures which should help insulate them from oil price volatility. Also see "Mid-East 'Learns Oil-boom Lesson'", *BBC News*, June 29, 2006, http://news.bbc.co.uk/go/pr/fr/-/2/hi/business/5129512.stm, [June 30, 2006]; "Recycling the Petrodollars," *The Economist*, November 12, 2005, pp. 77-9; and Stephen Roach, "The Case of the Missing Petro-Dollars," *Morgan Stanley Global Economic Forum*, November 28, 2005, http://www.morganstanley.com [December 7, 2005].

[46] Useful surveys of and perspectives on OPEC include Ashraf Lufti, *OPEC Oil* (Beirut: Middle East Research and Publishing Center, 1968); Ian Seymour, *OPEC: Instrument of Change* (London: Macmillan, 1980); Ian Skeet, *OPEC: Twenty-five Years of Prices and Politics* (Cambridge: Cambridge University Press, 1988); Mohammed E. Ahrari, *OPEC: The Failing Giant* (Lexington: University Press of Kentucky, 1986); Fu'ad Ruhani, *A History of O.P.E.C.* (New York: Praeger, 1971); Jahangir Amuzegar, *Managing the Oil Wealth: OPEC's Windfalls and Pitfalls* (London: I.B. Tauris, 1999); Abbas Alnasrawi, *OPEC in a Changing World Economy* (Baltimore: Johns Hopkins University Press, 1985); Fadhil J. Al-Chalabi, *OPEC and the International Oil Industry: A Changing Structure* (Oxford: Oxford University Press, 1980); Al-Chalabi, *OPEC at the Crossroads* (Oxford: Pergamon, 1989); Pierre Terzian, *OPEC: The Inside Story* (London: Zed Press, 1985); El Mallakh (ed.), *OPEC: Twenty Years and Beyond*; Ali M. Jaidah, *An Appraisal of OPEC Oil Policies* (London: Longman, 1983); Albert E. Danielsen, *The Evolution of OPEC* (New York: Harcourt Brace Jovanovich, 1982); Dankwart A. Rustow and John F. Mugno, *OPEC: Success and Prospects* (New York: New York University Press, 1976); Charles F. Doran, "OPEC Structure and Cohesion: Exploring the Determinants of Cartel Policy," *Journal of Politics*, vol. 42, no. 1, 1980, pp. 82-101; Dermot Gately, "A Ten-Year Retrospective: OPEC and the World Oil Market," *Journal of Economic Literature*, vol. 22, no. 3, 1984, pp. 1100-14; A.F. Alhajji and David Huettner, "OPEC and World Crude Oil Markets from 1973 to 1994: Cartel, Oligopoly or Competitive?" *The Energy Journal*, vol. 21, no. 3, 2000, pp. 31-60; John Evans, *OPEC and the World Energy Market: A Comprehensive Reference Guide* (Essex: Longman, 1990); Zuhayr Mikdashi, "The OPEC Process," in Raymond Vernon (ed.), *The Oil Crisis* (New York: W. W. Norton & Company, 1976), pp. 203-227; Claes, *The Politics of Oil-Producer Cooperation*; Peter R. Odell, "OPEC: Too Soon to Write it Off?" *Petroleum Economist*, vol. 66, no. 10, 1999. The latter contains very detailed references to contemporary writings on the subject. The early history of the Organization of Arab Petroleum Exporting Countries (OAPEC) is examined in detail in Mary Ann Tetreault, *The Organization of Arab Petroleum Exporting Countries; History, Policies and Prospects* (Westport, Connecticut: Greenwood Press, 1981); and Abdelkader Maachou, *OAPEC: An International Organization for Economic Cooperation and an Instrument for Regional Integration* (New York: St. Martin's Press, 1983). Also see OPEC's and OAPEC's websites at http://www.opec.org, and http://www.oapecorg.org.

[47] The U.S. implemented the Mandatory Oil Import Program (MOIP) in March 1959 in order to shift the burden of adjustment from the U.S. oil industry to the rest of the world. Morse, "A New Political Economy of Oil?" p. 9.

[48] In Article 2 sub A, B, and C, Chapter 1 of the Statute of the Organization of the Petroleum Exporting Countries (OPEC), the main aims are set forth: the coordination and unification of the petroleum policies of member states; the determination of the best means for safeguarding the individual and collective interests of the member states; stability of prices in international crude oil markets in order to eliminate harmful and unnecessary fluctuations; due regard to the interests of the producing nations and to the necessity to secure a steady income; an efficient, economic and regular supply of petroleum to consumer countries; and a fair return on capital to those investing in the oil industry. OPEC, *Official Resolutions and Press Releases*, (Vienna: The Secretariat OPEC, 1960-1990), p. 32.

1970s. However, disarray within OPEC has been more or less a constant, and it could not and *cannot* act as a cartel to rig the oil market.[49] Arguably, OPEC is "first and foremost a political organisation of economically heterogeneous countries with clashing national and even economic interests."[50] Internal division is usually evident between the price hawks (Libya, Venezuela, Iran, Nigeria and Indonesia), and countries close to the West with a moderate line on prices (Saudi Arabia, Kuwait, and the UAE), and the conflict often centres on hawks' 'free riding'. In other words, there is often a strong incentive to cheat, and produce more, or less, oil than prescribed by the quota system.[51] Although the pursuit of a coordinated or even uniform oil policy by the member states was considered highly important for the realisation of OPEC's objectives, this cannot be achieved until there are converging developments in the oil industries and economies of member states. Besides the fact that there are no legal repercussions if a member violates an agreement, since no legally binding agreements are made, OPEC countries do not have enough common interests to maintain price solidarity for long. Moreover, the group is too heterogeneous to agree as national interests clearly prevail,[52] and the relationship between the members of OPEC is not like that of a community of states.[53] In addition, several of the OPEC members (Iran, Iraq, and Kuwait) have been involved in military conflicts with one another, what further contributes to cartel's lack of cooperative success. In recent years, OPEC's market power has diminished as, except for that of Saudi Arabia, which has historically been known as the swing producer, the cartel nowadays lacks high spare production (or excess) capacity of past decades.

Importers

---

[49] See in particular, Skeet, *OPEC: Twenty-five Years of Prices and Politics*; Terzian, *OPEC: The Inside Story*; and Noreng, *Crude Power*, chapter 3. On the contrary, Raymond J. Learsy, who surveyed OPEC's methods of economic dominance and suggests how to bust it, suggested that OPEC acts as a cartel, and manipulates the oil markets and destabilises the world economy. See *Over a Barrel: Breaking the Middle Eastern Oil Cartel* (Nashville: Nelson Current, 2005).

[50] A.A. Kubursi and S. Mansur, "The Political Economy of Middle Eastern Oil," in Richard Stubbs and Geoffrey Underhill (eds.), *Political Economy and the Changing Global Order* (London: Macmillan, 1994), p. 320.

[51] Falola and Genova, *The Politics of the Global Oil Industry*, p. 67. Given the pressure of socioeconomic demands and the need for quick, easily fungible revenues, 'needy' and hawkish oil-exporting governments (Iran for example) are more inclined to exploit the short-run inelasticity of demand for oil. By pushing for higher oil prices, however, these governments may accelerate the oil substitution or conservation process, hence pushing the prices down in the longer period. If, however, oil-exporting governments feel that future prices (in real terms) are likely to be higher, and assuming that they have no immediate profitable use for funds, they may prefer to defer production and keep the major national asset in the ground (Saudi Arabia for example).

[52] Coby van der Linde, *The State and the International Oil Market: Competition and the Changing Ownership of Crude Oil Assets* (Boston: Kluwer Academic Publishers, 2000), p. 122.

[53] Claes, *The Politics of Oil-Producer Cooperation*, p. 163.

In 2005, eight out of ten largest importers of crude oil were OECD countries (see Table 1.1), with the United States far ahead of any other country. Besides the OECD countries, which in 2005 imported 29.5 million bpd, 12 million bpd more than they did two decades ago, emerging market economies, such as China, which became a net oil importer in 1993, are in desperate need for additional oil (see Table 1.3). China's emergence as a major oil importer has occurred both relatively recently and quite rapidly.[54] Between 2001 and 2005, China accounted for 35 percent and the United States for 17 percent of the total increase in global crude oil demand.[55] Put together, in 2005, OECD countries and emerging market economies of South, East and Southeast Asia consumed 77.7 percent of the world's oil,[56] and they absorbed much of world's traded oil.

Table 1.3: Increasing Net Oil Imports in the OECD, US and China

	OECD		USA		China	
Year	1985	2005	1970	2005	1992	2005
	Million BPD		Million BPD		Million BPD	
Production	20.060	19.763	11.297	6.830	2.841	3.627
Consumption	37.217	49.254	14.710	20.655	2.662	6.988
Net Imports	17.157	29.491	3.413	13.825	-0.179	3.361

Source: *BP Statistical Review of World Energy 2006*

At first glance, the problems that industrial nations face today in acquiring secure sources of oil may seem more acute than ever before. The United States, Japan, China, and the European Union are heavily dependent on oil imports - they consume 57.8 percent of world's oil, and import 70.1 percent of all traded oil.[57] Current production figures significantly underestimate the longer-term dominance of the Middle East, as oil production in most OECD countries has already peaked. The future importance of Middle East and its oil is further exacerbated by the projection of import fractions in the United States – rise from 33 percent in 1985, to 67 percent in 2005 and to around 80 percent in 2025. The import fraction in the European Union is expected to rise from 84 percent in 2005 to around 90 percent in 2025. In Japan, it is already at 98 percent and is expected to be 100 percent in 2025. Finally, in China, it grew rapidly from zero in 1992, to 27 percent in 2000, 48 percent in 2005, and it is expected to

[54] International Energy Agency, *China's Worldwide Quest for Energy Security* (Paris: IEA, 2000), p. 74.
[55] British Petroleum, *BP Statistical Review of World Energy 2006*.
[56] China, Hong Kong, Taiwan, Vietnam, Thailand, the Philippines, Singapore, Malaysia, Indonesia, Bangladesh, India and Pakistan. Ibid.
[57] British Petroleum, *BP Statistical Review of World Energy 2006*.

reach 73 percent by 2025.[58] It is obvious that major world powers are all increasingly dependent on imported, and particularly OPEC oil, and the uneven endowment of oil can easily be translated into political and diplomatic problems for those who lack abundance in oil reserves.

Preoccupied with balance of payments problems, inflationary pressures, and concern over availability of supplies, oil-importing governments generally aim at lower disbursements for oil imports, consistent with their perceived objective of security of supplies (or energy security), which usually refers to uninterrupted availability of oil at stable and reasonable prices.[59] Some have even suggested that Western governments, and in particular those endowed with oil, such as the U.S., U.K., Norway and Canada, need relatively high prices to provide an umbrella under which their higher-cost supplies of oil can be developed.[60] For oil importing nations, security of supplies can be satisfied through diversifying sources of imports; developing competitive domestic production of oil or of any substitute products; assisting state-owned or private oil companies with headquarters in that particular country in their overseas ventures; and by engaging in demand-management by reducing domestic oil consumption. Oil importers are rivals for market shares as they find themselves in competition or even conflict with each other in order to secure sufficient oil needed to run their economies.

It is thus unsurprising that in every oil-importing nation, energy security is high on both domestic and foreign policy agendas, and securing an adequate supply of oil is a paramount concern.[61] Two oil crises that erupted in the 1970s brought energy security to the forefront of many governments' objectives, and also resulted in increased academic interest. The importance that various oil-importing governments ascribed to energy security diminished by the mid-1980s, when oil prices were low and supplies

---

[58] *International Energy Outlook 2004* and *BP Statistical review of World Energy 2006*.

[59] Oil-importing countries could support or tolerate efforts of oil-exporting countries and/or oil companies to raise prices within acceptable limits if there are trade-offs involved. For more detail, see Zuhayr Mikdashi, *The International Politics of Natural Resources* (Ithaca, N.Y.: Cornell University Press, 1976), p. 32.

[60] Francisco Parra, *Oil Politics: A Modern History of Petroleum* (London: I.B. Tauris, 2004), p. 347.

[61] For more on energy security, see Daniel Yergin, "Ensuring Energy Security," *Foreign Affairs*, vol. 85, no. 2, March-April 2006; Jan H. Kalicki and David L. Goodwyn (eds.), *Energy and Security: Toward a New Foreign Policy Strategy* (Washington, D.C.: Woodrow Wilson Center Press, 2005); Gawdat Bahgat, "Energy Security in a New World Order," *The Journal of Energy and Development*, vol. 30, no. 1, 2004; Nader Elhefnawy, "Toward a Long-Range Energy Security Policy," *Parameters*, vol. 36, no.1, 2006; Shirin Akiner, *The Caspian, Politics, Energy and Security* (London: Routledge, 2004); and G.C. Watkins, "Oil Scarcity: What Have the Past Three Decades Revealed?" *Energy Policy*, vol. 34, no. 5, 2006. For older work on the subject, see Daniel Yergin and Martin Hillenbrand (eds.), *Global Insecurity: A Strategy for Energy and Economic Renewal* (New York: Penguin Books, 1983); David A. Neese and Joseph S. Nye (eds.), *Energy and Security* (Cambridge: Ballinger, 1981); and David D. Deece, "Energy: Economics, Politics and Security," *International Security*, vol. 4, no. 3, 1979-80.

were abundant, but has been revived in recent years. This *revival* and the new age of energy security are driven in part by an exceedingly tight oil market and by high oil prices. According to Yergin, other factors include the threat of terrorism, inclement weather, instability in exporting nations, resource nationalism, fears of a scramble for supplies, geopolitical rivalries, countries' fundamental need for energy to power their economic growth, and anxiety over whether there will be sufficient resources to meet the world's energy requirements in the decades ahead.[62] One driver of the renewed focus on energy security, which is not mentioned by Yergin, is that some states consider the economic and environmental impact of demand, rather than security of supply, as one of the key issues in their energy security.[63] However, the key energy security policy driver for most, if not all states, is that security of oil supplies is taken as a necessary precondition in ensuring progress and economic growth. While this clearly is the case in the UK,[64] in formal political discourse in the U.S., petroleum is considered a national security matter.[65] In his speech at the Brookings Institution in 2006, Senator Richard Lugar, chairman of the Senate Foreign Relations Committee, warned, "Energy is the albatross of US national security."[66] According to American neo-conservatives, such as Richard D'Amato, Chinese ownership of an American oil company (UNOCAL) would not only be a threat to economy, but also to the national security.[67]

Similarly, emerging economies of Asia, such as China and India, according to Michael May, depend for "probably most of their continued economic growth on the continued normal functioning of world [petroleum] markets … for the exports needed to pay for these products."[68] In other words, economies in Asia require energy to fuel

---

[62] Yergin, "Ensuring Energy Security," p. 69. Also, see Robert C. McFarlane, "The Global Oil Rush," *The National Interest*, no. 84, Summer 2006, pp. 34-6.

[63] For a comprehensive list of attributes and dimensions of energy security, see Nautilus Institute, "A Framework for Energy Security Analysis and Application to a Case Study of Japan," June 7, 1998, http://www.nautilus.org/archives/pares/PARES_Synthesis_Report.PDF, [November 8, 2006].

[64] *UK International Priorities: A Strategy for the FCO* (London: Foreign and Commonwealth Office, December 2003), p. 40.

[65] Klare, *Blood and Oil*, p. xiv.

[66] Quoted in Xuecheng Liu, "China's Energy Security and Its Grand Strategy," The Stanley Foundation, Policy Analysis Brief, September 2006, p. 12.

[67] "National Security Dimensions of the Possible Acquisition of UNOCAL by CNOOC and the Role of CFIUS," Statement of Hon. C. Richard D'Amato, Chairman, U.S.-China Economic and Security Review Commission, Before the House Committee on Armed Services, July 13, 2005, http://uscc.gov/testimonies_speeches/testimonies/2005/05_07_13_testi_damato.pdf, [July 20, 2005].

[68] Michael May, "Energy and Security in East Asia," Asia/Pacific Research Centre, January 1998, p. 25; Also see Fereidun Fesharaki, "Energy and the Asian Security Nexus," *Journal of International Affairs*, vol. 53, no. 1, Fall 1999; Wesley, "The Geopolitics of Energy Security in Asia". For recent analyses of energy security in Northeast Asian context, see Peter Hayes and David von Hippel, "Energy Security in Northeast Asia," *Global*

their export-led development and growth. Hence, in China for example, according to Bo Kong, "energy security is now firmly at the top of the leadership's domestic and foreign policy agenda,"[69] and according to Mao Yushi, "oil supply security has become the contemporary imperative."[70] Whereas most oil importers rely on the IOCs to supply their crude oil and products, China and India have their own NOCs, which perform this function. While IOCs are often independent of any home government interference, Chinese and Indian NOCs are government-controlled and most often follow directions prescribed by their governments. Thus, in ensuring their energy security Chinese and Indian NOCs receive state support, since their governments consider oil a strategic asset.[71] In this way, China and India can directly serve their interests in the oil markets by relying on their NOCs rather than on the IOCs. The NOCs, and the role they play in serving governments' interests, will be examined in more detail below.

Not unlike the oil-exporting countries, oil importers may also use a strategy of collective action. In 1973/74 the United States took the initiative in re-tabling a proposal that states in the OECD should act in concert to confront the producers' cartel (OPEC) with a countervailing consumers group, in order to push the prices down, and reduce the impact of unleashing the 'oil weapon' in future.[72] Thus, they formed the IEA, the origins of which can be found in the 1973 oil embargo.[73] As a response to this embargo, the U.S. government, under the direction of then Secretary of State Henry Kissinger, called for the establishment of the IEA, which eventually took place in 1974. The U.S. objectives were both economic and political, aiming at

---

Asia, vol. 1, no. 1, September 2006, pp. 90-105; Anthony Bubalo and Mark Thirlwell, "New Rules for a New 'Great Game': Northeast Asian Energy Insecurity and the G-20," Lowy Institute Policy Brief, November 2006; and Kent E. Calder, "China and Japan's Simmering Rivalry," *Foreign Affairs*, vol. 85, no. 2, March/April 2006, pp. 129-39.

[69] Bo Kong, "Institutional Insecurity," *China Security*, Summer 2006, p. 77.

[70] Mao Yushi, "Politics vs. Market," *China Security*, Summer 2006, p. 106.

[71] Nelson D. Schwartz, "Why China Scares Big Oil," *Fortune*, August 8, 2005, p. 43.

[72] Relationships between the consuming nations are discussed in Lieber, *The Oil Decade*.

[73] For more on the IEA see Ulf Lantzke, "The OECD and Its International Energy Agency," in Raymond Vernon (ed.), *The Oil Crisis* (New York: W. W. Norton & Company, 1976); Richard Scott, *IEA: The First 20 Years* (Paris: International Energy Agency, 1994); Scott, "Innovation in International Organization: The International Energy Agency," *Hastings International and Comparative Law Review*, no. 1, Spring 1977, pp. 1-56; Charles F. Doran, *Myth, Oil and Politics: Introduction to the Political Economy of Petroleum* (New York, 1977), chapter 5; Robert O. Keohane, "The International Energy Agency: State Influence and Transgovernmental Politics," *International Organization*, vol. 32, no. 4, 1978; Robert O. Keohane, "International Agencies and the Art of the Possible: The Case of the IEA," *Journal of Policy Analysis and Management*, vol. 1, no. 4, 1982; Mason Willrich and Melvin A. Conant, "The International Energy Agency: An Interpretation and Assessment," *The American Journal of International Law*, vol. 71, no. 2, 1977; and Glen Toner, "The International Energy Agency and the Development of the Stocks Decision," *Energy Policy*, vol. 13, no. 1, 1987. For more on both OPEC and the IEA see Falola and Genova, *The Politics of the Global Oil Industry*, chapter 4.

lower oil prices, development of new energy sources, confronting OPEC's emerging power, which was seen as a challenge to U.S. hegemony, and preserving the position of U.S.-based IOCs in supplying OECD countries with oil.[74] The United States was not successful in making the IEA a counter-cartel to OPEC under its own control, as the economic objectives were contradictory and the political objectives met with resistance from Western Europe and Japan, which did not want to compromise their relations with the OPEC countries. In hindsight, the IEA has failed in its original objectives,[75] as until this day, no crisis addressed by the IEA has been caused by the OPEC 'bogeyman'.[76] Currently there are thirty IEA, or OECD member states,[77] and the IEA essentially remains an agency for compiling data and making forecasts on energy markets.

Companies

Besides oil exporting and importing governments, oil companies are the other major actors in the contemporary oil industry. Oil companies are divided into two major groups: the IOCs and the NOCs. The IOCs are further divided into majors and independents. Below, I firstly examine the IOCs and their major characteristics, what is followed by a survey of the NOCs. Moreover, both IOCs' and NOCs' interests and objectives are identified and discussed.

IOCs

The IOCs, which are also referred to as the majors or 'Big Oil', have a significant proportion of the exploration, oil and gas producing, oil refining, chemical and marketing operations in several different countries.[78] Most IOCs strive to be vertically

---

[74] Noreng, *Crude Power*, p. 48.
[75] Seymour, *OPEC: Instrument of Change*, p. 132.
[76] Toby Shelley, *Oil: Politics, Poverty and the Planet* (London: Zed Books, 2005), p. 95.
[77] These are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom, and USA.
[78] The best studies of the role of IOCs in the IPE of oil, and the decline in that role after 1973, are Louis Turner, *Oil Companies in the International System* (London: Allen & Unwin, 1983), which was based on Louis Turner, "The Oil Majors in World Politics," *International Affairs*, vol. 52, no. 3, July 1976, pp. 368-80; Sampson, *The Seven Sisters*; and Robert M. Grant, *The Oil Companies in Transition, 1970-1987* (Milano: Franco Angeli, 1991). For more on IOCs, see Falola and Genova, *The Politics of the Global Oil Industry*, pp. 23-42; and Nick Antill and Robert Arnott, *Oil Company Crisis: Managing Structure, Profitability and Growth* (Oxford: Oxford Institute for Energy Studies, 2002). For a somewhat dated study on relationship between IOCs and host governments, see Jack E. Hartshorn, *Oil Companies and Governments* (London: Faber and Faber, 1962). For a detailed study of the relations between ten majors and the Arab countries and their nationals see Giacomo

integrated economic actors specifically and essentially involved in three highly capital-intensive[79] activities: exploration for and production of crude oil ('upstream'); transportation and refining of the same; and marketing of finished oil products ('downstream').[80] In the past, this has resulted in great structural power accruing to the companies and enhancement of this position was possible by individual companies cooperating to maintain their market position. Consequently, free market principles have never *fully* applied in the oil industry and instead oligopoly has been the typical and usually accepted structure. While historically, vertical integration helped companies to absorb the burdens of adjustment between supply and demand, and assisted in shifting these burdens onto other actors, today, and generally after nationalisations of the 1970s, no private oil companies were/are operationally vertically integrated, and hence all are operationally imbalanced.[81]

The majors are, as the term suggests, the biggest private oil companies. Nowadays, six corporations are regarded as majors: Exxon Mobil, Chevron, BP, Royal Dutch/Shell, Total, and Conoco Phillips. Between them, they account for roughly 13 percent of world oil production, 21 percent of refining, and 35 percent of product sales.[82] Traditionally, majors were very powerful actors in the international political economy and have often been more powerful than some states, as their revenues were regularly higher than those of many small and medium sized states. In recent years, the IOCs

---

Luciani, *The Oil Companies and the Arab World* (New York: St. Martin's Press, 1984). For a superb company history, looking far beyond the history of just British Petroleum, see Bamberg, *History of the British Petroleum Company. British Petroleum and Global Oil, 1950-1975*; and Ronald W. Ferrier, *History of the British Petroleum Company* (New York: Cambridge University Press, 1982), for BP's history until 1950. Similarly, for the history of Royal Dutch/Shell (and much more) from the company's perspective, see Stephen Howarth, *A Century of Oil: The "Shell" Transport and Trading Company, 1897-1997* (London: Weidenfeld and Nicolson, 1997) and F. C. Gerretson, *The History of Royal Dutch* (The Hague: Royal Dutch Petroleum Company, 1955). For a detailed history of Standard Oil up to the mid-1950s, see Ralph W. Hidy and Muriel E. Hidy, *History of Standard Oil Company (New Jersey), Vol. 1; Pioneering in Big Business, 1882-1911* (New York: Harper and Brothers, 1955); George S. Gibb and Evelyn H. Knowlton, *History of Standard Oil Company (New Jersey), Vol. 2; The Resurgent Years, 1911-1927* (New York: Harper and Brothers, 1956); Henrietta M. Lawson, Evelyn H. Knowlton, and Charles S. Popple, *History of Standard Oil Company (New Jersey), Vol. 3; New Horizons, 1927-1950* (New York: Harper and Row, 1971); and Bennett H. Wall, *History of Standard Oil Company (New Jersey), Vol. 4; Growth in a Changing Environment* (New York: McGraw-Hill, 1988). On the formation and activities of ENI up to 1963, see Charles R. Dechert, *Ente Nazionale Idrocarburi* (Leiden: E. J. Brill, 1963).

[79] It is quite expensive to set up the operations (refinery or production), but once it exists, the maintenance costs are fairly low.

[80] The classic text on the structure of the industry remains Paul H. Frankel, *The Essentials of Petroleum: A Key to Oil Economics* (London: Frank Cass, 1969).

[81] Morse, "A New Political Economy of Oil?" p. 3. Historical reasons for vertical integration in the oil industry are described by Antill and Arnott, *Oil Company Crisis*, pp. 4-6. Antill and Arnott also offer a detailed analysis of pro and cons of vertical integration for private oil companies.

[82] Parra, *Oil: A Modern History of Petroleum*, p. 329.

have represented half of the world's top ten MNCs by sales and profits,[83] and half of top ten performing companies listed in S&P 500 index.[84] As a group, the five major companies represent more than 50 percent of the market capitalisation of all publicly traded oil stocks, and during the past 20 years, these corporations have generated returns 10 percent higher than the industry average.[85] In 2005, Exxon Mobil was world's largest company in terms of sales, market value and profits, and its profits were larger than that of any U.S. company in history.

The independents are the late entrants, smaller, privately owned companies such as Anadarko, Valero Energy, Amerada Hess or Occidental without the same extensive vertical integration outlined above. The ability and willingness of these independents to employ spoiling tactics by offering host states more favourable terms than the majors was to prove a crucial variable in breaking the power of the latter to control the market after 1970. As a result when the OPEC challenge was made to wrest control from the majors, the presence of the independents assisted OPEC and weakened the majors. Today, outside their home countries, the interests of independents are mostly confined to one or two countries, and they have scant refining and marketing operations.

The IOCs are usually driven by three major interests before and after they established operations in a particular host state. Firstly, they seek a contract that allows them to 'book' these reserves – including them in their accounts – which increases the market value of their company. Production sharing agreements (PSAs), joint ventures (JVs), and royalty/tax (R/T) agreements, like concession contracts in past, permit companies to book reserves in their accounts.[86] The importance of this should not be

---

[83] Ranked by revenues in 2001: ExxonMobil ranked second, BP fourth, Royal Dutch/Shell eighth, Chevron fourteenth, and Total Fina Elf fifteenth. *Fortune*, July 22, 2002. This did not change much by 2006: ExxonMobil was second, Royal Dutch/Shell third, BP fourth, Chevron seventh, Total ninth, and ConocoPhillips tenth. "The Forbes Global 2000: The World's 2000 Largest Public Companies," *Forbes*, April 16, 2007.

[84] These are ConocoPhillips (2nd), Chevron (3rd), Valero Energy (4th), ExxonMobil (7th) and Apache (10th). "The Best Performers," *Business Week*, April 4, 2005, p. 39.

[85] Ivo J. H. Bozon, Stephen J. D. Hall, and Svein Harald Øygard, "What's Next for Big Oil?" *The McKinsey Quarterly*, no. 2, 2005.

[86] For more on different types of agreements, see Jenik Radon, "The ABCs of Petroleum Contracts: License-Concession Agreements, Joint Ventures, and Production-sharing Agreements," in Svetlana Tsalik and Anya Schiffrin (eds.), *Covering Oil: A Reporter's Guide to Energy and Development* (New York: Open Society Institute, 2005); Abdulaziz Al-Attar and Osamah Alomair, "Evaluation of Upstream Petroleum Agreements and Exploration and Production Costs," *OPEC Review*, vol. 29, no. 4, December 2005; Roderick O'Brien, "South China Sea Oil: Two Problems of Ownership and Development," The Institute of Southeast Asian Studies, Singapore, Occasional Paper, no. 47, August 1977, pp. 62-4; Mark J. Kaiser and Allan G. Pulsipher, "Fiscal System Analysis: Concessionary and Contractual Systems Used in Offshore Petroleum Arrangements," U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, March 2004; Kirsten

underestimated for the oil majors. In 2004, when Royal Dutch/Shell overstated the size of its 'booked' reserves by over 20 percent, it lost the faith of the financial markets: the company's share price dropped and its credit rating fell.

Secondly, if unsurprisingly, before investing in a country, the IOCs look for an opportunity to make large profits. Generally, oil companies make their profits from investing and risking their capital, and they are usually high-risk takers. In some cases, they lose their capital, for example, when they drill a 'dry well.' However, in some cases they will find large and hugely profitable fields. Oil companies are therefore very different from service companies like Halliburton or Schlumberger, which make money from fixed fees on predictable contracts. IOCs aim for deals which may be more speculative, but which give them higher potential profit margin. A related objective is to maximise the long-run earnings of their stockholders. In this respect, adequate rates of return on private investments in developing countries are usually set above those found in developed countries. The difference represents a premium to cover perceived higher risks. Profit maximisation cannot be achieved through a strategy of pushing for growth in quantity of crude oil or products sold without due regard for price-cost (profitability) considerations. It can also come through vertical integration, economies of size, diversification, creation of additional capacity, as well as through the merger of competing or complementary oil companies.

Finally, the IOCs look for predictability of tax and regulation. While companies can accept exploration risk (that they will not find oil) or price risk (that the oil price falls), both being *largely* beyond their control, they try to manage 'political risk' (that the host state will alter the fiscal and regulatory regime affecting their investment) by locking in governments. They thus seek to bind governments into long-term contracts that fix the term of their investment. PSAs, for example, last for 25 to 40 years with terms which protect the IOCs from potential change by incoming governments.

Bindemann, *Production-Sharing Agreements: An Economic Analysis* (Oxford: Oxford Institute for Energy Studies, October 1999); Daniel Johnston, *International Petroleum Fiscal Systems and Production Sharing Contracts* (Dundee: University of Dundee, 1994); Thomas W. Wälde, "The Current Status of International Petroleum Investment: Regulating, Licensing, Taxing and Contracting," in *CEPMLP Journal*, vol. 1, no. 5, July 1995 (pub. University of Dundee); and Jeffrey Davis, Rolando Ossowski, and Annalisa Fedelino (eds.), *Fiscal Policy Formulation and Implementation in Oil-Producing Countries* (Washington, D.C.: IMF, 2003).

Other objectives of private oil companies relate to concerns over sales growth, raising market shares, and reducing uncertainty in the business environment.[87] In their efforts to satisfy these objectives, oil companies often have command over or access to vast resources and wide opportunities as compared with a large number of host country governments, and notably the developing and low developed countries. The strength of IOCs has historically been based on not only their size and resources, but also their advanced technology and expertise; their superior organisational and managerial ability; their extensive market outlets; and their negotiating, or bargaining skills. Historically, and prior to nationalisations in many oil-exporting countries, these factors have favoured the IOCs in bilateral negotiations with low developed and developing countries.

As to their relations with oil-exporting countries, currently, in the best-case scenario, the activities of IOCs in oil sectors of countries with nationalised oil industries are mainly restricted to exploration, production and the export of crude. The sheer size of the oil assets controlled by the NOCs and their governments and the lack of alternative sources of crude oil is a large incentive for the IOCs to cooperate with oil-producing governments.

NOCs

An NOC "is a company with at least 51 percent state ownership that is active in the exploration and production of hydrocarbons – in other words the 'upstream',"[88] and most NOCs were established by nationalisation and expropriation. Today, there are more than 100 NOCs around the world – one from almost every oil-exporting country and a number from major importing countries.[89] Examples of majority state-owned or

---

[87] Raymond Vernon, *Sovereignty at Bay: The Multinational Spread of U.S. Enterprise* (New York: Basic Books, 1971), p. 138.
[88] Marcel, *Oil Titans*, p. 5.
[89] For a good overview of the debates and issues about NOCs, see Leslie E. Grayson, *National Oil Companies* (Chichester: John Wiley and Sons, 1981); Department of Energy (Canada), *An Energy Policy for Canada* (Ottawa: The Department of Energy, Mines and Natural Resources, 1972); Beredjick and Wälde, *Petroleum Investment Policies*; Edward N. Krapels, *Controlling Oil: British Oil Policy and the British National Oil Corporation* (Washington, D.C.: The United States Government Printing Office, 1977); Henri Madelin, *Oil and Politics* (Saxon House/Lexington Books, London, 1974); Øystein Noreng, *The Oil Industry and Government Strategy in North Sea* (London: Croom Helm, 1980); Øystein Noreng, "State-Owned Oil Companies: Western Europe," in Raymond Vernon and Yair Aharoni (eds.), *State-Owned Enterprise in the Western Economies* (London: Croom Helm, 1981); Colin Robinson, "Energy Policy: Errors, Illusions and Market Realities," *Occasional Paper*, no. 90, London: The Institute of Economic Affairs, 1993; United Nations Centre for Natural Resources, Energy and Transport (UNCRET), *State Petroleum Enterprises in Developing Countries* (New York: Pergamon Press, 1980);

controlled NOCs are Kuwait Petroleum Company (KPC), Sonatrach of Algeria, Petroleos de Venezuela (PdVSA), Saudi Aramco, ADNOC of UAE, Pemex of Mexico, NIOC of Iran, the China National Petrochemical Corporation (Sinopec), the China National Petroleum Corporation (CNPC/PetroChina) the China National Offshore Oil Corporation (CNOOC), India's Indian Oil Company (IOC) and Oil and Natural Gas Corporation (ONGC), Statoil of Norway, Gazprom and Rosneft of Russia, Petronas of Malaysia, or Petrobras of Brazil.[90] According to Valérie Marcel, 90 percent of the world's oil reserves are entrusted to state-owned companies.[91]

For many oil-exporting countries, especially the member countries of OPEC, the nationalisation of the oil industry is an assertion of national independence. The governments of oil-producing countries establish NOCs with mixed objectives. The main reasons for formation of NOCs are revenue collection, preservation of sovereignty, and ideology.[92] In most cases, an NOC is established to carry out all activities related to the oil industry in the country. An NOC has traditionally been regarded as the most appropriate instrument to develop the relevant technical and commercial expertise, partly in order to enhance their bargaining position in relation to the IOCs.[93] It was rightly assumed that the IOCs have international interests that may not coincide with national interests whereas a NOC can be assumed to put national interest first.[94] The governments opted to monopolise the sector or, in countries where IOCs were allowed a certain presence in the oil sector, the NOCs were given market power. The desire to bring the assets of the IOCs under state control was also led by the long history of political and economic exploitation. Despite large potential benefits to be gained from developing a NOC, after nationalisation, the NOCs often found

---

Falola and Genova, *The Politics of the Global Oil Industry*, pp. 49-61; and van der Linde, *The State and the International Oil Market*. For the best study of NOCs in general, and Middle Eastern NOCs in particular, see a recent study by Marcel, *Oil Titans*. In addition, The James A. Baker III Institute for Public Policy, together with the Japan Petroleum Energy Center (JPEC), in March 2007 released a comprehensive study aimed at providing an effective framework to analyse the strategies, objectives and performance of NOCs. The study consists of 13 case studies examining the history and formation of 15 different state-owned oil companies and two economic modelling studies aimed at assessing the operational efficiency of NOCs.

[90] In addition, some companies are partly state-owned. Examples are Inpex of Japan (38 percent government owned), Lukoil of Russia (7 percent government owned), or ENI of Italy (30 percent government owned). While Petrobras of Brazil is only partly state owned (32 percent), it has majority government shares at the voting level. Ibid, p. 6.

[91] Marcel, *Oil Titans*, p. 1.

[92] Robert Grosse, *Multinationals in Latin America* (London: Routledge, 1989), p. 237. For a full list of interests, see van der Linde, *The State and the International Oil Market*, pp. 102-3.

[93] Noreng, *Crude Power*, p. 45.

[94] See Paul H. Frankel, "The Rationale of National Oil Companies," in UNCRET, *State Petroleum Enterprises in Developing Countries*.

themselves grappling with major problems, such as the lack of capital, and the lack of managerial and technological expertise.[95]

NOCs can be distinguished between those set up by oil exporting countries and those set up by oil importing countries.[96] Although from country to country, there are considerable differences between NOCs themselves and their relationship with their respective governments, there are many common aspects.[97] Although the relationship between the NOCs and the state varies among the OPEC and non-OPEC countries, state interference is considerable and the oil-producing governments very often meddle with the management of the company and impose non-commercial demands.[98] Governments control their NOCs through policymaking, which includes setting targets and industry rules, and by developing institutions, which hold the NOC responsible for its performance. Usually, NOCs are not consulted on key oil policy decisions, for example on those related to OPEC politics and policy.[99] In some countries, the NOC is the only operator in the sector, whereas in other countries, the NOC always has a majority stake in a project, and/or arranges PSAs. In many oil-producing countries, the NOC, operating as the government's agent, determines or biases entry, particularly through the administration of PSAs or through serving as a contractor with private IOCs. Domestic distribution of oil products, albeit below cost, is reserved for the NOC. Increasingly, NOCs are becoming vertically integrated companies (PDVSA, Saudi Aramco, Sonatrach, or CNPC) and compete with major IOCs internationally, thus blurring the distinction between the various categories.

Due to high level of government interference, NOCs have non-commercial objectives that differ greatly from those of the private IOCs. These objectives include wealth creation for the nation and oil wealth redistribution to society at large; foreign and strategic policy and alliance building; energy security, including assurance of domestic

---

[95] Falola and Genova, *The Politics of the Global Oil Industry*, p. 58.
[96] Leonardo Maugeri distinguished between producers' NOCs (PNOCs) and consumers' NOCs (CNOCs). See Maugeri, *The Age of Oil: The Mythology, History, and Future of the World's Most Controversial Resource* (New York: Praeger, 2006).
[97] See Jack E. Hartshorn, *Oil Trade: Politics and Prospects* (Cambridge: Cambridge University Press, 1993), p. 165; and Marcel, *Oil Titans*, p. 5. For differences in the legal status of NOCs see Bentham, "Legal Status of State Petroleum Companies" and R. Bentham and W. Smith, *State Petroleum Corporations: Corporate Forms, Powers and Control* (Dundee: The Centre for Petroleum and Mineral Law Studies, University of Dundee, 1986).
[98] Murray J. Horn, *The Political Economy of Public Administration* (Cambridge: Cambridge University Press, 1995), p. 139. For more detail about government administration of NOCs see van der Linde, *The State and the International Oil Market*, pp. 104-11.
[99] Marcel, *Oil Titans*, pp. 76 and 80. For more detail, see chapter 4 in *Oil Titans*.

fuel supply and security of demand in importing countries; participation in national-level politics; and industrialisation and economic development.[100]

The structure of power between the oil companies is now tripolar. The majors are no longer able to set production and pricing targets as in the past. The independents are important, particularly in 'downstream' operations. The nationals represent a resurgence of state-centred attitudes and a desire to counterbalance the archetypical MNC represented by the majors. In recent years, they accounted for at least three-quarters of all production and worldwide oil reserves, clearly replacing the pre-OPEC domination of the majors.

In summary, the world's oil industry can be characterised as a mixed actor model. There are a number of key actors but none is evidently predominant. Cooperation depends essentially upon an agreement about ground rules, which may be impossible if parties are pursuing mutually exclusive goals. It would be unrealistic to leave the impression that objectives and interests are uniform or necessarily consistent for all members of each group in the oil industry. Variances have existed and continue to exist among oil companies, as well as between oil exporting or importing governments. The changes in the split of benefits and costs among the major protagonists in the oil industry have crucial effects, and such changes lead to bargaining.

1.2.2 The Contemporary Oil Industry: From Cooperation to Conflict

After identifying the major oil industry actors and their interests, it is essential to characterise the contemporary oil industry. In essence, the oil industry is an industry in which, typically, large economic rents can be earned because the market price is well above the price required to keep the factor of production in active use and is above the price required to earn economic profits.[101] Bargaining and negotiation determine the

---

[100] "The Changing Role of National Oil Companies in International Energy Markets," Baker Institute Policy Report, Published by the James A. Baker III Institute for Public Policy of Rice University, no. 35, March 2007, p. 4.

[101] "Economic rent is said to be earned whenever a factor of production receives a reward that exceeds the minimum amount necessary to keep the factor in its present employment." (p. 753) What makes economic rent so important is that it can "be taxed away without reducing the quantity of input supplied." (p. 755) William J. Baumol and Alan S. Blinder, *Economics, Principles and Policy* (New York: Harcourt Brace Jovanovich, 1991). Maurice A. Adelman links the concept of economic rent as excess payment to market imperfections, which are expressed in the balance of supply and demand. His view is simply that "economic rent is caused by imperfect competition," rather than by the intrinsic value of the properties of oil in the ground. See Adelman, *The World Petroleum Market*, p. 6. For more about the concept of economic rent, see Kenneth W. Dam, *Oil Resources* (Chicago: The University of Chicago Press, 1976); Partha Dasgupta and G.M. Heal, *Economic Theory*

division of these rents. Bargaining among the major actors in the oil industry is not a new phenomenon, and while at any period of time there is bargaining, some periods, such as the 1970s and early 1980s can be classified as conflictual as there was a high degree of bargaining, and other periods, such as the late 1980s and 1990s can be referred to as cooperative due to lower levels of bargaining.[102]

The 1970s and early 1980s were the years in which oil produced for the international oil market was progressively brought under state control. The IOCs lost control of numerous 'sweetheart' deals with oil exporting governments, and in this period their initial bargains have obsolesced.[103] In contrast, the late 1980s and 1990s showed a contrary development, as the oil industry experienced both deregulation and privatisation.[104] The oil price fall in 1986 and the continued lower oil prices in the years thereafter unleashed a move away from the indebted state.[105] Therefore, some states privatised their oil industries/companies, such as the UK, Brazil, Argentina, Italy and France. Other countries did see the need to at least commercialise state oil companies, and transform them into 'normal' companies.[106] Since government control has become less direct, NOCs tried to redefine their roles, what at occasions put them at odds with their governments (for example Venezuelan government versus PDVSA). A major boost in the privatisation of NOCs in the oil industry came in the early 1990s, when centrally planned economies started on a process of transition towards market economies.[107] The fragmentation of the Soviet Union into separate states and their painful transition to a market-based economy opened up the oil sector for private investment.[108] In addition, in the 1980s and 1990s, most OECD governments increased oil taxes and captured increasing percentage of economic rent, away from producer governments. Arguably, the IOCs, after a period of 20 years, were again playing a dominant role in the international oil industry, as their control over market

---

and Exhaustible Resources (Cambridge: Cambridge University Press, 1979); Alfred Marshall, *Principles of Economics, 8th Edition* (London: Macmillan, 1994); David W. Pearce and E. Kerry Turner, *Economics of Natural Resources and the Environment* (Baltimore: The Johns Hopkins University Press, 1990); Edmund S. Phelps, *Political Economy* (New York: W.W. Norton & Company, 1985); Jack Hirshleifer, *Price Theory and Applications* (Englewood Cliffs, New Jersey: W.W. Norton & Company, 1988); and Noreng, *Crude Power*, pp. 156-60.

[102] By 'conflictual', I do not imply military conflict, but rather a state of disharmony between actors with incompatible interests.

[103] The concept 'obsolescing bargain' was initially framed by Raymond Vernon in *Sovereignty at Bay*, (see particularly pp. 47-53). It is explored in more detail in Chapter 2.

[104] Stevens, *Strategic Positioning in the Oil Industry*, p. 13.

[105] van der Linde, *The State and the International Oil Market*, p. 7.

[106] Ibid, p. 8.

[107] See generally Joseph E. Stiglitz, *Whither Socialism* (Cambridge: MIT Press, 1995), pp. 171-96.

[108] Hartshorn, *Oil Trade: Politics and Prospects*, p. 276.

had increased, and joint ventures, strategic alliances and mergers had served to balance risk and control.[109]

Thus, in the oil industry, resource nationalism and the 'obsolescing bargain' of the 1970s have weakened by the mid and late 1980s and 1990s. Oil expert Edward Morse argued that in the 1990s "resource nationalism has practically disappeared from the discourse of international relations."[110] In line with general trends and with low oil prices in the 1990s various oil-exporting states offered relatively attractive deals to the major Western IOCs, although we did not witness the return to the concessions era. The reopening of reserves to external companies has taken different forms in different countries, and terms on which foreign oil companies invested in host countries varied considerably, from royalty/tax system, which was most favourable to the IOCs, to PSAs, and risk service agreements, which were least favourable for the IOCs. In the 1990s, host countries needed the investment, and IOCs wanted access to oil, but only if it were cheaper to produce than it would be elsewhere. The underlying factors influencing bargaining in the oil industry in the second part of the 1980s and in the 1990s, was that the low oil prices resulted in host countries' dire need for foreign investment; secondly, the IOCs had no challenging competition which would offer host countries more options; and thirdly, the IOCs still had alternative options to pursue if not allowed entry under favourable terms to a particular host state. While in the 1980s and 1990s bargaining did not disappear from the oil industry, it mainly occurred between various oil exporters, and not between oil exporters, and oil importers and IOCs.[111]

However, the oil industry has shifted from a cooperative phase during the 1990s, when the IOCs managed numerous 'sweetheart' deals, to a conflictual phase characterised by resource nationalism in the current decade. Hence, host state (and NOC)-IOC bargaining is frequent in the oil industry, and the stage seems set for competition between IOCs and NOCs over markets as well as upstream positions. As opposed to the common perception, I believe that the IOCs, although they sometimes may be supported by their powerful home (oil importing) states, do not gain extra bargaining power as they did in the 1990s. My assumption is that they have possibly lost it to

[109] van der Linde, *The State and the International Oil Market*, p. 8.
[110] Morse, "A New Political Economy of Oil?" p. 14.
[111] Wilson, "World Politics and International Energy Markets," p. 146.

NOCs from other oil importing states, such as China. Thus, the IOCs find themselves in a particularly challenging situation.

The Challenges Facing the IOCs

The major IOCs find themselves in a difficult situation. At first glance, it is hard to believe that major IOCs may be facing difficult times ahead when one takes into account that Exxon Mobil has been reporting the largest earnings in the history of business, notching up $8.4 billion in its first quarterly report of 2006. The combined 2006 earnings of Exxon Mobil, BP, Royal Dutch/Shell, Chevron, Conoco Phillips and Total, equal $135 billion, a sum greater than the GDP of the Czech Republic or Israel.[112] Why would one need to be concerned about their future?

Today, the oil industry faces challenges that could ultimately wipe out some, or most of major IOCs, once venerated as the Seven Sisters.[113] The biggest companies and remnants of the original seven may be running out of good ways to invest their money. Although cash-rich due to recent years' surge in the oil price, these companies are opportunity-poor as their aging reserve base badly needs topping up (see Table 1.4),[114] and they will all begin seeing production declines by 2009.[115] This is not surprising when considering that they have been unable to replace their reserves in recent years (Table 1.4).[116] In the oil industry, "reserve replacement is the best guide to whether a company will be able to maintain – or grow – production in the future."[117] At the same time, according to Robinson West, *PFC Energy* Chairman, "It is becoming increasingly difficult to find attractive ways to reinvest today's profits," and it will not get easier, since there are no infinite numbers of prospects to drill.[118] A healthy reserve replacement ratio should always be over 100 percent. However, ratios for most of the six major IOCs have lately been below that level, and will remain there over the next

---

[112] "Why You Should Worry About Big Oil," *Business Week*, May 15, 2006.
[113] "A Survey of Oil," *The Economist*, April 30, 2005, p. 8. Seven Sisters originally included Esso, Gulf, Texaco, Mobil, Chevron, BP and Shell.
[114] "A Survey of Oil," p. 8. That is particularly true in North America and the North Sea, which account for about 60 percent of the majors' current oil and natural gas production and where more than 50 percent of the reserves have been extracted. In those areas, production costs continue to climb, and every new investment to extend the life of the reservoirs becomes more marginal, as fixed costs are covered by shrinking volumes. In the North Sea, for instance, the average extraction cost for a barrel of oil rose 42 percent from 2000 to 2005. Bozon, *et al.* "What's Next for Big Oil?"
[115] John Vidal, "The Beginning of the End," *The Guardian*, April 21, 2005.
[116] "A Survey of Oil," p. 10.
[117] Schwartz, "A Shell of Itself."
[118] Quoted in "Why You Should Worry About Big Oil."

five years.[119] Buried beneath their record profit figures of recent years are worrying signs of a sector in decline. Analysts from McKinsey and Company consultancy have suggested that "Big Oil confronts its most far reaching test in decades," as "the top five companies – Exxon Mobil, BP, Royal Dutch/Shell, Chevron and Total – face increasingly tough challenges finding new sources of oil and natural gas to replace existing reserves."[120]

Table 1.4: Major IOCs' Crude Oil and Natural Gas Liquids (NGL) Reserves (2002-2005)

	2002	2003	2004	2005
Exxon Mobil	12,623	12,856	11,651	11,229
BP	7,762	7,449	7,550	7,161
Total	7,231	7,323	7,003	6,592
Chevron	6,494	6,280	5,511	3,626
Royal Dutch/Shell	5,782	5,009	3,745	3,466
Total Majors	39,892	38,917	35,460	32,074

Source: Organization of the Petroleum Exporting Countries, *OPEC Annual Statistical Bulletin 2005* (Vienna, Austria: Ueberreuter, 2006), p. 129.

While the major IOCs may be generating unprecedented profits, this comes with a cost, as between 2000 and 2006 their returns on capital have been stagnant. According to Goldman Sachs, in 2006, the average integrated Western oil company will earn a 19 percent return on capital employed, up by only 2 percent since 2000.[121] In the supremely capital-intensive oil industry, return on capital is a key measure because it reflects not just how much profit a company made, but the cost of making it. The bottom line is that value creation at oil companies is stagnating. While IOCs are making more than ever before, they are also spending unprecedented amounts to generate those profits. In addition, they are struggling to find where to put their profits safely and soundly to work in order to increase their return on capital. Overall production at the oil majors is struggling to keep up with demand, and as argued above, the reserve replacement ratio, the measurement of how well they are replenishing their supplies, is slipping.

The biggest obstacle the majors face in replacing their reserves is the ultimate peculiarity of the oil business. Oil is the only industry in which the cheapest to produce oil reserves and largest assets, those located in Russia and OPEC countries, are not in

[119] Ibid.
[120] Bozon, *et al.* "What's Next for Big Oil?"
[121] Rana Foroohar, "Big Oil's Big Problem," *Newsweek*, October 9, 2006, p. 40.

the hands of the most efficient and best-capitalised firms, Western IOCs,[122] but of NOCs,[123] where in most cases the government owns and self-finances the whole operation from reserves to pipelines – the "Saudi Aramco model."[124] In numerous countries, foreign investment in energy exploration and production ('upstream') activities is banned or saddled with strong disincentives.[125] Although some claim that despite the existence of "some holdout governments that refuse to relinquish control to the private sector," resource nationalism is moribund,[126] this does not apply in the oil industry, where oil producing and exporting states own and control *at the very least three-quarters* if not 90 percent of total proven world oil reserves.[127]

Thus, the problem for major IOCs is not that there is not enough oil, but that there are not enough opportunities to find oil.[128] For example, two-thirds of the wells drilled worldwide from 1997 to 2003 were in North America, where production is falling. Meanwhile, the Middle East, which holds two-thirds of the world's proven reserves of conventional oil, accounted for only 2 percent of global investments, and has ever since the nationalisations that took place three decades ago remained largely off limits to international investors. Much of the majors' production today comes from large fields in Alaska, the Gulf of Mexico and the North Sea, which are in the phase of rapid decline.[129] Desperate major IOCs are now looking for growth in West Africa, the Caspian, Venezuela, Russia, Canada's tar sands and the ultra-deep waters off Brazil. Nevertheless, this new wave of oil exploration is proving difficult and dangerous due to some countries' complex oil formations and unforgiving environments that require lots of up-front capital expenditure,[130] and mostly due to unreliable legal frameworks and political risks associated with investing in many of these countries.[131]

---

[122] No major oil companies in top 50 companies in the world by assets in 2006. "The Forbes Global 2000."
[123] "A Survey of Oil," p. 10.
[124] As opposed to the "Azerbaijan model," in which the state-owned assets are operated, managed, funded and equipped almost entirely by the oil MNCs under production-sharing agreements (PSAs), in exchange for a percentage of sales receipt. Greg Palast, "OPEC on the March," *Harper's Magazine*, April 2005, p. 76.
[125] Klare, *Blood and Oil*, p. 123. The Middle Eastern countries serve as a typical example.
[126] Morse, "A New Political Economy of Oil?" p. 18.
[127] PFC Energy, an industry consulting firm in Washington, puts this figure at 77-78 percent. See Justin Blum, "National Oil Firms Take Bigger Role," *The Washington Post*, August 3, 2005; "Open Season on Big Oil," *Business Week*, September 26, 2005, p. 41; "Oil's Dark Secret," *The Economist*, August 12, 2006, p. 56; Valérie Marcel puts it at 90 percent. Marcel, *Oil Titans*, p. 1. Another report put the figure for 2005 at 77 percent, with additional 6 percent controlled by partially privatised Russian oil companies. See "The Changing Role of National Oil Companies in International Energy Markets," p. 1.
[128] Quoted in Mouawad, "Big Oil's Burden."
[129] "A Survey of Oil," p. 8.
[130] For example, Royal Dutch/Shell's Sakhalin-2 project and BP's Thunder Horse platform are extremely expensive to build and dangerous to maintain.
[131] "A Survey of Oil," p. 8.

Major IOCs also face increasing competition. NOCs have grand ambitions: they are competing with the majors by developing new oil reserves overseas and investing in international refining and retail activities. The technology, the capital and the markets, the lack of which was often seen as a reason to privatise NOCs, are now easily available through independent operators (Talisman Energy and Apache for example) and oil-service companies (Halliburton and Schlumberger), but more importantly, from NOCs from oil importing (China, India, Brazil) and exporting countries (Malaysia's Petronas, Norway's Statoil) who are expanding internationally. To illustrate, competition for untapped energy deposits with NOCs from China and India has been described as "fiercer than ever".[132]

Thus, it is not surprising to see that the top nine companies in the world's list of top twenty oil companies by reserves are fully state-owned, and Exxon Mobil is fifteenth, the top ranked major.[133] Moreover, besides low reserve ownership of 2.7 percent of the world total, the majors in 2005 produced only 39 percent of their sales volume,[134] and just 13-15 percent of global oil production.[135] Major Western IOCs as a whole have full access to countries with only 6 percent of the globe's known reserves, mainly in North America and Europe, and can also invest in countries that own additional 11 percent of reserves through JVs or PSAs.[136] It is worth mentioning that as late as 1972, the 'Seven Sisters' controlled 91 percent of Middle Eastern production and 77 percent of the non-communist world's oil reserves outside the United States.[137] According to Øystein Noreng, until about 1970, integrated trading represented perhaps 85-90 percent of international oil trade.[138] In the past, major IOCs – with their leading-edge technology, unrivalled expertise in managing complex projects, and deep pockets had a clear edge in negotiations with the national governments in control of energy resources. However, as evident, those advantages have become less pronounced, thus

---

132 Bozon, *et al.* "What's Next for Big Oil?"
133 *Petroleum Intelligence Weekly*.
134 Organization of the Petroleum Exporting Countries, *OPEC Annual Statistical Bulletin 2005* (Vienna, Austria: Ueberreuter, 2006), p. 129.
135 Bozon, *et al.* "What's Next for Big Oil?"; Nelson D. Schwartz and Jon Birger, "Slick Operators," *Fortune*, May 18, 2006; and *OPEC Annual Statistical Bulletin 2005*, p. 129.
136 Data from PFC Energy, a Washington-based consulting firm, consulted in Jad Mouawad, "Western Firms Feel a Pinch from Oil Nationalism," *International Herald Tribune*, May 7, 2006
137 Bromley, "The United States and the Control of the World Oil," p. 230; and Bromley, "The United States, Hegemonic Strategies and World Oil," *St Antony's International Review: The International Politics of Oil*, vol. 2, no. 1, May 2006, p. 59.
138 Noreng, *Crude Power*, p. 164.

weakening their position at the negotiating table. In addition, the loss of supply base following nationalisations subsequently reduced the volume and significance of integrated trading.

In order to maintain their status as the world's top MNCs, major IOCs need to ensure possession of more oil reserves. This is certainly not going to be easy and may require much help from their home states and skilful bargaining with oil producing states and their state-owned companies. The rise of the NOCs and resource nationalism ensures that the major IOCs will not have cheap and easy 'sweetheart' deals in future. Edward Morse argued in 1999 that the new era in the political economy of oil is marked by "a shift from government control to government and industry cooperation," and that "resource nationalism … disappeared from the discourse of international relations."[139] The evidence presented above points quite to the contrary.

Conclusion: Empirical Conundrums

This chapter has shown that the market for the most important strategic commodity in the world is politicised. Such characterisation is derived from the premise that governments interfere in the free functioning of the international oil market. This does not imply that the economic factors are less important, but it does suggest that the economic and political factors deserve equal attention. Since the international oil market is politicised, studying bargaining relationships between various oil industry actors is the most effective way of understanding it. Given that bargaining between various actors shapes the political events, bargaining between different actors in the oil industry shapes the politics of oil. Thus, studying bargaining is crucial for understanding the balance of power between major actors in the contemporary oil industry.

Various oil industry actors - oil exporting and importing governments, the IOCs, and the NOCs – have diverging objectives and interests. Both intra and inter-group interests are generally not uniform or consistent. Variances have existed and continue to exist among oil companies, as well as between oil exporting and importing governments. For example, while oil importing countries' main objective is to ensure

[139] Morse, "A New Political Economy of Oil?" pp. 1 and 14.

secure oil supplies at reasonable prices, the IOCs' main goal is profit maximisation. The oil industry is currently in a conflictual stage, which differs from previous cooperative stage that lasted throughout the late 1980s and the 1990s. In the current stage, resource nationalism is rampant and there is a lot of evidence of bargaining. Despite their record-breaking profits the major IOCs are struggling to compete with oil exporting countries and NOCs from both oil exporting and importing countries. This may suggest that, similar to unfavourable developments, such as expropriations and nationalisations that they faced in the 1970s and the early 1980s in many oil exporting countries, the attractive deals that the major IOCs signed with oil exporters in the late 1980s and 1990s may not remain in tact for much longer. In other words, their bargain may be re-obsolescing, and thus, oil exporters and their NOCs may to be on the winning end of the contemporary oil industry bargain.

Meanwhile, energy security has re-emerged on the top of the agenda for most of the oil importing governments. In the 1970s, particularly during the two oil crises, major oil importing governments considered the availability of sufficient oil supplies as the paramount objective since oil formed the backbone of their economies. We can witness a similar situation in the recent years, and various oil importing governments have adopted diverse approaches in tackling the problem. Historically, the U.S., the world's largest oil consumer and importer, has been faithful to the markets, and largely relied on 'its' and other IOCs to supply its oil market, without exercising direct control over American IOCs. However, other countries, and particularly the world's second largest oil consumer – China – do not share the same faith in the markets. After it became an oil importer in 1993, China supported and directed its NOCs in order to secure the delivery of oil supplies to its shores. The Chinese government's financial and diplomatic support for its NOCs may be one of the most significant contributors to the demise of the IOCs, since the latter most likely lack such unconditional home government support. China's diplomatic and financial support for its NOCs is driven by China's insatiable thirst for oil. This, in turn, may endow the governments of countries from which China sources its oil with increased bargaining power vis-à-vis the potential investors and other actors, and these governments are likely to use their increased bargaining power as a leverage in order to gain concessions in other bargaining arenas.

Several questions emerge based on these preliminary empirical observations. Have the major IOCs in the current decade lost their bargaining power vis-à-vis oil exporting governments and their NOCs, when compared to the late 1990s? If so, is this indicative of their ultimate demise, which began with nationalisations and the 'obsolescing bargain' in the 1970s? In other words, are we witnessing the 're-obsolescing bargain'? The preliminary survey of the contemporary oil industry points in this direction, and suggests that the increased competition from NOCs is the main factor influencing diminished IOC bargaining power. However, whether this indeed is the case warrants a much more detailed and thorough analysis. If the IOCs' bargain is indeed re-obsolescing in this decade, are the oil exporting countries and their NOCs the main beneficiaries? Are any other actors, such as China's NOCs, also reaping benefits at the IOCs' expense? If China's NOCs' bargaining power is increasing at the IOCs' expense, is the world's largest oil importer, the United States, stepping behind 'its' IOCs and supporting them in their bargaining with other oil industry actors? If there is such help, does it improve IOCs' chances of bargaining success? If oil exporters are successful in bargaining with major IOCs, and if they are endowed with increased bargaining power vis-à-vis other actors, are they also able to gain concessions by using oil as a bargaining chip in other arenas? Finally, given that various governments adopt different strategies in order to secure their oil supplies in this new age of energy security, are the governments of major oil importing countries successful in bargaining with other actors when their oil supply security is perceived as threatened? Answering these questions is the main focus of this thesis. In order to answer them, in the following chapter I analyse various previously established and directly relevant theoretical debates and frameworks, and set up the hypotheses to be tested later in the this dissertation.