Bargaining Model for the International Oil Industry

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1. INTRODUCTION

The *raison d'être* of the firm is the ongoing search for, and sustainability of, economic rents (Bowman, 1974; Mahoney, 1995). Host governments aim to transfer economic rent from foreign investors to domestic factors of production without reducing the inflow of beneficial foreign investment (Globerman & Shapiro, 1998). Conflicts between host governments and multinational corporations (MNCs) usually centre on the issues of division of rents (Mikdashi, 1976). The international 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 profits. Bargaining and negotiation between host states and oil companies determine the division of these rents. Bargaining between the oil companies and host governments is positive sum, as the objectives of the two sets of actors are never exclusively conflicting. Although the goals of IOCs and governments are very different, there is always a range of complementarity or overlap and thus there is scope for each party to achieve its goals through cooperation (Eden, Lenway & Schuler, 2005).

During a period of high oil prices, during which time large rents can be earned, the phenomenon of resource nationalism comes to the surface, as it is a by-product of high prices (Wälde, 2008). This state of affairs corresponds to Wilson's model of the politics of the world oil market – the petropolitical cycle (PPC) (Wilson, 1986; Wilson, 1987). The PPC model posits that the likelihood and the direction of market politicization 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 in a trough. In rising markets, sellers, such as oil-exporting governments, gain leverage; in falling markets, buyers,

such as IOCs or oil-importing governments, gain leverage. In addition, in times of rising prices, the governments of developing states, 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 (Wilson, 1987).¹

Historically, there has been cyclical change in the relative balance of power between host states and their national oil companies (NOCs) and major international oil companies (IOCs), reflective of the cyclical nature of the oil and gas industry (Joffé, Stevens, George, Lux & Searle, 2009; Stevens, 2008; Vivoda, 2009). Some periods, such as the 1970s, the early 1980s, and the 2000s, can be classified as 'conflicting'. During these periods, rising and relatively high oil prices endowed host states with more capital, which helped them to re-negotiate the agreements with the IOCs and to gain larger shares of the economic rent. These were also periods characterized by a low degree of compatibility between host state and IOC interests. Other periods, such as the late 1980s and 1990s, can be referred to as 'cooperative'. During these periods, falling markets and low prices resulted in the balance of power shifting to IOCs, which in turn allowed them to gain attractive investment terms in oil-exporting countries. Consequently, these periods were characterized by a higher degree of compatibility between host state and IOC interests. In short, the larger the rents to be divided, the more intensive the bargaining relationship becomes, and vice versa.

Vernon's obsolescing bargain model (OBM) has occupied central stage in explaining host state–MNC bargaining dynamics in the late 1970s, 1980s and early 1990s. Such is the importance of this explanatory model that some have referred to it as the accepted paradigm of host government-MNC relations in the international political economy (Kobrin, 1987; Nebus & Rufin, 2010). The OBM explains the changing nature of bargaining relations between an MNC and host country government as a function of goals, resources and constraints on both parties (Vernon, 1971). Numerous scholars from a wide ideological spectrum have endorsed this argument (Brewer, 1992; Fagre and Wells Jr., 1982; Kobrin, 1987; Moran, 1974; Vachani, 1995). In the OBM, which is seen as a positive sum game in which the goals of the MNC and host state are assumed to be in conflict, the initial bargain favors the MNC, but as MNC assets are transformed into hostages, their relative bargaining power shifts to

the host state over time. Once bargaining power shifts to the host state, its government imposes more conditions on the MNCs, ranging from higher taxes to asset expropriation. Thus, the original bargain obsolesces, giving the OBM its name. The OBM was originally applied as an explanation for widespread expropriation and nationalization in the 1970s of MNC natural resource subsidiaries located in developing countries (Vernon, 1977). Rising oil prices motivated host states to renegotiate their agreements with the IOCs, and renegotiation often took the form of outright expropriation. In line with the general trends, the 1970s and early 1980s saw oil produced for the international oil market progressively brought under state control. The IOCs lost control of numerous 'sweetheart' deals with oil-exporting governments and their initial bargains obsolesced.

Relations between MNCs and host governments in developing countries changed from the 1970s, when they were predominantly confrontational, to being largely cooperative in the 1980s and 1990s (Dunning, 1998; Luo, 2001). With greater overall acceptance of FDI in developing countries and transitioning economies, and privatization replacing public-sector ownership at a rapid pace around the globe, foreign investors in the extractive industries were treated just like FDI in any other sector (Moran, 1998). The change in government attitudes was accompanied by economic liberalization, deregulation, privatization, less expropriation and the loosening of rules governing FDI – which created unprecedented opportunities for MNCs (Ramamurti & Doh, 2004). In the oil industry, the openness to FDI that characterized the 1980s and 1990s replaced the nationalistic behavior of the 1970s. In line with general trends, in the late 1980s and 1990s, the oil industry experienced both deregulation and privatization (Stevens, 1998; Grosse, 2005). As a consequence of low oil prices in the 1990s, various oil-exporting states offered relatively attractive deals to major IOCs. Reflective of the general sentiment of the 1990s, Morse (1999: 14) argued that "resource nationalism has disappeared from the discourse of international relations."

Unsurprisingly, the obsolescing bargaining model was declared to have outlived its usefulness during this period (Eden & Lenway, 2001; Eden & Molot, 2002; Levy & Prakash, 2003; Luo, 2001; Ramamurti, 2001). As a consequence, various alternatives and improvements to the OBM have

emerged in the literature. These include the political bargaining model, which broadens the scope of the OBM and makes it iterative, and also includes other stakeholders (for example, NGOs), and international commitments (Eden, et al., 2005), and a model developed by Ramamurti (2001). Ramamurti's model conceptualizes host state-MNC relations as part of a two-tier, multi-party bargaining process. Tier-1 bargaining between the governments of host and home states occurs bilaterally or through multilateral institutions and produces macro rules on FDI that affect micro negotiations in Tier-2, in which the traditional bargaining model applies (Ramamurti, 2001). It has also been suggested that since MNC-host government relations have become cooperative, little formal bargaining occurs between MNCs and host governments (Eden, et al., 2005).

Regardless of whether little formal bargaining has recently occurred between MNCs and host governments in most industries, in the international oil industry intense bargaining episodes between host states, IOCs, and other stakeholders have been ample. For example, in recent years and driven by rising oil prices, many host states have re-negotiated their agreements with IOCs. The investment terms for IOCs have worsened in Russia, Venezuela, Chad, and numerous other countries. The major IOCs have also been faced with a high degree of industry competition from oil-importing NOCs from China and India, in particular. These NOCs have been challenging IOCs worldwide and have provided them with fierce competition for oil-production agreements in the Middle East, Latin America, the Former Soviet Union and Africa. In recent years the major IOCs have struggled to secure access to new oil reserves and, consequently, their oil production has dropped (Vivoda, 2009). High oil prices, increased industry competition and the lack of alternative investment options for IOCs have translated to unfavorable bargaining outcomes. The oil industry has once again shifted from a cooperative phase to a phase characterized by resurgent resource nationalism, increased competition and regulation of foreign investment, and expropriations (Joffé, et al., 2009; Stevens, 2008; Vivoda, 2009).

In the world of international business, negotiation rather than the perfect market equilibrium solution is the rule (Agmon, 2003). Nowhere is this more pronounced than in extractive industries, due to

cyclical and highly volatile nature of the markets. Since 1986, crude oil, refined petroleum, and natural gas prices have been more volatile than prices for about 95% of other producer price index commodities (Regnier, 2007). The price of West Texas Intermediate (WTI) light crude climbed from US\$50/barrel in January 2007 to a peak of US\$147/barrel in July 2008, subsequently dropping to under US\$34/barrel in December 2008. Frequently changing market conditions result in changes in relative bargaining power between host states and foreign investors, and changes in relative (potential or actual) bargaining power lead to (re)bargaining.

Given the cyclical nature of the international oil industry, the OBM only applies to a limited number of situations. Yet, the OBM remains a powerful explanatory model in international business literature (Gould & Winters, 2007). The OBM and other traditional bargaining models of MNC-host state relations assume that MNC entry (or loyalty) conditions depend on the relative bargaining power of the two sides, which, in turn, depend on their strengths. The model proposed here builds on these traditional models and leverages three key contributions. First, these studies are valuable as they have identified multiple variables that are sources of MNC and host state bargaining power. Second, they recognize that an actor's resources and constraints increase and decrease, which in turn affects its ability to achieve a favorable bargaining outcome. Third, they acknowledge the dynamic nature of bargaining, in that bargaining power shifts over time, as occurs in Vernon's OBM. Notwithstanding their contribution, most of the early models can only account for MNC-host state negotiations on a case-by-case basis, in specific market contexts, and in isolation from increasingly complex issues that surround the MNC-host state relationship.

The model advanced here recognizes that a bargaining model ought to include other actors and stakeholders and hence must be extended beyond the dyadic host state-MNC relationship (Ramamurti, 2001; Eden, et al., 2005; Henisz & Zelner, 2005). In particular, by utilizing the concept of 'nesting', the model integrates the effects of firm-specific, industry-specific and host country-specific factors and relationships (at both domestic and international level) on the relative bargaining power of host governments and IOCs. This paper falls in the tradition of soft rationalism associated with

institutional economics. As such, it aims to speak to a wider audience, couching it in formalistic as opposed to game theory terms. A descriptive, extensive form of 'game' has been adopted given that reduced mathematical methodology can be insufficient to an understanding of the entire range of variables and actors' concerns, which include political and social considerations far beyond those mathematically measurable. The need for a methodology that allows for more complexity follows logically from the increasingly multifarious nature of bargaining between host states and IOCs (Hosman, 2009). The model is indispensable in gaining an understanding of how an actor's power is shaped by the complex web of bargains and relationships with actors not directly party to the bargaining in which the two parties are enmeshed. As such, the model is useful as a sophisticated mechanism with which to grasp the complex array of bargains and relationships within which host state-IOC bargaining relationship is nested. Theoretically, the model presented here advances our ability to understand bargaining dynamics between host states, oil companies and other stakeholders in the oil industry. The corresponding practical contribution is that it will help actors choose strategies more systematically, potentially leading to more preferable bargaining outcomes.

The paper is primarily theoretical and in the following section uses contemporary examples from the international oil industry to illustrate various factors which may influence the relative bargaining power between an IOC and a host state. The model is generalizable to both totalitarian regimes and democratic states. A caveat - the dynamic bargaining model developed in this paper is in no particular way attributable uniquely to the international oil industry and it can be applied beyond the triad IOC-host state context.² In the first instance, it can be utilized to examine the dynamics of the bargaining power relationship between host states and national oil companies from non-triad oil-importing countries, such as China and India, and between host states and MNCs in the mining industry. Additionally, the model may have a more broad-based application, with wider implications for contexts other than the extractive industries.

Why is the focus on the international oil industry? Oil remains a key source of primary energy, essential for continued smooth operation of the global economy. In 2010, oil accounted for 34% of

global energy demand, a level around which it has hovered for several decades (BP, 2011). Crude oil and refined products are the largest items in international trade, whether measured by volume or value. In 2010, the total value of international crude oil and petroleum product trade amounted to US\$1.552 trillion, an amount equivalent to Canada's or India's annual GDP (BP, 2011). Energy transitions are prolonged affairs, and given recent trend, affordability, and vested political and economic interests in its continued importance, it is unlikely that the world will shift away from oil and other fossil fuels any time soon (Odell, 2004; Maugeri, 2006; Smil, 2010). Historically high oil prices have rendered the market power of the oil companies and oil exporting nations particularly evident in recent years. The major IOCs (ExxonMobil, BP, Chevron, Royal Dutch/Shell, ConocoPhillips, and Total) are some of the world's largest and most powerful corporations. In 2010, the combined profits these oil companies amounted to over US\$80 billion and their sales revenues to over US\$1.6 trillion (Fortune, 2011). Yet such is the scale of the global oil industry that these firms control only 6% of global oil reserves with most of the remaining oil reserves controlled by governments, largely through their NOCs (Vivoda, 2009).

The paper proceeds as follows. Section 2 discusses the insights from relevant literature that are integrated in the model. The literature review has been limited to the articles, books and other items that have a direct bearing on the topic being addressed. In Section 3, the paper builds on the existing literature on host state-MNC bargaining in order to set up a model for analyzing the dynamics of the host state-oil company bargaining relationship. This section then discusses the dynamics of the theoretical model. Section 4 summarizes the model's contribution, its limitations, and outlines avenues for further research.

2. RELEVANT LITERATURE

This paper contributes to the development of bargaining power theory in the context of the international oil industry. It builds upon previous theory and integrates it into the theoretical model, dynamics of which are discussed in Section 3. The literature on bargaining theory reached its high

point in the 1970s and 1980s, partly as a consequence of the OBM. This section reviews the relevant literature on the factors influencing the relative IOC-host state bargaining power in the domestic and international context and is organized as follows. The first subsection reviews the relevant literature on the unique relative resources in possession of host states and MNCs. The second and third subsections examine the literature on firm-specific resources and constraints in the host state and international context. The fourth and fifth subsections analyze the literature on industry-specific influences in the host state and international context. The final two subsections examine the international institutional resources and constraints for the host state and host country-specific non-industry factors.

2.1. Unique resources: basic entry conditions

In order for an MNC's bargaining power to generate economic rents that are sustainable, the bargaining power must be based on idiosyncratic firm resources and capabilities that are *valuable*, *rare*, *imperfectly imitable*, *and lack strategically equivalent substitutes* (Barney, 1991). The possession of firm-specific advantages provides the *raison d'être* of MNCs (Dunning, 1988). The bargaining power of both MNCs and host states comes from the ability to withhold resources and capabilities, such as raw materials, capital, and technological and managerial skills that the other party wants. These are the basic entry conditions and, in their absence, a mutually beneficial bargaining outcome is unattainable.

An MNC's bargaining power is stronger when the host government wants firm-specific assets that are inimitable and are in scarce supply. Financial resources and capital in MNC's possession increase the bargaining power of an MNC vis-à-vis a host government (Bennett & Sharpe, 1985; Fagre & Wells Jr., 1982; Lecraw, 1984; Poynter, 1982). Producers need investment capital when their fiscal relationship with the state is structured in such a way that their capital needs are sacrificed to government budgetary needs or that when their means of revenue generation cannot meet investment requirements. During periods characterized by low oil prices, IOCs are often welcomed by host

governments that require foreign investment. But during times of higher oil prices, host states seldom have severe debt problems and capital difficulties. Thus, they may not require high levels of FDI, and consequently possess higher potential bargaining power vis-à-vis IOCs.

Developing countries seek FDI to access the technology and managerial skills of MNCs. The level of technology and managerial skills an MNC possesses vis-à-vis the host state has been hypothesized to increase the MNC's bargaining power, *ceteris paribus* (Bradley, 1977; Fagre & Wells Jr., 1982; Lecraw, 1984; Moon & Lado, 2000; Oman, 1984). The main rationale has been that a high level of technological and managerial complexity makes the MNC a more difficult target for host governments to intervene or expropriate since host governments of developing countries often lack the technological competence or knowledge to run MNC's operations independently. When an MNC's bargaining power is founded on technological 'know-how' or managerial expertise, it is likely to provide durable basis for generating and appropriating economic rents. MNCs characterized by a more sophisticated configuration of technical, operational and managerial systems have greater potential bargaining power relative to the host governments (Poynter, 1982).

By contrast, a host state's power derives from its ability to offer access to rare country-specific advantages, such as valuable mineral resources (Levy & Prakash, 2003). Host government's bargaining power is stronger when the host country has valuable natural resources that are desired by an MNC (Eden, et al., 2005). In the oil industry, countries that control large reserves possess more bargaining power against the IOCs than those in possession of smaller reserves (Vivoda, 2008). According to Shelley (2005), those countries which have yet to demonstrate that they have commercial reserves and those that have small reserves are likely to obtain a smaller dividend from contracts with foreign investors. All else being equal, there will be more interest among the IOCs for investing in Saudi Arabia, Iran, Iraq, Kuwait, UAE, Venezuela or Russia, rather than Indonesia, Malaysia or Egypt. This argument extends to reserve longevity and potential profitability. Governments in control of oil reserves, which at current production levels are expected to last longer, are expected to have higher bargaining power vis-à-vis the IOCs than those governments whose

reserves, at current production rates, are expected to last for a shorter period of time. Countries with higher Reserve/Production (R/P) ratios are expected to have more bargaining power against the IOCs than countries with lower R/P ratios. Potential oil production profitability also influences the bargaining power of IOCs against host countries. There is thus likely to be more interest among the IOCs to invest in countries where production would yield high profits, such as in Saudi Arabia or Iraq. The higher the potential for profitability, the higher the potential bargaining power the host government possesses against the IOCs.

2.2. Firm-specific resources and constraints in the international context

There are various firm-specific factors that may serve as resources or constraints for MNCs when bargaining with host states. An MNC's ability to substitute for host country resources, and in extension, high levels of competition among countries for investment, improves its potential bargaining power vis-à-vis a host country (Eden & Molot, 2002; Ghosal & Bartlett, 1990; Jenkins, 1986). By contrast, if an MNC is unable to substitute for host country resources and find alternative investment options, this would signal higher potential bargaining power for a particular host state vis-à-vis that MNC. In the oil industry, if an IOC is engaged in negotiation over entry conditions with a host government, and if it has equal or more profitable options to pursue elsewhere, this positively affects its potential bargaining power against the host government.

However, previous contracting arrangements by an MNC with other governments may limit its options (Eden, et al., 2005). If an IOC recently accepted relatively unfavorable investment conditions with a particular host state, it is unlikely that it will achieve more favorable contracting arrangements in any forthcoming negotiations with other host states. This argument also extends to the following three subsections in the context of a particular host country and the international oil industry context. The host state may also be disadvantaged by the existing bargains with other IOCs (Eden & Molot, 2002). More broadly, the quality of previous bargains may also act as both resources and constraints in bargaining for both host states and IOCs.

An MNC that has a good international reputation may command greater potential bargaining power that may assist in achieving favorable investment terms in its negotiations with the host government (Ghosal & Bartlett, 1990). It is unlikely that IOCs with poor environmental records, such as BP in light of the Gulf of Mexico oil spill, would be welcome to drill in offshore areas in many other oil-producing states, particularly without adequate regulation in place. Alternatively, an IOC's membership in international best-practice organizations, such as the Extractive Industry Transparency Initiative (EITI), may increase its international reputation and, in turn, the company may be viewed favorably by a host state.

A firm is a political organization that is made up of coalitions competing for power (Pfeffer & Salancik, 1978; Pfeffer, 1981). Intra-firm conflict over objectives may constrain its ability to fully exploit its potential power (Pfeffer, 1982). Moreover, access to markets and the broader global distribution network is an MNC power resource (Kobrin, 1987; McKern, 1976; Poynter, 1985; Vernon, 1977). The host state's desire to access global markets and distribution networks, and the dependence on the foreign firms who have access to it, produce a constraint on the host government's bargaining power (Tarzi, 1991). In the oil industry, if an IOC can provide an external market for the sale of host state's crude oil or refined products, this becomes a source of potential bargaining power, particularly if the host state faces impediments such as sanctions on its oil exports (i.e. in the case of Iranian exports to the US).

Major IOCs' reserve replacement is an important indicator of their bargaining power. 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. It is a key performance measure, and is critical to the manner in which financial markets value a company's stock as it measures a company's ability to continue to operate as a viable entity (Wright & Gallun, 2008). Thus, if an IOC fails to replace its production in any given year, this negatively affects their potential bargaining power vis-à-vis host states. Alternatively, if they replace all the oil they produce in that year, and manage to secure access to additional reserves,

this *positively* affects their potential relative bargaining power. A healthy reserve replacement ratio should always be over 100%. Between 1998 and 2002, the five majors 'replaced' 99.7% of oil produced, which was at the 'break-even' point. However, between 2003 and 2007, the five major IOCs replaced only 51.7% of oil they produced (Vivoda, 2009).

An MNC's country of origin impacts its bargaining power in a host country. This is due to different historical, colonial, cultural and political factors. The political climate may be more accepting of MNCs from a home country with greater cultural proximity and stronger historical ties (Hofstede 1980). Such ties may result in a higher perception of value attached to the MNC's operations by the host government, because there may be a closer fit between the company's management approach and what is appropriate locally (Stopford, 1974; Beamish, 1993; Vachani, 1995). MNCs originating from politically and economically more powerful countries have more bargaining power than those originating from weaker countries (Eden & Molot, 2002; Gilpin, 1975; Tarzi, 1991). While this may endow them with some potential bargaining power, whether that potential power is translated into actual bargaining power is context dependent. The concept of institutional distance is a useful concept for evaluating whether an MNC's home state affects the company's bargaining vis-à-vis the host state. Kostova & Zaheer (1999) argue that the institutional distance between the home and host country affects the IOC's ability to achieve legitimacy in the host country. Institutional distance refers to difference or similarity between the regulatory, cognitive and normative institutions of the two countries (Kostova, 1996). When institutional distance is high, governments are likely to see the IOC in stereotypical terms, increasing the IOC's liability of 'foreignness' and making it more difficult for bargains to be reached (Eden, et al., 2005). In the US case, Vivoda (2010) demonstrated that when the US government supports American-based IOCs in bargaining with host states, this support may weaken these IOCs due to high institutional distance and/or particularly hostile anti-American political and cultural context of the host country.

The overall size of MNCs impacts their potential bargaining power vis-à-vis host governments (Bradley, 1977; Fagre & Wells Jr., 1982; Lecraw, 1984; Poynter, 1982 and 1985). Their overall size,

as measured by assets is a source of bargaining power for MNCs because larger MNCs would be more likely to have the managerial, technological and financial resources to invest in majority-owned subsidiaries and also to undertake lengthy negotiations with host governments. It is expected that the largest IOCs, such as ExxonMobil, Royal Dutch/Shell, BP, Total and Chevron would have the highest potential bargaining power relative to host states.

2.3. Firm-specific resources and constraints in the host country

Sunk costs refer to those investments or expenditures that, once deployed, are very costly to reassign to an alternative use (Keesey & Moon, 2000; Marsh, 2007). Long-term contracts for natural resource production and distribution facilities and services are the most prominent examples of high sunk cost investments in specific assets (Tarzi, 1991; Woodhouse, 2005). Klein, Crawford & Alchian (1978) emphasize the problem of "hold- up" in such scenario. A party that has invested in specific assets may be forced to accept a worsening of the terms of the relationship after the investment is sunk. Hence, asset specificity creates appropriable specialized quasi rents. Once the foreign investor has sunk a proportionally large investment into specific assets in the host country, the host government's relative potential bargaining power vis-à-vis the investor increases significantly. Therefore, an IOC's potential bargaining power relative to the host government will depend on how much sunk costs the company had deployed in the country.

In addition, firm reputation and legitimacy in the host country can be an important source of an MNC's bargaining power (Moon & Lado, 2000). Economists and business strategy scholars have long recognized the importance of 'invisible assets', such as corporate reputation, image, and brand name (Fombrun & Shanley, 1990; Wiegelt & Camerer, 1988; Wilson, 1985). At the time of entry, the government treats an MNC as an outsider, or as a firm without legitimate status in the host country. Legitimacy can be achieved if the MNC becomes isomorphic with the institutional environment in the host country, but this takes time and commitment (Eden, et al., 2005). More broadly, positive corporate reputation may enhance an IOC's potential bargaining power, as positive reputations can

convey a signal about an IOC's 'socio-political legitimacy' in dealing with various publics, including the host government (Aldrich & Fiol, 1994). In turn, the host government may use high-reputation IOCs already operating in the host country as a signal to the international investment community that it provides an attractive climate for FDI (Weiss, 1990). The argument also extends to host state reputation as an FDI destination as perceived by IOCs.

Legitimacy in the host country is likely to be enhanced when the MNC develops partnerships with local firms and institutions. It may also be enhanced by good social performance that can make the firm become perceived as 'domestic' (Boddewyn & Brewer, 1994). Local allies can be a potent source of bargaining and lobbying power for IOCs vis-à-vis the host government and there often exists a strong alliance between MNCs and various powerful host state pro-business groups (Tarzi, 1991). For example, in a study of the National Energy Policy (NEP) implemented in Canada in October 1980, Jenkins (1986) found that American IOCs were able to circumvent the NEP by using local allies. Marketing expertise, which encompasses knowledge of marketing and merchandising techniques, and possession of differentiated products, also allows the MNC to enjoy market power in developing countries (Caves, 1982; Dunning, 1988; Hymer, 1976; Kindleberger, 1969). This intangible asset could strengthen local demand for the MNC's products, and enhance its bargaining power relative to host state.

The structure of subsidiary ownership is a source of potential bargaining power, influencing the expropriation rate of subsidiaries (Moon & Lado, 2000; Rodriguez, 2008). Joint ventures with local governments are likely to safeguard an MNC's operations from government intervention. Bradley (1977) reported that expropriation of joint ventures comprised exclusively of foreign multinationals was eight times more likely than expropriation of joint ventures that involved local partners. Tomlinson & Brown (1979) have reached similar conclusions. It is expected that IOCs' which have joint ventures with local partners have more potential bargaining power and are less likely to face host government intervention.

2.4. Industry-specific resources and constraints in the international context

Traditional industrial organization economists have suggested that an industry's level of profitability should decrease as its concentration level (the degree to which a few large sellers dominate an industry in terms of relative market share) decreases (Bain, 1951; Bain, 1956; Porter, 1980; Scherer & Ross, 1990). In an extension of this argument, intense industry competition, or low industry concentration, reduces the bargaining power of an MNC, as firms have to battle more fiercely against each other for, inter alia, customer support, best inputs, or the latest technology (Knickerbocker, 1973; Fagre & Wells Jr., 1982; Kim, 1988; Lecraw, 1984; McKern, 1976; Tarzi, 1991). The result of these battles is heightened environmental uncertainty for individual firms (Dess & Beard, 1984). The bargaining power of government is greater in highly competitive industries, where more than two or three MNCs are able to supply the product or service (Grosse, 1989). Wherever rival sources of capital, technology or access to markets have appeared, "their rivalry has diluted the unique strengths of any single enterprise and has weakened its bargaining position" (Vernon, 1977: 194). In this situation, the government can play firms against each other to obtain the most favorable outcome. This argument applies in both the international and host state industry context (the following subsection). Similar to the competition provided by the independent oil companies in the 1970s, during the last decade the rise of national oil companies has provided host countries with investment alternatives (Penrose, 1976; Vernon, 1977; Vivoda, 2009). Chinese, Indian, and Russian NOCs have emerged as alternatives to the IOCs in Africa, Latin America, the Middle East and the Former Soviet Union. The increased competition has given host states increased bargaining power vis-à-vis the IOCs.

Moreover, oil prices affect the relative bargaining power between host states and IOCs (Vivoda, 2009). If oil prices are low, host governments often seek foreign capital investment in their oil industries. Therefore, their potential bargaining power against the IOCs is negatively affected. Alternatively, if the oil prices are high, host governments often have greater capital flows and may not require foreign investment, and thus, their potential bargaining power vis-à-vis the IOCs is positively

affected. In these circumstances, host governments rethink their contracts and seek higher taxes and royalties. In the 1970s, rising oil prices helped Venezuela to reach better deals with IOCs, and in the last decade high oil prices were instrumental in allowing Russia and Venezuela to reach more favorable investment conditions (Tugwell, 1975; Vivoda, 2008).

The potential bargaining power of host countries vis-à-vis MNCs is stronger when minerals are perceived as scarce, and weaker if they are perceived as abundant (McKern, 1976). Thus, if there is a general perception of oil scarcity or peak oil, a view which has gained much popularity in the last decade, host states have more potential bargaining power than the IOCs. Alternatively, if there is a general perception of abundance of oil, the IOCs have more potential bargaining power vis-à-vis host states. The argument extends to the level of concentration of oil reserves. If most of the remaining oil reserves are located in a handful of countries, these few countries have more potential bargaining power than if reserves were equally divided among all states. Currently, over 60% of remaining oil reserves are located in the Middle East and North Africa (MENA) and if countries in this region were to act in concert, their potential bargaining power relative to IOCs would multiply.

If resource nationalism affects one country or region it is likely to spread to other countries and/or regions, which is in turn reflected in higher bargaining power for host states. Kobrin (1985) argues that diffusion plays an important role in the nationalization of oil. In a direct causal sense, events in one country lead to similar events taking place in another, as a result of a process of social communication. Previous unfavorable contracting arrangements by IOCs with host governments limit their future options and potential bargaining power vis-à-vis host states and are likely to lead to obsolescing bargains elsewhere (Eden, et al., 2005).

Doh and Teegen (2002), and Teegen (2003) show the importance of non-governmental organizations (NGOs) for relations between MNCs and host governments. NGOs often exercise influence by framing public discussion and debate on an issue (Nebus & Rufin, 2010). In the international oil industry, large international NGOs can play an important role in constraining the actions of IOCs,

which are often criticized for their poor environmental performance in one or multiple jurisdictions. If this were the case, IOCs' potential bargaining power relative to host states will be negatively affected.

2.5. Industry-specific resources and constraints in the host country

MNCs operating in industries that are of strategic importance to a host country are expected to be in a relatively weak bargaining position. MNCs operating in high importance industries (including cement, steel, oil refineries, infrastructure and natural resources) were strongly associated with higher intervention levels than MNCs operating in the other industries (Bradley, 1977; Poynter, 1982; Poynter, 1985). Where strong nationalist feeling exists, it is particularly likely to be directed at foreign oil companies for two key reasons. Oil is a non-renewable resource, so it is easier to argue that oil wealth is extracted from the country and not created for it. Oil is also widely regarded as having strategic significance (Philip, 1976).

As established in previous subsections, both the level of industry competition in the host country and the quality of other IOCs' bargaining outcomes with the host government affect the relative potential bargaining power between a host government and an IOC. In addition, countries with large and growing markets enjoy higher bargaining power with MNCs (Gomes-Casseres, 1990). In the international oil industry, a host state, such as Russia, with a large and growing domestic market for crude oil and refined products, has higher potential bargaining power vis-à-vis IOCs as opposed to a host state with a small domestic market, such as Brunei or Bahrain.

Moreover, the host country industry-specific legal context (e.g. investor protection and other constraints, such as secrecy in terms of availability of geological maps) affects the relative potential bargaining power of IOCs and host governments. If a host government offers no investment protection to IOCs which seek to establish a long-term presence in the country, or if there is a history of legal battles between the host state and the IOCs over specific terms and conditions of an investment contract, the host state's potential relative bargaining power is negatively affected. This

factor is discussed in more detail in the following subsection as the quality of domestic legal context is affected by the host state's international institutional obligations.

2.6. Host state international institutional resources and constraints

A host state's exercise of power vis-à-vis multinationals is constrained by the international environment and international interdependence constrains a host state's autonomy (Kobrin, 1987; Tarzi, 1991). According to Eden (1996), the web of international agreements between nation-states is creating an investment regime that offers more protection and bargaining power to multinationals. The role of multilateral rules negotiated in international institutions of which host countries are members could limit the bargaining power of host states, since most governments are members of multilateral organizations (Doh & Ramamurti, 2003; Eden & Molot, 2002; Henisz & Zelner, 2005). Ramamurti (2001) argues that government-to-government bargains can establish overall rules of the game, which then constrain MNC-host state bargaining in specific issue areas. For example, balanceof-payments difficulties or severe external debt problems may increase a host country's demand for FDI or limit its freedom of action, due to conditions imposed by international financial organizations or commercial banks. Bilateral investment treaties (BITs), multilateral treaties, such as the Energy Charter Treaty, and political risk insurance (PRI) through MIGA or OPIC, bestow MNCs with more potential bargaining power relative to the host government if the latter is a party to the relevant treaties. Since these treaties allow MNCs to recover compensation from host governments for losses suffered as a result of expropriation, they constrain the host government's actions. It is unlikely that the host government will engage in direct or indirect expropriation against an MNC's interests if they are aware that international arbitration is to ensue as a consequence (Joffe, et al., 2009). The IOCs were helped by the fact that, in the mid-to-late 1990s, Russia and Venezuela suffered economically and were highly indebted. Since the Western-dominated institutions were the main creditors of their debt, the Western IOCs received indirect support in their bargaining with Russia and Venezuela and were able to sign favorable investment agreements (Vivoda, 2008).

At the same time, the international institutional environment can also act as a resource for host states. For example, OPEC membership may in some situations enhance host state's bargaining potential power relative to an IOC. The development of producer cartels, such as OPEC, created a strong impetus for improving expertise within host states to better manage MNCs. Indeed, OPEC was formed to share information on terms of concession on pricing formulas, and on strategies that might strengthen the hand of negotiators in the host state (Tarzi, 1991). Therefore, cooperation among member states may help a particular member in maximizing its interests in bargaining with the IOCs.

2.7. Host country-specific non-industry factors

The level of economic development of a host country can have an impact on MNC's bargaining power relative to the government of that country (Moon & Lado, 2000). A host country's 'absorptive capacity', referring to the capacity of its local firms and government agencies "to recognize the value of new external information, assimilate it, and apply it to commercial ends," is directly reflective of its level of economic development (Cohen & Levinthal, 1990: 128). Therefore, a host country, which is at the high stage of economic development, will be associated with high potential bargaining power. Conversely, for countries that are at lower levels of economic development, an MNC would possess greater potential bargaining power. In addition, host countries have differing capabilities depending on their size. The larger a host state in terms of overall GDP or population, the more likely it is that it will have more power at its disposal in bargaining with MNCs.

Multinational corporations do not commit large sums of money in countries with high levels of political and economic risk unless they are likely to get extremely generous terms of investment (Tarzi, 1991). A host country's level of political and economic risk and/or stability affects its potential bargaining power relative to the MNCs. For example, if a host country's credit ratings published regularly by Moody's, Standard & Poor's, and Fitch are favorable, and the credit risk is low, this endows the host country with additional potential bargaining power vis-à-vis IOCs, as the perceived

investment risks are lower and the jurisdiction is a more attractive investment destination for oil companies.

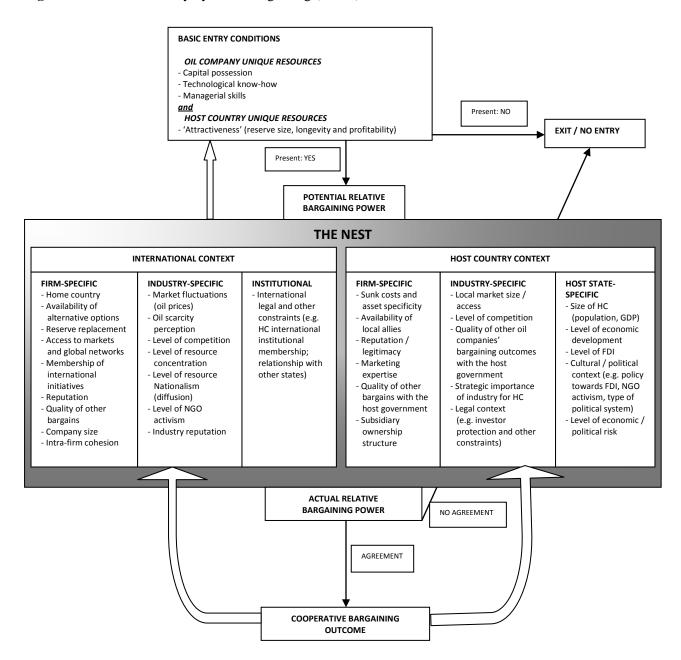
Domestic politics can also impact governments' negotiations with external parties, including other states and MNCs (Gourevitch, 1996; Mayer, 1992; Putnam, 1988). Changes in the domestic political and cultural context within a host country affect the relative bargaining power between a host state and a multinational corporation (Moon & Lado, 2000; Tarzi, 1991). IOCs' potential bargaining power can evaporate with domestic political changes in host countries. For example, host nations governed by populist politicians will almost always tend to obtain greater rewards from intervening in subsidiaries, which epitomize the ideological opposite (Poynter, 1985). Attitudes and beliefs of the ruling elite and, other groups, such as labor unions, local businesses and NGOs, towards FDI are also important in this context (Tarzi, 1991). Dependence of the host country's economy on FDI may also constrain its actions, either because of the control current investors exercise, or the fear of repelling future investors (Kobrin, 1987). Additionally, when dealings between the government and IOCs are widely publicized in the press and other media, the government tends to have a bargaining advantage, since IOCs are often portrayed as foreign interlopers, and the government can utilize public opinion to sway negotiations towards more favorable outcomes (Grosse, 1989: 83). Finally, the type of political system in the host country may also affect the bargaining relationship between the host government and MNCs. Klapp (1987) argues that decentralized, representative democratic governments are more vulnerable to the influence of domestic societal groups than centralized and authoritarian governments.

3. THE MODEL

This section integrates the extant literature reviewed in the preceding section within a coherent theoretical model for analyzing the IOC-host government bargaining dynamics, as illustrated in Figure 1, Section 2. Numerous factors influence the relative balance of bargaining power in the oil industry and they were identified in the previous section. The model advanced here (Figure 1) is a

sophisticated mechanism which integrates a complex array of bargains and relationships. The main aim of this section it to elaborate on the dynamics of the model.

Figure 1 Oil industry dynamic bargaining (OIDB) model.



The interaction between IOCs and host governments is a dynamic process in which both the host state and IOC have goals that they want to accomplish and attach a level of salience to the particular negotiation. In this context, a bargaining situation is characterized by the coincidence of cooperative and conflicting elements as well as interdependent decisions. Without common interest there is

nothing for which to negotiate and without conflict nothing about which to negotiate (Iklé, 1964; Jönsson, 2002). Interdependence entails the need for mutual, rather than unilateral, action. Grosse & Behrman (1992) argue that it is the dissimilarity of interests or conflicting elements between the two parties that are relevant for understanding the bargaining situation. Bargaining determines how the dissimilarity of interests is to be settled and the conditions under which cooperation is to take place, if at all. The more similar the goals of two parties, the less difficult the bargaining process becomes, and the more likely that a cooperative bargaining outcome will be reached. In this context, bargaining between an IOC and the host state is characterized as a strategic interaction between two parties seeking a mutually acceptable arrangement while each attempts to maximize its own profit. Both parties behave rationally and have interests in reaching a cooperative agreement but their interests are not identical.

One school of thought in the IBS literature contends that MNCs' bargaining power is indicated by the nature and size of the 'bargaining outcomes' that the MNCs achieve through their interactions with host governments (Moon & Lado, 2000). The concept of power as an outcome is essentially a tautological one that is most closely related with the early work of Robert Dahl (1957). From this standpoint, power is the equivalent of successful influence, and power that is not successful is not power at all. One evaluates power by examining the outcome or result of some sequence of events or interaction. Thus, in the bargaining relationship, power is indexed by the bargaining outcome or the nature of the agreement, and, therefore, power can be determined only after the fact. The only way one can posit an *a priori* distribution of power in a bargaining relationship is to assure that the relationship reflected in the outcome of previous encounters applies to current bargaining. According to this approach, the only empirical manifestation of bargaining power lies in the bargaining outcome, and the prime value of power is that it provides retrospective interpretations for the distribution of payoff embedded in a settlement.

An understanding of bargaining outcomes adopted here differs considerably from that adopted by Dahl. The understanding of the concept of power is built largely around the work of Bennett & Sharpe

(1979). The relative power of actors should not be gauged merely from the bargaining outcome. Such post hoc analysis of power excludes any meaningful analysis of why a particular outcome occurred and forecloses the possibility that one party had potential power it did not exercise (Bennett & Sharpe, 1979). Moreover, Bennett & Sharpe (1979: 75) argue that MNCs' "power resources are not entirely interchangeable from context to context, or from contest to contest. What serves as a basis for power in one situation may be worthless, perhaps even a liability, in another." Therefore, one could regard supposition that power resources are 'fungible', and that the possession of power resources gives one a centralized capacity whenever and wherever one pleases, as dangerously misleading (Baldwin, 1971). Consequently, in introducing the international and host country-specific contexts, it is not an adequate approach to conceive of IOCs' bargaining power in terms of the possession of certain resources. This myopia arises partly from the strictly dyadic character of the standard pluralist conception of power ('A has power over B'). Such an approach abstracts the actors from all other significant relationships in which they are engaged, and thus seeks to locate bargaining power apart from these other significant relationships (Bennett & Sharpe, 1979). Instead, what is needed is an understanding of how an actor's power is shaped by the complex web of relationships - with actors not directly party to the bargaining in which the two parties are enmeshed.

Since bargaining is contextual, a study of bargaining necessarily raises questions about definition of an issue-area and linkages among issues. To exercise influence on one issue often means making concessions on another. Keohane & Nye (1977) define a set of issues as an 'issue area' when those who are working to resolve that set of issues view the issues as closely interdependent and deal with them collectively. The politics of the law of the sea differ from the politics of nuclear proliferation; the politics of tariffs from the politics of oil. Bargaining also typically encompasses several complex issues and nowhere is this more pronounced than in the international oil industry. According to Strange (1988: 41) "the international oil business is a particularly complex cat's-cradle of interlocking bargains". Issue linkage is a useful method for handling complexity. Issue linkage entails combining sub-issues that would be non-negotiable if treated separately into package deals and tradeoffs, and it allows for an endless variety of contextual factors that influence bargaining behavior and processes

(Haas, 1980; Sebenius, 1983; Stein, 1980). The international oil industry is, as an issue area, not in isolation from the rest of society. Indeed, it is intimately connected to broader domestic and international political and economic issues.

The concept of 'nesting', originally developed by Vinod Aggarwal (1985), is of utility in this context, as it can assist in contextualizing a given bargaining case within a network of bargains. In explaining the creation of regimes from the perspective of a hierarchy of systems, Aggarwal uses nesting, a systemic level factor. For Aggarwal (1985), the textile system is nested within the overall trading system, and the trading system is nested within the overall international strategic system (concerning security matters), and actions countries take in other systems influence behavior in the textile subsystem. Similar to textile bargaining, bargaining in the international oil industry is not isolated from the rest of international and domestic bargaining. Bargaining between actors in the oil industry is influenced by, and linked to, the actors' alliances, and interests and behavior outside the specific issue at stake. Similarly, a specific bargaining episode in the international oil industry can influence bargaining in other issue areas.

Having established the contextual parameters within which the model operates, the paper now turns to outlining how the model works in practice. As illustrated in Figure 1, in the first instance, potential power connotes the relative bargaining power of the host government and the IOC, which is dependent upon: (1) unique resources of the oil company; and (2) unique resources of the host government. These unique resources, which are industry-specific, form the *basic entry conditions*. In their absence from either of the two parties, there will be no basis for an IOC's entry into, or continued presence in, the host country. Unique resources of the oil company are the level of capital possession, and technological and managerial expertise relative to the host government. Unique resources of the host country include the level of attractiveness of its oil, measured in terms of reserve size, reserve longevity, and potential profitability. The relative possession of these resources serves as a source of *potential relative bargaining power* for an IOC and the host state, and the bargaining process can begin.

There is an abundance of obstacles to the full utilization of potential power, and power resources are not automatically translated into effective power over outcomes (Keohane & Nye, 1977). The relationship between potential relative bargaining power and actual relative bargaining power is moderated by the international and host country context, here referred to as 'the nest'. There are various domestic and international factors which affect whether the potential power of host states and IOCs is translated into actual power and these have been discussed in the previous section. The rationale for suggesting these factors to be moderators of the relationship between potential and actual relative bargaining power is based on literature on issue linkage / nesting, which recognizes that each bargain is embedded or nested in a context comprised of a multitude of other bargains. As illustrated in Figure 1, IOCs' relative bargaining power relative to a host government is conditioned by: (1) the firm-specific, industry-specific and institutional factors in the international context; and (2) the firmspecific, industry-specific and host state-specific (non-industry) factors in the host country context. These host country and international factors affect the extent to which potential relative bargaining power is transformed into actual relative bargaining power. Consequently, the extent of actual relative bargaining power is conditional on the ability of the two parties to maximize the resources and minimize the constraints presented by other bargains, as well as the overall bargaining context in the nest.

If a host government and an IOC have come to an agreement, the terms and conditions of this agreement comprise a *cooperative bargaining outcome*. This successful outcome is measured in terms of the MNC's ownership level and other investment terms and conditions attached in the agreement (Fagre & Wells Jr., 1982; Gomes-Casseres, 1989; Lecraw, 1984). An IOC with greater actual bargaining power relative to the host state is likely to achieve a preferable bargaining outcome characterized by favorable investment terms and conditions. The outcome should favor the party that is able to maximize its potential resources and the other parties' potential constraints in the nest. Whether actual relative bargaining power is translated into a favorable bargaining outcome also

depends on the relative negotiating skills and capabilities of host government officials and oil company negotiators, and the level of uncertainty in negotiations.

Alternatively, a cooperative bargaining outcome between a host government and an IOC may not be reached, and this can take place for a variety of reasons. While this is also a form of bargaining outcome, in the model this condition is referred to as *exit / no entry*. Either or both parties can decide to refuse access to its own unique resources during the bargaining process or after a bargaining outcome has been reached. In the first case, there is no consensus from the two parties on terms and conditions of a mutually beneficial agreement. In other words, their perceived or actual 'best alternatives to negotiated agreement' (BATNA), win-sets or zones of acceptance are inflexible or leave little room for agreement during negotiation (Fisher & Ury, 1981; Putnam, 1988). In the second case, a change in conditions in the nest or in the quality of the two parties' unique resources alters perceptions of their respective relative potential and/or actual bargaining power. This, in turn, triggers re-bargaining of an earlier agreement. However, the two parties are unable to reach a new cooperative bargaining outcome, thus leading to IOC's exit.

In summary, the initial equilibrium is the moment in which the two parties to potential bargaining express interest in each other's unique resources. During the bargaining process, they are aiming to realize a mutuality of interests, employing a positive sum perspective in which bargaining determines the division of rewards (economic rents) between the two parties, in which both may benefit. Each party would like to reach some agreement rather than disagree and not reach any agreement. Yet, each party is seeking a mutually acceptable agreement while attempting to maximize its own profits. Each party is making strategic decisions while uncertain about the preferences or behavior of the other. There are many possible actors and external influences (as specified in 'the nest') that affect the relative bargaining power between the two parties and ultimately influence the nature of the mutually agreed cooperative outcome (if one is reached in the first place). During the bargaining process, the two parties learn about each other's strengths, weaknesses and strategic preferences, embedded in 'the nest'. After one party has made an offer, the other must decide either to accept it or reject it.

Acceptance of the offer ends the bargaining and a cooperative bargaining outcome is reached. After rejection, bargaining is either discontinued, or restarted where each party reassesses its preferences in light of initial disagreement.

The final task of this section is to briefly explain the dynamism of the model and elucidate the conditions under which re-bargaining occurs. The model presented in this paper, which models a repeated game in game theory (see Osborne & Rubinstein, 1994) is both dynamic and iterative in two important ways. First, when a bargaining outcome is reached, the terms and conditions attached to this specific agreement feed back into the nest as they have the potential to affect the quality of future bargaining outcomes between IOCs and host states in other bargaining situations. This is similar to the way in which the quality of other bargains has affected the bargain in question. For example, if a host state and an IOC sign an agreement with conditions that are favorable to the state, this may affect other future bargaining outcomes between IOCs and host states. Second, changes in the conditions in the nest may affect the basic entry conditions. To illustrate, during a period characterized by low oil prices, an IOC may possess unique resources (capital) that host states require. However, if oil prices increase to a level seen in mid-2008, they may provide the host state with required capital so that an IOC loses the unique resources that the host state needs. A similar scenario may apply if there is increased industry competition both internationally and in the context of the host state, thus making a particular IOC's technological and managerial skills replaceable.

When does re-bargaining occur? Whether re-bargaining between the two parties takes place is conditioned by changes in the nest and in the possession of unique resources at the two parties' disposal. In other words, non-compliance is conditioned by real or perceived changes in potential and actual relative bargaining power between a host state and an IOC. If a host state triggers rebargaining, this is usually referred to as intervention, and numerous studies have investigated the conditions under which intervention takes place (Bradley, 1977; Combe & Mucchielli, 1998; Hawkins, Mintz & Provissiero, 1976; Poynter, 1985; Reuer & Ariño, 2002). An MNC's competitive advantage relative to the host state can be sustained or temporary (Moon & Lado, 2000; Schoemaker,

1990). Whether competitive advantage is sustained or temporary depends on changes in the potential and actual relative bargaining power as conditioned by the relative possession of unique resources and by other bargains in the nest, respectively. The likelihood of host state intervention is higher if the IOC has temporary competitive advantage. In such circumstances, IOCs may be highly exposed to the host state's opportunism. By contrast, the host state is likely to be accommodating if the IOC has sustained competitive advantage. An IOC may be non-compliant and trigger re-bargaining if it has a sustained comparative advantage and perceives that its potential and/or actual bargaining power relative to the host state has increased.

4. CONTRIBUTION, LIMITATIONS, AND FURTHER RESEARCH

This paper has established a model for understanding the dynamics of the host state-IOC bargaining relationship. This final section summarizes the model's contribution, and suggests avenues for further empirical research and theory development. Theoretically, the model presented here advances scholarly ability to grasp the complexities of bargaining dynamics between host states, IOCs and other stakeholders in the oil industry. The model is not simply an extension of the OBM, as it can be applied during the entire oil industry cycle. The proposed model builds on and leverages the key contributions of the OBM and later bargaining models. In particular, by utilizing the concept of 'nesting', the model extends beyond the host state-IOC dyad and includes the influence of other bargains and stakeholders. The paper's main theoretical contribution is that it extends the bargaining power paradigm through the development of a sophisticated and dynamic theoretical model to analyze bargaining in the international oil industry. This model integrates key contributions from existing scholarship on host state-MNC bargaining while also taking into account the importance of other actors and bargains at domestic and international levels that affect bargaining between an IOC and a host state. Given the recent changes in the structure of the industry, extreme market volatility, and the importance of oil as the largest source of energy for the global economy, this paper is a timely addition to the literature on the contemporary oil industry which combines insights from International

Business Studies (IBS), International Relations (IR) and International Political Economy (IPE) literature.

The model is relevant to policy practitioners and executives, particularly those engaged in extractive industries. The model is useful as it is a sophisticated mechanism with which policy practitioners and executives can grasp the complex array of bargains and relationships within which host state-IOC bargaining relationship is nested. The practical contribution is that the model will assist these actors to choose strategies more systematically, potentially leading to higher relative bargaining power that may translate into preferable bargaining outcomes. Each party can utilize the model as a checklist, identifying strengths and weaknesses for both parties associated with each factor in the nest. Once these strengths and weaknesses have been identified, each party can then devise a bargaining strategy with which it can utilize its strengths and other party's weaknesses, which endow it with additional bargaining power, and which may potentially lead to a better bargaining outcome. The model also allows a policy practitioner, company executive or researcher to identify and analyze the underlying mechanisms through which actors exert bargaining influence in the international oil industry issue area.

Of course, the model is not without its limitations and some important issues are beyond the scope of this paper and require further work. Given that this is a theoretical piece, the relative importance of various international and domestic constraints / resources in the nest is not specified in the model. If it is to be utilized as a tool to predict likely future bargaining outcomes between IOCs and host states, future research needs to be directed towards empirical testing of specific bargaining cases between IOCs and host states in the international oil industry in order to ascertain the relative importance of specific domestic and international constraints and resources located in the nest. Recent examples which may be used as empirical cases include bargaining relationship between various Western IOCs and the governments of Venezuela, Russia or Iran; bargaining relationship between BP and the US government during and in the aftermath of the 2010 Gulf of Mexico oil spill; or following Levy & Kolk (2002), bargaining between IOCs and governments over climate change policy. A significant

amount of data on these and other, bargaining cases will need to be collected and analyzed so that the researcher may accurately measure the relative importance of variables in the nest in affecting the relative bargaining power of the two parties. Future research will also need to be directed at analyzing the degree to which changes in the nest and in basic entry conditions affect relative bargaining power and the quality of bargaining outcomes respectively.

The model treats the relative bargaining power of the two parties and their respective bargaining outcome preferences and bargaining outcomes as separate constructs, following previous approaches in the literature (Nebus & Rufin, 2010). Analysis of mediator variables – the outcome preferences, the perfect access to information about resources/constraints, the timing, relative bargaining skills, and level of salience attached to the bargaining case by two respective parties – is beyond the scope of this paper. Future research will need to be directed towards analyses of the effect of these and other mediator variables on influencing whether relative actual bargaining power is translated into preferable bargaining outcomes for the two parties. A final avenue for further research is to analyze what specific changes in the basic entry conditions and in the nest trigger re-bargaining by the two parties.

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NOTES

¹ It is also plausible that there is a reverse causality and that the oil prices are affected by the changing balance of power in the oil industry. For instance, oil prices are likely to rise when oil-exporting countries have more power relative to the IOCs and oil importing countries, and are likely to drop when the oil-exporters have less relative power.

² Triad economies include OECD North America, Europe and Asia.

³ The phrase is from Parsons (1963), whose suggestion that power be seen on the analogy of money leads to the erroneous supposition of the fungibility of power. For a corrective, see Baldwin (1971). ⁴ George Tsebelis (1990) applied 'nesting' to game theory.