



PROGRAM ON ENERGY AND
SUSTAINABLE DEVELOPMENT



Working Paper
#104
October 2011

STRATEGIC ALLIANCES BETWEEN NATIONAL AND INTERNATIONAL OIL COMPANIES

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FREEMAN SPOGLI INSTITUTE FOR INTERNATIONAL STUDIES

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The Program is part of the Freeman Spogli Institute for International Studies at Stanford University. PESD gratefully acknowledges substantial core funding from BP.

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About the National Oil Company Research Platform

While the role of the state is declining in nearly every sector of world economic activity, in hydrocarbons the pattern is quite different. State-controlled oil companies—so-called national oil companies (NOCs)—remain firmly in control over the vast majority of the world's hydrocarbon resources. Some NOCs are singular in their control over their home market; others engage in various joint ventures or are exposed to competition.

These enterprises differ markedly in the ways they are governed and the tightness of their relationship with government. NOCs also vary in their geological gifts, as some are endowed with prodigious quantities of "easy" oil while others must work harder and apply highly advanced technologies; some have sought gas, which requires different skills and market orientation than oil, while others stay focused on liquids. PESD case studies have explored whether and how these and other factors actually explain the wide variation in the performance of NOCs. PESD research also considers the conditions under which NOCs and the private, international oil companies (IOCs) can effectively collaborate for mutual benefit.

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Strategic Alliances Between National and International Oil Companies

Robert A. James¹

Oil companies owned by national governments (“NOCs”) and oil companies with extensive international operations owned by diverse private investors (“IOCs”) constitute some of the largest and most important economic organizations on the planet. Individually and collectively, they command vast amounts of capital and have large potential impacts on macroeconomic conditions and global-level environmental policies. Security concerns, at the local, national and international levels, are tied more to their activities and assets than to those of other types of firms.

A number of authors have examined NOCs and IOCs as separate classes of entities and in individual case studies. In this paper, I consider how and why NOCs and IOCs deal with one another, given their respective capabilities, constraints and ambitions. As a contract lawyer, I base my comments on my personal experience and concentrate on the possibility of structural and transactional alternatives to the current roles. In particular, I focus on the potential for partial integration between NOCs and IOCs in the form of strategic alliances, taking advantage of the strengths of both while coping with the limitations of each. I then offer my predictions of where the sweet spot for such alliances might be located.

Those readers who do not normally think about petroleum ventures might extend or generalize these comments to other contexts. A number of international and national oil companies have development arms or interests in the clean technology, power and infrastructure sectors. The cross-cultural aspects of integration apply to dealings with sovereign wealth funds, which are investing in a large number of sectors not limited to petroleum. Indeed, revenues generated by NOCs can themselves be distributed to these sovereign funds. Funds generated by Qatar Petroleum (the NOC) are provided to the Qatar Investment Authority, which in turn invests in ventures as diverse as Qatar Airways, a stake in Harrods, and large real estate developments in Washington, D.C. The subject of NOC-IOC alliances, whether viewed from an academic, a

¹ Partner, Pillsbury Winthrop Shaw Pittman LLP, San Francisco and Houston. This article is based on remarks at the Pillsbury Energy Conference in Lansdowne, Virginia, on October 3, 2009. For their comments, the author thanks his colleagues Terry Kee, Ada Wall and Julie Hutchings of Pillsbury, and Mark Thurber of the Program on Energy and Sustainable Development (PESD) at Stanford University. Copyright © 2011 Robert A. James (rob.james@pillsburylaw.com).

business or a legal standpoint, thus has relevance beyond the hydrocarbon sector and the energy industry.

I. NOC AND IOC ROLES AND RELATIONS

A. The oil industry participant roster

NOCs can be further defined as oil companies predominantly owned and controlled by a single national government. There can be a separation between state ownership and state control, where the government retains a minority “golden share” with substantial approval or veto rights (as in the cases of Eni and Petrobras). Similarly, IOCs can be further defined as oil companies that are vertically integrated and predominantly privately owned and controlled. The IOCs characteristically operate in many countries, and are accordingly “international.” There has been a marked trend toward multinational operation of many NOCs, however, so any distinction between “national” and “international” companies has become muddled. I prefer to think of the conventional NOC and IOC acronyms as shorthands instead for “nation-owned oil companies” and “investor-owned oil companies,” respectively.

The NOCs are a hard group to define, in part because they appear in developed, centrally planned and developing countries alike. Some companies, such as Statoil, have shifted between the NOC and IOC definitions over time. They tend to have close relationships with the government of the country in which they are based, but they range from wholly captive arms of the government to power centers in their own right independent of changes in the current ruling party.²

NOCs were not typically formed and are not always presently maintained with the sole or even a predominant focus on profit, or on the efficient development of a country’s natural resources.³ They may have as strong competing objectives the maintenance of employment, the generation of stable amounts of hard currency, or the development of infrastructure.

A number of auxiliary businesses are often associated with NOCs, including electric power generation, chemicals, minerals, and all manner of infrastructure. Some have far-flung interests in non-energy retail and commercial assets. I worked on one IOC-NOC relationship in Asia in which the NOC operates general grocery stores, because such outlets happen to be the channel through which petroleum products are distributed in that country. In Kazakhstan, our IOC client and an NOC entered into a joint venture that acquired, among other assets, a primary and secondary school system. I witnessed the spectacle of American capitalists arguing that education is a public good that the state ought to provide, while former communists retorted that schooling of workers’ families is an incident of employment that private enterprise should furnish. To understand what drives NOCs, one must therefore look beyond the oil fields and refineries.

² See Mark Thurber, David Hults & Patrick Heller, “Exporting the ‘Norwegian Model’: The effect of administrative design on oil sector performance,” 39 *Energy Policy* 5366 (2011).

³ See Peter Hartley & Kenneth B. Medlock III, “A Model of the Operation and Development of a National Oil Company,” The James A. Baker III Institute for Public Policy, Rice University (2007).

NOCs also vary widely in their sources of investment funds. At one extreme are those NOCs that use conventional approaches similar to those of the IOCs, including issuing equity and debt securities in public capital markets. For example, several Middle East NOCs have large quantities of retained earnings on which they can draw when their hydrocarbon revenues are low, in order to keep their long-term capital programs on course. At the other end of the spectrum are NOCs that are little more than auxiliaries of their respective oil ministries. These companies remit directly to the government virtually all of the net proceeds of royalties and hydrocarbon sales during any period of time. Then, during hard times, they must compete for government funds for ongoing investment with other potential users of the limited cash.

The IOCs are far from monolithic, but they present more consistent characteristics. They are business corporations that have as their objective the maximization of profit for their diversified shareholders through oil and gas extraction and monetization on a global scale. They either are focused entirely on the upstream sector—the so-called independents—or are fully integrated.⁴ Some, such as certain Asian trading companies, focus their activities in the trading and investment functions. IOCs generally tend not to be based in the countries in which the majority of their extraction operations are located.⁵

The IOCs have competitive advantages in project and risk management capabilities and techniques, and in access to technology, capital, and downstream markets. They can absorb, bear and transfer risk to a greater degree than can many other market participants.⁶ These capabilities are indeed what they have historically offered to NOCs and host governments on a contractual basis. But there are other industry players who can provide many of the same services. These include oilfield service companies, project management companies, and oil companies operating exclusively in the downstream sector. These entities compete with IOCs to work with NOCs and often ask, “Do the NOCs and service companies, acting together, even need the IOCs?”

B. NOC and IOC reserves and geographic reach

The relative roles of NOCs and IOCs in the world oil economy have changed dramatically over the last century. In the 1970s, the IOCs had some five-sixths of the world’s hydrocarbon resources on their books.⁷ Today, the IOCs have only 6 to 8% of world reserves, which is remarkable for many of us who began our careers during the first wave of development.⁸

⁴ An integrated oil company is one that holds assets in both the upstream sector (exploration and production) and the downstream sector (refining and marketing).

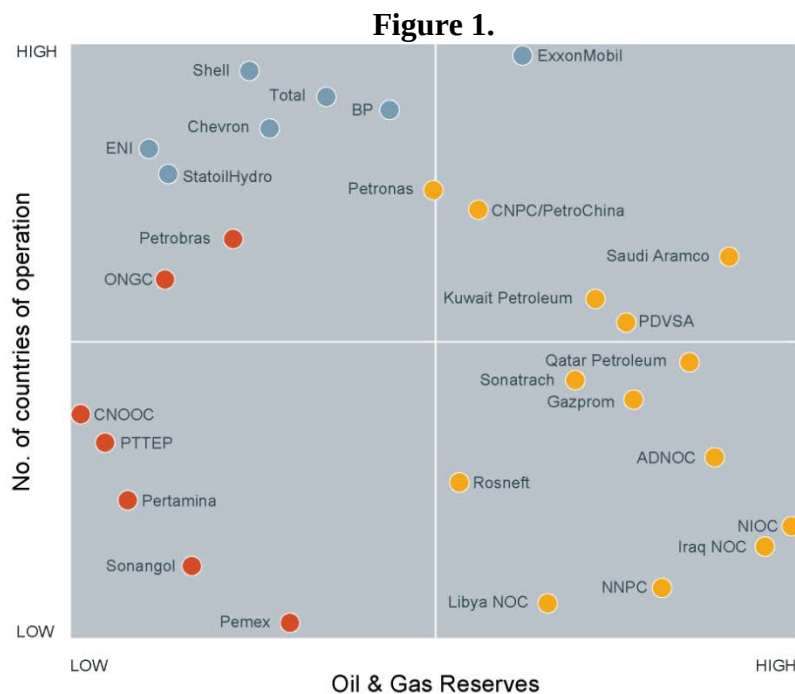
⁵ For a review of IOCs, see Amy Myers Jaffe & Ronald Soligo, “The International Oil Companies,” James A. Baker III Institute for Public Policy, Rice University (2007).

⁶ Peter A. Nolan & Mark C. Thurber, “On the State’s Choice of Oil Company: Risk Management and the Frontier of the Petroleum Industry,” Stanford University PESD Working Paper No. 99 (2010), available at http://pesd.stanford.edu/publications/on_the_states_choice_of_oil_company_risk_management_and_the_frontier_of_the_petroleum_industry/.

⁷ Rob Jessen, “IOC Challenge: Providing Value Beyond Production,” Special Report, *Oil & Gas Journal*, February 2, 2009.

⁸ *Id.*

The NOCs now occupy those same commanding heights, with over 80% of world reserves.⁹ There are many companies with reserves that greatly exceed those of the IOCs. The national companies of as few as ten nations—led by Saudi Arabia at 22%—account for half of total oil production.¹⁰



Source: Ernst & Young (2008). *Are National Oil Companies the new International Oil Companies?*

One way of analyzing the companies is to compare their reserves with the number of countries in which they operate. Seven major IOCs are marked in blue in Figure 1 and are largely confined to the upper left quadrant.¹¹ The NOCs marked in yellow on the right side of the chart have been referred to as “resource holders.”¹² They already have considerable reserves, and have less need of or interest in the reserves that may be available to the IOCs. The NOCs marked in red on the left side of the chart have been referred to as “resource seekers.”¹³ These firms do not have extraordinarily large reserves, yet they may have no less an ambition to play in the international arena.

⁹ Nadejda Makarova Victor, “On Measuring the Performance of National Oil Companies (NOCs),” Stanford PESD Working Paper No. 64 (2007) (estimating that NOCs control 80% of world reserves and account for 73% of production), available at <http://fsi.stanford.edu/publications/nocperformance/>.

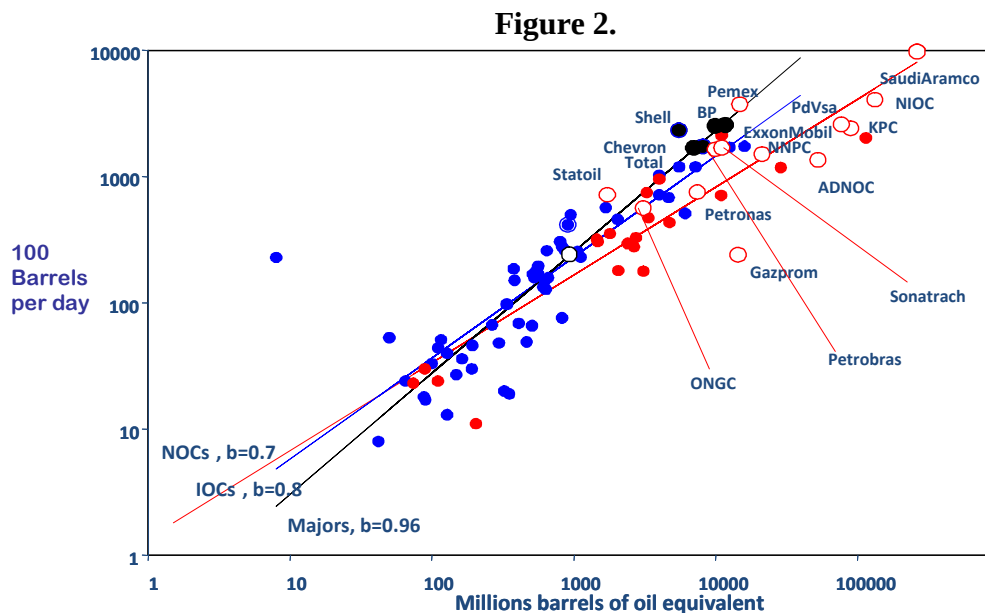
¹⁰ Rob Jessen, “IOC Challenge: Providing Value Beyond Production,” Special Report, *Oil & Gas Journal*, February 2, 2009.

¹¹ It is an article of faith, by the way, that one almost always lists international oil companies as a grouping of seven. If two of these companies merge, another IOC suddenly joins the six to keep the magic number intact. That number has been seven ever since the first description of the largest IOCs as the “seven sisters.” This name was given to the IOCs by the chairman of the Italian company Eni as a pejorative, when Eni was in fact *not* in the circle that he perceived. So it is good to see that in this chart, at least, he and his company have finally made it to the top.

¹² *Are National Oil Companies the new International Oil Companies?* Ernst & Young (2008), at 8.

¹³ *Id.*

The IOCs and NOCs are also frequently compared based on the current rates at which they produce barrels of oil equivalent in relation to the levels of their reserves.¹⁴ A typical comparison is shown in Figure 2.



Source: Nadejda Makarova Victor, "On Measuring the Performance of National Oil Companies (NOCs)," Stanford PESD Working Paper #64 (2007).

There is evidence that NOCs tend to have lower rates of exploitation than IOCs. This difference, if significant, likely reflects both the lower levels of capital deployed per unit of reserves by many NOCs, and the various motivations of NOCs and their governments—including to deplete reserves at a deliberate pace—that are at variance with a drive for simple profit maximization.

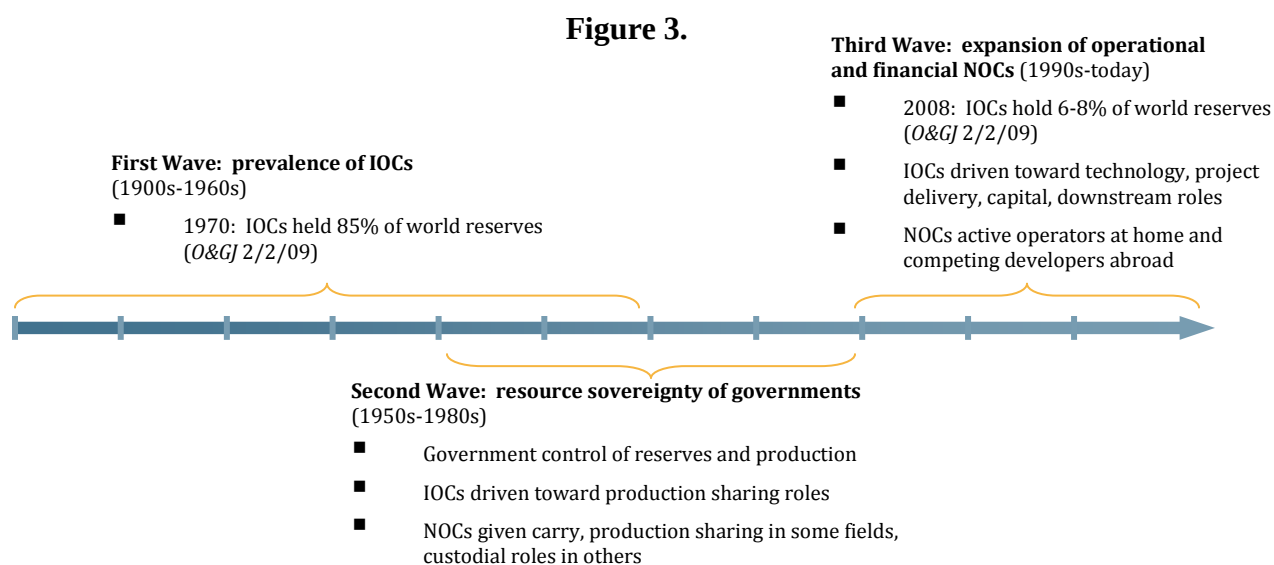
C. *Contemporary models of oil asset ownership and control*

Despite the breadth of the range of players on the industry roster, there is a surprisingly simple list of methods for controlling assets in the hydrocarbon sector. On the upstream side, the predominant model is for one or more oil companies to be party to a lease, production sharing or services agreement awarded as a result of the competitive tender. A given field or block of real property, offshore or onshore, is open to such a contract. Upon execution of the agreement, the contractor (whether IOC, NOC, or a one-off joint venture between or among IOCs and NOCs) develops and implements the infrastructure, and a staffing plan is developed for that individual property. NOCs may be involved in many different ways: as the sole contractor, as a joint venture partner in the contract or the field, as the holder of an overriding royalty interest in the project, as the recipient and marketer of the state's production or in-kind royalty receipts, or as

¹⁴ Some researchers have framed this issue as a matter of efficiency and concluded that state-owned enterprises are only 61-65% as technically efficient as private firms. Christian O.H. Wolf, "Does Ownership Matter? The Performance and Efficiency of State Oil v. Private Oil (1987-2006)," 37 *Energy Policy* 2642 (2009) (citing other studies).

the direct or indirect recipient of the tax take from the production. Importantly, the relationship between the IOC and the NOC tends to be determined on a tender by tender basis for each lease or field, so neither party has any assurance of a broader or longer relationship.¹⁵

The nature of the contract governing the relationship has shifted over time, from “concessions” to “production sharing agreements” to “service agreements.” These changes reflect the trend toward conveying to the host government or its NOC greater amounts of control over specific production plans and output. This trend, summarized in Figure 3 below, corresponds with the historical increase in the NOC control of the underlying available reserves.



The economic returns for the NOC and its government under such contracts have been defined in any number of ways: as “royalties,” as “taxes,”¹⁶ as ownership of “equity oil” as it is produced, or as “in kind” compensation for services. The government take and the contractor take will define the inducement the contractor has to undertake investment and assume risk. But at the most general level, the fundamental and consistent factor is the allocation of control between the IOC on the one hand, and the NOC or the host government on the other hand—control over the operations, the investment decisions and the production levels.

On the downstream side, the contract structure options are even simpler. The contracts for controlling refining and transportation assets generally involve a single NOC or IOC (less often a joint venture) that owns the downstream assets outright. In some cases, the owner of such assets may bear the risks of operating and investing in the facilities, and buying inputs and selling

¹⁵ In the Middle East, joint ventures have been created for assets downstream of oil and gas production for massive investments managed for a relatively long duration. Indeed, several of the major U.S. IOCs have made some of their largest capital investments in projects such as these. Exxon Mobil and Shell have made investments in Qatar in the tens of billions of dollars with respect to LNG infrastructure and gas-to-liquids projects, respectively.

¹⁶ Taxes are a particular source of growing concern among IOCs, as countries such as Venezuela continue to implement tax regimes which, depending on the price of oil, may result in a tax rate of up to 95%. See, e.g., Kejal Vyas, *Venezuela’s Oil Tax*, WALL ST. J. (Apr. 23, 2011).

outputs, all for its own account. In other situations, the owner may function more as a processor of inputs and outputs for which other parties bear the economic risk, or as a facilitator of capital investments that are staked, funded, and recouped by other parties. For transportation assets, the shipper making use of the pipeline or vessels may finance the construction and operations, or subscribe to take-or-pay commitments to the same effect. Similar to the upstream side, then, the fundamental factor is the degree of control that the private company has over operation of the affected assets.

D. Inefficiencies in current roles

The functions performed by the international companies in the conventional field-specific tender, and the regions, countries and projects in which they play a part, are largely determined by government policies other than matching the best organization to any particular job. This creates a number of inefficiencies. Some of the inefficiencies are inherently part of the cost that the resource owner must bear in order to maintain control over its sovereign rights, while other inefficiencies may be reduced through alternative contract and organizational structures.

First, regardless of the level of their expertise and talents, IOCs simply have not expanded their reserves in the great hydrocarbon concentrations—those in the Middle East, in particular—over the last several decades. As a result, these international companies are continually driven towards acquisitions in areas with lower concentrations, such as West Africa, Latin America, Russia and Central Asia. The reason they are acquiring assets in these locations is simply because that is where “reserves,” as defined by the international investment community, are formally on offer. They are not necessarily the places where, if one were looking at the capabilities of those companies, they could have the most impact on production, realize the greatest improvement in efficiencies, and add the most value to the global hydrocarbon portfolio.

Second, contracts for most of these projects are awarded tender by tender. The result is often the creation of duplicative silos. These silos of functions, such as procurement, staffing, training, and technology transfer, often feature different teams sitting literally next to one another in offices and contractor organizations. Adjacent projects are sometimes “unitized,” which brings together the production operations for areas embraced by a common geologic reservoir. But unitization is not easily accomplished when the NOCs are different, or in the case of cross-border reservoirs. And there are many functions beyond production, such as procurement, transportation and marketing, that are not integrated and coordinated in the same manner.

As noted above, the host governments often set goals other than profit maximization that define the role and measure the performance of the NOC. Some national companies might be conducting their operations with an eye to the bottom line of net profit. But others may be operating with a view towards full employment, stable revenue, stable production, or transfer of revenues to other parts of the economy deemed politically expedient.

Moreover, the mix of government policies affecting NOCs tends to change over time, due to swings in domestic politics and variations in international macroeconomic conditions. The

current allocation of roles, and the current definition of national objectives, are defined more by these ebbs and flows than by profit-maximization objectives.¹⁷

The NOC and the IOC each brings something to the table. NOCs are able to manage resource and production controls consistent with the way in which the home state perceives those twin measures to be in the national interest. NOCs are the primary agent in many emerging and developing countries for acquiring and developing emerging technologies, and for transferring those technologies to other parts of the domestic market.

The IOCs possess or have access to a tremendous base of expertise and resources that are underutilized assets. IOCs also have a strong capability to define markets for new products. When oil began to flow out of Kazakhstan and Russia into European markets, for example, it was the international companies that were instrumental in creating blended crude specifications that could be relied on by Mediterranean refineries. But with limited access to the primary sources of reserve growth in the world, the IOCs do not have the opportunity to deploy fully the access to the markets they enjoy.

Technology transfers can come from a variety of sources, it is true—including from other countries' NOCs and from the oil field service companies. But they have historically come from the IOCs, which can offer efficient application and communication of that technology. In addition, the IOCs' "project discipline"—the ability to bear, absorb, transfer and manage risks, to control and manage procurement and construction decisions, and to spend money for the right reasons at the right time—is the envy of companies in many other industries, whether private or public.¹⁸

II. STRATEGIC ALLIANCE ALTERNATIVES

A. *NOC-IOC integration opportunities*

In short, as the IOC and NOC relations are currently structured, their individual strengths are not necessarily being deployed to reap the full benefit of their respective capabilities. Are there other structures in which the talents and endowments of both types of entities can be used to increase the value and performance of the global hydrocarbon portfolio?

Alternative structures can integrate NOCs and IOCs to varying degrees. At one end of the spectrum, we could consider outright acquisitions—the acquisition of an IOC by a NOC, or of a NOC by an IOC. The political challenges to such an absolute takeover, in either direction, may be daunting. At the other end of the integration spectrum, one could consider subcontracted relationships, where the IOC merely provides a service utilizing its talents for an appropriate compensation. For example, Gazprom appears to be offering such service roles to European

¹⁷ Some of these political forces can be grouped under the heading of oil nationalization. Joe Barns & Matthew E. Chen, "NOCs and U.S. Foreign Policy," James A. Baker III Institute for Public Policy, Rice University (2007), Appendix I (describing the cases of Venezuela's PDVSA and Mexico's Pemex).

¹⁸ Nolan & Thurber, *supra* note 6.

IOCs as a condition of initial entry into the Shtokman natural gas development project in the Arctic Ocean.

Between these extremes lies the opportunity to establish forms of integration that are not complete takeovers but that nonetheless go “beyond the tender” of particular blocks, into the realm of strategic alliances. The term “strategic alliance” is used here to refer to a joint venture between two large organizations for the conduct of business with each other contemplated to have a relatively long duration, in a broadly defined functional or geographical subset of the organizations’ scope of activities. It is distinguished from joint ventures for a particular facility, set of assets, or business line; from joint ventures of broader scope but for a relatively short duration; and from two parties’ common investment in a portfolio company in the absence of further integration between the co-owners.

There are numerous examples of IOC-NOC alliances in the international oil industry. Some representative cases are the following:

- BP and Statoil created (and then dissolved ten years later) a joint venture for international exploration and production activities.
- Aramco was essentially such an alliance during its initial phase, with the Saudi Arabian government and the Western oil company shareholders (first Standard Oil Company of California (now Chevron), later joined by Texaco and the predecessors to Exxon and Mobil).
- Texaco set up downstream U.S. joint ventures with the Saudis, first the Star Enterprise venture and then (along with Shell) the Motiva venture.
- ConocoPhillips acquired 9.9% of the common stock of the Russian oil company LUKoil.
- Abu Dhabi National Oil Company (ADNOC) entered into an agreement with Occidental Petroleum whereby ADNOC will hold a 60% interest and Occidental will hold a 40% interest in a 30 year deal to develop reservoirs in the Shah field southwest of Abu Dhabi city.¹⁹
- Eni and PetroChina entered into a memorandum of understanding to develop unconventional resources (such as shale gas) in China and elsewhere.²⁰
- Rosneft and ExxonMobil will form a joint operating company (66.7% and 33.3% ownership interests, respectively) to develop Black Sea oil and gas resources.²¹
- Sinopec agreed with Australia Pacific LNG to purchase a 15% stake in the AP LNG project from ConocoPhillips and Origin Energy Limited.²²

¹⁹ Ernst & Young, *National Oil Company Monitor Q1 2011*, p. 4, available at [http://www.ey.com/Publication/vwLUAssets/National_Oil_Company_Monitor_Q1_2011/\\$FILE/National_Oil_Company_Monitor_Q1_2011.pdf](http://www.ey.com/Publication/vwLUAssets/National_Oil_Company_Monitor_Q1_2011/$FILE/National_Oil_Company_Monitor_Q1_2011.pdf).

²⁰ *Id.*

²¹ *Id.* at 3.

²² Ernst & Young, *National Oil Company Monitor Q2 2011*, p. 7, available at [http://www.ey.com/Publication/vwLUAssets/National_Oil_Company_Monitor_Q2_2011/\\$FILE/National_Oil_Company_Monitor_Q2_2011.pdf](http://www.ey.com/Publication/vwLUAssets/National_Oil_Company_Monitor_Q2_2011/$FILE/National_Oil_Company_Monitor_Q2_2011.pdf).

There are also an increasing number of significant NOC-NOC alliances, which have continued to develop and expand. Some examples are the following:

- China National Petroleum Company (CNPC) and Cuba's NOC, Cupet, signed an agreement to allow Cupet to leverage CNPC's technological capabilities, increase output and decrease operational costs.²³
- Petroleos de Venezuela (PDVSA) and Ecuador's NOC, Petroecuador, entered into oil and gas cooperation deals to develop blocks in Ecuador and explore blocks in Venezuela.²⁴
- ADNOC and KNOC created a joint venture for the exploration and development of three blocks with estimated reserves of 340-570 million barrels of oil in Abu Dhabi.²⁵
- Korea Gas Corporation (KOGAS) and Uzbekneftegaz to build a network of compressed natural gas stations in Uzbekistan.²⁶

An NOC-NOC alliance may be seen as a more attractive alternative to an IOC-NOC alliance for purposes of domestic politics, in circumstances where consorting with an IOC is considered to be undesirable. An NOC-NOC alliance may also make sense in circumstances where an IOC partner is difficult to find, or if the partner NOC is willing to agree to a more favorable arrangement than the IOC. However, an NOC-NOC alliance may also raise additional complications on the international relations front, depending on the participants and the converging or conflicting interests over time of their respective host governments.

Strategic alliances are not a good idea between just any NOC and any IOC (or NOC) on any project, as the unhappy experience of some of these past alliances has demonstrated. BP's Russian ventures with LUKoil (LUKARCO), TNK (TNK-BP) and Rosneft, and Shell's ventures with Rosneft and Gazprom for giant gas projects in Sakhalin and elsewhere, have proven difficult. But even these problematic examples are instructive. Some of the Russian ventures did not offer full potential for gains because they focused on opportunities made available only at the option of the NOC. In some cases involving domestic onshore projects, it may have been unclear what the IOC added to the capabilities of a large and sophisticated NOC. Alliances might be more successful focusing their combined efforts on "frontier" prospects outside the NOC's existing business plan.²⁷

²³ *Id.* at 4.

²⁴ *Id.*

²⁵ Ernst & Young, *National Oil Company Monitor Q1 2011*, p. 4, available at [http://www.ey.com/Publication/vwLUAssets/National_Oil_Company_Monitor_Q1_2011/\\$FILE/National_Oil_Company_Monitor_Q1_2011.pdf](http://www.ey.com/Publication/vwLUAssets/National_Oil_Company_Monitor_Q1_2011/$FILE/National_Oil_Company_Monitor_Q1_2011.pdf).

²⁶ Ernst & Young, *National Oil Company Monitor Q4 2010*, p. 5, available at [http://www.ey.com/Publication/vwLUAssets/Q4_NOC_Monitor_FINAL/\\$FILE/Q4_NOC_Monitor%20FINAL.pdf](http://www.ey.com/Publication/vwLUAssets/Q4_NOC_Monitor_FINAL/$FILE/Q4_NOC_Monitor%20FINAL.pdf).

²⁷ Elsewhere, I have defined "frontier" projects as those "where alternative technologies, conflicting laws and agencies, and uncertain benefits or risks constrain the knowledge or decisions of participants" in new fields or applications. Robert A. James, "Finesses and Game-Changers in Frontier Project Development: The Case of Carbon Capture and Storage," Stanford University PESD Working Paper No. 87 (2011), p. 5, available at http://pesd.stanford.edu/publications/finesses_and_gamechangers_in_frontier_project_development_the_case_of_carbon_capture_and_storage.

The focus for a particular alliance will vary depending on the profile of the particular companies involved.²⁸ An alliance between an IOC eager for reserves and a NOC with international ambitions could work well in underdeveloped areas outside of the home country of both companies. The right geographic focus must be combined with the right functional segment. Some of the ventures mentioned above cover a particular exploration sector, offshore or onshore, not necessarily limited to one specific country or region. Deepwater offshore exploration might be an appropriate scope. Complex new products, such as heavy oil or bitumen from oil sands, and challenged existing products, such as liquefied natural gas (LNG) under depressed pricing and other obstacles to international gas movements, are also segments where strategic alliances between IOCs and NOCs could be successful.

An alliance based in the NOC's home country may face significant operational challenges unless the geographic focus requires something that the IOC can uniquely contribute. For example, there might be regions of a country that are especially technologically challenging, and where the IOC provides technology to which the home NOC does not have effective access. Other possibilities include the development of large-scale alternative energy projects, or the marketing and trading of carbon emissions. The NOCs thus may have reason to call on the institutional capabilities of the IOCs to optimize the development of these new business lines that become the province of the national companies.

A strategic alliance might also be in order where resources exist underneath political "neutral zones," locations claimed by more than one country. In such zones, neither NOC of the countries claiming sovereignty may be welcome as a solitary developer or operator. Perhaps some of these neutral zone production areas could be further integrated, using an IOC as an entity deemed to be isolated from the local political conditions. One example of a successful implementation of this strategy is Chevron's exploration and production contracts in the Partitioned Zone between Kuwait and Saudi Arabia. Other projects in contested geographic areas have not fared so well; a power plant in the Gaza Strip proposed by an Enron-Palestine Electric Company (PEC) venture was derailed by regional strife, heightened by the uncovering of links between PEC and the Binladin Group.

Similarly, the difference between an IOC's profit-maximization objective and the local NOC's other objectives could be embraced, and in fact provide the justification for an alliance. An NOC may be generally used by the host government to address broad public policy goals such as high employment or stable revenues. But it may be politically as well as economically expedient to ring-fence off one portion of the NOC's assets into an NOC-IOC joint venture that has as its unambiguous goal the maximization of profit over a defined period. Such a venture may be more attractive to other investors and lenders, and be free of some of the host government's additional constraints.

²⁸ For a discussion of alliance opportunities with Middle Eastern NOCs, see Valérie Marcel, *OIL TITANS: NATIONAL OIL COMPANIES IN THE MIDDLE EAST* 209-27 (2006).

B. *The NOC's take on alliances*

Why might an NOC look at these alliances? For these purposes, we should consider the interests not only of the NOC but also those of its host government, and of the country and people whose natural resource is the subject of development.

First, an alliance with a large IOC can provide some diversification to the NOC and its government. If they can tap into the presence of the IOCs in other markets, the impact of a downturn in the local economy or resource can be blunted.

International companies may have easier access to portions of the world's markets, especially given their vertical integration. Even the U.S. markets are not all that easy to enter. One early focus for Gazprom and the Russian government for the Shtokman project was facilitating access into a strange region known as the Gulf of Mexico—which may well be as foreign to the Russians as the Arctic Circle may be to the American IOCs who expressed an early interest in participating. (The Shtokman project is currently being developed with French IOC Total and Norway's Statoil for the European markets.) National companies that are starting to operate in world markets may benefit from an alliance with those who work well throughout such markets and who have the ability to create and define product specifications that will be accepted in those markets.

The strategic alliance might also provide some political cover for unpopular decisions. The venture may have more latitude than the rest of the national company's operations to employ assets in the service of more narrowly economic objectives. Politicians can argue that "their hands are tied" when it comes to joint venture actions that are economically rational but politically unpopular, such as investments in countries with dubious governance or in technologies with significant environmental footprints. Moreover, the participation of a respected private partner might help convince an NOC convince its government that forays into uncharted territory are prudent in the first place. For example, the Norwegian parliament might not have approved Statoil's internationalization efforts in the 1990s if BP had not also been a party to them.²⁹

NOC-IOC joint ventures were also a source of significant technological and resource transfer, particularly when NOCs with access to resources required the specific expertise of IOCs to develop those resources. Times have changed in this regard in some instances, and we now see NOCs with well-developed, indeed in some cases industry-leading, technical contributions. With this incentive for creating alliances diminished, some NOCs have begun to consider that the new value in partnerships with IOCs must be something other than the transfer of information. These new alliances frequently aim at expanding the NOC's geographic or industry reach (for example, by obtaining an interest in a different geographic location or type of production) or in providing training for its personnel within the IOC's organization. Secondment opportunities for NOC employees within the IOC have become important management training tools for the next generation of NOC leaders.

²⁹ Mark C. Thurber & Benedicte Tangen Istad, "Norway's Evolving Champion: Statoil and the Politics of State Enterprise," Stanford University PESD Working Paper No. 92 (2010), available at http://pesd.stanford.edu/publications/norways_evolving_champion_statoil_and_the_politics_of_state_enterprise/.

The principal disadvantage, for many NOCs and governments, is that a strategic alliance may confer equity interests in hydrocarbon reserves to a foreign entity. In the second and third waves of hydrocarbon resource development described in Figure 1 above, eliminating such foreign equity was almost tantamount to an article of faith in a number of these countries.³⁰ This taint may be very hard to wash off.

One challenge for NOCs is how to effectively exercise the privileges the NOC may have acquired in the formation of a joint venture or the purchase of a majority ownership interest. For example, a NOC might enter into a venture with an IOC for operations in a location or involving a process or technology with which the IOC has significant experience. The NOC might be the majority partner and be legally and contractually vested with formal controls, but lack the in-country experience and internal capability and resources to exercise those rights in practice. This may be a recipe for future disputes among the project owners.

Another challenge for any use of strategic alliances occurs once a host government depends on an alliance rather than on unmitigated competition for individual tenders. That government may lose some of the competitive juices that allow it to obtain a favorable total return or “take” from individual projects. At the same time, however, the government could gain a greater degree of commitment and alignment from an IOC. Even, or especially, an IOC of the size of Exxon Mobil seeks to be “a partner of choice among many of the governments and national companies with whom we do business.”³¹

C. The IOC’s take on alliances

What are the advantages and disadvantages from the IOC’s perspective with respect to NOC-IOC alliances? Here, the interests of the IOCs’ investor community and the governments most associated with the IOCs should be considered.

From these perspectives, the top three reasons to engage in a strategic alliance with a NOC are reserves, reserves, and reserves. The main benefit of such an alliance is to afford the IOC potential access to reserves in those places where its technology and other resources are valued the most highly and can have the most impact on profitability and production—in other words, projects that are large, or complex, or “frontier” in some sense. These opportunities may also allow the IOC to have access to a lower-risk proving ground for innovative frontier technologies.

Additionally, there could be a reduction of political risk faced by the IOC, at least as long as things are going well—while the joint venture’s interest and the NOC’s and host government’s interests all remain aligned. Actions that a host government might take against foreigners might be less likely to happen to a project or entity with heavy NOC investment. Indeed, many NOCs

³⁰ This is especially true in the Middle East. After a history of concessions and nationalization, Saudi Arabia, Iran and Kuwait, which together hold more than 40% of global oil reserves, will not offer equity stakes. Instead, they rely on variants of royalty agreements, development agreements and fiscal agreements. Valérie Marcel, OIL TITANS: NATIONAL OIL COMPANIES IN THE MIDDLE EAST 39-40 (2006).

³¹ Lee Raymond, CEO of Exxon Mobil, analyst meeting (Mar. 10, 2004), transcript at Exhibit 99 to Exxon Mobil Corporation Form 8-K (filed March 17, 2004)

reward loyalty and provide exclusive incentives to those IOCs with which they perceive they have developed long-term, mutually beneficial relationships. However, any relationship is subject to transformations, and it might be a very different story at the end, or threatened end, of such a relationship. In that case the NOC and the host government might enjoy strong leverage and thereby increase the political risk to the IOC associated with the termination of the arrangement.

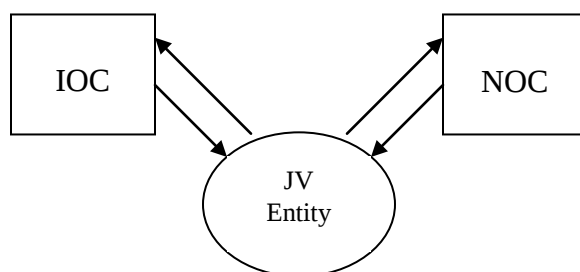
Even in current models of oil ownership and control, an IOC can become entwined in local politics, civil unrest and disruptions in the regional economy, because it does business in an unstable country. A joint venture in which the IOC has partial ownership and control will heighten the concerns of the IOC and its stakeholders over such entanglements. With the closer relations to the state required for a strategic alliance, at a minimum the IOC will need strong policies in place to distinguish the conduct of the joint venture from the local, regional and national security forces and objectives of the host government.

III. STRUCTURES FOR STRATEGIC ALLIANCES

A. *The venture entity alliance structure*

Transactional lawyers and negotiators can conceive of specific ways in which NOC-IOC strategic alliances can be structured. One obvious method is the historically familiar form of a joint venture company, as illustrated in Figure 4. In this structure, two or more parties would enter into a contract and typically would form a new legal entity. The new entity would enter into the leases, production sharing agreements, and other agreements for development of the project. The parents would share control over the governance of an enterprise, and one party or a new staff would operate the venture from day to day. All of these companies might be party to an investment protection agreement with international dispute resolution provisions.

Figure 4.



The scope of such a venture could be described functionally—for example, exploration and production in deepwater offshore worldwide using a defined type of technology. Or the scope could be defined in geographic terms—say, bids for new blocks in one or more specified countries in West Africa. There could be an exclusive part of the scope, in which the parent companies agree that only the joint venture will engage. There could be some complicated areas of non-exclusivity, which are left open for both parents to engage in, or perhaps where both

parents plus the joint venture entity may participate. Non-exclusive scopes are always an interesting part of any joint venture negotiation, and are challenging from a commercial, governance and competition law standpoint.

The core value proposition, historically, is that the parties exchange technology and provide training; the IOC provides its risk and project management expertise, and project staffing, capital and access to downstream markets; and the NOC or its host government provides new prospects and projects that otherwise would not be accessible to the IOC. The NOC and the relevant governments would further obligate themselves to cooperate in getting permits and other local authorizations needed to conduct the business.

As with many joint ventures in many businesses, the new entity would be entrusted to manage and execute a number of significant operational actions. Major issues arise in structuring the formation agreements as to how those activities will be controlled in the future. Some issues will require a supermajority or unanimous vote at the parent board level, while other issues can be decided by the staff to which some level of authority is delegated.

Upstream joint venture agreements often provide that if both parents do not agree to an expansion of the business, certain projects can be undertaken for the account of one of the parents, referred to in the oil industry as “sole risk” or “non-consent” projects. The parties will face complex issues as to how they decide what profits are either distributed or reinvested; when expansions should be undertaken; and other issues for which the drivers for the IOC and the NOC may dramatically diverge. There are a number of issues associated with termination of or exit from the joint venture, addressed in part III(D) below.

These are well known formation issues, with which oil company and government negotiators and decision-makers are well accustomed. Entity joint ventures are often associated with difficult disputes over day-to-day control. There are a number of challenges in designing the governance of such ventures, in order to give the entity enough freedom to act while assuring both parents that it acts in their best interests.³²

One conclusion of an academic study of the BP-Statoil venture was that “the majority assessment in both companies, at all levels and functions, seemed to be that the requisite trust to avoid duplication was not present.”³³ This is academic speak for the viewpoint that for at least some decisions in some contexts, nobody trusted anyone. Many jobs were done twice, or maybe even three times when neither of the parents trusted the child. It is important to note that BP and Statoil were both northern European companies, with considerable prior mutual dealings in the North Sea and elsewhere. There are many national companies and international companies between which one might expect the cultural challenges to be greater still.

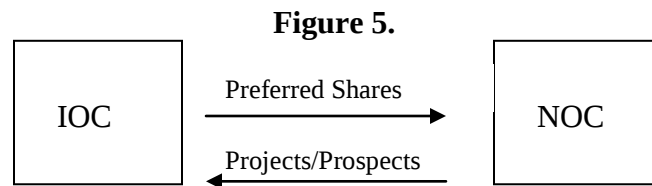
³² For an outline of joint venture agreement drafting considerations, see Robert A. James, “Joint Venture Agreements: Major Issues and Common Provisions,” in *THE BEST PRACTICES OF LEADING ENERGY LAWYERS* 397 (2007).

³³ Lin Lerpold, “The Statoil and BP E&P Alliance,” Stockholm School of Economics, Institute of International Business (2006).

B. *The preferred equity alliance structure*

NOCs and IOCs can consider ways of aligning their interests and more efficiently utilizing their strengths without forming a separate entity with a separate center of power and operations. Can alignment be achieved without setting the venture up for day-to-day challenges and disputes over control?

One structure worth exploring is the use of transfers of equity shares and assets between NOCs and IOCs in order to achieve a shared interest in the optimal development of projects. Such transfers can occur directly between the parties themselves, without creating a third joint venture entity. There are some examples of such alliances, such as ConocoPhillips's acquiring a ten percent interest in the common shares of LUKoil, which itself is in some ways a hybrid between an IOC and a NOC. BP also intended to swap stock with Rosneft in exchange for exploration rights in the Arctic Ocean, though that deal was thwarted by the conflicting claims of TNK.³⁴



But there may be more pervasive ways of controlling, confining and channeling the mutual relationships of two such companies. One such idea, illustrated in Figure 5, is the issuance of a special class of stock of one company in return for specific assets or entitlements of the other company. The concept is that in return for transfer of projects and prospects of the NOC or its government, the IOC would issue the NOC or its designee a class of preferred shares. These shares would have entitlements to dividends at the same level as similar shares of common stock, but would enjoy a stated preference upon liquidation. Through class voting, for certain decisions, where the consent of this new preferred class is mandatory, the NOC would enjoy certain controls on fundamental changes and have significant input on the governance of the IOC.

In this preferred equity alliance, the NOC thereby could reap a more stable and secure flow of revenue; a diversified portfolio of interests in business lines and regions; greater opportunities for technology transfer and human resource development; and perhaps other advantages. There is the possibility for the NOC to secure dedicated seats on the board of directors. Depending on the applicable corporation laws and stock exchange requirements, they may be able to control the nomination of certain critical board committee memberships, such as those responsible for audit, compensation of executives, and nomination of directors.

³⁴ The deal eventually consummated between Exxon Mobil and Rosneft calls for a multi-billion dollar investment by Exxon Mobil in the Arctic Circle exploration project and a potential transfer of some of Exxon Mobil's assets in the Gulf of Mexico to Rosneft. See Julia Kollewe and Tom Bawden, *BP-Rosneft Deal Collapses*, THE GUARDIAN (May 16, 2011); Andrew E. Kramer, *Exxon Reaches Arctic Oil Deal with Russians*, N.Y. TIMES (Aug. 30, 2011).

Such a separate preferred class could be set up so that the NOC is restricted from reselling the shares or buying any additional common shares for a period of time. The preferred shares could be structured so that if they are in fact sold, they would revert to common shares. Thus, the IOC and its other investors could enjoy a relatively stable environment for an agreed duration.

An important complement to this approach would be a more integrated staffing model. The alliance could thus extend throughout the organization chart, with appropriate levels and flows of international and national company personnel and technology development and transfer. Although such integration of staffing presents some complexity in the day-to-day operation, it would give both sides more information and reduce the need to trust the other party from a distance.

C. Common features and shortcomings of alliance structures

One advantage of alliances of either the venture entity or preferred equity type, at least from the standpoint of the IOC and its investors and interested governments, is the ever-present obligations of the IOC or the joint venture in favor of the NOC or host government. As I have pointed out elsewhere with respect to protecting other forms of international investment from political risks, it is often good to be a debtor.³⁵ Within some bounds, it is preferable to owe performance or payment to a sovereign, rather than to perform first and then have to expect, induce or threaten the sovereign to perform back.

To this end, I have described a tool I refer to as a “self-enforcing equilibrium clause.”³⁶ In a preferred equity alliance, the parties could declare that the dividend or other payment streams and the control and governance rights will automatically be subject to offset or other formula-defined adjustment if the agreed tax, regulatory and other terms and conditions of the investment are not met. Thus, the IOC is not in a position of having to sue a sovereign in the event of changes in the agreed economic conditions, whether external or not. The IOC’s remedy can be to withhold amounts of dividends or distributions from what is owed by either the IOC or the joint venture entity. Such an offset may only be valuable to the extent of the amounts owed by the IOC or venture, so it may not be a complete protection.

It must be acknowledged that self-enforcing equilibrium concepts could, in principle, run both ways. If the IOC does not perform on its front—for example, if projects run by the IOC encounter cost overruns (on individual projects or in the aggregate) that are not considered beyond the IOC’s control—then the NOC’s dividend and governance rights against the IOC could be automatically adjusted upward.

There are a host of complex regulatory issues associated with a separate class of preferred equity. There are securities and corporate governance aspects that need to be addressed. The parties

³⁵ Robert A. James & John G. Mael, “An Integrated Approach to International Energy Investment Protection,” *Proceedings of the 58th Annual Oil and Gas Law Conference*, Institute for Energy Law, Center for American and International Law (2007).

³⁶ Robert A. James, “Self-Enforcing Equilibrium Clauses,” course materials for Investment Treaties course at University of California, Berkeley, School of Law, 2008-2009.

could expect a number of questions from existing common stockholders of the IOC, from commercial and international lenders, from central banks and the IMF, from nongovernmental organizations (NGOs), and from other private stakeholders.

The parties would also face significant scrutiny from all relevant governments regarding issues of foreign investment—of the NOC in the equity of the IOC, and of the IOC in the projects and prospects of the NOC. The IOC would need to anticipate and guard against being entwined with policy issues associated with the NOC and the economic, political, security powers of the host state. Such an alliance could embroil the IOC intensely in questions of how money flows to government officials, raising questions under the U.S. Foreign Corrupt Practices Act or analogous anti-bribery laws called for by the Organization for Economic Co-Operation and Development. There may be antitrust or competition law issues, particularly for alliances in the more concentrated or regulated downstream (refining, marketing and transportation) sectors.

One finesse for this cluster of investment protection and regulatory concerns goes back to the issue of geographic focus: define the purpose of the alliance to be the conduct of businesses exclusively outside the borders of either company's home jurisdiction.³⁷ In this way, a Western firm would not be trying to do business with an Indian firm in India, or a Chinese firm in China. Instead, there might be a venture between an American or European firm, and a Chinese or Indian firm, for exploration and production offshore sub-Saharan Africa. This runs counter to one of the expressed advantages of strategic alliances, namely to gain access to reserves controlled by the host government of the NOCs. But some of the political risk and regulatory issues could be mitigated to the extent that the alliance is made less dependent on the interests of one or the other of the home states.

D. Ending the strategic alliance

I must finally address the sensitive subject of exit from and termination of the strategic alliance. There is a meme in pop culture: "Curse your sudden but inevitable betrayal."³⁸ When I first heard the curse, I mused, as a joint venture lawyer, about what it means—that is, what it *must* mean for a "betrayal" to be "inevitable." This question struck a familiar chord for me, because some of the joint ventures I have worked on seemed pre-wired for disappointment over the parties' trust in the venture and in one another.

For example, some joint ventures are formed in which one party is understood to have as its predominant objective an initial transfer of technology, or the initial entry into a particular geographic or product market. What happens to such a joint venture and the interests of that party if that initial purpose becomes either satisfied, or frustrated? Whether the purpose is achieved or prevented, one might not expect there to be an ongoing continuity of interest in the venture's success.

What I and other joint venture lawyers do, at least in part and with considerable delicacy and subtlety, is plan for the "inevitable" exit. I would not characterize such an exit necessarily as a

³⁷ On business finesses generally, see James, *supra* note 27.

³⁸ From the lamentably short-lived *Firefly* television series (see <http://www.imdb.com/title/tt0579535/quotes>).

“betrayal,” or in other terms suggesting a breach of some absolute concept of trust. Part of our job is to define the objectives and scope of the venture, and thereby to plan the extent of commingling of assets and integration of functions in the right way in the first place. These terms should be consistent with the perceived lifetime objectives of the parties, both at the outset and over the potential expected duration of the alliance.

For example, there might be defined five-year intervals, at the end of which one or both parties would have the right to sell its own interest or the right to buy all or some of the other’s interest. In the event of dissolution, the parties might resolve to require “unscrambling of the omelet” by returning the NOC’s projects to it. Alternatively, on breakup the NOC could simply receive an undifferentiated share of the equity or underlying assets of the overall venture or company. Either of these distribution rules might form the basis for subsequent bargaining among the parties to achieve a different allocation of assets.

An important issue from the IOC’s standpoint is the treatment of the reserves managed by the strategic alliance in the event of its dissolution. The planning for joint ventures is difficult when reserves define the importance of the venture to the parents’ stock value. Having some feathering of the downward impact of any reserve loss may be part of the solution for any such termination.

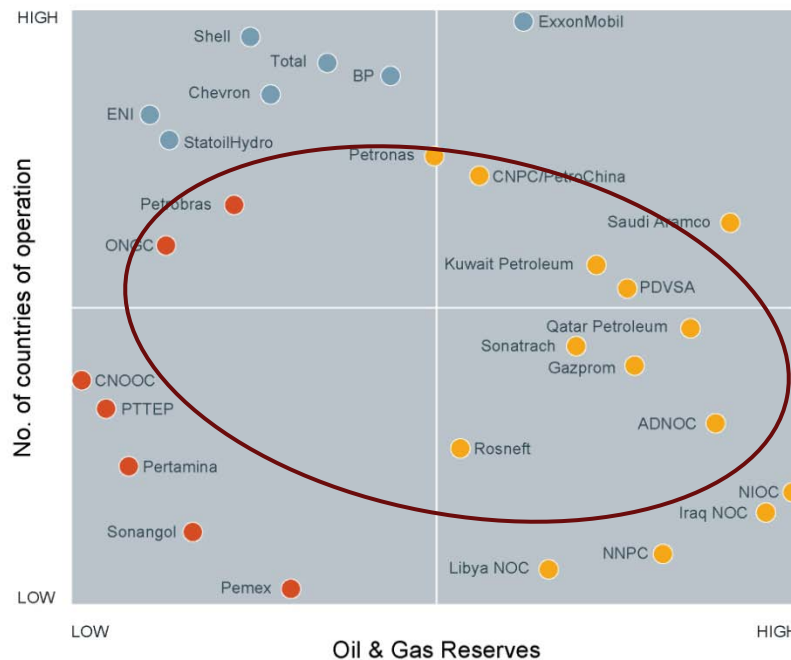
IV. THE FUTURE OF NOC-IOC STRATEGIC ALLIANCES

A. The “sweet spot” for future ventures

Putting all of these considerations together, I can offer some highly unscientific comments on what good strategic alliances might look like. Alliance opportunities will likely not occur on a small scale. They have to be big enough for efficiencies to take place.³⁹ But if the parties or their home governments have ruled out the possibility of outright acquisitions, the venture cannot be too big either. The venture should not be so large that either the NOC or the IOC exercises undue influence over all aspects of the other partner’s business. The scale of the alliance will thus likely need to be of moderate size in comparison to the reserves and productions of not one but both companies.

³⁹ “Indeed, while NOCs have built technical expertise and improved access to capital in recent years, they still rely on IOC partners, who bring a full complement of skills, knowledge and technology to their partnerships, especially for large-scale, high-cost, complex projects.” *What is next for international oil companies?* Ernst & Young (2008), at 2.

Figure 6.



Source: Ernst & Young (2009). *Are National Oil Companies the new International Oil Companies?*

The best candidates for alliances appear to be NOCs that have either high reserves and limited presence in international operations, or low reserves yet an evidenced drive for an international presence. Figure 6 above illustrates this zone.⁴⁰ A number of these NOCs also obtain capital in middle-of-the-road ways, such as debt markets and joint ventures. An alliance with an IOC can offer such a national company the reliable capital of the IOC's retained earnings and the IOC's potentially greater access to equity markets.

In terms of geographic and functional focus, these strategic alliances should aim for fields in which each party lacks the opportunity and capability to enter or thrive alone. Activities in politically difficult regions may be easier if companies from two countries participate. Other good candidates lie in unconventional production, such as deepwater offshore exploration, and complex new products, like heavy oil or carbon dioxide emission credits.

A note of caution must be sounded on the ability of any venture to achieve success in extreme environments. The Deepwater Horizon explosion and its aftermath are evidence that disasters may occur even when projects are operated by the entities with extensive experience. It would be a mistake to believe that any IOC, NOC or IOC-NOC operation would be without risk. This holds particularly true as production activities are increasingly centered in areas where technical, economic and political risks are greatest.

⁴⁰ Others have identified the NOCs at the upper edge of this zone as "emerging national oil companies." Dag Harald Claes & Helge Hveem, "Emerging National Oil Companies—challengers or partners?" 19-29, presented at International Studies Association Annual Convention (2009).

B. If not alliances, what?

There is no doubt that NOC-IOC joint ventures will encounter significant roadblocks and obstacles. But I would leave the reader with a series of questions.

Despite all of the formidable challenges to NOC-IOC strategic alliances, what exactly are the alternatives to such structures?

Will policymakers, investors and other stakeholders prefer to leave NOCs managing and operating virtually all of the world's resources, with their economics strongly influenced by home state fiscal, policy and political issues? Will they leave the NOCs' vital production levels swerving from objective to objective with the passage of political time?

And will similar groups of stakeholders allow the expertise, technology and capital of the IOCs to be stranded, deployed in marginal or declining-production fields? And leave such highly capable and endowed firms confined to operating primarily in those countries where, by chance or due to a government's temporary economic straits, the reserves happened to be temporarily available at the time the IOCs gained entry?

Petroleum industry observers and analysts have suggested that IOCs have to package their value proposition in creative and flexible ways, and that those who are willing to adapt will maintain their "viability." "Viability" is a rather pleasant sounding word until one considers the alternative of ceasing to exist. Both IOCs and NOCs need to take seriously the prospect of strategic alliances as a means for responsible and efficient development of the world's most important hydrocarbon resources.

