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RUSSIAN FEDERATION ENERGY POLICIES AND RISKS TO INTERNATIONAL JOINT VENTURES IN THE OIL AND GAS INDUSTRY

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Russia and other oil-rich nations are renegotiating production sharing agreements (PSAs) with stricter terms as well as phasing out these types of contracts as they turn more to the enhanced capabilities of their national oil companies (NOCs). In this paper NOCs are portrayed as aggressive competitors against international oil companies (IOCs). In this shifting landscape many Western oil companies are finding their traditional influence in the oil and gas industry (OGI) deteriorating as high energy prices have brought about renewed nationalism. As a result, many of the existing international joint ventures (IJVs) are experiencing additional business risks as Russia exploits its gas and oil resources to become an assertive energy superpower. The significance of the Kremlin changing the rules and becoming more obsessive with their resources and more bellicose with their entire upstream and downstream operations as it impacts upon IOCs is discussed in this exploratory paper.

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INTRODUCTION

The focus of this paper is the changing landscape of IOCs as they attempt to compete with NOCs in acquiring energy resources. The super-major oil companies (for the most part Western "Big Oil" companies) were engaged in many lucrative IJVs until the twenty-first century when numerous oil-rich host countries decided that they no longer needed these sharing partnerships. Many of these emerging market countries learned a great deal from their previous joint ventures capturing advanced technology and management skills required to be successful. Russia and other former members of the USSR (located in central Asia) together began to renegotiate contracts and demand majority ownership in existing contracts.

In 1998 oil prices were bottoming out at \$10 a barrel. Ten years later the same commodity is at nearly \$120 a barrel. From April 2007 to April 2008 oil prices rose 85 percent (Meyer, 2008). It is estimated that every dollar boost in the price of oil increases Russian revenues by \$1.4 billion (Corsi and Smith, 2005). Spilimbergo (2005) estimates that a one dollar increase in the price of a barrel of Urals blend oil for a year raises its federal budget revenues by 0.35 percent of GDP. This has resulted in a de facto nationalization of Russia's OGI (Idov, 2008; Politkovskaya, 2007).

A great deal of nationalism has arisen in these countries over their natural resources and now, for the most part, they are convinced that they can hire oil service firms to assist, as needed, in future exploration and mining of these energy resources. By doing more in both the upstream and downstream operations Russia has been able to establish a sovereign wealth fund (stabilization fund) and use much of this petroleum revenue for investments as well as immediate spending on infrastructure improvements. Russia's GDP was one trillion dollars by 2006 as hydrocarbon sales assisted in paying off sovereign debt early and allowing it to become one of the world's ten largest economies (Gaddy and Kuchins, 2008; Goldthau, 2008). The country experienced over eight percent growth in 2007 and the country's GDP rose to \$1.3 trillion in 2008. While high energy prices helped to propel this economic growth, oil and gas only contribute about 20 percent of the current GDP (Gvosdev, 2008).

In the days of the Soviet Union, state-owned enterprises were producing more than 12.5 million barrels of oil a day. However, following the collapse of the USSR in 1991, the post-Soviet states oil production amounted to no more than seven million barrels a day by 1996 (Morse and Richard, 2002; OPEC, 2004). A turnaround in Russian oil output began in 1999, but average production growth in Russia's energy fields has slowed to 2.5 percent in 2008 from a high of 12 percent in 2003. The world's second biggest exporter and a counterweight to the oil cartel -- the Organization of Petroleum Exporting Countries (OPEC) – experienced an output decline of one percent in the first three months of 2007, to

9.76 million barrels per day (Andrews, 2008; Hoyos and Belton, 2008; Nowak, 2008).

Experts generally agree that for Russia to increase productivity in the energy sector massive investments are needed. The vice president for Lukoil, Russia's largest independent oil company, recently estimated that Russia needs to invest \$1 trillion over the next 20 years to keep production in the range of 8.5 to 9.0 million barrels a day. The Russian government has made it hard for its oil industry to attract that kind of capital investment due to an austere tax structure.

The Kremlin has structured harsh taxes so that when oil rises above \$27 a barrel the government takes 80 percent of any change in revenue as taxes. That means, for example, at \$107 per barrel, the oil company's revenue increases by just \$16 per barrel from what is was at \$27 per barrel (Jubak, 2008; Leonard, 2005; Nowak, 2008). This unfriendly tax policy provides excess cash for deposit to a stabilization fund that has been in operation since 2004. The deposits amounted to \$80 billion in 2006 and \$157 billion in January of 2008. In February 2008 the fund was split into two parts, the reserve fund to invest conservatively in government bonds and maintain assets equal to 10 percent of GDP, and the national wealth fund to hold \$19 billion in 2009 for investments in global equities and some needed infrastructure projects in Russia (EIA, 2007; Koliandre, 2007; Russian oil, 2008).

Since Yukos Oil (Russia's largest private oil company) was dismantled and the Yukos' main production asset was taken over by Rosneft (the state-controlled oil company) in December 2004, the state's share of the oil industry in the country has risen from 28 percent to more than 50 percent. The takeovers by Rosneft and the state gas-controlled Gazprom, have created a high-risk investment climate. Some Western firms have already been extorted to relinquish majority ownership and the growing impression among these multinational enterprises (MNEs) is: Why enter in the high-risk ventures if eventually the state is going to take away a portion of your assets (Belton, 2008a)?

Thus, since 2003, investments in Russia's OGI have not kept pace with the dramatic increases in crude oil prices. Other reasons for the failure of Big Oil to pursue more ventures in Russia are the fact that no easy oil remains, costs are skyrocketing, and experienced manpower is dwindling. Assuming oil prices at \$110 a barrel, oil companies operating in Russia's core production locations (Siberia and the Caspian Sea) see net income of only \$11 a barrel (Belton, 2008a).

Rising nationalism, increasing operating costs and scarce supplies are limiting investment opportunities for IOCs, leading them to increase share buybacks. A recent study of the Big Five IOCs (Exxon Mobil, BP, Chevron, Royal Dutch Shell and Conoco Phillips) determined that they used 56 percent of their

increasing operating cash flow on share buy-backs and dividends instead of exploration and production (E&P). In 2007 Exxon devoted \$35.6 billion for this purpose, up \$3 billion from 2006. Conoco, the United States' third largest oil company, plans to spend \$10 billion on share buy-backs in 2008. The super-oil majors have been reducing E&P dollars since 1988-1989 and NOCs now control more than 80 percent of the world's fossil fuel energy reserves (McNulty, 2008a).

When the super-oil majors do obtain access to the mammoth-sized fields required for sufficient returns, they are frequently subjected to high royalties and taxes. This is forcing them to look beyond fossil fuels for their raw materials. Moreover, it is forcing them to self-examine their IOC model of doing business and to consider strategic alternatives to transform themselves as necessary. As producers of energy in an eco-conscious world, some of these MNEs are looking for newer, exotic types of energy. Conoco has developed technology to turn coal into a synthetic natural gas; BP is planning to steer more of its future business into mining Canadian oil shale and is turning to investments in biofuels (McNulty, 2008b; Wheatley and Crooks, 2008). It appears that IOCs are learning to adapt to the necessity for change in their business enterprises, but have they learned enough to navigate successfully through this shifting terrain and business environment in the years ahead (Crooks, 2007a; Mahtani, 2007)?

The paper is organized as follows: (1) a brief review of international business theory to help elucidate some of the strategic options available to the IOCs; (2) a discussion of some IOC problem areas; (3) the IOC solutions to some of the explicit problem areas discussed in the paper; and (4) a discussion of what we have learned in this exploratory paper together with some conclusions that should be helpful to managers and investors in the OGI.

Oil companies require predictability so that decisions can be based on solid assumptions. A challenge that oil companies encountered in Russia through the Yeltsin and early Putin years has been that the rules changed constantly – as have government officials, attitudes to rule enforcement and just about everything else. The dismantling of Yukos Oil and the jailing of its founder, Mikhail Khodorkovsky, are the best known examples of this trend (Aron, 2007; Brzezinski, 2007; Wu and Cavsugil, 2006). Russia wants to retain as much control as possible over its energy resources and export infrastructure (Woods, 2007) and all main decisions concerning the direction of the oil industry are made by the Kremlin because of the strategic nature of the industry and its importance in enhancing Russia's influence on the world stage (Tymoshenko, 2007). Additionally activities are constrained by a perceived general disregard for property rights and a weak rule of law and contract enforcement.

INTERNATIONALIZATION THEORY

According to internationalization theorists, firms expand internationally when their available external market fails to provide an efficient environment in which the firm can profit by using its technology or production capabilities. A central tenet of this theory is that organizations competing with indigenous firms in foreign markets possess an inherent weakness stemming from the disadvantage of 'foreignness'. Accordingly, the literature over the years has focused on identifying the characteristics and processes required for firms to overcome the disadvantages of foreignness (Hutzchenreuter, Pedersen and Volberda, 2007).

One example in the literature is the suggestion by Johanson and Vahine (1977) to learn more about overseas markets through practical experiences abroad. But the assets in the OGI and many other industries have been built-up over time with major investments in people, technology, and techniques required to compete in a competitive market-place. Most of the major Western players in the OGI have been "bulking –up" over time through opportune merger and acquisition (M&A) strategies (Campbell, 2002; Corsi and Smith, 2005; Patton, 2007).

Buckley, Devinney and Louviere (2007) note that MNEs location and control decision-making is most prevalently discussed in the literature as questions: (1) where should the activity be located? and (2) how should it be controlled? With respect to the location decision, Russia is an obvious choice for energy firms since it is very rich in natural resources. Its deposits of oil -- five percent of the world's oil reserves -- and around 28 percent of the world's gas reserves, make it a country rich in fossil fuel liquids (Kryukov, 2000; Kuznetsova, 2000; Longworth, 2006; Sutela, 2000; Turkellaub and Thorp, 2007).

The control decision boils down to a Greenfield investment or an outsource contract with the adoption of a joint venture a point between the two ends of the continuum (Buckley et al., 2007; Kipchillat, 2002; Pantzalis, 2001). Most of the Big Oil companies are pursuing an IJV strategy, trying to buy their way into Russian oil and gas field reserves as quickly as possible. Joint ventures are defined as freestanding entities jointly owned by the parents (Buckley et al., 2007; Zhang, Li, Hitt and Cui, 2007). The sharing of management that normally accompanies this type of common ownership can cause some operational difficulties and lead to conflict. One of the best and most dynamic of joint ventures are strategic alliances, but not all strategic alliances are in the strictest sense joint ventures (Kipchillat, 2002).

In recent years, the proportion of M&As in total foreign direct investment (FDI) has been growing compared to the option of building new facilities (Greenfield investments). Completed cross-border M&As rose in value from

around \$100 billion in 1987 to more than \$1 trillion in 2000 (Shankar and Luo, 2008).

Reasons for IJVs go beyond survival in the international marketplace or the pursuit of growth opportunities. A joint venture may be the only means of gaining market access, access to material of strategic importance, or access to cheaper supplies. In some cases, a joint venture is a means of smooth transition to a new strategic position (Kipchillat, 2002). IJVs also create synergies, human and capital resources, transfer of technology, and market expertise. In addition to shared benefits, joint ventures enable the sharing of risks associated to the venture operations, and capital (Kipchillat, 2002; Luo, 2000).

With IJV options a foreign investor, an IOC, with minority ownership may well have power over a consortium through the control of technology, management, or other key processes. One of the hallmarks of internationalization theory is a belief that there will be synergy gains from international expansion. Nevertheless, it is a learning process and less experienced managers generally behave in ways that are risk-adverse and perhaps somewhat ethnocentric (Buckley, et al., 2007).

According to internationalization theory, global competitive advantages are developed through M&A by economies of scale and scope, but equally important in many industry sectors today, they are generated by the M&A triggering organizational learning across the many strategic business units. Parent firms can implement information technology to make this corporate learning a reality; however, as a consequence of maintaining a centralized database with universal access (a sort of enterprise-wide resource) internationalization requires a degree of centralized decision-making responsibility and authority. Internationalization theory also specifies that the common governance of activities taking place throughout an enterprise contribute to a reduction of transaction costs. In many industries like the OGI, multinational enterprises are no longer able to compete as a collection of nationally independent subsidiaries. Rather, competition is based in part on the ability to link or integrate subsidiary activities across geographic locations (Shankar and Luo, 2008).

Internationalization is thus a way that MNEs establish globally dispersed foreign operations through a unified governance structure and common ownership. Given that internationalization creates an "unwritten contract" to conduct operations globally through this intra-firm structure, the MNE must be able to successfully carry this out at the culmination of M&A activity. With the increasing pace of business globalization, it is not uncommon to see large firms like the oil super-majors, trying to form strategic relationships with firms from other nations with some of these super-majors embarking on multiple acquisitions (Shankar and Luo, 2008).

RESOURCE DEPENDENCY THEORY

Resource Dependency theory suggests that organizations do not control all of the factors important to their success and must interact with powerful external factors in order to access resources needed for survival. According to this theory, firms are bundles of resources and capabilities. When these resources are unique, valuable, rare, and inimitable, the deployment of these resources allows firms to achieve sustainable competitive advantage (Luo, 2003).

However, a dependency situation arises when multinational subsidiaries rely on irreplaceable resources controlled by local possessors. In other words, a foreign market environment is a source of scarce resources sought by competing multinational enterprises. Thus, MNEs are often dependant on a host country's physical and infrastructure resources and are subject to increasing uncertainty and exposure due to their reliance on this environment. Therefore, if a multinational subsidiary can reduce its dependence on local resources by utilizing more internal resources from its parent or other subsidiaries, the transactional costs associated with resource acquisition will be decreased. This intra-company flow may consist not only of physical resources but also of knowledge, human skills and information (Luo, 2003).

The resource-based view of the firm explains a basic motivation for geographical diversification. That is, firms with unique internal capabilities will apply them in international markets to increase profitability by achieving economies of scale, rationalizing products, amortizing investments over broad market bases, and organizational learning. Thus, the underlying theoretical underpinning is that firms with unique resources can leverage these resources across national markets (Dixon, 2000; Luo, 2003).

CONTRACT STRUCTURE

There are three major contractual models that a country may choose from for the structural basis of its oil industry:

- 1. Tax and Royalty Agreements (TRAs)
- Production Sharing Agreements (PSAs)
- 3. International Joint Ventures (IJVs)

The differences between these models arise from different approaches of host governments to the level of control granted to IOCs, the compensation and reward-sharing schemes, and government involvement.

Tax and Royalty Agreements (TRAs)

In order to attract FDI in politically unstable environments, TRAs have been employed internationally for providing long-term stability. A TRA regime is founded on the idea of giving a producer the right to extract oil for which it pays a license fee, royalty and tax (usually defined as a percentage of gross revenues). The state dictates all financial terms and the producer has to decide whether to accept the contract or not. While this model is often utilized in underdeveloped countries, the contract makes expropriation possible. It is therefore unsuitable for the foreign investor in countries with a perceived potential risk of expropriation, such as in the case of Russia (Larsson, 2006; Pongsiri, 2004).

Another problem with this simplest form of contract is that oil companies find royalties conceptually objectionable since they are subject to a predetermined level of payment for oil extracted. They do not want to be a company paying the state for its oil – effectively buying it – or simply functioning as another oil service business providing services to the host country. Rather, they seek the highest possible 'upside' potential. The IOC model employed over the years has been based upon the premise of being rewarded for risk and having the opportunity to strike it rich even though they may drill many dry wells as they conduct business in overseas locations.

Production Sharing Agreements (PSAs)

This inventive type of contract was first used by Indonesia in a way that shifted the ownership of oil from companies to the state, while IOCs are compensated for their investment and risk taking.

The general idea of a PSA is that the state keeps ownership of the resources but transfers the rights of a certain share of production to the foreign producer in return for work and services provided by the investor. The foreign oil company (or consortium) is awarded a license by the host government to look for petroleum with the condition that it assumes the upfront costs of E&P. If oil is discovered in that allocated block the licensee will share the revenues with the host government, but only after initial costs are recouped (Ghazvinian, 2007).

This latter point is important since the so-called 'cost' oil can extend for a longer period of time than anticipated, leaving the host government with no revenue stream. Once costs (that frequently escalate over time) have been recovered so-called 'profit' oil is divided between the state and the company in agreed proportions. The IOC is

usually taxed on its profit oil and there may also be a royalty payable on all oil produced (Pongsiri, 2004).

The regime is subject to civil law and both parties must agree on any contractual changes. PSA regimes are often utilized by developing countries that recently have opened up for foreign investors in their energy sector. The risk, from the investor's point of view, is the risk of 'renegotiations' once investments are made. These renegotiations often fall within areas where the law is weak. Despite the risk, analyses suggest that if the factors of adaptability against legal and political risks and budgetary effects were jointly considered, a PSA would be best for the Russian market (Larsson, 2006).

The international oil companies liked the idea of stability from these long-term (25 to 40 years) contracts that could deliver the same fractional outcomes as a concession with the advantage of relieving nationalist pressures within the country (Pongsiri, 2004). In Russia, the PSA law was passed in December 1998 paving the way for increased FDI in the OGI (Luo, 2002: 56).

Russia has not, however, utilized the existing PSA regime except for a few projects, namely those at Sakhalin Island and there has been an adversity toward the regime. Exxon - Mobil's Sakahlin I contract, which had been a driver of growth, is facing decline as the state limits its expansion and Gazprom seeks to take control of its gas exports (Belton, 2008a). Russia has modified the agreement by putting a limit of 30 percent on the number of deposits that can be extracted (Larsson, 2006). PSAs are only used in respect of about 12 percent of worldwide oil reserves, in countries where oil fields are small (and often offshore), production costs are high, and exploration prospects are highly uncertain (Muttitt, 2005).

International Joint Ventures (IJVs)

In many developing and transitional economies, a joint venture is in conceptual harmony with government aspirations to be more proactive and involved in managing their natural resource assets. In such contracts, the most common combination of agents is the host government representative, the NOC, and an IOC, which can be an individual firm or a consortium. In strong partnership relations, both parties benefit from cooperation. That being said, the aim of the IOC as a private entity is profit maximization whereas, the NOC of the host country is mainly interested in maximizing economic value of the natural resources present in the country. As a result, the two parties

often clash and many joint ventures fail or else the terms of the contract are eventually altered (Pongsiri, 2004).

Boscheck (2007) argues that NOCs constitute an institutional response to failing market coordination with their IOC partner(s) and serve as a means for oil-rich countries to align their political and economic interests. Principal-agent conflict arises in this regard as the principle (the NOC) and the agent (the IOC) do not share the same objectives in a public-private partnership (Pongsiri, 2004). As a result of considerable tensions in such relationships the government often mandates changes in the venture to reflect and accommodate the needs of the host country.

In a study of 49 international joint ventures using a core list of 31 success factors, Katsioloudes and Isichenko (2007) were able to show that Russian and foreign partners exhibit diverse importance values on the success factors suggesting that such an inconsistency could be the cause of high failure rates among IJVs.

Royal Dutch Shell and Sakhalin-2

The Sakhalin-2 project in the far east of the country ran into trouble when Shell admitted in July 2005 that the project's cost had doubled to \$20 billion and that the first cargoes of liquefied natural gas (LNG) produced at the field would not be loaded until the summer of 2008, much later than planned (Belton, 2007c; Brower, 2007; Chazan, 2007). That infuriated the Russian government, since it meant it would start earning revenues much later than expected.

The Russian Ministry of Natural Resources accused the firm of environmental transgressions (e.g. despoiling salmon spawning streams on Sakhalin Island and dumping waste into a bay). Shell disputed the claims but eventually gave up its operator status in Sakhalin-2 after it reduced its interest from 55 percent to 25 percent, selling its shares to Gazprom for \$7.45 billion. In addition to ceding a controlling stake in their project to the Russian state gas company, Royal Dutch Shell and its partners (Mitsui & Co. and Mitsubishi Corp.) also agreed to pay a substantial annual dividend to the Russian government as part of a deal to salvage the \$20 billion venture. A so-called priority dividend will be paid from 2010 onward and be linked to the price of oil so the exact amount will vary, perhaps under a billion dollars a year (Chazan, 2007).

British Petroleum Tnk-Bp Joint Venture

In 2003 super oil giant British Petroleum (BP) formed a lucrative partnership with three Russian tycoons in a unique 50-50 venture that gave BP unprecedented access to the Kovykta gas field. BP invested \$8 billion in the joint

venture that would become Russia's fourth-largest oil company and which today accounts for a quarter of BP's global production, a fifth of its reserves, and nearly a tenth of its global profits (Bush, 2003; Chazan and White, 2007; Faucon, Cummings and Chazan, 2007; Racanelli, 2007; Wu and Cavusgil, 2006). Kovykta, the Siberian gas field with 1.9 trillion cubic meters of natural gas in reserves, has posed development problems because Gazprom has blocked access to its main export pipeline. Thus, without access to export markets, the IJV claims it has been unable to produce the 9 billion cubic meters of gas stipulated in its license agreement. Russian authorities are threatening to revoke the license and this dispute over Kovykta is part of a broader campaign for Gazprom or Rosneft to buy out the Russian shareholders (Belton, 2007a; Wu and Cavusgil, 2006).

Having witnessed what happened in Sakhalin, TNK-BP agreed to sell its 62.9 percent stake in Kovykta for \$700 to \$900 million. But completion of the sale has been delayed over terms to include price and the option for the IJV to buy back a 25 percent stake in the east Siberian gas field (Belton, 2008b). In recent developments, Gazprom is preparing to pay \$20 billion for control of the company (BP will sell one percent of its interest while the state acquires 50 percent from the three tycoons) (Walters, 2008).

Russia's Shtokman Gas Field

Having seen Shell and BP investments in Russia downsized, companies vying for a stake in the vast Shtokman gas field in the Russian Barents Sea inevitably set their sights low. In October 2006, Gazprom claimed that none of the competing Western IOCs had provided a suitable development plan, leaving the company to develop the field on its own. But Gazprom relented and admitted that it would, after all, need a company with offshore expertise to develop Shtokman. It selected Total Oil Co. of France (Belton, 2007b; Brower, 2007).

Total will receive a 25 percent stake in Sevmorneflegaz, the company formed to develop the field – leaving 24 percent for at least one more partner, the Norwegian energy company Statoil Hydro (Brower, 2007). When the field comes on-stream, these Western partners will return their stake in Sevmorneflegaz to Gazprom. If a model for this deal could be found elsewhere, the closest may be Mexico's multiple service contracts. In this country as well, the foreign firm providing the service is prohibited from owning the reserve. Such contracts are avoided by Big Oil as they are viewed as nothing more than "service" contracts (Belton, 2007c; Brower, 2007).

These foreign company agreements could be the clearest sign yet of just how weak the IOC position has become. A template is emerging for how Moscow will work with Western oil companies in Russia in the coming years. No non-Russian company will be allowed to own more than 49 percent of an important energy project (Wu and Cavusgil, 2006). Companies that hold such positions will have to

sell some of their stake voluntarily or else face regulatory interventions, including environmental assessments, tax audits and other intrusions (Cohen, 2007; Goldman, 2007).

CURRENT DEVELOPMENTS

Meanwhile, as the super-major oil companies find their power being short-circuited in downsizing and revamped contractual models, their vanquishers, state companies and the well-connected listed firms from resource-rich countries are leveraging their positions. For example, Lukoil is a listed company (ConocoPhillips owns 20 percent of it), but its close ties with the Kremlin are increasingly a source of power. Mr. Vagit Alekperov, chairman of Lukoil, recently announced that his company and Gazpromneft would create a joint venture to develop future projects, which, of course, would be 51 percent controlled by Gazpromneft (Brower, 2007). While President Putin toured Asia and Australia last year, Mr. Alekperov accompanied the president. In Indonesia, he signed an upstream contract with Indonesia's state-owned Pertamina for several prospective offshore blocks. Lukoil is already the Russian company with the greatest geographical portfolio and seeks to increase this growing international presence (Brower, 2007; Cohen, 2007).

As far as NOC strength is concerned, there is a steady path of creeping nationalism. While NOCs everywhere try to redefine themselves, many are far more advanced than others when it comes to scale, scope and competence. Some are clearly determined to become significant international firms and some industry experts predict that there could eventually be teaming arrangements formed between distinct state-owned enterprises in the oil and gas industry (Leblond, 2007; Leff and Fernandez, 2007).

Victor Khristenko has directed Russia's energy policy since the country began implementing a strategy of aggressively taking control of energy projects. Recently however, observers detect a more conciliatory approach from the Kremlin, as evidenced in the offers to let Total of France and StatoilHydro share in Gazprom's vast Shtokman project. It appears at the present time that BP and Gazprom will launch negotiations on forming a \$3 billion global joint venture involving projects in Russia and elsewhere. Each side would ante \$1.5 billion to the venture and TNK-BP may be invited back to Kovykta as a minority stakeholder (Chazan and White, 2007).

IOC RESPONSES

The response of IOCs has varied with the multiple problems they have encountered in the competitive environment going head-to-head with state-owned enterprises. European companies such as Eni of Italy, Total, and BP emphasize having good relationships in the countries where they operate. But for

all of them, the bottom line is the same: IOCs have to show that they can offer something that NOCs and service companies cannot (Crooks, 2007a). Technology for everything from surveying territory to processing products is available from Schlumberger, Halliburton, and other services companies, so IOCs no longer have any particular advantage there (Reed, 2008). Furthermore, finance has no longer been a problem for oil-rich countries enjoying huge cash inflows as a result of high prices for crude oil and natural gas. Given that the competitive landscape has been permanently altered, IOCs must bring to the market distinctive competencies in securing access to difficult to reach energy basins (Colvin, 2007a; Coy, 2007; Zhang et al., 2007).

The Big Five IOCs have, in recent years, turned over much of the research and development of the business to service companies. The Big Five cut exploration spending in real terms between 1998 and 2006, failing to respond to the incentive of high crude oil prices. Rather, they used over half of their increased operating cash flow on share buybacks and dividends instead of exploration. While this kept investors happy, it did not address questions about the groups' ability to replace reserves. The super-oil majors are not replacing reserves and, therefore, are seemingly slowly liquidating their long-term asset base. They may see a declining rate of production over time. In 2006, the super-oil majors increased exploration spending by 50 percent over 2005. However, the next 20 largest publicly traded US oil companies have been increasing exploration efforts since 1998, so their spending levels are currently equivalent to those of the Big Five (McNulty, 2007a).

The Big Five are under tremendous pressure, because of their size, to generate projects of enormous scale and high returns, and frequently capture large projects through production deals with governments rather than exploration. Recognizing that they no longer have big-ticket opportunities in the marketplace, these companies are beginning to revamp their strategies. Shell Oil Company will spend more in capital investments this year than any other energy company, investing between 28 and 29 billion dollars to develop an energy portfolio (Crooks and Mahtani, 2008).

Total's CEO recently outlined his vision for what he described as "a revolution" in the industry. The demand surpasses capacity for energy resources, partly because the countries that control most of the world's oil and gas are granting access to the IOCs only on their own terms. Further, there is the desire of certain countries to keep their reserves for the long term. They are making sufficient money with what they produce and prudently do not want to develop their remaining energy resources too fast; rather they have the feeling that it is good for their citizens to keep such resources for the future (Crooks, 2007b).

For the Total Oil Company that means the motto for its operations is "acceptability." The company's strategy now is being able to persuade resource-rich countries to give them access. This means stressing Total's contribution in bringing technology and skills such as project management to the forefront. But its model for growth also incorporates a way of maximizing local involvement (Crooks, 2007b).

Faced with maturing oil fields, rocketing costs, and the growing readiness of oil-rich nations to demand a higher price for access to resources, most Big Oil enterprises have been forced to scale back production targets and revise their reserve projections downward. As the industry changes, technology remains crucial as IOCs seek break through technological innovations or risk losing out to rivals. Indeed, the IOCs could face unexpected competitors, such as General Electric. General Electric invests about \$5 billion a year in technology across all industries — of which \$150 million is aimed at the OGI. Revolutionary technological improvements are needed and it is becoming clear that the future of IOCs depends on their inventing them (McNulty, 2007a).

This paper begs the question, "What have the commercial oil companies really learned"? Perhaps one thing they have learned is that their industry has a negative reputation because oil is one of the top contributors to global warming, air pollution, and other threatening damages to the environment. There has been a seismic shift from being in the business of solving people's problems to being in the business of solving the world's problems (Colvin, 2007b). Oil and gas companies are now addressing environmental issues as global citizens and have become more concerned with global warming.

Today the super-majors, for the most part, are all proclaiming their "greenness" and investing in alternative energy. Exxon is the exception to this new wave of doing business in the carbon-construed world as it avoids making huge investments in alternative energy sources (Colvin, 2007c). As a sign of the times, Representative Edward Markey, while ending a hearing of the House Select Committee on Energy Independence and Global Warming, lambasted Exxon officials for planning to spend only \$100 million over 10 years on alternate and renewable energy R&D when several of its competitors individually plan to spend billions (Snow, 2008).

In this regard, BP is trying hard to become a model global citizen, investing \$500 million in California and Illinois over ten years to establish the Energy Biosciences Institute. Here scientists will explore the emerging secrets of bioscience and apply them to finding new sources of clean and renewable energy. BP envisions a future that may not include petroleum (Frey, 2002), and is preparing for a world dominated by alternative energy sources. It is investing up to \$4.6 billion over the next 15 years in Wyoming and Colorado to increase

production of natural gas, the cleanest burning fossil fuel. Even its name change from British Petroleum to "BP" ('Beyond Petroleum'') was designed to sidestep negative organizational connotations for environmentalists (similar to Philip Morris Tobacco Company changing its name to Altria in an attempt to avoid the stigma of tobacco).

BP's magazine ads use a logo that is a white, yellow and green sunburst design with the cachet "Beyond Petroleum" and a title "It's time to invest in our own backyard." The mass promotion goes on to inform readers of its major investments in natural gas, bio-fuels, and solar energy. For instance, BP has an 18 percent global market in solar power and promotes its integrated solar plant in Frederick, Maryland as the largest in North America where it is embarking on a \$97 million expansion project. BP cut its own greenhouse emissions by 10 percent, eight years ahead of the schedule mandated by the Kyoto Protocol (BP, 2008). The oil group is investing in an IJV in Brazil to develop ethanol from sugar cane (Wheatley and Crooks, 2008).

CONCLUSIONS

The leaders in the oil industry are aware that the odds are against them as they compete with the national oil companies for the limited natural resources -- no "elephant fields" are left. Some executives are putting in place a revised strategy for the future. They are no longer simply looking for ways to tweak their operations in order to meet the appropriate numbers for oil field reserves, investments in new refineries, or other vertical ways to integrate their business operations. Rather, they are taking a contrarian view of their industry (McNulty, 2007b).

The super oil majors are considering a genuine paradigm shift in reinventing their business portfolio. They recognize that like tobacco, a product once profitable, oil and natural gas are merely commodities. Despite the drastic increases in prices for oil in our economy today, increased global demand, scarcity of energy assets throughout the world and production pressures brought about by the OPEC cartel, the major oil companies have not kept abreast in the industry with either E&P or R&D. There seems to be a somewhat defeatist attitude toward the geopolitics and enhanced competition by supplier firms like Schlumberger. The major oil supplying countries today believe they can do without the super-major oil companies especially now that many of them have given up their trade secrets and transferred much of their technology, management know-how, and intellectual capital to countries like Russia. If they continue to transfer their only real sources of competitive advantage to foreigners IOCs will have given up their only real negotiating power. Once the lessons of conducting the complex process of mining, logistics and other upstream and

downstream challenges are learned, every oil-rich country will predictably renegotiate their agreements.

In the short run there remain enough profits to satisfy shareholders and continue to forge ahead in this competitive industry. With oil prices near \$120 a barrel, even the US Congress is considering a tax on the excessive profits recorded by US based IOCs. The volatility in the pricing of energy resources over the years suggest that in the long run these huge profits will not be sustainable and that alternatives to existing business models need to be considered.

This paper has illustrated how the shift in the balance of power (where the NOCs are accumulating and exerting more control over their rich abundance of energy resources at the expense of the IOCs) has become a significant impediment to business as usual by the oil majors. Russia is becoming more possessive of its energy resources and more aggressive in maintaining control of its entire upstream and downstream operations. President Putin has restored the nation's self-respect and power with the help of rising energy prices (Brzezinski, 2007; Cohen, 2007; Simes, 2007). The rules of the game are changing dynamically, even revolutionary, as the state-owned energy companies hold the trump cards as provided by host-government edicts. Meanwhile, sovereign wealth funds or stabilization funds are indirectly reversing the privatization trend that began in the 1980s through the re-expansion of state ownership. Although this paper focuses on the Russian Federation and energy policies, much of the same policies are being implemented in other countries of the former Soviet Union and around the world.

REFERENCES

- Andrews, P. (2008) 'Russian oil drop may be inflating prices', Royal Dutch Shell PLC.com, April 20: [www document] http:royaldutchshellplc.com/2008/04/20/Russian-oil-drop-may-be-inflating-prices (accessed 28 April 2008).
- Aron, L. (2007) 'After Putin, the deluge?', Current History, 106(702): 314-320.
- Belton, C. (2008a) 'Russia starts to pay price for its energy strategy', Financial Times, April 21: 4.
- Belton, C. (2008b) 'Gazprom steps up pressure on TNK-BP', Financial Times, April 24: 21.
- Belton, C. (2007a) 'TNK-BP edges toward an accord with Gazprom', Financial Times, June 16-17: 8.
- Belton, C. (2007b) 'Gazprom gives StatoilHydro gas field stake', Financial Times, October 26: 18.
- Belton, C. (2007c) 'Moscow's tightening grip', Financial Times, November 9: Special Report 9.
- Boscheck, R. (2007) 'The governance of oil supply: an institutional perspective on NOC control and questions it poses', *International Journal of Energy Sector Management,* 1(4): 366-389, [www document]

- http://www.emeraldinsight.com/10.1108/17506220710836084 (accessed 22 April 2008).
- BP (2008) 'It's time to invest in our own backyard', Forbes, 181(5), March 10: 40.
- Brower, D. (2007) 'From Russia with tough love', Offshore Engineer, [www document] http://www.oilonline.com/news/features/oe/20071029.From_Russ.24752.asp (accessed 20 November 2007).
- Brzezinski, Z. (2007) Second Chance, Basic Books: New York.
- Buckley, P.J., Devinney, T.M. & Louviere, J.J. (2007) 'Do managers behave the way theory suggests? A choice-theoretic examination of foreign direct investment location decision-making', *Journal of International Business Studies*, **38**(7): 1069-1094.
- Bush, J. (2003) 'Russia: Murky dealings in the oil patch', Business Week, 3854: 60-61.
- Campbell, C. (2002) 'Accessible oil reserves are running out', in H. Cothran (ed.) *Energy Alternatives*, Greenhaven Press: San Diego, pp. 27-33.
- Chazan, G. (2007) 'Standoff on Kazakhstan oil', Wall Street Journal, November 30: A8.
- Chazen G. & White, G.L. (2007) 'BP set to leave Russia gas project', Wall Street Journal, June 22: A3.
- Colvin, G. (2007a) 'The new math of oil', Fortune, 156(10): 42.
- Colvin, G. (2007b) 'The 500 gets religion', Fortune, 155(8): 72.
- Colvin, G. (2007c) 'The defiant one', Fortune, 155(8): 86-92.
- Cohen, A. (2007) 'The national security consequences of oil dependency', *Heritage Foundation Lecture # 1021*, [www document] www.hertiage.com/Research/NationalSecurity/h11021.cfm (accessed 6 December 2007).
- Corsi, J.R. & Smith, C.R. (2005) Black Gold Stranglehold: The Myth of Scarcity and the Politics of Oil, WND Books: Nashville.
- Coy, P. (2007) 'Is \$100 oil as lethal as it looks?', Business Week, 4059: 50.
- Crooks, E. (2007a) 'Big shift in the balance of power', *Financial Times*, November 9: Special Report 6.
- Crooks, E. (2007b) "Acceptability" is Total's growth model', Financial Times, September 7: 14.
- Crooks, E. & Mahtani, D. (2008) 'Western oil majors start to feel the squeeze', *Financial Times*, February 1: 19.
- Dixon, N. (2000) Common Knowledge, Harvard Business School Press: Boston.
- EIA (2007) 'Russia' *Country Analysis Briefs*, Energy Information Administration, April: [www document] http://www.eia.doe.gov/emeu/cabs/Russia/Background.html (accessed 26 April 2008).
- Faucon, B., Cummuns, C. & Chazan, G. (2007) 'BP's new chief enters fray', Wall Street Journal, May 3: A12.
- Frey, D. (2002) 'How green is BP?', New York Times Magazine, December 8: 103. [www document] http://nytimes.com/gst/fullpage.html?res=9D01ESDF1F38F93BA35751C1A9t

- (accessed 25 April 2008).
- Gaddy, C.G. & Kuchins, A.C. (2008) 'Putin's plan', Washington Quarterly, 31(2): 117-129.
- Ghazvinian, J. (2007) Untapped: The Scramble for Africa's Oil, Harcourt: Orlando, FL.
- Goldman, M.I. (2007) 'Russia and the West: mutually assured distrust', *Current History*, **106**(702): 314-320.
- Goldthau, A. (2008) 'Resurgent Russia? Rethinking Energy Inc.', Policy Review, 147: 53-63.
- Gvosdev, N. (2008, March 3) 'Time for a New Russia Strategy', *International Herald Tribune*, [www document] www.cato.org/pub_display.php?pub_id=9253 (accessed 26 April 2008).
- Hoyos, C. & Belton, C. (2008) 'Russia braces for oil output decline', *The Oil Depletion Analysis Center (ODAC)*, April 15: [www document] http://odac-info.org/newsletter/2008/04/18 (accessed 26 April 2008).
- Hutzchenreuter, T., Pedersen, T. & Volberda, H.W. (2007) 'The role of path dependency and managerial intentionality: a perspective on international business research', *Journal of International Business Studies*, **38**(7): 1055-1068.
- Idov, M. (2008) 'The hibernation', The New Republic, 238(4,834): 30-33.
- Johanson, J. & Vahine, J.E. (1977) 'The internationalization process of the firm: a model of knowledge development and increasing foreign market commitments', *Journal of International Business Studies*, **8**(1): 23-32.
- Jubak, J. (2008) 'Why oil could hit \$180 a barrel', MSN Money, [www document] http://articles.moneycentral.msn.com/Inventory/JubaksJournal/WhyOilCouldHit18 0DollarsABarrel.aspx (accessed 26 April 2008).
- Katsioloudes, M.I. & Isichenko, D. (2007) 'International joint ventures in Russia: a recipe for success', *Management Research News*, **30**(2): 133-152. [www document] http://www.emeraldinsight.com/10.1108/01409170710722964 (accessed 25 April 2008).
- Kipchillat, C. (2002) 'Building long-term marketing relationships through the control of international joint ventures', in G. Nakos & J. Rushing (eds.) *Proceedings: 2002 AIB-SE Annual Meeting*, pp. 95-99.
- Koliandre, A. (2007) 'Russian oil firms reap little benefit from prices', Wall Street Journal, November 14: B10.
- Kryukov, V. (2000) 'Adjustments to change: the case of the oil and gas industry', in S. Harter & G. Easter (eds.) *Shaping the Economic Space in Russia*, Ashgate: Burlington, VT., pp. 102-126.
- Kuznetsova, O. (2000) 'Energy and raw materials', in P. Heenan & M. Lamontagne (eds.), The Russian and Commonwealth of Independent States Handbook, AMACOM: New York.
- Larsson, R.L. (2006) 'Russia's energy policy: security dimensions and Russia's reliability as an energy supplier', *Swedish Defense Research Agency (FOI) Report No.: FOI-R-1934-SE*. Stockholm. [www.document]
 - http://ocw.mit.edu/OcwWeb/Political-Science/17-906Spring-007/Readings/Index.htm (accessed 20 November 2007)

- Leblond, D. (2007) 'Oil summit notes industry challenges, uncertainties', Oil & Gas Journal, 105(16): 34-37.
- Leff, J. & Fernandez, C. (2007) 'RPT-Exclusive National oil companies could one day merge -Perronis CEO', Reuters, June 11: UK.
- Leonard, R. (2005) 'The reality of Russia', *The MOL Group (Lishon)*, May [www document] http://www.cge.uevora.pt/asp02005/abscom/ASP02005_Leonard.ppt (accessed 26 April 2008).
- Longworth, P. (2006) Russia: The Once and Future Empire from Pre-History to Putin, St. Martin's Press: New York.
- Luo, Y. (2003) 'Market-seeking MNEs in an emerging market: How parent-subsidiary links shape overseas success', *Journal of International Business Studies*, **34**(3): 290-309.
- Luo, Y. (2002) Multinational Enterprises in Emerging Markets, Copenhagen Business School Press: Copenhagen, Denmark.
- Luo, Y. (2000) Partnering with Chinese Firms: Lessons for International Managers, Ashgate: Burlington, VT.
- Mahtani, D. (2007) 'State groups give majors a run for their money', November 9: SR6.
- McNulty, S. (2008a) 'Big oil boosts buy-backs in absence of new investments', *Financial Times*, April 25: 19.
- McNulty, S. (2008b) 'Oil's quest to find tomorrow's fuels', Financial Times, April 24: 12.
- McNulty, S. (2007a) 'Investors put ahead of hunt for reserves by Big Five', Financial Times, November 12: 2.
- McNulty, S. (2007b) 'Frontier Challenges in the race for oil', Financial Times, August 21: 12.
- Meyer, G. (2008) 'Oil sets new high, near \$120', Wall Street Journal, April 23: C18.
- Morse, E.L. & Richard, J. (2002) "The battle for energy dominance", Foreign Affairs, 81(2): 16-31.
- Muttitt, G. (2005) 'Crude designs: the ripoff of Iraq's oil wealth', *Global Policy Forum*, November [www.document] www.globalpolicy.org/security/oil/2005/Crudedesigns.htm (accessed 25 April 2008).
- Nowak, D. (2008) 'Russian oil production drops', CNBC News, April 15 [www document] http://www.cnbc.com/id/24126283/?for=CNBC (accessed 26 April 2008).
- OPEC (2004) 'Oil outlook to 2025', OPEC Review Paper, September [www document] http://www.opec.org/library/OPEC%20Review/OWEM04.pdf (accessed 26 April 2008).
- Pantzalis, C. (2001) 'Does location matter?, *Journal of International Business Studies*, **38**: 1069-1094.
- Patton, J.R. (2007) 'Mergers and acquisitions in the oil and gas industry', in M. Baliamoune-Lutz, A.Z. Nowak, & J. Steagall (eds.) Global Economy: Challenges in Developing and Transition Economies, Vol. 2. Elipsa: Warsaw, Poland, pp. 446-469.
- Politkovskaya, A. (2007) A Russian Diary: A Journalist's Final Account of Life, Corruption, and Death in Putin's Russia, Random House: New York.

- Pongsiri, N. (2004) 'Partnerships in oil and gas production-sharing contracts', *International Journal of Public Sector Management*, **17**(5): 431-442. [www.document] www.emeraldinsight.com/0951-3558.htm (accessed 23 April 2008).
- Racanelli, V. (2007) 'Will the Russian bear maul BP?' Barron's, 87(24) June 11: 19.
- Reed, S. (2008) 'The stealth oil giant', Business Week, 4066: 38-45.
- (2008) 'Russian oil production fails to grow for first time in a decade', *International Herald Tribune*, April 15 [www document] http://www.iht.com/articles/ap/2008/04/15/business/EU-GEN-Russia-Oil-Slump.php(accessed 23 April 2008)
- Shankar, O. & Luo, Y. (2008) International Business, 2d ed. Sage: Los Angeles, CA.
- Simes, D. (2007) 'Losing Russia', Foreign Affairs, 86(6): 36-52.
- Snow, N. (2008) 'Lawmaker urges majors to spend more on alternatives', Oil & Gas Journal, 106(13) April 7: 27-30.
- Spilimbergo, A. (2005) 'Measuring the performance of fiscal policy in Russia', *International Monetary Fund Working Paper*, WP/05/241, December 1 [www document] http://www.imf.org/external/pubs/ft/wp2005/wp05241.pdf (accessed 29 April 2008).
- Sutela, P. (2000) 'Overcoming the transformation crisis selected issues and policy opinions', in P. Heenan & M. Lamontage (eds.) *Modernizing the New Russia*, Springer: New York. pp. 333-343.
- Turkellaub, A. & Throp, E. (2007) 'Oil groups can still gain from a new era in Russia', Financial Times, June 1: 9,
- Tymoshenko, Y. (2007) 'Containing Russia', Foreign Affairs, 86(3): 69-82.
- Walters, G. (2008) 'TNK-BP advances most in two years on report of Gazprom offer', Bloomberg News, April 24 [www.document]
 www.bloomberg.com/apps/news?pid=20601087&rid=abaqij9Pi2To&refer=home
 (accessed 24 April 2008).
- Wheatley, J. & Crooks, E. (2008) 'BP plans to invest \$560m in biofuels', Financial Times, April 25: 16.
- Woods, D. (2007) 'Russia's drive for power − 2: Gazprom controls gas exports to Europe, Asia', Oil & Gas Journal, **105**(7): 18-24.
- Wu, F. & Cavusgil, S.T. (2006) 'Organizational learning commitment and joint venture creation in inter-firm relationships', *Journal of Business Research*, **59**(1) January: 81-89.
- Zhang, Y., Li, H., Hitt, M.A. & Cui, G. (2007) 'R&D intensity and international joint venture performance in an emerging market: moderating effects of market focus and ownership structure', *Journal of International Business Studies*, **38**(6): 944-960.