

Principles and Rationale behind the Strategies Followed by NOCs and IOCs

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Introduction

The most important economic organizations owned by national governments (NOCs) and diverse private investors that own organizations with extensive international operations (IOCs) deal with one another to constitute the largest oil industry. IOCs represent international oil companies that include Western oil giants such as Exxon Mobil, BP, and Royal Dutch Shell. On the other hand, NOCs represent Rosneft and Saudi Aramco, which are state-owned companies (Dasgupta, 2009). In the first 70 years of the 20th century, private investors of international operations companies outside communist countries and North America dominated global oil production. This dominance was similar across all three main sectors of global oil production, including refining the oil in the downstream, production of oil in the upstream, and transportation of petroleum in the midstream. However, this faded away after 70 years of the 20th century in the 1970s when National Oil Companies (NOCs) were brought about. Major exporting companies took their part in establishing NOCs that dominated the gas and oil sector for many years by taking over the gas and oil reserves of countries operating under the surveillance of IOCs. The prospects of IOCs for the future have threatened the existence of private investors in international operations since June 2014 due to the so-called 'unburnable carbon problem' and the collapse in oil prices (Stevens, 2016). This paper will demonstrate the rationale behind the strategies followed by NOCs and IOCs, compare the key benefits and challenges of NOCs and IOCs, and provide an insightful discussion of the hybrid NOCs that combine the elements of NOCs and IOCs.

NOCs and IOCs in the Global Oil Industry

National Oil Companies (NOCs) are the organizations that are controlled and owned by the governments of countries that are rich in oil reserves. These companies conduct their operations in their own respective countries and expand their functions and operations beyond their national borders to emerge as global competitors. These companies manage over 90% of the reserves of oil in the world, so they take many influential forms to perform various roles, such as controlling and managing the oil resources in their country of origin. NOCs managing the new and existing reserves of oil are in a place to make and devise the principles for access to oil assets. IOCs developed a new business model in the early 1990s with the aim of discovering and demonstrating more and more oil and gas reserves. The model also suggested the minimization of operational costs while maximizing shareholder value. However, the model became ineffective, which made returns and profits on capital so poor that it underperformed global stock markets of IOCs shares. NOCs are categorized as Level 1,

Level 2, and Level 3 NOCs.

The Level 1 NOCs do not own any assets of their own and do not have much experience with the upstream enterprise. The activities include exploration, establishment, development, and production from ownership interests in oil assets. These are small enterprises that are primarily responsible for operating in the upstream sector to collect royalties and taxes from private companies. Level 2 NOCs deal with downstream and midstream field developments and derivative services that are roughly equivalent to small-to-medium-sized oil enterprises, independent in their operations. Lastly, the Level 3 NOCs are integrated international organizations that are inspired by the model developed by international oil companies (IOCs). These companies expand their operations outside their country of origin (Jaffe and Soligo, 2007).

International Oil Companies (NOCs) are corporate organizations that are privately owned, integrated, and controlled corporations that have a significant presence among global companies in the oil and gas industry. These enterprises are not monolithic but considered 'international' because of the IOCs' presence and some consistent characteristics among many countries around the globe. The major competitive purpose of IOCs companies is to maximize profit through the techniques and capabilities of risk and project management. The IOCs typically maximize profit through oil extraction and monetization techniques for maximizing profits as well as fostering companies' access to capital, downstream markets, and technology. International oil companies (IOCs) provide all the capabilities and opportunities on a contractual basis to national oil companies as well as governments of other host countries. Compared with other diversified shareholders in the markets, international oil companies are better at bearing, absorbing, and transferring the risk for the market participants (Stevens, 2008).

Strategies Opted for by NOCs and IOCs

Strategic Objectives of NOCs

The important strategies NOCs write, devise, and follow include the six significant strategic objectives as presented by Robert Pirog (2007), such as economic development, energy safety, foreign policy, employment program, consolidation, and distribution of wealth. Governments use NOCs as potential tools for fostering the process of economic development of the countries of origin with oil assets. These companies work on energy security-based objectives, which state that not a single consumer is allowed to become critical to the national companies working for the production, marketing, monetization, and refining of the oil assets. The policies of NOCs are used to accomplish goals for foreign policy that result in cross-sectional ties among the countries. These foreign policies are also used by governments in the national oil companies to maximize direct alliances with other governments across the globe to facilitate political relations with other host countries. National oil companies act as the domestic society where jobs and employment opportunities are provided to the

nation of the host country because national oil companies manage 90% of the oil reserves of the world.

Furthermore, oil companies in countries that are rich in oil reserves have their deep roots in upstream and downstream operations. In oil-producing nations, many national oil companies strive to achieve vertical integration among governments as well as organizations. The companies involve the redistribution of the oil assets of the society to accomplish employment policies, social welfare, and fuel subsidies (Pirog, 2007).

New Strategies of NOCs

National oil companies turn to new strategies to improve their operations nationwide as well as across the globe. According to a publication by KPMG [Global Energy](#) Institute in 2018, NOCs strive to increase competitiveness, enhance technical skills, and improve cost reduction. Some of the new strategies to improve organizational operations include the following:

NOCs Enhance Cost Reduction and Operational Efficiency

NOCs have been prompted to introduce and enhance a slew of measures for reducing production costs and enhancing free cash flow. These measures are designed to significantly enhance the additional free cash flows, improve organizational efficiency, and reduce production costs. The streamlined operational efficiency in NOCs enhances the drastic drop in the prices of commodities for long-term strategic goals.

NOCs Push Technological Excellence

National oil companies struggle vigorously to outsource proprietary processes and technologies to derive the benefits and services from the adoption of artificial intelligence, Big Data, and automation through key business processes.

National Oil Companies Enhance Access to New Resources and Markets

Although some national oil companies do not publicly disclose how they get access to international resources, they start discovering and considering how to expand their operations all around the globe.

Diversify Renewable Beyond Oil Resources

National oil companies diversify their portfolios in accordance with the policies of IOCs into alternative energy that is away from hydrocarbons. For instance, Saudi Aramco has estimated that \$50 billion would be invested in alternative energy and renewable energy and has announced plans to produce power with 10% renewable resources to strengthen its partnership (Al-Fattah, 2013).

Strategic Objectives of IOCs

Strategic objectives of international oil companies seek access to the reserves of oil through reserve replacements and the availability of oil reserves in the host country. IOCs collaborate with NOCs to ensure environmental responsibility and operational safety for the growth of income over the long term. IOCs look for management that is disciplined, efficient, talented, and knows how to utilize proprietary technology to build a strong reputation in the country. Moreover, international oil companies actively search for the minimal political involvement of the management as well as the organization in the country of operation for oil reserves. International oil companies have the experience and expertise to develop upfront unconventional and capital oil reservoirs, with a significant reason that IOCs should remain active and operate in heavy oil.

The privately owned IOCs are well-positioned in California, Canada, and Venezuela because the research conducted there regarding oil extraction and production reflects these regions' expertise in NOCs in heavy oil resources. The NOCs may also very well team up with the IOCs and other privately owned international companies that are service companies and independent leaders for technology deployment. To do so, every factor playing a part in the oil industry, including NOCs, IOCs, and service companies, should take part in fostering the growth of resources as the industry meets the critical challenges. The challenges that are unconventionally posed to the oil and gas sector are access to expertise, capital requirements, resources, and technology for developing the oil reservoirs.

Discussion: Strategically Balanced 'Hybrid' NOCs in the International Oil and Gas Sector vs. NOCs and IOCs

Several key trends for the development of international activities in national oil companies are emerging in the oil and gas sector, with the utilization of proprietary technology that includes complete access of the organization to in-house expertise and capital. National oil companies (NOCs) are becoming fully integrated energy companies through large acquisitions at the international level instead of being upstream producers in the oil and gas industry. However, NOCs are hindered by stakeholder action and the requirements of corporate governance, as major global oil companies may

be reluctant to invest their financial resources in areas rich in oil and gas reserves but with some unstable international sanctions. NOCs have been enabled to accomplish large international acquisitions in the capital market due to improved management techniques and the combination of high oil prices.

It is a fact that national oil companies have many significant advantages over privately owned international companies for the extraction, refining, production, and monetization of oil assets. The most important advantage of NOCs is the political power of the parent government in the host country for oil production, which has the tendency to tolerate abuses of the national leadership of the parent government, staff bloat, and underproductive labor (Inkpen and Moffett, 2011). Furthermore, NOCs require operating with the discipline of well-managed and trained oil and gas companies from the private sector to separate the national responsibilities of the organizations working in their own country of origin. However, national oil companies, as compared to international oil companies, tend to have greater capacity and capital for risk-taking and management in order to avoid potential inefficiencies in the corporations.

The reason why NOCs are restricted in some areas is that the national policy sometimes is not compatible with the decision-making strategy of the organization. However, NOCs can mitigate political risks through effective negotiation strategies and government-to-government relationships in the host countries. However, international political risks do not affect basic domestic consumption, which is why NOCs may be able to tolerate the impacts on oil and gas industries, leading to economically inefficient decisions that are not disciplined by the national exposure in relation to international oil companies. It is important that national oil companies fulfill their social objectives while costing out and clarifying the NOCs' larger social objectives that prevent organizational abuse and fraud. Having said this, national oil companies are rising in number and carry national endorsements because they have added advantages and resources of private international corporations operating in the host country of origin for oil extraction and production.

Comparison of the Key Benefits and Challenges of NOCs and IOCs

To protect the national interests of the government of the country of origin of oil reserves, NOCs prevent and deflate foreign investment to protect their energy production in the countries by default. E & P projects are one of those departments of the countries with rich oil reserves that close themselves off from profit-making enterprises in unconventional oil development. Companies that are owned by states mostly develop low-risk, low-cost, and low-maintenance resources that do not require any remunerative avenues for unconventional energy production and provision. To stabilize oil prices in countries rich in oil reserves, reducing fuel subsidies can encourage oil and gas consumers to reduce their annual consumption of the resources. The positive effect of this strategy, if implemented, is that it can reduce greenhouse gas emissions from the environment that has been increased over

the past few decades due to excessive carbon footprint.

In addition to reducing the subsidies and stabilizing the oil prices, governments can use systems that are state-owned and have access to significant natural resources. These systems tend to overtly subsidize their resources if they are able to market their home markets in their host country. This may result in dangerous inconsistencies in export prices for renewable which lead to consumers over-consuming them without considering the negative impacts of domestic consumption. However, outdated infrastructure, illegal tapping, and lack of oversight in the state-owned companies have plagued the safety and security, a costly issue in oil companies worldwide for many national oil companies (Al-Fattah, 2013). For instance, the domestic consumers of oil and gas assets of Venezuela paid \$0.20 per gallon in 2012, which is a fraction of what Western European importers are charged for unleaded gas. The percentage was 5% of the average price of oil consumption in the United States and 2% of the price in Europe (Ghadar, 1993).

Conclusion

Proprietary technological advances and foreign as well as national investments drive the decision-making strategy of IOCs. However, NOCs have an advantage over IOCs because their decisions are not derived from factors, including technology and investment, as NOCs go beyond political motives. This is the reason why NOCs are emerging as influential tools across the world with extensive global reach. Since the global footprints of national oil companies extend due to state-backed motives in their countries of operations, NOCs have become dominant and authoritative international players, unlike IOCs, because of their limited access to the proven oil assets of the globe.

IOCs have a disadvantage over NOCs as only 14% of the reserves are available to international oil companies. The reason is that IOCs only support projects that can generate income in comparison to NOCs that support states' political positions and can lose income to accomplish this objective. In a nutshell, national oil companies pose serious competition to international oil companies. However, they often find themselves working as fierce competitors as well as potential partners in the oil and gas sector. In addition, IOCs control major energy markets due to their established operations and access to global markets. On the other hand, NOCs have complete control over the country's oil and gas resources. However, they do not control the international markets because they support the state's political position.

References

Al-Fattah, S., 2013. The role of national and international oil companies in the petroleum industry.

Dasgupta, B., 2009. LARGE INTERNATIONAL FIRMS IN THE OIL INDUSTRY: LARGE INTERNATIONAL FIRMS IN THE OIL INDUSTRY. *Inst. Dev. Stud. Bull.* 6, 46-67.

<https://doi.org/10.1111/j.1759-5436.1974.mp6002005.x>

Ghadar, F., 1993. Operations on Oil Industry Structure. Transnatl. Corp. Exploit. Nat. Resour. 10, 183.

Inkpen, A.C., Moffett, M.H., 2011. The global oil & gas industry: management, strategy & finance. PennWell Books.

Jaffe, A.M., Soligo, R., 2007. The international oil companies.

Pirog, R.L., 2007. The role of national oil companies in the international oil market. Congressional Research Service, Library of Congress.

Stevens, P., 2016. International Oil Companies: The Death of the Old Business Model. Chatham House.

Stevens, P., 2008. National oil companies and international oil companies in the Middle East: Under the shadow of government and the resource nationalism cycle. J. World Energy Law Bus. 1, 5–30.