

Centre for Energy, Petroleum and Mineral Law and Policy University of Dundee

Movement of Bargaining Power: International Oil Companies and Developing Countries

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Abstract

Legal structures of the upstream sector in many countries have achieved a balance between meeting the economic objectives of International Oil Companies (IOCs) and Host States to facilitate win-win upstream petroleum development scenarios for both parties. Previously, this was not as frequently the case, and this paper tracks the historical shifts in legislative structures for benefit of either party at the expense of the other using their political-economic influence respectively. It ends with a commentary on the current balance of bargaining power between both IOCs and Host States in light of modern-day factors, particularly the increase in the development and use of clean energy sources.

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1. Introduction

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The oil industry is unique due to the sheer scale of economic rent that can be earned through extractive business activities in this sector (Ehsan, 1989). This may differ from economic rents in the mining industry of minerals such as gold due to the inelasticity of demand of oil. Hydrocarbons are unique goods which are not easily substituted and furthermore are considered a basic necessity, which results in lower shifts in demand in response to price changes (The market for oil, 2020). Another factor is the increase in global consumption of oil despite rising prices. Despite the upward price trend of oil from 2021 to the present it is estimated that the consumption of oil in that time period has increased from 97.38 million barrels per day ("mbpd") to 99.80 mbpd (Energy Information Administration, 2022). Gold in contrast is used primarily for investment and jewelry which in the year 2020 amounted to 83.47% of the use of gold (Gold demand worldwide by industry share 2020 | Statista, 2022). This makes gold especially in the jewelry industry vulnerable to both price elasticity and income elasticity. Increase in the price of gold or reduction in income results in lower demand due to it being a luxury good (The Elasticity of Jewellery Demand | Alchemist, 2022).

There are three main factors leading to high economic rent in the hydrocarbon industry. Firstly, the cost of production and exploration tends to be lower than the sale price of hydrocarbon products. Secondly, the scale of transactions as the global transportation sector relies exclusively on petroleum products and these products further contribute to onethird of the global energy production. Lastly, the oligopolistic structure of the world oil market has an enormous impact on the scale of the economic rent. A prime example of this is the Organization of the Petroleum Exporting Countries (OPEC), which in the year 2020 controlled 71% of proven oil reserves globally and were responsible for 36% of the world oil production in the same year. OPEC regularly sets quotas of production for its members to manage global oil prices (EIA, 2022). The division of these rents are between two major participants which are the State, for instance as represented by a National Oil Company (NOC), which in most countries outside of the United States of America (USA) has ownership of subsoil mineral rights, and (often) IOCs as: signatories to production sharing contracts (PSCs); licensees; operators (and farmed-in non-operators), and contractors. On the IOC side there will also likely be a plethora of upstream petroleum service companies working as sub-contractors, e.g. fulfilling specialist functionalities. Upstream petroleum rent is divided between the above based on model contracts, licensing rounds, and negotiations, in the context of recurring oil price volatility and evolving IOC estimations of "above-ground"

(e.g. political) risk, resulting in a dynamic and unpredictable pricing outcomes and regarding which the balance of bargaining power has observably changed cyclically between both sets of parties (Stevens, 2008).

In general, a Host State¹ will aim to maximize economic rent for domestic industries stemming from foreign cash flow without reducing foreign direct investment (Globerman & Shapiro, 1998). Such bargaining between states and IOC's is usually a positive endeavor as end goals of both parties is similar so there is no basis of conflict. The aims of both these parties tend to overlap greatly so there is ample reason for them to behave in a cooperative manner (Eden, Lenway & Schuler, 2005).

When oil prices are high the philosophy of resource nationalism comes to the forefront (Wälde, 2008). A model that was designed by Wilson portrays the mechanics of this philosophy, which is known as the Petro-Political Cycle (PPC). For a range of high-salience stakeholders, the PPC models changes in public policy, regulation and attitude towards the market at times of economic boom and troughs. In sum: in a booming market for oil, the Host State will have an advantage when it comes to bargaining terms; but when the market is in decline this bargaining power shifts away. Developing States that historically have lacked leverage in the international markets, during rise of petroleum product prices in the oil markets have an opportunity to change their *modus operandi* and take a more dominant position in negotiating with IOCs (Wilson, 1987).

In the beginning of the 21st century the oil market has gone through many disruptive episodes. The new trend of shale gas and oil originating in America has caused a decline in the oil prices. It has been estimated that if there was no shale gas revolution in the U.S. by the end of 2018 oil prices would be 36% higher (Balke, Jin and Yücel, 2020). This coupled with the fact that proven oil reserves in accessible and economically viable regions. Global proved oil reserves decreased by 2 billion barrels in 2020 compared to the reserves recorded in 2019 (British Petroleum, 2021). IOCs are exploring for further reserves more hazardous areas such as the Arctic Circle. A combination of increasing capital costs and declining prices are making such projects economically unviable. Projects worth \$620bn²have been either cancelled or deferred through 2020 (England, 2017) The situation

¹ A Host State is a state into which a foreign investment is made. In the context of petroleum law it is the State that allows an IOC to explore and produce oil in its territorial limits.

² All \$ quoted are United States Dollars

however has changed in the recent year due to rise in oil prices. To make matters worse the outbreak of COVID 19 coupled with lockdowns and travel restrictions has reduced the demand for oil products mostly fuel for cars and jets for majority of the year 2020 and 2021. This had driven prices even lower in these years (Blakemore, 2020). The above set of combined circumstances is consistent with the phenomenon of stranded assets becoming more and more common in the upstream petroleum sector.

As noted prior to the global outbreak of COVID-19 in 2019/2020, dynamic changes in the political economy have altered the relationship between IOCs and oil producing states (Raszweski, 2018).

In this paper we will first observe the historical factors behind the balance of bargaining power and the bargaining models developed on that basis. Then there will be an evaluation of current market changes which has challenged the IOCs current bargaining power. Finally, there will be a commentary on the contrast of political climate of the energy market in the 1900s and today and the change in bargaining power from IOCs to Host States.

2. Concession Era

Prior to the 1960 petroleum law revolved around either state monopolies or concession agreements a type of agreement common to mining law, from where its origins can be traced, and with broad applications. The concession system was widely followed globally (Weygandt, 2017). Historically these were imposed by colonising countries on their respective colonies, and oftentimes the same petroleum code was imposed on multiple territories, e.g. France's Sahara Code which became law across territories now part of multiple modern-day States, e.g. Algeria and Chad (Turner, 1983). Colonial laws were typically (almost invariably) favourable to the colonising nation and its private corporations, and were typically exploitative in terms of host communities/ nations, ensuring (cheap) petroleum supply for colonial markets at the expense of host communities (Weygandt, 2017). Under the concession system ownership of oil reserves was surrendered to the IOCs in return of portion of extracted hydrocarbon resources. The mineral codes under which the concessions were granted combined with oligopoly market structure meant IOCs could dictate terms to Host States, for instance those newly Independent of colonial rule, as they see fit, and the deals they would make were highly profitable. The upstream market until the early 1970s was controlled by a small group of IOCs known as the 'Seven Sisters' (Carola, 2007). While in that era there were a few States such as the Soviet Union and Mexico that nationalized their oil industries and issued service contracts, instead of concessions, they were not major producers at the time. The Service Agreement structure however allowed the Host State to retain greater control over the resources as the IOC would only be engaged to perform a specific service of exploration and production at the IOC's sole risk (IR Global, 2016). Indonesia in the 1960s developed a different form of exploration and production contracts known as production sharing contracts (PSCs), which granted the host government greater control over the activities of the IOCs. There use grew more widespread in the 1990s (IIED, 2012).

3. Bargaining Models

The obsolescing bargaining model (OBM) as first introduced by Vernon was used to explain the relationship between IOCs and host states from 1970s to the 1990s. It explains these relations in light of different factors such as the goals of the parties, resources at their disposal and constraints they may be affected by. This model explains on the presumption that the IOC and Host State are in conflict with one another in terms of goals. Initially the IOC has the greater bargaining power but as it invests greater capital its assets will turn into hostages. This gives the Host State greater leverage and may impose conditions such as higher taxes and expropriating those assets (Vernon, 1971). This is a popular explanation for nationalization of IOC subsidiaries in the 70s (Brewer, 1992). This was generally an outcome of rising oil prices (Vivoda, 2011).

After market liberalization in the 90s this model became outdated and to keep up with current affairs alternatives were introduced (Eden & Lenway, 2001). An example of this is the political bargaining model which broadens the scope of the OBM. It does so by including other factors in negotiations. These include the stake holders and external parties such as Non-governmental organizations (NGO)s. It will also evaluate the effect of international commitments (Eden, et al., 2005). Another model was introduced by Ramamurti. It describes a situation all negotiations between host states and IOCs are a two tier event involving multiple parties. In the first tier the bargaining will occur between two governments. It will happen so by legal instrumentation such as a bilateral/multilateral treaty. This will then determine foreign direct investment (FDI) policies, rules and their implementation and all negotiations made between entities of participating states such as IOCs and host states will be under the context of these agreements. In the second tier the traditional model will apply (Ramamurti, 2001).

Another bargaining model was introduced in 2011 by Dr. Vlado Vivoda, which takes into account a range of different factors which may affect bargaining power. It includes different participants such as various stakeholders who may have an outcome on the negotiations at both domestic and international levels. It also takes the contribution of factors such as market volatility and the value of oil in the global energy economy. It is a product of combination of different theories ranging from International Political Economy, International Business Studies and International Relations. It builds on the basic OBM model. It does so mainly by extending the concept of interconnection of relevant stakeholders (due to allied

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industries) beyond just the IOC-host state relationship and applying it to various other stakeholders and previous agreements. It can theoretically be applied to the entire oil industry business cycle (Vivoda, 2011).

4. Nationalist Period

In the period of the 1970s and early 1980s production of oil in the international market was increasingly controlled by the State. The initial bargains of the IOCs began to obsolesce and they started to lose highly beneficial deals with states who were major hydrocarbon exporters. Due to evolving market factors however development in the 1990s were contrary to previous ones. The oil markets experienced a time where regulations were relaxed and privatization of the industry encouraged (Stevens, 1998). In the year 1986 the oil prices began to fall and it continued to do so. Considering state debts, the industry began to move back in the private direction. There were two major strategies used to facilitate this change. States such as France, U.K and Brazil privatized their industries while other simply commercialized their state owned oil companies so that their operations resemble those of the private sector companies (Van der Linde, 2000). Another event took place in the 1990s when previously centrally planned economies, for example those previously under Communist rule, adopted the market economy system. This was a great spur to the (part and full) privatization of many NOCs, a process that continues to date with Saudi Arabia's partial privatization plans for its own NOC, Saudi Aramco. A clear example is after the Soviet Union's dissolution into independent States (1991), that facilitated a varied geometry of market economy reforms and privatizations in that former State. Hartshorn, 1993).

In the latter part of the 1980s and in the 1990s the Organisation for Economic Co-operation and Development (ODECD) states increased taxation on oil production which meant they would get a bigger share of the economic rent at the expense of IOCs. By the 1990s however, the concepts of obsolescing bargaining and resource nationalism were being ousted from the market systems. From an international relations perspective resource nationalism was no longer a concept in play (Morse, 1999). The low oil prices in the 1990s, which would mostly oscillate between USD 10 to 25 a barrel for most of this period (Reuters, 2008), resulted in oil producing countries presenting much more lucrative deals than the 1970s or 80s. It must be noted however these were not nearly as good for IOCs as those that were prevalent in the concession era. Each State applied a different strategy when allowing IOCs to re-enter their countries. Certain Host States would do so under the terms of a tax royalty system which were beneficial to the IOCs. Other States would implement PSCs or risk service agreements the terms of which were less appealing to IOCs. The objectives of both parties in the 90s were clear cut. Host countries required the foreign investment while IOC's required access to oil reserves on the condition it's the cheapest

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reserve available to them (Vivoda, 2009). After 20 years of being subdued IOCs finally came into a more dominating position in the oil market by getting an increase in market share, greater inclusion in alliances and using mergers to control risk (Van der Linde, 2000).

5. Current Challenges to IOCs

The current conditions of the oil and gas market are greatly different from when they were 40 years ago. NOCs now dominate 90 % of hydrocarbon reserves globally and produce an estimated 55% of the world's oil & gas (Natural Resource Governance Institute, 2019). This has caused IOCs to invest in projects carrying much greater political or technical risk than would have made them viable in the past. IOCs such as Chevron, Total and Shell continued investing in Venezuela in mid 2010s despite civil unrest instead of diversifying risk by looking for alternative investment opportunities (Florencio, 2016). Technically more challenging projects are being taken on such as ultra-deep water oil extraction and tapping into unconventional sources such as shale formations. These ventures however are still limiting their ability to replace reserves. ExxonMobil for the last 20 years has replaced 100% of its reserves consistently could not do so for 2 years in a row in 2015 and 2016 (Davis, 2017). Constant turbulences in the oil industry and shifts in the energy markets are weakening the positions of the IOCs and the business models they have relied on for so long, causing them to adopt different strategies to deal with current issues. It has also reduced their bargaining power when dealing with states. Market changes that have caused this can be observed as under.

In the period before 2014 and primarily after the economic crisis of 2008 many events took place which had a deep effect on the energy market. The demand for oil from emerging economies such as India and China fell (Walker, 2015), (Ebinger, 2014). Saudi Arabia, as *de facto* leader of the The Organization of the Petroleum Exporting Countries (OPEC) bloc, substantially stabilized prices through the operation of supply quotas, and the USA experienced a shale petroleum boom, greatly increasing global petroleum supply as a result. In mid-2014 the crude oil prices fell to half after being over \$100 a barrel (bbl). In January 2016 it had gone down to \$30/ bblbut recovered to above \$60/bbl by 2018 (Statistica, 2018). In 2020 due to the virus pandemic there is a glut of supply of crude oil resulted in benchmark Brent crude prices falling as low as \$21/bbl (GmbH, 2020). The short term cycles of oil prices are not providing any sort of reassurance to IOCs as they have started strategizing a lower for longer scenario by cutting capital investment, streamlining project efficiency and reducing debt (Malek, 2018). The combination of low prices and being cut off from easy oil has damaged profit margins of IOCs considerably.

After the Paris Agreement, an international treaty to tackle climate change, States began reducing fossil fuel consumption by increasing regulatory control over the market. This was to reduce emissions in order to meet climate goals. They did so by aiming to eliminate use of fossil fuels in transport vehicles, ending subsidies related to oil production and raising taxes on oil products. While normally low prices for goods including oil cause a proportionate rise in demand that is no longer the case due to such policies (Stevens, 2016). This would indicate that cyclical pattern has ended as the change is deeper and structural in nature. The combination of lowered demand which is being increasingly met by NOCs using low cost productions and unconventional supplies IOCs no longer have the ability to obtain price recoveries as they did in the 20th century.. Some IOCs such as Shell are preparing for a lower forever future (Davis, 2017). A structural lowering of demand would mean that IOCs will have to reevaluate their project structures as majority on their portfolios are high cost and long term which are no longer profitable (Maher and Mikulska, 2016).

To make matters more challenging for IOCs the unconventional hydrocarbon resource market has come to the forefront recently especially in the USA giving IOCs increasing levels of unconventional petroleum competition for their traditionally conventional petroleum operations and production. In 2017 the U.S experienced a 46 year high in oil production by tapping into these resources (EIA, 2017). Main participation in these projects were by Independent Oil and gas producers and they have the bigger share in this market than IOCs. Shale hydrocarbon "plays" are quite different to upstream petroleum development, e.g. they tend to have much have short investment and production cycles/ profiles. And the upfront costs are low and payback times shorter. Shale oil and gas reserves are easier and cheaper to explore than conventional oil and gas reserves as the locations are more accessible. This sector has a higher reactivity to different market forces and can adjust quickly to changes in price. This fact is a great contributing factor in the lower for longer issue. Increases in price can be met quicker with increase in shale production or vice versa implying more agile variation to production levels, in response to price signals in the market, and hence less extreme price swings and lower leves in volatility as supply and demand supply equilibriums are produced more rapidly and efficiently (Krane and Agerton, 2015).

IOCs have retained competitive advantage over this market by high investment capital, high tech development and great experience. Tapping into unconventional reserves however requires lower capital, less tech expenses and different form of project management. IOCs

would require a different approach in order to enter this market while possibly diversifying into other markets such as renewable energy solutions.

6. Conclusion

IOCs had an era of upstream petroleum market dominance in the decades following the second world war, not least with respect to their operations in Recently-Independent countries yet to fully articulate and assert their own development approach to subsoil petroleum extraction, and still acutely suffering from the aftermath of exploitative colonization. The States to which these companies belonged to had structured the global markets in such a manner that IOCs which were their companies could demand almost any terms they wanted. In the 1970s and onwards keeping with the philosophy of the OBM both developing and developed countries nationalized these sectors using expropriation of assets to control the influence this oligopoly had on the energy market. In the 1990s after realizing that they did not necessarily have the expertise or technology to manage their reservoirs as efficiently some control was handed back to these IOCs. Measures were taken however to ensure that bargaining power was not surrendered to the IOCs as in the concession era (Pre-1960s). NOCs were setup, legislation declaring the state as hydrocarbon resource owner implemented and contract systems such as the PSC were introduced. Then, however the negative effects of fossil fuel began to come into light which were mostly about the hazard to the environment. These issues coupled with a cheaper and more efficient method of acquiring fuel in the U.S through unconventional sources reduced the demand for oil. With a global reduction in oil demand during majority of the years 2020 and 2021 the vitality of IOCs in the global energy market declined, exponentially increasing the waning of their bargaining power (Waterworth and Bradshaw, 2018). The global shift towards renewable energy and finally the effect of the corona virus lockdowns had gutted the economic importance IOCs. IOCs diminishing access to oil has shifted the bargaining power to such an extent that where these companies would first dictate terms to sovereign governments to explore and exploit reserves are now prepared to invest in much riskier ventures just for access to oil despite lower profit margins.

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