

# **Towards a Policy Framework for Iraq's Petroleum Industry and an Integrated Federal Energy Strategy**

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## **Abstract:**

The “*Policy Framework for Iraq’s Petroleum Industry*” is a logical structure that establishes the rules to guide decisions and manage processes to achieve economically efficient outcomes within the energy sector. It divides policy applications between regulatory and regulated practices, and defines the governance of the public sector across the petroleum industry and relevant energy portfolios.

In many “Rentier States” where countries depend on a single source of income such as oil revenues, overlapping powers of authority within the public sector between policy makers and operators has led to significant conflicts of interest that have resulted in the mismanagement of resources and revenues, corruption, failed strategies and the ultimate failure of the system. Some countries have succeeded in identifying areas for progressive reform, whilst others failed due to various reasons discussed in this thesis. Iraq fits into the category of a country that has failed to implement reform and has become a classic case of a rentier state.

The primary aim of this research is to produce a policy framework applicable to the local settings of Iraq’s petroleum industry, together with an implementation strategy that helps the country in its transition from legacy practices to sustainable policies compatible with the federal constitution of 2005. Such a framework would observe the legislative applications that appeared in the aftermath of establishing a federal regime. The framework will help to rationalise the decisions and processes that sustain the governance and business practices across the energy value chain of Iraq.

The development of a policy framework exemplified by the final setting of the Federal Energy Council (FEC) proposed in this thesis has to take into account the existing legal framework, the legacy of previous policies and the governance arrangements of developing policy under a new federal regime. A review of federal models of major resource holders that may share similar attributes to Iraq is subsequently necessary to identify the appropriate fiscal regime which fits Iraq’s legal system. Conflicts of interest and how they have been reduced or eliminated in case study countries, must be identified to instruct the final proposed framework.

This research also examines key factors that influence the petroleum sector of a federalized major resource holder. Furthermore, qualitative in-depth case studies have been conducted to investigate the research problem. This research is complemented by numerous interviews that took place with high profile executives, policy makers and senior officials, as well as a review of data relevant to Iraq from an array of historical literature. The findings of this thesis will comprise a proposed “policy framework for Iraq’s petroleum industry,” exemplified by the FEC that the federal government of Iraq needs to adopt to transition energy institutions from the legacy of centralised rule to a modern and efficient petroleum industry in a democratic setting.

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## Chapter 1: Introduction and Methodology

Conventional fossil fuel resources such as oil and natural gas are commodities that form the foundation of the global economy and energy supply. Together they make up 55% of world's energy consumption,<sup>1</sup> with 60% of those resources held by the Major Resource Holders (MRH) of the Middle East, a region in which 40% of the world's petroleum is produced.<sup>2</sup>

Over the past few decades, especially after the return of widespread nationalisation of oil and gas and later, new contractual arrangements for foreign companies in the Middle East, the petroleum sector has undergone significant changes as it has become more regulated, and as governments seized more power to control states' assets. Since there is very little history of democratic institution building in the MENA region, and that in many cases, whoever controls the state directly runs the economy, the process of gradually increasing state control over the main revenue generator in resource rich nations has been accompanied by the problem set defined by Sachs and Warner as the Resource Curse.<sup>3</sup> Market volatility in oil and gas is one problem, but it can arguably be mitigated by a carefully designed petroleum policy that maximises efficiency within a country's energy value chain, helping shield the economy from market shocks.

Kennedy notes that by 1976, most major oil producers had nationalised their industries.<sup>4</sup> However, external and internal political dynamics have impacted the Middle East and North Africa (MENA) as much as geology, and have subsequently given a small number of producers the strategic ability to have an outsize influence on various oil producing states, of which many are dependent on hydrocarbon revenues as a single source of income.

With their newfound control over the hydrocarbon sector, MRH countries in the Middle East became increasingly aware of their growing political influence that came with so much supply (two thirds of global supply by 1972) and according to Rubin, "changed

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<sup>1</sup> International Energy Agency, "World Energy Outlook," (Paris, 2014)

<sup>2</sup> OPEC, "World Oil Outlook," (Paris, 2014)

<sup>3</sup> Andrew M. Warner, Jeffrey D. Sachs, "Natural Resource Abundance and Economic Growth," (National Bureau of Economic Research Working Paper 5398, 1995)

<sup>4</sup> Ryan Kennedy, "Nationalization of the Oil Sector: A Political Economy Perspective," *Paper presented at the annual meeting of the International Studies Association Annual Conference "Global Governance: Political Authority in Transition,"*) March 16th 2011

the rules of the game in their favour” beginning with Libya’s increasingly assertive attack on concession contracts.<sup>5</sup> Libya’s assertiveness culminated during the 1971 Tehran conference, where OPEC members threatened to unilaterally raise oil prices and even embargo the 22 International Oil Companies (IOCs) that took part in the talks if they did not comply with the terms made in February that year.<sup>6</sup>

This influence, and the downfall of the IOC monopoly of the “Seven Sisters” cartel was concerning enough for the United States to implement modest energy conservation policies such as the 55mph speed limit and the creation of a strategic petroleum reserve (under the 1975 Energy Policy and Conservation Act).<sup>7</sup> Such developments were no immediate threat to OPEC however; following the 1973 oil price shock, oil imports in OECD countries had fallen only 5% from their 1970 level, by 1975.<sup>8</sup> Indeed, OPEC continued its assertiveness with IOCs, as Clifton Garvin, Exxon CEO, recounted,

“After 1976] we agreed to try to operate under the arrangements...[But] they didn't seem to survive very long. In other words, if it was in the interests of the Saudi government to change, they changed.... We [also] tried to make the exploration arrangements work for a while, but it became obvious in a very short period of time that they were not going to honor what those crude oil arrangements had anticipated.”<sup>9</sup>

OPEC also faced internal fissures as countries sought to break quotas to capture market share, placing severe economic pressure on smaller producers. For new entrants to the global energy market, OPEC’s newfound power was potentially a threat to their economic stability, and they sometimes sought to evade the cartel’s quotas, as Fattouh notes,

“Problems become more acute when the required cuts are significant as the small OPEC members usually find it difficult to reduce their production on a pro-rata basis: the usual system adopted by OPEC over the years. In these circumstances, market participants would doubt the credibility of OPEC’s decision to cut production and may decide to ignore the signal. This is

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<sup>5</sup> Barry Rubin, *The Middle East: A Guide to Politics, Economics, Society and Culture*, (New York: Routledge, 2012) , 127

<sup>6</sup> Edmund Jan Osmańczyk, Anthony Mango, *Encyclopedia of the United Nations and International Agreements: Vol 4:T to Z* (London: Taylor and Francis, 2003): 2288

<sup>7</sup> “The Energy Policy and Conservation Act,” *William & Mary Environmental Law and Policy Review* 3 (1976): 94-163

<sup>8</sup> P Anderson, H Bernard, *Energy Shocks and the demand for energy*, (Research paper, Bank for International Settlements, Basle, 1991.)

<sup>9</sup> Morris Adelman, *OPEC at High Noon: 1974-1981*. (Research paper, MIT Center for Energy and Environmental Policy Research, Massachusetts, 1992.)

particularly true if there are deep divisions and political rivalries among member countries which will jeopardize the success of any coordination efforts.”

Adelman quotes the New York Times to illustrate this point:

"[Nigeria] thought it had an agreement with Algeria and Libya in 1977 to raise prices in concert. By the time they realized what was happening...they'd lost \$1.5 billion in revenues. Between the Fall of 1977 and the Spring of 1978, Nigeria lost nearly one-third of its sales because they were less than 2 percent out of line on prices.”<sup>10</sup>

Political division and the desire to capture market share within OPEC was only one problem with the cartel however, as individual member states experienced internal instability. In 1978 for example, oil workers in Iran went on strike, taking millions of barrels of Iranian oil off the market and leading to the second oil price shock of 1979 as Iranian revolutionaries ousted the Shah, reducing Iranian oil production from a high of 6 million bpd to just over 400,000 bpd in 1980, doubling world oil prices. <sup>11</sup>

While this crisis may have resulted in a revenue windfall for producers such as Saudi Arabia, who witnessed a spike in oil income to \$113 billion in 1980-81,<sup>12</sup> the longer term effect for all producers was more negative. Firstly, the shock of the 1979 spike dramatically reduced demand, which fell from 64 million bpd in 1979 to 59 million bpd by 1985.<sup>13</sup> Likewise, faced with yet another price crisis, Europe and North America re-orientated their strategies towards lower energy intensity, with oil consumption dropping 40% between 1979 and 1990.<sup>14</sup> At the same time, stockpiles of oil rapidly built up, as Saudi Arabia ramped up production from 8.5 million bpd to over 10 million bpd to avert global economic crisis, since Iranian and Iraqi production had almost collapsed.<sup>15</sup>

As oil demand started to fall, by 10% to 1983, stockpiles remained high. OPEC subsequently changed strategy to keep a floor on prices, with Saudi Arabia bearing over

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<sup>10</sup> Ibid.

<sup>11</sup> "Iran: Another Crisis for the Shah," *Time Magazine*, Nov. 13th, 1978

<sup>12</sup> René Rieger, *Saudi Arabian Foreign Relations: Diplomacy and Mediation in Conflict Resolution*, (New York: Routledge, 2016.): Section 2.3.2.

<sup>13</sup> Barry Rubin, *The Middle East: A Guide to Politics, Economics, Society and Culture*, (New York: Routledge, 2012) , 127

<sup>14</sup> Morris Adelman, *OPEC at High Noon: 1974-1981*. (Research paper, MIT Center for Energy and Environmental Policy Research, Massachusetts, 1992.)

<sup>15</sup> M. S. EL-Azhary, *The Iran-Iraq War, A Historical, Economic and Political Analysis*. (New York: Routledge, 1984.):44

60% of production cuts. This forced importers to buy more oil from non-OPEC countries and further reconfigure their energy strategies.<sup>16</sup> Increasingly cognizant of the damage to their economy caused by reducing output, Saudi Arabia then ramped up production in 1986 to secure market share, and with oil stockpiles at record highs, the effect was a glut and subsequent price collapse.<sup>17</sup> This in had a destabilizing effect on the region. By 1990 Saddam Hussein came to see Kuwait's continued high oil output as a threat to Iraq's economic stability, and subsequently used this as justification for his invasion of the country that year.<sup>18</sup>

So severe was the effect of this price collapse in oil dependent countries, that Shabafrouz argues it was responsible for conditions for the Algerian civil war of 1992<sup>19</sup> while others such as Gaidar<sup>20</sup> have suggested it played a key role in the demise of the Soviet Union, with Reynolds arguing lack of investment was central to rapid production decline and a Soviet financial crisis.<sup>21</sup>

The above examples of the volatility of the global energy market serve to illustrate a central point examined by this paper: Faced with the rising unpredictability of political as much as market factors influencing global supply, the need for viable policies to regulate complex industries is not an option but a necessity. This is particularly the case in a federal setting, where individual sub-states must bargain with the centre for revenue allocations and production and exploration rights a situation that is seen in all five federal states examined by this paper, the UAE, Russia, Canada, Nigeria and Iraq.

Maintaining professional practices free from legal conflict and mismanagement can help an MRH such as Iraq to withstand unpredictable exogenous political and market factors, to include rival producers ramping up production to damage the energy sector of a rival MRH, as seen with Venezuela's battle with Saudi Arabia in the late 1990s, which

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<sup>16</sup> Dermot Gately, "Lessons from the 1986 oil price collapse," *Brookings Papers on Economic Activity*, 2 (1986): 237-285

<sup>17</sup> Ibid.

<sup>18</sup> "Iraqi invasion of Kuwait-International Response." *Keesing's Record of World Events*, 36 (1990): 37631

<sup>19</sup> Miriam Shabafrouz, "Oil and the Eruption of the Algerian Civil War: A Context-sensitive Analysis of the Ambivalent Impact of Resource Abundance," *German Institute of Global and Area Studies, Working Papers*, 118 (2010)

<sup>20</sup> Yegor Gaidar "The Soviet Collapse," (paper presented at AEI on November 13, 2006.)

<sup>21</sup> Douglas B. Reynolds, Marek Kolodzie, "Former Soviet Union Oil Production and GDP Decline: Granger Causality and the Multi-Cycle Hubbert Curve," *Energy Economics*, 30 (2008) 271-289

derailed Caracas' production targets.<sup>22</sup> To insulate against such turbulence, modern petroleum policies have proved to be instrumental in drawing the line between the regulators (i.e., governments) and the regulated bodies, that is, the operators, including national and international oil companies and private sector firms.

As politics has continued to influence policies, the epidemic of conflicting interests within state institutions has become endemic in MRH countries that have failed to build checks and balances into their petroleum policies. As the Natural Resource Governance Institute note,

“Poor governance and systemic corruption are prevalent in many resource-rich countries... (corrupt networks) derive huge personal benefit from their ability to “capture” public resources, as well as regulatory and policy-making processes.”<sup>23</sup>

The role of regulators has overlapped with national and foreign operators, leading to mismanagement, corruption, hindering development and wasting of investment opportunities with such countries as Nigeria, Venezuela and increasingly Iraq proving to be egregious examples. Transparency International's Corruption Perception Index for 2015 ranks these countries at 138 (Nigeria) 158 (Venezuela) and 161 (Iraq.) Other major oil exporters fare badly, including Russia (119) Libya (161, joint position with Iraq) and Iran (130).<sup>24</sup> However, this paper does not seek to focus on MRH countries that score badly on governance indicators. Canada and the UAE have been chosen as more successful MRH countries in an attempt to examine successful and unsuccessful policies.

Nonetheless, some governments of oil producing states in the MENA region have consolidated centralisation and empowered national oil companies to further control petroleum exploration and production operations. These countries now face the challenge of changing their legal regimes (IOC investment frameworks) to attract more investment, despite recent IOC memories of difficult contractual terms driven by resource nationalism.

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<sup>22</sup>James Bowen, “Saudi Arabia's New Oil Strategy could backfire,” *The National Interest*, 8th of July 2016. Accessed July 16th 2016 <http://nationalinterest.org/feature/saudi-arabias-bold-new-oil-strategy-could-backfire-16515>

<sup>23</sup> Natural Resource Governance Institute, “Responding to the Challenge of Corruption in Resource-Rich Countries,” (2015)

<sup>24</sup> Transparency International: Corruption Perception Index 2015

For example, senior officials from ENI and Total have publicly remarked that their companies had lost “so much money” from the “buyback” contracts favoured by the Iranian government from the early 1990s onwards, hinting that the new Iranian model contract would need much better terms.<sup>25</sup> Likewise, after a series of corruption scandals hit the senior leadership of Algerian NOC Sonatrach, the Algerians struggled to adapt their Joint Venture dominated model and have failed to attract significant new investment in their oil sector as of 2016. According to IHS, Algeria’s failed 2011 licensing rounds were largely due to,

“Years of tightening fiscal terms, red tape and decision making paralysis in the state-owned industry and bureaucracy. IOCs have been forced to wait for years on commercialisation and development licences, while they have seen their expected returns on expensive projects plummet.”<sup>26</sup>

With challenging investment terms in countries holding a total of 361 billion bbl estimated reserves<sup>27</sup> including Algeria (12 billion bbl) Libya (48 billion bbl) and Iran (158 billion bbl) and instability and political uncertainty in Iraq (143 billion bbl), many IOCs were left with limited options to consider under rigid regulations, vague policies, unwelcoming laws and challenging commercial terms, forcing them to explore for oil far from the Middle East.

Deterred from Iraq until the 2009 licensing rounds, Major IOCs increasingly looked for oil opportunities in Siberia, Alaska, Canada and offshore regions such as the Atlantic coastline of West Africa.<sup>28</sup> This scenario had very little impact on traditional oil producers under high oil prices, but has proved to be threatening to economies under low oil prices, as petroleum has become the main source of income for MENA rentier states. With the advent of shale oil, the centre of production growth has shifted West, while the growth of the Asian economies and lessening energy intensity (combined with economic stagnation) has shifted consumption to the East.

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<sup>25</sup>Rania El Gamal, “Iranian officials revive ghost of oil deals disliked by majors”, *Reuters* 4th of July 2016. Accessed July 16th 2016. <http://uk.reuters.com/article/uk-iran-oil-contracts-idUKKCN0ZK1RY>

<sup>26</sup> “Abysmal Licensing Round Result in Algeria Confirms Energy Sector Malaise,” *IHS Markits* 18th of March 2011. Accessed 16th July 2016. <https://www.ihs.com/country-industry-forecasting.html?ID=1065929211>

<sup>27</sup> All figures from OPEC: Share of World Crude Oil Reserves 2015.

<sup>28</sup> Vlado Vivoda, “The rise of state-firm bargaining in the 2000s,” in “*The Political Economy of Natural Resources and Development: From neoliberalism to resource nationalism*” eds Paul A. Haslam, Pablo Heidrich. (New York: Routledge, 2016), 53-59.

This new challenge comes at a time when MENA producers are overcoming the legacy of decades of state dominance in the energy sector. Between 1975 and 1990, much oil development in these states was limited to old technologies inherited from International Oil Companies (IOCs) of the pre-nationalisation era. For example, when the former Oasis group (Amerada Hess, Conoco and Marathon) and Occidental Petroleum returned to Libya on a fact finding mission Libya to after discussing the end of sanctions, they evaluated infrastructure they had left behind in 1986.<sup>29</sup>

By the early 2000s, state management practices were underpinned by state-controlled enterprises, with no room for a market economy to evolve. For Iraq and Iran this already followed a challenging situation since in the 1990s the Iraq-Iran war burdened two major oil producers with over \$100 billion dollars' debt each. Following the collapse of the Soviet Union in the early 1990s and the collapse of Soviet oil production highs, the MENA region had become more welcoming to Western companies, foreign investment and reform, gradually experimenting with market economy practices.

In the mid -1990s, Iran launched its “Buyback” model contract, originally stemming from a 1989 modification to Iranian law that prohibited foreign company involvement in the energy sector, intended to give the Islamic Republic the ability to amass its own energy infrastructure.<sup>30</sup> Saddam Hussein's Iraq explored opportunities, with CNPC, Total and Lukoil for its Supergiant southern fields. Meanwhile Libya, exploring new relations with the West, returned to a version of its Joint Venture based Exploration Production-Sharing Agreements (EPSAs) for the giant fields of the Sirte Basin, altering a contract model initially launched in the early 1970s, but modified as the EPSA III in the late 1980s.<sup>31</sup>

By 2005, there was already some IOC discontent with Libyan contract models, as *Openoil* reported on the first bidding rounds open to Western companies, “Some IOC representatives considered that the limited number of bids signalled dissatisfaction with

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<sup>29</sup> International Business Publications “*Libya Oil and Gas Exploration Laws and Regulation Handbook*,”(Washington: International Business Publications, 2013): 67

<sup>30</sup> Mohammad Mehdi Hedayati, “A critical analysis of Iranian buy-back transactions in the context of international petroleum contractual systems.” (Dis.2008, Durham University.)

<sup>31</sup> “Libya Puts Upstream Negotiations with IOCs On Fast Track, Says Badri” MEES, 24th April, 2000.

increasingly stringent terms and operating conditions.”<sup>32</sup> Likewise, *Rigzone* reported in March 2007 how, “oil firms complain that business talks are typically mired in bureaucracy and squabbling between reform-minded officials and conservatives.”<sup>33</sup> By the time of the price collapse of 2009, Gaddafi was further deterring IOC investors by stating,

“Oil exporting countries may move toward nationalization because of the rapidly declining prices. This is put on the table and is being discussed seriously. Oil maybe should be owned by national companies or the public sector at this point, in order to control the oil prices, the oil production or maybe to stop it.”<sup>34</sup>

In Iran, the first Buyback negotiations took several years, with Total being the first IOC to sign an agreement in 1995 (Conoco previously signed a contract but then pulled out due to US sanctions). By 2005 however, it was apparent IOCs were struggling with the limited and inflexible fiscal terms of Buybacks, with Farnejad noting, “From the contractor's perspective, there are major risks associated with the buyback contract in terms of the performance guarantees associated with production rates, development cost and project schedule.”<sup>35</sup>

Difficult contractual terms were only one problem for IOCs in Iran however with one cleric condemning “those inside the oil empires who plunder millions and millions and send them to their own foreign bank accounts.”<sup>36</sup>

As investment stagnated, the alignment of investors and host-governments’ interests became a necessity to sustain long-term business development, especially in the petroleum industry since the objectives of various stakeholders often differ quite significantly.

For this reason, International Oil Companies demanded more clarity on regulatory frameworks prior to engagement in long term investment as they aimed for revenue

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<sup>32</sup> Openoil: Libya, 2011

<sup>33</sup> Sally Jones, “BP Talks with Libya on Giant Gas Acreage Falter -Officials,” *Rigzone*, 9th of March 2007. Accessed 16th of July 2016. [http://www.rigzone.com/news/oil\\_gas/a/42345/BP\\_Talks\\_with\\_Libya\\_on\\_Giant\\_Gas\\_Acreage\\_Falter\\_Officials](http://www.rigzone.com/news/oil_gas/a/42345/BP_Talks_with_Libya_on_Giant_Gas_Acreage_Falter_Officials)

<sup>34</sup> Sue Pleming, “Gaddafi says looking at Oil firm Nationalization,” *Reuters* January 21st 2009. Accessed July 16th 2009. <http://uk.reuters.com/article/businessproind-us-libya-gaddafi-oil-idUKTRE50K61F20090121>

<sup>35</sup> Hooman Farnejad, How competitive are the Iranian Buyback contracts in comparison to production sharing fiscal systems? (Diss. University of Dundee, 2008).

<sup>36</sup> “The fight over letting foreigners into Iran’s oilfields.” *The Economist*, July 12th 2001.

maximisation. The present study will illustrate the acute problems caused by ongoing regulatory uncertainty in Iraq's energy sector.

It will be argued that the objective of the petroleum regulatory framework from a host-government's perspective is to establish a viable and welcoming policy that aims to:<sup>37</sup>

- Attract IOCs to explore and develop potential resources;
- Develop a well-functioning and sustainable petroleum sector;
- Develop the country's economy, taking into consideration a long-term and short-term view.

With the growing commercial understanding of governments for fair competition, policy reform and fair fiscal regimes, having a viable petroleum policy framework has become a priority to offer a level playing field for qualified operators including national and international oil companies (NOCs and IOCs). This has helped newly formed Gulf Countries in the 1970s to maximize their oil production levels and secure a greater market share in consuming countries in Asia, Europe, and the United States of America. However, even in the Gulf States there have been challenges, as El Katiri remarks,

“The Gulf states’ domestic pricing framework sets a low ceiling for investment returns from development projects, a particularly painful truth for international oil and gas companies.”<sup>38</sup>

Despite this, the Gulf States have an advantage in oil extraction over rivals Iran, Libya, Iraq and Algeria in that they have decades of political stability in addition to low per barrel extraction costs, and even where extraction costs are relatively cheap (Iraq, Libya) requirements to invest in new energy infrastructure after wars and political instability have been a deterrent to investment. Of the Gulf States, Hvozdyk notes,

“NOCs in a number of major oil producers – particularly where financial constraints are less binding or it is easy to attract private capital – ratcheted up plans for investment since 2005. Large companies – such as Saudi Arabia’s Aramco, UAE’s ADNOC, and Kuwait’s KPC, which can self-finance projects and were able to maintain their human and productive capital base during the

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<sup>37</sup> Upstream Law and Regulations, Pereira and Talus, 2013

<sup>38</sup> Laura El-Katiri, “Energy Sustainability in the Gulf States: The Why and the How.” (Oxford: Oxford Institute for Energy Studies, 2013.)

lean years of the 1990s – have developed ambitious capacity expansion plans at all levels of the production chain.”<sup>39</sup>

By resolving difficult questions regarding foreign investment and ownership in their energy sectors as long ago as the 1970s, countries such as the UAE were eventually able to focus on energy subsidy reform, which has been a continuously difficult issue in MRH countries such as Iraq, Russia, Nigeria and Venezuela, to name a few examples. In the MENA region, this issue has been particularly problematic. Boersma and Griffiths note how up to 2 million bpd of fuel in the MENA region is burned in power generation at cost to the state, because of subsidies, fuel which could be exported for government revenue.<sup>40</sup>

Despite these problems, moving from an exclusively state-owned and operated market to a market economy and cooperative partnership between IOCs and NOCs has been major milestone post nationalization.<sup>41</sup> In some petroleum producing countries, an increasing number of NOCs coexist and cooperate with IOCs on national soil. This is the case for ADNOC in the UAE, Sonatrach in Algeria, the NOC of Libya (pre-2011), Petronas of Malaysia, Petrobras in Brazil, Pertamina in Indonesia, NNPC of Nigeria, the Qatar National Gas Company, and although strained, PDVSA (Petróleos de Venezuela SA). Other NOCs have the structure of mixed shareholding with majority shares owned by the state and minority shareholding for private investors such as Petrobras of Brazil and Statoil of Norway.<sup>42</sup>

However, state institutions in some major oil producing countries such as Iran, Iraq and Kuwait have resisted change for nearly 40 years after the 1970s-nationalization wave, while the overlap of authority between regulator and regulated bodies has become more of a hindrance to petroleum development and less welcoming to foreign investors. According to Fadhil Chalabi, this has resulted in billions of dollars’ worth of lost opportunities that have gone to competing producers in the region.<sup>43</sup>

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<sup>39</sup> Lyudmyla Hvozdyk, Valerie Mercer-Blackman, “What determines investment in the oil sector?” *Cambridge University and Inter-American Development Bank. IDP Working Paper Series IDP-WP-209*

<sup>40</sup> Tim Boersman, Steve Griffiths, “Reforming Energy Subsidies: Initial Lessons from the UAE.” *Brookings Energy Security and Climate Initiative* (Masdar University 2016.)

<sup>41</sup> Valerie Marcel, “Oil Titans: National Oil Companies in the Middle East,” (Washington: Brookings Institution Press): 122

<sup>42</sup> *Ibid.* Page 277

<sup>43</sup> Fadhil Chalabi, 201, “Oil policies, oil myths: Observations of an OPEC insider,” (London: Tauris, 2010): 244

Since the nationalisation of the Iraq Petroleum Company (IPC) in the early 1970s (formally owned by BP, Shell, ExxonMobil, Total and Partex), the oil and gas sector in Iraq has been performing erratically when it comes to the application of practical policies required for sustainable growth.<sup>44</sup> After the collapse of Iraq's Monarchy in 1958, all subsequent polities ruling Iraq have employed a state-controlled economy approach while relying on oil revenues as the country's single source of income, reaching 95% of national budgets.<sup>45</sup> State control over Iraq's oil revenue together with massive expenditure for the army to resolve internal conflicts through force has further divided the nation,<sup>46</sup> and has led to Iraq being classified as a failed state in the international index.<sup>47</sup>

Although Iraq's National Oil Company (INOC) was formed in the early 1960s, to become Iraq's main national operator with full control over nationalized assets, by the early 1970s this model was proving to have limitations. In 1987 the ruling party in Iraq decided to dissolve INOC making all national operating companies subsidiaries of the Ministry of Oil. Since then, the regulator of the petroleum industry in Iraq has also acted as an operator. The end of INOC heralded a new era of conflict of interest that now defines the management of Iraq's biggest single source of income. Under Baathist rule, centralism and the monopoly of decision-making defined the political modus operandi, and the petrodollar was the main financier of consecutive wars and internal armed conflicts. The overlap of politics and policies was clearly making oil a dividing factor, not a unifying instrument, as Saddam weaponised the sector for his own ambitions. Newnham notes,

“Oil and gas profits can also be used to win over politically important individuals. Saddam Hussein was widely reported to have used this tactic after the first Gulf War, when his regime covertly gave oil export permits to individuals who were helping Hussein politically and economically. Such permits, allowing the export of steeply discounted oil, could then be resold to oil dealers at a large profit.”<sup>48</sup>

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<sup>44</sup> Ghanim Anaz, “Iraq: Oil and gas in the 21st century,” (Nottingham: Nottingham University press, 2012): 413

<sup>45</sup> Luay al Khatteeb, Iraq's economic reform for 2016,” *The Oil and Gas Year 2015*

<sup>46</sup> For a detailed overview of Iraq's internal conflicts during the Baath era and the general militarization of the country under Saddam Hussein, see Dina Rizk Khoury, “Iraq in Wartime: Soldiering, Martyrdom, and Remembrance,” (Cambridge: Cambridge University Press, 2013)

<sup>47</sup> Fund for Peace Fragile States Index 2015, Accessed July 16th 2016, Available at <http://foreignpolicy.com/2015/06/17/fragile-states-2015-islamic-state-ebola-ukraine-russia-ferguson/>

<sup>48</sup> Randall Newnham, “Oil, carrots, and sticks: Russia's energy resources as a foreign policy tool,” *Journal of Eurasian Studies*, Vol.2, 2 (2011): 134-143

Although nationalization aimed to secure Iraq's sovereignty over hydrocarbon assets, the effect was the opposite given the lack of best-practice processes, policy applications, governance frameworks and viable commercial strategies to replace the state vacuum of the concession system, where the government's role was consigned to taxing the profits of IOCs that had legal ownership of the resource.<sup>49</sup>

Therefore, the only notable result of Iraq's period of total state domination of the industry was the steady decline of Iraq's main revenue generator, far below the country's potential, coupled with the continuation of Iraq's economy being dependent on oil revenue in isolation from other industries. The legacy of this era still affects Iraq's economy and places it at the mercy of unsustainable oil production (reservoirs were damaged during the Iran-Iraq war as Iraq sought to maintain a war economy) and volatile oil prices.<sup>50</sup>

With regard to market strategies, Iraq put downward pressure on global prices as it ramped up production in the mid-1980s (by increasing pipeline exports, since the southern export corridor was effectively blockaded), eventually reaching almost 3 mbpd by late 1989.<sup>51</sup> This was an approach that it later planned to repeat with a 2010 production target of 12mbpd.<sup>52</sup>

While pursuing aggressive and unrealistic export targets, the Ministry of Oil continues to overlook critical efficiency savings in the sector. Lucrative commodities such as gas have continued to be flared at similar levels to those seen in the 1990s (see Basra Gas Company case study, chapter 5) while the petrochemical industry struggles, aging refining capacity suffers inefficiency due to old technology, and Iraq's private sector has had no chance to complement the role of the public sector. With regard to the latter point, Public Private Partnerships (PPPs) are a much needed introduction to Iraq to

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<sup>49</sup> Fadhil al-Chalabi, *Oil Policies, Oil Myths: Analysis and Memoirs of an OPEC Insider* (London, 2010), 219

<sup>50</sup> Adnan al Janabi, Luay al Khatteeb, "The need for cooperation between producers and consumers," Iraq Energy Institute, 10th of August, 2012, Accessed July 16th 2016  
[http://iraqenergy.org/home/articles\\_details.php?id=32](http://iraqenergy.org/home/articles_details.php?id=32)

<sup>51</sup> Iraq warning on oil exports. *The New York Times*. October 10<sup>th</sup> 1989. Accessed July 16<sup>th</sup> 2016.  
<http://www.nytimes.com/1989/10/10/business/iraqi-warning-on-oil-exports.html>

<sup>52</sup> "Shahristani denies rumours of reduced oil target," *Iraq Business News*, May 9th 2011. Accessed 16th of July 2016. <http://www.iraq-businessnews.com/2011/05/09/shahristani-denies-rumours-of-reduced-oil-target/>

sustain the wider value chain of this diverse industry, but the creation of this model in Iraq has been beset with bureaucratic hurdles, a legacy of the mentality of state control.<sup>53</sup>

Nonetheless, the role of the Iraqi government will likely remain central for the foreseeable future, and requires the necessary reforms to act as an effective policy-maker and regulator for overseeing the entire sector and companies operating within it, while setting the necessary policies and standards, and focusing on maximizing the economic rent to the Iraqi people from these operations. However, if the government engages in operating the sector as opposed to managing it, this will likely compromise its own role as an effective regulator.<sup>54</sup>

Across the world, countries have opted for different organizational structures for their petroleum industries. The federal government of Iraq has the opportunity to shape its own oil and gas policy and resolve the regulatory problems that will undoubtedly determine the petroleum sector's future. At the same time, a well-designed national energy strategy has the potential to mitigate the effect of volatile international energy markets.

## **1.1 The Research Problem**

Research in the field of petroleum policy framework development is inconclusive; this is due to the complexity of the sector being an economic driver in virtually every sector, especially for rentier states where governments have a strong control over industry and domestic energy consumption. Unpredictable political, social and commercial dynamics are a major influencing factor in deciding the economic development of a state.<sup>55</sup> Subsequently, Large-N studies are prone to significant margins of error due to the number of factors that influence energy policy, while other case study approaches risk being too narrow to identify optimal approaches to resource governance.

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<sup>53</sup> Ghanim Anaz, "Iraq: Oil and gas in the 21st century," (Nottingham: Nottingham University press, 2012): 141

<sup>54</sup> Valérie Marcel, "Guidelines for Good Governance in Emerging Oil and Gas Producers," The Royal Institute of International Affairs (2013)

<sup>55</sup> Valerie Marcel, "Oil Titans: National Oil Companies in the Middle East," (Washington: Brookings Institution Press): 235

A number of authors have focused their work on the low capacity of governments in developing countries to manage resource wealth, suggesting resource abundance is causally linked to low long term growth, chronic corruption, increased risk of civil war and autocratic governance. A term first used in the 1970s, the “resource curse” arguably became a popular theory in 1995 with Sachs and Warner’s study, “*Natural Resource Abundance and Economic Growth*” which illustrated a correlation between long term low growth and the abundance of resources.<sup>56</sup> By 2007, Ilmi used qualitative analysis to show a “statistically significant” indication that resource wealth negatively affected per capita incomes, noting,

“In Latin America, high income inequality stemming from uneven distribution of resource returns has ended in failure to accumulate social and human capital, interfering with sustained growth and economic diversification.”<sup>57</sup>

For the purpose of designing an energy policy framework, it is not sufficient to note the existence of a large resource base in Iraq and correlate this with political instability, corruption and economic volatility and then diagnose a case of the resource curse. For example, the existence of this phenomenon has been challenged in recent years by a number of observers who point to nations that have escaped this trend, notably Chile and Botswana.<sup>58</sup>

Ross has looked at 14 quantitative studies examining the relationship between civil war and resource wealth, and found no strong relationship between natural resource abundance and conflict.<sup>59</sup> Similarly, Smith concludes that when analysing developing countries with and without resource wealth, there appears to be no trend that links resources to conflict. He notes,

“By removing the barricades separating oil exporting states from other states (especially in the post-colonial world), we gain the capacity to put resource

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<sup>56</sup> Andrew M. Warner, Jeffrey D. Sachs, “Natural Resource Abundance and Economic Growth,” (National Bureau of Economic Research Working Paper 5398, 1995)

<sup>57</sup> Atsushi Ilmi, “Escaping from the Resource Curse: Evidence from Botswana and the Rest of the World,” IMF Staff Papers, Vol. 4, 54 (2007)

<sup>58</sup> Ibid.

<sup>59</sup> Michael L. Ross, “What Do We Know About Natural Resources and Civil War?” *Journal of Peace Research*, 41, 3 (London: Sage, 2004) :337–356

wealth in a more normalized place in comparative inquiry, where resource wealth is influential but not entirely constitutive.”<sup>60</sup>

Di John is more concise in his analysis, noting that,

“The proposition that oil abundance induces extraordinary corruption, rent seeking and centralised interventionism and that these processes are necessarily productivity- and growth-restricting is not supported by comparative or historical evidence.”<sup>61</sup>

Rather than seeking to justify diagnosis of the curse, a more useful way of looking at the research problem would be to look at what is missing in Iraq in terms of institutional strength and federal structure to effectively govern resources and what is present in federal countries that have developed strong regulations. Stevens, Lahn and Kooroshy note the problems with the wide scope of resource curse theory, which has informed the small but focused case study approach taken by this study:

“The shortcomings of the resource-curse theory arise mainly from the reductionist quest for ‘one big explanation’ of the role of resources in development. The generalization that resource production harms the economy overlooks the complexity of economic development in different countries under different circumstances. Inevitably, the experience of extractives-led growth varies from country to country. Rather than focusing on why resource production harms the economy, this paper asks a more pertinent question: why has resource production failed to create more resilient economies?”<sup>62</sup>

In the case of Iraq, a useful research question may be, “why has Iraq’s political reorganization since 2003 failed to create a more resilient economy, than that which existed under the Baath regime?”

While there may be problems with the broad scope of much resource curse literature, the small case study approach may undoubtedly identify attributes of petroleum policy frameworks that could be feasibly implemented in Iraq, but no one system of resource governance, even if seemingly exemplary, can be transposed onto another country. Increasingly observers (such as Thurber, Holts and Heller,) are arguing there is no “one size fits all” approach, even with the much-vaunted “Norway Model.”<sup>63</sup>

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<sup>60</sup> Benjamin Smith, “Measuring the Resource Curse: Revisiting the Politics of Oil Wealth,” (University of Florida, 2011.)

<sup>61</sup> Jonathan Di John, “The ‘Resource Curse’: Theory and Evidence,” (Elcano Royal Institute, 2010)

<sup>62</sup> Paul Stevens, Glada Lahn, Jaakko Kooroshy, “The Resource Curse Revisited,” (Chatham House, 2015)

<sup>63</sup> Mark Thurber, David Hults, “Exporting the “Norwegian Model”: The effect of administrative design on oil sector performance.” *Energy Policy*, 39, 9 (2011):5366

In the latter case, while Norway's strong system of checks and balances against political control of the sector are widely considered to have avoided the "resource curse"<sup>64</sup> other nations attempting similar policies may not have the institutional strength or technocratic human capacity to implement the model in a similar way. Havro and Santiso note with regard to developing resource rich countries,

"the paradox of plenty has shown that they might just as well pose increased difficulties, especially as many of these same countries do not have the institutional strength and capacity needed to avoid the curse."<sup>65</sup>

To an extent, this is discussed in this section with regards to Nigeria and Iraq, who have both planned but never implemented similar mechanisms for limiting political control as seen in the Norway Model. The challenge of implementing good governance in the energy sector is not only restricted to resource rich developing countries.

Even advanced countries have witnessed ongoing political controversy in reviewing their policy frameworks and regulatory regimes, as global market and political factors create the necessity of change. For example, the Australian government has had to conduct a significant review of its petroleum regulatory system after it experienced a decline in resources, forcing the government to review what some saw as bureaucratic barriers to operations and investment.<sup>66</sup> It was argued that the petroleum regulatory framework of Australia was outdated, encumbered with regulatory burden and failed to meet Australia's petroleum policy to serve the national interest. To address this problem, a comparative study was conducted to assess Australia's petroleum regulatory framework against similar frameworks such as that of Norway.<sup>67</sup> Such practice helped in adjusting policies to meet modern practices, passing necessary legislation to solve regulatory and policy problems. Likewise, analysts and scholars in Canada such as Greg Poelzer have frequently referenced the Norway Model, in particular with regard to Natural Resource Funds, which are vital for maintaining economic stability with regards

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<sup>64</sup> Steinar Holden, "Avoiding the resource curse the case of Norway," *Energy Policy*, 63 (2013): 870–876

<sup>65</sup> Gøril Havro and Javier Santiso, "Benefiting the Resource Rich: How Can International Development Policy Help Tame the Resource Curse?" Institute of Development Studies IDS working paper 355 (2011)

<sup>66</sup> Australian Government Productivity Commission, "Review on the regulatory burden on the upstream oil and gas sector," (April 2009.)

<sup>67</sup> Tina Hunter, "It's time: Petroleum policy change for sustainable development in the Australian offshore upstream petroleum sector," *Journal of applied law and policy* (2009) :31-54

to unpredictable oil prices.<sup>68</sup> However, as discussed later, only the UAE has succeeded in building an enduring natural resource wealth fund.

In some cases, regulatory reform is required to fix operational problems. A comparative study was conducted to examine gas flaring in the oil and gas industry in Nigeria and Texas. The analysis focused on how Texas managed the balance between sustaining the oil and gas boom while reducing its gas flaring to 0.4%.<sup>69</sup> Meanwhile, Nigeria has failed to achieve anything comparable due to the lack of effective and efficient regulations that govern the operations of the IOCs and NOCs.<sup>70</sup> Similarly, Russia and Iraq have faced the same operational challenge with Iraq ranking 4<sup>th</sup> in the global gas flaring index.<sup>71</sup>

In Iraq however, the problem is unique, since a major constitutional change put into effect in early 2006 defined Iraq as a federal state, allowed the participation of the private sector and foreign investors in the petroleum industry, and offered provincial authorities in Iraq the right to jointly negotiate, manage and operate petroleum assets together with the federal government.<sup>72</sup> This constitutional change has radically altered the rules of management and operation away from central to federal practices.

Problematically, the federal Ministry of Oil together with national oil companies continued to pursue the centralized practices that were in place under the former regime. Between the “transfer of sovereignty” in 2004 and the advent of sustained unilateral Kurdish oil exports in 2015, the federal ministry of oil held the final decision on governing all processes through rigid controls.<sup>73</sup> Unilateralism on the part of the ministry created many more conflicts of interest and as a result of the overlapping rules of authority, the Kurdistan Region of Iraq went its own way in formulating petroleum policy, which it has attempted to pursue since 2007.<sup>74</sup>

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<sup>68</sup> Greg Poelzer, “What Crisis? Global Lessons from Norway for Managing Energy-Based Economies,” Macdonald-Laurier Institute (2015)

<sup>69</sup> Denis Otiotio, “Gas Flaring Regulation in the oil and gas industry,” “A Comparative Analysis of Nigeria and Texas Regulations” Tulsa University (2013.)

<sup>70</sup> Ibid.

<sup>71</sup> The World Bank: “Global Gas Flaring Reduction Partnership,” Accessed July 16th 2016  
<http://www.worldbank.org/en/programs/gasflaringreduction>

<sup>72</sup> The Constitution of the Republic of Iraq, 2005

<sup>73</sup> Rex Zedalis, “*The Legal Dimensions of Oil and Gas in Iraq*,” (Cambridge: Cambridge University Press, 2009) 294

<sup>74</sup> Ibid. page 290

The resultant political conflict between the Ministry of Oil in Baghdad and the Kurdish Ministry of Natural Resources (MNR) diverted much attention in Baghdad to arguments over constitutional issues, played out in the Council of Representatives (parliament, or COR) ultimately ending in Baghdad cutting the KRI off from its 17% budget allocation, and diverting energy from pressing challenges.<sup>75</sup> These include, but are not limited to, the ending of gas flaring, rebuilding refinery and export infrastructure and reassuring potential IOC investors to both the KRI and southern Iraq, who can provide the necessary capital to maintain production.<sup>76</sup> Arguably, the KRI has been similarly focused on developing an independent export policy at the expense of an efficient petroleum policy that would optimise its energy value chain.

As these debates and legal battles have continued, including lawsuits issued by Baghdad against both the KRG and potential buyers of Kurdish crude, as much as \$40 billion US dollars per annum was being wasted as provincial and regional actors in the Iraqi oil industry sought to block certain contract types and projects following local or political interests, losses that mirror estimates of opportunity cost due to electricity outages.<sup>77</sup> A culture of non-compliance toward the federal authorities and the new federal constitution emerged, greatly slowing energy mega projects that could have saved Iraq billions in revenues.<sup>78</sup>

At the heart of these conflicts is the lack of a clear distinction between the roles of the operating entities (national and international oil companies) as regulated bodies and the roles of the regulatory and supervisory bodies including federal and regional governments.<sup>79</sup> It follows that there is an urgent need to re-focus on a 'policy framework' and 'implementation strategy' to guide the process of resource-management and operations. Successful policy will have to promote a clear and unequivocal separation of powers and roles between the 'regulator' and the 'regulated'; otherwise, conflict of interest, mismanagement, and corruption will be inevitable across the

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<sup>75</sup> Nassir al-Hassoun "Iraqi Kurdistan economy suffers amid budget dispute with Baghdad" *Al Monitor* May 16<sup>th</sup> 2014. Accessed August 2<sup>nd</sup> 2016.

<sup>76</sup> See Iraq Energy Institute interview with Thamir al Ghabban for an overview of these many challenges. Accessed July 16<sup>th</sup> 2016. <http://www.iraqenergy.org/news/?detailof=7668&content=Exclusive-Interview-with-Al-Ghabban-on-Iraq%27s-Oil-&-Gas-Sector>

<sup>77</sup> Walid Khadduri, "Electricity shortage costs Iraqi economy \$40 billion a year," *Al Monitor* September 24<sup>th</sup> 2013, Accessed July 16<sup>th</sup> 2016. "<http://www.al-monitor.com/pulse/business/2013/09/iraq-oil-energy-crisis.html>

<sup>78</sup> IEA Iraq Outlook, 2012

<sup>79</sup> Martin Sandbu, "The Iraqi who saved Norway from its oil," *The Financial Times*, August 29<sup>th</sup> 2009. Accessed July 16<sup>th</sup> 2009 <https://www.ft.com/content/99680a04-92a0-11de-b63b-00144feabdc0>

petroleum industry, keeping Iraq highly ranked in failed state indices. Currently, both Iraq and Nigeria are classed as “high alert” on the fragile states index.<sup>80</sup>

## 1.2 Research Questions

Petroleum policy framework development for federal regimes is still a developing subject for MRH countries in the MENA region, since Iraq is the second federal state (2006) to emerge in the Middle East after the United Arab Emirates (founded in 1971). Furthermore, of the two young federal states, Gerard Butt<sup>81</sup> and Boersma and Griffiths<sup>82</sup> note the relative success of the UAE’s energy strategy, highlighting rapid prosperity in the former case and the phasing out of subsidies for gas from 6.5% of GDP to over 3% in just two years in the latter, while Habeeb points to gradually reducing tensions in the federation following their merger of armed forces in 1976 and rapidly increasing literacy rates.<sup>83</sup>

Furthermore, while there was only brief and low casualty conflict in the process of the UAE’s transition, conflict between ethnic, sectarian and political groups in Iraq has been severe to the point of involving genocide, in the case of Saddam Hussein’s Anfal campaign against the Kurds which saw at least 100,000 people killed.<sup>84</sup> Add to this the aftermath of the 1991 uprising in southern Iraq which saw the deaths of at least another 100,000 people, and uprisings in Ramadi (1996) Nasiriyah (1997) and Basra (1999) and it is clear that the internal conflict within Iraq has had a lasting and transformational effect of the nation’s politics, as Rizk Khoury argues in her study, *Iraq at Wartime*.<sup>85</sup> For example, as the self-declared Islamic State terror group fall back in Iraq through 2016, new fighting has erupted between Kurds and Shia paramilitary over disputed

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<sup>80</sup> Fund for Peace: Fragile States Index 2015

<sup>81</sup> Gerald Butt, “Oil and Gas in the UAE,” from “United Arab Emirates: A new perspective,” Eds. Ibrahim al Abed, Peter Hellyer, (New York: Trident, 2001): 231-248

<sup>82</sup> Tim Boersma, Steve Griffiths, *Reforming Energy Subsidies: Initial Lessons from the United Arab Emirates*, Masdar Institute of Science and Technology (2016)

<sup>83</sup> Willim M. Habeeb, *The Middle East in Turmoil: Conflict, Revolution, and Change*, (Greenwood: Oxford) :28

<sup>84</sup> Andrew Cockburn, Patrick Cockburn, “Saddam Hussein: An American Obsession.” (Verso: New York, 2002): 22.

<sup>85</sup> Dina Rizk Khoury, *Iraq in Wartime: Soldiering, Martyrdom, and Remembrance*, (Cambridge: Cambridge University Press, 2013): 18

territory, including oil rich Kirkuk, a dispute rooted in 1970s era Baath politics of ethnic cleansing known as “Arabization.”<sup>86</sup>

By contrast, Al Ulama notes how in the UAE,

“Short conflicts have occurred between members of the Union, even since federation, such as the conflicts between Dubai and Sharjah (1973 and 1975); between Sharjah and Fujairah (1972 and 1974) in the eastern province of the U.A.E. where Sharjah has three enclaves: Dibba Al-Husn, Khur Fakkan and Kalba; and between Ras al-Khaimah and Fujairah (1974).”<sup>87</sup>

These may have been extremely serious due to the small size of the Emirates, but do not fit a popular definition of civil war, defined by Hironaka as being sustained in duration, high intensity and consuming much resources.<sup>88</sup> Furthermore, Al Ulama notes how,

“the proposal for a federation among the Gulf States was put forward to reduce as far as possible the tension of the boundary disputes,” before highlighting the endurance of the federation.”<sup>89</sup>

By contrast, Iraq’s history of confrontation between the centre and provinces has introduced hitherto unprecedented challenges to a governance system rooted in decades of centralised control, in particular in the energy sector, which has experienced a degree of “re-Baathification,” or the re-hiring of Baath party members, in some cases in senior management positions.<sup>90</sup>

In sum, while we cannot make a clear comparison between the Middle East’s only two federations, the UAE has elements of Iraq’s problems, including subsidies that account for a high percentage of GDP, causing fuel inefficiency and depleting gas available for export, as well as unresolved territorial disputes. Furthermore, it is clear some of the UAE’s energy strategy has been particularly well planned, for example, an aggressive diversification strategy into petrochemicals, and compromise between the regions and the centre have had a mutually beneficial effect on all citizens, so there may be lessons for Iraq.

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<sup>86</sup> Human Rights Watch: Reversing the Arabization of Kirkuk (2004)

<sup>87</sup> Al-Ulama, Hessam Muhamed Sultan, “The Federal boundaries of the UAE.” (Diss, Durham University, 1994.)

<sup>88</sup> Ann Hironaka, *Neverending Wars: The International Community, Weak States, and the Perpetuation of Civil War*, (Harvard University Press, 2005): 3

<sup>89</sup> Al-Ulama, *ibid.* 86.

<sup>90</sup> Frank R. Gunter, “*The Political Economy of Iraq: Restoring Balance in a Post-Conflict Society*,” (Cheltenham: Edward Elgar Publishing, 2013):75

More importantly, since there is only 1 other federal state aside from Iraq in the Middle East, this study has chosen a range of federal states as comparative case studies to examine a range of questions including:

- 1- Can an energy framework be established in a federal context to replace Iraq's legacy institutions, in order to transition from centralism to federalism, while managing decentralization of authority and power sharing?
- 2- What are the factors that influence the energy sector in Iraq and the required steps to decouple the regulators and regulated bodies in order to shape the final policy framework?

The final outcome should provide a framework that identifies the various problems that need to be mitigated, steps required to implement policies, and competencies needed to institutionalise the effective management of a mammoth petroleum sector, which continues to have a significant impact on the global economy. For example, in 2015 Iraq was the world's second fastest growing contributor to global liquids supplies, yet many inefficiencies remained inbuilt in the sector.<sup>91</sup>

The proposed policy framework will define the final setting of the 'Federal Oil and Gas Council', a body of technocratic energy professionals tasked with far reaching regulatory power over the energy sector, first called for in 2007.<sup>92</sup> The structure, executive authorities, and responsibilities of the FOGC need to be clearly defined. This will be coupled with set of recommendations for the implementation of a strategy that the federal government of Iraq needs to adopt to guarantee the smooth transition of the petroleum institutions from the central legacies to the new federal regime. A comprehensive strategy should sustain a more reliable petroleum industry that is both more inviting to investment and free of historic conflicts of interest, corruption, and mismanagement. As Marcel notes,

“It is considered best practice to separate the functions of policy-making, regulation, and operations into three distinct bodies, as this maximizes the clarity of roles and allows for better accountability for the delivery of each function.”<sup>93</sup>

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<sup>91</sup> U.S Energy Administration Agency: Iraq is the second leading contributor to global liquids supply,” (2016)

<sup>92</sup> Lionel Beehner, Greg Bruno, “Why Iraqis Cannot Agree on an Oil Law,” *Council on Foreign Relations*, February 22nd 2008. Accessed July 16th 2016. <http://www.cfr.org/iraq/why-iraqis-cannot-agree-oil-law/p13298>

<sup>93</sup> Valérie Marcel, “Guidelines for Good Governance in Emerging Oil and Gas Producers,” The Royal Institute of International Affairs (2013)

Such a framework would assist organisations in identifying their roles and to deliver their tasks and identify the key factors affecting the successful implementation of the framework mechanism. This will eventually provide policy makers and sector executives with effective guidance that contributes to meeting the institutional reform needed for the transition from a central to federal regime as well as achieving their business objectives.

### 1.3 Research Aims and Objectives

The aim of this research is to explore the experiences of several oil and gas rich exporting countries to recommend the most appropriate policy model suitable to Iraq's circumstances. This framework could also serve the purpose of many hydrocarbon-producing countries that share same geopolitical conditions in the region and impacted by similar crises to those affecting Iraq, such as Libya, Yemen, and Syria. For example, Libya, although ethnically homogenous, is tribally and politically divided and faces the same bifurcated energy system currently seen in Iraq, since there is a political struggle to merge the two competing NOCs, one based in Tobruk, the other based in Tripoli.<sup>94</sup> As in Iraq, a key issue has been the right for a state to export and market oil without reference to parliament, or in the case of Libya, the House of Representatives which competes with the Government of National Accord. Just as in Iraq, there have been export blockades and threats of legal action over exports, as well as conflict over revenues and short term deals that have no constitutional basis.<sup>95</sup>

As noted however, it would not be the intention of such a framework to be a precise blueprint for other nations but rather a set of guidelines. The final policy framework is intended make the sector more reliable and sustainable in compliance with the federal constitutional setting. The objectives of this research are as follows:

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<sup>94</sup> Salma E Wardani, "Reopening Libya's oil ports is newly unified NOC's top priority," *Bloomberg* 11th July 2016, Accessed July 16th 2016 <http://www.bloomberg.com/news/articles/2016-07-11/reopening-libya-oil-ports-is-newly-unified-noc-s-top-priority>

<sup>95</sup> "Libya's Civil War: An Oily Mess" *The Economist*. April 9th 2015. Accessed July 16th 2016. <http://www.economist.com/news/middle-east-and-africa/21648054-negotiations-fail-progress-one-side-tries-grab-oil-revenue-oily>

1. To carry out and produce an extensive ‘literature review’ focused on MRH countries which have experienced similar problems to Iraq in terms of suffering vague constitutional language in reference to resource rights (Russia, Nigeria) that have led to tensions within the federation, conflict between the regions and the centre over rights to develop oil and gas fields (Nigeria, in the case of the 2002 Supreme Court ruling on offshore oil revenues and provincial allocations<sup>96</sup> of onshore revenues, Canada in the case of the dispute over offshore oilfields leading to the 1985 Atlantic Accords)<sup>97</sup> political conflict over how to disburse revenues (Canada in the case of Alberta’s brief 2005 oil “prosperity bonus” to citizens,<sup>98</sup> Russia, with the 1994 dispute between Tartar and Moscow over oil revenues).<sup>99</sup> While these countries may not share many of the characteristics to Iraq, it is apparent many of the same debates and conflicts have been experienced. Therefore, this study will critically analyse the findings that underpin the petroleum policy frameworks for these federal regimes;
2. Once these countries have been examined in detail, the study will seek to identify key factors influencing petroleum policy frameworks in these countries.
3. These findings will then feed into a conceptual framework for the petroleum sector in Iraq for the executive body.
4. The study will conclude with an outline and implementation guideline for the policy framework and regulatory regime in federal Iraq.

In summary, the proposed policy framework will help in shaping a legally authorised policy framework with a regulatory setting that supports Iraq’s constitutional requirements. It will clearly define the roles of regulator and regulated entities and eradicate the inefficient overlap of authority and conflict of interest that has hindered Iraq’s petroleum industry for decades.

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<sup>96</sup> International Monetary Fund Nigeria: 2002 Article IV Consultation 2003) :14

<sup>97</sup> “The 1985 Canada-Newfoundland Atlantic Accord,” The Newfoundland and Labrador Heritage Website <http://www.heritage.nf.ca/about/index.php>

<sup>98</sup> Katherine Harding, “Alberta to cut ‘prosperity bonus’ cheques.” September. 13th, 2005 *The Globe and Mail* September 13th, 2005. <http://www.theglobeandmail.com/news/national/alberta-to-cut-prosperity-bonus-cheques/article4120632/>

<sup>99</sup> Charles E. Ziegler, “*The History of Russia*,” (Greenwood: London, 1999):192

## 1.4 Research Approach and Methodology

The present study will employ research approaches and methods in policy work and political economy. Identifying the influencing factors that will impact the economic model and regulatory framework for Iraq's federal regime is vital. In order to achieve the aims and objectives of this research, an in-depth literature review of modern studies on Iraq is required for critically examining international practices and influencing factors on policy.

Also in the form of a literature review, there will be a qualitative analysis of four federal countries (Canada, Russia, UAE, Nigeria) in order to assess the federal, regional, and operational challenges that closely match problems in Iraq.

Moreover, the method of data collection based primarily on interviews will be employed to gauge the insights of policy makers.

The selected case studies in the following chapters will aim to inform and validate the conceptual model produced. The formulation process involves the assessment of all factors identified in the literature reviews; the case studies will take into consideration the concept of federalisation as a remedy to energy disputes and decentralization of Iraq's institutional practices as per the constitution of 2006.

It may be concluded that federalism alone, or constitutional or legal clarity without institutional strength cannot be a remedy for Iraq's energy disputes, as Vasquez notes, this has not been the case in Argentina, which he classifies as a highly decentralised federal system,

“The nature of Argentina's federalism creates a context in which oil and gas policy decisions result from political bargaining rather than from institutional consensus or open congressional deliberation. This serves to weaken the rule of law, even though the decisions per se are made within constitutionally-defined limits.”<sup>100</sup>

Nonetheless, in the absence of an agreed upon Federal Oil and Gas Law, ongoing work on resolving energy disputes in Iraq is necessary to prevent unilateralism among Iraq's

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<sup>100</sup> Patricia I. Vásquez, “Argentina's Oil and Gas Sector: Coordinated Federalism and The Rule of Law,” Wilson Center (2016)

18 provinces and most likely, the end of any effort to develop a coherent energy strategy. In that respect, consultation with many stakeholders across Iraq, in the form of conversational unstructured interviews (ie. questions were not uniform among interviewees) has been undertaken to support the validation process. The opinions of policymakers, regulators and operators involved in engineering and shaping the new federal state of Iraq have been sourced for the present study.

The main influencing factors that affect petroleum policy making were identified as the following:

- Political Stability
- Financial Stability
- The Legal Framework
- The Fiscal Regime
- Production Scenarios
- Oil Markets

## 1.5 Limitations of the Study

As noted, the relevance of this research is limited to countries that share similar characteristics to Iraq. While a number of countries in the MENA region have suffered similar challenges, for example, dictatorship and/ or sudden regime change (leading to a rise in tribal and ethnic identities, sometimes violently asserting themselves), the proposed policy framework will not necessarily be relevant to all Middle East oil producing countries. However, given the nature of decentralization in the MENA region, the recommended framework could be a blueprint for other petroleum producers, such as Yemen, Libya and Syria, to consider as part of a post conflict solution. As noted, Libya is already showing signs of similar disputes to Iraq related to energy governance and civil war, and while Syria is thought to have only limited oil and gas resources, it does have a resource base of phosphate rock, used in fertilizer production and expected to gain value as global fertilizer stocks diminish. Therefore, the framework developed here could have wider implications for resource rich countries, not necessarily related to oil and gas.<sup>101</sup>

Most likely, the findings of the research conducted in the present study is also limited to MRH countries that have experienced transitions from central to federal systems. Some observers see scope for comparison between countries as seemingly different as Iraq and Canada. Danilovich contends that “like in Canada, the territorial devolution of power and polycentric governance in Iraq can bring peace to the divided society.” He notes that in the 1970s, there was nearly a referendum on the secession of Quebec, a possibility that has been discussed several times in relation to the Kurdish Region of Iraq.<sup>102</sup>

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<sup>101</sup> Ministry of Petroleum and Mineral Resources of Syria. Available at <http://www.nti.org/learn/facilities/447/> Accessed July 16th 2016

<sup>102</sup> Alex Danilovich, “Iraqi Federalism and the Kurds: Learning to Live Together” (New York: Routledge, 2014):94

## **1.6 Structure of Thesis**

The thesis is made up of eight chapters:

Chapter one covers the nature and the intent of the research to follow, highlighting the need to develop a successful oil and gas policy framework under the new federal regime of Iraq. It defines the research problem and explains the aims and objectives of the study, taking into account the research contributions as well the methodology used.

Chapter two presents a set of definitions relevant to policies and how a framework incorporates these policies with an emphasis upon the structure of petroleum policy in federal regimes. This chapter also further defines the “resource curse,” (defined briefly above regarding Sachs and Warner.

Chapter three is a review of the literature on the petroleum industry of Iraq, examining where analysts and historians have identified critical problems, lack of strategy, as well as successes in the industry from the Baath era to the present day. The chapter takes a critical view of this literature, seeking to identify areas requiring further analysis with regards to designing a petroleum policy framework for Iraq.

Chapter four examines the petroleum federal regimes of four major resource holders that share some of the characteristics to federal Iraq, highlighting key influencing factors on their petroleum industries and assessing how relevant they are to Iraq.

Chapter five details three case studies in Iraq. It also highlights the factors that need to be considered in designing the framework. The case studies examined will cover the Federal Ministry of Oil, the Ministry of Natural Resources of the Kurdistan Regional Government, and an operatorship model with focus on the Basra Gas Company Joint Venture. Current policy dimensions will be examined, considering how they can be incorporated into a new framework.

Chapter six examines the effects of the persistent low oil price environment in Iraq in 2014 and beyond, examining measures Iraq has taken to mitigate the effect of very low prices, and in turn assessing the degree of resource dependency and inefficiency in petroleum policy planning within Iraq.

Chapter seven provides an overview of some of the challenges experienced by the four case study countries and three Iraqi institutions examined in chapter 5, examining the strengths and weaknesses of their energy policies.

Chapter eight is the conclusion, presenting the final policy recommendations on how best to implement the proposed policy framework for the petroleum sector in Iraq, including the proposed framework itself and a note on further research.

## **1.7 Research Design**

Multiple case studies have been considered as a core instrument in the methodology as opposed to a single-case study approach to examine comparativeness queries and to assess influencing factors on a given case. Moreover, for the present research, a careful investigation was made into the various variables and factors that impacted the supplier side of oil and the policies employed at international, regional and national levels.

The research study is funnel shaped, with a series of steps starting with a broad based literature review followed by local case studies leading to the development of a policy framework model. This inductive approach to the research design draws upon chosen qualitative methods in its data collection.

The primary research objective is to produce a petroleum policy framework for Iraq with actionable and evidence based recommendations. The findings should directly inform the development of an intervention policy to mitigate issues faced by the federal government of Iraq via evaluating other policies in operation elsewhere and their appropriateness to the situation in Iraq.

The primary audience of the findings would be the Iraq's federal government and the stakeholders in the oil and gas sector. Previous studies on petroleum policy in the Middle East have tended to concentrate on production development rather regulatory structures and policy with the notable exception of Suleiman's study *The Petroleum Experience of Abu Dhabi* (2007) and Zedalis' *The Legal Dimensions of Oil and Gas in*

*Iraq (2009)* although the latter book lacks an examination of Iraq's wider political economy and energy value chain.

The study's focus is to identify the key factors that need to be considered when formulating a petroleum policy, to draw upon the experience of relevant oil rich countries with regards to these key factors and undertake case studies to investigate organisational structure and operating practice.

It is important to note that events in Iraq during the period of research have led to many revisions of the component parts of the study and have changed the parameters of the research, in particular the rise of the self-declared Islamic State and the subsequent Kurdish occupation of oil fields formerly operated by the Federal North Oil Company, including Bai Hassan and Kirkuk.<sup>103</sup> These developments have changed the importance of certain key factors during the period of research leading to new evaluations.

## **1.8 Historical Research**

Outside of historical research in the case studies, an important basis for the present study is an approach that seeks to include data collection from unstructured interviews with the focus on international experiences and practices, evaluation of the material and data synthesis which often takes the form of going back and forth while reading, collecting and writing.<sup>104</sup>

Interviews have been gathered from my experience as the Senior Advisor to the Federal Parliament of Iraq for energy policy and economic reform, as well as my networks of energy professionals from my tenure with Shell.

Indeed historical accounts based on oral interviews and testimonial narratives do entail methodological problems in that they can be subjective, as noted by Laitin and Fearon highlight; moreover, ethnic bias in countries that have experienced inter-ethnic violence

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<sup>103</sup> Robin Mills, "Under the Mountains: Kurdish Oil and Regional Politics" Oxford Institute of Energy Studies Working Paper 63. (Oxford, 2016)

<sup>104</sup> Nicholas Sproull, "Handbook of research methods: A guide for practitioners and students in the social sciences," (New York: Scarecrow.)

can be “learned” suggesting those who are biased may not even be aware of this bias.<sup>105</sup> This is before we consider political bias, however, in areas where perceived ownership of subsurface resources is strongly tied to identity politics, this could be a drawback of relying solely on interviews.

Other primary sources include the laws and policies set in place by previous Iraqi governments and other countries that can be evaluated to determine best policy. In this respect foreign experience, where problems designing petroleum frameworks can be deemed similar, can be instructive, validating a historical approach to case studies.

Secondary sources include literature reviews that document main texts describing past events and the development of petroleum policies. Writings on Iraq and the oil industry are often undertaken by individual stakeholders whose vested interests are not always transparent. For example, Greg Muttitt is explicitly sceptical of IOC involvement in host countries (see literature review), while Fadhil Chalabi is more in favour of a stronger IOC role.

## 1.9 Quantitative Approach

Quantitative research is a systematic empirical investigation of statistical, mathematical or numerical data or computational techniques. This methodology employs tables, charts and statistical techniques to connect the concepts of the hypothesis.<sup>106</sup> As mentioned in the introduction, the accuracy and reliability of these secondary sources of numerical data needs to be carefully considered before conclusions can be drawn.

For example, British Petroleum (BP) publishes the Annual Statistical Review of World Energy which is usually quoted when production and reserves figures are mentioned. The review is re-published data from the *Oil and Gas Journal* who get their data by simply asking each producing country.<sup>107</sup> The replies may or may not be accurate especially with regards to the Middle East where oil reserve figures are often treated as

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<sup>105</sup> James D. Fearon, David D. Laitin, “Violence and the Social Construction of Ethnic Identity,” *International Organization* 54 (2000): 845–877

<sup>106</sup> William Neuman, “Social Research Methods: Qualitative and quantitative approaches,” (Boston: Allyn and Bacon)

<sup>107</sup> Gal Luft, “How Much oil does Iraq have?” Brookings Institution, May 12th 2003. Accessed July 16th 2016. <https://www.brookings.edu/research/how-much-oil-does-iraq-have/>

state secrets. Reserves are categorised as either proven or estimated ultimately recoverable and these definitions are often open to local interpretation.

Some industry experts believe there are no reliable estimates of world oil reserves. Laherrere points out, “public data on reserves are atrociously unreliable. The industry has systematically under-reported the size of discovery for good commercial reasons, and several countries have exaggerated their reserves for political reasons.”<sup>108</sup>

Iraq’s oil reserves are unknown and open to debate, as much of the country and especially the western region remains unexplored. In 2003 the *Oil and Gas Journal* claimed the reserves stood at 115bn barrels, the *Petroleum Economist* magazine claimed 200bn barrels, the Federation of American Scientists 215bn, The James Baker III Institute at Rice University claimed 220bn and the Centre for Global Energy Studies were even higher in their estimate of 300bn barrels.<sup>109</sup> Ten years on the debate remains unresolved, as few field surveys have been completed. Those that have increased the official government figures for reserves to 150bn barrels in 2013.<sup>110</sup> Unofficially, the government estimates that with further surveying this figure may reach 214bn in the future, an estimate given in a speech by Iraq’s Deputy PM Hussain al-Shahrestani in London on April 12, 2012.<sup>111</sup>

Production figures should be more reliable as market oil trades are recorded across the world. However, like reserves estimates, studies show that forecasts are usually over optimistic. This has been particularly notable in Iraq, with the advent of the repeatedly revised and widely discredited 2010 production target of 12 MBPD, but it is notable that IEA estimates of Iraq’s future production have also been significantly incorrect in the case of a 2012 estimate for 2015, which expected 4.2 million bpd when production at the start of 2015 was 3.1 mbpd.<sup>112</sup>

More recently Iraqi Kurdistan has been affected by accusations of a lack of transparency regarding exports, after the region started shipping oil via a pipeline to Ceyhan in

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<sup>108</sup> Jean H Laherrere, “The end of cheap oil,” *The Scientific American*, 1998

<sup>109</sup> Ibid.

<sup>110</sup> Kadhim Adrash, “Iraq revises its oil reserves to 150 billion barrels.” *Bloomberg* April 10th 2016. Accessed July 16th 2016. <http://www.bloomberg.com/news/articles/2013-04-10/iraq-revises-its-oil-reserves-to-150-billion-barrels>

<sup>111</sup> Ibid.

<sup>112</sup> Iraq: Selected Issues, IMF Country Report No. 15/236 (August 2015)

Turkey and shipping oil to the USA, Hungary, Morocco and Mediterranean consumers.<sup>113</sup> These exports have not gone through the federal government's oil marketing organisation (SOMO) and are largely unrecorded shipments, as are road shipments from Kurdistan to Turkey, which were substantial before the pipeline became operational.<sup>114</sup> Complicating matters, southern Turkey, Kurdistan and northern Iraq have a long history of illicit trading in oil be it trucking oil to Turkey or sanctioned Iran.<sup>115</sup> According to Robin Mills<sup>116</sup> Stratfor<sup>117</sup> and Joel Wing and other accounts detailed in this study, a complex network of smuggling for both crude and illegally refined oil has developed over a number of years and is largely ignored by all the relevant governments.<sup>118</sup>

Given the uncertainty surrounding oil and gas reserves and production data, the use of quantitative data analysis is limited within this research study and a qualitative approach to data analysis is preferred.

## 1.10 Qualitative Approach

Qualitative data collection methods are flexible in nature allowing a more in depth and detailed explanations of policy experiences. According to Choy, "qualitative methods typically refer to a range of data collection and analysis techniques that use purposive sampling and semi-structured, open-ended interviews."<sup>119</sup> This methodology does come with inherent setbacks such as time consumption, high cost and as already mentioned the difficulty in formulating an unbiased analysis. The drawbacks of time consumption

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<sup>113</sup> Denise Natali, "Stalemate, not statehood, for Kurdistan," Lawfare Blog. November 1st 2015. Accessed July 16th 2016. <https://www.lawfareblog.com/stalemate-not-statehood-iraqi-kurdistan>

<sup>114</sup> Khalid al Ansari, "Iraq's Kurds bypass state for oil exports to tighten control," *Bloomberg* July 15th 2016. Accessed July 16th 2016. <http://www.bloomberg.com/news/articles/2015-07-14/iraq-s-kurdish-region-exporting-550-600k-b-d-oil-of-own-output> <http://www.bloomberg.com/news/articles/2015-07-14/iraq-s-kurdish-region-exporting-550-600k-b-d-oil-of-own-output>

<sup>115</sup> Ibid.

<sup>116</sup> Robin Mills, "Under the Mountains:Kurdish Oil and Regional Politics" Oxford Institute of Energy Studies Working Paper 63. (Oxford, 2016)

<sup>117</sup> Stratfor, "Special Report: Iran's Oil Smuggling Network in Iraq," 30th January 2016. Accessed July 16th 2012. <https://www.stratfor.com/sample/analysis/special-report-irans-oil-smuggling-network-iraq>

<sup>118</sup> Joel Wing, "A History Of Oil Smuggling In Iraq," *Musings on Iraq*, August 17th 2010. Accessed July 16th 2016.

<http://musingsoniraq.blogspot.co.uk/2010/08/history-of-oil-smuggling-in-iraq.html>

<sup>119</sup> Looi Theam Choy, "The Strengths and Weaknesses of Research Methodology: Comparison and Complimentary between Qualitative and Quantitative Approaches," *IOSR Journal Of Humanities And Social Science* 19, (2014) :99-104

and cost have been mitigated somewhat by high level access to policy makers, stakeholders and business executives in the Iraqi energy sector.

Similarly, Ahmadov writing about the relationship between oil wealth and authoritarianism in post-Soviet states, notes, “Because of limited context, the difficulty in identifying all relevant variables to be included in the analysis; the difficulty in generalizing the findings – the findings might be relevant only to one cultural/geographic region<sup>120</sup>

Asking the question, “What specific features of democratic institutions and practices affect development outcomes?” Ahmadov does not that “Careful comparative qualitative analysis can help parse out the causal mechanisms at work in these cases.”<sup>121</sup>

### **1.11 Case Study Approach**

Case studies have traditionally been the recommended methodology for evaluating processes and policies. In this research the “unit of analysis” is the petroleum policy framework, the primary objective being the identification of key factors that influence the petroleum policy framework that can be applied to Iraq.

The case study research approach is especially appropriate in new topics areas<sup>122</sup> and can be used for formulating a new theory. In this respect, since no petroleum policy framework for Iraq has been proposed since the 2011 Draft Federal Oil and Gas Law, it is deemed suitable to follow a case study approach to formulate a new framework.

The research strategy of a case study consists of five basic components, according to Yin: “a study’s questions; its propositions, if any; its unit(s) of analysis; the logic linking the data to the propositions; and the criteria for interpreting the findings.”<sup>123</sup> In this case, Yin’s components are instructive; firstly, regarding questions, this study will ask what is the main aim or features of a well-designed petroleum policy framework?

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<sup>120</sup> Anar Kamil Ahmadov, “A Conditional Theory of the ‘Political Resource Curse:’ Oil, Autocrats, and Strategic Contexts,” (Diss. London School of Economics)

<sup>121</sup> Anar Ahmadov, Farid Guliyev, “Tackling the resource curse: The role of democracy in achieving sustainable development in resource-rich countries,” International Institute for Democracy and Electoral Assistance (2016)

<sup>122</sup> Harry Scarborough, “Knowledge management in practice: An exploratory case study,” *Technology Analysis & Strategic Management* 11

<sup>123</sup> Robert K. Yin, “Case Study Research,” (London: SAGE, 2003)

For example, if the main aim is to maximise government take for the longest period, would such contracts be sustainable arrangements with IOCs in lower price environments?<sup>124</sup> A framework could strongly prioritise fuel subsidies to help low-income households and state owned companies, but this may come at the expense of foreign investment in refining capacity. In studying Iraq and the other countries examined here, a vast array of possibilities arises, but questions remain as to which elements of country studies are best tailored to Iraq's circumstances?

An examination of exemplary petroleum policy frameworks such as that of Norway, and in contrast, countries that have failed to develop a coherent policy framework, such as Nigeria, would require specific attention to areas of overlap with Iraq to be of any use. Nonetheless, initial reading suggests a degree of overlap exists in debates over public policy regarding, for example revenue distribution and central government authority even in a country as seemingly different to Iraq as Canada, and that resolution for these issues can be instructive in different settings.

Likewise, both Russia and Nigeria have seen deals made between the centre and regions that many argue are unconstitutional, a similar situation to Iraq (more on which in Chapter 4), although some argue this is due to lack of constitutional clarity. Writing on Russia and Nigeria, Shkaeva notes how, "as soon as oil revenues increase in a state with fuzzy institutional arrangements, political actors will have incentives to "capture" oil revenues rather than invest in other sectors."<sup>125</sup>

Arguably, political competition over oil in Iraq increased after oil prices passed \$70 in 2010 with rising Iraq exports. Previously, former Iraqi Minister of Oil Hussein al-Shahristani had not sought to legally punish the KRI for unilateral oil exports and had not threatened buyers with legal action, during the price collapse of 2008.

Secondly, regarding Yin's "propositions" and the case studies related to Iraq in Chapter 5, some propositions may seem self-evident, such as the need to rapidly install proper

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<sup>124</sup> Ivan Martin, Phillip Whittaker, "Government Take in Upstream Oil and Gas." Boston Consulting Group. December 9th 2015) Accessed July 16th 2016. <https://www.bcgperspectives.com/content/articles/energy-environment-government-take-upstream-oil-gas/>

<sup>125</sup> Shkaeva, Natlalia, "The resource curse magnitude in federal states," (Diss: Central European University, Budapest, 2014.)

metering across Iraq. But it is important to consider whether these propositions are only clear with hindsight, taking into consideration different challenges that are unique to Iraq regarding a task of such fundamental importance as metering. Thirdly, as identified here, the unit of analysis is petroleum policy frameworks. Fourthly, regarding Yin's "logic linking the data to the propositions," case studies in Chapter 5 should illustrate how Iraqi oil companies would benefit from operational independence from MoO. And fifthly, regarding Yin's component, "criteria for interpreting the findings," the study shall examine what elements define a successful framework policy.

For example, in the case of Norway, the stated aim of the framework is:

"the profitable production of oil and gas in the long term. The value creation shall benefit the Norwegian society as a whole, activities must take place within a sound HSE framework, and environmental concerns and coexistence with other industries are to be taken into account throughout the industry."<sup>126</sup>

By contrast, the 2005 Iraqi constitution expresses a broader aim to "formulate the necessary strategic policies to develop the oil and gas wealth in a way that achieves the highest benefit to the Iraqi people using the most advanced techniques of the market principles and encourages investment."<sup>127</sup>

The case study approach appears more suitable than a quantitative method for this study, because as noted, the study seeks to resolve problems related to the absence of a policy framework, based on other countries' experiences, rather than use data analysis to identify a trend among nations. For example, a quantitative analysis of the performance of well-regulated NOCs such as Ecopetrol in Colombia, Statoil in Norway, and Staatsolie in Suriname,<sup>128</sup> compared to NOCs considered poorly run, would be useful but potentially lacking in contextual analysis of historical developments that led to effective institutional evolution.

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<sup>126</sup> See Norwegian Ministry of Petroleum and Energy, <http://www.norskpetroleum.no/en/> Accessed July 16th 2016

<sup>127</sup> Constitution of the Republic of Iraq.

<sup>128</sup> Valérie Marcel, "Guidelines for Good Governance in Emerging Oil and Gas Producers," The Royal Institute of International Affairs (2013)

## 1.12 Interviews

Unstructured interviews were seen as a useful method for developing an understanding of the relevant importance of key factors in shaping previous policies whilst allowing the interviewees time to talk on a particular factor that interested them or was relevant to their roles.

The interviews were based on the 5 identified factors to examine the level of influence of each factor on federal and regional entities, feeding all gathered data to the case studies.

The relevance / correlation of the factor to the selected entity (if any):

- a) The level of influence of the factor on the affected entity;
- b) The urgency to adopt a resolution as per the affecting factor: “Why, where and when to regulate.”

The bodies interviewed represented both regulator and regulated bodies at both federal and regional bodies, including executives and legislatives:

- Council of Representatives: Federal, Legislative, Regulator
- Council of Ministers: Federal, Executive, Regulator
- Operating Companies Executives: Federal, Operators, Regulated
- Parliament of Kurdistan: Regional, Legislative, Regulator
- KRG Council of Ministers: Regional, Executive, Regulator
- KRG Operating Companies: Regional, Operators, Regulated
- Former Officials and Key Experts: Across Iraq “leading authorities”

### 1.13 Case Studies

The five factors that have been identified from the literature review, will be cross examined against three case studies that were conducted for investigating the organizational structure and practice at a policy level and operatorship:

- 1- **MoO**: Iraq's Federal Ministry of Oil as a Federal Regulator
- 2- **MNR**: Ministry of Natural Resources in Kurdistan as a Regional Regulator
- 3- **JVO**: Joint Venture Operator, between National and International Companies

It is worth noting that the MoO's case study was compiled of two cases reflecting on the overlap of federal authorities between "the regulator" (the Ministry) and "the regulated" (Iraq National Oil Companies, INOC) as per the merger between MoO & INOC in 1987. As Ghadhban notes.<sup>129</sup>

Key factors have been registered and analyzed by the data collection exercise and analysis techniques through a set of interviews with representatives from 3 categories including:

- 1- Federal and regional policymakers,
- 2- National and international operators,
- 3- Industry experts and former officials.

### 1.14 Data Collection Method

Data gathered from relevant government institutions (above) will give an overall picture of the policy trends, implementation of strategies and preferences of policymakers and operators (federally and regionally). Hence, the focus of the case studies is federal and regional practices at both regulator and regulated institutions, in addition to the role of national and international operatorship.

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<sup>129</sup> See Iraq Energy Institute interview with Thamir al Ghadhban for an overview of these many challenges. Accessed July 16th 2016. <http://www.iraqenergy.org/news/?detailof=7668&content=Exclusive-Interview-with-Al-Ghadhban-on-Iraq%27s-Oil-&-Gas-Sect>

## **1.15 Methodology Structure**

Following the literature review, five key factors will be identified and assessed for the development of the framework model, and examined in relation to the case studies in Chapter 4. Some factors relate to petroleum regulators and others are linked to operators. Moreover, all qualitative data gathered from the conducted case studies will be cross examined with the identified factors and analysed for the framework model.

A conceptual model will then be then developed and validated by the case studies mentioned above, leading to the development of the final policy framework for the petroleum sector in Iraq coupled with set of recommendations for policymakers to consider during the implementation process (figure-1 below depicts the overall methodology structure).

The left hand side of the framework below groups and outlines the identified factors affecting each regulatory entity (federal or regional) and the relevant regulated bodies (operators) linked to the affected regulator:

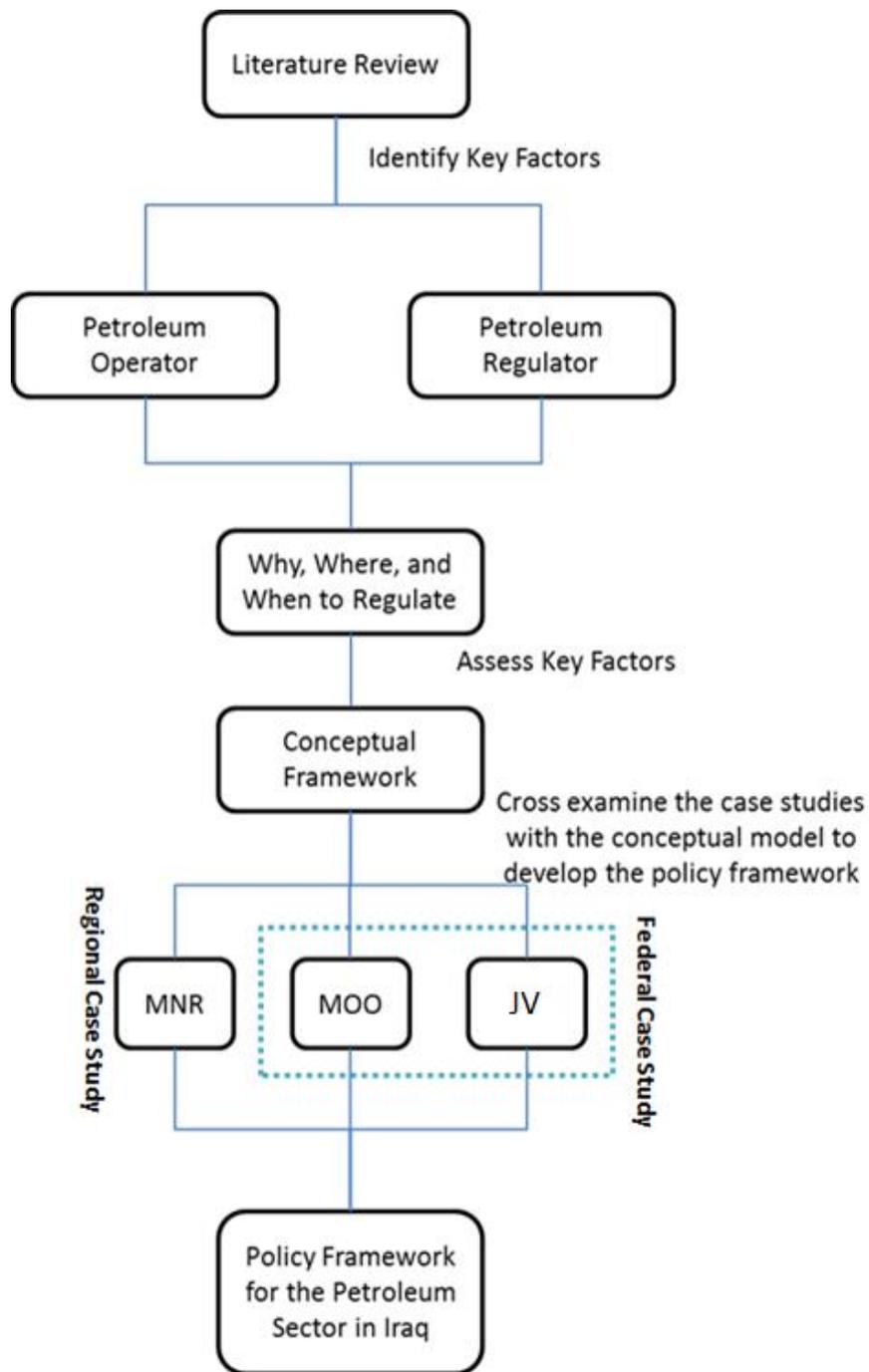


Figure-1: Methodology Structure

## 1.16 The Conceptual Model

Figure 2 below depicts the conceptual framework of how a federal policy framework should look like. It defines the Federal Oil and Gas Council (FOGC) as the main representative of the state that regulates the Oil and Gas Sector with all sub-entities linked to it at federal and regional levels. The framework also demonstrates the key competencies of each local regulator and the relevant regulated bodies affiliated to it.

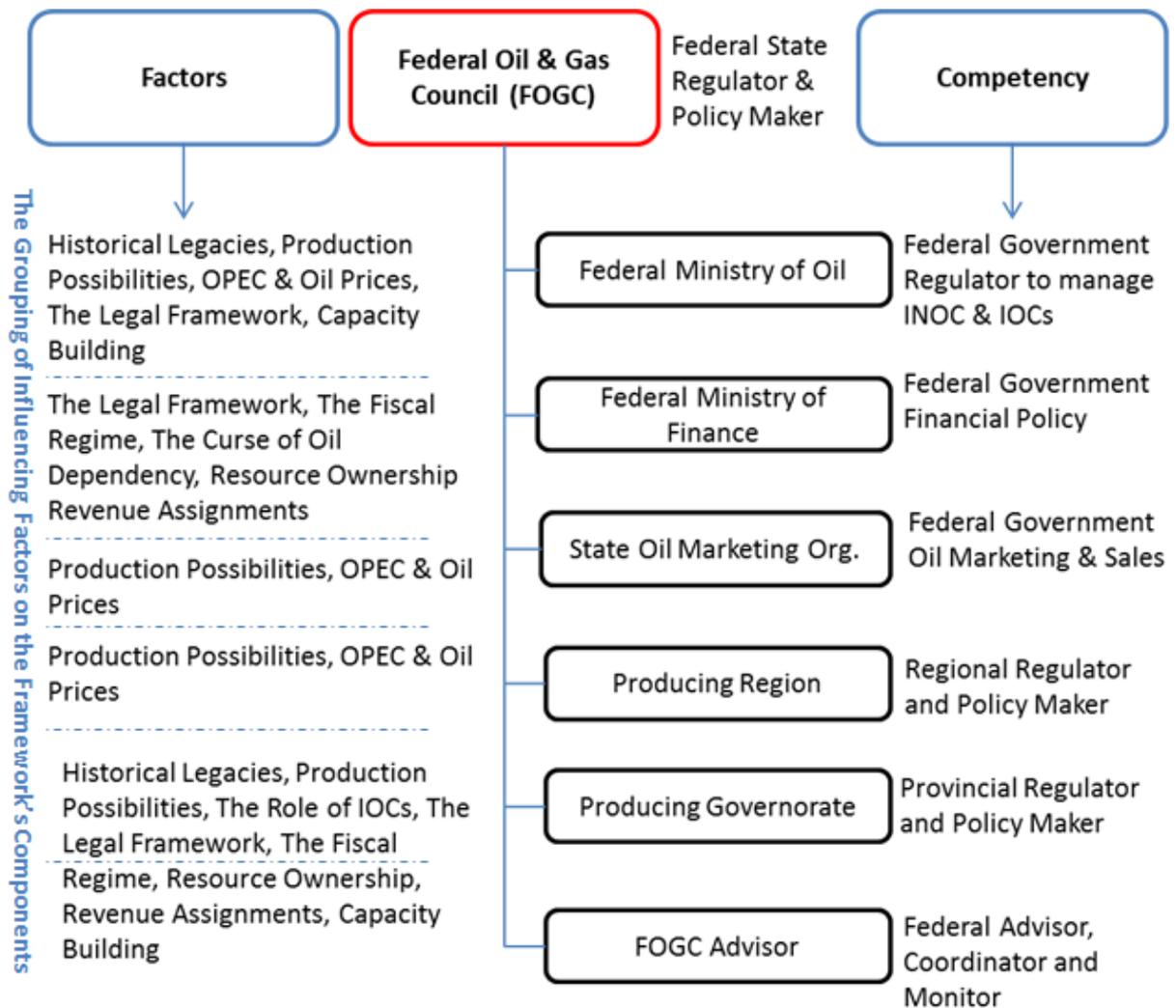


Figure-2: The Initially Proposed Federal Oil & Gas Council

Now that we have established the aims of the thesis and an overview of the key research problems, including the concept of having an independent regulator clearly separated from the state and private energy organizations, the legacy of authoritarian control of the energy sector and the challenge market volatility poses to planning, we will now turn to key definitions. These are concepts identified as critical to designing a petroleum policy framework, in addition to the concept of a framework itself. Consistent with the analysis of energy policy in a federal context, focus on these concepts will refer back to state-sub state relations.

## Chapter 2: Definitions

### 2.1 Public Policy

Torjman defines the aim of public policy as that which,

“seeks to achieve a desired goal that is considered to be in the best interest of all members of society. Examples include clean air, clean water, good health, high employment, an innovative economy, active trade, high educational attainment, decent and affordable housing, minimal levels of poverty, improved literacy, low crime and a socially cohesive society, to name a few.”<sup>130</sup>

Given the history of dictatorship and conflict in the MENA region, it may be assumed that Torjman’s inclusive concept of public policy is alien to Iraq and other states in MENA, as in May 2016, *The Economist* named Tunisia as the only democracy in 22 MENA states.<sup>131</sup> Furthermore, it follows that for policies that encourage “cohesive society” “in the best interest of all members of society,” would need to involve a consultation process with government that was free from coercion. Beissinger notes how,

“Autocrats fear the challenges that “conventional” civil society organizations present to their hegemony and repress them; past autocratic rule usually leaves stunted civil society development in its wake; and formal organizations based on face-to-face relations are relatively easy for autocratic regimes to identify, regulate, and target for repression.”<sup>132</sup>

In the public policy domain Torjman’s definition suggests the state upholds the best interests of the public, whereas dictatorships such as those of Saddam Hussein sought to exclude certain segments of society, in some cases physically moving some members of ethnic groups, in the cases of the relocation of Shias “of Persian origin” to Iran and the Arabization of Kirkuk where Kurdish Iraqis were forcibly relocated.<sup>133</sup> The notion that dictatorships do not subscribe to Torjman’s idea of public policy loosely matches the

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<sup>130</sup> Sherri Torjman, “What is Policy?” *Caledon Institute of Social Policy* (2005) Accessed July 16th 2016. [http://www.caledoninst.org/Special%20Projects/CG-COP/Docs/What\\_is\\_Policy\\_complete.pdf](http://www.caledoninst.org/Special%20Projects/CG-COP/Docs/What_is_Policy_complete.pdf)

<sup>131</sup> “What is the Arabic for democracy?” *The Economist* May 14th 2016. Accessed July 16th 2016. <http://www.economist.com/news/special-report/21698436-endless-obstacles-political-freedom-remain-what-arabic-democracy>

<sup>132</sup> Mark R. Beissinger, “Russian Civil Societies, Conventional and Virtual,” *Taiwan Journal of Democracy* 8, 2 (December 2012), 91- 104 <http://www.princeton.edu/~mbeissin/beissinger.CES2013paper.pdf>

<sup>133</sup> Human Rights Watch, “Background: Forced Displacement and Arabization of Northern Iraq.” Accessed July 16th 2016. <https://www.hrw.org/reports/2004/iraq0804/4.htm>

analysis of Mulligan, Gil and Martin who note that while dictatorships can be responsive to public policy concerns, they are more likely to use violently coercive methods on those opposing public policy.<sup>134</sup> To contrast with a democratic interpretation of public policy, Coleman refers to Rhiannon Vickers, who “suggests that Canada’s political culture has a strong tradition of public consultation in policy-making.”<sup>135</sup>

Just as the continued threat of violence to implement policy contrasts with the approaches of the democratic ideal, Geurts describes a policy formulation process that involves, “activities such as proposing initiatives, practicing advocacy, mobilizing stakeholders, holding consultations, building opinions and taking positions. There are many stakeholders and participants and they vary according to the policy intention.”<sup>136</sup>

This again suggests that public policy is something formulated in a democratic setting, and therefore, is something that is not present in the Middle East. Gunther supports this view that while non-democracies can formulate public policy, it is generally centrally driven. He uses the example of Spain’s transition from dictatorship to democracy in the 1970s and 80s to illustrate that social spending was 10% less than the Western European average and driven by Franco’s interventions in particular sectors of the economy that he felt were necessary to maintain the regime.<sup>137</sup> With regards to Iraq, debate over public policy in relation to oil and gas is particularly relevant, since the Council of Representatives represent Iraqi society, who are directly affected by issues such as government take, local content (use of Iraqi labour and materials) and the environment and how they feature in oil contracts.

Despite definitions of public policy that appear exclusive to democracy, there are examples of the concept in the Middle East. Torjman’s definition is particularly relevant to the case of arbitration in the UAE, where under Federal Law public policy is defined as,

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<sup>134</sup> Casey B Mulligan, Richard Gil and Xavier Sala-i-Martin, “Do democracies have different public policies than non-democracies?” *Journal of Economic Perspectives* 18 (2004) Accessed July 16th. URL: <http://www.people.fas.harvard.edu/~iversen/PDFfiles/Mulligan.pdf>

<sup>135</sup> Heather Coleman, “Translating Canadian Models: International Partnerships and Public Policy Reform In Russia” *Canadian Slavonic Papers* 51 (2009) 25-52. [https://www.academia.edu/12928942/Translating\\_Canadian\\_Models\\_International\\_Partnerships\\_and\\_Public\\_Policy\\_Reform\\_in\\_Russia](https://www.academia.edu/12928942/Translating_Canadian_Models_International_Partnerships_and_Public_Policy_Reform_in_Russia)

<sup>136</sup> Almaashi Ibrahim, “Request for a bridge between politics and public policies,” *Practical Application of Science*. 3 (2015) 255. [http://sea.bxb.ro/Article/SEA\\_8\\_38.pdf](http://sea.bxb.ro/Article/SEA_8_38.pdf)

<sup>137</sup> Richard Gunther, *Spanish Public Policy From Dictatorship to Democracy*. Juan March Institute, Madrid. (research paper, 1996.) <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.526.9113&rep=rep1&type=pdf>

“Rules relating to personal status such as marriage, inheritance, descent, and rules concerning governance, freedom of commerce, trading in wealth, rules of personal property and provisions and foundations on which the society is based in a way that do not violate final decisions and major principles of Islamic Shari’a.”<sup>138</sup>

This is particularly important in light of the UAE’s signing of the New York convention (on arbitration) which Iraq has not yet signed as of 2016.<sup>139</sup> Under the convention, the domestic courts of a signatory country are restricted in their powers in cases of commercial arbitration, although one area where certain provisions are made is the violation of “public policy,” where courts can refuse foreign arbitration awards.<sup>140</sup> The fact that “freedom of commerce” and “trading in wealth” are areas of public policy in the UAE constitution suggests a legally mandated position on the role of the private sector, akin to Iraq’s constitutional language in Article 25,

Article 25: “The state shall guarantee the reforming of the Iraqi economy according to modern economic bases, in a way that ensures complete investment of its resources, diversifying its sources and encouraging and developing the private sector.”<sup>141</sup>

Likewise while there is no direct reference to public policy in the Constitution in Iraq, Scheibel notes how the 2005 Constitution provides the basis for public-policy making, which, he claims, “is unprecedented in the region,” contrasting with pre-Arab spring governments that had no external input in public policy. Scheibel points out how Article 78 provides that,

“The Prime Minister is the direct executive authority responsible for the general policy of the State,” while Article 80 states, “The Council of Ministers shall exercise the power to plan and execute the general policy and general plans of the State and oversee the work of the ministries and departments not associated with a ministry.”<sup>142</sup>

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<sup>138</sup> “Arbitration in the UAE,” *BSBG blog*. 7th of July 2015. <http://bsbgulf.com/blog/arbitration-in-the-uae/>

<sup>139</sup> Craig Tevendale, “The ICSID Convention enters into force in Iraq,” *Herbert Smith Freehills*, 7th January. Accessed July 16th 2016. 2016.<http://hsfnotes.com/publicinternationallaw/2016/01/07/the-icsid-convention-enters-into-force-in-iraq/>

<sup>140</sup> “Arbitration in the UAE,” *BSBG blog*. 7th of July 2015. <http://bsbgulf.com/blog/arbitration-in-the-uae/>

<sup>141</sup> Constitution of the Republic of Iraq, 2005.

<sup>142</sup> Constitution of the Republic of Iraq (2005). [http://www.iraqinationality.gov.iq/attach/iraqi\\_constitution.pdf](http://www.iraqinationality.gov.iq/attach/iraqi_constitution.pdf)

Here, Torjman's definition is especially relevant to oil and gas, if we accept that good public policy protects and maximises the public's health and financial well-being, since in defining terms of the "model contract" for IOCs, the Ministry of Oil has direct influence on environmental standards and the economic efficiency of contracts. Furthermore, it is clear the extent that oil and gas decisions affect existing public policy in Iraq, since as of 2016 numerous public policy documents have been drafted with some relevance to the sector. Scheibel lists 22 draft documents, which include laws on pollution of the Tigris River and the ozone layer (created by the Ministry of Environment) Desertification and groundwater issues and strengthening the industrial sector (created by the Ministry of Industry and Minerals.)<sup>143</sup>

All of these policy documents are particularly relevant to oil production and revenues. This overlap in itself presents new challenges, as the IEA have written,

"policy coordination among the numerous ministries involved, as well as implementation of policies, legislation and regulation, are often a challenge: Dozens of sub-laws and regulatory acts need to be prepared, voted on and coordinated; the information needs to be made available; and implementation needs to be monitored and controlled, which requires human and institutional capacities to do so."<sup>144</sup>

This raises a number of issues in the instances of Iraq, Russia and Nigeria (discussed in chapter 4.) The first is that countries can be neither democracies or autocracies, but in a state of transition, and over time, the overall state of openness and political freedom within the country can fluctuate, as in the case of Nigeria, which was under military rule for 33 years between 1962 and 1999, with a brief period of democracy between 1979 and 1983.<sup>145</sup> However, it was not until the national elections of 2015 that an incumbent politician was defeated by a member of the opposition.<sup>146</sup> Freedom House, which ranks countries on how democratic they are by a series of metrics including political pluralism

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<sup>143</sup> Joseph Scheibel, "Opportunities in crisis: Iraq's steps toward inclusion," *Middle East Policy Council* 21,3, (2014) 145-153. <http://onlinelibrary.wiley.com/doi/10.1111/mepo.12089/abstract>

<sup>144</sup> International Energy Agency, "Energy Policies Beyond IEA Countries- Russia 2014." <https://www.iea.org/Textbase/npsum/russia2014sum.pdf>

<sup>145</sup> Cheta Nwanze, "Nigeria's Democratic Revolution" *The Nation*. April 2nd 2015. Accessed July 16th 2016. <https://www.thenation.com/article/nigerias-democratic-revolution/>

<sup>146</sup> "How Nigeria Won its First Democratic Power Transfer," *The Economist*. April 6th 2016 Accessed July 16th 2016. [.http://www.economist.com/blogs/economist-explains/2015/04/economist-explains-2](http://www.economist.com/blogs/economist-explains/2015/04/economist-explains-2)

and the electoral system, rated Nigeria as “partly free” in 2016.<sup>147</sup> Iraq, despite holding elections deemed “free and fair” by Freedom House in 2014, was classed as “Not Free” by the organization<sup>148</sup> in 2016.<sup>149</sup> In relation to public policy formulation, restrictions related to what Freedom House calls “de facto ethnic and sectarian apportionment of key offices” affected Iraq’s rating, with the organization then noting how, “The powerful Kurdish president controls several key institutions without parliamentary oversight.”<sup>150</sup>

In the case of the Kurdish Democratic Party, who have controlled the KRI presidency position since 2015 when the constitutional mandate of President Massoud Barzani expired,<sup>151</sup> this would suggest a highly restricted environment for public policy making in the energy sector, since MNR is controlled by the KDP. In Arab Iraq, where the nominee of the Parliamentary bloc with the highest number of seats has to have cabinet nominations approved by Parliament, it is possible that there is more space for public policy, since in choosing the Minister of Oil, parliamentarians can be responsive to constituents.<sup>152</sup> In practice, the Ministry of Oil has on occasion acted without reference to Parliament, in the most extreme case with regard to Technical Service Contracts, which are considered by some Iraqi lawmakers to be unconstitutional without parliamentary approval. In 2009, the head of Iraq’s Parliamentary Oil and Gas Committee expressed his view that TSCs were illegal, noting,

“We will not allow the oil ministry to move ahead, ignoring parliament and signing contracts, since they are illegal and unconstitutional.”<sup>153</sup>

In this regard Iraq perfectly fits the profile of a transitional country, since in the absence of new hydrocarbon legislation, much Baath era law still applies, such as the Preservation of Hydrocarbon Resources Law No. 84 of 1985 and the Iraqi Companies

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<sup>147</sup> Freedom House. “Freedom in the World 2016” Nigeria report. Accessed July 16th 2016. <https://freedomhouse.org/report/freedom-world/2016/nigeria>

<sup>148</sup> Freedom House “Freedom in the World 2016” Iraq report. Accessed July 16th 2016. <https://freedomhouse.org/report/freedom-world/2016/iraq>

<sup>149</sup> Freedom House “Freedom in the World 2014” Iraq report. Accessed July 16th 2016. <https://freedomhouse.org/report/freedom-world/2014/iraq>

<sup>150</sup> Freedom House “Freedom in the World 2016” Iraq report. Accessed July 16th 2016. <https://freedomhouse.org/report/freedom-world/2016/iraq>

<sup>151</sup> Joost Hiltermann, “The Kurds: A divided future?” *The New York Review of Books*, May 19th 2016. Accessed July 16th 2016. <http://www.nybooks.com/daily/2016/05/19/kurds-syria-iraq-divided-future/>

<sup>152</sup> Charles B Trumbull, Julie B Martin, “Elections and Government Formation in Iraq, an Analysis of the Judiciary’s Role,” *Vanderbilt Journal of Transnational Law* 44 (2011) 331. <https://wp0.its.vanderbilt.edu/wp-content/uploads/sites/78/trumbull-cr.pdf>

<sup>153</sup> Tamsin Carlisle, “Iraqi Minister Defends Oil Deals” *The National* June 23 2009. Accessed July 16th 2016. <http://www.thenational.ae/business/energy/iraqi-minister-defends-oil-deals>

Law No. 21 of 1997, which was the legal basis for the formation of the Basra Gas Company Joint Venture.<sup>154</sup> According to the IMF, one characteristic of a transition economy is the ongoing process of legal and institutional reform to move from a centrally planned economy to a modern market economy. The IMF note how new laws “are needed to *redefine the role of the state* (emphasis added) in these economies, establish the rule of law, and introduce appropriate competition policies.”<sup>155</sup>

With regards to public policy formulation, “*redefining the role of the state*” is directly relevant to reforming Iraq’s history of a centrally planned energy sector. In terms of formulating public policy that would support this goal, Iraq’s government have avoided the public consultation that forms part of Torjman and Guert’s definition of public policy, not only with regards to the 2008 secretive formation of the Basra Gas Company (described in Chapter 5) but also with regards to dealing with unions. For example, in May 2007 former Prime Minister Nouri al-Maliki reportedly promised to consult trade unions in the oil sector in southern Iraq with regards to the drafting of the 2007 oil law. When the consultation never occurred, the union members went on strike, shutting down oil operations, and the government sent in security forces to arrest union leaders, and unions subsequently remained in opposition to many MoO projects.<sup>156</sup>

Lack of consultation has at times also defined public policy in Russia and Nigeria. Taking Robert and Clark’s definition of public policy as “steps taken by a government to solve problems, make decisions, allocate resources or values, implement policies and in general to do the things expected of them by their constituencies,” Phillip and Peter also suggest the concept of public policy is new to a transitional economy. Writing on public policy in Nigeria, they note,

“In Nigeria, there is a missing-link between the government and the public and also the government and its agencies when it comes to policy formulation and implementation and that explains why policies grossly fail in Nigeria.”<sup>157</sup>

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<sup>154</sup> Richard Devine and Safwan Al-Amin, “Oil and Gas Regulation in Iraq,” *Practical Law*. (2014) Accessed July 16th 2016. <http://uk.practicallaw.com/9-581-2725>

<sup>155</sup> International Money Fund, “Transition Economies: An IMF perspective on progress and prospects.” 3rd of November 2000. Accessed July 16th 2016. <http://www.imf.org/external/np/exr/ib/2000/110300.htm>

<sup>156</sup> Benjamin Isakhan, “Oil unions and democracy in post Saddam Iraq.” *Australasian Political Studies Association* (2012) Accessed July 16th 2016. <https://dro.deakin.edu.au/eserv/DU:30050879/isakhan-oilunions-2012.pdf>

<sup>157</sup> Dahida Deewua Phillip, Maidoki Peter, “Public Policy Making and Implementation in Nigeria: Connecting the Nexus,” (University of Abuja, 2013.) Accessed July 16th 2016. <http://www.iiste.org/Journals/index.php/PPAR/article/viewFile/6355/6593>

Likewise, Coleman describes the work of a Canadian effort to strengthen civil society in post-Communist Russia, noting how,

“The decision to focus attention on public policy—a new term for Russians—entailed explaining what made policy public and raised the broader question of the relationship between the idea of public policy in Western political practice and the notion of an independent public sphere and models of civil society.”<sup>158</sup>

It is worth considering therefore that Iraq, which had its first democratic election in 2005, is still highly transitional, although has already seen a strong demand for consultation between policy makers and the public. This has been seen in the cases of the conflict between Trade Unions and the Ministry of Oil, as well as between Basra Provincial Council and the Ministry of Oil regarding the Basra Gas Company, described in Chapter 5.

## 2.2 Federalism

Bader notes that while there are many definitions of federalism, “the most fundamental tenet of this theory is that the state and federal governments have distinct, mutually exclusive realms of regulatory jurisdiction -distinct and limited federal powers.”<sup>159</sup> In this respect, it is arguable that Iraq’s current federal arrangement is weak due to the indistinct division of powers between regions and the centre.

A more detailed definition, and one suggesting federalism’s role in limiting conflict and autocratic power comes from Elazar who notes that federalism is “the constitutional diffusion of power so that the constituting elements in a federal arrangement share in the processes of common policy-making and administration by right.”<sup>160</sup> Power sharing and its many problems have come to define Iraq’s post 2003 political landscape, therefore federalism has often been at the center of debates on the question of how to solve Iraq’s ongoing conflicts, since it is often referred to in the context of other resource, ethnic and

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<sup>158</sup> Heather Coleman, “Translating Canadian Models: International Partnerships and Public Policy Reform In Russia” *Canadian Slavonic Papers* 51 (2009) 25-52.  
[https://www.academia.edu/12928942/Translating\\_Canadian\\_Models\\_International\\_Partnerships\\_and\\_Public\\_Policy\\_Reform\\_in\\_Russia](https://www.academia.edu/12928942/Translating_Canadian_Models_International_Partnerships_and_Public_Policy_Reform_in_Russia)

<sup>159</sup> Christopher Bader, “A dynamic defense of cooperative federalism,” *Whittier Legal Review* 161 (2012) Accessed July 16th 2016. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2189920](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2189920)

<sup>160</sup> Daniel J Alazar, “Introduction’ in *Federal Systems of the World: A Handbook of Federal, Confederal and Autonomy Arrangements*,” *Jerusalem Centre for Public Affairs* Accessed July 16th 2016.  
<http://www.jcpa.org/dje/index-fs.htm> at 3.

sect based conflicts. To this end, Erk and Anderson talk about the trend for proscribing federal solutions to ethnic conflict:

“One particular area where federalism is increasingly prescribed is in the accommodation of territorial divisions and the management of ethno-linguistic conflict. It is especially marketed as a palliative to secessionist conflict. That is, federalism has come to be seen as a way to accommodate territorially based ethnic, cultural and linguistic differences in divided societies, while maintaining the territorial integrity of existing states.”<sup>161</sup>

In contrast to the view of federalism as a solution to ethnic and religious based conflict, or conflict over resources, federalism has been associated with the potential breakup of Iraq in the view of some Iraqi nationalists, for example, according to Istrabadi the topic is the most controversial subject in Iraq “bar none.”<sup>162</sup> Istrabadi notes the “principal drivers” of federalism in Iraq have been the Kurds, with other federalists suggesting that the layers of government that federalism provides mean that there are more checks and balances against holding absolute power and subsequently abusing it. As Istrabadi notes, this is undoubtedly a check against the emergence of another Saddam-like figure, while the risks of Iraqi politics becoming over-centralized are also outlined by Fitzsimmons who notes,

“In Iraq, the risks of too much centralization flow from two related potentialities. The first is that the central government—whether under Maliki, another prime minister, or perhaps a military junta—successfully uses its power to marginalize opposition and undermine democracy. This outcome would be a familiar one for Iraq and for the region. The second is that the government’s efforts to centralize power could reignite violent resistance to the government, prompting a slide back into the experience of 2006 or even worse.”<sup>163</sup>

Considering this danger, Weingast et al. argue that federalism leads to a more limited government central government that in turn restricts its capacity to act in a predatory manner and thus more inclined to honour political and economic rights.<sup>164</sup>

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<sup>161</sup> Jan Erk and Lawrence M Anderson, *The Paradox of Federalism*. (New York: Routledge, 2010), 4. [http://samples.sainsburysebooks.co.uk/9781317987727\\_sample\\_827862.pdf](http://samples.sainsburysebooks.co.uk/9781317987727_sample_827862.pdf)

<sup>162</sup> Feisal Amin Istrabadi, “A Constitution Without Constitutionalism: Reflections on Iraq's Failed Constitutional Process.” (Indiana University Maurer School of Law 2009) Accessed July 16th 2016. <http://www.repository.law.indiana.edu/cgi/viewcontent.cgi?article=3361&context=facpub>

<sup>163</sup> “Michael F. Fitzsimmons, “Centralization or Decentralization in Iraq? In Search of the Elusive Sweet Spot,” Institute for Defence Analysis (2008)

<sup>164</sup> Yingyi Qian, Barry Weingast, “Federalism as a commitment to preserving market incentives.” *Journal of economic perspectives*. 11 (1997) Accessed July 16th 2016. <http://www-siepr.stanford.edu/workp/swp97042.pdf>

Stansfield and Anderson support Weingast's conclusion and note how an Iraq of five federal regions could reduce the ability of small interest groups from capturing the state. They note,

“On several occasions, relatively minor forces have been able to effect regime change by establishing control over the capital city. The establishment of five power centers in Iraq will make this more difficult. By far the major benefit of this model, however, is that it is potentially more broadly acceptable to major political forces than any alternative. From the Kurdish perspective the major advantage of the regional model over all other alternatives is that it is a compromise position that allows the Kurds to keep the autonomy they already enjoy but that is also likely to prove acceptable to other Iraqi groups, particularly the Shia.”<sup>165</sup>

Others have noted however, that federalism is not in itself a solution when communities face internal divisions. Le Billion draws parallels between the cases of South Sudan and the Kurdish region of Iraq, noting a number of similar problems. Le Billion notes,

“South Sudan and the Kurdistan Region have also faced similar issues, including debates over federalism versus secessionism, recurrent factionalism, internecine conflicts and fiscal crisis related to oil independence. They both have also inherited a legacy of operating as resistance movements in which personal networks of allegiances were crucial, while a culture of transparency and accountability towards the public at large was not. As South Sudan sadly demonstrates, transition towards broad-based security and shared prosperity seems very arduous for a land-locked, oil-rich region seeking greater autonomy — not only because of external influences, including in the neighborhood, but also for domestic reasons.”<sup>166</sup>

Le Billion's point that groups seeking autonomy may not themselves be politically united (and possibly prone to internal conflict as with the Iraqi Kurdish civil war of the mid-1990s) underlines a general lack of consensus regarding whether federalism can help post-colonial states such as Iraq, Nigeria and Sudan (all formerly under British control, and having experienced post-colonial wars between ethnic groups and the center.

In the case of Iraq, there has been great uncertainty as to the extent of federation, or even whether the country should be federal at all. While some of these are debates in

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<sup>165</sup>Liam Anderson, Gareth Stansfield, “The Implications of Elections for Federalism in Iraq.” *Oxford University Press* (2005) Accessed July 16th 2016.  
<http://publius.oxfordjournals.org/content/35/3/359.abstract>

<sup>166</sup> Phillip Le Billion, “Oil, Secession and the Future of Iraqi Federalism,” *Middle East Policy Council Journal* 22 (2015) <http://www.mepec.org/journal/middle-east-policy-archives/oil-secession-and-future-iraqi-federalism?print>

Baghdad over the 2005 Constitution, the debate is sometimes complicated by external viewpoints. Particularly controversial has been the Biden-Brownback plan to “maintain a unified Iraq by federalizing it and giving Kurds, Shiites, and Sunnis control over their daily lives in their own regions.”

Iraq’s model of federalism is unfortunately not uniform, containing a regional government that for many years enjoyed significant fiscal autonomy (Kurdistan) and two regional governorates with less power but globally significant natural resources, namely Basra with its supergiant oilfields and Anbar, with the Akkas natural gas field, thought to have 5.6 trillion cubic feet of gas.<sup>167</sup>

This lack of uniformity poses a problem for the central administration as it creates what Zedalis calls a “bifurcated policy,” in addition to ad hoc central government laws intended to give more revenues and petroleum policy powers to provinces, such as Law 21 of 2009.<sup>168</sup> Some debate has focussed on devolving more power to the current 18 provinces (as with Law 21) granting the Kurdish region independence from Baghdad or experimenting with a “five region approach” as described by Anderson.<sup>169</sup> Fitzsimmons argues that focus on regions and the formation of regions may be less helpful than focusing on the rights of provinces to develop hydrocarbon resources. Fitzsimmons argues that,

“Provinces have two other potentially advantageous characteristics: there are a lot of them; and their demographics are a mixture of homogeneity and heterogeneity. Together, these two features have the potential to moderate the worst effects of ethno-sectarian conflict.”<sup>170</sup>

Regardless of the model, the fundamental success of a federal government depends upon agreed power sharing and authority of the central and regional governing authorities, which takes the debate back to problems with the 2005 constitution, as Le Billion notes, “Reflecting a classic conundrum of federalism, the new constitution has

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<sup>167</sup> Luay J. al Khatteeb, “Natural Gas in the Republic of Iraq,” *Baker Institute Center for Energy Studies* (research paper, 2013) <http://belfercenter.ksg.harvard.edu/files/CES-pub-GeoGasIraq-111813.pdf>

<sup>168</sup> UNDP, “Decentralising Power in Iraq.” Accessed July 16th 2016. <http://www.iq.undp.org/content/iraq/en/home/presscenter/articles/2013/07/10/decentralising-power-in-iraq.html>

<sup>169</sup> Liam Anderson, Gareth Stansfield, “The Implications of Elections for Federalism in Iraq.” *Oxford University Press* (2005) Accessed July 16th 2016. <http://publius.oxfordjournals.org/content/35/3/359.abstract>

<sup>170</sup> “Michael F. Fitzsimmons, “Centralization or Decentralization in Iraq? In Search of the Elusive Sweet Spot,” *Institute for Defence Analysis* (2008)

both prevented and facilitated secessionism, in part because of an imprecise text allowing for multiple interpretations.”<sup>171</sup>

Therefore, while the role and authority of the central government is clearly defined in the new constitution (Article 110) and the encouragement of decentralisation is enshrined in Article 115, further constitutional review is necessary and in fact incomplete, since it was called for in the constitution itself, which notes that oil and gas revenue disbursement “shall be regulated by a law,” under Article 112, First.<sup>172</sup> Without a clear legislative path therefore, arrangements that may increase the powers of provinces could be easily undermined, as Suberu illustrates in the case of Nigeria (covered in more depth in Chapter 4.) Even still, constitutional amendment is in itself highly contentious, and may lead to further political deadlock, as Alkadiri notes,

“Battles over how far decentralization should extend have contributed to instability in Iraq at least as much as ethnic and sectarian disputes have since 2003. The attempts to reclaim central power by attempting to amend the constitution have been more than controversial for the regional powers. The need to define the powers of both central and regional authorities as enshrined in the constitution is of paramount importance to the success or failure of a federal state.”<sup>173</sup>

As noted, some argue that a paradox of federalism is whether it encourages separatism or whether it accommodates it. (Jan Erk et al.)<sup>174</sup> Whether federalism can manage, prevent and resolve conflict within a divided Iraq is only now just being tested, but for this study it should be instructive to see how Nigeria has handled oil revenue disbursement and sub-national government rights over oil and gas, since Nigeria has also experienced prolonged civil war, severe corruption and growing inequality. Fitzsimmons noted how Nigeria’s system of revenue disbursement may be an example of successful federalism in a transitional economy,

“While Nigeria’s federal democracy is far from a shining example of stability or democratic governance, its current experiment with equitable distribution of oil

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<sup>171</sup> Phillip Le Billion, “Oil, Secession and the Future of Iraqi Federalism,” *Middle East Policy Council Journal* 22 (2015) <http://www.mepc.org/journal/middle-east-policy-archives/oil-secession-and-future-iraqi-federalism?print>

<sup>172</sup> Constitution of the Republic of Iraq. [http://www.wipo.int/wipolex/en/text.jsp?file\\_id=230001](http://www.wipo.int/wipolex/en/text.jsp?file_id=230001)

<sup>173</sup> Raad al-Kadri, “Oil and the question of federalism in Iraq,” *International Affairs* (2010, 1315-1328 <https://www.jstor.org/stable/40929764>

<sup>174</sup> Jan Erk and Lawrence M Anderson, “*The Paradox of Federalism*.” (New York: Routledge, 2010), 4. [http://samples.sainsburysebooks.co.uk/9781317987727\\_sample\\_827862.pdf](http://samples.sainsburysebooks.co.uk/9781317987727_sample_827862.pdf)

and gas revenues across thirty-six states may offer a barometer for the sustainability of provincial decentralization in a multi-ethnic oil state.”<sup>175</sup>

This view contrasts strongly with the work of Suberu and Diamond who note the “dramatic and consequential” decline of Nigerian federalism, in particular because (in their analysis) the government over decentralised power leading to increasingly strong calls for autonomy and greater revenues from various regions, which,

“served to weaken the size and resource base of individual sub-federal units, to augment the hegemony and visibility of the central government, to increase administrative costs, and to provoke often violent inter-communal rivalries and conflicts over the administrative location, ethnic configuration, and distributive disposition of the new units of government.”<sup>176</sup>

By 2016, Suberu’s assessment seemed justified following a wave of attacks on oil infrastructure in the Niger Delta, by a group seeking to “cripple Nigeria’s economy” unless greater revenue transfers to the region were arranged.<sup>177</sup> This followed the breakdown of a peace agreement in 2009 which involved cash payments to rebels in the delta area.<sup>178</sup> The Niger Delta, where most oil and gas production in Nigeria occurs, and its struggle with the center underscore the challenges of trying to accommodate highly assertive, or even aggressive calls for more revenues or autonomy, as Selassie notes,

“Ethnic federalism faces yet another difficulty. Such a structure may exacerbate, rather than reduce, interjurisdictional disparities in wealth. Vast differences in human and natural resources separate ethnic groups. Some ethnic groups may be well endowed with oil deposits, or other mineral resources; they may have large populations, or may inhabit economically important regions, such as port cities. In contrast, other ethnic groups may lack these attributes. All ethnic groups may benefit by pooling together their respective resources in a federal arrangement. But given the tendency of ethnic governments to view themselves primarily as agents of their own ethnic groups, they have little or no incentive, much less any sense of obligation, to share any of their resources with other ethnic groups. On

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<sup>175</sup> “Michael F. Fitzsimmons, “Centralization or Decentralization in Iraq? In Search of the Elusive Sweet Spot,” Institute for Defence Analysis (2008)

<sup>176</sup> Rotimi Suberu and Larry Diamond “Institutional Design, Ethnic conflict management and democracy in Nigeria,” in “The Architecture of Democracy: Constitutional Design, Conflict Management and Democracy” (Oxford: Oxford University Press 2002) <https://kellogg.nd.edu/faculty/research/pdfs/Suberu.pdf>

<sup>177</sup> Chris Ewokor, “The Niger Delta Avengers, Nigeria’s Newest Militants,” *BBC News* 2nd June 2016. Accessed July 16th 2016 <http://www.bbc.co.uk/news/world-africa-36414036>

<sup>178</sup> International Crisis Group: “Curbing Violence in Nigeria,” 29th September 2015. Accessed July 16th 2016: <https://www.crisisgroup.org/africa/west-africa/nigeria/curbing-violence-nigeria-iii-revisiting-niger-delta>

the contrary, ownership of important resources may foster in them an attitude of economic self-sufficiency, and a willingness to go it alone politically.”<sup>179</sup>

With regards to the disparity in the location of natural resource wealth within federations, illustrated well in all of the case studies examined in Chapter 4 (Nigeria, Russia, UAE, Canada) Anderson points out that in the vast majority of oil and gas rich countries, resources are concentrated one geographic area, complicating debates over revenue disbursement. For example, people living near oil fields may demand more jobs in the sector or special compensation for environmental damage, which in itself could exacerbate agitation from communities who are far from the resources and may feel no benefit from the industry.<sup>180</sup>

Mitigating the complex challenges this presents, Anderson notes there are a great many types of federal regime, and levels of devolution of power “vary enormously.” This would suggest that there is no template for Iraq’s federal organization in relation to energy, as Thurber et al note, there are limitations when replicating the Norway Model in transitional economies.<sup>181</sup>

Anderson, also notes that while these challenges are supposedly governed by constitutions, in reality unpredictable politics are more often the determinant of regulation and fiscal policy. Since institutions play a critical role in developing both legal and fiscal regimes, Anderson points out that resource governance is only as good as institutional strength.

## 2.3 Policy Framework

The first stage for the government is to set out its strategic objectives and then decide upon a policy framework that can deliver these objectives. According to the organization Cafcass

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<sup>179</sup> Alemante G. Selassie, “Ethnic Federalism: Its Promise and Pitfalls for Africa,” *William & Mary Law School Faculty Publications* 88 (2003)  
(<http://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1088&context=facpubs>)

<sup>180</sup> George Anderson, *Oil and Gas in Federal Systems* (Oxford: Oxford University Press 2012) 3-5.

<sup>181</sup> Mark Thurber, David Hults, Patrick R.P. Heller, “The Limits of Institutional Design in Oil Sector Governance: Exporting the “Norwegian Model” (ISA Annual Convention New Orleans, February 2010.)  
[https://fsi.stanford.edu/sites/default/files/Thurber\\_Hults\\_and\\_Heller\\_ISA2010\\_paper\\_14Feb10.pdf](https://fsi.stanford.edu/sites/default/files/Thurber_Hults_and_Heller_ISA2010_paper_14Feb10.pdf)

“A Policy Framework describes an overall strategic approach, describing the desired future and setting out what needs to be achieved in order to bring about change. It can often be an 'umbrella' strategy' to which a number of policies relate.”<sup>182</sup>

Related to public policy formulation, gaining support for a policy in a democracy requires consulting stakeholders and political lobbying to gain a consensus of opinion to follow it to the statute book, and consultation of the public, a process defined by the OECD.<sup>183</sup> This has by enlarge not been the case with energy policy in Iraq, where in some cases contracts between the Ministry of Oil and IOCs have been negotiated in full behind closed doors (as in the case of the Basra Gas Company) or altered in secret (in the case of BPs Technical Service Contract for Rumaila).<sup>184</sup> The policy stakeholders are the political groups, government departments, industrial lobbyists, the community and its own lobbyists. The process of consulting stakeholders may take some time, and in the case of Canada this has been many decades before the democratic process led to a relatively fixed national level policy frameworks in oil and gas. For example, as late as 2012, the government of Stephen Harper was proposing a framework for “responsible resource development.”<sup>185</sup> Brownsey quotes journalist Barrie McKenna, to illustrate what he sees as an absence of an effective energy framework for Canada, noting,

“In an August 2012 article in The Globe and Mail, these (problems) include: (a) the inability to complete the Northern Gateway pipeline project in British Columbia; (b) the apparent intent of the Chinese to acquire large parts of the energy sector; (c) the ongoing conflict between Quebec and Newfoundland and Labrador over oil and hydro reserves; (d) Ontario’s inability to pursue its goal of becoming a green energy leader; (e) the unwillingness of the USA to quickly resolve the Keystone XL pipeline issue; and (f) the inability of Canada to tap into the rapidly growing Asian energy markets.”<sup>186</sup>

Indirectly highlighting some of Canada’s policy framework challenges, the IEA note the capacity for tension within the federation, perhaps best illustrated by the legal battles

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<sup>182</sup> Policy Development Framework, Cafcass, 2008.

<https://www.cafcass.gov.uk/media/6755/POLICY%20FRAMEWORKAUG07a.pdf>

<sup>183</sup> OECD, “Background on Public Consultation.” <http://www.oecd.org/mena/governance/36785341.pdf>

<sup>184</sup> Gregg Muttutt “From glass box to smoke filled room: how BP secretly renegotiated its oil contract, and how Iraqis will pay the price.” Platform, (2010). <http://platformlondon.org/documents/glass-box-print-low-res.pdf>

<sup>185</sup> Natural Resources Canada, “Harper Government Announces Plan for Responsible Resource Development.” April 17<sup>th</sup> 2012. Accessed July 16<sup>th</sup> 2016.

<http://www.nrcan.gc.ca/media-room/news-release/2012/45/2001>

<sup>186</sup> Keith Brownsey, “A period of uncertainty: Canadian energy policy in transition,” Mount Royal University, (2012) [http://www.relooney.com/NS4053-Energy/0-Routledge-Canada\\_2.pdf](http://www.relooney.com/NS4053-Energy/0-Routledge-Canada_2.pdf)

over offshore oil and gas rights which led to the Atlantic Accords, described in Chapter 4. Under a section of a report entitled “Policy framework,” the IEA note,

“A key feature of the Canadian context is that provinces, jurisdictions that receive their power and authority directly from the Constitution Act of 1867, are owners of their ground resources apart from those located in aboriginal lands and some federal lands. Provincial governments are the direct managers of most of Canada’s resources and have primary responsibility for shaping policies implemented in their jurisdictions. Policy co-ordination between the federal and the provincial governments takes place through formal high-level committees and informal contacts and consultations.”<sup>187</sup>

The fact that consultation, committees and contracts between provinces and the centre have not yet resulted in a comprehensive policy framework, despite decades passing since exports increased in the 1960s, should be of concern to Iraq. Iraq’s Constitution explicitly calls for cooperation in the formulation of strategic policy under Article 109, b.<sup>188</sup>

Perhaps inevitably, the democratic process takes substantially longer to formulate than the time taken in autocratic regimes, which has been the case in Iraq, when we contrast the relatively quick authorization of a Production Sharing Contract with CNPC under Saddam Hussein in 1997, compared to the long debates over contract types in post 2003 Iraq.<sup>189</sup>

Nonetheless, the Southern Area Gas Project, which was constructed during the 1980s and was operational by the start of the 1990s, suggests a relative competency in the Ministry of Oil during the former regime in terms of strategic planning, allowing enough treated gas to be exported to Kuwait, an export achievement that the Basra Gas Company has struggled to match over a period of 6 years.<sup>190</sup> This latter achievement was permanently undermined when Saddam invaded Iraq’s southern neighbour in 1990. Later, Saddam’s order that oil exports be halted to pressure the international community into easing sanctions against Iraq is indicative that there was no overarching policy framework, since the energy sector had become another arm of Baathist power.

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<sup>187</sup> IEA: Canada 2009 Review.

<https://www.iea.org/publications/freepublications/publication/canada2009.pdf>

<sup>188</sup> Amy Myers Jaff, “Iraq’s Oil Sector: Past, present and future,” Rice University (2007.)

[https://bakerinstitute.org/media/files/page/97579f52/noc\\_iraq\\_jaffe.pdf](https://bakerinstitute.org/media/files/page/97579f52/noc_iraq_jaffe.pdf)

<sup>189</sup> Andreas Goldthau, “The Handbook of global energy policy,” (Oxford: John Wiley and Sons, 2013.)

<sup>190</sup> Anthony H. Cordesman, “Energy Developments in the Middle East.” (Connecticut: Praeger, 2004.) 182

Therefore, Iraq faces significant challenges in formulating a policy framework, even when the constitution calls for a cooperative approach. Canada's experience, despite decades of political stability, underlines the challenge of unifying policies into an overarching strategy.

## 2.4 Petroleum Policy

For nations where the petroleum industry constitutes a significant portion of GDP and government revenue, an effective and clear policy is needed for the industry. In some cases, federal states with centralist tendencies can make ad hoc arrangements with sub central units that circumvent the constitution, in the case of Russia. In other cases, subsidy and revenue distribution policies can be linked to short-term assistance for various social groups, leaving policy open to political exploitation.

Particularly relevant to subsidies in Iraq, the IEA has highlighted how Russian fuel subsidies have “linked” social policy to energy policy,<sup>191</sup> but also of interest here is the need to create an efficient energy value chain (defined below.) Policies can also include the goal of increasing global market penetration or competitiveness, such as increasing output to a stated number, as with Nigeria's policy in 2001 to increase output from 2.2 million barrels per day to 3 million bpd.<sup>192</sup> Petroleum policy can be divided specifically along the lines of upstream (exploration and production), midstream (transportation, storage and marketing), and downstream (refining of crude oil, and purifying and processing of gas). In Nigeria, a goal that is specifically related to the upstream sector is the encouragement of greater foreign investment for the purpose of financing exploration via production sharing contracts.<sup>193</sup> For Norway, the overarching policy is to ensure the petroleum sector has “long-term management and value creation on the Norwegian Continental Shelf (NCS) within an environmentally acceptable framework and in coexistence with other users of Norway waters.”<sup>194</sup>

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<sup>191</sup> International Energy Agency, “Energy Policies Beyond IEA Countries- Russia 2014.”

<https://www.iea.org/Textbase/npsum/russia2014sum.pdf>

<sup>192</sup> Gbadebo Olusegun Oladaru, “Crude oil and the Nigerian economic performance,” Covenant University (2008.)

<sup>193</sup> <http://energymixreport.com/the-nigerian-production-sharing-contract-an-overview/>

<sup>194</sup> Energy Policies of IEA Countries: Norway review. IEA, 2011. Accessed July 16<sup>th</sup> 2016. [http://www.iea.org/publications/freepublications/publication/norway2011\\_web.pdf](http://www.iea.org/publications/freepublications/publication/norway2011_web.pdf)

Therefore, petroleum policy is closely linked with the law and legal system, not just for Iraq but the world over, and depends on whether best public policy is considered to be fuel subsidization and price controls, or more market orientated or environmentally led policy.

## 2.5 The Role of Regulators

Proponents of public interest theories including Baldwin define the purpose of regulation to govern conduct so that publicly desired results come about in situations where the market alone would fail to produce these. Regulation is therefore, according to this theory, carried out by benevolent actors for the benefit of society. Other theories for the purpose of regulation and the behaviour of regulators have been mentioned by Baldwin, such as the interest group theory, where regulators are driven by the concerns of interest groups.<sup>195</sup>

The ‘power of ideas’ explanation posits that regulation or deregulation occurs when a particular idea is prevalent, as described by Baldwin.<sup>196</sup> For instance, during the 1980’s the Thatcher and Reagan administrations both advocated deregulation in an attempt to liberalise the economies of their respective countries.<sup>197</sup> This is of interest to Iraq as views about the environment have changed with the advent of post Saddam era NGOs such as Nature Iraq.<sup>198</sup> In future the role of IOCs may come under greater scrutiny, perhaps due to increasing nationalistic sentiment, calling for stricter regulations.

The regulator, the body that oversees conduct, is not necessarily always a part of the government. The aftermath of the deregulation era of the 1990’s saw the emergence of semi-independent regulatory agencies, described by Mark Thatcher.<sup>199</sup> Thatcher also describes how, despite being created by legislation and being subject to controls by politicians they are given powers of regulation and are separate from the government. These agencies were given the tasks of other regulators, such as overseeing fair

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<sup>195</sup> Michael Gafkin, “Regulation as Accounting Theory,” University of Wollongong (2005) <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1049&context=acfinwp>

<sup>196</sup> Robert Baldwin and Martin Cave “*Understanding Regulation: theory, strategy and practice*,” (Oxford: Oxford University Press: 1999) ,45

<sup>197</sup> James Cooper, “Margaret Thatcher and Ronald Reagan: A very political special relationship,” (New York: Palgrave Macmillan: 2012), 145

<sup>198</sup> See Nature Iraq website. <http://www.natureiraq.org/>

<sup>199</sup> Mark Thatcher, “Delegation to independent regulatory agencies in Western Europe,” MA diss, London School of Economics, 2011.

competition, enforcing licenses, enforcing health and safety, racial and gender equality etc. In Iraq, the intended technocratic and independent regulator for the energy sector is the as yet not active Federal Oil and Gas Council, but the current regulatory environment is dominated by the Ministry of Oil, which has on occasion been in conflict with the Ministry of Environment, in particular following the 2011 Basra pipeline incident.<sup>200</sup> The British democratic context suggests that, as in Norway, regulatory bodies must be separated from cabinet level control.

## 2.6 Regulated Bodies

A point of interest for this study is how regulated bodies are given the incentive to comply with regulation, or deterred from breaching it, as has been the subject of intense debate in Russia, which has gradually increased fines for IOCs that go over their allowance of flared gas. In that case, Government Decree No 7 “On the measures stimulating reduction of atmospheric pollution by products of associated petroleum gas flaring”, outlined fines of 20 roubles per 1000 cubic meters of associated gas flared, but by 2011 this had been raised to 290 roubles.<sup>201</sup>

In the case of Iraq, The 2009 Environmental Law (27/2009) replaces and repeals the 1997 Environmental Law, and outlines obligations for IOCs to conduct environmental assessments of projects, and fines and punishments (including jail) for violations. Article 3 of the 2009 law outlines how,

“[a] polluter of the environment [must] remove the influencing factor during the 10 days from the date of notification warning. In the case of non-compliance, the minister may order the installation to cease operations or close for a term of not more than 30 days, which can be extended to the removal of the violation.”<sup>202</sup>

In order to ensure cooperation from regulated bodies there needs to be an effective way of enforcing the rules of regulation, otherwise there is unlikely to be cooperation and compliance. Neil Gunnigham looks at enforcement and compliance strategies in detail,

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<sup>200</sup> Iraq Energy Research.

<sup>201</sup> Julia S Lowe, Olga Ledenhaug, “Reducing Gas Flaring in Russia: Gloomy outlook in times of economic insecurity,” Poyri Management Consulting paper, 2012. [http://www.fni.no/russcasp\\_internal/WP-2012-002-JPL-Reducing-Gas-Flaring-in-Russia.pdf](http://www.fni.no/russcasp_internal/WP-2012-002-JPL-Reducing-Gas-Flaring-in-Russia.pdf)

<sup>202</sup> Thomas W Donovan “Jurisprudence of Environmental regulation in Iraq,” *International Law Office* December 13th 2010. <http://www.internationallawoffice.com/Newsletters/Environment-Climate-Change/Iraq/Iraq-Law-Alliance-PLLC/Emergence-of-environmental-jurisprudence-in-Iraq#Penalties>

and highlights that there are generally two methods to bringing about compliance: the punish and persuade approaches.<sup>203</sup> Christine Parker argues for ‘responsive regulation’, that responds to a regulated body’s continuing defiance by increasingly punitive and coercive measures. Parker believes this is a superior method of regulation than simple deterrence.<sup>204</sup>

George Stigler in his ‘economic theory of regulation’ writes that businesses provide a demand for regulation, and are willing to accept the status of a regulated body so that their special interests are served by the regulatory rules. Some regulated bodies thus cooperate with regulators from the inception of regulation of an industry. This form of corrupt practice leads to compliance between the regulator and regulated body, leading to what is now often called “regulatory capture.”<sup>205</sup> In Iraq, model oil and gas contract stabilization clauses (see below) have been referred to as “pre-emptive regulatory capture clauses” to the potential for IOCs to override future regulatory change.<sup>206</sup>

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<sup>203</sup> Neil Gunningham, “Compliance and Enforcement of Environmental Regulation: What Makes an Excellent Regulator?” Discussion paper, University of Pennsylvania Law School (2015)  
<https://www.law.upenn.edu/live/files/4383-gunninghamdiscussion-draftmarch-2015pdfpdf>

<sup>204</sup> Christine Parker, “Twenty Years of Responsive Regulation: An Appreciation and Appraisal,” Monash University - Faculty of Law, 2013.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2315368](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2315368)

<sup>205</sup> George Stigler, “The theory of economic regulation,” University of Chicago (1971)  
<http://www.ppge.ufrgs.br/giacomo/arquivos/regulacao2/stigler-1971.pdf>

<sup>206</sup> Ahmed Salah al Janabi, “Oil and gas contracts in Iraq,” *Whosewholegal*, July 2010.  
<http://whoswholegal.com/news/features/article/28421/>

## 2.7 Petroleum Policy Making

Despite not having an agreed petroleum policy, the Iraqi government has been successful in increasing its oil and gas output in the face of multiple infrastructure challenges and political roadblocks, raising production to 3.2 mbpd in July 2016.<sup>207</sup>

Any coherent petroleum policy for Iraq now needs to clarify governing rules over investment, contracts, revenue sharing between the IOCs and the government, and more importantly for many Iraqis, the revenue sharing between the provinces. Failure to agree upon and pass an oil law to provide a common framework for the industry has led to uncertainty, inefficiency and unsustainability, a similar set of circumstances seen in Nigeria in the absence of a national level policy framework, and to a lesser extent in Russia, where government unilateralism has dominated, as Locatelli and Rossiaud note,

“The increasing share of state-owned companies in oil production has been accompanied by tougher conditions for access to the country’s hydrocarbon resources, or at the very least by tight control over access to resources by the authorities. These tougher conditions for access firstly affected the regions. The various amendments to the subsoil law put an end to the principle of joint allocation by state and regions of exploration and development licences, with the state taking full control.”<sup>208</sup>

This is incoherent policy, since it contradicts Russian constitution’s Article 5, which allocates equal rights between regions and the centre.<sup>209</sup>

Without an agreed petroleum policy the Iraqi government has encouraged the oil producing regions to pursue their own interests thereby encouraging unilateralist and even separatist agendas, not only in the Kurdish region but also in Basra and to a lesser extent, Salahaddin and Wasit provinces in 2012, who entered into short lived negotiations with IOCs.<sup>210</sup>

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<sup>207</sup> Aref Mohammed, Iraq’s oil exports from south rose to 3.2 million barrels in July,” *Reuters*, August 1st 2016. <http://www.reuters.com/article/us-iraq-energy-oil-exports-idUSKCN10C118>

<sup>208</sup> Catherine Locatelli, Sylvain Rossiaud, “Russia’s Gas and Oil Policy: the Emerging Organizational and Institutional Framework for Regulating Access to Hydrocarbon Resources,” *International Association for Energy Economics* (2009) [http://edden.upmf-grenoble.fr/IMG/pdf/CL-SR\\_Russia-gas\\_IAEE-newsletter2011.pdf](http://edden.upmf-grenoble.fr/IMG/pdf/CL-SR_Russia-gas_IAEE-newsletter2011.pdf)

<sup>209</sup> Cameron Ross, “Federalism and Electoral Authoritarianism under Putin,” *University of Dundee* (2004)

<sup>210</sup> Denise Natali, “Iraq’s oil brinkmanship,” *Al Monitor* January 23 2014. <http://www.al-monitor.com/pulse/originals/2014/01/krq-baghdad-iraq-oil-maliki-barzani.html>

Leaving contracts aside, it is arguably inevitable that the oil producing provinces would seek to claim a higher proportion of the revenues whilst other areas are left neglected, in the absence of an agreed petroleum policy. In 2009 for example, producing provinces were promised up to \$5 extra per barrel of oil produced in the province;<sup>211</sup> this was not fully implemented however, Basra Provincial Council still demands this level of revenue. Had the proposal been fully implemented, the fixed \$5 per barrel would have meant that Basra consumed a substantial percentage of oil revenues as oil prices collapsed under \$30 per barrel in 2016, a sum that might have been sustainable under much higher oil prices.

Regardless of the political model, a national petroleum policy should seek to develop the oil and gas resources in an environmentally friendly way whilst seeking to maximize the returns to Iraq and ensuring equitable benefits to the people of Iraq, now and in the future. This would match the aims of Canadian and Norwegian energy policy statements.

If Iraq is to develop its energy sector efficiently, the legal framework and institutional oversight needs to be established. Appropriate laws and regulations must be put in place with a regulatory body to oversee their implementation and to police the industry, and in Nigeria such a body even has powers of arrest, although this appears to have had minimal impact on corruption.<sup>212</sup> The authority of Iraq's ministry or body has to be established and be transparent, and an independent regulator may be required to monitor the NOC and compliance in the industry. The relationship between the State and the NOC needs to be clearly defined. According to Marcel:<sup>213</sup>

*“There are three main models for the assignment of powers to regulate and oversee the sector:*

- *Separation-of-powers model (also referred to as the ‘Norwegian model’): an independent technocratic agency has regulatory powers.*

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<sup>211</sup> Rudaw, “Iraqi Ministers Approve 2014 Budget Despite Kurdish Boycott.” 15<sup>th</sup> January 2014. Accessed July 16<sup>th</sup> 2016. <http://rudaw.net/english/kurdistan/150120142>

<sup>212</sup> Oil and Gas Regulation in Nigeria: Overview. Practical Law, 1st of May, 2014. [http://uk.practicallaw.com/5-523-4794?q=\\* &qp=&qo=&qe=](http://uk.practicallaw.com/5-523-4794?q=* &qp=&qo=&qe=)

<sup>213</sup> Valerie Marcel, “Guidelines for good governance in emerging oil and gas producers,” Chatham House (2013) [https://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Energy,%20Environment%20and%20Development/0913pp\\_marcel.pdf](https://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Energy,%20Environment%20and%20Development/0913pp_marcel.pdf)

- *‘Ministry-dominated model’*: the petroleum ministry or an equivalent executive body is charged with regulation and oversight.
- *‘NOC-dominated model’*: the NOC has *de jure* or *de facto* responsibility for day-to-day regulation, sometimes including the power to award exploration/production licenses.

Regardless of whether there is to be an NOC dominated model or a Norway style separation of powers, the NOC’s mandate over commercial and operational activities needs to be determined. The principles under which licensing and contracting take place need to be established so that auctions of exclusive rights are transparent and fair. The nature of production sharing contracts, production tax rates and joint venture contracts also need to be established. The role of IOCs and other foreign investors needs to clearly be established as do the incentives for them to enter the industry.

Given the finite nature of resources, the objective of maximum recovery needs to be paramount to operational work programmes so as to maximize returns to the Iraqi people. Likewise, environmental considerations and protection need to be embedded in the policy.

The petroleum policy has to establish the fiscal regime (defined below) associated with development aiming to maintain robust incentives for reliable and responsible investors, whilst providing a fair and equitable return to the people of Iraq. The fiscal regime needs to be progressive and flexible so as to give the state an increasing share of profits as the profitability of the projects rises whilst giving some protection to investors as oil and gas prices fluctuate.<sup>214</sup>

As shall be discussed, current contracts in Iraq have failed to do this. The inclusion of fiscal instruments to hedge against changing circumstances needs to be embedded to avoid constant revisions to the regime. Therefore, the predictability of the fiscal regime needs to be clear for both the government and investors.

The policy may determine local content (e.g., how many Iraqi employees are hired, how much material is sourced within Iraq) the role of government agencies, the contribution made by local companies, the use of local labour and supplies, and the provision of

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<sup>214</sup> By Diego Mesa Puyo, Roberto Schatan, “Designing flexible fiscal regimes to protect revenues,” IMF Fiscal Affairs Department, November 24th 2015.  
<https://www.imf.org/en/News/Articles/2015/09/28/04/53/socar112415a>

training and career development opportunities for local citizens (capacity building, as distinct from local content). The objective should be to ensure the transfer of knowledge, management and technology whilst investing in the building of local supply chains.

The industry's infrastructure from exploration to production, refining and distribution has to be coherently planned, currently not the case in Iraq which suffers serious inefficiencies related to subsidies, which have suppressed investment in new refining capacity. Major customers have to be fed by pipelines or export terminals, an issue which has seen political conflict in Iraq regarding use of export infrastructure through the Kurdish region.<sup>215</sup> All of this requires agreed planning at local, regional and national levels, as current problems in Canada regarding pipeline construction illustrate, despite the presence of a national level regulator, the National Energy Board.

According to the Chatham House Report on Good Governance of the National Petroleum Sector project (2007) there are:

“five universal principles of good governance which transcend national boundaries: clarity of goals, roles and responsibilities; sustainable development for future generations; enablement to carry out the role assigned; accountability of decision-making and performance and transparency and accuracy of information.”<sup>216</sup>

However, as the report admits there are many different models of governance in existence:

“Case studies contributed by participants demonstrated how much countries differed in their governance processes. These may involve, in different ways and with different weight, the executive government, the national central bank, a petroleum advisory council, official regulators, local authorities and the legal institutions. Parliament, trade unions, the media, civil society groupings etc. may represent people and different elements in society. The investor/operator grouping includes the national oil company, local private-sector companies, international oil companies and financial institutions. An NOC can be more of a government agency than an operating company. In some countries trade unions may exercise a strong role in the state legislature and have representation on the Board of the NOC. Identifying and understanding the national context is

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<sup>215</sup> Author discussion with Ibrahim Bahr Alolom.

<sup>216</sup> Glada Lahn, Dr Valérie Marcel, John Mitchell, Dr Keith Myers, Prof. Paul Stevens, “ Report on good governance of the national petroleum sector,” Chatham House (2007) <https://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Energy,%20Environment%20and%20Development/ggreport0407.pdf>

therefore a first step in developing strategies for improvement of governance in the petroleum sector.”<sup>217</sup>

Taking these points into consideration, a successful petroleum policy would consider the following elements:

- The national context
- The assignment of goals, roles and responsibilities
- The location of responsibility for regulation
- The purpose of the NOC
- The relationship between NOC and state
- The role of the IOCs
- Sustainability

The success of a national petroleum policy depends heavily upon the capacity of the state to effectively legislate and monitor the sector’s activities and performance, to collect taxes, share and invest revenues. Taking the above factors into account, case studies focusing on the Ministry of Oil and Ministry of Natural Resources will consider how effective the current Iraqi Federal Government is in achieving its legislative objectives.

## 2.8 The Resource Curse

The idea that mineral wealth could lead to a number of problematic experiences in a major resource holding country, chiefly long term low economic growth, was debated as long ago as the 1950s, but arguably did not gain widespread popularity until Richard Auty used the term “resource curse” in his 1993 essay, *Sustaining Development in Mineral Economies: The Resource Curse Thesis*.<sup>218</sup> Since then, the thesis has evolved into what Rosser defines as three strands of literature dealing with three main ideas, firstly that resource rich nations have a higher likelihood of civil war, secondly that resource rich nations have a higher likelihood of lower economic growth and finally that

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<sup>217</sup> Glada Lahn, Dr Valérie Marcel, John Mitchell, Dr Keith Myers, Prof. Paul Stevens, “ Report on good governance of the national petroleum sector,” Chatham House (2007)  
<https://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Energy,%20Environment%20and%20Development/ggreport0407.pdf>

<sup>218</sup> Richard M Auty, “Sustaining Development in Mineral Economies,”(New York: Routledge) 1993.

they are more predisposed to authoritarian regimes.<sup>219</sup> Wing notes that all of these symptoms of the resource curse are present in various forms in Iraq.<sup>220</sup>

In economic development, much concern has been focused on what is known as “Dutch disease” whereby a surge in resource income leads to an appreciation of the real exchange rate, damaging other sectors in the economy, as described by Corden and Neary<sup>221</sup> More recently Sachs notes that the risk of the condition has been exaggerated if a MRH properly invests revenue windfalls in non-oil sectors, or if there is minimal non-oil industry in the first place.<sup>222</sup>

Secondly, with regard to economics, a number of analysts have pointed to the problem of the “rentier state.” This is where large revenue inflows from a single export to the government form the basis of what is known as “unearned income” which then becomes disposed of haphazardly in the form of social welfare programs, which are politically attractive to the government but may produce inefficient economic outcomes or heighten corruption, where weak institutions are predominant. Rosser notes that rentier states tend to have large state owned enterprises sectors, particularly relevant to the case of Iraq.<sup>223</sup>

Politically, it has been widely argued that the concentration of “rent” in a centralised political system also entrenches governments with authoritarian tendencies which are able to “capture the state” and use rents to bolster pro-government armed forces or “buy” support or opposition groups, as noted by Lam and Wantchekon<sup>224</sup> Jensen and Wantchekon<sup>225</sup> Beblawi and Luciani.<sup>226</sup>

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<sup>219</sup> <https://assets.publishing.service.gov.uk/media/57a08c47ed915d622c00123f/wp268.pdf>

<sup>220</sup> Joel Wing, “Does Iraq suffer from the resource curse?” Musings on Iraq, December 11th 2012. <http://musingsoniraq.blogspot.co.uk/2012/12/does-iraq-suffer-from-oil-curse.html>

<sup>221</sup> W. Max Corden, J. Peter Neary, “Booming Sector and De-Industrialisation in a Small Open Economy,” *The Economic Journal*, 91, (1982), 368, 825-848  
<https://www.jstor.org/stable/2232670>

<sup>222</sup> Escaping the Resource Curse (Initiative for Policy Dialogue at Columbia) Eds. Macartan Humphreys, Jeffrey D. Sachs, and Joseph E. Stiglitz, (Columbia University Press:2011)

<sup>223</sup> Andrew Rosser, “The Political Economy of the Resource Curse: A Literature Survey,” Institute of Development Studies, Working Paper 268 (2006.)

<http://www.ids.ac.uk/publication/the-political-economy-of-the-resource-curse-a-literature-survey>

<sup>224</sup> Ricky Lam and Leonard Wantchekon, “Political Dutch disease,” New York University (2002)

<http://www.nyu.edu/gsas/dept/politics/faculty/wantchekon/research/dutch.pdf>

<sup>225</sup> Nathan Jensen, Leonard Wantchekon, “Resource Wealth and Political Regimes in Africa,” *Comparative Political Studies* 34 (2004)

[https://www.princeton.edu/~lwantche/Resource\\_Wealth\\_and\\_Politics\\_Regimes\\_in\\_Africa\\_Jensen\\_Wantchekon](https://www.princeton.edu/~lwantche/Resource_Wealth_and_Politics_Regimes_in_Africa_Jensen_Wantchekon)

<sup>226</sup> Hazem Beblawi, Giacomo Luciani, “The rentier state,” *Bulletin of the School of Oriental and African Studies* 51 (1988)

Finally, it has been found by Auty that resource rich countries are more likely to experience civil war, however particularly relevant in the case of Iraq is the finding of Collier and Hoeffler that while civil wars are likely in an MRH, secessionist wars are three times more likely than conflicts driven by other political factors.<sup>227</sup> This raises significant questions regarding Iraq where resources are spread unevenly across the country and various groups have fought political, and at times violent battles for control of land and resources. The resource curse will be explored in more detail in Chapter 4, international case studies.

## 2.9 Petroleum Fiscal Regimes

Petroleum fiscal regimes encompass the laws, regulations and agreements that dictate the interactions between national oil companies, international oil companies and national and subnational governments in exploration, development and production of oil and gas resources.<sup>228</sup> Relevant here are types of licensing systems common in countries such as Iraq, where the state owns the rights to the subsurface resource. The licensing systems described below have all at one point either existed in Iraq, or are currently in use in the Kurdish Regional of Iraq or Arab Iraq.

## 2.10 Production Sharing Agreements

Production Sharing Agreements are a common form of oil contract whereby the host country contracts an IOC to explore for and develop hydrocarbon resources.<sup>229</sup> PSAs became increasingly popular following the first wave of nationalisation in the 1960s and '70s where MRH countries wanted to retain a degree of sovereign control over subsurface resources, but recognised the need for foreign private enterprise to fully exploit

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<http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=3923140&fileId=S0041977X00116672>

<sup>227</sup> Paul Collier, Anke Hoeffler, "Greed and grievance in civil war," *Oxford Economic Papers*, 56 (2004) 563-594. <http://www.econ.nyu.edu/user/debraj/Courses/Readings/CollierHoeffler.pdf>

<sup>228</sup> National Resource Governance Institute, "Fiscal Regime Design: What revenues the government will be entitled to collect?" March 2015. Accessed July 16<sup>th</sup> 2016.

[http://www.resourcegovernance.org/sites/default/files/nrgi\\_Fiscal-Regime-Design.pdf](http://www.resourcegovernance.org/sites/default/files/nrgi_Fiscal-Regime-Design.pdf)

<sup>229</sup> Kirsten Bindemann, "Production sharing agreements: An economic analysis," *Oxford Institute of Energy Studies* (1999) <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/WPM25-ProductionSharingAgreementsAnEconomicAnalysis-KBindemann-1999.pdf>

resources. Therefore, the state, represented in the form of a National Oil Company, contracts the IOC who retain a share of production as payment for extracting the resource. With the exception of this share however, the state owns the rest of the oil extracted, in contrast to a concession agreement, and the state will also levy a tax on the “profit oil.” Under these contracts, the government owns oil installations and the IOC take all of the risk, in the sense that if no oil is found there is no compensation. Also typical to most PSAs, the IOC will pay a royalty on gross production to the government, and then the government will agree to a share of cost recovery to the IOC, leaving the rest of the oil as “profit oil” which is divided between the government and the IOC at an agreed share.<sup>230</sup>

PSAs have been the preferred contract type for the Kurdish Regional Government Ministry of Natural Resources, and initially proved attractive due to the offsetting of initial costs to future profits, although this arrangement has proved difficult for the KRI under low oil prices. As discussed later in this chapter, PSAs have been particularly controversial in Iraq.

## **2.11 Production Service Contracts**

Production service contracts are widely regarded as having been adopted by host countries for similar reasons to PSA adoption, namely the retention of sovereign rights to subsurface and exported liquids. Service contracts are typically long term (at least 20 years) and, as with PSAs the IOC is contracted to explore and develop oil and gas fields in return for a contractually agreed fixed fee, normally per barrel. Unlike in a PSA, where IOCs receive a share of extracted oil or gas, under the PSC the IOC will not have any right to extracted or sub-surface oil and gas, although in the case of Iraq problems with paying IOCs has led to MoO deciding to pay IOCs in oil. In the PSC, the IOC carries a degree of risk in that it normally fronts capital expenditure and brings in technology, although this has been mitigated somewhat in the case of Iraq by a rapid cost recovery mechanism within the contract.<sup>231</sup>

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<sup>230</sup> Kirsten Bindemann, “Production sharing agreements: An economic analysis,” Oxford Institute of Energy Studies (1999)

<sup>231</sup> World Bank Institute Guide to Extractive Industries Documents: Oil and Gas. January 2013 <http://www.eisourcebook.org/cms/Jan%202014/Guide%20to%20Petroleum%20Documents.pdf>

PSCs have drawn controversy in Iraq due to nationalist sentiment that opposes the IOC having what amounts to a fixed percentage of exported oil, but have come under more detailed scrutiny from Ghandi and Lin who view them as producing long term economic inefficiency due to an inability to optimise production rates,<sup>232</sup> and Wells who argues along similar lines that the high production plateaus for fields do not coincide with forecast world oil demand or expected Iraqi infrastructure capacity.<sup>233</sup> This will be discussed in more detail in chapter 5.

## 2.12 Joint Venture

The Joint Venture has long been the preferred private investment model across multiple sectors in Iraq however only the Basra Gas Company (BGC) exists as a JV in the energy sector. According to Radon JVs are a particularly challenging type of contract, because if all potential possibilities are not considered prior to the signing of the contract, legal disputes can be likely. The example of Nigeria is given whereby JVs for oil and gas broke down in the 1970s when the government was unable to meet financial terms in the contracts. JVs are a typically 50-50 ventures, where an NOC owns half of the project, approximately the case with the Basra Gas Company.<sup>234</sup>

## 2.13 Concession Agreements

Many analysts, such as Zebari, Anaz, and Cohoon,<sup>235</sup> regard concession agreements (also known as royalty tax systems) as the contract model of the colonial era, being both very long term and offering low royalties for extracted oil in return for full control over subsurface and extracted oil. Johnston notes that royalties could often be round 10%, entitling the IOC to legal and physical possession of 90% of the “lifted” oil, however in

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<sup>232</sup> Abbas Ghandi, Cynthia Lyn, “Production sharing contracts around the world,” Institute of transportation studies, University of California (2014)

[http://www.des.ucdavis.edu/faculty/Lin/service\\_contracts\\_review\\_paper.pdf](http://www.des.ucdavis.edu/faculty/Lin/service_contracts_review_paper.pdf)

<sup>233</sup> Peter Wells, “Iraq’s Technical Service Contracts – A Good Deal For Iraq?” Iraq Oil Forum, 2009.

<http://www.iraqoilforum.com/wp-content/uploads/2009/12/Iraqs-Technical-Service-Contracts.pdf>

<sup>234</sup> Jenik Radon, “The ABCs of Petroleum Contracts: License-Concession Agreements, Joint Ventures, and Production-sharing Agreements,” in *Covering Oil: A reporter’s guide to energy and development*” Ed. Svetlana Tsallik et al (New York: Open Society Institute, 2005) 61. <http://openoil.net/wp/wp-content/uploads/2011/12/Chapter-3-reading-material1.pdf>

<sup>235</sup> Dildar F. Zebari, “Fundamental Issues of early Oil Concession Contracts in Iraq until 1950,” *International Journal of Humanities and Management Sciences (IJHMS)* (2015) <http://www.isaet.org/images/extramages/P315048.pdf>

some cases if the IOC paid the host government from another source, nullifying the royalty, entitlement could be 100% to the IOC.

Radon does however note that while most concessions were replaced in the 1960s (most famously by the first PSA in Indonesia in 1966 which replaced Dutch colonial era laws) concessions can in some cases have advantages in certain situations. Radon suggests that this model may be of use in countries as a “license agreement” where there is little reliable legal infrastructure or judiciary that could be able to interpret “complex agreements.” By this logic, commercial terms can be focused on without the need to fill in gaps in existing law by building clauses into contracts. Johnston notes that while many concession contracts were bad for host governments, government take could in fact be very high over the cycle of the field (from initial production through to decline and abandonment) if high taxes were levied, in addition to a 10% royalty.

## **2.14 Government Take**

According to Radon government ownership of the resource entitles it to a majority share of the revenues from its extraction. This percentage of royalty, other revenue, tax or payment of oil to the government is known as “government take” and will vary across contract models and on the ground conditions. For example, particular areas may come with high levels of geological, security or political risk, and these factors affect the remuneration and cost recovery structure of contracts, with IOCs typically asking for greater compensation, meaning a smaller government take.

Exogenous factors also influence government take, including the wider global oil market both at the time the contract is negotiated and forecast demand. In some cases, government take can rise as international oil prices rise in such a way as to not affect the commercial viability of a project for IOCs, but Radon notes that tax systems often do not adjust the rate of return under different scenarios to provide optimum conditions for the host government.<sup>236</sup> According to the IMF, in Iraq “TSCs were lucrative for the government when oil prices were high, but they became less attractive with falling oil

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<sup>236</sup> Jenik Radon, “The ABCs of Petroleum Contracts: License-Concession Agreements, Joint Ventures, and Production-sharing Agreements,” in *Covering Oil: A reporter's guide to energy and development* Ed. Svetlana Tsallik et al (New York: Open Society Institute, 2005) 61. <http://openoil.net/wp/wp-content/uploads/2011/12/Chapter-3-reading-material1.pdf>

prices as revenues from oil exports plummeted and payment obligations to the IOCs remained high.”<sup>237</sup>

According to Ernst and Young, by 2011 the Iraqi Parliament and later, Ministry of Finance had attempted to mitigate this situation by imposing taxes on oil and oil field service operations:

“In 2010, the Iraqi parliament ratified a tax law for foreign oil and gas companies. As per this 2010 oil and gas income tax law, the income tax rate applicable to income earned in Iraq from contracts undertaken by foreign oil and gas companies and by contractors working in the fields of production and extraction of oil and gas and related industries is 35 percent. Companies, branches or offices of oil and gas companies and service companies, and subcontractors working in fields of production and extraction of oil and gas and related industries are all subject to the law.”<sup>238</sup>

## 2.15 Booking Barrels

According to Johnston booking barrels is “the practice of counting oil among the assets of a company,”<sup>239</sup> however, the number of barrels a company can book varies across contracts, since they can only book oil they are entitled to. Therefore, in the case of a royalty tax contract, this could be total estimated recoverable oil minus the royalty, while in the case of a PSC, the entitlement available to book can increase as the price of oil falls (and the IOC percentage share becomes more valuable) and decrease as the price of oil rises. According to Johnston in the US booking barrels is based on reasonable certainty of proved reserves, a point of particular relevance to Iraq and the KRI where Iraq’s southern fields are widely considered to be well mapped out compared to fields in the KRI.<sup>240</sup> An IOC’s ability to book barrels will have a direct impact on its share price, since stock analysts follow the “reserve replacement ratio.”<sup>241</sup>

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<sup>237</sup> Iraq: Selected Issues, IMF Country Report No. 15/236 (August 2015)

<https://www.imf.org/external/pubs/ft/scr/2015/cr15236.pdf>

<sup>238</sup> Maria Lasa Aresti, “Oil and Gas Revenue Sharing in Iraq: Revenue sharing case study.” Natural Resource Governance Institute, 2016. Accessed July 16<sup>th</sup> 2016.

<http://www.resourcegovernance.org/sites/default/files/documents/oil-gas-revenue-sharing-iraq.pdf>  
<sup>239</sup> <sup>239</sup>, Daniel Johnston “International exploration, economics, risk and contract analysis,” from *Escaping the Resource Curse*. (New York: PennWell Books 2003) P.65.

<sup>240</sup>, Ibid P.83.

<sup>241</sup> Betty Simkins, Russel Simkins, “Energy Finance and Economics: Analysis and valuation, risk management and the future of energy,” (New York: Wiley, 2004.)

## 2.16 Energy Value Chain

According to a 2009 report by the World Bank Group, this term refers to the overall efficiency of the hydrocarbons sector from policy creation and regulation to exploration and extraction (upstream) transportation (midstream) and refining (downstream) operations. Decisions made at the ministry level, or made by an NOC can decrease or increase efficiency, or “value” in the chain. For example if a country decides to create a number of small refineries when an expert suggests improving existing larger facilities may be more cost effective, the country is reducing value in the entire chain.<sup>242</sup>

This situation would become even more inefficient if a large portion of refined liquid from the smaller refineries is intended for domestic use. In this case, absence of economy of scale in the chain, through increased transportation costs, the time it has taken to get the new refineries online (rather than upgrade existing ones) or issues with the yield of refined fuel, all decrease value. This could be particularly damaging if the government decides to allocate a portion of refined fuel to state owned companies or give Heavy Fuel Oil (a by-product of refining) to power stations, which can damage turbines. Both of these latter situations have occurred in the refining sector in the KRI and southern Iraq as examples of inefficient energy value chains.<sup>243</sup>

Now that these key concepts have been examined, attention will be turned to the academic discussions on Iraqi energy policy after 2003, which involves many of the ideas outlined above. Fiscal regimes, contractual terms, political control over the energy sector and the energy value chain have been the subject of prolonged debate among energy analysts and industry professionals focused on Iraq. Arguments made in research papers, books and journals however only present pieces of analysis that, when examined together, help give a broader understanding of the barriers Iraq has faced in designing a strong energy strategy.

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<sup>242</sup> The World Bank Group: Petroleum Sector Value Chain. June 2009.

[http://siteresources.worldbank.org/INTOGMC/Resources/noc\\_chapter\\_1.pdf](http://siteresources.worldbank.org/INTOGMC/Resources/noc_chapter_1.pdf)

<sup>243</sup> Energy Information Administration, Country Analysis Brief, Iraq April 28 2016.

2016[http://www.ieee.es/Galerias/fichero/OtrasPublicaciones/Internacional/2016/EIA\\_Iraq\\_28abr2016.pdf](http://www.ieee.es/Galerias/fichero/OtrasPublicaciones/Internacional/2016/EIA_Iraq_28abr2016.pdf)

### Chapter 3: Literature Review on the Iraqi Petroleum Industry

A review of the scholarly literature related to Iraq's oil and a gas sector reveals a broad picture of "tactics without strategy" which, as Sun Tzu is thought by some to have noted, "is the noise before defeat."<sup>244</sup> Conversely, this quotation also notes that tactics were vital albeit not essential as long as there was strategy in place. In the context of Iraq's energy sector, "strategy" refers to the design of a petroleum policy framework that would fulfil the constitutional objective of the maximum economic return to the Iraqi people, as Article 112, Second notes, to "formulate the necessary *strategic* (emphasis added) policies to develop the oil and gas wealth in a way that achieves the highest benefit to the Iraqi people."<sup>245</sup>

The majority of literature on Iraq's post 2003 energy sector reconstruction has focused on significant "tactical" questions, namely contract types and their expected economic performance or constitutionality, or questions of whether fields were "present" (producing) or "future." Many experts (including Zedalis, Gunter) have often noted an absence of strategy or a legal framework that might provide the basis for a coherent petroleum policy, but pay little attention on what an optimum strategy might look like.<sup>246</sup> Others focus on very specific problems such as whether PSAs are an IOC attempt to reap profits at the expense of Iraq or whether Iraq should "avoid the resource curse" by diverting a proportion of its oil revenues into a fund and then directly distribute the dividend to the population. This idea follows the style of the Alaska Permanent Fund, and was proposed by West, Looney, Birdsall and Subramanian,<sup>247</sup> as well as being written into the 2012 draft budget, but never implemented.

Some experts such as Michael Knights and Tim Arango<sup>248</sup> endorse short term deals and echo the tactical approach taken by the Iraqi government to the problem of Iraq's mismanaged energy sector, focusing on individual problems rather than an integrated

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<sup>244</sup> The quote has never been attributed and does not appear in Sun Tzu's most famous work, Sun Tzu *The Art of War* See version translated by Lionel Giles. ( Berkley Publishing Group: New York, 2009\_

<sup>245</sup> Constitution of the Republic of Iraq.

<sup>246</sup> Frank R. Gunter, *The Political Economy of Iraq: Restoring Balance in a Post-Conflict Society,* (Cheltenham: Edward Elgar Publishing, 2013) :88

<sup>247</sup> Todd Moss, "The Governor's Solution: How Alaska's Oil Dividend Could Work in Iraq and Other Oil-Rich Countries," Center for Global Development, (Washington DC, 2013)

<sup>248</sup> Tim Arango, "Iraqi Government and Kurds Reach Deal to Share Oil Revenues," *The New York Times*. December 2nd 2014. Accessed July 16th 2016. [http://www.nytimes.com/2014/12/03/world/middleeast/kurd-pact-with-baghdad-against-islamic-state.html?\\_r=0](http://www.nytimes.com/2014/12/03/world/middleeast/kurd-pact-with-baghdad-against-islamic-state.html?_r=0)

strategic approach.<sup>249</sup> By focusing attention to individual “tactical” projects such as developing particular fields, changing terms of refinery investment or specific infrastructure projects, Iraq appears to have achieved massive export growth, while incurring serious inefficiency in the absence of national level master planning and coordination between government agencies. Limited success has been, as a study by *OpenOil* highlights, against the odds of a legacy of sanctions, war and insurgency that saw Iraqi production fall to a low of 1.3 million bpd in 2003, rising to 2.8 million bpd in 2011 with considerable foreign participation.<sup>250</sup>

No observers suggest this increased production represents Iraq’s full potential. Several experts reference aspects of the “resource curse” that they see as prevailing in Iraq, leading to a series of inefficiencies which have undermined investment in the sector as Iraq eventually faced financial crisis in 2014. West notes that following the oil price collapse of 2009, “Iraq fell prey to one of the classic syndromes of oil producing countries: growing dependency on oil rents combined with severe income volatility.”<sup>251</sup> Gunter notes how this dependency persisted through 2012, noting how it enabled the GOI to become “employer of first choice” and that, if oil prices remain high as Iraq’s exports surge, this scenario would likely bring “an explosion of corruption” and divert efforts to “diversify Iraq’s economy.”<sup>252</sup> Wing identifies four manifestations of the resource curse, noting that Iraq has signs of all, including Dutch Disease, the Rentier Thesis, the Repression Thesis, and the Rent Seeking Thesis.<sup>253</sup> In the case of Iraq, Wing notes how public expenditure is closely linked to oil revenues, and that high oil revenues have led to overspending, failure to implement tax policies and a subsequent lack of social contract between the government and the people. To justify the presence of repression thesis in Iraq, he notes how oil revenues are used to build up large armed forces to defend the government, certainly the case under Saddam and, according to Dodge Nouri al- Maliki.<sup>254</sup> Regarding Dutch Disease, Wing notes how a GOI fixation with using oil revenues to prop up SOEs, rather than diversify a private sector economy, has crowded out growth of the private non-oil sector. To remedy the growing

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<sup>249</sup> Michael Knights, “Making the Iraqi Revenue-Generating Deal Work,” <http://www.washingtoninstitute.org/policy-analysis/view/making-the-baghdad-krq-revenue-generating-deal-work>

<sup>250</sup> Johnny West, “Iraq’s last window.” Center for Global Development, Working Paper 266, September 2011.

<sup>251</sup> Frank R. Gunter, “*The Political Economy of Iraq: Restoring Balance in a Post-Conflict Society*,” (Cheltenham: Edward Elgar Publishing, 2013)

<sup>252</sup> *Ibid.*

<sup>253</sup> Joel Wing, “Does Iraq suffer from the resource curse?” December 11th 2012. Accessed July 16th 2016. <http://musingsoniraq.blogspot.co.uk/2012/12/does-iraq-suffer-from-oil-curse.html>

<sup>254</sup> Toby Dodge, “From War to a new Authoritarianism,” (New York: Routledge, 2012) Kindle Edition: 37-39

symptoms of the “resource curse” in Iraq, Wing suggests that Iraq’s involvement in the Extractive Industries Transparency Initiative (EITI), combined with an aggressive investment in economic diversification and even direct distribution of revenues could be initial strategies, but offers no further detail on the matter and does not reference petroleum policy frameworks.<sup>255</sup>

This is similar to the assessments of some experts who note the problem of an absence of strategy, without venturing proposals on what could be done, as Jaffe notes, “Without a well-defined national political framework for oil and gas development, Iraq runs the risk that conflict over resource rights and benefits could become a destabilizing factor in the country’s long-term stability and unity.”<sup>256</sup>

Jaffe’s work points to a fundamental energy sector tension that has caused vast waste in Iraq. This is the conflict between the Ministry of Electricity and the Ministry of Oil over fuel allocations for power stations and power for oil projects; power station turbines break down from heavy fuel oil use (when Iraq’s abundant gas could be used) causing recriminations between ministries and likewise oil projects compete with the government for electricity and clash over the flaring and reinjection of gas that could be used for power stations.

Jaffe notes that following the demonstrations over electrical outages in 2011,

“Political leaders promised that electricity services to the residential sector would take precedence, creating new problems for industry’s ability to mobilize the electricity services needed for the water injection program. Power generation is needed both to pump seawater north to the southern oil fields as well as to fuel desalination plants that will be required to convert seawater into usable water for injection purposes.”<sup>257</sup>

Likewise, Jaffe notes the conflict over gas allocations “foreign investors are also unhappy about turning natural gas production over to Shell, and may lobby for the opportunity to compete for the right to utilize the gas from their own projects.” Chapter 5 will evaluate whether Iraq may have had a stronger position regarding IOC demands through closer coordination between the Ministry of Electricity and Ministry of Oil,

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<sup>255</sup> Joel Wing, “Does Iraq suffer from the resource curse?” December 11th 2012. Accessed July 16th

<sup>256</sup> Jareer Ellass, Amy Myers Jaffe, “Iraq Oil Potential and Implications for global oil markets and OPEC politics,” James Baker III Institute for Public Policy, 2011.

<sup>257</sup> Ibid.

since MoO had the majority stake in the Basra Gas Project which is intended to prioritise Iraq's National Grid before exports.

Nonetheless, Jaff does not outline how government agencies could coordinate better, instead referring back to the absence of national strategy. Jaffe does note however, that the level of bureaucracy in Iraq's energy sector and related ministries that have involvement in petroleum logistics and security (Ministries of Transport and Interior) has produced problems for IOCs, "given the multitude of official agencies at the local and provincial levels." Jaffe could perhaps also highlight another problem of coordination which goes beyond MoO and MoE, as Gandhi and Lin note,

"in implementing the Rumaila TSC, misaligned responsibilities among different Iraqi government entities involved in the contract may lead to an implicit cost ceiling being imposed on the IOC. The Iraqi government entity awarding the contracts is different from the one making cost decisions, which is different from the one receiving the revenue. The Ministry of Oil and its Petroleum Contracts and Licensing Directorate, which awards the contract, follow a policy of maximizing revenue with an emphasis on garnering a higher plateau production target in the bidding process. However, the state-owned South Oil Company, which oversees the Rumaila operation and has to approve the IOC's work plans and capital expenditures, is primarily concerned with cost. The revenue goes through the Ministry of Oil's Treasury department. The South Oil Company therefore decides on the cost without seeing the revenue."<sup>258</sup>

Gunter has also highlighted the problems between oil and electricity ministries, writing,

"there are continuing difficulties coordinating the actions of the Ministry of Oil and Electricity. The Ministry of Electricity argues that inadequate fuel quality and quantity reduce electrical generation while the Ministry of Oil states that inadequate electrical quality (frequency drops) and quantity reduce refinery production."<sup>259</sup>

While Muttitt, Jiyad, Chalabi, Zedalis (as described below) and those who focus on direct distribution (Subramanian et al)<sup>260</sup> look at specific issues, much analysis focuses on general challenges to Iraq's energy sector, with the possible exception of Gunter, who looks at Iraq's linked industries but mentions little in relation to the Federal Oil and

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<sup>258</sup> Abbas Ghandi, Cynthia Lyn, "An Analysis of the Economic Efficiency of Oil Contracts: A Dynamic Model of the Rumaila Oil Field in Iraq." Institute of transportation studies, University of California (2014)

<sup>259</sup> Frank R. Gunter, "*The Political Economy of Iraq: Restoring Balance in a Post-Conflict Society*," (Cheltenham: Edward Elgar Publishing, 2013), 93.

<sup>260</sup> Todd Moss, "The Governor's Solution: How Alaska's Oil Dividend Could Work in Iraq and Other Oil-Rich Countries," Center for Global Development, (Washington DC, 2013)

Gas Law, except to note that it did not enter into effect.<sup>261</sup> Jaffe also looks at infrastructure challenges, a lack of human capacity leading to difficulties to “approve and tender and award contracts for management and equipment for major oil projects,” which relates to the the possible over-scrutiny of capital expenditure by South Oil Company referred to by Ghandi and Lin. Jaffe also notes, how “entrenched interests weigh in to block key projects, such as oil trucking services whose employees have much riding against the successful completion of new oil pipeline expansions.”<sup>262</sup> The massive problem of water supply for injection to maintain pressure in Iraq’s 6 giant southern fields is mentioned, as are other infrastructure bottlenecks that threaten Iraq’s plans to expand production.

In a joint paper, Jareer Elas and Amy Myers Jaffe differ from other observers such as Muttitt, Jiyad and Failat who worry that Iraq has contract types that do not optimise economic gains, by noting how contracts awarded for Rumaila, West Qurna-1, West Qurna-2, Majnoon, Zubair and Halfaya have such tough remuneration terms that they may not be profitable for IOCs. Singling out the West Qurna-2 deal for Lukoil and Statoil, she notes the estimated profit for the contract amounts to 56 cents a barrel because of a 35 percent tax on the remuneration fee and the 25% stake of SOC.<sup>263</sup>

It is noted however, that BP and CNPC later negotiated cost recovery terms that made their contract more viable. Regarding gas flaring and Shell’s gas capture project, Jaffe forecasts that if the BP consortium hit a target of 2.85 million bpd for Rumaila, more than 2 bcf a day (bcf/d) and nearly 300,000 b/d of liquefied petroleum gas (LPG). However, no analysis of Iraq’s Gas Master Plan is ventured, which shall be discussed in depth in Chapter 5. This is a considerable oversight, since the Gas Master Plan has been a cornerstone of Iraq’s plan to reduce oil consumption for electricity generation.

Attention is also given to then Minister of Oil Shahrstani’s 2010 announcement that Iraq’s reserves would be upgraded following revised recovery rates, which was followed by Iran and then Saudi Arabia announcing similarly large reserve upgrade estimates. By highlighting these points, Jaffe echoes the fears of Chalabi (outlined

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<sup>261</sup> Frank R. Gunter, *ibid* p 99

<sup>262</sup> Jareer Ellass, Amy Myers Jaffe, “Iraq Oi Potential and Implications for global oil markets and OPEC politics,” James Baker III Institute for Public Policy, 2011.

<sup>263</sup> Jareer Ellass, Amy Myers Jaffe, “Iraq oil potential and implications for global markets.” “Iraq Oi Potential and Implications for global oil markets and OPEC politics,” James Baker III Institute for Public Policy, 2011. <http://www.amymyersjaffe.com/content/pdf/PUBEF-pub-IraqFutureEllassJaffe-072611-1.pdf>

below) that suggest Iraq risks a confrontation with OPEC. Jaffe suggests this could be extremely unwise, given Saudi Arabia's previous ability to undercut rival producers aiming to rapidly expand production, which happened in the case of Venezuela in the late 90s, and to many observers is happening today with the battle between Saudi production and Iranian and Russian production, and Shale oil.<sup>264</sup>

Thus, a number of factors are examined before the conclusion that Iraq lacks an overarching policy, a point they reference with regard to exports, noting that under "a Saddam era law" only SOMO can export Iraq's oil.<sup>265</sup>

Megan O'Sullivan is similarly broad in her analysis, but also turns to exogenous market factors, noting how resumption of global demand in 2010 following the 2009 oil price crash "reminds us that spare capacity is finite."<sup>266</sup> Like Chalabi, she notes that key factors in Iraq's oil revenues and marketability rest on Iran's potential return to the market following (what was then) a possible lifting of sanctions and Chinese demand. Most relevant to this study, she describes how increased political strain within government will lead to "more short term thinking" and how "politics in Iraq is driven by a sense of urgency rather than strategy."<sup>267</sup>

As an example of poor strategic planning, she notes the risk that Iraq could induce a price collapse by rapidly expanding exports over 6 mbpd, a problem highlighted by Gunter, Failat and Chalabi. Returning to political analysis, she briefly describes the short lived proposal for the National Council for Strategic Policies (NCSP), which was to be given a special role in approving energy projects (among other tasks) but appears to have been born out of an attempt to produce political compromise following the deadlocked 2010 elections, rather than created as a genuine check on government power.

She notes the NCSP would have made little progress, since it required 80% approval for binding decisions. Turning focus to controversy over IOC contracts, O'Sullivan describes how nationalists such as Muqtada al-Sadr and Iyad Allawi opposed the post-

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<sup>264</sup> James Bowen, "Saudi Arabia's New Oil Strategy could backfire," *The National Interest*, 8th of July 2016. Accessed July 16th 2016 <http://nationalinterest.org/feature/saudi-arabias-bold-new-oil-strategy-could-backfire-16515>

<sup>265</sup> Jareer Ellass, Amy Myers Jaffe, "Iraq Oil Potential and Implications for global oil markets and OPEC politics," James Baker III Institute for Public Policy, 2011.

<sup>266</sup> Ibid.

<sup>267</sup> Ibid.

2009 contracts with IOCs (with Sadr flatly opposed to foreign oil involvement) and points out that Parliamentary Oil and Gas Committee head Adnan al-Janabi called for all IOC contracts to be reviewed, including KRI contracts.<sup>268</sup>

Regarding these contracts, O’ Sullivan suggests that constitutional ambiguity was not a mistake (as Zedalis, Jiyad and others argue) but actually vital and intentional for Baghdad and Erbil to reach compromise. She then goes on to note “positive” deals between then KRI Prime Minister Barham Saleh and former Iraqi PM Nouri al-Maliki on Kurdish exports through the Federal System, suggesting Maliki and then Oil Minister Abdul Karim al-Luabi may have backed down on Kurdish oil contracts, in particular controversial PSAs, because Kurdish geology was more challenging. Again, this general approach, touching on a number of challenges, eschews any commitment to suggesting which path Iraq could follow to formulate a coherent petroleum policy framework.

Following a more political line of analysis, Al-Kadiri notes that ethnic tensions over oil in Iraq, while important, are not the main issue to overcome and that intra ethnic and intra sect tension also warrant appraisal. He does note however that Kirkuk has long been seen by Kurds as a potential gateway to independence that could vastly upgrade oil resources at the disposal of the KRI, a fact that remains a source of ongoing tensions with Sunni Arabs in the wake of Saddam’s Arabization campaign in the region.

Al-Kadiri reminds us, however, of the tension between Nouri al-Maliki’s centrist Dawa party and the regional gambit of the Islamic Supreme Council of Iraq in 2009 (Dawa, were “centrist” in the sense that they neither portrayed themselves as revolutionary, like the Sadrist Trend, or as secular, like Ayad Allawi’s Al-Wataniya coalition.<sup>269</sup> ISCI’s then policy position to create a Shi’a majority oil rich region in the south was quickly abandoned after the Iraqi public showed little interest in the idea. He also notes, in relation to the July 2007 revisions to the Draft Oil and Gas Law (DOGL--see analysis of Zedalis, below) that ISCI joined the Kurds in rejecting the draft on the grounds that it gave far too much power to Baghdad.

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<sup>268</sup> Meghan L. O’Sullivan, *Iraqi Politics and Implications for Oil and Energy*, Harvard Belfer Centre, 2011. Page 9.

<sup>269</sup> Adam Simpson, “A crash course in Iraq’s electoral politics,” *Atlantic Council*, April 21st 2014 . Accessed July 16th 2016 <http://www.atlanticcouncil.org/blogs/menasource/a-crash-course-in-iraq-s-electoral-politics>

With regards to the proposed Revenue Sharing Law, he suggests that it gives so much power to regions over fiscal policy that Baghdad would be reduced to little more than a “cash machine.”<sup>270</sup> He concludes that the bundle of laws that Iraqi Parliament has failed to pass--the basic oil and gas framework law, the revenue sharing law and the law reorganizing the Oil Company (INOC) are all less important than resolving the fundamental constitutional questions over regional, provincial and central power. Until this happens, he argues, “policy disputes will be a constant drag on energy strategy.”<sup>271</sup> Again, this falls into the realm of correctly identifying the absence of strategy but not venturing what a strategy may entail.

Istrabadi arguably follows a politicised approach in his analysis, explicitly supporting a united Iraq while focusing on the fundamental tension between Iraq emerging as a federal state with strong unitary tendencies, although the 2005 Constitution recognises Iraq as federal - a situation he calls “unprecedented in the Middle East.” This is highly problematic he notes since a 2004 poll of Iraqis suggested that while Kurds favoured their new federal status, over 60% of people in Arab Iraq wanted the country to remain as a unitary state.<sup>272</sup> Likewise, in Basra, less than 10% of the registered voters required to have a referendum on the province’s federal status wanted the province to become a region in 2009.<sup>273</sup>

Therefore, Istrabadi concludes that the constitution is seen by nationalists as a de facto partition of Iraq and recalls that members of Iraq’s initial Interim Governing Council debated for hours how to handle and disperse Iraq’s oil revenues. Acknowledging his position as an Iraqi Nationalist, by noting, “The Nationalists (including this author) feared too great a weakening of the new federal structures,”<sup>274</sup> Istrabadi ventures that since the KRI is landlocked it is better for them to remain within Iraq and use Iraq’s export infrastructure for their oil rather than rely on historically difficult neighbours who have had difficult relations with Kurds.

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<sup>270</sup> Raad I Kadiri “Oil and the question of federalism in Iraq,” *International Affairs*, 86 (2010): 1315–1328

<sup>271</sup> *Ibid.*

<sup>272</sup> Gallup poll, 2004. Accessed July 16h 2016. <http://www.gallup.com/poll/11995/gallup-poll-iraq-could-kurdistan-iraqs-quebec.aspx>

<sup>273</sup> Joel Wing, “Basra Federal Region Plan Fails,” *Musings on Iraq*, January 23rd 2009. Accessed July 16th 2009. <http://musingsoniraq.blogspot.co.uk/2009/01/basra-federal-region-plan-fails.html>

<sup>274</sup> Feisal Amin Istrabadi, “A Constitution Without Constitutionalism: Reflections on Iraq 's Failed Constitutional Process,” *Indiana University Maurer School of Law*, 87 (2009): 1645

He also describes how strong Kurdish demands for autonomy over oil exports provoked similar sentiments among some Shi'a leaders with Adil Abdul Mahdi saying, "whatever the Kurds get, the Shi'a should get," a position that contrasted to that of the Fadilah Party and Dawa, who favoured a strong center, while Sadrists and the Kurds were left to what Istrabadi calls "maximalist" demands.<sup>275</sup> Therefore, Istrabadi portrays widespread political deadlock, without going into analysis on how this distracted the Iraqi state from developing an energy strategy, delaying mega projects or tackling massive waste through petroleum theft, smuggling and refinery inefficiency, among many other problems. On balance, however, Istrabadi writes before many of these developments, such as Iraq's removal of Exxon over the seawater injection project. While political analysis is essential, it cannot be taken in isolation to understand Iraq's failure to create a national level energy policy.

Failat is arguably more explicitly nationalist than Istrabadi, because while Istrabadi declares himself a nationalist, he also notes that the Transitional Administrative Law (Iraq's legal governing structure prior to the ratification of the 2005 constitution) is right to support the Kurdish autonomous status, noting, "the foundations of a modus vivendi were laid in the TAL." Failat, meanwhile, argues along similar lines to Muttitt and Anaz that Kurdish PSAs are illegal under the Iraq constitution and that the KRI, "interprets the constitutional provisions in a selective and unilateral manner."<sup>276</sup> His basis for this illegality is the citing of Article 110 of the Iraqi constitution which gives the Federal government authority over trade policy, a view rejected by Zedalis. Of the 2011 FOGL, Failat notes that, "It has failed to consider art.110 of the Constitution, which explicitly stipulates the exclusive powers of the Federal Government."<sup>277</sup>

Furthermore, he suggests that since OPEC production ceilings are negotiated by Baghdad, independent Kurdish policy on oil production must defer to the federal government. He goes on to attack Kurdish PSAs noting that they prioritise maximum production, which could rapidly increase depletion rates of fields to the detriment of the federal government and that subsequently PSAs are not constitutional in that they do not offer the maximum benefit promised to the Iraqi people under the constitution.

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<sup>275</sup> Ibid.

<sup>276</sup> Yanal Abul Failat, "The Iraqi Federal Oil and Gas Law 2011: Exploration, Exploitation and Expropriation," *IELR*, 4: (2013) :141.

<sup>277</sup> Ibid.

Continuing his critique of PSAs, he suggests that stabilization clauses and clauses for foreign commercial arbitration limit Iraq's sovereign power to alter contracts if circumstances change and that foreign arbitration, occurring on a purely commercial basis, does not consider the rights of Iraqi civil society. This viewpoint is particularly similar to that of Gregg Muttitt, but while these points are important to consider it is hard to imagine a situation where IOCs would invest billions in Iraq without guarantee of a modern, advanced commercial arbitration process existing within the country.

Also with a strong focus on investment terms is Robin Mills, although he looks exclusively at the experience of the KRG. *Under the Mountains: Kurdish Oil and Regional Politics* is perhaps the most comprehensive and up to date study (as of 2016) on the KRI's use of unilateral energy sector development to fund a drive for greater autonomy. Expanding on Zedalis' postulations on the possible breakup of Iraq, Mills points out that in the view of the Kurdish Democratic Party (KDP) this is with the goal of independence from Iraq. *Under the Mountains* therefore provides an overview of the mounting political risks that have shaped the KRI's energy strategy, but also highlights how this has led both Ministries of Oil (Natural Resources in the case of the KRG) to undertake somewhat self-defeating moves in the struggle to influence IOC involvement in their respective fields. This is particularly the case with Baghdad's expulsion of Exxon from the Common Seawater Supply project, which is intended to maintain reservoir pressure in the supergiant southern fields. Baghdad removed Exxon from the project following its deal with MNR in 2010, which Exxon initially tried to keep secret. This had a deterrent effect on other Oil Majors and the KRI was subsequently forced to continue signing PSAs with smaller IOCs, who lacked expertise to exploit fields in challenging geological conditions.

Mills opens by charting the history of the energy sector in the KRI, from initial drilling at Kirkuk to the beginning of the area's regional autonomy in 1970 under the Baath regime, and the subsequent breakdown of this arrangement in 1974, after which a long period of armed hostilities resumed with Baghdad.<sup>278</sup> Like Istrabadi, Mills notes this difficult period for the Kurds has shaped their view of oil resources, particularly in Kirkuk, as being a potential gateway to financial and political independence. Kurdish

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<sup>278</sup> Robin Mills, "Under the Mountains: Kurdish Oil and Regional Politics" Oxford Institute of Energy Studies Working Paper 63. (Oxford, 2016)

faith in the political reliability of Baghdad has been marred by the genocide campaign launched by Saddam Hussein against the Kurds in the 1980s.

Prior to this period, Mills notes how Baghdad was reluctant to explore for oil in an area considered semi-hostile and geologically difficult, although an oil field was discovered but not developed at Taq Taq in 1978, which later became a flagship field for the region after being developed by Turkish-British consortium Genel Energy and the Swiss Addax Petroleum from 2007 onwards.<sup>279</sup>

The chaos of Saddam's 1980s *Anfal* campaign against the Kurds was followed by what Mills calls "de facto independence" after Baathist forces were driven from the region following the 1991 uprising, which led to the KRI holding an election, resulting in a contested division of power between the KDP and the Patriotic Union of Kurdistan (PUK). This resulted in a war, initially over the division of "customs" revenues from Iraqi oil trucked over the border with Turkey, as Iraq sought to circumvent sanctions. Importantly, Mills goes to some length to illustrate how this struggle over the energy sector was effectively won by the KDP, who prioritised energy sector development in the provinces of Erbil and Dohuk (that fall under their control) and monopolised independent oil revenues. Mills concludes that this political monopoly has led the semi-autonomous region to develop many characteristics of a rentier state.<sup>280</sup>

Following the expulsion of the regime from the KRI, ongoing violence resulted in a short-lived alliance between the KDP and Saddam Hussein in the mid-1990s. This scene setting, along with a description of the Kurd's difficult and often violent relations with neighbouring states where they are also a minority, underscores one of Mills' central points: the Kurds' energy strategy is in large part based on ending this long period of turmoil and using Turkish and Iranian demand for its natural resources to build pragmatic relations with its neighbours, and in this respect, Mills concludes there has been much success, but success hinging on vulnerable export infrastructure, uncertain regional relations and mounting political risk.<sup>281</sup>

Mills notes that this risk has defined many of the problems and successes of the region's energy strategy, but these same political problems have meant that only small to

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<sup>279</sup> *Ibid.* p8.

<sup>280</sup> *Ibid.* p31

<sup>281</sup> *Ibid.* p43

medium size IOCs were willing to enter the KRI. Determined to pursue a separatist agenda, the KDP gained control of the energy portfolio, having a head start over the new government in Baghdad by signing a Production Sharing Agreement with (then wholly Turkish) Genel Energi in 2002.

Early agreements, including the deal with Norway's DNO struck immediately before the Coalition's "transfer of sovereignty" in the summer of 2004, were a deliberate attempt by the KDP and IOCs to circumvent any constitutional clauses that might have prevented such deals.

Here Mills highlights constitutional Articles not touched upon by many observers, who focus heavily on interpretation of Articles 108, 109, 112 and 114. Firstly, he notes that IOCs argued that contracts before the 2005 Constitution were legal, and secondly he points to Articles 126(4) and 142 which the KRG considers as giving it veto powers over federal decisions that may affect its interests as a region.

Aided by Minister of Natural Resources Ashti Hawrami, who had experience working with BP in the 1970s as well as experience with INOC, the Kurds had an experienced figure to pursue this agenda, a contrast Mills notes, to then Iraqi Energy Minister Hussein al-Shahristani who had no prior involvement in oil and gas. Mills does note however, that Hawrami took on a "confrontational" approach with Baghdad, although he does not describe how this provoked an aggressive stance on independent exports from the Baghdad side, except to note the series of legal actions against Kurdish oil shipments and legal threats to potential buyers made after November 2013 Kurdish exports through their new pipeline. Of particular interest here would be the question of why Baghdad did not take more assertive action following the signing of Hunt Oil's PSA for Ain Sifni, the first field the KRG has exploited in disputed territory, in 2007 or take legal action against the trucking of oil from Taq Taq and Tawke, following Baghdad's refusal to let the KRG use the federal Kirkuk pipeline.<sup>282</sup>

Importantly, the Iraq-Turkey Pipeline treaty of 1973 is referenced, with its subsequent updates, the last being in 2010, as Baghdad's main legal defence against Kurdish oil shipments from the Turkish port of Ceyhan. This highlights yet another example of how Baghdad has fallen back on pre-2003 laws in the absence of an approved Federal Oil and Gas Law. Conveniently for Baghdad in this case, pre-2003 legislation only

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<sup>282</sup> Ibid. p11

authorises SOMO to oversee oil exports, which is paradoxically a potential problem that has given centrists grounds to reject contracts for southern fields. In this respect, Mills effectively summarises how unclear and tangled the legal framework for oil and gas exploitation in Iraq has become in the absence of agreed upon legislation.<sup>283</sup>

Nonetheless, the KRG proceeded with independent exports and the study notes that by disguising cargoes and building semi-covert ties with nations willing to buy Kurdish oil, 10 nations were buyers by 2015, according to Hawrami. However, Mills notes that Baghdad held the strongest cards in the conflict between the two oil ministries, firstly because major IOCs did not want to isolate their access to southern Iraq's supergiant oil fields, that were well explored, had a theoretically very low per barrel extraction cost and had immense "booking" value, constituting over 80% of Iraq's oil. Certainly, most IOCs heeded Baghdad's warning, with the notable exceptions of Gazprom and Exxon. In the latter case, Exxon forfeited involvement in the \$10 billion common seawater supply facility for water injection in southern Iraq, which will soon result in significant drops in pressure in the southern fields, derailing Baghdad's hoped for production targets.<sup>284</sup> This is one of at least three self-defeating moves on the part of both sides. The second major error, on the part of the Kurds, has been to pursue a risky unilateral energy strategies in the absence of secure export infrastructure and legal guarantees, which as Mills notes, succeeded in deterring a host of the world's biggest and most technologically experienced IOCs from entering the KRI, including Shell, BP, CNPC, ENI, Petronas, CNOOC, Gazprom Neft, Total and Occidental.

Finally, Mills notes what he calls a "tactical error" on the part of Baghdad when bids made by Shell, Sinopec, and Turkey's TPAO were made for the Kirkuk field, which according to Mills would have "cemented" central government control of a field producing light oil with a 34–35° API.<sup>285</sup>

The absence of large scale IOC operations with their attendant resources was greatly problematic for the Kurds, since difficult geology, mountainous terrain and a landlocked export infrastructure pushed up field development costs, an unwelcome challenge for smaller IOCs and the KRG, who had to reimburse some of those costs. Subsequently, some of the smaller and more daring IOCs to venture into the region did not have the

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<sup>283</sup> *Ibid.* p35- reference to Iraq Turkey Pipeline Treaty.

<sup>284</sup> *Ibid.* p11

<sup>285</sup> *Ibid.* p15

expertise or technology required to either find oil or effectively develop fields. Mills notes how,

*“Fractured reservoirs present variable productivity across structures and complicate reservoir management, with some companies having to make heavy reserves write-downs – for example Afren at its Barda Rash field in January 2015 and MOL of its Akri Bijeel field in September 2015.”*<sup>286</sup>

After Mills’ paper was published, KRI flagship field Taq Taq, producing light sweet crude with a high API, had its reserves downgraded by more than half, slashing the share price of Genel Energy by 42%.<sup>287</sup>

Not discussed by Mills is a possible scenario where the Kurdish MNR may have pursued a more conciliatory approach with Baghdad and may have been able to attract Oil Majors to the region, with an attendant increase in oil and gas production and development. Unfortunately, this has been one side effect of political, rather than technocratic neutral oversight of the industry in both Baghdad and Erbil, where decisions to control resources have sometimes come at the expense of maximising production and optimising the energy value chain.<sup>288</sup> Following the ISIS offensive of June 2014 however, such possibilities look increasingly unlikely following the Kurd’s annexation of Kirkuk, the contested city which is supposed to have final status determined in a referendum, which multiple parties concerned have blocked.

In the summer of 2014, relations between Baghdad and Erbil declined significantly with Mills pointing out that after Iraqi forces were routed by ISIS, Kurdish Peshmerga forces seized the oilfields at Kirkuk, Bai Hassan, and Jambur, drawing immediate condemnation from Baghdad. Furthermore, the KRG has also connected the Avana Dome of the Kirkuk field, which is linked by pipeline to Bai Hassan, to the Khurmala oilfield, putting oil previously managed by the federal North Oil Company through Kurdish oil infrastructure. This will likely have the effect of making a compromise between Baghdad and Erbil, similar to the short lived November 2014 exports and revenues agreement, increasingly unlikely.<sup>289</sup>

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<sup>286</sup> Ibid. p23

<sup>287</sup> Kiran Stacey, “Genel shares plunge after oilfield downgrade.” *The Financial Times*. February 29<sup>th</sup> 2016. Accessed July 16<sup>th</sup> 2016. <https://www.ft.com/content/7736ffbc-ded4-11e5-b072-006d8d362ba3>

<sup>288</sup> Author discussion with Jabar al-Luaibi.

<sup>289</sup> Ibid.p13

While describing this damaging dispute over exports and revenues, that saw Baghdad cut the KRI's budget payment in January 2014, Mills does describe a number of points that could be considered relatively advantageous to the KRI from their unilateral approach. Firstly, he notes the KRG's aggressive strategy to utilise natural gas from the Khor Mor gas field for power generation at the Erbil and Bazian power plants, a move that puts the region several years ahead of Baghdad in terms of integrating an energy strategy. Secondly, and he notes how the KRG has been able to pursue its own refineries strategy, commissioning an extra 150,000 bpd of capacity, although he notes that plans for smaller refineries may be less efficient than bolstering two larger existing refineries.<sup>290</sup>

Finally, he suggests that in pursuing its own contract model, a rather standard version of the PSA used in countries such as Qatar and Algeria, the KRG has been able to gain limited investor confidence from IOCs, which Mills argues would not have existed if the region had followed Baghdad's Technical Service Contract model, for reasons described earlier, including challenging geology, logistical difficulties and political risk. Mills concludes that these contracts are marginally better for the KRI under low oil price scenarios, but that government take is still not nearly enough to pay IOCs on time, and that the KRG faced a debt burden of \$17bn by the end of 2015.

One of Mills' conclusions differs from a widespread perception of effective private sector development in the KRI post 2003, noting that the KDP led energy strategy, in conjunction with federal transfers from Baghdad and a large degree of fiscal autonomy has led to a bloated public sector, where over \$750 million was spent on government wages, pensions and subsidies every month through 2013. The KRI notes Mills has "developed a political economy showing many of the features of the classic 'rentier state' – a lack of domestic taxation, heavy subsidies to the populace, a high degree of state employment (much of it non-productive), the prevalence of patronage and corruption, and an authoritarian government albeit with democratic elements".<sup>291</sup>

We may be able to conclude therefore, that while the KDP has sought to develop a more efficient energy strategy than Baghdad by trying to offer more attractive terms to IOCs, an overall lack of strategy has led to the region suffering many of the same ailments

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<sup>290</sup> Ibid.p13

<sup>291</sup> Ibid. p31.

experienced in Arab Iraq, including many symptoms of the resource curse outlined by Wing at the start of this section.

While Mills' study is one of the most comprehensive works on energy in the KRI, further research would be useful to examine how a federally led, or decentralised energy strategy based on legally codified compromise rather than political confrontation, could have maximised the energy value chain for the Kurds and led to more stable development.

Aside from papers listed above written on Iraq's energy sector, more in-depth studies to date are Rex Zedalis' *The Legal Dimensions of Oil and Gas in Iraq*, and Ghanim Anaz's *Iraq Oil and Gas in the 20th Century*, of which the former is more relevant to this study, since it focuses on the as yet to be passed legislation formulated after 2003.

Zedalis' book opens with an overview of the history of oil and gas in Iraq from the discovery of Kirkuk oilfield in 1927 until regime change, going over problems experienced by federal states in this study, such as oil reserves being overwhelmingly in one region (70-80% of Iraq's proven reserves are found in the south east<sup>292</sup> and covering long running tensions between the national oil company and IOCs, underpinned by arguments of national ownership over resources, as experienced by Canada and Nigeria in the 1970s and Russia in the 1990s and early 00s, as discussed in Chapter 4 *Evaluation of International Petroleum Regimes*.

The book then discusses the first relevant legislation prior to the 2005 Constitution. Zedalis notes how the first post-2003 legislation on Iraq's energy sector was UN resolution 1483 of May 2003, which (among other things) "spoke directly to the matter of Iraqi legal power over its hydrocarbon resources by stressing the right of the Iraqi people freely to determine their own political future and control their own natural resources."<sup>293</sup> Zedalis makes this point to outline how neither the US led Coalition Provisional Authority (CPA) which legislated against private sector involvement in the energy sector with CPA Order 39, or the UN, displaced or modified the (imperfectly executed) notion that Iraqis owned their natural resources, a principle that existed under the Baath regime.

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<sup>292</sup> Rex Zedalis, "*The Legal Dimensions of Oil and Gas in Iraq*," (Cambridge: Cambridge University Press, 2009), 28

<sup>293</sup> *Ibid.* p25

Putting aside issues of energy infrastructure rebuilding attempts such as the Halliburton led Operation Restore Iraqi Oil<sup>294</sup> or the CPA's Order 39 which essentially continued public ownership of the energy sector, Zedalis moves to the relevant parts of the 2005 Iraqi Constitution, noting in detail how even as it was being drafted, the Kurdish Regional Government were in talks with IOCs for exploration and production contracts.

Chapter 5 details KRI deals up to 2007, beginning with DNO's 2006 announcement that they had signed a deal to produce 50,000 bpd from Tawke, and Genel and Addax's announcement that they were in the process of renegotiating an exploration and production contract, originally struck in 2004, as well as Dana Gas' talks with the KRI in early 2007. Zedalis notes that these deals led to "frustration in Baghdad" and the KRG's subsequent indication that it was proceeding with what it interpreted as a constitutional right to develop hydrocarbon resources.<sup>295</sup> This outlines one of Zedalis' main conclusions which is that Iraq was heading to a "bifurcated" system with two legal regimes. In July 2007, Zedalis notes the KRI's announcement that it was aiming for 1 million bpd from 200,000 bpd within a 5 year time frame and was considering offering up to 40 oilfields for development.<sup>296</sup>

After outlining the magnitude of the KRG's plans, main constitutional points relevant to energy are outlined with an overview of Articles 109 to 115 which describe the powers of the federal government. While Article 110 covers issues such as national security with the federal government having exclusive power, it also allocates jurisdiction over commercial matters involving the crossing of regional or governorate boundaries, which Zedalis notes is seen by supporters of the federal government as effectively giving Baghdad control over international oil and gas sales.<sup>297</sup> Directly concerned with oil and gas are Articles 111 and 112, with Zedalis quoting Article 111's now famous "oil and gas are owned by all the people of Iraq in all the regions and governorates."

Article 112, First, Zedalis argues, "drives home the importance of revenue disbursement" by attaching a proviso to its grant of authority to the federal government,

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<sup>294</sup> Kellog, Brown and Root, Restore Iraqi Oil, (2005.)

<sup>295</sup> Ibid p29

<sup>296</sup> Ibid p30

<sup>297</sup> Ibid p35

which is to manage oil and gas from “present fields.”<sup>298</sup> That proviso is that this right rests on the federal government’s obligation to distribute revenues in a fair manner which takes into account population distribution and regions that suffered particular damage by the Baath regime, in addition to allowing for balanced development across Iraq. This latter point arguably echoes the spirit of the Canadian arrangement of Equalization, as discussed in Chapter 4. The details of revenue disbursement were to be regulated “by a law,” which is of course the long awaited hydrocarbons law. Also of great importance, Article 112, Second, notes that the federal government, in cooperation with the regions and governorates, shall formulate long term strategic policies in a way which brings “maximum benefit” to the Iraqi people.<sup>299</sup>

Also relevant to the distribution of revenues is Article 121, which stipulates that allocations should not only take into account population, but also needs of different areas. Zedalis’ main conclusion in this section is the ambiguity of language in Articles 121, which he notes, “leaves the door open for interpretive abuse” with regard to the Article’s call for allocations considering areas “unjustly deprived” by the former regime, as well as what constitutes “balanced development.”<sup>300</sup> Secondly, he notes how Article 121 outlines the standard for the distribution of “national revenue” which could be interpreted as multiple revenue streams, in contrast to revenue referred to in Article 112, which could refer only to oil and gas.

Lastly, Zedalis briefly examines the claim that Article 110 vests the federal government with control over oil and gas contracting because it leaves fiscal, economic and trade policy formulation with Baghdad. Zedalis argues that the policy formation powers referred to in Article 110 are distinct from negotiating oil and gas agreements, since “policy formulation or regulation imply the identification of general and specific goals or objectives” and “the applicable strategies for their implementation.”<sup>301</sup>

By contrast, contracts or agreements related to oil and gas development cover “more mundane, technical and tailored task of crafting a formal legal instrument that might seek to effectuate or reflect the goals of and objectives of formulated policies or

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<sup>298</sup> Ibid p36

<sup>299</sup> Ibid p36

<sup>300</sup> Ibid p41

<sup>301</sup> Ibid p43

promulgated regulations.”<sup>302</sup> Zedalis goes on to note how some have made arguments over central or subcentral power over energy in reference to Articles 114 (which covers the powers of planning) and Article 115 (which stipulates that regional governments have priority in a dispute concerning shared powers between Baghdad and regions) but suggests that these arguments are weakened by the fact that these Articles do not specifically mention oil and gas.

Zedalis does conclude however, that the constitution limits federal powers to control over oil extracted from “present fields” and strategic policy (albeit in cooperation with regions) and that although not specific, the collaborative language of Article 112, which states that policy is formulated by the central government “with” the regions, is reinforced by Articles 115 and 121 which explicitly give sub central units powers that are not vested in the central government.

Zedalis’ work therefore focuses on legal interpretation of the Iraqi constitution and the subsequent Draft Oil and Gas Law of February 2007, and an amended July 2007 version which was intended to clarify language in Articles 112 and 111, as well as going into detail on issues such as revenue distribution and specifying exactly which fields are considered “present.” He concludes that the failure to pass clearly written legislation exacerbated disputes over constitutional interpretation, leading to Iraq’s “bifurcated system.”<sup>303</sup>

Importantly, Zedalis never suggests any detailed plan of how new legislation, reorganization of ministries or INOC, or constitutional revisions, would clarify matters in a way that would help the development of a coherent Iraqi national energy strategy. Likewise, he does not venture deeply into the history and context of Iraqi oil and gas, for example, there is little to no coverage of infrastructure damage in 2003, no mention of the Halliburton led Operation Restore Iraqi Oil, little to no political analysis and little analysis of political economy. This is not to say Zedalis’ work is limited, and he acknowledges the intentionally narrow scope of the study, which is (as mentioned) vital for its unmatched detail on the legal dimension. Nonetheless, greater historical and political context is required for a fuller understanding of why Iraq has not developed a coherent energy strategy. Therefore, this study will examine some of the specific

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<sup>302</sup> Ibid p43

<sup>303</sup> Ibid p43

infrastructure issues related to Iraq's energy redevelopment and their interplay with political issues, both largely missing from Zedalis' work.

Arguably Zedalis' most significant conclusion from his analysis of Iraq's constitution is that KRG oil and gas deals are in accordance with the constitution, specifically that IOC contracts "have every reason to be considered constitutionally authorised." His reasoning for this is that Article 112's stipulation that the federal government acts, "with the regions and governments" is indicative of shared power and that this is supported by the language of Article 115 that places final authority with the regional government in the advent of a dispute over "shared powers."<sup>304</sup> As such he asks why if the federal government has absolute power over oil and gas, there is even the need for the mention of regional government in Article 112, suggesting that the collaborative language would not be there if Baghdad had absolute control. He does however contend that if there were to be a dispute between the federal govt. and a sub central unit over long-range strategic policy, and then the central government would have final authority.<sup>305</sup>

After asserting his position on the constitution, Zedalis goes on to examine the draft Federal Oil and Gas Framework Law, and some of the immediate controversies following its public release in February 2007. Firstly, most significant specifications of the law are outlined, including the naming of "present" and "future fields," more specifically known and producing fields, and discovered but undeveloped fields both under INOC control and outside of INOC. Notably, Zedalis describes how the new draft elevates the role of the federal government, under Article 5F, something that proved particularly controversial in for the KRG.<sup>306</sup>

Article 5F changes the power of sub-central units to be able to make "preparations to propose oil and gas activities and plans" and "provide licensing of petroleum operations under federal standards," for Annex 3 fields, which are discovered but undeveloped fields not under INOC control. Zedalis calls this new KRI authority "paltry" in comparison to what is outlined in the 2005 constitution before noting how sub central units are also "authorised to collaborate with federal entities in providing compliance

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<sup>304</sup> Ibid p53

<sup>305</sup> Ibid p54

<sup>306</sup> Ibid p55

oversight regarding oil and gas activities.”<sup>307</sup> Regarding regulatory bodies, he notes how the law proposes 5 federal agencies with extensive responsibilities, perhaps in an effort to mimic the Norway Model but likely leading to the potential for inter-agency conflict and overlap and subsequent inefficiency. Other aspects of the law are covered that will be discussed in this study, such as Article 25 of the law that says gas flaring must be eliminated. Zedalis notes how even as the law limited regional power over Annex 3 fields, the remaining fields in Annexes 1 and 2 constituted an estimated 90% of Iraq’s oil and gas reserves.

Later, Zedalis outlines the FOGC review process by which the council had 3 months to review proposed contracts, but notes that here there is some new vagueness, for example, Article 5b of the law states that the Council of Ministers “shall be responsible for recommending proposed legislation” while Article 5D states that the Oil Ministry is the competent body for this task.<sup>308</sup> In Articles 5C and 5D, more concerning overlap and contradiction between MoO and FOGC is identified. Article 5D, notes Zedalis, says nothing of MoO’s authority regarding exploration, development and production, although the purpose of this article is to outline MoO’s powers and responsibilities. Article 5D, 8th, limits MoO’s authority to “Oil and Gas supply services other than those covered by Exploration and Development contracts,” presumably limiting these contracts to the Annex 1 and 2 fields. In contradiction to this limiting of authority, articles 9 and 10 suggest that MoO does in fact have authority over exploration and production contracts. Two particularly obvious areas of overlap are also spotted, whereby Article 5C indicates that FOGC has oversight of “Federal Petroleum policies, Exploration plans, Development of fields and main pipeline plans,” while Article 5D authorises MoO, in consultation with regions and producing governorates the power to draw up and propose “Federal policies and plans on Exploration, Development and Production.” The second major overlap is identified as Article 5B outlining COM’s power to “recommend proposed legislation” while Article 5 D suggests the oil ministry is the “competent authority for proposing Federal Policy, laws and plans.”<sup>309</sup>

Later in his study, Zedalis describes an issue that has caused less controversy than revenue sharing or export agreements between Baghdad and Erbil, the law to reconstitute INOC, called for and described in Articles 6 and 7 and 5D and 5E of

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<sup>307</sup> Ibid p63

<sup>308</sup> Ibid p75

<sup>309</sup> Ibid p161

DOGL. These laws appear to be an attempt to at least capture the spirit of the Norwegian Model, albeit lacking in enough detail to fully define the roles of INOC and MoO. The main points here are that INOC was to be reconstituted as an autonomous but Iraqi owned commercial entity, operating on a commercial basis rather than one of state control. However, INOC, and “wholly owned subsidiaries,” each intended to earn profit, were to have direct authority over Annex 1 (producing fields) and the authority to participate in the development of Annex 2 fields (discovered but not producing) and would only have access to Annex 3 and 4 fields (discovered but undeveloped) on a purely competitive basis. Until MoO is reorganized, INOC would have authority to manage, own and operate the pipeline network and ports, before FOGC would allocate this responsibility to another govt. entity.<sup>310</sup>

Meanwhile, MoO was to create a new department focused on the “planning, developing and following up on the process of contractors obtaining from the ministry rights” relative to petroleum operations.” Interestingly and related to information examined on MoO training in Chapter 5, DOGL called for special training for MoO staff in bidding processes, contracts and negotiations with oil companies. A vital layer of separation is outlined in Article 7B which calls for “devices and mechanisms that will ensure a wall of separation between, on the one hand, the Ministry, related companies (such as INOC and its subsidiaries) and regulators and monitors, and on the other hand, the oil and gas companies doing business in Iraq and subject to regulatory oversight and control” and also, “full separation between production and oil services companies and on the other hand, regulatory, monitoring and supervisory departments in the Ministry.” But as Zedalis later notes there is no method outlined that would guarantee this full separation, although he suggests Article 5D of DOGL would at least limit MoO’s power to formulating exploration, production and development policies as only “suggestions” to be approved by FOGC.<sup>311</sup>

Equally problematic regarding the lack of detail on splitting INOC from MoO is Zedalis’ identification of the conflict between the KRG’s 2007 Oil and Gas Law and the 2007 draft, which notes under Article 40B that FOGC will review prior contracts and that their decision, within 90 days will be “binding” while the equivalent body in the

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<sup>310</sup> Ibid p178

<sup>311</sup> Ibid p180

KRG, as described in Article 54 of the KRG law, has “final” decision on reviewing contracts.<sup>312</sup>

In summary, Zedalis’ main focus is on interpretation, but he makes some tentative conclusions in the final section of the book based on 5 main observations. Firstly, he notes that the KRI and Baghdad are engaged in a “tug of war” over centralisation and decentralisation policies. Secondly, he notes the “Dubai annexes” of the 2007 draft law constitute overwhelming INOC control over Iraq’s resources, while thirdly he notes how the 2007 KRG Oil and Gas Law has a different view of which are current and future fields. Lastly, Zedalis concludes there has not been enough detail on revenue sharing from oil and gas activities, which has led to ongoing dispute, and as his fifth conclusion he notes ongoing disputes over the acceptability of PSCs.<sup>313</sup>

In the final chapter, he describes a scenario where the bifurcated system of oil and gas management leads to the “balkanization” of Iraq and posits that were this to happen a major reason would be the vagueness of the constitution and the 2007 draft law. The constitution, he notes, has “such generality that it is impossible to draw inferences regarding the assignment within the central government of authority over oil and gas activities.”<sup>314</sup> Regarding the 2007 draft law, he quotes the law in requiring MoO to “create important institutional and methodology changes to reflect its new responsibilities” which then fails to describe out exactly how this should be done, calling instead for a new department with “planning, development and following up on obtaining rights.”<sup>315</sup> With regards to the Norway Model, he quotes the article’s call for “full separation between production and service companies and the regulators, monitors and supervisors who oversee them,” but again, there is no description of how this separation should be achieved.<sup>316</sup>

The book finishes by postulating that in the event of the KRI breaking away from Iraq, there is no reason to suggest a significant departure from its Oil and Gas Law of 2007 or preference for PSCs, although Arab Iraq would face the same challenges with regards to the constitution. In the event of this, Zedalis considers the draft Oil and Gas Law to be a

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<sup>312</sup> Ibid p181

<sup>313</sup> Ibid p295

<sup>314</sup> Ibid p305

<sup>315</sup> Ibid p179

<sup>316</sup> Ibid p305

helpful document that would nonetheless need to be “fleshed out.”<sup>317</sup> This section of the book is less relevant to this study since it involves discussing speculative scenarios regarding the breakup of Iraq. In summary, Zedalis covers many shortcomings of existing and proposed energy sector legislation in Iraq but his recommendations for clarity are few, and taken together, do not amount to an analysis of how Iraq might develop a coherent and efficient petroleum policy framework. This is, as he mentions, not the point of his work, which is to give a comprehensive analysis of the legal environment.

Closest to Zedalis’ technical approach is the more substantial work by Ghanim Anaz’s *Iraq: Oil and Gas in the Twentieth Century*. The study has a wide scope and, for example, individually details almost all of Iraq’s 85 known oilfields, explaining the history of the industry from the Babylonian era onwards, going as far as descriptions of living quarters for INOC employees during the Baath era. Therefore, only limited parts are of direct relevance to this study, beginning with a description of the politicization of oil operations under Saddam, with senior MoO officials being rounded up at the beginning of his presidency, seeing two former Iraqi Company for Oil Operations directors Ghanim Abdul Jalil and Ismail al-Najjar arrested in an alleged plot against Saddam Hussain.

Another ICOO director, Majid al-Hamdani was dismissed.<sup>318</sup> However, Anaz does not go as far as to venture what effect the threat of death penalty might have had on MoO’s performance or the effect of Saddam’s absolute power over the industry. Instead, he briefly describes the 1976 and 1987 reorganization of MoO and his assessment of the latter is particularly interesting with regard to separation of regulator and regulated bodies, which shall be referred to in the case studies. Of the 1987 dissolving of INOC, Anaz suggests the reasoning was that INOC had too many responsibilities and subsequently, departments with overlapping authority, and in addition to the three operators, this had produced

“a mammoth, cumbersome and very difficult to manage company. Furthermore, there was no clear line of responsibilities in many spheres of its activities

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<sup>317</sup> Ibid p306

<sup>318</sup> Ghanim Anaz, “Iraq: Oil and gas in the 21st century,” (Nottingham: Nottingham University press, 2012): 171

resulting in confusion and overlapping layers of authority between it and the Ministry of Oil.”<sup>319</sup>

Anaz does not detail whether the break up of INOC produced any tangible benefit for Iraq’s energy sector, or whether it produced different problems. What follows is a brief history of INOC during the 1970s and its relationships with foreign service providers, such as the Russian Machinoexport, Italy’s ENI, Japan’s Mitsubishi and Brazil’s Petrobras, who worked on Majnoon oilfield. During this section, Anaz explains the rapid increases in production that occurred in this period, noting how the agreement between INOC and French state oil company ERAP was “a complete triumph, since it will be the first time in the history of the oil industry in Iraq that the country had full control with a foreign company acting under a service contract only.”<sup>320</sup> Relevant to the analysis of Iraq’s energy sector after 2003, Anaz later turns his attention to the debate over optimal contract types for Iraq during the 2009 licensing rounds and beyond, describing the difference between PSCs and PSAs, before venturing views of his own. Here he notes that PSAs are considered “illegal” by Baghdad and have been the subject of bitter dispute between the KRI and Baghdad, and outlines the constitutional dispute briefly. Unlike Muttitt (described below) he does not venture whether the KRG has a strong legal claim to enter into oil and gas contracts of its choosing with IOCs. However, it may be inferred that he believes KRG contracts to be illegal, because of his previously expressed opposition to PSAs. Nonetheless, Anaz’s apparent opposition to KRG PSAs does not appear to reflect support for politicians in Baghdad, whom he notes are following “short sighted agendas.”<sup>321</sup> No views are ventured on the Hydrocarbons Law, except that it had suffered “never ending delays.”<sup>322</sup>

These views do not mean Anaz sees the TSCs that Iraq used with the giant southern fields in a positive light. He notes that it is “regretful” that only Kirkuk remains under full MoO control while the southern fields have been “auctioned like a heap of scrap metal and awarded to IOCs through the controversial and much debated Production Service Contracts.” He does note however, that “the terms of these contracts are much better for Iraq than those of the Production Sharing Agreements which were preferred

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<sup>319</sup> Ibid p185

<sup>320</sup> Ibid p207

<sup>321</sup> Ibid p227

<sup>322</sup> Ibid p227

and fiercely lobbied for by the oil companies and were as a result adopted by the Ministry of Oil.”<sup>323</sup>

Despite these assertive views, much of the book remains purely technical analysis, much of which is extremely relevant here. For example, the history of Iraq’s pipelines are covered, extremely relevant in the case of the Iraq--Turkey pipeline and the Iraq-Turkey Pipeline treaty, which later formed part of the legal basis for Baghdad’s objection to the KRG attempting to sell oil in the United States from the port of Ceyhan, discussed in Chapter 5. This is also useful background reading for assessing Iraq’s export infrastructure needs under different export scenarios. Elsewhere, Iraq’s gas infrastructure for gathering and processing gas is covered in great detail, hugely relevant to Iraq’s status as the fourth biggest flarer of gas globally and the Gas Master Plan of 2005, as well as Article 25 of the 2007 Draft Oil and Gas Law, which calls for the end of flaring.<sup>324</sup>

Anaz’s views on IOC interaction with MoO after 2003 echo those expressed by Gregg Muttitt in his book *Fuel on the Fire*, another main text that is far more subjective in comparison to Anaz’s technical work or the legal focus of Zedalis. As with all main texts on oil and gas in Iraq, the book opens with an overview of the history of the sector from the time of the British mandate to the 2003 invasion, but uses the early history of Iraq to set up the thesis, which is that the colonial interest in Iraq’s oil reserves of the British Empire has been replaced with neo-colonialism following the 2003 invasion, in the form of regime change and enforced privatization. To this end, Muttitt quotes Foreign Office cables, including the remarks of British Foreign Office Middle East Director Edward Chaplin, who noted,

“At any rate, we were determined to get a fair slice of the action for UK companies in a post Saddam Iraq.”<sup>325</sup> Muttitt elaborates on why he thinks the US and UK waged war against Saddam to control Iraq’s resources, and specifically, to get them out of public ownership and prioritise IOC access to Iraqi fields, again quoting a declassified UK FCO cable, the implication being that the UK was involved in a secret plan for Iraq:

“To meet our objectives the principal challenge for Iraq’s oil industry will be to

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<sup>323</sup> Ibid 228

<sup>324</sup> Ibid 431

<sup>325</sup> Greg Muttitt, *Fuel on the fire: Oil and Politics in Occupied Iraq*. (London: The Bodley Head, 2011), 142

institute the necessary structural, fiscal and regulatory reform needed to attract foreign direct investment (FDI) in the sector.”<sup>326</sup>

Muttitt subsequently asserts that the UK was acting in collusion with the United States, and that US law firm BearingPoint was hired to draft Iraq’s Oil Law, in order to enshrine key legal precepts such as “stabilization clauses” and international arbitration with the New York Convention as standard, to the benefit of Western IOCs such as BP, Shell and Chevron.

Nonetheless, he also notes how Norway’s DNO were early entrants in the KRI, quoting DNO Director Helge Eide, who remarked that the company needed to finalise the deal “before the Interim Government came in.”<sup>327</sup>

Arguing that this attitude of circumventing Iraqi sovereignty was a main goal of (specifically British and American) IOCs, Muttitt later outlines how international arbitration could diminish Iraq’s sovereign control of its oil industry, leading to the risk of asset seizure and the sidelining of public interest groups and Iraqi stakeholders, such as trade unions .<sup>328</sup> He asserts that this is a form of economic control over Iraq, arguing that the Iraqi oil industry would have been able to raise production levels with little to no foreign IOC involvement, and would have been able to borrow the \$25 billion estimated required funds to achieve 5 million bpd production, an early government target.

Instead of being given this option, the book asserts that the Coalition deliberately underfunded the Iraqi Ministry of Oil, allowing infrastructure and capacity to degrade, so that at a later date foreign expertise would be required, something he likens to a colonialist model of domination. Instead, Muttitt suggests Iraq’s energy sector would benefit from little to no IOC involvement, and refers to the views of former DG of MoO Faleh al Chayat, who was in the position from 1995-2003. Muttitt quotes al-Chayat saying, “State companies have characteristics that no foreign company can have.”<sup>329</sup> Paraphrasing al-Chayat, Muttitt explains that IOCs need too many guarantees, unlike state owned ventures which (according to al Chayat) will continue to focus on

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<sup>326</sup> Ibid.127

<sup>327</sup> Ibid 127

<sup>328</sup> Ibid p200

<sup>329</sup> Ibid p85

production in spite of war and instability, and not declare *force majeure*.<sup>330</sup> Later, Muttitt quotes al-Chayat, warning that eventually there will be so much private sector involvement in Iraq's energy industry that Iraq will not have the human technical capacity to implement simple projects.<sup>331</sup>

Therefore, the book asserts that Iraq had the inherent capacity to reconstruct the energy sector without foreign involvement and US efforts were an attempt at domination. As an example, Muttitt suggests that IOCs had an alternative agenda when bringing in foreign experts to advise or "snuggle up to" the Iraqi government by way of MOUs, such as the 2004 Chevron agreement to provide technical advice to MoO, and Shell's 2004 agreement to work on Iraq's Gas Master Plan, discussed in Chapter 5.

Muttitt argues these MOUs were a diversion and their real role was to push for investment conditions that would heavily favour IOCs, pressuring the Iraqi government to accept controversial PSAs. This aim, according to Muttitt, dovetailed with the constitutional language favouring modern methods and standards, and was accentuated by the 2007 Oil Law, which he claims was heavily influenced by US policy.<sup>332</sup> Dispute this assertion, he later remarks on his surprise that BearingPoint had no say on the final draft, which was finalised by Thamir al-Ghadban and Farouk al-Khasim, the Norwegian Iraqi credited with being the father of the Norwegian Model. Muttitt then details growing Iraqi opposition to the Draft Oil Law, noting how PSAs were a major source of tension and united multiple Iraqi parties against the law, including Shi'a religious parties Fadila and the Sadrist current, while the secular parties National Dialogue Front of Sunni politician Saleh al-Mutlak and Ayad Allawi's Iraqi National List also opposed the law.<sup>333</sup> Mainstream Sunni parties Tawafuq and the Iraqi National Accord also opposed the law, explicitly on the grounds of PSAs and their perceived threat to Iraqi sovereignty. These developments, Muttitt notes, were a victory for Iraqi democracy and successfully stalled the passing of the law, which he suggests united Iraqis across sectarian lines.<sup>334</sup>

Overall, Muttitt articulates a deep concern that investment terms highly favourable to IOCs will become a part of the Oil Law, in contrast to Zedalis' more technical rather

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<sup>330</sup> Ibid p82

<sup>331</sup> Ibid p312

<sup>332</sup> Ibid p357

<sup>333</sup> Ibid p334

<sup>334</sup> Ibid p261

than political analysis, including interpretations the 2005 constitution, the content of the oil law and what it might mean for management of the sector. Muttitt meanwhile asserts that there was little need for an oil law in the first place with regards to revenue sharing, since revenues were already being distributed equitably.

Furthermore, Muttitt frequently expresses concern with the way the oil law was drafted, out of the public eye, citing a poll in 2006 which found that two thirds of Iraqis wanted to keep public ownership of the energy sector and that only 4% felt adequately informed about the content of the proposed law.<sup>335</sup> Public engagement is certainly of relevance to any future changes to hydrocarbon legislation, since as the Basra Gas Company case study will illustrate, secrecy had the effect of heightening political opposition to the plan. Muttitt's concern with Iraq's apparent loss of sovereignty, had the oil law been passed, is interesting in light of the content of the law, which placed the vast majority of Iraq's oil fields, all except "Annex 3" fields, under the control of Baghdad.

Also of particular relevance is Muttitt's analysis of Ministry of Oil involvement in disputes with unions, which he pays close attention to, to illustrate his assertion that IOCs colluded with the Iraqi government to sideline civil society groups. This is particularly interesting in light of the draft oil law's call for separation of powers, reducing the MoO role to one of a regulator that would not have day-to-day influence over oilfield operations, by IOCs or INOC. While Muttitt does not highlight the need for such a separation, his descriptions of MoO micromanagement and conflict with the South Oil Company illustrate the potential for conflict when organisations have overlapping powers. For example, he describes in detail two episodes where Hussein al-Shahristani personally intervened in a union dispute by re-assigning union leaders to different parts of the country in an attempt to weaken the union.<sup>336</sup> While this is not strictly MoO intervention in oilfield operations, it was no doubt another unwelcome political quarrel slowing more pressing issues such a installation of adequate metering, that may have benefitted from strong politically independent oversight. Furthermore, according to Muttitt, Shahristani was able to replace SOC head Fayadh Nima with a Dawa Party loyalist, most probably because of conflict over whether trade unions would be allowed to continue.<sup>337</sup>

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<sup>335</sup> Ibid p172

<sup>336</sup> Ibid p320

<sup>337</sup> Ibid p320

Regarding allegedly inefficient MoO involvement in operations, the book quotes former SOC head (also removed by Shahristani) Jabbar al-Luaibi who claims that MoO took months to approve equipment purchases, in one case delaying a tender for new storage tanks at Buzurgan.<sup>338</sup> While Muttitt does not mention separation of power between regulator and regulated, the concern over its absence is inferred with reference to the second draft of the Oil Law, which changed the role and composition of the FOGC. Here Muttitt quotes Tariq Shafiq who describes how FOGC was initially proposed as a small group of technocrats in the first draft, while in the second draft it had been changed to include politicians, including four ministers.<sup>339</sup>

Diverging from Muttitt's claims of a neocolonial attempt at seizing Iraq's oil and shaping Iraqi oil policy, Fadhil J. Chalabi's *Oil Policy's, Oil Myths: Observations of an OPEC Insider* follows a similar first person style, journalistic narrative but is rooted in Chalabi's experience as Deputy Secretary General of OPEC between 1978 and 1988, as well as his brief advisory role in Iraq's post 2003 energy policy. In his book on OPEC, Chalabi dedicates a chapter to Iraq in relation to the organization, opening briefly with the view that the United States played almost no role in guiding Iraqi energy policy towards favouring US IOCs or allowing Iraq to ramp up production to keep more supply on the global market, which he argues, would be counter to the objectives of developing higher cost energy (eg. shale) in the US, and subsequently hurt US national interests.

Chalabi then moves to topics of more relevance to OPEC, noting how Iraq reached 14% of OPEC production prior to the Iran-Iraq war but due to infrastructure damage incurred in that conflict and the degrading effect of sanctions, Iraq lost 19.4 bn/B of oil, which would have been produced if the late 1970s rates of production had continued.<sup>340</sup>

Therefore, Chalabi argues this lost income must be taken into account "in the context of OPEC and its quota system, bearing in mind Iraq's production remained outside the system ever since Saddam's invasion of Kuwait."<sup>341</sup>

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<sup>338</sup> Ibid p281

<sup>339</sup> Ibid p220

<sup>340</sup> Ibid 266

<sup>341</sup> Ibid 255

Because of the damage caused by the wars of the Baath era, Chalabi argues for a rapid injection of foreign investment into the industry to rejuvenate Iraq's exports and aid reconstruction. Despite this challenge, he notes that the greatest problem Iraq faced after 2003 in the energy sector was the passing of the Oil Law, which he calls the Petroleum and Gas Law, which he suggests has been delayed by "irreconcilable divergence of opinion."<sup>342</sup>

As is commonly agreed by Muttitt, Anaz and Zedalis, one of the main reasons for this delay and disagreement was concern that PSAs initially favoured by MoO would give too many rights to IOCs in an echo of what Chalabi calls the "concession system of the colonial past." The Baghdad--Erbil dispute is also briefly covered, with Chalabi broadly agreeing with Anaz that the 2005 constitution is too ambiguous, "bedevilled by a contradiction"<sup>343</sup> before he returns to controversy over PSAs. Here he gives tentative support for the PSA contract type, noting Iraqi Parliamentary opposition may have been too severe, and that IOCs can only "book" a part of the reserves with a PSA, while he claims TSC negotiation was too drawn out and not transparent enough. Overall, he concludes that the long debate over central and sub central powers and the subsequent deadlock it produced "wasted" at least 7 years of potential energy sector progress in Iraq.

Refocusing on OPEC, he then discusses the 2010 MoO production target of 12 mbpd. Aside from challenges including high capital outlay, plateau sustainability and infrastructure shortcomings, Chalabi outlines how OPEC had a shut in capacity of 6mbpd at the time of the announced target, leading to a total OPEC spare capacity of 14mbpd. This would, he surmises, drive down oil prices to an unsustainably low level.<sup>344</sup> Chalabi's longer term analysis points to persistent bearishness in the oil market around the time when Iraq's production would be aiming towards 10mbpd. He justifies this view by pointing to long term energy efficiency trends pushed by Europe and North America following the 1970s oil shocks, decreasing "energy intensity" with OECD consumption falling by 4mbpd between 2004 and 2009 and Chinese consumption dropping 10% in the first decade of the 21st century.<sup>345</sup>

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<sup>342</sup> Ibid p258

<sup>343</sup> Ibid p259

<sup>344</sup> Ibid 265

<sup>345</sup> Ibid p263

Secondly, he points to a US drive to reduce reliance on MENA region oil, and the subsequent focus on non-conventional energy and thirdly, he points to mounting concern over climate change as another driver of energy efficiency. But aside from technical concern over Iraq's production ambitions and the difficulty of marketing this oil, Chalabi notes that if Iraq reached even 5mbpd before 2020 it would be exceeding its OPEC quota with a vast capital outlay but simultaneously a market with weakening demand, which he says, would lead to "vast economic problems" for Iraq and "a damaging battle with OPEC."<sup>346</sup>

Frank Gunter is also cautious about Iraq's production targets in *The Political Economy of Iraq* drawing similar conclusions to Chalabi. Of the 2010 production plan of 12 mbpd, Gunter notes this would have been be a 360% increase within 6 years, but then examines the revised 2011 proposal of 10 mbpd by 2017.<sup>347</sup> He notes that this target, if achieved, would theoretically mean per capita GDP would reach over \$10,000 from a 2011 range of \$3000-\$6000. Problematically, he notes that this assumes \$100 per barrel in 2017 and that, "it is contrary to assume Iraq will be able to substantially increase the world's supply of oil without putting downward pressure on prices."<sup>348</sup> Gunter goes on to note that Iraq is waiting on "four major pieces of petroleum legislation since 2007" listing them as 1) The basic oil and gas framework law, 2) the revenue sharing law, 3) the law reorganizing the Oil Company (INOC) but then refers the reader to see Zedalis for more details, concluding that the passing of the oil and gas framework law would not end controversy.

Instead, Gunter predicts that regional, national and provincial governments would continue to come into conflict over different interpretations of the law that would eventually need to be resolved judicially or by compromise.<sup>349</sup> Gunter then turns attention to the issue of Iraq's refining sector, noting how oil not exported is taken by truck or pipeline to domestic refineries or power stations, and that refining capacity fell from 0.6 MBPD in 2001 to 0.4 MBPD in 2009. Gunter notes the diversion of oil to the black market "makes it almost impossible to reconcile physical flows of crude and processed oil with the resulting financial transactions" with much oil smuggled into

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<sup>346</sup> Ibid p266

<sup>347</sup> Frank R. Gunter, "*The Political Economy of Iraq: Restoring Balance in a Post-Conflict Society*," (Cheltenham: Edward Elgar Publishing, 2013), 103

<sup>348</sup> Ibid p103

<sup>349</sup> Ibid p99

Turkey or Iran, or appearing on the black market within Iraq.<sup>350</sup> Gunter then describes a vicious circle where smuggling is exacerbated by fuel shortages, which were curtailed slightly between 2007 and 2009 when the government reduced subsidies and increased the price, only to backtrack following public protest.

As other accounts in this study note, a major problem is that meters have been missing from pipelines or deliberately calibrated inaccurately to facilitate smuggling, although Gunter notes the Baghdad-Kirkuk and the Kirkuk-Ceyhan pipeline had proper metering by the end of 2010. Completing the vicious circle, Gunter describes refinery inefficiency where refineries produce excessive amounts of heavy fuel oil (HFO) which in some cases has been sent to power plants, causing problems with turbines because it is of such low quality, a point noted earlier by Jaffe. Gunter concludes by asking if such an inefficient system is worth the effort for Iraq, citing a 2008 study which suggested that while Iraq earned \$37 for every barrel exported, the net earning for a barrel refined and sent to an SOE was only \$2, therefore it may be more cost effective for Iraq to simply export all oil and import fuel.<sup>351</sup> He notes a counter view that as more oil revenue comes into the Iraqi state, it may be possible to build enough efficient refining capacity to change this situation. Gunter concludes his chapter on Iraq's energy sector by warning that Iraq is too dependent on oil and that a drop in the oil price below \$50 is possible, which would leave Iraq as an oil economy in a world of low price oil.<sup>352</sup>

Ahmed Mousa Jiyad's chapter on Iraq in *Globe Law and Business' Upstream Law and Regulation* is more akin to Zedalis' analysis, being focused on legal and contractual aspects of Iraq's dealings with IOCs. Jiyad opens by emphasising the vast oil and gas potential for Iraq but noting that long-range predictions of success or failure "seldom coincide with expectations."<sup>353</sup> Jiyad also points out that

"the upstream petroleum sector constitutes the main pillar of the Iraqi economy. The national development plans, state budgets, the balance of payments and trade balance depend largely on oil production and consequent export revenues."<sup>354</sup>

Jiyad points out that the estimate of 143 billion barrels reserves only applies to 28% of

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<sup>350</sup> Ibid p100

<sup>351</sup> Ibid p109

<sup>352</sup> Ibid p109

<sup>353</sup> Ahmed Mousa Jiyad, "Iraq" in *Upstream Law and Regulation*, (London: Globe Business Publishing, 2013): 445

<sup>354</sup> Ibid p445

Iraq's oil in place, covering (by his estimate) 66 of Iraq's known fields and that Iraq had a National Exploration Plan to identify a further 10 billion barrels of oil and hold a fourth bid round, which occurred in 2012.<sup>355</sup>

During this round MoO announced a fifth round for 60 exploration blocks. Jiyad notes that Minister Shahrstani asked MoO to "sweeten the terms of the model contracts for IOCs" but provides no further political analysis as to why.<sup>356</sup> The chapter then briefly covers the scope of the 3 bid rounds in June 2009 and October 2010, noting how a previous contract (the first post 2003 PSC) with CNPC for Alahdab in November 2008 was a revised PSA originally drawn up in 1997. Here he suggests that if plateaus were reached for all 14 oilfields, over 12 MBPD would be reached, but doing so would require an expansion of export facilities with 8.5 MBPD through the Persian Gulf, 1.6 MBPD through Turkey, 4.5 MBPD through Syria and 1 MBPD through Jordan.<sup>357</sup>

Attention then turns to legal matters, where Jiyad describes the legal framework for petroleum operations in Iraq as a many-layered pyramid. At the top of this pyramid is the constitution, which outlines basic principles followed by "instruments specific to the upstream and midstream sectors" with 3 broad categories of laws. These laws constitute laws that were valid prior to the constitution, such as Law 22 on Public Companies. Interestingly, Jiyad does not mention here Law 21 of 1997 under which the Basra Gas Company was formed.<sup>358</sup> The second category Jiyad mentions are the laws not yet passed from 2007, including the Draft Oil and Gas Law, the Iraqi National Oil Company Law, the Ministry of Oil Law, the Revenue Sharing Law and the Public Commission to Audit and Appropriate Federal Revenues Law. In the third category, Jiyad places "laws which could have direct and indirect implications for petroleum related projects" in which he includes Law 13 of 2006 on Investment, Law 64 of 2007 on Private Investment in Oil Refining and the Provincial Powers Law number 21 of 2008.

Jiyad notes that this complex arrangement has led to "daunting uncertainties" and "serious rifts between the legislative and executive branches with regard to their

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<sup>355</sup> Ibid p446

<sup>356</sup> Ibid p447

<sup>357</sup> Ibid 447

<sup>358</sup> Iraq Energy Research.

respective roles in the development of the upstream petroleum sector.”<sup>359</sup>Jiyad then touches on a matter at the heart of petroleum policy in Iraq, which is the conflict between the Council of Ministers and MoO on one side and the Council of Representatives (COR-parliament) on the other as to who has the legal authority to enter into contracts with IOCs. Jiyad then refers to a statement made through the Iraq Energy Institute on June 4th 2009 by three Iraqi lawyers, who expressed their support for the legal authority of COR. Turning attention to regulatory matters, Jiyad notes that legal instruments are proposed by the executive to be approved by the legislature and as such both COM and COR have a regulatory role.<sup>360</sup>

In essence, the regulatory function of COM stems from MoO proposing laws to be approved by COM’s Energy Committee and then referred to COR. Authority is vague however, and here Jiyad notes Article 60 of the Iraqi constitution, which confusingly stipulates that once COM has proposed draft legislation, ten members of COR must approve it, or a committee must approve it related to COR. This blurred responsibility led to two different versions of the Draft Federal Oil and Gas Law being submitted in 2011, by two competing bodies, one from MoO and the other by parliament’s Oil, Gas and Natural Resources Committee.<sup>361</sup>

Jiyad then describes the bidding process for the first licensing rounds, noting how bids were awarded on the basis of what MoO decides to be an acceptably low remuneration fee per barrel, and if competing bidders “tie” on a fee accepted by MoO, the license is granted to the company that offers additional service, such as an increased plateau target. The example given here is the “tie” between the Lukoil-ConocoPhillips consortium and the Exxon-Shell consortium who both were eventually knocked down to accepting \$1.90 per barrel in June 2009, but the latter consortium won the bid for West Qurna 1 after agreeing a higher production target. Relating to the overall power of MoO to shape IOC entry into Iraq, Jiyad notes the ministry’s Petroleum Contracts and Licensing Department criteria for IOCs to qualify for bidding, a point based assessment on technical, financial, legal, health safety and environment and training.<sup>362</sup>

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<sup>359</sup> Ahmed Mousa Jiyad, *Upstream Law and Regulation*, (London: Globe Business Publishing, 2013) 448

<sup>360</sup> *Ibid* p449

<sup>361</sup> *Ibid* p450

<sup>362</sup> *Ibid* p452

Minimum work programs and expenditures are then given an overview, noting that each contract has its own specifications in this regard, as well as Local Content requirements (see MoO and Basra Gas Company case studies) and HSE requirements. HSE requirements refer back to the Constitution, where Article 33 requires the state to protect the environment and biodiversity, while Article 114 notes that federal and regional authorities must “formulate environmental policy to ensure the protection of the environment from pollution and preserve its cleanliness in cooperation with the regions and governorates.”<sup>363</sup> Further underscoring the “pyramid” of legislation, Jiyad also notes the 2009 Law for Protection and Improvement of the Environment, Law 27 and also Law 21, which requires an environmental impact assessment for any project in any sector. Finally, Jiyad here notes that the model service contract stipulates that companies must adhere to “best international business practices” and that two environmental impact assessments must be carried out before each project.<sup>364</sup>

Related to Muttitt’s concern over international arbitration, Jiyad merely notes that dispute resolution shall be settled under the Rules of Arbitration of the International Chamber of Commerce with the court venue being Paris, but no comment is given on the political acceptability of this contractual feature in Iraq.

Jiyad goes on to describe the fiscal terms of the model contracts, before concluding “the fiscal terms of these contracts indicate Iraq has, undoubtedly, made good deals. However, if cost control is not properly monitored and professionally audited, costs could escalate to unprecedented levels.”<sup>365</sup> His solution for this possible problem is for the Ministry of Oil to embark on a series of “crash course” capacity building projects with a special new unit in the Ministry for this purpose, a suggestion very similar to a capacity building initiative laid out in the February 2007 Draft Oil and Gas Law. This concern, over increased costs, does not address the scenario of price collapse, and the fiscal burden a fixed remuneration fee would place on Iraq.

In summary, since Jiyad’s focus is overwhelmingly legal, his chapter in *Upstream Oil and Gas* is limited to presenting a technical analysis, one that is useful in that respect but fails to outline (beyond his suggested capacity building initiative) how Iraq’s energy sector could become better organized and more efficient.

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<sup>363</sup> Ibid p455

<sup>364</sup> Ibid p456

<sup>365</sup> Ibid p467

## **Literature review: Concluding remarks**

Having reviewed the key texts on oil and gas in Iraq, chiefly with a focus on the Baath era and the transition after 2003, a number of themes emerge. Ghanim Anaz and Fadhil Chalabi lament the overall lack of long term planning after 2003, with Anaz suggesting Iraq's auctions for technical service contracts in the massive southern fields between 2009-2011 were too generous, leaving the supergiants "auctioned off like scrap metal." Likewise, Chalabi is critical of an overly ambitious ministry with massive production targets, a critique echoed by Frank Gunter—both analysts note that the ministry's targets were both unrealistic and potentially disastrous had they been successful, remarking how 10 million bpd production could crush global prices. In light of the 2014 price collapse, it would appear this assessment is correct. Most authors do not advocate heavy restrictions on the private sector in Iraq and, like Meghan O'Sullivan, Ahmed Mousa Jiyad and Amy Myers Jaffe, advocate a balanced government approach to the private sector, with the exception of Gregg Muttitt and perhaps Ghanhim Anaz, who both have an optimistic view of state dominance. No authors outline how they see the relationship between the public and private sectors could be defined by legislation, to include Rex Zedalis, who outlines problems with Iraq's Draft Oil and Gas Law without going into detail as to how new legislation or arrangements in the sector could be significantly improved. Here there is scope in the concluding sections of this thesis, to go into detail regarding how Iraq's energy sector could be re-organized. This is particularly important in light of Robin Mills and Feisal Istrabadi's analysis, which describe the problems of constitutional vagueness and lack of clear legislation.

## Chapter 4: International Case Studies and Influencing Factors

The performance of the Iraq petroleum industry will determine the country's rate of economic growth, the development of other industrial sectors such as agriculture, industry, SMEs and services such as health and education, a point made by Gunter when he outlines different oil production scenarios and prices, and how they could affect per capita income and living quality in Iraq.<sup>366</sup>

The price and the production of oil will determine government revenue, its reconstruction programme and its ability to stimulate economic growth. Therefore the organisation of the petroleum industry in the new federal state of Iraq is crucially important to Iraq's future.<sup>367</sup> However, in order to maximise the economic benefits of the newly re-organized petroleum industry, a number of factors must be examined, primarily the political independence (or lack of) of petroleum institutions, the political setting of these organizations and an understanding of powerful global market forces is required. A re-organized Iraqi National Oil Company or Ministry of Oil must be designed to withstand internal political pressures and be aware of market forces, to attract investment and win market share.

Key to this development is institutional strength, which Robinson and Acemoglu have made the focus of their research, arguing that institutional development is more important than a country's natural resource base. In particular, they note that economic and political institutions must be inclusive, which relates to Iraq regarding the importance of engaging a wide array of stakeholders from diverse communities in energy policy.<sup>368</sup>

Regarding institutions, a World Bank report in 2013 noted how,

“Weak public and private institutions, coupled with a predominantly statist approach, hinder Iraq's emergence as a modern, vibrant economy,

before going on to note how,

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<sup>366</sup> Frank Gunter, “Challenges Facing the Reconstruction of Iraq's Infrastructure.” (Research paper: Lehigh University, 2013)

<sup>367</sup> Author discussion with Adnan al-Janabi.

<sup>368</sup> Daron Acemoglu, James A Robinson, “*Why Nations Fail*,” (New York: Profile Books, 2011) :83

“fiscal institutions need to embed practices of good economic management and long-term fiscal planning, and strong regulatory institutions free of entrenched networks of patronage will be vital.”<sup>369</sup>

The implication is that, even in the presence of significant revenue inflows from oil and gas, weak institutions will not be able to sustain growth. Acemoglu and Robinson note how building institutional capacity is an extremely long term project, taking hundreds of years in Europe and decades in transitional economies such as South Korea and Chile.<sup>370</sup> Since energy is the key driver of revenue to the Iraqi state, it is fair to assume a priority must be the reconstruction and development of the industry, to maximise revenue for planned reconstruction projects. There are three approaches this development could take, identified by Birdsall and Subramanian as the prevailing schools of development between the 1970s and present day, “hardware, Washington Consensus” and “Software.”<sup>371</sup> Hardware is defined by Birdsall and Subramanian the construction of roads, dams and other key infrastructure, so in the case of Iraq’s oil, ensuring pipelines are upgraded, terminals are built to increase exports and refineries are built or repaired.

The “Washington Consensus,” prevailing in the 1980s, places emphasis on liberalising markets and letting the economics of free trade optimise conditions for investment. In the case of Iraq, this approach has been tried with limited success in the case of the early privatisations in the non-oil economy under the CPA, but as Chapter 2 illustrated, privatisation was rejected for political reasons in the case of oil, until Iraq decided on licensing rounds in 2009.<sup>372</sup> Finally, “software” refers to “the institutions, customs, laws, and social cohesion that help to create and sustain markets.” If the World Bank’s 2013 assessment is correct, then the “software” (institutional) approach is of prime importance for Iraq. In the case studies below, only countries that invested in the human capacity and the creation of pro-investment legal frameworks and institutions (Canada and the UAE) in their energy sectors have achieved the conditions for sustainable growth and low political risk, even under sustained low oil prices.

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<sup>369</sup> World Bank, Iraq: “Investing in Infrastructure and Institutions to Create an Environment for Sustainable Economic Revival and Social Progress.” October 5th 2013. Accessed July 16th 2016.  
<http://www.worldbank.org/en/results/2013/10/04/iraq-investing-in-infrastructure-and-institutions-to-create-an-environment-for-sustainable-economic-revival>

<sup>370</sup> Ibid.

<sup>371</sup> Nancy Birdsall, Arvind Subramanian, “Saving Iraq from its oil,” *Foreign Affairs*, July/ August 2004 Issue.

<sup>372</sup> Rex J. Zedalis “*The Legal Dimensions of Oil and Gas in Iraq*”(Cambridge: Cambridge University Press, 2012) : 268

For example, the EIA forecast Canada's oil production to rise through 2016 despite a punitively high per barrel extraction cost,<sup>373</sup> and while the scale of Canada's tar sands boom was met with a skills and equipment shortage, attractive investment terms for IOCs were able to mitigate this problem by bringing in enough experienced foreign workers.<sup>374</sup>

Russia and Nigeria on the other hand, have built systems which managed to invest heavily on "hardware" with impressive infrastructure gains, only to see relative decline in both cases as their respective energy sectors became politicised in the absence of clear separation of powers and the decoupling of foreign policy and political power away from energy. Such a decoupling is essential for Iraq.<sup>375</sup> These problems are described in more detail in this chapter.

To a large extent, Iraq has also seen the impact of heavy political control over its energy sector, most prominently under the rule of Saddam Hussein, who appointed a party loyalist, Hussein Kamal, as Minister of Oil in the early 1990s.<sup>376</sup> With Hussein Kamal in charge, Saddam Hussein was able to use the MoO as a foreign policy tool, allocating specific oil deals with friendly governments and imposing a secret "surcharge" per barrel on certain shipments of oil, as detailed in the Volcker report.<sup>377</sup>

After Saddam had developed direct control over the oil industry as a part of Iraq's war effort during the long Iran-Iraq war<sup>378</sup> oil became a mechanism of international influence during the sanctions era, and on two occasions Iraq briefly halted production, in an attempt to use this as a bargaining chip.<sup>379</sup> In a similar way, Vladimir Putin was able to use his control of the gas sector to cut the Ukraine's gas supply in 2009.<sup>380</sup> In

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<sup>373</sup> "IEA Canadian oil production expected to increase despite lower prices" February 26th 2016. Accessed July 16th 2016. <http://www.eia.gov/todayinenergy/detail.cfm?id=25112>

<sup>374</sup> J Peter Findlay, "The Future of the Canadian Oil Sands" *Oxford Institute for Energy Studies WPM-64* (Oxford, 2016)

<sup>375</sup> Author discussion with Ibrahim Bahr Alolom.

<sup>376</sup> T. Christian Miller "Blood Money: Wasted billions, lost lives and corporate greed in Iraq." (New York: Little Brown and Company, 2006): 97

<sup>377</sup> Paul Volcker et al, "Independent Inquiry into the United Nations Oil for Food Programme," (October 27th 2005) :19

<sup>378</sup> Ghanim Anaz, "Iraq: Oil and gas in the 21st century," (Nottingham: Nottingham University press, 2012)

<sup>379</sup> Eliyahu Kanovsky, "Who's really over a barrel?" *Middle East Quarterly* (Spring 2003) :51-63

<sup>380</sup> Andrew Kramer, "Russia Cuts Gas, and Europe Shivers," *The New York Times* January 6th 2009, accessed July 16th

2016.[http://www.nytimes.com/2009/01/07/world/europe/07gazprom.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2009/01/07/world/europe/07gazprom.html?pagewanted=all&_r=0)

Iraq, due to the levying of the Oil for Food surcharge, corruption also flourished in the ministry, which developed habits of hiding costs, as Faleh Khawaji, former head of contracting in MoO remarked,

"We'd accept the low bid and say to the supplier, 'Give us another 10 percent,' so that was added to the contract. If the bid was for \$1 million, for example, we would tell the supplier to make it \$1.1 million."<sup>381</sup>

Illegal practices continued at the Ministry after 2003, in some cases involving the same companies and likely, the same officials. For example, in 2010 it was revealed that Indonesian petrochemicals firm Innospec, which illegally benefited from Oil for Food, had paid bribes between 2000 and 2007 to the value of at least \$6 million to officials in the Ministry of Oil to export tetra ethyl lead (TEL) to Iraq, which was banned in most countries in the world (Iraq has now phased it out.)<sup>382</sup> The fact that this scheme continued through the regime change suggests the same individuals in Iraq may have been involved, or at least the legacy of this practice from the Baath era continued.

Therefore, reforming and restructuring institutions to de-politicise them, enforce transparency and effect change in nations that have seen decades of authoritarian rule is not something that can happen quickly, as Alston and Melo note, "to create a truly open society takes decades."<sup>383</sup>

Also relating to timelines, a 2014 Chatham House report noted that,

"The time available may be insufficient for the government to develop the institutional capacity required to enforce the regulation of the new sector, which may be strict, or to provide the necessary governance and mechanisms to handle the new revenue flow."<sup>384</sup>

As the case studies below demonstrate, effective management of the energy sector evolves over a period of many years, even in politically stable countries such as Canada.

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<sup>381</sup> Susan Sachs, Hussein's Regime Skimmed Billions from Aid Program," *The New York Times*, February 9th 2004. Accessed July 16th 2016.[http://www.nytimes.com/2004/02/29/world/hussein-s-regime-skimmed-billions-from-aid-program.html?\\_r=0](http://www.nytimes.com/2004/02/29/world/hussein-s-regime-skimmed-billions-from-aid-program.html?_r=0)

<sup>382</sup> United States Securities and Exchange Commission, "SEC Charges Innospec for Illegal Bribes to Iraqi and Indonesian Officials." March 18th 2010. Accessed July 16th 2016.<https://www.sec.gov/news/press/2010/2010-40.htm>

<sup>383</sup> Lee J. Alston, Marcus André Melo, *Bernardo Brazil in Transition: Beliefs, Leadership, and Institutional Change* (Princeton: Princeton University Press, 2016):16

<sup>384</sup> Paul Stevens, Glada Lahn, Jaakko Kooroshy, "The Resource Curse Revisited," (Chatham House, 2015) : 34

Furthermore, progress towards stable governance of the sector is often threatened by price shocks, as seen in Canada when the 1973 price spike caused greater federal intervention in the energy sector and a prolonged political battle between provinces and the center, as Brownsey notes.<sup>385</sup> In Nigeria, moderate progress capturing gas has been offset by a chronic lack of investment in the energy sector following the price collapse of 2014, and the government has been unable to intervene after draining its currency reserves, a situation made worse by the absence of an oil law which has prolonged investor uncertainty.<sup>386</sup> Severe political instability continues to threaten the energy sector, a situation that is likely in Iraq, in the continued absence of effective revenue management and energy strategy.

Of the factors analysed here, political stability may be the most critical. Scholars of the resource curse have suggested that oil rich regimes are more likely to be corrupt and more likely to be involved in civil war and wars with neighbours. Iraq under Saddam Hussain clearly fits these criteria. An analysis by Paul Collier suggests that for any given five-year period, the chance of a civil war in an African country varies from less than 1% in countries without resource wealth to nearly 25% in those with such riches<sup>387</sup>.

However, more recent research by Brunnschweiler and Bulte shows that

“Resource wealth, via an income effect, lowers the probability of conflict, and especially of the onset of a major conflict. Moreover, we find no evidence of an across-the-board link running from resource dependence to civil war.”<sup>388</sup>

It is quite possible that Brunnschweiler and Bulte’s assessment of high resource wealth lowering the chance of civil war applies to Iraq. While it is widely agreed that the 2005-2008 Sunni insurgency against the government constituted civil war, a number of experts on the Iraq war such as Fanar Haddad, Toby Dodge and Reidar Visser would argue that oil was not a major factor in the violence, favouring explanations involving complex tribal and political identity, even over sectarian identity in some cases. Furthermore, while there have been clashes between Kurds and Iraqi government forces over disputed oil fields, these clashes do not yet constitute civil war, and it would be

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<sup>385</sup> Keith Brownsey, “Canadian Federal Energy Policy” (New York: Routledge, 2011)

<sup>386</sup> Elisha Bala Gbogo, “Nigeria Oil contracts review adds to industry uncertainty,” *Bloomberg* October 8th 2015. Accessed July 16th 2016. <http://www.bloomberg.com/news/articles/2015-10-08/nigeria-offshore-contracts-review-adds-to-industry-uncertainty>

<sup>387</sup> Paul Collier, Anke Hoefler, “Greed and grievance in civil war.” (Oxford: Oxford University Press, 2004)

<sup>388</sup> Christa Brunnschweiler, Erwin Bulte, “Natural resources and violent conflict: Resource abundance, dependence and the onset of civil wars.” *Center for Economic Research ETH Zurich Working Paper 08/78* (Zurich 2012)

possible to argue Baghdad's control of revenues prevents, rather than exacerbates, centrifugal forces. Nonetheless, we shall focus here on resource curse literature that suggests conflict in resource rich countries is likely, since Iraq fits many criteria for resource curse affliction, as identified in Chapter 2.

While it is difficult to clearly delineate different factors that influence the formulation of efficient national level petroleum policies, a number have been identified which need to be explored in relation to the chosen federal case study countries, Canada, UAE, Russia and Nigeria:

1. Political Stability
2. Financial Stability
3. Legal Frameworks
4. Fiscal Regimes
5. Production Scenarios
6. Oil Markets

## **4.1 Political Stability**

### **4.1.1 Nigeria**

Of the countries reviewed in this case study section, the most similar to Iraq regarding political stability is Nigeria, which shares a similarly low ranking on the Corruption Perception Index, a high ranking on the fragile states index and has experienced at times comparable levels of violence.<sup>389</sup> A number of experts have also made comparisons between the two countries with Danilovic noting that the two countries have constitutions that highlight cooperative federalism while in reality the federal government is dominant.<sup>390</sup> Writing on Iraq, Lockhart defines Nigeria as a “failed” federation, noting how it is “an excellent case study for a model of government in the postcolonial world that has failed to remain resilient and democratic in governance.”<sup>391</sup>

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<sup>389</sup> Jeffrey Taylor, “Worse than Iraq? Nigeria's president and onetime hope for a stable future is leading his country toward implosion—and possible U.S. military intervention,” *The Atlantic*, April 2006 issue.

<sup>390</sup> Alex Danilovich, *Iraqi Federalism and the Kurds: Learning to Live Together*, (New York: Routledge, 2013.)

<sup>391</sup> Paul G. Lockhart, “Geopolitics, Borders, and Federalism: Challenges for Post-War Iraq,” Diss. Western Kentucky University, 2014.)

Just as Lockhart refers to Nigeria as “over-centralised,” the country is what Visser refers to as an “asymmetrical” federal arrangement,<sup>392</sup> defined by Anderson as a country is nominally federal, implying that all regions and provinces have equal powers, but in reality particular provinces have been granted more power for the sake of political stability.

In Iraq, the Kurdish region has an asymmetrical degree of authority compared to any of the remaining 15 provinces. As in Iraq, a review of the literature on Nigeria shows that granting some areas higher revenue allocations or specific decision making powers in a way that circumvents the constitution, has not led to political stability, but in some cases has led to conflict over interpretation of the constitution. In other words, simply giving more revenue to provinces does not necessarily result in development if there is little capacity to spend it effectively and little accountability, as Thurber et al note, the notion that,

“an increase in the percentage of oil revenue that is allocated to state and local governments through the so-called “derivation formula”—will resolve the problems in the Niger Delta seems highly suspect. Spending by sub-national governments already accounts for almost half of consolidated government spending in Nigeria, and the accountability mechanisms at state and local levels are virtually non-existent. There is no evidence that existing allocations to states and localities have been effectively translated into development.”<sup>393</sup>

Furthermore, Ikein and Diepreye note how corruption has been “systemic” and “institutionalised, heightening the inefficiency of revenue distribution and energy governance.”<sup>394</sup> In Nigeria’s case, the country has in fact become more unstable despite increased revenue allocations for specific regions, resulting in knocking oil production off line through insurgent attacks, leading to attempts to “buy off” opposition, as Jensen and Wantchekon note, “regional and ethnic competitions for oil revenues have contributed to Nigeria’s political system of institutionalized patronage”<sup>395</sup> Much of this instability has also been traced to high unemployment and high levels of poverty, as in

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<sup>392</sup> Reidar Visser, “Nonsense of Congress on Federalism in Iraq,” *Historiae.org*, 13 December 2007  
Accessed 16th July 2016. <http://www.historiae.org/congress.asp>

<sup>393</sup> MARK C. THURBER, IFEYINWA M. EMELIFE, AND PATRICK R.P. HELLER “NNPC AND NIGERIA’S OIL PATRONAGE ECOSYSTEM” *Stanford Working Paper on Sustainable Development no.95* (Stanford, 2010.)

<sup>394</sup> Okolie Onyeisi Romanus, Ochei C. Monday, *An Examination of Nigerian Fiscal Federalism and Its Impact on Revenue Generation for Economic Development*. 2, 12, 2014

<sup>395</sup> Nathan Jensen, Leonard Wantchekon, “Resource Wealth and Political Regimes in Africa,” *Comparative Political Studies* 37; (2004) 816

Iraq where unemployment has fuelled violence in southern Iraq<sup>396</sup> and also insurgency (across Iraq) where Carpenter suggests poverty plays a more important role than unemployment.<sup>397</sup> Likewise, Nigeria has experienced insurgency and terrorism in both the north and south of the country, in the form of Boko Haram in the Muslim majority north and the a variety of militias in the Niger Delta largely animist south.<sup>398</sup> Rogers notes, that aside from a self -declared religious motivation,

“Boko Haram’s support also stems from three specific aspects of the Nigerian situation: the relative economic neglect of the Moslem north, a country-wide issue of very serious divisions of wealth and poverty (in spite of the oil wealth of the Delta), and an endemic problem of corruption, especially within the political system.”<sup>399</sup>

Regarding oil revenue, Rotberg notes that under the 1963 constitution the “derivation” principle allowed for 50% of oil revenues from a producing state to be returned to that locality, but was gradually reversed until the federal share of revenues reached over 55%.<sup>400</sup> Abuja has therefore retained a high degree of control over revenues and their disbursement, centralising corruption and institutional weakness, as Romanus notes,

“The problems emanating from proper application of true federalism include total neglect of areas where mineral resources are exploited; criticism on the mode of determining equitable and acceptable revenue sharing formula; neglect of tax bases of various states and local government and the agitation for resource control. These factors have accounted for lack of rapid economic development of the country.”<sup>401</sup>

Despite these problems, Nigerian political leadership, divided over tribal and religious lines, has attempted to separate the national regulator of the energy sector and regulated bodies. But autocratic leadership from the has circumvented this arrangement, “capturing” the key energy institutions, leading to massive corruption.

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<sup>396</sup>Kristian Coates Ulrichsen, “Basra, Southern Iraq and the Gulf: Challenges and Connections,” (London School of Economics, 2012)

<sup>397</sup> Ami C. Carpenter, “*Community Resilience to Sectarian Violence in Baghdad*” (New York: Springer, 2014 ) : 108

<sup>398</sup> Omolade Adunbi, “*Oil Wealth and Insurgency in Nigeria*,” (Indiana: Indiana University Press, 2015): 187

<sup>399</sup> Paul Rogers “Nigeria: The Generic Context of the Boko Haram Violence.” Oxford Research Group. April 1<sup>st</sup> 2012. Accessed July 16<sup>th</sup> 2012.

[http://www.oxfordresearchgroup.org.uk/publications/middle\\_east/nigeria\\_generic\\_context\\_boko\\_haram\\_violence](http://www.oxfordresearchgroup.org.uk/publications/middle_east/nigeria_generic_context_boko_haram_violence)

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<sup>400</sup> Robert I. Rotberg, “*Crafting the New Nigeria: Confronting the Challenges*,”(London: Lynne Rienner, 2004):91

<sup>401</sup> Okolie Onyeisi Romanus, Ochei C. Monday, An Examination of Nigerian Fiscal Federalism and Its Impact on Revenue Generation for Economic Development. 2, 12, 2014

This has squandered what Durotoye writing on the “MINT” economies, identified as strong future potential. He describes the challenges Nigeria must overcome to fully exploit its hydrocarbon wealth, including lack of infrastructure, corruption and weak institutional capacity.<sup>402</sup> Comparable to Iraq, Nigeria has also had to contend with the legacy of colonialism and a redrawing of boundaries, which has led to civil war and contested rights to subsurface resources. Nigeria’s struggle may be more complex than Iraq’s, with over 350 ethnic groups dispersed over 30 provinces, compared to approximately 7 ethnic and religious groups in Iraq, including Kurds, Sunni Arabs, Shia Arabs, Yezidis, Christians Turkmen and Mandeans.<sup>403</sup>

Emerging as a nation in 1914 while still a British colony, Nigeria had been under British control in the form of three protectorates, the Crown Colony of Lagos and the Northern and Southern Protectorates. Stepan<sup>404</sup> makes an important distinction relevant to understanding Nigerian federalism, between “coming together” and “holding together” federations, with the US, UAE and Australia being examples of the former, while Hiltermann<sup>405</sup> suggests India, Belgium and Spain are examples of the latter.

Critically, Hiltermann outlines a problem with “holding together” arrangements such as Nigeria and Iraq, whereby fiscal relations between governments are controlled and defined by the centre, whereas in “coming together” arrangements, the federal states define the terms of the union for mutually beneficial goals. Even the latter case, as seen during the formation of Canada, is far from perfect in creating sustainable energy federalist arrangements, and often needs frequent revisions, as the Atlantic Accords case demonstrates, which will be examined in this chapter.

Disputes over control of revenues and licensing appear significantly more problematic in cases such as Nigeria, where unlike Canada or Belgium, institutions have not had

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<sup>402</sup> Adeolu Durotoye “The MINT Countries as Emerging Economic Power Bloc: Prospects and Challenges,” *IISTE Journal* 4, 15, 2014

<sup>403</sup> Felicia H. Ayatse, Isaac Iorhen, “THE ORIGIN AND DEVELOPMENT OF ETHNIC POLITICS AND ITS IMPACTS ON POST COLONIAL GOVERNANCE IN NIGERIA” *European Scientific Journal* 9, 17 (2013) 178

<sup>404</sup> Alfred Stepan, “Federalism and Democracy: Beyond the U.S. Model,” *Journal of Democracy* 10.4 (1999) :19-34

<sup>405</sup> Sean Kane, Joost R. Hiltermann and Raad Alkadiri *The National Interest* 118 (March/April 2012) : 20-30

time to evolve, and are subsequently weak and lack transparency<sup>406</sup> This is another parallel to post 2003 Iraq.

Rotberg notes how hindered institutional development is especially severe if the federation has already experienced armed conflict with secessionist movements, as Nigeria has experienced in the delta region and now with the Boko Haram insurgency/terror group in the north.<sup>407</sup> Again, Iraq has had this challenge with armed clashes with separatist Kurdish groups from the 1960s to early 70s, and later during the Anfal Campaign in the 1980s.<sup>408</sup>

As with Iraq, terrorism and insurgency in Nigeria have not ended central governance, investment, NGO work and infrastructure construction, but have led to a series of serious humanitarian problems and have made some areas ungovernable, perhaps putting both countries on the path to state failure, as defined by Rotberg, as a rapid erosion of public services and living standards as crises mount.<sup>409</sup> In Nigeria, centrifugal forces were reduced with the advent of prolonged civilian rule in 1999, and a democratic forum for political debate (rather than force and coercion) defined new fiscal transfer arrangements, which have nonetheless been politically contested. For example, in 2000, the new democratic government of Olusegun Obasanjo changed the derivation formula from a 13% revenue allocation to producing provinces (which had been reduced from 50% in 1994) to 24% of revenues to states and 20% to local government.<sup>410</sup> Problematically, confusion over the constitution endured, causing, “a continuing debate over which tier of government, federal or state, is best equipped to deal with various areas of policy.”<sup>411</sup> Arguments over revenue allocations ensued.<sup>412</sup>

Likewise Ganu and Egwu argue that higher allocations did not usher in a new era of decentralisation and that Nigeria still belonged to the category of a “holding together” arrangement. This is despite their claim that initially, the goal of the 1960 constitution was a “coming together” federal entity, but regressed into a military dominated nation

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<sup>406</sup> Jonathan Di John, “CONCEPTUALISING THE CAUSES AND CONSEQUENCES OF FAILED STATES: A CRITICAL REVIEW OF THE LITERATURE Crisis States Research Paper Working Paper No. 25 (LSE, 2008)

<sup>407</sup> Ibid.

<sup>408</sup> Dina Rizk Khoury, “Iraq in Wartime: Soldiering, Martyrdom, and Remembrance,” (Cambridge: Cambridge University Press, 2013): 131

<sup>409</sup> Robert I. Rotberg, “Failed States in a World of Terror,” *Foreign Affairs* July/ August 2002

<sup>410</sup> Joel D. Barkan, Alex Gboyega, “State and Local Governance in Nigeria”. The World Bank, August 2nd 2002.

<sup>411</sup> Ibid.

<sup>412</sup> Ibid.

with strong unitary characteristics.<sup>413</sup> Ganu and Egwu argue that this has important implications for the country's energy federalism, because at the heart of the constitutional arrangement is a paradox whereby the centre has long had overwhelming control over the nation's primary resource and export, leading to a politically adversarial arrangement between the non-producing 22 regions and the producing 9, with all regions at various times having been in conflict with the federal govt.<sup>414</sup> This is comparable to Iraq, where the producing provinces of Basra, Wasit and Salahaddin have had political clashes with Baghdad, as much as non-producing provinces with little to no oil (eg. Anbar) have also fought politically for control over rights to develop fields, in the case of the Akkas gas field. In the latter case, an argument between the local government in Anbar and Baghdad over exports from the Akkas field delayed implementation of work in the area.<sup>415</sup>

Furthermore, despite the constitutional revisions of 1999, the 1960 Nigerian constitution remains largely unchanged<sup>416</sup> and an effort to introduce fairer and more transparent transfers to the regions, the "derivation" system, has shifted inequality, moving larger transfers from the non-oil producing regions to the producing regions (which had previously been exploited by the govt.)

Therefore, almost no region, producing or otherwise, has seen a net benefit. This underscores the difficulty Iraq may face in designing a revenue sharing law that tries to balance development in regions and provinces. If greater transfers are sent to Basra, a largely urban province which has seen extreme poverty since 2003, this raises the question of what happens to provinces with high rural populations, such as Maysan, which also have high levels of poverty? In 2014, an amendment to the Provincial Powers Law 21 of 2009 proposed additional oil revenue for southern provinces, but has faced stiff political opposition in Baghdad, underscoring how Iraq is only nominally federal.<sup>417</sup>

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<sup>413</sup> Aaron Tsado Gana, Samuel G. Egwu, *Federalism in Africa: Framing the national question*, Volume 1 (Asmara: Africa World Press, 2003) :26

<sup>414</sup> Ibid.

<sup>415</sup> Energypedia, "Iraq to sign Akkas gas field deal with KOGAS and KazMunaiGaz this week," February 22nd 2011. Accessed July 16th 2016. <http://www.energy-pedia.com/news/iraq/iraq-to-sign-akkas-gas-field-deal-with-kogas-and-kazmunaigaz-this-week>

<sup>416</sup> Wumi Iledare, Rotimi Suberu, "Nigeria" from *"Oil and gas in federal systems,"* ed. George Anderson (Oxford: Oxford University Press, 2012)

<sup>417</sup> Saleem al-Wazzan, "Basra's mighty petrodollar," *Niqash*, 13th March 2014. Accessed July 16th 2016. <http://www.niqash.org/en/articles/economy/3398/>

Despite Nigeria's small constitutional changes, the 1999 Nigerian constitution still upholds the centralising principle that the federal government enjoys "control of all minerals, mineral oils under or upon and land in Nigeria, its territorial waters, and exclusive economic zone." <sup>418</sup> As in Canada, some Nigerian states on the Atlantic seaboard have successfully challenged government ownership of offshore oil and gas.

A number of laws passed under military rule further entrenched govt. control of resources, allowing Gen. Abacha to dominate resource wealth during his rule, moving substantial sums out of the country at the expense of producing regions in the Niger delta and the rest of the nation.<sup>419</sup> The situation has been somewhat different in Iraq, where new legislation has been mixed after 2003, with the 2007 Draft Oil and Gas Law centralising federal control<sup>420</sup> and the 2009 Provincial Powers Law number 21 allowing for greater decentralisation, although it has been opposed.<sup>421</sup>

Nigeria's presidential corruption followed legislation passed under military rule in the late 60s and 70s which included the Petroleum Act of 1969 and the Land Use Act of 1976, granting the govt. total control of any land it chooses with minimal provisions for compensation following seizure <sup>422</sup> Watts suggests such highly centralised government control over land use has exacerbated insurgency in the Niger Delta, and it is likely that similar government powers in Iraq could face armed resistance.<sup>423</sup>

Nonetheless, while the Iraqi experience has attempted to allow for some regional and provincial control over hydrocarbons, such as allowing for local oil and gas companies such as the Dhi Qar Oil Company, legislation exists at the federal level which allows for abuse of oil revenues.<sup>424</sup> Namely, this is Article 136 B of the Criminal Code, which is now defunct but as Logan notes, allowed Ministries to terminate investigations into

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<sup>418</sup> Rhuks Ako "Environmental Justice in Developing Countries: Perspectives from Africa and Asia Pacific," (New York: Routledge, 2013): 29

<sup>419</sup> Martin and Subramanian Addressing the Resource Curse: An Illustration from Nigeria. IMF Working Paper, July 2003, Washington DC: IMF.

<sup>420</sup> Rex J. Zedalis "The Legal Dimensions of Oil and Gas in Iraq"(Cambridge: Cambridge University Press, 2012) :153

<sup>421</sup> Reidar Visser, "Is Iraq Headed for Complete Disintegration?" Historae.org blog. 27th June 2013, accessed July 16th 2016. <https://gulfanalysis.wordpress.com/2013/06/27/provincial-powers-law-revisions-elections-results-for-anbar-and-nineveh-is-iraq-headed-for-complete-disintegration/>

<sup>422</sup> Wumi Iledare, Rotimi Suberu, "Nigeria" from "Oil and gas in federal systems," ed. George Anderson (Oxford: Oxford University Press, 2012)

<sup>423</sup> Michael Watts, "Petro-Insurgency or Criminal Syndicate? Conflict & Violence in the Niger Delta" *Review of African Political Economy*, " 34, 114. (2007: 637-660

<sup>424</sup> John Lee, "Iraq sets up Dhi Qar oil company," *Iraq Business News* January 8th 2016. Accessed July 16th 2016.<http://www.iraq-businessnews.com/2016/01/08/iraq-sets-up-dhi-qar-oil-company/>

their departments, and was heavily used by the Ministry of Oil.<sup>425</sup> For example, a 2007 US State Department report in on the ability of the Ministry's Inspector General to stop corruption found that of 138 investigations, 14 went to court, 5 involved the use of 136 b to successfully plead immunity, and only two led to arrests, with the report citing intimidation of the Inspector General as the reason for the low prosecution rate.<sup>426</sup>

Comparable to Iraq, Thurber et al argue that no military or civilian government in Nigeria has displayed competent handling of surging revenues, and corruption has critically hindered every administration, greatly rewarding anyone close to government.<sup>427</sup> According to Watts this mishandling of revenues triggered a number of localized conflicts within the country, the most serious being the Biafra war (also known as the Nigerian civil war) in which as many as a million people were killed. The nearest experience in Iraq to date would be the Kurdish civil war, which was in part fought over control of oil smuggling revenues, but it was far smaller than the Biafran conflict. Some Iraq observers<sup>428</sup> have argued that the presence of large contested oil revenues in Iraq could lead to future conflict.

Aside from the Biafran war and the Niger Delta struggle, other smaller religion and resource related conflicts have persisted. Unlike the Biafra conflict, which involved large military formations, the current problems in the north and south of the country currently resemble insurgency. Nonetheless, they have had serious implications for Nigeria's oil output, as Watts has noted, disruptions of over 500,000 bpd in a single incident. Again, this is comparable to Iraq, where mismanagement of revenues (rather than arguments over their distribution) has seen prolonged high unemployment, exacerbating insurgency, which has in turn destroyed key infrastructure such as the 300,000 bpd Baiji refinery.

In Nigeria, political conflicts are complicated by the presence of multiple ethno-confessional groups—primarily Muslims in the north and Christians and Yoruba people in the south, divided over tribal lines and ethnicities. Competition between the Hausa, Ibo and Yoruba majorities and the Ijaw, Itsekiri and Urhobo minorities (as well as up to

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<sup>425</sup> Joseph Logan "The Quality of Justice: Failings of Iraq's Central Criminal Court," Human Rights Watch (2008): 19

<sup>426</sup> Leaked State Department Report.

<sup>427</sup> MARK C. THURBER, IFEYINWA M. EMELIFE, AND PATRICK R.P. HELLER "NNPC AND NIGERIA'S OIL PATRONAGE ECOSYSTEM" Stanford Working Paper on Sustainable Development no.95 (Stanford, 2010.)

<sup>428</sup> Emma Sky, "The Unravelling," (New York: Atlantic, 2016): 35

250 smaller groups<sup>429</sup>), has led to an at times violent struggle over the final shape of the Nigerian geographic-political entity. Similarly, complex ethno-sectarian division over Kirkuk has the potential to see renewed violence, and has defied international and central government efforts at resolution, with the city sometimes referred to as a “powder keg” of potential ethnic conflict<sup>430</sup>

One possible solution to these localised grievances in Iraq has been to create new semi-autonomous regions, although as noted, appetite for this in some parts of Iraq has met nationalist resistance. In Nigeria, Iledare and Suberu describe how, at the beginning of the 1960s there were 3, then four regions of the federation. By the late 1970s this had grown to 19, and is now 36.<sup>431</sup> While this proliferation of sub states had the intention of strengthening the federation and reassuring local grievances, according to Mustapha it had the effect of reinforcing ethnic identity and claims to greater shares of resources, heightening prospects for conflict.<sup>432</sup> Likewise, Iledare and Suberu also claim the centralization of state power set off centrifugal forces in the federation. This echoes the concerns of Natali that further decentralisation may not solve the root cause of Iraq’s problems, and still leaves room for intra-ethnic conflict, but also points to how unilateral centralization of power can heighten secessionist sentiment.<sup>433</sup>

Equally problematic in Nigeria, according to Obi<sup>434</sup> is the convergence of the main majorities into 3 dominant political regional entities, often at the expense of Nigeria’s many minorities, has led to a competition over resources characterised by Lergo as “chaos” which has “stifled Nigeria’s social evolution.”<sup>435</sup> Instead of negotiation, the use of fiscal transfers, threats of secession and armed action have been the main methods through which subnational governments have pressured each other into finding an amicable agreement, or face breaking away from the federation.

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<sup>429</sup> Stephanie Hanson, “Nigeria’s Creaky Political System,” *Council on Foreign Relations*, April 12th 2007, Accessed July 16th 2016. <http://www.cfr.org/nigeria/nigerias-creaky-political-system/p13079>

<sup>430</sup> Liam Anderson, Gareth Stansfield, “*Crisis in Kirkuk: The Ethnopolitics of Conflict and Compromise*” (Philadelphia: University of Pennsylvania Press, 2009) :9

<sup>431</sup> Wumi Iledare, Rotimi Suberu, “Nigeria” from “*Oil and gas in federal systems*,” ed. George Anderson (Oxford: Oxford University Press, 2012)

<sup>432</sup> Abdul Raufu Mustapha, “Ethnic Structure, Inequality and Governance of the Public Sector in Nigeria,” *Democracy, Governance and Human Rights Programme Paper Number 24* (United Nations, 2006)

<sup>433</sup> Denise Natali, “The myth of a tripartite Iraq,” *Al Monitor* June 23, 2016. Accessed July 16th 2016. <http://www.al-monitor.com/pulse/originals/2016/06/iraq-myth-tripartite-sunni-shia-kurd-stability-isis.html>

<sup>434</sup> Cyril Obi, “Nigeria’s Niger Delta: Understanding the Complex Drivers of Violent Oil-related Conflict,” *Africa Development*, 34, 2009, 103–128

<sup>435</sup> Tunga Lergo, “Deconstructing Ethnic Politics: The Emergence of a Fourth Force in Nigerian Political Discourse,” *International Journal of Humanities and Social Science*, 1,15, 2011, 87

The latter scenario occurred in Biafra following the 1967-1970 war of the native Igbo people to gain independence, and control over locally extracted oil, which led to major battles over oil infrastructure, including BP and Shell installations at Bonny Island.<sup>436</sup> A similar conflict in Iraq, perhaps between secessionist Kurds and pro-government forces, would likely see a targeting of oil infrastructure, to the detriment of all Iraqis.

By 1970, the Biafrans had been defeated, but as noted, the issue of oil revenues and ownership in the Niger Delta has been continuously problematic. This has fed into the idea of Nigeria as being acutely affected by the resource curse as the phenomenon is often linked not only to endemic corruption, but likelihood of enduring civil conflict.<sup>437</sup>

According to Rotberg almost every post WW2 conflict in Nigeria can be traced to resource control, although this includes minerals and water, not only oil and gas.<sup>438</sup> More recently, Lergo outlines the role of religion with the advent of the Boko Haram terror movement, which followed religious unrest in the Muslim majority Kano province in 1980.<sup>439</sup>

Lergo also notes that resource allocation is still a driving factor of the radical Islamist movement. The latter assertion is by Chiegeonu Aga who notes that the rebellious province of Kana received the largest fiscal transfers during the 1990s at 10.9% of allocations, compared to 3.2 to 3.5% allocations for Abuja and Lagos.<sup>440</sup> This is relevant to the case of Anbar, the centre of Iraq's Sunni insurgency against the government; at no point were transfers withheld from Anbar, yet the level of political grievance, as in Kana, remained high. After sustained violence in Anbar in 2006, the Iraqi government increased Anbar's budget allocation by \$70 million, but these allocations, amounting to \$500 million in 2014, up from \$177 million in 2007, did not stop renewed insurgency action.<sup>441</sup>

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<sup>436</sup> Chibuikwe Uche, "Oil, British Interests and the Nigerian Civil War" *The Journal of African History*, 49, 1 (2008): 133–134.

<sup>437</sup> Paul Collier, Anke Hoeffler, "On economic causes of civil war," *Oxford Economic Papers*, 50, 4 (1998) : 563-573

<sup>438</sup> Robert Rotberg, "Nigeria; Elections and Continuing Challenges," Council on Foreign Relations, *Council Special Report 27*, April 2007):20

<sup>439</sup> Tunga Lergo, Deconstructing Ethnic Politics: The Emergence of a Fourth Force in Nigerian Political Discourse

<sup>440</sup> Chiegeonu Aga, "*Nigeria: State by State*," Nigeria Book of Records, (2009)

<sup>441</sup> Leaked US State Department cable, available at Wikileaks. Accessed July 16th 2016. [https://wikileaks.org/plusd/cables/07BAGHDAD2552\\_a.html](https://wikileaks.org/plusd/cables/07BAGHDAD2552_a.html)

This would suggest that poor resource allocation was not a driver of the Boko Haram insurgency/ terror movement, suggesting that greater allocations to regions in Iraq would not necessarily prevent violence. This perhaps because in these cases, as in the case of Boko Haram, a major cause of insurgent violence is a radical interpretation of Islam, and that in the presence of corruption and inefficiency, transfers may not solve chronic poverty, another cause of violence. However, given Nigeria's acutely opaque revenue monitoring during the period, it is difficult to say how accurate Chiegeonu Aga's statistics are. What is certain is that while sub states have been accused of severely mismanaging the resources allocated to them there remained an acute disparity in the amount of fiscal transfers given to sub states.<sup>442</sup>

#### **4.1.2 Russia**

In Russia, revenue distribution has been less controversial than overall control of exploration, development, export and taxation of hydrocarbon resources. Nonetheless, the post-Soviet political arrangement resembles federal "asymmetry," Anderson's term for Iraq's current situation, as described at the start of this chapter. As with Iraq and Nigeria, the asymmetrical arrangement is partly due to constitutional vagueness or "fuzziness as Shkaeva calls it, leading to rows over interpretation."<sup>443</sup>

Distinct from Iraq's entirely new post 2003 document, the Russian constitution of 1993 was re-written from the former Soviet constitution of 1977, and came about following the collapse of the USSR and the advent of parliamentary democracy in Russia, creating conditions for a distinct divergence from Soviet era principles regarding private ownership.<sup>444</sup> However this was not a rapidly created new document but as with Iraq, there had been a dramatic change in regime, and a new precedent for private investment, which would have to be politically accepted.

Yeates et al assert that over 200 changes to the Russian constitution between the onset of Gorbachov's "perestroika" reforms in 1985 and the post-Soviet version in 1993 have

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<sup>442</sup> Wumi Iledare, Rotimi Suberu, "Nigeria" from *"Oil and gas in federal systems,"* ed. George Anderson (Oxford: Oxford University Press, 2012)

<sup>443</sup> Natlialia Shkaeva, "The resource curse magnitudde in federal states," (Diss: Central European University, Budapest, 2014.)

<sup>444</sup> J. Lanier Yeates, Paul E. Comeaux, N. Stepha: Kinsella, "The Russian Constitution of 1993: Provisions of Interest to the Energy Industry." *Russian Oil & Gas Guide* 4, 2, April 1995

contributed to a “self-contradictory” document, and that this has contributed to confusion regarding federal and sub-state government oil and gas ownership.<sup>445</sup>

As an example, Yeates et al note articles 35 and 36, which outline commitment to the right of private ownership. This is contravened (according to an EU ruling) by the Yukos expropriation case in 2004.<sup>446</sup> Writing in 1993, prior to the Yukos expropriation, they note that it is too early to tell if the Russian Constitution will enable rights “for the energy industry investor, the important rights to own, freely use, and dispose of private property.”

Likewise Vazquez, Boez contend that division of power in the 1993 constitution is vaguely defined, essentially undecided, as outlined in articles 71-72.<sup>447</sup> Problematically, they argue that the regions’ ability to make bilateral oil and gas arrangements with the federal government circumvents the constitution. Hahn notes that the Moscow treaty with Tartasan, which granted the federal subject control over oil and gas exploitation, contravened article 71.2a of the constitution, which stipulates “joint” ownership.<sup>448</sup>

Meanwhile, Pascal describes the treaty between Samara and Moscow in 1997, which granted the region significant influence on a number of local issues, including 100% of payment for the rights to extract oil and gas, and 50% of excise taxes, 100% of which had normally gone to the federal govt.<sup>449</sup> These arrangements echo the ad hoc arrangements, circumventing the constitution, that Baghdad made with the KRI, described in Chapter 3’s review of literature on Iraq.

Pascal notes that similar bilateral deals had been signed with Tartarsan and Sverdlovsk. By 2000, Pascal notes how Putin was determined to put a stop to such ad hoc decentralisation and re-invigorate Russian nationalism. Regarding the Samara agreement, Pascal notes that while the Oblast (federal subject) was not a major oil producer, it originally received a significant percentage of tax on oil operations from Yukos, until the oil giant was acquired by Menatep in 1996, who re-directed these taxes

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<sup>445</sup> Ibid.

<sup>446</sup> Ibid.

<sup>447</sup> Jorge Martinez-Vazquez, Jameson Boex, “*Russia’s Transition to a New Federalism*,” (Washington: The World Bank Institute, 2001) : 11

<sup>448</sup> Gordon Hahn, “Putin’s Federal Reforms: Reintegrating Russia’s Legal Space or Upsetting the Metastability of Russia’s Asymmetrical Federalism.” *Demokratizatsiya*, 9,4 (2001)

<sup>449</sup> Elizabeth Pascal, “*Defining Russian Federalism*” (Westport: Praeger, 2003)

to Moscow, and bought up many small, local oil and gas companies.<sup>450</sup> Federal intervention in this case, was therefore a sign of what would happen later with the Yukos expropriation.

But until Putin's premiership in 2000, these constitutional violations went both ways. In an echo of the KRI's move to draft its own constitution and oil law, the republics of Altaj, Adygei, Bashkortostan, Ingushetia, Komi, and North Osetia-Alania all wrote their own constitutions claiming control over resources.<sup>451</sup> By the turn of the century, some 13 subjects of the Russian Federation had all received "presidential warnings."<sup>452</sup>

In the case of Adygei, Goode notes that the republic was weak and its demands overturned in relation to mineral (and oil) rights.<sup>453</sup> This was the case in Iraq with demands made by Wasit and Salahaddin to exploit oil and gas within their provinces.<sup>454</sup> It is notable that many of the battles over the constitution outlined by Goode, Boez et al are over multiple issues of federal or regional jurisdiction, only one of them being oil and gas. In Iraq, oil has dominated political disputes between Erbil and Baghdad and to a lesser extent, Basra and Baghdad.

Hahn suggests that behind some of the Kremlin's efforts to prevent further violations of the constitution was the example of Chechnya, whose secessionist movement was defeated in a conflict which claimed the lives of as many as 160,000 people and ruined the capital city.<sup>455</sup> To make this point, Hahn quotes Putin who asserted in 2001, following the second Chechen war:

"We managed to make significant progress forward in strengthening Russian statehood. Remember the kind of state we were living in only recently? One-fourth of regional laws were unconstitutional or contradicted federal legislation. Two-thirds of those regional laws have now been brought into compliance with the constitution."<sup>456</sup>

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<sup>450</sup> Ibid, 125.

<sup>451</sup> Gordon Hahn, "Putin's Federal Reforms: Reintegrating Russia's Legal Space or Upsetting the Metastability of Russia's Asymmetrical Federalism." *Demokratizatsiya*, 9,4 (2001)

<sup>452</sup> Ibid.

<sup>453</sup> J. Paul Goode "The Decline of Regionalism in Putin's Russia: Boundary Issues" (New York: Routledge, 2011) :97

<sup>454</sup> Denise Natali, "Iraq's oil brinkmanship" Al Monitor, January 14th 2016, Accessed July 16th 2016. <http://www.al-monitor.com/pulse/originals/2014/01/krg-baghdad-iraq-oil-maliki-barzani.html>

<sup>455</sup> "Chechen official puts death toll for 2 wars at up to 160,000" *The New York Times* August 16th 2005. Accessed July 16th 2016.

<http://www.nytimes.com/2005/08/16/world/europe/chechen-official-puts-death-toll-for-2-wars-at-up-to-160000.html>

<sup>456</sup> Gordon Hahn, "Putin's Federal Reforms: Reintegrating Russia's Legal Space or Upsetting the Metastability of Russia's Asymmetrical Federalism." *Demokratizatsiya*, 9,4 (2001)

The implied threat of violence to ensure compliance with federal demands is reminiscent of the Baath era in Iraq, although a comparison of Sasoon<sup>457</sup> writing on Iraq and Lucas<sup>458</sup> writing on Russia, suggests political violence in the Putin era has been far less intense. As well as pressuring regional administrations to comply with federal law, Putin also sought to pressure the energy sector into reform, putting an end to tax avoidance that had arisen from deals between oil companies (affiliated with LUKoil and Sibneft) and the offshore tax haven of Baikonur, Kazakhstan.

Claiming that \$500 million in federal payments had been lost in 2001 alone, the Ministry of Taxation put an end to these schemes when the Constitutional Court declared them illegal, in 2005.<sup>459</sup> Notably, Yukos may have saved \$1 billion through an offshore tax scheme, and tax avoidance was the main argument used by the federal govt. to expropriate of the company. Chebankova argues that Yukos was made an example of as a deterrent to further exploitation of the transfer price system, because “a broad range of tax optimisation methods” were still in existence in Russia following the 2004 closing of internal offshore havens.<sup>460</sup>

Putin also asserted federal power by cooperating with heads of major industries operating in strategic regions, to use combined federal and industrial influence to appoint suitable regional leaders, putting an end to regional elections.<sup>461</sup> Chebankova attributes this move to growing political—business ties within regions that risked undermining federal authority. A notable example of such an appointment is the nomination of Alexandr Filpenko to head the major oil producing autonomous Okrug of Khanti Mansi. According to Chebankova, this process involved negotiations between Putin and TNK-BP, LUKoil and Rosneft, among others.<sup>462</sup>

Chebankova also notes that Putin would later remove uncooperative governors, including the governor of Sakhalin, Ivan Malakhov, who had poor relations with state owned Rosneft, who were operating in the region (note, some reports suggest this

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<sup>457</sup> Joseph Sassoon, *Saddam Hussein's Baath Party*, (Cambridge: Cambridge University Press, 2012)

<sup>458</sup> Edward Lucas, *The New Cold War*, (London: Bloomsbury, 2009)

<sup>459</sup> Elena Chebankova, *Russia's Federal Relations: Putin's Reforms and Management of the Regions* (New York: Routledge, 2010), :128

<sup>460</sup> Ibid.

<sup>461</sup> Ibid.

<sup>462</sup> Ibid.

appointment was also related to a slow response to an earthquake.<sup>463</sup>) Therefore, it is logical to conclude that Putin has to a large extent re-asserted federal control of the energy sector in comparison to the Yeltsin era, and that this is to an extent a re-assertion of federal influence, as per the 1993 constitution.

What is the meaning of this re-centralisation regarding political stability for investment? To Ferguson and Henderson the outlook is poor, with increased political control leading to “a non-linear and opaque” business environment. Furthermore they note,

“In the past decade, Russia has not changed dramatically. Institutions in the country remain weak, hollowed out and often dominated by elites. Laws and regulations are unreliable and the business outlook remains short-term.”<sup>464</sup>

Equally unpromising is Russia’s use of energy as a foreign policy tool. Following Russia’s military action in Crimea and Ukraine, and the subsequent Western sanctions which have in part targeted Russian energy projects, a combination of these sanctions and low oil prices have constrained the much needed development to maintain production at current levels of over 10 million bpd beyond 2017.<sup>465</sup> With this in mind, Russia has turned to projects with Indian and Chinese state owned companies, but long term, Putin’s aggressive re-centralisation of the energy sector will likely alter political risk calculations of western IOCs.<sup>466</sup>

#### 4.1.3 Canada

While difficult political risk calculations may be expected to continue in Iraq, Russia and Nigeria for many years, if not decades, a cursory glance at the relative success of the Canadian oil industry would suggest that political risk and stability is not a problem. While tensions in a country that has been a democracy for over 150 years would be unlikely to turn violent, they still have the capability to cause decades long disputes over rights to oil and gas and can increase investor uncertainty, which could be

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<sup>463</sup> Isabel Gorst, “Putin appoints Rosneft ally to Sakhalin,” *The Financial Times*, August 7th, 2007. Accessed July 16th 2016. <https://www.ft.com/content/c8f78216-451f-11dc-82f5-0000779fd2ac>

<sup>464</sup> James Henderson, Alastair Ferguson, “International Partnerships in Russia’s Oil and Gas Industry,” *Russia and Eurasia Programme Meeting Summary* March 27th 2014, Accessed July 16th 2016. [https://www.chathamhouse.org/sites/files/chathamhouse/field/field\\_document/20140327RussiaOilGas.pdf](https://www.chathamhouse.org/sites/files/chathamhouse/field/field_document/20140327RussiaOilGas.pdf)

<sup>465</sup> ISN Security Watch: How much punishment can Russia’s oil industry take?” *Oilprice.com* 16th of January 2015. <http://oilprice.com/Energy/Energy-General/How-Much-Punishment-Can-Russias-Oil-Industry-Take.html>

<sup>466</sup> Debjit Chakraborty, Russia deepens ties to India with Siberian Oil field sales,” *Bloomberg*, March 16th 2016, Accessed July 16th 2016. <http://www.bloomberg.com/news/articles/2016-03-16/rosneft-signs-pact-with-indian-companies-to-sell-stake-in-fields>

particularly problematic in a time of prolonged low oil prices.<sup>467</sup> Nonetheless, Canada's constitution is quite clear on oil and gas ownership rights, unlike in Russia, Iraq and Nigeria. In Canada, disputes have occurred over oil pipelines, the environment and offshore oil ownership. As with Iraq, Russia and Nigeria, oil reserves are very unevenly spread across the federation, which has been problematic.

In theory, oil and gas ownership rights in Canada enjoy a spirit of federalism, placing natural resources under the jurisdiction of the province, a development that dates back to 1867 with the advent of the Constitution, which outlines separation of federal and provincial powers in sections 91 and 92.<sup>468</sup>

Federal jurisdiction in the energy sector exists in matters affecting more than one province (such as pipeline construction, oil spills) offshore discoveries and uninhabited land outside of the provinces, the "territories." In this case, the arrangement is similar to Iraq where federal export infrastructure runs through the semi- autonomous Kurdish region, and environmental issues related to oil and gas are supposed to be managed at the federal level, although the KRG has its own environmental rules within its 2007 Oil Law.<sup>469</sup>

However, a number of observers (including Plourde, Gattinger) have documented a more complex reality than what is outlined in the 1867 constitution, in particular the advent of the Atlantic Accords, signed between the federal govt. and the Atlantic provinces of Newfoundland and Labrador, and Nova Scotia in 1986 and 1987 respectively.<sup>470</sup>

The Accords followed a 20 year legal battle between these provinces and the govt. over offshore oil reserves, leaving significant control over offshore development with the Atlantic provinces, an arrangement Leslie notes had "no constitutional basis."<sup>471</sup>

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<sup>467</sup> Peter Findlay, "The Future of the Canadian Oil Sands," OIES PAPER: WPM 64 (Oxford: Oxford Institute for Energy Studies, 2016)

<sup>468</sup> Parliament of Canada, "The Division of Powers," Accessed July 16th 2016. [http://www.lop.parl.gc.ca/About/Parliament/Education/ourcountryourparliament/html\\_booklet/division-powers-e.html](http://www.lop.parl.gc.ca/About/Parliament/Education/ourcountryourparliament/html_booklet/division-powers-e.html)

<sup>469</sup> Oil and Gas Law of the Kurdistan Region: [http://cabinet.gov.krd/uploads/documents/Kurdistan%20Oil%20and%20Gas%20Law%20English\\_\\_2007\\_09\\_06\\_h14m0s42.pdf](http://cabinet.gov.krd/uploads/documents/Kurdistan%20Oil%20and%20Gas%20Law%20English__2007_09_06_h14m0s42.pdf)

<sup>470</sup> Andre Plourde, "Oil and gas in the Canadian federation," Paper presented at the "Canadian-United States Energy Issues after Copenhagen," May 28th 2010, Northwestern University, Illinois.

<sup>471</sup> Peter M. Leslie *Canada: The State of the Federation, 1986* (Kingston: Institute of Intergovernmental Relations, 1985.), 202

Even after the Accords were signed however, a study by the University of Texas' Center for Energy Economics noted ongoing problems with the tax arrangement for offshore oil,

“The problem is that for every dollar that flows to governments, the federal government is set to gain more than 80 cents. Nova Scotia on the other hand is set to gain less than 20. The result is that Nova Scotia is not the primary beneficiary of offshore development. There are difficulties in trying to effect change. For example, the Canada Nova Scotia Offshore Petroleum Board (CNSOPB) is governed by two statutes these statutes, one federal and one provincial are “mirror legislation.” Any change would need to be endorsed by both levels of government. However, the federal government would have a complementary interest in legislation effecting Newfoundland where they essentially have the same “mirror legislation” with the Newfoundland Offshore Petroleum Board (CNOPB). The fact that there are two offshore boards in Nova Scotia and in Newfoundland is a reflection of the fact that there is a significant jurisdictional debate.”<sup>472</sup>

Plourde outlines the historical development of the Canadian state in relation to resources, noting that the two provinces which host most hydrocarbon activity in Canada (Saskatchewan and Alberta) were not created until 1905, with mineral rights being granted in 1930. As such, Plourde highlights that the federal govt. would have been unaware of the forthcoming energy sector growth, which would expand significantly after 1945, beginning with the discovery of the Leduc field in southern Alberta in 1947. Therefore, Plourde asserts that Canadian oil policy had to work around the constitution, a document which did not envisage the energy boom.

Fossum describes how the unequal geographic distribution of oil and gas reserves has raised difficult questions regarding the constitutional goal of “fiscal equalization,” the policy of ensuring that public services and taxes remain relatively consistent across the country.<sup>473</sup> This is interesting when considering whether an “Equalization” style system could be replicated in Iraq, since it has been controversial in Canada.

Equalization, established as a principal in Canada in 1957, was not formalised in the constitution until 1982 with the Constitution Act—from which point, 100% of provincial oil revenues were to go into the equalization system, and the constitution

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<sup>472</sup> “North Atlantic Canada: Local Content” Requirements” (University of Texas, 2002) Accessed July 16th 2016. [http://www.beg.utexas.edu/energyecon/new-era/case\\_studies/North\\_Atlantic\\_Canada.pdf](http://www.beg.utexas.edu/energyecon/new-era/case_studies/North_Atlantic_Canada.pdf)

<sup>473</sup> John Erik Fossum, *Oil, the State, and Federalism: The Rise and Demise of Petro-Canada as a statist impulse*, (Toronto: University of Toronto Press, 1997): 43

asserts that these resources must be used to deliver relatively equal public services across the “have” (resource endowed) and “have not” provinces.<sup>474</sup>

The equalization system has faced a number of political problems and many adjustments over the years. Milke notes that, following the 1982 act that stipulated 100% of resource revenues should go into the equalization system, this amount was reduced to 50%, with “have not” provinces often campaigning for a return to 100%. Later, in 2009, Ontario, which had been classed as a “have” province, suffered slower economic growth and therefore fell below the “10 province average” of fiscal capacity, meaning that it qualified for equalization payments. Milke argues this distorted the entire system, with the percentage of the population covered by equalization payments jumping from 32% to 68% of the population.<sup>475</sup> Only two years later, Ontario had a marginally higher per capita income than two of the “have” provinces, British Columbia and Newfoundland and Labrador.<sup>476</sup>

Equalization came under further scrutiny in 2015, when Ontario lost its status as a “have not” province, but even as Alberta struggled with the oil price collapse, the province was still paying into the system as a “have” province even though technically it no longer qualified for this status. Analyst Don Drummond subsequently pointed out that the equalization system was slow to respond to changes in commodity prices, a similar problem that has been discussed in relation to the proposed \$5 per barrel allocation for Iraqi producing provinces.<sup>477</sup> Mendelsohn also points out a similar problem with commodity price fluctuations, and notes that the equalization is constantly at risk of political struggle. Mendelsohn recommends the creation of an independent organization to monitor transfers to provinces and payments into the federal system:

“Many have an interest in concealing the true nature of inter-regional redistribution in Canada. An independent, disinterested body could report on fiscal capacity and net redistribution and related issues. Much like the Canadian Institute for Health Information does for health care, a new Fiscal Transfers Council could similarly improve transparency and governance in Canada’s fiscal arrangements.”<sup>478</sup>

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<sup>474</sup> Marke Milke, “Equalization, Ontario, and the politics of division,” *Fraser Research Bulletin* January 2014 Accessed July 16th 2016. <https://www.fraserinstitute.org/sites/default/files/equalization-ontario-and-the-politics-of-division.pdf>

<sup>475</sup> Ibid, Milke.

<sup>476</sup> Ibid.

<sup>477</sup> <http://www.theglobeandmail.com/news/politics/ontario-to-lose-equalization-payments-as-albertas-economic-fortunes-fall/article27831080/>

<sup>478</sup> [https://mowatcentre.ca/wp-content/uploads/publications/58\\_back\\_to\\_basics\\_future.pdf](https://mowatcentre.ca/wp-content/uploads/publications/58_back_to_basics_future.pdf)

Another difficulty has been managing export infrastructure over a vast area between the “have” and “have not” provinces. Plourde explains that once early logistical problems of the oil industry in Canada were overcome (mainly transporting oil and gas from the producing West to the importing East) “policy related tensions” within the federation began to emerge as production and exploration expanded and revenues climbed. Tensions over a trans-Canada pipeline (and whether it would pass through the US or be entirely on Canadian soil) led to the creation of a “National Energy Board” to oversee energy matters which cut across provincial boundaries.<sup>479</sup>

The National Energy Board is the main federal regulatory organization in Canada and was created in 1959, following the findings of the Borden Royal Commission, which recommended a coordinating body for national energy policy, which was previously executed “piecemeal” by a number of agencies.<sup>480</sup> This led to the National Energy Board Act, which led to the body of the same name.

The NEB has “regulatory responsibilities for interprovincial and international natural gas, oil and commodity pipelines pursuant to the National Energy Board Act” and also has environmental impact oversight regarding the construction and operation of interprovincial pipelines.<sup>481</sup> According to the NEB Act, these projects must be in the public’s best interests.<sup>482</sup> In 1961, the NEB added oil to its remit, which formerly included electricity and gas. Between 1960 and 1965, Canadian oil exports to the US doubled, and doubled again between 1970 and ’73.<sup>483</sup> Perhaps the equivalent institution in Iraq would be the as of yet not constitutionally authorised Federal Oil and Gas Council. If the FOGC comes into existence, it would probably increase overall efficiency in the energy sector to add electricity to its remit, as in Canada. However, the NEB could not stop an increase in political controversy as Canada’s exports rose.

Given that so much new oil production in Canada was centred in the West, the potential for new political disputes grew throughout the volatile oil market years of the 1970s and

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<sup>479</sup> James A. Desveaux, “*Designing Bureaucracies: Institutional Capacity and Large-scale Problem Solving*,” (Stanford: Stanford University Press, 1995) :59

<sup>480</sup> Ibid.

<sup>481</sup> National Energy Board website. <https://www.neb-one.gc.ca/bts/ctrg/mmrndm/2013trnsprtnd-eng.html>

<sup>482</sup> Ibid.

<sup>483</sup> Carolyn Tuohy, “*Policy Politics Canada*,” (Philadelphia: Temple University Press, 1992) :264

80s, and these disputes continue to this day, as Feehan highlights, detailing much controversy over changes to the equalization formula during the 00's.<sup>484</sup>

In particular, Fossum notes how the 1973 oil embargo sparked a “constitutional crisis” centred on the question of who would deal with problems resulting from surging prices: Ottawa or the producing provinces. The resultant failure to address this question, and disappointment over changes to the equalization formula, led to the erosion of the constitution, according to Fossum.<sup>485</sup>

The political outcome of post 1973 oil price environment was that the government continued its interventionist federal control of oil sales, while provinces fought to retain control over the production and development of oil and gas.<sup>486</sup> This echoes the Iraq experience, where the oil price collapse heightened tension over the giant oilfields at Kirkuk, which are contested between Baghdad and Erbil. Nonetheless, federal—provincial tension over oil and gas revenues has not been the only political tension related to energy in Canada.

Notably, the constitution does not mention the environment, and Plourde notes that environmental issues within provinces related to the energy sector are largely the jurisdiction of the province. However, the federal government dictates environmental policy in relation to international treaties, such as the Kyoto agreement, and national level pollution such as air and water pollution.<sup>487</sup>

Subsequent tensions emerged at the 2009 Copenhagen summit on Greenhouse emissions, when four Canadian provinces set out separate environmental targets different from federal govt. policy, while governors of Alberta and Ottawa publicly argued over the impact of oil sands development.<sup>488</sup> Currently, Iraq is not a signatory to any carbon emissions agreements, but if it was to sign a treaty in future, perhaps after

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<sup>484</sup> Jim Feehan, “Canada’s Equalization Strategy: Peering inside the black box.” *University of Calgary School of Public Policy Research Papers*, 7, 24 (2014)

<sup>485</sup> John Erik Fossum, *Oil, the State, and Federalism: The Rise and Demise of Petro-Canada as a statist impulse*, (Toronto: University of Toronto Press, 1997): 273

<sup>486</sup> Andre Plourde, “Oil and gas in the Canadian federation,” Paper presented at the “Canadian-United States Energy Issues after Copenhagen,” May 28th 2010, Northwestern University, Illinois.

<sup>487</sup> Paul Anthony Chastko, *Developing Alberta’s Oil Sands: From Karl Clark to Kyoto* (Calgary: University of Calgary Press, 2004): 239

<sup>488</sup> Paul Anthony Chastko, *Developing Alberta’s Oil Sands: From Karl Clark to Kyoto* (Calgary: University of Calgary Press, 2004): 239

reduction of flaring, this would raise the problem of Kurdish emissions, or emissions of provinces within the federation, were they to formulate independent energy policies.<sup>489</sup>

Would the creation of the FOGC remedy such potential problems? The experience of the NEB between its creation and the present day suggest it would not be without challenges. Desveux outlines a number of critiques regarding the NEB, in particular the concern that the NEB would have more authority than Cabinet to set policy. This was largely because the NEB came under the jurisdiction of the Ministry of Trade and Commerce, therefore, it was seen to prioritise trade in oil and gas, for example, exports to the US were a priority area.

Further criticism emerged following the 1973 oil crisis, due to the NEB's ability to make its own decisions on oil and petroleum exports, because of the short term nature of oil export contracts. Fisher argues that public interest groups (eg. environmental groups) will not be able to intervene in board decisions, since only private interests would have the ability to raise the funds for making a detailed case in a lengthy hearing.<sup>490</sup> Fisher also felt that the board's decisions lacked transparency, so that it was difficult to assess whether it was acting in the public interest.

Toner, Pal and Prince also note that, in the case of a series of 2004 MOUs with the US Federal Energy Regulatory Commission, there was a "lack of transparency" regarding the agreement, in breach of the NEB Act's pledge to serve the public interest.<sup>491</sup> At the time of writing, there have also been a number of accusations that the NEB has been subject to "regulatory capture"—federal or private sector undue influence, due to the overlap of its members with the energy sector, although there are currently no academic reviews of this accusation.<sup>492</sup>

Finally, and relevant to the political risk calculations of IOCs regarding the prospect of changing regulations, PWC reported in May 2016 that IOCs were once again considering heightened political risk in Canada. The report refers to a planned banning

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<sup>489</sup> Ecowatch, "Which countries won't be signing the Paris climate agreement on Earth day?" April 26th 2016. Accessed July 16th 2016. <http://ecowatch.com/2016/04/21/countries-wont-sign-paris-agreement/>

<sup>490</sup> Barry D. Fisher, "The Role of the National Energy Board in Controlling the Export of Natural Gas from Canada," *Osgoode Hall Law Journal*, 9,3 1971.

<sup>491</sup> Glen Toner, Leslie A. Pal, Michael Prince, "Policy: From Ideas to Implementation," (Montreal: Kingston University Press, 2010): 223

<sup>492</sup> Daniel Tencer, "Has the National Energy Board been 'captured by industry?'" *The Huffington Post*, 5th November 2014 Accessed July 16th 2016. [http://www.huffingtonpost.ca/2014/11/05/regulatory-capture-national-energy-board\\_n\\_6108628.html](http://www.huffingtonpost.ca/2014/11/05/regulatory-capture-national-energy-board_n_6108628.html)

of tanker traffic by the federal govt. off the northern coast of British Columbia, which would jeopardise a planned export terminal, and the regulatory risk posed by changing environmental laws on energy mega projects. The report notes how, “These developments signal a deteriorating political and social environment towards pipelines that threatens producers’ ability to address their top priority of resolving the market access issue and finding alternative export markets.”<sup>493</sup>

#### 4.1.4 UAE

Of the four countries reviewed, the UAE demonstrates that even a country with a small population and an abundance of natural resources has still struggled with some of the regulatory and legal problems outlined here, which briefly threatened the stability of the Emirates. The UAE has the 7th largest proven reserves of both crude oil and gas in the world, some 6.1 trillion cubic metres of gas and 97.8 billion barrels of oil.<sup>494</sup> As in all of the countries surveyed, these resources have been concentrated in one area but rather than this becoming a centrifugal force as provinces and regions clashed with the center over revenues and resource rights, the vast wealth of Abu Dhabi has for the most part cemented the UAE together. Over 85% of the Emirates’ resource wealth is in Abu Dhabi.<sup>495</sup> To a lesser extent, a separation of the regulator *The Supreme Petroleum Council* from the national oil company ADNOC, is also seen as a favourable comparison to Norway, although the extent to which this has eliminated conflict of interest is contested.

Only a minority of analysts present an alternative view, which will be examined here, suggesting that while the UAE has effectively regulated its industry and managed oil revenues, some problems have emerged which could yet cause difficulties in a persistent low price environment. Soto and Haouas contend that the UAE may not have escaped the resource curse.<sup>496</sup>

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<sup>493</sup> “Regulatory stability and policy certainty needed in oil and gas industry: PwC” *Business Vancouver* May 26th 2016. Accessed July 16th 2016.

<https://www.biv.com/article/2016/5/regulatory-stability-and-policy-certainty-needed-o/>

<sup>494</sup> U.S Energy Information Administration, “United Arab Emirates plans to increase crude oil and natural gas production”, Accessed July 16th 2016.

<http://www.eia.gov/todayinenergy/detail.cfm?id=23472>

<sup>495</sup> Gerald Butt, “Oil and Gas in the UAE,” from “United Arab Emirates: A new perspective,” Eds. Ibrahim al Abed, Peter Hellyer, (New York: Trident, 2001): 231-248

<sup>496</sup> Raimundo Soto, Ilam Haouas, “Has the UAE escaped the resource curse?” *Economic Research forum Working Paper 278* Economic Research Forum, 2012

First, it is worth examining the view that the UAE has been an exemplary federation in managing its oil boom. Aartun asserts that a key reason for the federation's remarkable political stability is a small population (only 1.2 million of the 9 million residents are indigenous Emiratis) meaning that even when oil prices fell in the 1980s, a generous "cradle to grave" welfare system<sup>497</sup> and substantial revenues (to the equivalent of \$65,000 per capita in 2014) (IMF)<sup>498</sup> ensured a level of dependency on Dubai (and later Abu Dhabi when Dubai exhausted its oil fields) as the "breadwinners" of the federation. Emirates without substantial resource wealth have also depended on Abu Dhabi for generous subsidies on health, education and fuel—a point which Peterson suggests has led Abu Dhabi to tighten its grip on the federation.<sup>499</sup>

Peterson therefore supports the theory that oil revenues have helped hold the UAE together, rather than being a source of ethnic, tribal or political violence. Peterson does however note that there were problems since some constituent states hoped that they would discover oil and gas and rival Abu Dhabi's power.<sup>500</sup>

This in turn exacerbated border disputes, in the case of Umm al Qaywayn and Sharjah, who disputed an offshore discovery in the late 1970s, and Sharjah and Dubai, who disputed ownership of an oasis, in 1972. In the latter case, a UAE force intervened after the dispute became violent, exemplifying the power of Abu Dhabi to resolve disputes, influence that Peterson suggests is underwritten by oil revenues.<sup>501</sup>

Furthermore, the UAE has enshrined ownership of mineral rights in its constitution, which also states that Emirates must make a contribution of revenues (from all sources) to the federal budget, which will be re-distributed to Emirates as needed. In reality this means that Abu Dhabi is the "breadwinner" for the country. Article 23 of the constitution notes, "The natural resources and wealth in each Emirate shall be considered the public property of that Emirate. Society shall be responsible for the protection and proper exploitation of such natural resources and wealth for the benefit of the national economy."<sup>502</sup>

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<sup>497</sup> Anne Louise Aartun, "The Political Economy of The United Arab Emirates," (Diss: University of Oslo, 2002)

<sup>498</sup> IMF, World Economic Outlook, 2014

<sup>499</sup> J Peterson, "The future of federalism in the United Arab Emirates," In *Crosscurrents in the Gulf: Arab Regional, and Global Interests* (London: Routledge, 1988) : 198- 230.

<sup>500</sup> Ibid.

<sup>501</sup> Ibid.

<sup>502</sup> Constitution of the United Arab Emirates, 2004.

#### **4.1.5 Political stability: Implications for Iraq**

All of the countries here offer different lessons for Iraq, although a detailed examination of why some have been more prone to conflict and endemic corruption than others is perhaps more suited to the analysis of political science.

However, since we cannot separate the political economy of oil and gas from political science, some lessons are nonetheless important. In the case of Nigeria, decentralisation and the need for an even distribution of oil revenues appears to be more important than the right of people to form regions, which does not seem to have lessened the chance of conflict or decreased corruption. In other words, provinces, particularly in the Niger Delta, have wanted far more say over oil and gas management. But when the government have created new regions, it has not solved problems of corruption and mismanagement. Problematically, constant changes to the “derivation system” of revenue sharing have been a source of argument. This is similar to the situation in Canada: both countries have a constitutional article on revenue sharing, but the method for distribution has been constantly altered, leading to a series of political rows. In Iraq, it is constitutionally fixed on a per capita basis, meaning that changes in the oil price will be reflected fairly in distribution of revenue. This seems more logical. The lesson here may be that, once ratified, constitutional articles must be followed strictly, otherwise political deals between the state and sub-state governments may face constant legal challenges. The UAE has avoided this problem by adhering to its constitution on energy matters.

In the case of the UAE, the concentration of oil and gas resources in one emirate has not been a challenge to peace and security, and has actually been a force for holding the federation together. But the potentially positive force of oil revenue in terms of increasing political stability is boosted by clear constitutional language outlining the rights of Emirates to control of oil and gas and their rights to resources.

Arguably, the idea of oil revenue helping federations “hold together” is interesting regarding Iraq, because although the UAE is far smaller, more homogenous and far richer than Iraq, the Kurdish Region of Iraq has not broken away despite numerous threats of unilateral independence, while Sunni majority Anbar has politically rejected

calls to form a region. In other words, it may be speculated that reasons for this include these areas having lesser oil and gas wealth than the south—as in the UAE, sub-states have a dependency on the centre. This is not in itself reason for the centre to simply transfer funds to regions and provinces and dispense with any administrative duty towards the populations there, because high oil prices, and oil itself, is not an endless certainty and in any case, southern oil needs the option of a northern export route for marketing options, due to the chance of conflict in the Persian Gulf.

In Russia, it is hard to separate political and financial stability. For example, the energy sector has been both a tool of political policy, in the case of cutting gas supplies to Ukraine, and also a target of foreign policy action, as in the case of energy sector sanctions which have damaged much needed investment in ageing fields. This offers no lesson for oil and gas management, except that strong political control is in itself a risk. Furthermore, political control over the domestic use of energy in terms of subsidies has been damaging, and distorted the role of Gazprom, which has fallen victim to state corruption and the economic inefficiency associated with generous subsidies.

As in Nigeria and Iraq, the general population, and those on low incomes, pay the price for this, as funds are spent on meeting domestic seasonal demand, at greatly reduced prices, cutting into the state's investment budget which could be used on (for example) higher education to help diversify the economy away from oil. Unlike the foreign policy dimension of oil and gas, this does offer a lesson, which will be elaborated on in the concluding chapters: ideally, ministries must closely coordinate through one technocratic body, to provide checks and balances on how oil, gas and refined fuels can be used domestically. If done correctly, this should be a factor in reducing political risk in Iraq.

## **4.2 Financial Stability**

Of the countries surveyed, the UAE and Canada are best placed to weather sustained low oil prices, because in the case of Canada oil accounts for 7% of GDP and was as low as 3% by 2015)<sup>503</sup> while in the case of the UAE, a sovereign wealth fund has been amassed worth over \$792 billion for a population equivalent a medium sized city,

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<sup>503</sup> The Economist, "Canada's Economy: Beyond petroleum." January 31st 2015, accessed July 16th 2016. <http://www.economist.com/news/americas/21641288-growth-shifting-oil-producing-west-back-traditional-economic-heartland>

equating to \$840,000 per capita.<sup>504</sup> However, the price collapse of late 2014 shows how even Russia, with a GDP in 2014 of \$1860 billion, has been severely affected by the price collapse.<sup>505</sup> For Nigeria and Iraq therefore, the consequences have been extremely severe. With 90% of government revenue coming from oil revenues Iraq's budget is highly vulnerable both to the risk of sabotage of oil production and also to fluctuations in the world market price of oil.

#### 4.2.1 Russia

Ovcharova notes how Russian conventional production is in a period of decline, and according to the 2009 *Russian Energy Strategy to 2030* national policy document, \$600 billion of investment will be needed to reach a production goal over 11 million BPD.<sup>506</sup> This need for more investment will likely re-orientate what has been a journey in Russia from strong state control under the Soviet period, accompanied by high oil production, to rapid and somewhat chaotic privatisation after 1991. Yeltsin's rapid privatization drive was followed by the restoration of a degree of state control under Putin, although attempts to attract more IOC investment to develop new fields and maintain output in mature fields will require the end of sanctions, imposed in 2014. The state's reliance on oil revenues has jeopardised the work of National Oil Companies to carry out vital energy projects, with one think tank predicting as much as 3 million bpd of Russian production could be lost by 2025 due to a combination of sanctions and low oil prices.<sup>507</sup> However, in terms of creating sustainable investment policies for the energy sector, commentators differ on what approaches would have been best for the people of Russia.

According to Joseph Stiglitz, The Yeltsin era of rapid privatisation of the energy sector was seen as particularly damaging. Stiglitz notes that the state lost control of the only hard currency revenue stream available, leading to "fiscal destabilization."<sup>508</sup> It was the policy of rapid privatization, according to Stiglitz, that reinforced public opposition to private sector involvement in energy during the Yeltsin era. Bohme contrasts the Yeltsin

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<sup>504</sup> Sovereign Wealth Fund Institute, "Abu Dhabi Investment Authority" Accessed July 16th 2016. <http://www.swfinstitute.org/swfs/abu-dhabi-investment-authority/>

<sup>505</sup> Trading Economics. Russia GDP 1989-2015. Accessed 16th July 2016. <http://www.tradingeconomics.com/russia/gdp>

<sup>506</sup> Anna Ovcharova, "Russia" *Upstream Law and Regulation*, (London: Globe Business Publishing, 2013), 409

<sup>507</sup> <https://www.ft.com/content/fc354a6a-5dcb-11e4-b7a2-00144feabdc0>

<sup>508</sup> Dimo Böhme, "EU-Russia Energy Relations: What Chance for Solutions? : A Focus on the natural gas sector," (Diss, University of Potsdam, 2011):163

and Putin eras, praising Putin's reforms as helping lead to a rapid and sustained growth in GDP, in marked contrast to Hahn, who argues that the energy sector driven growth is evidence of the resource curse. Following the oil price collapse of late 2014, Hahn may be correct, as Russia's economy has gone into sustained decline and will need to attract immense foreign investment to sustain output in difficult conditions. This may not however, significantly affect political stability in Russia, since Putin continues to enjoy high approval ratings.<sup>509</sup>

Zubarevich notes how some of this high approval may stem from using oil and gas wealth to increase social spending, particularly under the Presidency of Medvedev, however this was curtailed under Vladimir Putin. Zubarevich notes,

“Due to fear of social instability, the federal government increased financial transfers to the regions by one third in 2009. The federal share of the regional budgets increased from 19 to 27 percent. However, rather than strategically targeting those regions who were most affected by the crisis, additional transfers were evenly spread across the country. Moreover, most of the money was distributed in a non-transparent way, thus further strengthening Moscow's ‘manual control’ (ручное управление) over the regions during Medvedev's presidency.”<sup>510</sup>

Another significant financial pressure on Russia has come in the form of fuel and electricity subsidies, which have long been a contentious issue and were opposed by Alexei Miller, who as head of Gazprom in 2000, wanted to cut subsidies and increase profits, according to Robert Ortung. Ortung notes how,

“Gazprom cannot be understood in “strictly conventional economic terms” since the Russian government uses the company's vast resources to subsidize the energy needs of Russian households and factories.”<sup>511</sup>

The IEA estimated that Russian energy subsidies cost the country over \$30 billion in 2009, since Moscow had decided upon a policy of selling gas and electricity at prices well below international prices. Subsidies in 2009 were estimated to cost \$19 billion for

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<sup>509</sup> The Economist, “Vladimir Putin's unshakeable popularity,” February 4th 2016. Accessed July 16th 2016. <http://www.economist.com/blogs/graphicdetail/2016/02/daily-chart-4>

<sup>510</sup> Natalia Zubarevich, “Russian elections and relations between the centre and the regions,” from *“Russia: Insights from a Changing Country,”* (Institute for Security Studies, 2012) :23

<sup>511</sup> Robert Ortung, “A limited toolbox: Explaining the constraints on Russia's foreign energy policy,” *Journal of Eurasian Studies*, 2, 1. (2011.) 74-85.

gas and \$15 billion for electricity, which according to Laan equated to \$238 per capita. Laan also notes that people were paying 77% of market prices.<sup>512</sup>

Russian officials have defended the subsidies, noting that they are necessary for areas where winter temperatures fall well below zero, however Cohen writes,

“Russian officials are also quick to point out that cheap energy is essential to the survival of millions living in the far north and Siberia. One problem is that these subsidies are also extended to a range of companies in a particularly non-transparent fashion, and Russia's trade partners see this as constituting a hidden subsidy. This has become a critical sticking point in Russia's negotiations for WTO accession. These subsidies, moreover, do little to encourage conservation and have real costs in terms of foregone foreign exchange earnings.”<sup>513</sup>

Related to this waste, Laan points out a number of problems, while noting that Russia raised gas prices in 2014 to the rate charged to European buyers, while electricity prices were raised in 2011.

However, Laan notes that if subsidies had been completely removed, tens of billions of dollars that are saved could be better spent, “through the tax system, social payments, cash transfers, or increased social spending.” In addition to this, Lahn highlights that 30% of subsidies go to SOEs, therefore this still represents a large outlay, and that Russia is catching up on new investment in infrastructure due to the artificially low prices for so many years, which reduced investment.<sup>514</sup>

Despite reducing social spending overall following the 2008 oil price collapse, Vladimir Putin appears to have targeted spending on key projects in certain regions, such as the Sochi Winter Olympic Games, however as of 2016 it is unclear how sustainable large transfers to the regions will remain, given that the Russian Sovereign Wealth Fund, the “Reserve Fund” was expected to deplete by more than half, projected to lost over \$40 billion through 2016.<sup>515</sup>

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<sup>512</sup> Tara Laan “The High cost of Cheap Energy,” *International Centre for Trade and Sustainable Development*. 11<sup>th</sup> July 2011. Accessed July 16<sup>th</sup> 2016. <http://www.ictsd.org/bridges-news/biores/news/opinion-the-high-cost-of-cheap-energy-russia%E2%80%99s-fossil-fuel-subsidies>

<sup>513</sup> Harry Cohen, “The Russian Economy Under Vladimir Putin,” Report for NATO Parliamentary Assembly, 2003. Accessed July 16<sup>th</sup> 2003. <http://www.nato-pa.int/default.asp?SHORTCUT=361>

<sup>514</sup> Laan, *ibid* 465.

<sup>515</sup> Sue Chang, “Weak oil prices deplete Russia's sovereign-wealth fund,” *Marketwatch*” October 27th 2015. Accessed July 16th 2016. <http://www.marketwatch.com/story/weak-oil-prices-deplete-russias-sovereign-wealth-fund-2015-10-27>

This has resulted in a financial crisis for Russia and undermines the Russian government's attempts to save oil revenue in sovereign wealth funds, which had previously been relatively successful. Aslund examines Russian international reserves, looking at the different components of Russia's financial safety net, including gold. He notes the declared aim of the Wealth Fund, which,

“is a part of federal budget assets. NWF is dedicated to support [the] pension system of the Russian Federation to guarantee long-term sound functioning of the system. [The] Fund's primary assignments are to cofinance voluntary pension savings of Russian citizens and to balance [the] budget of Pension Fund of the Russian Federation.”<sup>516</sup>

Aslund also notes that much of these funds are committed to investment in infrastructure, including Rosneft's planned purchase of \$49 billion worth of assets of TNK-BP which Aslund describes as “wasteful,” although the money was never transferred. Aslund notes the mission statement of the reserve fund, while writing that much of the fund is deposited in state banks and difficult to withdraw in an emergency.<sup>517</sup>

“The Reserve Fund is a part of the federal budget assets. The Reserve Fund is dedicated to ensure financing of the federal budget expenses and maintaining federal budget balance in case oil and gas budget revenues decline.”<sup>518</sup>

Despite this, during the financial crisis of 2008-2009, withdrawals from the Reserve Fund increased, although the Welfare Fund managed to increase in value, reaching \$83 billion in 2014.<sup>519</sup>

However, one of the fiscal problems Russia has experienced, as with Iraq and Nigeria, is an optimistic outlook on oil prices. Under relatively high global prices, Russia enacted a “budget rule” in 2013, intended to amass greater sovereign wealth, which assumed long term average \$80 oil prices. This rule was abandoned in 2015, as Russia planned a 2016 budget based on an average price of \$50 oil, which was still too

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<sup>516</sup> Anders Aslund, “Are Russia's reserves running dangerously low?” Peterson Institute for International Economics. November 20<sup>th</sup> 2014. Accessed July 16<sup>th</sup> 2016. <https://piie.com/blogs/realtime-economic-issues-watch/are-russias-usable-reserves-running-dangerously-low>

<sup>517</sup> Ibid.

<sup>518</sup> Ibid, Aslund.

<sup>519</sup> Carol Matlack “Russia Set Aside \$83 Billion for Pensioners. Putin Is Using It to Aid Russia Inc.” *Bloomberg*. 9.10.2014. Accessed July 16<sup>th</sup> 2016. <http://www.bloomberg.com/news/articles/2014-10-08/russia-dips-into-its-pension-fund>

optimistic, since prices have averaged under \$45.<sup>520</sup> Russia's international reserves had shrunk by one fifth in the year ending December 2014.<sup>521</sup>

Aslund suggests Russia was heading for financial crisis in late 2014 since the measure of minimum reserves is usually the sum amounting to 3 months' worth of imports, which would have totalled \$85 billion in 2013, therefore he calculates that by late 2015, unless there was a sudden rise in the oil price or an end to foreign sanctions, Russia would have over \$90 billion left of reserves, enough for four months of imports.<sup>522</sup> The reality was more serious however, as by October 2015, the fund had fallen to over \$70 billion.<sup>523</sup>

#### 4.2.2 Canada

Canadian provinces, with a high level of autonomy over resource wealth, enshrined by the constitution, have had less success than Russia in building SWFs, and Canada has also experienced a number of disputes between provinces and the centre over oil revenues. Despite having a formula to "equalize" payments into the federal coffers and transfers back to provinces, Canada has not escaped the effects of price volatility, but challenges are more geological than political. Much of the country's reserves are found in the "tar sands" (also called Athabasca sands) and as such, estimates of their recoverability vary significantly, due to logistical challenges, environmental constraints and price volatility.<sup>524</sup> As such, they have relied on high oil prices to be profitable. This has led some observers to characterise this unconventional oil boom as a "gold rush"<sup>525</sup> while others have framed it in more cautious terms as a potential "resource curse."<sup>526</sup>

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<sup>520</sup> Olga Tanas "Withering Reserve Buffer Forces Russia to Waive Key Budget Rule." *Bloomberg*. 9.9.2015. Accessed July 16<sup>th</sup> 2016.

<http://www.bloomberg.com/news/articles/2015-09-09/withering-reserve-buffer-forces-russia-to-waive-key-budget-rule>

<sup>521</sup> "Olga Tanas, Russia May Burn Wealth Funds in 3 Years Without Cuts." *Bloomberg*. 26<sup>th</sup> December 2014. Accessed July 16<sup>th</sup> 2016.

<http://www.bloomberg.com/news/articles/2014-12-26/russia-may-burn-wealth-funds-in-3-years-without-budget-revision>

<sup>522</sup> Anders Aslund, "Are Russia's reserves running dangerously low?" Peterson Institute for International Economics. November 20<sup>th</sup> 2014. Accessed July 16<sup>th</sup> 2016. <https://piee.com/blogs/realtime-economic-issues-watch/are-russias-usable-reserves-running-dangerously-low>

<sup>523</sup> Holly Ellyatt "Russia's Reserve Fund could run empty in 2016." *CNBC*. October 27<sup>th</sup> 2015. Accessed July 16<sup>th</sup> 2016. <http://www.cnbc.com/2015/10/27/russias-reserve-fund-could-run-empty-in-2016.html>

<sup>524</sup> Dan Woynillowicz, Chris Severson-Baker, "The Environmental Implications of Canada's Oil Sands Rush," (Alberta: The Pembina Institute, 2005): 4

<sup>525</sup> *Ibid.*

<sup>526</sup> Angela V. Carter "Cursed by Oil? Institutions and Environmental Impacts in Alberta's Tar Sands." (Diss: Cornell University, 2007.)

Currently, tar sands production is facing extreme financial pressure in the post June 2014 low price environment (IEEFA, 2014.)<sup>527</sup> This is of significant concern for Alberta, a province which holds some 168 billion barrels of proven reserves in tar sands<sup>528</sup> or 95% of Canada's oil sands reserves.<sup>529</sup> As noted, oil and gas revenues account for around 3% of Canada's GDP, as of 2015.

Therefore, while low oil prices have been a serious development for Alberta, where the majority of Canadian oil and gas extraction is based, the country as a whole has managed to endure sustained low prices with little political instability. Despite this, some provinces have examined the failure to build large sovereign wealth funds which may have provided emergency finance following the price collapse, or potentially funded economic diversification.

In 2013, a report by the University of Saskatchewan suggested that the province should launch its own SWF, following on from a failed attempt in the 1970s. The Saskatchewan Heritage Fund (SHF) was launched in 1978 but abandoned in 1992. The report underlines the importance of a futures fund having permanence, rather than being a "rainy day fund" or a fund for financing projects when capital is not available.<sup>530</sup>

The report outlines the importance of the SHF, which aimed to

"1) protect and preserve resource revenues for future generations, 2) provide greater fiscal stability year to year by stabilizing the flow of resource revenues into the government's general revenues fund, 3) enhance legislative control over non-renewable resource revenue by making fund investments and expenditures subject to approval by the legislative assembly."

Originally, the Fund was to take in 100% of resource revenues, including taxes and royalties on non-renewable resources, as well as revenue from investments made by the fund.

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<sup>527</sup> Tom Sanzillo, Lorne Stockman, Deborah Rogers, Hannah McKinnon, Elizabeth Bast, and Steve Kretzmann, "Material Risks: How public accountability is slowing tar sands development," Institute for Energy Economics and Financial Analysis (IEEFA) 2014.

<sup>528</sup> Alberta Government information on Oil Sands, January 2014. Accessed July 16th 2016. <http://www.energy.alberta.ca/OilSands/pdfs/AlbertasOilSandsFactsJan14.pdf>

<sup>529</sup> Nicola Armaroli, Vincenzo Balzani, "Powering Planet Earth: Energy Solutions for the Future," Weinheim, Wiley VCH, 2013)

<sup>530</sup> Peter Mackinnon, "A Futures Fund for Saskatchewan: A Report to Premier Brad Wall on the Saskatchewan Heritage Initiative." Local government report, 2013. Accessed July 16<sup>th</sup> 2016. Available here: <http://www.gov.sk.ca/adx/asp/adxGetMedia.aspx?mediaId=2db41e74-30f1-4397-bf4f-fa051bc6182e&PN=Shared>

However, the report notes that controls on fund withdrawals were “informal” and by the late 70s’ and early 80s, much of the fund money was allocated to Crown Corporation loans. Expenditure gradually overtook replenishment of the fund, until its abolishment in 1992. (Crown Corporations are Canadian public bodies with a high level of autonomy from the government, designed to invest in public services, energy and infrastructure for the public good, where private finance is not available.)

Prior to the establishment of the SHF, Alberta established its “Heritage Fund” in 1976, which had broader goals of financial savings and improving the quality of life for Albertans. The fund was initially to source 30% of resource revenues from the province, which was later reduced to 15%, with the rest coming from other provincial government revenue. In 1987, Alberta Premier Don Getty halted transfers into the fund.<sup>531</sup>

A study later found that from 1977 to 2004, only 8.6% of funds put into the AHF were actually saved, with the rest being spent on projects or used to pay off provincial debt.<sup>532</sup> Funds passing through the account in the same period totalled \$122.9 billion.<sup>533</sup>

In 2012, Conservative Provincial political party the Wildrose Party made it their election campaign pledge to rebuild the fund by adding 50% of every budget surplus to the account.<sup>534</sup> By 2015, the fund was valued at over \$15 billion, generating around \$1.5 billion per year, although much of the investment revenue was taken as government revenue, saving only \$200 million per year.<sup>535</sup>

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<sup>531</sup> Justin Giovanetti, “What happened to Alberta’s cash stash: The life and death of the province’s rainy-day fund?” *The Globe and Mail*. April 30<sup>th</sup> 2016. Accessed July 16<sup>th</sup> 2016. <http://www.theglobeandmail.com/news/alberta/what-happened-to-albertas-cash-stash/article24191018/>

<sup>532</sup> Robert Smith, “Dipping into Heritage Fund has cost Alberta financial security.” *Edmonton Journal*, May 14<sup>th</sup> 2016. Accessed July 16<sup>th</sup> 2016. <http://edmontonjournal.com/opinion/columnists/roger-s-smith-dipping-into-heritage-fund-has-cost-alberta-financial-security>

<sup>533</sup> Ibid.

<sup>534</sup> Wildrose political party website. “Rebuild Heritage Fund now: Anderson.” June 20<sup>th</sup> 2012. Accessed July 16<sup>th</sup> 2016. [http://www.wildrose.ca/rebuild\\_heritage\\_fund\\_now\\_anderson](http://www.wildrose.ca/rebuild_heritage_fund_now_anderson)

<sup>535</sup> Jeff Lewis, “Heritage Savings Trust Fund returns for its Alberta election cameo.” *The Globe and Mail*. April 17<sup>th</sup> 2015, accessed July 16<sup>th</sup> 2016. <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/heritage-savings-trust-fund-returns-for-its-alberta-election-cameo/article24014600/>

### 4.2.3 Nigeria

Of the four countries covered here, Nigeria has been most affected by oil price volatility. In 2013, Nigeria relied on oil for 90% of export revenues and 70% government income, or 10% of GDP.<sup>536</sup> According to PWC, Nigeria has been in a vicious circle where mismanagement of revenues has slowed economic growth, increasing political violence and reliance on fuel subsidies, with the subsequent effect of lessening output at a time when the country needs to export to secure market share.<sup>537</sup> As with Iraq and Russia, Nigeria has been forced to draw down limited currency reserves as revenues collapsed, with a budgetary break even price over \$120 per barrel in November 2015.<sup>538</sup> This Central Bank policy, perhaps executed with no other option, has been highly problematic with currency reserves dropping to just \$20 billion by mid-2016 from \$43 billion two years previously.<sup>539</sup> The effect of this has been currency devaluation and further predictions of recession. Feeding into a vicious cycle, this will hamper any government attempt to increase revenue allocations for the unstable Niger Delta. As mentioned, this area has seen continued insurgency, which by 2016 succeeded in destroying pipeline infrastructure and pushing exports to 20 year lows, with a new insurgent group, the Niger Delta Avengers saying that one of the reasons they are attacking oil infrastructure is for a greater share of revenues.<sup>540</sup> A sovereign wealth fund with strong legal restrictions on withdrawals, well managed revenue disbursement and policies that may have strengthened human capacity in government bureaucracy may have mitigated the crisis situation that has developed in Nigeria, but the creation of an SWF only occurred in 2014 and the first deposit into the fund did not happen until 2015.<sup>541</sup>

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<sup>536</sup> Daniel Magnowski, "Nigerian Economic Growth Slows on Oil Industry's Contraction," *Bloomberg*, May 13, 2015. Accessed July 16th 2016. <http://www.bloomberg.com/news/articles/2015-05-13/nigeria-1q-gdp-grows-3-96-y-y-natl-bureau-of-statistics-says>

<sup>537</sup> PwC report, "The perils and blessings of low cost oil for growth markets," February 2015. Accessed July 16th 2016. <https://www.pwc.com/gx/en/growth-markets-centre/publications/assets/low-cost-oil-for-growth-markets.pdf>

<sup>538</sup> Angelina Rascoet, "Oil states need price jump to balance budget" *Bloomberg* 30th of November 2015. Accessed 16th July 2016. <http://www.bloomberg.com/news/articles/2015-11-30/oil-states-need-price-jump-to-balance-budget-opeac-reality-check>

<sup>539</sup> Gbenga Akingbule, "Nigeria Central Bank Drops Foreign Exchange Peg," *The Wall Street Journal*, June 15th 2016. Accessed July 16th 2016. <http://www.wsj.com/articles/nigeria-central-bank-drops-foreign-exchange-peg-1466004204>

<sup>540</sup> Nick Cunningham, "Wave of Violence Causes Nigerian Oil Output to Fall to 20 Year low," *Oilprice .com* 10th of May 2016. Accessed July 16th 2016. <http://oilprice.com/Energy/Energy-General/Wave-Of-Violence-Causes-Nigerian-Oil-Output-To-Fall-To-20-Year-Lows.html>

<sup>541</sup> Felix Onuah, "Nigeria makes first 2015 contribution to sovereign wealth fund" *Reuters*, Nov 19th, 2015, Accessed July 16th 2016. <http://www.reuters.com/article/nigeria-economy-idUSL8N13E5AB20151119>

#### 4.2.4 UAE

In contrast to the three other countries, the UAE have set an exemplary standard with their use of oil revenues. High oil revenues have been used to promote rapid development from a very low base, for example high illiteracy during the early 1970s led to a situation where, according to Gray the Emirates “instituted deliberate, meticulous strategies of economic diversification and development” that included significant investment in education and new business opportunities. Speaking of Gulf States in general, Gray notes, “It would be crude to describe SWFs as state retirement funds, but they do at least in some measure act as such.”<sup>542</sup>

Haouas and Soto disagree somewhat regarding investment in education but nonetheless contend that the UAE has followed a number of Norway’s critical strategies for escaping the resource curse, namely wage controls, the sovereign wealth fund and strategic protection of key industry until it is ready to compete globally. It would seem logical therefore, that inter-state tensions within the federation could be exacerbated to critical levels in the advent of price collapses, but the sheer size of the sovereign wealth fund, as high as \$875 bn, has mitigated this problem as of 2016 (Sovereign Wealth Fund Institute, 2014.)<sup>543</sup>

#### 4.2.5 Financial stability: Implications for Iraq

If sanctions and low oil prices continue in Russia, there is speculation that the country may see a decline in production measured in the millions of barrels up to 2030, and if the state had not had to rely heavily on drawing down sovereign reserves, the funds may have been available to boost investment required to maintain state-run production. This lack of funds is a result of dependency on revenues, but also a result of the inefficiency of generous fuel subsidies, as described. As with Nigeria, Russia has also shown a record of over estimating the oil price, at one point setting an \$80 long term average estimate. This is undoubtedly very unhelpful for economic planning and serves as another warning to Iraq to not repeat past behaviour, and instead perhaps to assume lower average prices as a rule.

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<sup>542</sup> Matthew Gray, A Theory of “Late Rentierism” in the Arab States of the Gulf” *Occasional Paper No. 7* (Georgetown, 2011.)

<sup>543</sup> Sovereign Wealth Fund Institute, 2014 <http://www.swfinstitute.org/fund-rankings/>

In contrast, the UAE seemingly serves as a strong model for Iraq, until the emirates' very small population is considered. Evidently, the UAE have been fortunate to have a tightly controlled political system which strongly considered the interests of its people and where possible, invested funds to diversify the economy and put funds aside for the nearly \$800 billion SWF. Iraq's experience with authoritarian governance however, and the size of Iraq, suggests this is far from a good option.

Russia, being considerably larger than Iraq, is an interesting case since the country managed to amass significant sums across three funds, only to see these rapidly deplete during the oil price collapse, in part due to the large population of the country. Canada and Nigeria, as mentioned, created but failed to sustain SWFs. The lesson here for Iraq is a difficult one to assess, since few countries have had success with SWFs. This perhaps places more importance on efficiency (better planning) in the petroleum value chain, a strong focus of the UAE and a critically weak point in Russian and Nigerian energy strategy. This is not to say that Iraq should avoid replenishing currency reserves—Russia shows how the funds have been a vital buffer under low prices, but in the absence of a diversified economy, they will only last so long.

### **4.3 Legal framework**

#### **4.3.1 Nigeria**

One of the problems Nigeria has experienced is the lack of a strong legal system that can prevent regulatory capture, despite an early effort to separate regulator and regulated bodies. During the 1960s, a period of rapid expansion in the Nigerian energy sector, the main organization with oversight of hydrocarbons was the Ministry of Mines and Power.<sup>544</sup> By 1970, exploration and licensing had expanded to the extent that a new organization was called for, and personnel were taken from the MMP to form the Department of Petroleum Resources.<sup>545</sup>

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<sup>544</sup> Wumi Iledare, Rotimi Suberu, "Nigeria" from *"Oil and gas in federal systems,"* ed. George Anderson (Oxford: Oxford University Press, 2012)

<sup>545</sup> *Ibid.*

The following year, Nigeria joined OPEC, and the organization stipulated that all members must have a national oil company to have greater control over the hydrocarbon sector and therefore be more responsive to OPEC policy. The Nigerian National Oil Company was subsequently formed, to manage crude oil marketing, facilities construction and exploration—an increasingly important task now that, due to another OPEC directive, member governments were to acquire 35% equity participation in IOC activity. In 1977 NNOC was replaced with the Nigerian National Petroleum Company, tasked with representing the interests of the federal govt. Since the beginning of significant IOC activity in Nigeria in the late 1950s, the govt's role had been purely regulatory, overseeing price controls on refined product for the domestic market, collecting fees from exploration licenses and leases, taxes and royalty payments.<sup>546</sup>

According to Thurber and Nwokeji, Nigeria pioneered the separation of regulator and NOC, one year before Norway's pioneering "Ten Oil Commandments" White Paper with the separation of NNOC and DPR, but this did not prevent opportunities for corruption. Quoting Gillies Iledare and Suberu note how, until 1988, the DPR had existed as "a unit inside the NNPC" which was "an untenable situation" in terms of undue influence.<sup>547</sup>

Political influence in the energy sector has at times involved the president, as Iledare and Suberu note, the role has overriding authority over hydrocarbon activity, a more negative influence during the country's periods of military dictatorship. Nwokeji highlights how a loyalist to the military dictator, President Yakubu Gowon was appointed to head NNOC, Phillip Asiodu, who had no oil experience and was able to overrule regulatory decisions by the DPR, and technical advice from NNOC staff, in collusion with the Ministry of Mines and Power. This nullified any benefits of a separated system similar to Norway, as Victor, Holts and Thurber note,<sup>548</sup>

"while DPR is the formal regulatory body, NNPC often plays the role of de facto regulator through its interactions with IOCs. Conflicts of interest are inevitable. For example, NNPC both regulates local content and in theory can supply it.

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<sup>546</sup> Ugo Nwokeji "The Nigerian National Petroleum Corporation and the Development of the Nigerian Oil and Gas Industry," James A Baker III Institute for Public Policy, Rice University (2007.)

<sup>547</sup> Wumi Iledare, Rotimi Suberu, "Nigeria" from *"Oil and gas in federal systems,"* ed. George Anderson (Oxford: Oxford University Press, 2012)

<sup>548</sup> David G. Victor, David R. Hults, Mark C. Thurber, "Oil and Governance: State-Owned Enterprises and the World Energy Supply," (Cambridge: Cambridge University Press, 2012), 716

Also, NNPC is responsible for cost regulation in the joint ventures while simultaneously serving as the majority partner in these ventures.”<sup>549</sup>

Currently, the way the Nigerian system is organized still encourages mismanagement because the Department of Petroleum Resources and Ministry of Oil are closely politically linked and controlled by the government. Agboade and Abebe explain how under the Petroleum Act, the Federal Govt. has the ownership of petroleum resources in Nigeria, and under the act, all activities ranging from exploration to production and distribution of crude oil and natural gas may only be done with the consent of Minister of Petroleum Resources, via the Dept. of Petroleum Resources.

The DPR issues licenses and permits. According to Agboade and Abebe, the act also vests in the Minister regulatory powers deemed “necessary” for these functions. Nonetheless, there has been an ongoing attempt in Nigeria to create a strong legal framework for the industry. Iledare and Suberu note that it was not until 2007 that Nigeria attempted to formulate a long-term energy policy, due in large part to political instability under the previous military dictatorships. However, the Obasanjo administration set in motion a reorganization of the energy sector, following the recommendations of Nigeria’s first Nigerian Extraction Industry Transparency Initiative (NEITI) report, in 2006.<sup>550</sup>

Attempting to enforce transparency, Nigeria has also struggled against corruption. Such a strategy, while vital, may ultimately save less than a comprehensive law on petroleum (which as noted has stalled in parliament) and has cost the country tens of billions in lost investment and caused the near collapse of NNPC through politicised mismanagement. The new law is supposed to partly privatise the NOC and introduce a new Nigeria Petroleum Regulatory Commission (NPRC) to oversee license bid rounds and fuel prices. The NPRC would have an investigation unit with the power to make arrests, an improvement on the current situation where multiple bodies have an ill defined regulatory function, leading to conflicts of interest and regulatory power within the NNPC.<sup>551</sup>

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<sup>549</sup> Ibid.

<sup>550</sup> Wumi Iledare, Rotimi Suberu, “Nigeria” from *“Oil and gas in federal systems,”* ed. George Anderson (Oxford: Oxford University Press, 2012)

<sup>551</sup> Julia Payne, “Stalled Nigerian oil law broken up, new draft splits state giant,” *Reuters*. May 25th 2015. Accessed July 16th 2016.

<http://www.reuters.com/article/us-nigeria-oil-lawmaking-idUSKBN0TQ27R20151207>

Re-organization would see the passing of a Petroleum Industry Bill which would allow for the creation of a new organization, the National Petroleum Directorate, which would come into existence in the place of the Ministry of Petroleum Resources.<sup>552</sup> Three new regulators, the Nigerian Petroleum Inspectorate, the National Midstream Regulatory Agency, and the Petroleum Products Regulatory Authority, would come into existence, in addition to a new and completely re-structured NOC.<sup>553</sup>

Due to political disputes over the Petroleum Industry Bill, as of 2016 it has not yet passed into law.<sup>554</sup> Despite this disappointment for the NEITI, Iledare and Suberu describe a slow but consistent success of Nigerian administrations from the 1980s onwards, namely the use of incentives and fines to reduce gas flaring, from 100% in 1970, to 90% in 1980, to 77% in 1990, to 50% in 2000 and 26% in 2008.<sup>555</sup> These figures are disputable however, since the World Bank noted Nigeria was still flaring 13 bcm a year in 2012, the second biggest flarer in the world.<sup>556</sup>

#### 4.3.2 UAE

As already highlighted, each Emirate has jurisdiction of natural resources within its boundaries, although the Supreme Petroleum Council regulates oil and gas law across the Emirates. Main Garcia highlights how contracts are awarded to state owned oil companies by way of concession, and IOC participation is limited to minority ownership interests in the state company. The state companies grant Technical Service Contracts to their IOC partners.<sup>557</sup>

These concessions convey the right to explore, develop and produce petroleum; however there is no comprehensive law governing exploration and development concessions, but rather a series of laws, such as the Abu Dhabi Petroleum Resources Conservation Law and the Abu Dhabi Petroleum Ports Law.<sup>558</sup> This suggests that,

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<sup>552</sup> Nigeria Extraction Industries Transparency Initiative, "NEITI and the Petroleum Industries Bill," accessed July 16th 2016. <http://neiti.org.ng/index.php?q=publications/neiti-and-petroleum-industry-bill>

<sup>553</sup> Petroleum Industries Bill Consultative Forum, "An overview of the Petroleum Industries Bill," July 2009, accessed July 16th 2016. <http://www.nnpcgroup.com/portals/0/pdf/pibconsultativeforum.pdf>

<sup>554</sup> Samuel Ogundipe "Buhari govt 'dragging feet' on Petroleum Industry Bill—Dogara," *Premium Times*, July 19th, 2016 Accessed July 25th 2016. <http://www.premiumtimesng.com/news/top-news/207154-buhari-govt-dragging-feet-petroleum-industry-bill-dogara.html>

<sup>555</sup> Ibid Iledare and Suberu.

<sup>556</sup> The World Bank, "Time to end routine gas flaring." July 7th 2014, Accessed July 16th 2016. <http://www.worldbank.org/en/news/feature/2014/07/15/gas-flaring-reduction-takes-center-stage-at-global-event>

<sup>557</sup> Mhairi Main Garcia, "UAE," from "The International comparative legal guide to oil and gas regulation." (London: Global Legal Group, 2013.)

<sup>558</sup> Ibid.

provided all sub-state entities respect legislation, having hydrocarbon law in a single document may not be essential, however, as noted, the UAE is much smaller and ethnically homogenous, compared to Iraq.

Within Abu Dhabi, ADNOC manages upstream, midstream and downstream oil and gas operations on behalf of the government of Abu Dhabi. Article 4 of the Abu Dhabi Gas Ownership Law affords ADNOC the right to exploit and use all gas discovered or to be discovered within Abu Dhabi and to claim all rights derived from agreements concluded by the govt. of Abu Dhabi, which are related to gas discovered or produced, or the facilities of production and extraction of gas. ADNOC reports directly to the SPC.<sup>559</sup>

In Sharjah, the Sharjah Petroleum Council is responsible for regulating policy regarding the development of oil and natural gas in that emirate. The council also submits recommendations to the ruler for concessions and concluding such agreements, and represents the Sharjah govt. in companies which participate in oil and gas investments.

The Federal Ministry of Energy's influence is limited by the constitutional powers of the Emirates, although a Federal Ministry of Environment and Water has oversight on those issues, in conjunction with environmental departments in the emirates, and has some power over approving oil and gas projects, to enforce the Federal Environment Law. This illustrates a functioning collaborative approach that the Iraqi constitution aimed for, which did not work in practice. Again, a likely reason for this success is the UAE's small size and ethno-sectarian homogeneity when compared to Iraq.

### **4.3.3 Russia**

The structure of the Federal Executive Bodies in charge of the Oil and Gas sector was created by the Presidential Decree 724 on Question of the System and Structure of the Federal Executive Bodies, in May 2008. The main regulatory bodies influencing oil and gas contracts are:

- The Ministry of Natural Resources and Ecology of the Russian Federation.
- The Federal Agency for Subsoil use (Rosnedra),

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<sup>559</sup> Ibid.

- The Federal Supervisory natural Resource Management Service (Rosprirodnadzor)

According to Ovcharova the Ministry of Natural Resources and Ecology of the Russian Federation has control over Rosnedra and Rosprirodnadzor.<sup>560</sup> It also supervises and controls The Federal Forestry Agency and the Federal Water Resources Agency. The Ministry has federal executive authority with responsibilities for public policy making and industry regulation, with priorities for renewal and conservation of natural resources of forests, bodies of water, fauna and many other duties to ensure environmental continuity.<sup>561</sup>

Specific to hydrocarbons, the Ministry of Natural Resources is responsible for monitoring pollution, policy making, implementation, and statutory regulation, encompassing issues relating to production and consumption and waste management.<sup>562</sup>

Kesselman, Krieger and Joseph note how until 2000, there was a separate organization for environmental oversight, the State Committee for Environmental Protection, which was abolished with the creation of the MNR. They suggest that the abolishment of a dedicated environmental regulatory body is indicative of a low level of concern for the environment in Russia.<sup>563</sup>

Rosnedra, reporting to the Ministry of Natural Resources, manages federal property in the context of petroleum extraction. It is the acting owner of federal lands and works as the main body guiding the tender process for concession licenses and awarding PSA's through committee decisions in accordance to the procedure laid down by law. Socor notes how Rosnedra recently warned Hungarian—Russian joint enterprise ZMB, who were operating in Khansi-Mansi, to capture rather than flare or re-inject associated gas.<sup>564</sup>

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<sup>560</sup> Anna Ovcharova, "Russia" *Upstream Law and Regulation*, (London: Globe Business Publishing, 2013), 409

<sup>561</sup> Ministry Natural Resources and Environment of the Russian Federation. <https://www.mnr.gov.ru/english/>

<sup>562</sup> Ibid.

<sup>563</sup> Mark Kesselman, Joel Krieger, William A. Joseph *Introduction to Comparative Politics*, Brief Edition (Boston: Wadsworth 2010) : 221

<sup>564</sup> Vladimir Socor, "Hungarian MOL Takes Steps to Keep Production License in Russia," *Eurasia Daily Monitor* 6, 155

The compliance of licenses issued by Rosnedra are monitored by The Federal Supervisory natural Resource Management Service (Rosprirodnadzor). This institution is in charge of the Ministry of Natural Resources. It has the authority to monitor exploration and production activities and to issue fines and/or other negative legal consequences. For example, Krysiak gives the example of Rosprirodnadzor being asked by the MNR to investigate the conduct of Total in allegedly failing to meet terms of a PSA for the Kharyaga project.<sup>565</sup>

According to this allegation, Total had only managed to produce 20,000 bpd of the 65,000 bpd quota outlined in the PSA, had failed to introduce the best technology available for the project, and had flared most of the associated gas, contrary to the wishes of the MNR.<sup>566</sup>

Rosprirodnadzor was asked to investigate what had gone wrong with the Kharyaga project, and decided that Total would have to pay a small fine of over \$1000 for its mismanagement, something Krysiak suggests is indicative of an “incoherent” energy policy, following aggressive Russian interventions in the Kovytko (TNK-BP) case.<sup>567</sup> Despite these challenges, Russia managed to use 76% of associated gas by 2012.<sup>568</sup>

However, Russia’s attempts to eliminate flaring have been restricted by the price collapse, as investment in oil output has been prioritised over investment on the infrastructure required to process the gas, a situation made more challenging by sanctions against Russia, and the fact that associated gas increases with oil production.<sup>569</sup>

Regarding regulation and punishment of companies for flaring, if the discrepancy regarding how Russia treated TNK-BP and the low fine for Total over flaring suggests incoherent policy, then the same can certainly be said of Iraq, since (as one example) if an IOC caused an oil spillage in the KRI which then contaminated a waterway leading

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<sup>565</sup> Timothy Fenton Krysiak, “Agreements from Another Era: Production Sharing Agreements in Putin’s Russia, 2000-2007,” *Oxford Institute for Energy Studies WP 34*, September 2007, 6

<sup>566</sup> *Ibid.*

<sup>567</sup> *Ibid.*

<sup>568</sup> The World Bank, “Time to end routine gas flaring.” July 7th 2014, Accessed July 16th 2016. <http://www.worldbank.org/en/news/feature/2014/07/15/gas-flaring-reduction-takes-center-stage-at-global-event>

<sup>569</sup> Stephen Bierman, Elena Mazneva, “Russia’s Effort to Limit Pollution Is Going Up in Smoke” *Bloomberg*, July 1st 2015. Accessed July 16th 2016. <http://www.bloomberg.com/news/articles/2015-07-01/russia-s-effort-to-limit-pollution-is-going-up-in-smoke>

into Arab Iraq, there is potentially a difficult question as to whom would impose penalties on the IOC and under which law would this fall, the KRI Oil Law or Baghdad's 2009 environmental legislation, which outlines punishment for environmental damage. In the KRI, Article 31 of the Kurdish oil law says that IOCs must,

“Report to the competent entity within the government on the amounts of operational and accidental discharge, leakage and waste resulting from Petroleum Operations.”<sup>570</sup>

The question of how Baghdad would deal with such a situation involving a transboundary waterway suggests this may not simply be an issue for the KRI.

Therefore, while the relationship between the regulator and the operator needs to be legally formalised, this becomes more complex in a federation if the regulating body does not have clearly defined powers. Decisions over why, when, and where to regulate the industry need to be established and clarified within a legal framework. For example, Iraq's Ministry of Oil clashed with the Ministry of Environment over a 2013 oil spill that nearly saw 2200 tons of crude oil contaminate the city of Basra's water supply. In the end, the spill was cleared up by CNPC before any fines were imposed, but had this become a legal battle the question over which ministry had the legal authority to deal with the issue could have become a protracted struggle.<sup>571</sup>

#### **4.3.4 Canada**

The case of Canada suggests how problematic it could be for a transitional nation such as Iraq to formulate a legal framework, since Ottawa has already struggled with provinces over environmental law on a national and international level. As noted, even in Canada the National Energy Board has been accused of lacking transparency and “regulatory capture.”<sup>572</sup> Cases examined here in Nigeria, Canada and Russia all demonstrate the damage that can be done not only through regulatory uncertainty, but also through poorly defined legal frameworks.

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<sup>570</sup> Republic of Iraq Draft Oil and Gas Law, February 15th 2007. 28

<sup>571</sup> Iraq Energy Research.

<sup>572</sup> Daniel Tencer, “Has the National Energy Board been ‘captured by industry?’” *The Huffington Post*, 5th November 2014 Accessed July 16th 2016. [http://www.huffingtonpost.ca/2014/11/05/regulatory-capture-national-energy-board\\_n\\_6108628.html](http://www.huffingtonpost.ca/2014/11/05/regulatory-capture-national-energy-board_n_6108628.html)

Despite some controversy, Radon notes how Canada automatically benefits from an advanced legal system, which has influenced its choice of fiscal regime, the licensing agreement, noting,

“With a well-developed legal system, as in most industrialized countries such as the UK, Norway, and Canada, a license or concession agreement can focus on the commercial terms without the burden of devising contractual provisions to fill in gaps in the legal system of the host country.”<sup>573</sup>

#### **4.3.5 Legal framework: Implications for Iraq**

Nigeria is awaiting the passing of the Petroleum Industries Bill, which would see the creation of three new regulators and a Nigerian Petroleum Directorate, which would regulate a re-structured NOC, which would also be partly privatised. This is a similar situation to the legal gridlock in Iraq. In the UAE, the Supreme Petroleum Council is in theory the independent regulator of the Federal Ministry of Energy and has oversight over the award of contracts, while some observers have noted political influence in its composition. Any damaging effect of this appears to be mitigated somewhat by the powers of the emirates themselves, which are enshrined in the constitution and give the right to enter into contracts, choosing contract types to suit local conditions, reducing the over-centralisation of power which has affected Iraq, Russia and Nigeria.

This appears to be an effectively federated model that Iraq learn from, in addition to the UAE’s merging of ministries, which improves overall energy sector coordination. In Iraq, this would have to be legislated for however. Furthermore, Iraq’s experience with IOCs on major projects is relatively recent regarding the post 2003 transition and an important point has been made regarding Canada’s legal framework, which is that well developed economies do not have to “fill in the gaps” in their legal systems by creating contractual clauses. Iraq has some way to go before reaching such a situation, where contracting with IOCs can focus more on commercial terms. This is a matter for Iraq’s overall development of capacity to deal with international companies regarding international business standards.

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<sup>573</sup> Jenik Radon, “The ABCs of Petroleum Contracts: License-Concession Agreements, Joint Ventures, and Production-sharing Agreements,” in *Covering Oil: A reporter's guide to energy and development* Ed. Svetlana Tsallik et al (New York: Open Society Institute, 2005) 61.

## 4.4 Fiscal Regimes

### 4.4.1 Nigeria

Early contracts with IOCs in Nigeria took the form of JVs (Joint Ventures) however, due to the inability of the Nigerian govt. to fund their share of capital and operating expenditures, JVs were no longer seen as preferable agreements although 7 joint venture contracts still exist in Nigeria.<sup>574</sup>

Subsequently, PSCs were introduced, with the first being signed in 1973 with Ashland oil, and by 2006, there were 25 PSCs in operation, accounting for 20% of production.<sup>575</sup> Under the petroleum sector reforms of the Obasanjo govt. Service Contracts were introduced in 2000, which according to Nwokeji bore some resemblance to JVs, in the sense that NNPC subsidiaries are partnered with the IOC, as in the case of the Service Contract between NNPC's E&P subsidiary and Italian IOC Agip. Nigerian PSCs contain clauses which demand technology transfer, local suppliers and capacity building, as per the Local Content Act and Petroleum Act, but they also include firm protective stabilization clauses.<sup>576</sup> Despite the stabilization clauses however, Nigerian law calls for arbitration in Nigeria in accordance with the country's Arbitration and Conciliation Act. Therefore, while Nigeria has clearly tried to strike a balance between national sovereignty and attracting IOC investment, the absence of separation of powers has led to inbuilt inefficiencies in the petroleum policy framework, as described above.

### 4.4.2 Russia

Following the collapse of the Soviet Union, Hill and Fee describe the advent of PSAs in Russia, arising from the needs of an industry that was "reserve rich but cash starved" and that PSAs seemed to provide a model which could attract rapid IOC investment and experience.<sup>577</sup> PSA applications involve a combination of civil law (mainly the Federal Law on Production Sharing Agreements) and administrative procedures. The first PSA in Russia was the Sakhalin 2 agreement in 1994, between the Sakhalin Energy

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<sup>574</sup> Ernst and Young, "Doing business in Nigeria," Workshop in Paris, 23rd February 2012.

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<sup>576</sup> Taiwo Adebola Ogunleye, "A Legal Analysis of Production Sharing Contract Arrangements in the Nigerian Petroleum Industry," *Journal of Energy Technologies and Policy*, 5, 8, International Knowledge sharing platform, 2015)

<sup>577</sup> Fiona Hill, Florence Fee, "Fueling the Future: The Prospects for Russian Oil and Gas" *Demokratizatsiya* 10,4 (Autumn 2002) 462-487

Investment Company (SEIC), a consortium consisting of Shell, Mitsui and Mitsubishi, and the Russian Federation.<sup>578</sup>

Krysiek describes what was considered by Rutledge to be an exceptionally generous PSA compared to preceding PSAs around the world. Rutledge calls this a “non-sharing agreement.”<sup>579</sup> Signed in 1994, the Sakhalin II agreement was atypical of a PSA in that risk was not shared by the state and the consortium, but carried almost entirely by the Russian govt. Rutledge outlines several key reasons for what he sees as a failure of this PSA, and the eventual govt. intervention in PSA agreements under Putin.

Firstly, much of the exploratory work had been executed prior to the signing of the PSA, effectively eliminating risk for the consortium. Secondly, the consortium inserted into the contractual terms provisions for greater Russian cost sharing in the event of overspending and adverse price conditions.<sup>580</sup> Krysiek subsequently outlines how initial political opposition to PSAs in Russia created the conditions for Putin to diminish their attractiveness and reassert NOC control. Putin passed new legislation that restricted the number of fields that could be operated under PSA contracts, and in 2003 changed the federal tax code to make the agreements less attractive to IOCs. While this may have satisfied concerns about Russian sovereign control of resources, it may not prove an instructive lesson for Iraq, since great need for capital intensive enhanced oil recovery project requires favourable terms for investors. Currently, as we see in Chapter 5, Iraq’s oil contracts are poorly balanced being neither favourable to the government or IOCs under low oil prices.

While existing PSAs at Kharyaga, Sakhalin-1 and Sakhalin-2 were unaffected by changes to tax codes, Putin’s government moved to significantly increase state owned participation in the projects, as previously discussed, although the current level of IOC involvement under Putin is contested by Treisman, as noted above, who states that the state’s share of the Sakhalin 2 project was no more than 42% in 2002.<sup>581</sup> However, Ovcharova summarises the views of many analysts when she notes that in order to attract more foreign investment for ventures on the continental shelf, the Russian govt.

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<sup>578</sup> Ibid.

<sup>579</sup> Ian Rutledge, “The Sakhalin II PSA – a Production ‘Non-Sharing’ Agreement.” Sheffield Energy & Resources Information Services (SERIS) 2014 November 2004 Accessed July 16th 2016 [https://www.foe.co.uk/sites/default/files/downloads/sakhalin\\_psa.pdf](https://www.foe.co.uk/sites/default/files/downloads/sakhalin_psa.pdf)

<sup>580</sup> Ibid.

<sup>581</sup> Daniel Treisman, “Oil and democracy in Russia,” (Diss, University of California, 2010.)

will have to “stabilise the business climate” and “make the Russian legal framework friendlier for subsoil users and investors.”<sup>582</sup>

#### 4.4.3 UAE

The experience of the UAE can be characterised as a transition away from Concessions to PSAs and TSCAs, because low extraction costs remain attractive to IOCs in comparison to the many logistical, political and climatic challenges of working in Russia. As mentioned, each emirate oversees concessions for development, exploration and production of natural resources. State owned enterprises, such as ADNOC issue concessions to IOCs, who have minority ownership interests in the SOE.<sup>583</sup>

Subsequently, each Emirate sets the terms for these concessions, and gains benefit through corporate tax and equity participation through the project companies.<sup>584</sup> As a result of this arrangement, Abu Dhabi is the main contributor to the federal budget, and now prefers PSAs with majority ADNOC involvement to recently expired (or about to expire) concessions. For example, IOCs under the old ADCO concession (which expired in January 2014) received only \$1 per barrel produced. Under new 40 year offshore concessions, Japan’s Inpex and Total received 10 and 5% interest in fields offering \$3 per barrel.<sup>585</sup>

Underlining the UAE’s loose federal arrangement, the contractual arrangement in Dubai and Sharjah is somewhat different, and service contracts are used to gain the most from mature fields, while the other (smaller) emirates use PSAs.<sup>586</sup>

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<sup>582</sup> Anna Ovcharova, “Russia” *Upstream Law and Regulation*, (London: Globe Business Publishing, 2013), 409

<sup>583</sup> Oil and gas regulation in the United Arab Emirates: overview from Practical Law. 1st of June 2016. Accessed July 16th 2016.

<http://uk.practicallaw.com/2-528-1046>

<sup>584</sup> Oil and gas regulation in the United Arab Emirates: overview from Practical Law. 1st of June 2016. Accessed July 16th 2016.

<http://uk.practicallaw.com/2-528-1046>

<sup>585</sup> Energy Information Administration, “UAE Oil Market Overview” accessed July 16th 2016.

[“http://www.oil-marketing.com/index.php/news/453-eia-uae-oil-market-overview](http://www.oil-marketing.com/index.php/news/453-eia-uae-oil-market-overview)

<sup>586</sup> Ibid.

#### 4.4.4 Canada

Bankes outlines how Alberta's Petroleum and Natural Gas Tenure Regulation (under the authority of the mines and minerals act) outlines two forms of tenure: a petroleum and natural gas license and a petroleum and natural gas lease.<sup>587</sup>

This a concession system, as described by Deholis and Cuschieri,

“The oil and gas regime in Canada is concession-based and the Crown does not normally co-own or directly participate in oil and gas projects. The owner of the mineral rights, whether the Crown or the owners of freehold estates, will typically grant a company a lease that gives the lessee the right to explore and drill for, remove and dispose of minerals for a set term in exchange for a certain amount of consideration, rental fees and royalty interests on recovered minerals.”<sup>588</sup>

What is particularly interesting here is that the concession system in Canada has proven so controversial historically in Iraq and Nigeria, and yet has been so readily accepted in Canada, which enjoys a high degree of public support for the oil and gas industry. Nonetheless, this issue has still been politically contested. Highly privatised production in Alberta drew scrutiny in 2012 with a report that noted more than two thirds of production of oil sands is owned by foreign private enterprise, while defenders of IOC investment in Alberta point to the Canadian Energy Research Institute study which notes that around 100,000 direct and indirect jobs are created by the sector.<sup>589</sup>

#### 4.4.5 Fiscal regimes: Implications for Iraq

Nigeria has transitioned away from JVs, in large part due to the government's failure to pay its share of investment in projects, a situation similar to that experienced with Iraq's TSCs, which are rooted in the JV approach. Notably, Iraq's mounting debt to IOCs during the oil price collapse has not catastrophically impacted projects, but has led the state to take on growing debt to keep energy projects moving and maintain production levels.

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<sup>587</sup> Nigel Bankes, “Canada” *Upstream Law and Regulation*. *Upstream Law and Regulation*, (London: Globe Business Publishing, 2013), 225

<sup>588</sup> Ron Deyholos & David Cuschieri, “Canada,” in “*Oil & Gas: A Comparative Guide to the Regulation of Oil and Gas Projects*” (London: European Lawyer Reference Series, 2012) : 31

<sup>589</sup> Mike De Souza, “Majority of oil sands ownership and profits are foreign, says analysis,” *Financial Post* 10th of May 2012. Accessed July 16th 2016. <http://business.financialpost.com/news/majority-of-oil-sands-ownership-and-profits-are-foreign-says-analysis>

Nigeria has also seen similar problems maintaining IOC investment, and despite an attempt to phase out JVs, only 20% of contracts were PSCs by 2006, as noted. A potential lesson here is that an oil ministry under strong political control may be unwilling to relinquish control of the sector to the extent of abandoning the JV approach and that in the long term, this may increase the risk of political mismanagement, heightening political risk in the sector. For Iraq, this is further evidence of the need to have a strong independent regulator.

In contrast, Russia's lesson may be a warning the other way, with overly generous PSAs, or "product non-sharing agreements" as they were called by one analyst, leading to a backlash against IOCs and burdensome taxes on the sector, a situation which has largely been reversed in response to the price collapse. While Iraq rejected PSAs, there is a risk that new contract models for new fields could diverge too sharply from state participation and place the burden of risk with the Iraqi state.

Going forward, the lesson Russia provides is that there must be a balance between IOC and state interests in contracts, where risk is shared as prices rise and fall, but at the same time the IOC participation is not so great as to provoke a damaging political backlash, as seen following Russia's Sakhalin PSA contracts. The UAE is perhaps exemplary regarding fiscal regimes, which generally award IOCs small participation in fields (following quite generous concessions in previous years) which is offset by low extraction costs and long contractual terms. Most importantly, the fiscal regime is different depending on the circumstance of the field, an arrangement which has been followed unofficially in Iraq, where it has led to a dispute (as noted, the MNR has chosen PSAs due to more challenging geological conditions.)

On the other hand, Canada's licensing and leasing system favoured by the provinces has attracted and largely sustained foreign investment even during the price collapse which has placed huge pressure on the tar sands industry. Based on controversy surrounding PSAs in Iraq, such an approach would likely prove politically impossible, at least in the short term.

## 4.5 Production Scenarios

### 4.5.1 UAE

As in Russia, Canada and Nigeria, the question of how much state involvement in the UAE's energy sector has been a determining factor in output, although interestingly, the UAE have managed to sustain high oil output despite fairly low profit margins for IOCs, aided by a per barrel extraction cost of around \$7 in 2009.<sup>590</sup> In the absence of complex geological, political and logistical risk, IOC participation has been high, helping the country maintain high output even as other countries have seen collapsing capital expenditure. However, low oil prices have delayed plans to raise oil production, 9.2% of the OPEC total<sup>591</sup> ADNOC originally planned to increase output to 3.5 million bpd by 2018 from 2.8 million bpd, but according to Anthony Dipaola, delayed the project until the oil price showed signs of recovering, since the Emirate was under no financial pressure to keep pumping oil.<sup>592</sup>

### 4.5.2 Canada

In Canada, a liberal licensing arrangement has brought about a surge in investment, with tar sands alone showing an increase from 2.9 million BPD in 2007 to 3.7 million BPD in 2013.<sup>593</sup> In the case of Alberta, the aim of attracting as much foreign IOC investment as possible is to create the optimum expenditure on recovery that has cost as high as \$39.67 dollars per barrel, as of January 2016, when the oil price reached a low of \$28 dollars for lighter oil. Being heavier oil (and thus discounted due to higher refining cost) this was a disaster for Albertan production.<sup>594</sup> This caused a temporary slump in oil

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<sup>590</sup> International Energy Agency World Energy Outlook, 2008

<sup>591</sup> Angelina Rascoet, "Kuwait, U.A.E. Happy With Market Strategy: OPEC Reality Check," June 5th 2015, Accessed July 16th 2016. <http://www.bloomberg.com/news/articles/2015-06-04/kuwait-u-a-e-happy-with-market-strategy-opec-reality-check>

<sup>592</sup> Anthony Dipaola, "Abu Dhabi missing 2017 target for oil-output capacity boost" 6th of February 2016, accessed July 16th 2016.

<http://www.worldoil.com/news/2015/6/02/abu-dhabi-missing-2017-target-for-oil-output-capacity-boost>

<sup>593</sup> American Petroleum Institute, "Understanding Crude Oil and Product Markets," Accessed July 16th 2016. <http://www.api.org/~media/files/oil-and-natural-gas/crude-oil-product-markets/crude-oil-primer/understanding-crude-oil-and-product-markets-primer-high.pdf>

<sup>594</sup> Chester Dawson, "Canadian oil sands producers struggle" *The Wall Street Journal* August 19th 2015. Accessed July 16th 2016. <http://www.wsj.com/articles/oil-sands-producers-struggle-1440017716>

sands production, particularly oil extracted through the more expensive Steam Assisted Gravity Drainage method.<sup>595</sup>

Despite this, heavy foreign investment has helped build up in human capital and in many cases allowed production to keep going, even at a considerable loss. Canada was the fifth largest producer of oil in the world in 2013 supplying 4.7% of the world's demand, and retained that position in 2015.<sup>596</sup> Its latest proven oil reserves as of 2013 stand at 174.3 Billion bbls, 10.3% of the global total. This makes Canada the third largest holder of oil beneath its soil. With this potential, a mid-2016 report on Canadian oil production to 2025 predicted an increase of over 1 million bpd, provided oil stayed above a \$50 breakeven price. This forecast increase is less than previous forecast increases, due to the oil price collapse of late 2014.<sup>597</sup> One reason for this increase, albeit revised down, is the size of investments in oil sands projects, which have caused investors to keep operations going, rather than terminate work or shut in production, which can damage oil sands reservoirs.<sup>598</sup> Therefore, it can be said that even in the presence of expensive production costs and high distance to market, Alberta's oil production has benefitted from liberal investment policies, which have kept IOC interest even in very adverse market conditions.

#### 4.5.3 Nigeria

Nigeria has been much less fortunate, although it remains Africa's largest oil producer, accounting for approximately 26% of Africa's oil production (IETI, 2014) and approximately 2.7% of world production (BP, 2014)<sup>599</sup> in addition to having some 37 bn barrels of proven oil reserves (EIA,2015.)

This status may be under threat for a number of reasons. Nigeria initially attracted IOCs to new contract models in the mid-1990s, leading to an increase in production, before

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<sup>595</sup> Ibid.

<sup>596</sup> Prableen Bajpai "The World's Top Oil Producers," *Investopia* October 7th 2014 Accessed July 16th 2016. <http://www.investopedia.com/articles/active-trading/100714/worlds-top-oil-producers.asp>

<sup>597</sup> Peter Findlay, "The Future of the Canadian Oil Sands," OIES PAPER: WPM 64 (Oxford: Oxford Institute for Energy Studies, 2016)

<sup>598</sup> Lauren Krugel, "Oilsands Losing Money On Every Barrel, Yet Have No Choice But To Produce: Analyst," *The Huffington Post* 13th of January 2016, Accessed July 16th 2016. [http://www.huffingtonpost.ca/2016/01/13/oilsands-losing-money\\_n\\_8969094.html](http://www.huffingtonpost.ca/2016/01/13/oilsands-losing-money_n_8969094.html)

<sup>599</sup> IETI Nigeria reserves. Accessed July 16th 2016. <https://eiti.org/Nigeria>

seeing a period of contractual uncertainty which damaged investor confidence.<sup>600</sup> These investment conditions returned following the 2014 price collapse, as the government considered renegotiating contracts with IOCs for more revenue, as insurgent attacks crippled production. Nigeria also faces a natural decline in some of its older fields, heightening urgency to diversify the economy.<sup>601</sup> Iledare points out that new production will also be contingent on discovering new fields. Adding further challenges, Iledare notes that “estimated projected annual funding requirement for JV operations alone ranges between \$11 and \$13 billion from 2007-2011.”<sup>602</sup> This has been strained following the price collapse, a problem which may have been mitigated (as noted in “Financial Stability” above) by a larger share of revenues being put aside in a sovereign wealth fund.

As in Iraq, the price collapse has put strain on the relationship between the government and the IOCs, as a similar situation has arisen to the 1970s, when the government failed to pay its share of JV costs. By 2016, the NNPC was \$6 billion in debt to IOCs, and as in Iraq, struggled to make these payments, owing shipments of oil to fulfil PSA contract terms.<sup>603</sup> This crisis comes at a particularly difficult time for the country’s exports, which were thought to be as low as 1 million barrels per day by mid-2016, and has fallen 800,000 bpd through infrastructure attacks alone.<sup>604</sup>

A final challenge, as noted, is Nigeria’s delayed oil law, which has been stalled in parliament for a number of years as of 2016. The law’s delay has heightened investor uncertainty, with Oil Producers Trade Section of the Lagos Chamber of Commerce warning that this has already cost the country \$50 billion in lost investment in the latter

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<sup>600</sup> Elisha Bala Gbogo, “Nigeria Oil contracts review adds to industry uncertainty,” *Bloomberg* October 8th 2015. Accessed July 16th 2016. <http://www.bloomberg.com/news/articles/2015-10-08/nigeria-offshore-contracts-review-adds-to-industry-uncertainty>

<sup>601</sup> Charles Kennedy, “Nigeria’s Oil production in free fall after more attacks,” May 30th 2016, Accessed July 16th 2016. <http://oilprice.com/Energy/Crude-Oil/Nigerias-Oil-Production-In-Free-Fall-After-More-Attacks.html>

<sup>602</sup> Wumi Iledare, Rotimi Suberu, “Nigeria” from *“Oil and gas in federal systems,”* ed. George Anderson (Oxford: Oxford University Press, 2012)

<sup>603</sup> Libby George, “Nigeria’s NNPC fights for oil cargoes as revenues squeeze bites,” April 18th 2016, Accessed July 16th 2016. <http://www.reuters.com/article/nigeria-oil-idUSL5N17L3CK>

<sup>604</sup> Julian Lee, “Forget the Saudis, Nigeria’s the big oil worry,” *Bloomberg*, May 16th 2016 Accessed July 16th 2016. <http://www.bloomberg.com/gadfly/articles/2016-05-15/nigeria-s-a-bigger-worry-for-oil-than-saudi-arabia>

half of the '00s, and that output may decline 25% without significant foreign capital attracted to the sector.<sup>605</sup>

#### 4.5.4 Russia

Russia has faced similar problems attracting enough investment to increase oil output in line with its Energy Strategy 2030 targets. Firstly, the main Russian natural decline in the giant Western Siberian fields poses a major challenge, which should offset other increases in the Russian sector of the Caspian Sea and Eastern Siberia, with Western Siberia losing as much as 1 million bpd by the mid-2020s.<sup>606</sup> By mid-2016, oil production in Russia had stabilized, having risen 10% from 9.75 to 10.75 mbpd before falling through 2016 and then rising again, with IOC efforts benefitting from a strong dollar.<sup>607</sup>

Sergei Brezitsky, Vice President of TNK-BP, has noted the challenges operating in East Siberia, including infrastructure problems as well as complex geology, saying that without “tax incentive possibilities” there production increases would be constrained. Likewise, in 2010 Peter O’Brien, Vice President of Rosneft, noted how,

“Uncertainty about the tax regime in East Siberia could slow investments that are essential if the oil industry, and the ESPO, are to flourish...We can’t proceed with investment decisions without more clarity.”<sup>608</sup>

The oil price collapse has added further challenges, with Lukoil Chief Executive Vagit Alekperov noting in mid-2016 that “We will have to limit our spending and that will lead to a fall in production.”<sup>609</sup> Problematically, and as with the case of Nigeria, the government have considered changing the fiscal regime to make up for collapsing government revenues. This has led Russian officials to acknowledge that production could decline further as new investment slumps. Lack of new FDI in the sector has been

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<sup>605</sup> Elisha Bala Gbogo, “Nigeria Oil contracts review adds to industry uncertainty,” *Bloomberg* October 8th 2015. Accessed July 16th 2016. <http://www.bloomberg.com/news/articles/2015-10-08/nigeria-offshore-contracts-review-adds-to-industry-uncertainty>

<sup>606</sup> James Henderson, “The Strategic Implications of Russia’s Eastern Oil Resources,” *Oxford Institute for Energy Studies WPM 41* (Oxford: Oxford Institute for Energy Studies, 2011)

<sup>607</sup> Gabriel Collins, “Don’t expect Russia to cut oil production voluntarily.” *Forbes*. October 19<sup>th</sup> 2016. Accessed November 2<sup>nd</sup> 2016. <http://www.forbes.com/sites/thebakersinstitute/2016/10/19/dont-expect-russia-to-cut-oil-production-voluntarily/#65294a77381f>

<sup>608</sup> *Ibid.*

<sup>609</sup> Nick Cunningham, “Is A Russian, OPEC Production Cut In The Making? January 25th 2016, accessed July 16th 2016. <http://oilprice.com/Energy/Crude-Oil/Is-A-Russian-OPEC-Production-Cut-In-The-Making.html>

exacerbated by the post 2014 sanctions which have led to Russia increasingly turning to Chinese IOCs to help boost production (China has not observed Western imposed sanctions) which has occurred with some success at Imilor.<sup>610</sup> Taken together, these challenges amount to a forecast of ongoing production decline in the former USSR, according to IEA estimates.<sup>611</sup>

Only a regional basis, this was reflected in a fall in production at Khanty Mansiyisk (which comprises half of Russian production) of 2.8% in 2015, and a fall of 6% in the first nine months of 2015 at Rosneft's West Siberian operations.<sup>612</sup> Despite these challenges, the potential of Russian reserves still attracts a high level of IOC interest with BP-Rosneft investing \$300 million in Eastern Siberian development and exploration in the summer of 2016.<sup>613</sup>

#### **4.5.5 Production scenarios: Implications for Iraq**

With the exception of the UAE, which as noted has benefitted from an exceptionally low per barrel extraction cost and a stable business environment for IOCs, and Russia, which has been forced to radically revise fiscal regimes (mainly cutting Mineral Extraction Tax) all countries in the study have struggled to hold off production declines following the price collapse. As noted, Russia is seeing risk of collapsing production, but analysts are generally divided as to how soon this may occur.

However, a couple of lessons may be relevant to Iraq in the coming years. Firstly, in the case of Canada, the liberal investment climate has helped IOCs invest in new extraction methods and has helped provinces attract the most highly skilled workers, which may have offset some of the effects of the price collapse, by focusing knowledge on efficiency gains. As noted, Canada may yet see an increase in production if global prices remain above \$50.

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<sup>610</sup> James Henderson "International Partnerships in Russia's Oil and Gas Industry," Chatham House *Russia and Eurasia Programme Meeting Summary* 27th March 2014  
[https://www.chathamhouse.org/sites/files/chathamhouse/field/field\\_document/20140327RussiaOilGas.pdf](https://www.chathamhouse.org/sites/files/chathamhouse/field/field_document/20140327RussiaOilGas.pdf)

<sup>611</sup> IEA, "Short term energy outlook," 9th of August 2016. Accessed August 15th 2016.  
[https://www.eia.gov/forecasts/steo/report/global\\_oil.cfm](https://www.eia.gov/forecasts/steo/report/global_oil.cfm)

<sup>612</sup> Selina Williams, "Russian Oil: Output grows as prospects sink" *The Wall Street Journal* 24th January 2016. Accessed 16th July 2016. <http://www.wsj.com/articles/russian-oil-output-grows-as-prospects-shrink-1453685744>

<sup>613</sup> Jillian Ambrose, "BP heads to Siberia with \$300m Rosneft oil venture," *The Telegraph*, 17th June 2016. Accessed July 16th 2016.  
<http://www.telegraph.co.uk/business/2016/06/17/bp-heads-to-siberia-with-300m-rosneft-oil-venture/>

For Iraq, this means that it is important for future contracts to harness IOC investment in Iraqi capability and local content. Existing contracts have these provisions, but it may be worthwhile for Iraq to explore ways of increasing IOC investment in local human capital. This may involve leaning towards more investor friendly contracts that allow higher remuneration for IOCs under high price scenarios, while allocating a higher percentage of these funds to developing Iraqi oil sector personnel. At the same time, government take would need to be sustainable under low prices.

In terms of collapsing production, Nigeria offers a warning to Iraq, which is again one of over-centralisation and strong political interference in the sector, mismanaging everything from revenues to abusing local content clauses for corrupt purposes. As will be discussed in the concluding chapters, the over-arching lesson here is depoliticization of the sector through strong independent regulation that allows for as much transparency as IOCs will allow (without compromising company secrets.) Russia's lesson, if any, is that Iraq must be flexible with contractual terms as the global oil market changes and possibly enters a new era of volatility.

## **4.6 Oil Markets**

### **4.6.1 Canada**

Canada's reaction to conditions in the global market has in many ways shaped the current private sector dominance of the sector, after failed government intervention in the wake of the 1973 price spike, in the form of the National Oil Policy. According to Brownsey, Gattinger and Doern, Diefenbaker's govt. implemented the NOP primarily to protect Western Canadian production from US quotas, which resulted in the price wall across Canada along the Ottawa valley.<sup>614</sup> Canadians in the West could purchase only Canadian petroleum products, while Canadian private citizens, industry and the downstream sector in the East would rely on imports from Venezuela and the Middle East.<sup>615</sup>

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<sup>614</sup> G. Bruce Doern, Monica Gattinger, *Power Switch: Energy Regulatory Governance in the Twenty-first Century* (Toronto, University of Toronto Press, 2003), 27

<sup>615</sup> *Ibid.*

Additionally, the NOP was partly the result of Canadian oil companies lobbying the federal govt. for protection against cheap foreign imports<sup>616</sup> As such, Brownsey, Gattinger and Doern view the NOP as insulation against the threat of OPEC, formed a year previously. This policy had the consequence of placing consumers and the downstream sector in Western Canada at a disadvantage, paying more for oil (closer to US prices) compared to their Eastern counterparts.<sup>617</sup>

However, a multi authored IPB report disputes the claim that the East—West pricing difference was significant for consumers, and claims that in reality Alberta producers were “capable of meeting the price of international oil at Montreal.”<sup>618</sup> The IPB authors also claim that IOCs importing to refiners in Eastern Canada were selling at prices that did not fully reflect the cheaper production costs in Venezuela and the MENA region, negating some of the saving for Western Canadian consumers.<sup>619</sup>

The situation for major producers Alberta and Saskatchewan turned in their favour in 1973 with the advent of the Arab oil embargo and a fourfold increase in prices. It is generally accepted that the Eastern provinces were now suffering higher prices (see Gattinger, Doern) although Feehan notes that under high price scenarios, equalization payments made from the “have” provinces may have offset a lot of the revenue gains.<sup>620</sup>

This spurred the producing provinces to counter with the creation of their own provincially controlled companies, in part a reaction to the detrimental NOP policies.<sup>621</sup> Pratt points out that a further interventionist govt. response to the 1973 crisis was to tax conventional oil production in Alberta, and use the proceeds of this tax to invest in unconventional oil development and finally, to create Petro Canada, essentially a company created to cement Canadian influence in the energy sector and limit the effect of IOCs gaining from windfall profits.<sup>622</sup>

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<sup>616</sup> Brownsey, Keith, “Canadian Federal Energy Policy” (New York: Routledge, 2011)

<sup>617</sup> Ibid.

<sup>618</sup> International Business Publications, “*Canada Energy Policy Laws and Regulations Handbook Volume 1*” (Washington, IBP Inc, 2014), 45

<sup>619</sup> Ibid.

<sup>620</sup> Wade Locke, Paul Hobson “An Examination of the Interaction Between Natural Resource Revenues and Equalization Payments” “*Institute for Research on Public Policy*,” IRPP Working Paper Series no. 2004-10

<sup>621</sup> G. Bruce Doern, Monica Gattinger, “*Power Switch: Energy Regulatory Governance in the Twenty-first Century*” (Toronto, University of Toronto Press, 2003), 27

<sup>622</sup> Larry Pratt, “Energy: The Roots of National Policy” *Studies in Political Economy*, 7, (1982) : 27

According to Fossum the creation of Petro Canada had a number of national objectives, besides appeasing nationalist concern about foreign IOC dominance.<sup>623</sup> These objectives, stated in a 1973 Energy, Minerals and Resources department (EMR) report on the creation of an NOC, included increasing federal govt. understanding of the oil and gas industry (they had not had much previous access to all IOC data) increasing supply security and revenues to the federal govt. and increasing Canadian ownership.<sup>624</sup>

Desveux notes that this report, *An energy strategy for Canada: Phase 1* argues that the strategic objectives of an NOC are worthwhile, but the high cost to the taxpayer, in addition to the likely inefficiency of a state owned enterprise, were significant risks.<sup>625</sup> Nonetheless, either through strategic necessity or nationalism, Canadian political consensus after the 1973 embargo enabled further state intervention in the energy sector, outlined in a “national energy strategy for self-reliance,” in 1976.<sup>626</sup> That report, *An energy strategy for Canada: policies for self-reliance*, envisioned the objective to reduce foreign imports to one third of oil supplies by 1985, with a final objective of total self-reliance for natural gas. Subsequently, the EMR raised difficult questions regarding the initial costs of such a plan.<sup>627</sup> With increasing state intervention, Canada was approaching what is widely seen by several analysts reviewed here as its most controversial energy policy. The failed National Energy Program of 1980-1985 aimed to increase Canadian ownership in the oil and gas industry by 50% by 1990.<sup>628</sup> The NEP was abandoned after estimates placed losses in revenues for Alberta as high as \$100 billion, as well as recession in Alberta, with IOCs leaving or halving investments due to the federal oil export tax.<sup>629</sup> Furthermore, NEP was opposed by Albertans, according to one poll, by a ratio of 5 opposed to one in favour. In 1984, a new Conservative government formally ended the NOP.<sup>630</sup>

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<sup>623</sup> John Erik Fossum, “Oil, the State, and Federalism: The Rise and Demise of Petro-Canada as a statist impulse,” (Toronto: University of Toronto Press, 1997): 273

<sup>624</sup> Ibid.

<sup>625</sup> James A. Desveaux, “Designing Bureaucracies: Institutional Capacity and Large-scale Problem Solving,” (Stanford: Stanford University Press, 1995) :72

<sup>626</sup> Michael Bradfield “An Energy Strategy for Canada: Policies for Self-Reliance,” *Canadian Public Policy / Analyse de Politiques* 3,4 (1977) 551-554

<sup>627</sup> Ibid.

<sup>628</sup> Larry Pratt, “Energy: The Roots of National Policy” *Studies in Political Economy*, 7, (1982) : 27

<sup>629</sup> Jen Gerson, “Riley’s last ride: A Calgary western-wear institution falls victim to the oil slump” *The National Post*, 22ns August 2016. Accessed July 16th 2016.

<http://news.nationalpost.com/news/canada/the-last-cowboy-outfit-in-calgary>

<sup>630</sup> Historica Canada, “National Energy Program,” accessed July 16th 2016.

[http://www.thecanadianencyclopedia.ca/en/article/national-energy-program/#h3\\_jump\\_2](http://www.thecanadianencyclopedia.ca/en/article/national-energy-program/#h3_jump_2)

Privatisation of the industry has not insulated the sector from the effect of the 2014 price collapse. In Canada the slump has caused capex to fall 40% compared to 2015.<sup>631</sup> However, Canada's economy is far more diversified than any of the nations covered here, with oil and gas accounting for only 3% of GDP, as noted. However, due to the concentration of oil and gas in Alberta, the province faced a deficit of over \$10 billion in 2016, with Canadian energy company Encana cutting its workforce by over half the level before the 2014 price collapse, the worst contraction since the 1982 oil slump.<sup>632</sup>

From 1994 to 2014, Alberta's GDP grew by an average of 3.5 per cent a year, accounting for 25 per cent of net new jobs for the entire country over the same period. This has been particularly problematic for the province which relies on oil for over 30% of its GDP,<sup>633</sup> leading to speculation as to whether the province had the resource curse. Freeman notes,

“Revenues from Alberta flowed into federal coffers, boosting overall growth and, along with a well-cultivated housing bubble, allowing Canada to avoid the worst of the Great Recession of 2008-09. Furthermore, Alberta provided a huge safety valve for surplus labour from other parts of the country. Thousands of skilled and not-so-skilled workers from the Atlantic provinces, Quebec and Ontario flocked to Fort McMurray for the high wages, sending money home like immigrants providing remittances to their families abroad.”<sup>634</sup>

Freeman also suggests that this reliance on hydrocarbons has deferred sensible economic planning. Morton and McDonald note however that Alberta has had some limited success diversifying its economy, pointing to petrochemical growth with the industry accounting for half of Canada's petrochemical industry and almost 10,000 jobs.<sup>635</sup> However, they note that diversification efforts made by Alberta Premiers Peter Lougheed and Don Getty in the 1980s had largely failed, arguing that this confirms Mathias' "forced growth" theory, whereby the government lacks the expertise to

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<sup>631</sup> Nia Williams, "At \$22, three quarters of oilsands production is underwater and losing up to \$3 on every barrel," *Financial Post* December 17th 2015 accessed July 16th 2016.

[http://business.financialpost.com/news/energy/at-22-three-quarters-of-oilsands-producers-are-underwater-and-losing-3-on-every-barrel?\\_lsa=89fa-757a](http://business.financialpost.com/news/energy/at-22-three-quarters-of-oilsands-producers-are-underwater-and-losing-3-on-every-barrel?_lsa=89fa-757a)

<sup>632</sup> Justin Giovannetti, "Alberta braces for longest economic slump since 1980s," *The Globe and Mail* February 24th 2016, accessed July 16th 2016.

<http://www.theglobeandmail.com/news/alberta/alberta-ndp-confirms-provinces-recession-to-last-into-2016/article28877029/>

<sup>633</sup> Alan Freeman, "The question nobody asks: What if Alberta oil doesn't have a future?" *ipolitics* February 24th 2016. Accessed July 16th 2016.

<https://ipolitics.ca/2016/02/24/its-the-question-nobody-dares-ask-what-if-alberta-oil-doesnt-have-a-future/>

<sup>634</sup> Ibid.

<sup>635</sup> Morton, Ted and Meridith McDonald, "The siren song of economic diversification: Alberta's Legacy of Loss" *SPP Research Paper No. 8-13*. (2015).

effectively allocate loans and grants to stimulate different economic sectors, and that these allocations can fall prey to cronyism. This would certainly be relevant in the case of Iraq, where many observers including Gunter, Bowen and Dodge refer to rampant cronyism in politics.

They note that private sector projects require “high quality, independent, professional assessment of the proposed project’s long-term economic viability,” something lacking in the capacity of most governments.<sup>636</sup> Finally, and also relevant to Iraq, they note that while Alberta set up an SWF, or “Sustainability Fund” in the case of the province, the Klein government of Alberta repeatedly changed regulations governing withdrawals, and regulation became “soft and vague.”

#### **4.6.2 Nigeria**

Canada’s problems with unexpected market conditions have been small in comparison to Nigeria, which faces national level crisis on a number of indicators in the face of the oil price collapse. According to the World Bank, oil accounts for close to 90% of Nigeria’s exports and roughly 75% of the country’s budget, with a budgetary breakeven price of \$120 at the time of the 2014 price collapse.<sup>637</sup> This has forced Nigeria into the position of discounting its main export crude, Qua Iboe, through 2016, as well as focusing on internal market efficiencies.<sup>638</sup>

One of the initial problems this crisis has caused will likely lead to a vicious cycle; funds will be needed to both help communities in the Niger Delta where unemployment has worsened an anti-government insurgency, which in turn has taken hundreds of thousands of barrels of oil off line, erasing funds needed to help rebuild areas destroyed by the war against militant group Boko Haram.

However, with the price collapse, Nigeria will struggle with both the defence expenditure and reconstruction funds required to alleviate these problems, possibly

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<sup>636</sup> Ted Morton, Meridith McDonald, “The siren song of economic diversification: Alberta’s Legacy of Loss” *SPP Research Paper No. 8-13*. (2015).

<sup>637</sup> Angelina Rascoet, “Oil states need price jump to balance budget” *Bloomberg* 30th of November 2015. Accessed 16th July 2016. <http://www.bloomberg.com/news/articles/2015-11-30/oil-states-need-price-jump-to-balance-budget-opeo-reality-check>

<sup>638</sup> Rupert Rowling, “Nigeria cuts oil prices, sees huge cargo overhang in market.” *Bloomberg*. October 20<sup>th</sup> 2016, Accessed November 2<sup>nd</sup> 2016. <https://www.bloomberg.com/news/articles/2016-10-20/nigeria-cuts-oil-prices-sees-huge-cargo-overhang-in-market>

leading to more violence and greater strain on the budget.<sup>639</sup> This is comparable to Iraq, where defence spending consumed a substantial portion of GDP in the war against ISIS, a problem made worse by the group's destruction of refining infrastructure in northern Iraq.

In order to respond to this problem, the government has attempted to abolish fuel subsidies, so that as of 2016 fuel prices would rise from \$0.43 a litre to \$0.73.<sup>640</sup> Fuel subsidies had previously thought to cost the country \$2.7 million per day. According to Verisk Maplecroft, resistance to subsidy abolition may have been weakened, having previously caused riots in 2012, because black market prices arising from fuel shortages have often been much more than the subsidized price.<sup>641</sup> The move to abolish the subsidy came after an IMF advisory effort, but comes too late to change the fundamental reality in the country, that dependency on oil revenue has been excessive.<sup>642</sup>

#### 4.6.3 Russia

Of the countries covered, Russia has faced a mixture of challenges, in part outlined above in “production scenarios,” forcing the country to pursue a strategic energy alliance with China, cooperating with Chinese IOCs in exchange for oil import contracts, which successfully saw Russia win greater market share than Saudi Arabia in early 2016.<sup>643</sup>

Despite this, the challenges are far less immediate than in Iraq and Nigeria, but much worse than those faced by Canada and the UAE. Firstly, Russia’s GDP contracted 3.7% in 2015, while the Rouble lost 127% of its value, according to the World Bank. Most problematically, oil and gas account for around half of Russia’s government revenue, meaning that budgets and planning are severely affected, with the 2016 budget assuming \$50, a similar problem faced by Nigeria and Iraq, where both governments

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<sup>639</sup> Charlotte Alfred, “How Cheap Oil Handicaps Nigeria’s Fight Against Boko Haram,” *The Huffington Post*, 2nd of December 2015. Accessed July 16th 2016.

[http://www.huffingtonpost.com/entry/oil-nigeria-boko-haram\\_us\\_56be78c7e4b08ffac1256afe](http://www.huffingtonpost.com/entry/oil-nigeria-boko-haram_us_56be78c7e4b08ffac1256afe)

<sup>640</sup> Conor Gaffey, “Nigeria Removes Fuel Subsidies, prompts mixed reactions.” 5th of December 2015, accessed July 16th 2016. <http://europe.newsweek.com/nigeria-removes-fuel-subsidy-prompts-mixed-reactions-459159>

<sup>641</sup> Ibid.

<sup>642</sup> Conor Gaffey The key issues for IMF chief Christine Lagarde in Nigeria ,” 1st of May 2016. Accessed July 16th 2016. <http://europe.newsweek.com/four-issues-christine-lagarde-nigeria-agenda-411912>

<sup>643</sup> Zainab Calcuttawala, “Saudi Market share takes a hit as Russia doubles exports to China.” May 23<sup>rd</sup> 2016, accessed July 16<sup>th</sup> 2016. <http://oilprice.com/Energy/Crude-Oil/Saudi-Market-Share-Takes-A-Hit-As-Russia-Doubles-Oil-Exports-To-China.html>

were too optimistic about the extent of the price collapse, possibly delaying emergency measures.<sup>644</sup>

This has forced the government to launch

an aggressive austerity strategy, widening the percentage of Russians who live in poverty even as industry has contracted 3.5%.<sup>645</sup> As of 2016, this crisis has only prompted calls for greater economic diversification, with President Dmitri Medvedev noting that, “The current situation on the global oil market shows how the modern structure of the economy is necessary [for] sustainable economic growth with an emphasis not on the market of raw materials.”<sup>646</sup> As noted in “production scenarios” one of the main Russian approaches to this challenge has been to engage more heavily with Chinese IOCs to boost production, since sanctions have restricted much Western IOC involvement, and to tie this involvement with greater attempts to secure market share in Asia, overtaking Saudi Arabia as China’s largest supplier. Such aggressive marketing has however, helped drive down the oil price, so may prove self-defeating.<sup>647</sup>

#### 4.6.4 UAE

The UAE’s apparent lack of urgency to increase high levels of production (the Emirates agreed to freeze production in the spring of 2016) stems in part from more modest budgetary requirements than Nigeria, Russia and Iraq. In 2015, as it appeared that the price collapse would be long in duration, the UAE’s fiscal breakeven price was estimated at \$73.<sup>648</sup> For some oil dependent countries this would be a disaster, but as noted, the UAE took national level strategic steps in the 1970s to aggressively diversify the economy. Aiming to capture as much associated gas as possible, the government decided petrochemicals would be a pillar of its new economy, and as of 2016, 11.9 million tonnes of petrochemicals are produced per year (Gulf Petrochemicals and

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<sup>644</sup> Sergei Karpukhin, “Russia’s Putin says \$50 per barrel oil in 2016 budget ‘too optimistic’” 17th of December 2015, accessed July 16th 2016.

<sup>645</sup> Himani Pant, “Russia’s Economy in 2016,” *The Diplomat*, May 11th 2016, accessed July 16th 2016.

<sup>646</sup> <http://thediplomat.com/2016/05/russias-economy-in-2016/>

<sup>647</sup> Ibid.

<sup>647</sup> Chen Aizhu, Florence Tan, “Russia overtakes Saudi Arabia for second time in China crude supply,” October 21st 2015. Accessed July 16th 2016.

<http://uk.reuters.com/article/china-oil-russia-idUKL3N12K3KA20151021>

<sup>648</sup> Angelina Rascoet, “Kuwait, U.A.E. Happy With Market Strategy: OPEC Reality Check,” June 5th 2015, Accessed July 16th 2016.

<http://www.bloomberg.com/news/articles/2015-06-04/kuwait-u-a-e-happy-with-market-strategy-opec-reality-check>

Chemicals Association.)<sup>649</sup> Logistics, shipping and aluminium soon added to the economic mix, but due to the severity of the price collapse, the wider economy has not been without problems, as companies froze hiring through 2016<sup>650</sup> and lending slowed down.<sup>651</sup> One of the main measures the UAE has taken to counter these problems is to try and maintain market share in Asia, selling crude below Saudi Arabian prices.<sup>652</sup>

#### 4.6.5 Oil markets: Implications for Iraq

Russia and Canada both have interesting lessons for Iraq regarding government intervention in the face of rapidly changing global oil markets. In the case of Canada, an attempt at strong state involvement through the failed National Energy Program during the 1980s which sought to maximise state participation through PetroCanada and apply burdensome taxes on IOCs, was (as noted) widely thought to have sent the industry into recession. Canada's response to this failure was widespread privatisation, leading to some concern that IOCs are too dominant and counter arguments that the industry's growth has had a knock-on effect of non-oil job creation, due to oil services money in local economies.

If there is a lesson here for Iraq, it is that the private sector is more responsive to the volatility of global markets than the state. Russia's case is more complex and involves the shift from widespread PSAs to growing state control and finally, a flexible tax system which has seen companies invest in the upstream sector despite the price collapse. This points to the importance of flexible and sustainable contracts which help both the state and the government, and suggests that Iraq should move away from TSCs.

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<sup>649</sup> Abdulwahab Al Sadoun "How diversification will drive the UAE through times of low oil prices," *The National* March 31st 2016. Accessed July 16th 2016.  
<http://www.thenational.ae/business/economy/how-diversification-will-drive-the-uae-through-times-of-low-oil-prices#page2>

<sup>650</sup> "UAE says all oil producers will need to cap output after price collapse," *The National* March 1st 2016 Accessed July 16th 2016.  
<http://www.thenational.ae/business/energy/uae-says-all-oil-producers-will-need-to-cap-output-after-price-collapse>

<sup>651</sup> Charles Kennedy, "Low oil prices hitting real estate in UAE," May 5th 2016, accessed July 16th 2016.  
<http://oilprice.com/Energy/Energy-General/Low-Oil-Prices-Hitting-Real-Estate-in-UAE.html>

<sup>652</sup> Florence Tan, "OPEC price war in Asia intensifies as oil falls below \$50" *Reuters* Monday January 12th 2015. Accessed July 16th 2016.  
<http://www.reuters.com/article/us-mideast-crude-asia-idUSKBN0KL0VJ20150112>

Domestically however, Russia and Nigeria have both had to take radical steps to reduce fuel subsidies and discount oil exports to compete for market share, an experience of many other MRH countries, but extremely serious in the case of both of these nations, risking a public backlash. Likewise, in the case of Iraq, austerity and reform of the business environment have been features of the economy during the oil price collapse, but it may be too early to say how successful these measures are.

This leads to a possible conclusion when governments plan around oil market uncertainty, which is that the caution of persistent low price forecasts by IOCs and some governments after 2014 is justified. For example, a number of Russian IOCs operated after 2014 on the basis of long term low prices.

Having examined key factors relevant to local dynamics in federal MRH countries, attention can be turned to the focus of this study, which is the federal setting of Iraq and the energy institutions after 2003 at the federal and regional level. The next chapter will take into consideration some of the arguments discussed in the literature review of analysis on Iraq.

#### **4.7 Conclusion and implications for Iraq**

It is difficult to draw coherent lessons for Iraq from an array of different scenarios, however a number of points appear to stand out. For example, Nigeria's favored JVs have shown a proven path of decline while Russian NOCs have been beset by political interference and inefficiency. The lesson here is that, as much as the state may want to give NOCs primacy in the sector, overbearing government intervention is risky and potentially damaging.

In Iraq, Minister Ghadban wanted to rely on EPCs to massively increase production. This would probably not have happened, even with optimum security, based on the many problems MoO experienced with capacity and budget execution, even after 2010, when security conditions had massively improved in the south.

Quite possibly, Nigeria shows how lack of investor confidence, combined with severe attacks on infrastructure, has decimated output, again suggesting that when security conditions are potentially adverse, attractive investment terms may be able to offset

some of the infrastructure loss through conflict. In the case of Iraq, this would mean strong foreign investment in the refining sector, which might have offset the destruction of Baiji refinery in 2014.

Elsewhere, too many organizations with lack of oversight under the MoO has led to a culture of low transparency, smuggling and corruption, a case similar to what has happened in Nigeria. In Nigeria, as in Iraq, a lack of refining capacity has necessitated large scale state run distribution of fuel products, which has opened the door to criminal enterprise. This in turn is linked to subsidies, since the state is spending so much money on cheap fuel that it simply cannot invest in the required refining infrastructure, creating a vicious circle where foreign IOCs will not build new refineries, because returns on fuel to the domestic market are so low.

Nigeria also serves as a warning in the fight to create more transparency in the oil sector and reduce the number of state interests and overlapping organizations; in Nigeria for example, the Petroleum Industries Bill would re-organize and part privatise the NOC, but it has been stuck in parliament, likely due to strong vested interests in maintaining the status quo. Similarly, some of the best provisions of DOGL have been opposed by individuals accused of trying to control oil revenues and having a personal interest in IOC contracts, as discussed in Chapter 3.

Re-organizing MoO and creating a new, partly privatised INOC with a clear separation of power between the two entities, could reduce some of the conflicts of interest in Iraq but also, could potentially increase the institutional capacity of each side of the sector by allowing for defined roles. Furthermore, without such separation, regulators can be caught up in the political interference in the sector, as was the case in Russia where environmental regulations were used against some IOCs, allegedly as a way of getting better terms from the companies after generous PSAs were found to have been dissatisfactory.

This point relates to the importance of having contracts that are satisfactory to both the IOC and the government, as just as in the Russian case of aggressive regulation, Iraq has seen IOCs fight back against low per barrel remuneration, by demanding rapid cost recovery. This has been very problematic for Iraq under low prices and again points towards more balanced contracts.

Furthermore, the warnings from foreign organizations of urgency to reform, seen repeatedly in Nigeria, when met with repeated delays in progress, can have disastrous consequences if left unheeded. Reforms, when advised as (for example) the radical re-organization of a sector beset with corruption and inefficiency must be followed decisively. For example, Nigeria began the EITI process in 2005 to much fanfare, but no substantive change has happened in the absence of the Petroleum Industries Bill.

Likewise, both Russia and Nigeria have suffered from a series of ad hoc political arrangements regarding extraction tax arrangements, revenues and provincial rights to develop oilfields, a situation made possible by vague constitutional language, but ultimately arising from heavily centralised control of the energy sector. The losses to these economies, estimated in the tens of billions, serve as yet another warning to Iraq to finalise overarching legislation for state-sub state energy relations, which currently rely upon a mixture of legacy legislation and a disputed 2005 constitution. Furthermore, any agreement, once legally ratified, needs to not only be clear but transparently managed in perpetuity, not only to defeat corruption but to maintain trust between governorates and the centre.

These issues will be examined again in relation to three of Iraq's institutions, two federal and one regional, in the next chapter.

## Chapter 5: Iraq Case Studies

This chapter covers three case studies to briefly explain the main features of the petroleum industry in Iraq and the assessment of each case from policy perspective.

In the first case, a federal institution that acts as the executive arm of the industry is exemplified by the Federal Ministry of Oil (MoO). This entity is a cabinet portfolio of the Iraqi federal government.

The second case study is a regional institution, and for this purpose, the Ministry of Natural Resources of the Kurdish Region (MNR) was selected. This entity is a member of the Kurdistan Regional Government, acting as the executive arm of the KRG.

The third case study provides an example of a joint venture operator between foreign and national companies. For this case, the Basra Gas Company (BGC) was identified as a prominent example to examine its framework.

All three cases will be profiled and assessed from a policy perspective to analyze their impact on the overall petroleum framework in Iraq. The policy analysis will mainly focus on the relevance of some of the key factors identified in the thesis such as the commercial and legal conditions of the fiscal model adopted by the examined institutions at federal, regional and operatorship level.

### 5.1 Case Study 1: Federal Iraqi Institutions

Iraq in 2003 had the capacity to add significant production to international oil markets, causing widespread speculation about how transition could impact its energy sector and global markets.<sup>653</sup> The 2003 IMF World Economic Outlook for example, cited the prospect of Iraq's oil export recovery having a "sharp impact" on prices.<sup>654</sup> Reserve estimates further raised questions as to how a post Ba'ath Ministry of Oil would interact with the private sector, with some estimates putting exploration at covering only 10% of

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<sup>653</sup> Raad al-Kadiri, Fareed Mohamedi, "World Oil Markets and the Invasion of Iraq." MER 279, Volume 33, Summer 2003.

<sup>654</sup> IMF, "World Economic Outlook September 2003, "Public Debt in Emerging Markets." (IMF: New York, 2003.)

Iraq with high and variable reserve estimates.<sup>655</sup> The US Department of Energy (DOE) Energy Information Administration (EIA) estimated 112 billion barrels (bbl) reserves in Iraq while the Center for Global Energy Studies and Petrolog & Associates estimated reserves as high as 300 bbl.<sup>656</sup> Prior to the invasion, Paul Wolfowitz foresaw Iraqi oil revenues in the region of \$50-\$100 billion in the first two to three years, which would fund Iraqi reconstruction.<sup>657</sup>

Post-Baath evaluation and planning for the sector would have to compete with rapid change in Iraqi society. Oil and refined product consumption in Iraq rose by an annual average of 7% from 2004 to 2013 following the end of economic sanctions.<sup>658</sup> Demand rapidly outpaced refining capacity; in 2004 Iraq consumed 20 million litres of refined product a day with a refining capacity of 8 million litres a day<sup>659</sup> from 8 refineries. Two years later, capacity was still less than 50% of requirements.<sup>660</sup> This has placed long term strain on the Iraqi economy.

In 2005 the EIA reported that refined product imports were costing Iraq at least \$60 million per month, before the losses from subsidizing pump prices at 10-cent-per-gallon, while the US Department of Energy estimated an \$8 billion a year cost.<sup>661</sup> In contrast, the country which was widely seen as capable of 6 million bpd production and exports exported only 1.367 bpd average in January 2005 bringing in \$1.49 billion in revenues for the month, in large part due to poor security and corruption hampering the sector.<sup>662</sup> This was down from 2.5 million bpd in early 2004.<sup>663</sup>

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<sup>655</sup> EIA, Department of Energy, Country Analysis Briefs: Iraq. EIA, 2004.  
<http://usiraq.procon.org/sourcefiles/eiacountryanalysis.pdf>

<sup>656</sup> Luft, Gal "How Much oil does Iraq have?" Brookings Institution, May 12th 2003. Accessed July 16th 2016.  
<https://www.brookings.edu/research/how-much-oil-does-iraq-have/>

<sup>657</sup> Paul Blustein, "Wolfowitz Strives To Quell Criticism," *The Washington Post*. March 21<sup>st</sup> 2005.  
<http://www.washingtonpost.com/wp-dyn/articles/A52375-2005Mar20.html>

<sup>658</sup> EIA: Country Analysis Brief: Iraq. April 28<sup>th</sup> 2016. [http://www.iberglobal.com/files/2016/iraK\\_eia.pdf](http://www.iberglobal.com/files/2016/iraK_eia.pdf)

<sup>659</sup> Presentation by Institute of Energy Economics, Japan (IEEJ) June 2010.  
<http://eneken.ieej.or.jp/data/3196.pdf>

<sup>660</sup> BBC News, "Iraq to up fuel imports for 2006." 5th September 2006. Accessed November 2<sup>nd</sup> 2016.  
<http://news.bbc.co.uk/1/hi/business/5317972.stm>

<sup>661</sup> Lawrence Kumins, "Iraq Oil: Reserves, Production, and Potential Revenues." Congressional Research Service. CRS report for Congress. April 13<sup>th</sup> 2005. Accessed November 2<sup>nd</sup> 2016:  
<https://www.fas.org/sqp/crs/mideast/RS21626.pdf>

<sup>662</sup> Ibid.

<sup>663</sup> EIA, Department of Energy, Country Analysis Briefs: Iraq. EIA, 2004.  
<http://usiraq.procon.org/sourcefiles/eiacountryanalysis.pdf>

### 5.1.1 Ministry of Oil Profile

Iraq began the post Baath era facing a multiplicity of challenges to its energy sector, the first being the interruption caused by war and the subsequent wave of looting across the country, which caused further damage to infrastructure. As a result of this disruption, output was 5% of its pre-war peak in the spring of 2003 and refining output was at 30% of nameplate capacity.<sup>664</sup> However, only 7 oil wells had been set fire out of an estimated 1500 as a part of the Baathist “scorched earth” policy during the invasion, and the Ministry of Oil had been protected from looters by U.S. troops.<sup>665</sup> Some foreign observers of the industry were confident of the potential for reviving exports, and one estimate of per barrel extraction cost was \$1<sup>666</sup> while another estimate envisaged investment of only \$3 billion a year to rapidly raise exports.<sup>667</sup> This climate of optimism persisted in the Iraqi energy sector for the remainder of the decade, as predictions of output in excess of 12 million bpd in 2010 demonstrate. Despite this, Iraq faced many other challenges and initial funding for the sector was far lower. Official Coalition documents noted in June 2003,

“The restoration of the Iraqi oil infrastructure is critical to the overall success of the Coalition’s mission. The oil infrastructure provides for the generation of significant revenue. In June 2003, Task Force Restore Iraqi Oil and the Ministry of Oil completed a Rough Order of Magnitude (ROM) for the restoration of the Iraqi oil infrastructure and initiated a funding request.”<sup>668</sup>

The report outlined over 220 projects including increasing export capacity in the Upstream sector, the development of new oil and gas fields, with a target of an additional 250 kbpd production, the development of gas fields to meet electricity generation requirements, to reduce HFO use and diesel oil use. Gas processing was expected to reach 200 million scfd for the domestic market, in theory a very achievable aim considering the existing infrastructure.<sup>669</sup> In the Downstream sector, a new refinery

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<sup>664</sup> Donald L. Bartlett, “Iraq’s crude awakening.” *Time Magazine*. May 10<sup>th</sup> 2003.  
<http://content.time.com/time/magazine/article/0,9171,450939,00.html>

<sup>665</sup> Ibid.

<sup>666</sup> Ibid.

<sup>667</sup> Ariel Cohen, “Restarting the Flow: Restoring Iraqi Oil Production.” Heritage Foundation. October 1<sup>st</sup> 2003.

<http://www.heritage.org/research/reports/2003/10/restarting-the-flow-restoring-iraqi-oil-production>

<sup>668</sup> Stefan Talmon, “The Occupation of Iraq: Volume 2: The Official Documents of the Coalition.” (Portland: Hart Publishing, 2013.) 220.

<sup>669</sup> Ibid.

was planned with a 70 kbpd capacity, while existing refineries were to have new units. Storage capacity for gas and oil was also planned to increase, allowing for more flexible response to changing seasonal demand.<sup>670</sup>

Regarding the environment, the RIO hoped that better refining could reduce sulphur content in diesel products and reduce the need for toxic TEL in petrol.<sup>671</sup> By September 2003, Oil Minister Thamir al-Ghadban envisaged a return to pre-war oil production by spring 2004, speaking at a conference in Dubai. Ghadban outlined how Iraq, while not privatising the energy sector, would award EPC contracts to IOCs, raising production as high as 6 million bpd by 2015. Ghadban also suggested that, were Iraq to reach the short-term target of 3.5 million bpd, OPEC would not impose a quota due to lost production during the 1990s. At the time of the conference, oil infrastructure across Iraq was suffering from a lack of electric power generation capacity for gas oil separation plants and refineries, among other challenges.<sup>672</sup>

Supporting this aim, on the 13th of July 2003, CPA head Paul Bremer appointed Ibrahim Bahr-Ulloum as head of the Ministry of Oil in the Interim Governing Council. Bahr-Ulloum later announced that subject to general political approval, he would not oppose production sharing contracts with IOCs.<sup>673</sup> Following this transitional period, Ghadban took over the Ministry in June 2004 and, in conjunction with directives from PM Allawi, outlined how Iraq's 17 producing fields would continue to be developed by the Iraqi National Oil Company, while the remaining 63 discovered but not producing fields would be open to IOC investment.<sup>674</sup>

This would be subject to political oversight following the writing of the new democratic constitution. Until then, MoO engaged in discussions with IOCs. In January 2004, Iraq's State Company for Oil Projects (SCOP) issued tenders for development of the Khurmala dome with the goal of increasing production at Kirkuk and invited bidding for the Hamrin field, to bring 60,000 bbl/d on line.<sup>675</sup> Rapid security deterioration made

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<sup>670</sup> Ibid.

<sup>671</sup> Ibid.

<sup>672</sup> Institute for Global Energy Research, "Iraq expected to return to pre-war oil capacity levels by March 2004." September 9<sup>th</sup> 2003. Accessed November 2<sup>nd</sup> 2016.

<http://www.gasandoil.com/news/2003/10/ntm34086>

<sup>673</sup> Congressional Record, V. 153, Pt. 10, May 22, 2007 to June 5 2007. (Washington: United States Government Printing Office, 2007.) 13680.

<sup>674</sup> Ibid.

<sup>675</sup> EIA, Department of Energy, Country Analysis Briefs: Iraq. EIA, 2004.  
<http://usiraq.procon.org/sourcefiles/eiacountryanalysis.pdf>

this work next to impossible, although some production was initially restored at Rumaila through RIO. By February 2004 however, Minister of Trade Ali Allawi noted that foreign participation in the sector would have to happen when Iraq became sovereign and not before.<sup>676</sup>

With the elections of 2005, Ibrahim Bahr Ulloum was re-appointed Minister of Oil, and a new body was established, the Energy Council, which would have oversight over issues of the same name, including the drafting of a Petroleum Law governing the sector (later known as the Hydrocarbon law and sometimes simply the Oil Law.<sup>677</sup> As these issues were worked on, security in Iraq had deteriorated with insurgents and terror groups attacking energy infrastructure, with output through 2005 falling to between 1.9 and 2.4 mbd, with exports averaging less than 1.6 million bpd for the year (some estimates show an even lower average of 1.4 mbpd, bringing in \$26 billion in revenues, while estimated investment to restore pre-2003 production was \$30 billion.<sup>678</sup> Both Persian Gulf export infrastructure, as well as the Kirkuk-Ceyhan pipeline, suffered attacks.<sup>679</sup>

Of the \$26 billion in oil revenues in 2005, around \$4 billion was then spent on importing refined products, in part due to delays implementing RIO plans for refining capacity, while up to 20% of refined product was lost due to smuggling.<sup>680</sup> A U.S. State Department report noted this was in part due to a disorganized sector, blaming,

“The participation of several oil organizations in the control of warehouses (Oil Products Distribution Company, Oil Pipelines Company, Gas Filling Company), in addition to overlapping responsibilities among these organizations. This is especially the case because these warehouses are distributed across the various Iraqi governorates, leading thus to the loss of administrative and technical control over those warehouses. For instance, the domestic gas stations in the governorate of Missan receive large quantities of gas oil that are neither

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<sup>676</sup> Ibid Congressional record VI

<sup>677</sup> Greg Muttitt, *Fuel on the fire: Oil and Politics in Occupied Iraq*. (London: The Bodley Head, 2011), 243

<sup>678</sup> Jim Krane, “Iraq Oil Output Lowest Since Invasion.” *The Washington Post*. April 28<sup>th</sup> 2006. Accessed November 2<sup>nd</sup> 2016. <http://www.washingtonpost.com/wp-dyn/content/article/2006/04/28/AR2006042801082.html>

<sup>679</sup> Lawrence Kumins, “Iraq Oil: Reserves, Production, and Potential Revenues.” Congressional Research Service. CRS report for Congress. April 13<sup>th</sup> 2005. Accessed November 2<sup>nd</sup> 2016:

<https://www.fas.org/sgp/crs/mideast/RS21626.pdf>

<sup>680</sup> Ibid.

controlled by the Shaaybe warehouse, which belongs to the Pipelines Company in Basra, nor by the Missan's warehouse which is located in the governorate of Missan. To a large extent this leads to smuggling activities in the southern regions.”<sup>681</sup>

Amid this situation, May 2006 saw the appointment of Hussein al-Shahristani as Minister of Oil, who prioritized continued work on the Oil Law, also called the Hydrocarbon Law, which would govern investment in the sector. However, no draft of this law was shown to Parliament in 2006. That year, Iraq was envisaging 6.5 million bpd production by 2015, with IOC assistance, 4 million bpd from a national oil company and over 2 million bpd from IOCs.<sup>682</sup>

By 2007, four new pieces of legislation were awaiting government approval, which would be vital to the sector, the Financial Resources Law, the Hydrocarbon Law, the Law for the Reorganization of MoO and the establishment of INOC, while additionally, a constitutional review committee was to finalize the 2005 constitution.<sup>683</sup> Parliament would have to authorise the Hydrocarbon Law, while the Council of Ministers would review the Law to Reorganise the Ministry of Oil, and a sub-committee would review the Law to re-establish INOC.<sup>684</sup>

The Hydrocarbon framework law outlined the responsibilities for the Ministry of Oil and INOC, and (according to a report for Congress) planned “to ensure proper oversight, accountability, and separation of powers between the two entities.”<sup>685</sup> The Law to Reconstitute INOC described in Articles 6 and 7 and 5D and 5E of the Draft Oil and Gas Law (DOGL) envisioned an autonomous but Iraqi owned commercial entity that was largely insulated from political interference, along with “wholly owned subsidiaries,” which could profit from oversight of Annex 1 (producing fields) and the authority to participate in the development of Annex 2 fields (discovered but not producing) and would only have access to Annex 3 and 4 fields (discovered but

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<sup>681</sup> Office of the Oil Ministry's Inspector General, “*Second Transparency Report: Smuggling crude oil and oil products.*” 2006. <http://archive.resourcegovernance.org/sites/default/files/052206.pdf>

<sup>682</sup> Iraq Energy research.

<sup>683</sup> Gunter, Frank, “*The Political Economy of Iraq: Restoring Balance in a Post-Conflict Society,*” (Cheltenham: Edward Elgar Publishing, 2013)

<sup>684</sup> Iraq Energy, interview with Thamir al-Ghadban.

<sup>685</sup> Christopher M. Blanchard, “Iraq: Oil and Gas Legislation, Revenue Sharing, and U.S. Policy.” CRS Report for Congress, July 2007. Accessed November 2<sup>nd</sup> 2016. <http://fpc.state.gov/documents/organization/88057.pdf>

undeveloped) on a competitive basis.<sup>686</sup> Prior to the reorganization of MoO, INOC would have authority to manage, own and operate the pipeline network and ports, before the establishment of a Federal Oil and Gas Council, (FOGC) which would give this responsibility to another government organization.<sup>687</sup>

At the same time, MoO would create a new organization for “planning, developing and following up on the process of contractors obtaining from the ministry rights relative to petroleum operations.”<sup>688</sup> DOGL also called for special training for MoO staff in bidding processes, contracts and negotiations with oil companies. This would have supplemented a major capacity building effort led by the U.S. State Department and supplemented by foreign aid, such as \$4 million donated by Norway for MoO staff training by November 2007.<sup>689</sup> At the time, a U.S. State Department report noted how “high-level MoO officials have expressed a deep respect for Norway's state-owned company and have a keen interest to implement most of Norway's methods in Iraq.”<sup>690</sup>

Capacity was a problem at the time of the DOGL in 2007, as the U.S. Department of Defence report noted, “the Iraqi government’s failure to execute several billion dollars of its own funds in oil sector development” had delayed recovery of the sector.<sup>691</sup> Left to operate independently in the absence of governing legislation, MoO failed to benefit significantly from any large scale partnerships with IOCs, since companies were wary of the investment environment; by June 2008, MoO had spent only half of its \$2.2 billion capital expenditure budget.<sup>692</sup>

Nonetheless, DOGL had outlined a plan for a more efficient and accountable sector in Article 7B which suggests,

“mechanisms that will ensure a wall of separation between, on the one hand, the Ministry, related companies (such as INOC and its subsidiaries) and regulators and monitors, and on the other hand, the oil and gas companies doing business

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<sup>686</sup> Rex Zedalis, *The Legal Dimensions of Oil and Gas in Iraq*, (Cambridge: Cambridge University Press, 2009) 294

<sup>687</sup> Ibid p178.

<sup>688</sup> Ibid.p179.

<sup>689</sup> U.S State Department cable, November 25<sup>th</sup> 2007. Available from Wikileaks. Accessed November 2<sup>nd</sup> 2016. [https://wikileaks.org/plusd/cables/07BAGHDAD3837\\_a.html](https://wikileaks.org/plusd/cables/07BAGHDAD3837_a.html)

<sup>690</sup> Ibid.

<sup>691</sup> Christopher M. Blanchard. “Oil and Gas Legislation, Revenue Sharing and US Policy.” November 3<sup>rd</sup>, 2009. (Washington: Congressional Research Service, 2009), 19.

<sup>692</sup> Ibid.

in Iraq and subject to regulatory oversight and control” and also, “full separation between production and oil services companies and on the other hand, regulatory, monitoring and supervisory departments in the Ministry.”<sup>693</sup>

Due to political opposition to DOGL, MoO went ahead with talks with IOCs in the absence of parliamentary consensus. In Q1 2008, after Iraq announced reserves of 115 billion barrels, <sup>694</sup>MoO conducted a pre-qualification process involving 100 IOCs, 35 of which were chosen by the Ministry’s Petroleum Contracts and Licensing Directorate.<sup>695</sup> Licensing rounds were launched in Summer 2008, with six producing fields operated by the South Oil Company, North and South Rumaila, West Qurna Phase 1 and Zubair, and North Oil Company’s Kirkuk and Bai Hassan, in addition to two gas fields, including Akkas in Anbar.<sup>696</sup> 22 of the 35 pre-qualified companies made 15 bids for \$16bn-worth of technical service contracts, with terms broadly allowing a 25% share and stake in the fields and the remaining stake to be the Iraqi partner company, in most cases the South Oil Company, with IOCs fronting development costs, remunerated at a fixed fee per barrel once a production target had been reached, including \$4 per barrel for Bai Hassan and \$1.90 for West Qurna.<sup>697</sup>

A consortium of BP and CNPC beat the bid from Exxon and Petronas for the supergiant Rumaila, the only field awarded during the first bid round. The consortium accepted a lower \$2 a barrel remuneration (after recovering investment) which was a reduction from their initial bid, over a 20 year contract, although bilateral negotiations over terms continued until November 2009.<sup>698</sup> This was Iraq’s first Technical Service Contract, and involved a \$500 million signature bonus, which the IOCs would recoup from 2011 onwards.<sup>699</sup>

The first bid round was widely seen as a disappointment for Iraq, due to there being only one contract awarded, while IOCs also felt deterred after a sustained period of

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<sup>693</sup> Rex Zedalis, *The Legal Dimensions of Oil and Gas in Iraq*, (Cambridge: Cambridge University Press, 2009) 180.

<sup>694</sup> Natural Resource Charter, “Lessons from Iraq’s 2009 Oil Auctions. Accessed November 2<sup>nd</sup> 2016.

“<http://www.resourcegovernance.org/sites/default/files/documents/lessons-from-iraqs-2009-oil-auctions.pdf>

<sup>695</sup> Ministry of Oil, Petroleum Contracts and Licensing Directorate: Final tender protocol for the award of service contracts, Iraq’s first petroleum licensing round. April 23<sup>rd</sup> 2009. [https://openoil.net/wp/wp-content/uploads/2012/03/FinalTenderProtocol\\_Round1.pdf](https://openoil.net/wp/wp-content/uploads/2012/03/FinalTenderProtocol_Round1.pdf)

<sup>696</sup> Ibid.

<sup>697</sup> Global Market Research Data: “Take Two: Iraq’s all important licensing round.” 7<sup>th</sup> December 2009.

Accessed November 2<sup>nd</sup> 2016. <http://www.offshore-technology.com/features/feature70823/>

<sup>698</sup> Press release on Rumaila oilfield, CNPC website. Accessed November 2<sup>nd</sup> 2016.

[http://www.cnpc.com.cn/en/CNPCandBPtojuvenateIraqsRumailaOilfield/CNPC\\_and\\_BP\\_to\\_rejuvenate\\_Iraqs\\_Rumaila\\_Oilfield.shtml](http://www.cnpc.com.cn/en/CNPCandBPtojuvenateIraqsRumailaOilfield/CNPC_and_BP_to_rejuvenate_Iraqs_Rumaila_Oilfield.shtml)

<sup>699</sup> Ibid 34.

interest and engagement with Iraq, including the aforementioned training for MoO staff. More problematically, the bid round was also politically controversial, coming after secretive MoO plans for short term no-bid contracts with a number of IOCs to revive the sector as (according to MoO) a “stop gap” measure until the Hydrocarbon Law was passed.<sup>700</sup> One analyst noted that the no bid contracts were not service contracts, as they had been described by MoO, but “were designed to circumvent the legislative stalemate and bring Western companies with experience managing large projects into Iraq before the passage of the oil law.”<sup>701</sup> Equally problematic was the secretive nature of talks with Shell over the Basra Gas Company, which according to a company spokesman, amounted to,

“A conceptual proposal to the Iraqi authorities to minimize current and future gas flaring in the south through gas gathering and utilization. The contents of the proposal are confidential.”<sup>702</sup>

MoO was demonstrating a willingness to act without parliamentary oversight. In March 2008 Hussein al-Shahristani informed the US State Department that the February 2007 DOGL was opposed by the KRG as being unconstitutional, but that a compromise may be reached if MNR cancelled post February 2007 Production Sharing Agreements (PSAs) and that if the KRG did so, DOGL would go to the Council of Representatives for approval.<sup>703</sup> Shahristani noted that MoO would not wait for the KRG’s approval for TSCs before bid rounds.<sup>704</sup> As noted in chapter 5, the KRG opposed TSCs on the grounds that they were economically damaging to the best interests of the Iraqi people and therefore unconstitutional, a similar view expressed by MoO of MNR’s contracts. In the same communication with the US State Department, Shahristani stated that MoO would hopefully reach 6 million bpd with or without parliamentary approval of a hydrocarbon law, and that plans were underway to build another Single Point Mooring System (SPM) for Basra.<sup>705</sup>

While Shahristani focused on plans regardless of the passage of the hydrocarbon law and negotiations between MoO and the BP-CNPC consortium for Rumaila continued, a

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<sup>700</sup> Andrew Kramer, “Deals with Iraq are set to bring oil giants back.” *The New York Times*. June 19<sup>th</sup> 2008. Accessed November 2<sup>nd</sup> 2016. <http://www.nytimes.com/2008/06/19/world/middleeast/19iraq.html>

<sup>701</sup> Ibid.

<sup>702</sup> Ibid.

<sup>703</sup> US State Department Cable, US Embassy Baghdad, 5<sup>th</sup> March 2008. Accessed November 2<sup>nd</sup> 2016. <http://wikileaks.redfoxcenter.org/cable/2008/03/08BAGHDAD656.html>

<sup>704</sup> Ibid.

<sup>705</sup> Ibid.

second round of bidding was announced for 2009 with 41 pre-qualified IOCs.<sup>706</sup> The auctions held in June 2009 covered “brownfield” sites that were previously being operated prior to the onset of conflicts such as the Iran-Iraq war, in some cases still littered with unexploded bombs, such as the Majnoon field. In total, these fields amounted to 80% of existing output, while “greenfield” sites (again, largely explored and with a high degree of geological certainty) were allocated for a December auction.<sup>707</sup> These bidding rounds again created much controversy, generating enough concern in Parliament to have Shahrastani called for questioning twice, facing a vote of no confidence, while oil worker unions and the South Oil Company voiced opposition to the contracts.<sup>708</sup> The bid rounds themselves were hampered by the low per barrel remuneration fees offered by Iraq, which were lower than what all IOCs were expecting, in at least one case 10 times lower.<sup>709</sup>

The second bidding round saw the Cabinet authorise the Rumaila contract, which was then called for review by a group of MPs in Parliament, while concurrently, DOGL looked unlikely to be passed into law at least until elections in 2010. Shahrastani attempted to assuage some of the concerns in parliament by claiming that IOCs would only earn around \$16 billion from the contracts, while Iraq’s potential revenue would be \$1.7 trillion.<sup>710</sup> This figure is equivalent to the estimated value of the global oil industry in October 2016, but was lower than some projections of Iraq’s oil earnings which were higher up to 2035.<sup>711</sup>

During the course of 2009, operational funds for MoO increased 800% to \$950 million, while investment stayed at just over \$2 billion, below the minimum figures discussed in 2003 to raise production.<sup>712</sup>

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<sup>706</sup> IHS Report, “Iraq Outlines 2009 Oil Licensing Round; Short-Term Contracts Called into Question.” IHS Markit, 7<sup>th</sup> July 2008. Accessed November 2<sup>nd</sup> 2016. <https://www.ihs.com/country-industry-forecasting.html?ID=106596636>

<sup>707</sup> Natural Resource Charter, “Lessons from Iraq’s 2009 Oil Auctions. Accessed November 2<sup>nd</sup> 2016. <http://www.resourcegovernance.org/sites/default/files/documents/lessons-from-iraqs-2009-oil-auctions.pdf>

<sup>708</sup> Christopher M. Blanchard, “Iraq: Oil and Gas Legislation, Revenue Sharing, and U.S. Policy.” CRS Report for Congress, July 2007. Accessed November 2<sup>nd</sup> 2016. <http://fpc.state.gov/documents/organization/88057.pdf>

<sup>709</sup> Ibid.

<sup>710</sup> Patrick Cockburn, “Bidding war for Iraq’s huge oil contracts sputters into life,” *The Independent*. 30<sup>th</sup> June 2009. Accessed November 2<sup>nd</sup> 2016. <http://www.independent.co.uk/news/world/middle-east/bidding-war-for-iraqs-huge-oil-contracts-sputters-into-life-1726205.html>

<sup>711</sup> Zainab Calcuttawala, “The \$1.7 trillion oil industry isn’t going anywhere.” *Oilprice*. October 21<sup>st</sup> 2016. Accessed November 2<sup>nd</sup> 2016. <http://oilprice.com/Energy/Crude-Oil/The-17-Trillion-Oil-Industry-Isnt-Going-Anywhere.html>

<sup>712</sup> Christopher M. Blanchard, “Iraq: Oil and Gas Legislation, Revenue Sharing, and U.S. Policy.” CRS Report for Congress, July 2007. Accessed November 2<sup>nd</sup> 2016. <http://fpc.state.gov/documents/organization/88057.pdf>

The finalization of the TSCs rapidly changed this situation. By 2011, ExxonMobil, Shell, CNPC, Petronas, CNOOC, ENI, Total, Gazprom Neft, BP and Occidental had all signed contracts with MoO.<sup>713</sup> The following year, total foreign investment in Iraq was \$55 billion, much of it in the energy sector.<sup>714</sup> However, in 2012 the IEA projected that the projected increase in investment “could be at risk if the government’s efforts to modernize and reform Iraq’s legal framework and institutions are delayed or frustrated, or if fluctuations in prices and oil revenue feed through into irregular capital spending.”<sup>715</sup>

### 5.1.2 Ministry of Oil Policy Analysis

Iraq has reached a production capacity of over 4 million b/d controlled by the federal Ministry of Oil, which continues to face a number of challenges that, if unresolved, will continue to inflict significant financial damage on the sector. This target has been attained 12 years after the hoped for 4 million bpd target by spring 2004, and is a fraction of the hoped-for targets of 12 million bpd in 2009. While much delay to achieving, this target has been because of poor security, other damage has been self-inflicted. Initially, renegotiation of TSCs to reduce development plateau’s, following delays to infrastructure projects, has taken considerable time and distracted from the task of providing a comprehensive legal framework, which has in turn damaged investor confidence. This has occurred regardless of the security situation, which improved dramatically in southern Iraq after 2009.<sup>716</sup>

As of 2016, repeated efforts to attract investment in the refining sector have not translated into significant extra capacity, putting Iraq back to its position in the 2003--2006 period when poor security delayed efforts to increase capacity; consumption in 2016 was 800,000 bpd in all of Iraq, a major problem in the KRI and northern Iraq which depended on the 200,000 bpd Baiji refinery to supply fuel.<sup>717</sup> Replacing this capacity is an urgent priority due to Iraq’s growing population and refined product demand. The energy sector as a whole has suffered from the delay to the Hydrocarbon

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<sup>713</sup> Ibid.

<sup>714</sup> IBP, “Iraq Business Law Handbook Volume 1 Strategic Information and Basic Laws.” (Washington: International Business Publications, 2013.) 54

<sup>715</sup> International Energy Agency, “Iraq Energy Outlook 2012.” Accessed November 2<sup>nd</sup> 2016. [https://www.iea.org/publications/freepublications/publication/WEO\\_2012\\_Iraq\\_Energy\\_OutlookFINAL.pdf](https://www.iea.org/publications/freepublications/publication/WEO_2012_Iraq_Energy_OutlookFINAL.pdf) mmercial and Legal Structure

<sup>716</sup> Emma Sky, “The Unravelling,” (New York: Atlantic, 2016): 254

<sup>717</sup> IEA, “Country Analysis Brief: Iraq,” April 28, Accessed August 2<sup>nd</sup> 2016 [http://www.iberglobal.com/files/2016/iraK\\_eia.pdf](http://www.iberglobal.com/files/2016/iraK_eia.pdf)

law, meaning that pre-2003 legislation remains in effect, as per Constitutional Article 130. This states that all legacy laws stay valid until repealed by a new federal law, such as the Preservation of Hydrocarbon Resources Law No. 84 of 1985 and the Iraqi Companies Law No. 21 of 1997.<sup>718</sup>

This has not only been a problem for investors, who have had to contend with competing interpretations of the constitution as well as navigate legacy laws. The failure to ratify a federal Hydrocarbon law has led to a political and legal vacuum, further damaging trust with IOCs which have also had to deal with difficult contract negotiations and delayed payments. The latter situation has also affected Iraq and the Kurdish region, however, both Erbil and Baghdad may have mitigated this situation even in the absence of contract renegotiation, had they not implemented sustainable fiscal policies. Modernising their respective regional and national energy sectors under a clear constitutional framework and a separation of powers may have yielded efficiency gains. These in turn would have reduced many of the difficulties caused by the post 2014 price collapse.

Political deals between the federal government of Iraq and the KRG have proven a recipe for failure. In the absence of federal parliamentary backing, unconstitutional agreements have been difficult to implement given a pervading lack of transparency and trust. Unrealistic federal budgets and parameters within agreement terms that relate to oil prices and production rates have encountered problems with the reality of infrastructural bottlenecks, accounting mechanisms and volatile prices, among other problems.

A possible way forward may be to revive the hydrocarbon, revenue sharing and INOC draft laws that were initiated by parliament in mid-2011. This could be a sensible starting point for mitigating the legal and political conflict between the MoO and MNR over oil contracts, export rights and financial allocations.

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<sup>718</sup> The Constitution of the Republic of Iraq, 2005

## 5.2 Case Study 2: Regional Institution

### 5.2.1 Kurdish Ministry of Natural Resources

In late 2014 the MNR announced that the Kurdish Region of Iraq possessed 60 billion barrels of oil reserves, an increase of 15 billion barrels on their previous estimate. According to the IEA, this figure had not been verified and in 2016 the agency reported the KRI's proved reserves at 4 billion.<sup>719</sup> The higher estimates were likely based on the US Geological Survey from the year 2000, which put estimated reserves in the Zagros fold belt in Iraq (most of which lies in the KRI) at between 40 and 45 billion barrels.<sup>720</sup> In 2012, Richmond Energy Partners estimated that recoverable oil stood at a much lower 8 billion barrels.<sup>721</sup> Prior to 2014, the MNR estimated recoverable reserves to be 11 billion barrels.<sup>722</sup>

Earlier estimates drew the interest of IOCs prior to the Iraq invasion, since the KRI was semi-autonomous following the first Gulf War and the implementation of a “no fly zone” over northern Iraq. The first IOC to enter the region was Genel Enerji, who signed a PSC for Taq-Taq field in July 2002, amending the agreement in January 2004.<sup>723</sup>

In 2003, IOC interest was growing in the Kurdish Region of Iraq, which as noted had not seen exploration efforts since the 1970s due to internal conflict in the region and war with the central government.<sup>724</sup> However, IOC focus was firmly on the south after 2003, due to less complex geology and much available data on exploration. Therefore, despite some concerns over reservoir damage in the south and at Kirkuk, this was minor compared to the exploration risk in the KRI, which was seen as relatively unknown in comparison to fields such as Majnoon, which had been explored since the early 1970s.<sup>725</sup>

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<sup>719</sup> Energy Information Administration, Country Analysis Brief, Iraq April 28 2016.

2016 [http://www.ieee.es/Galerias/fichero/OtrasPublicaciones/Internacional/2016/EIA\\_Iraq\\_28abr2016.pdf](http://www.ieee.es/Galerias/fichero/OtrasPublicaciones/Internacional/2016/EIA_Iraq_28abr2016.pdf)

<sup>720</sup> Mills, Robin, “Under the Mountains: Kurdish Oil and Regional Politics” Oxford Institute of Energy Studies Working Paper 63. (Oxford, 2016)

<sup>721</sup> Iraq Oil Almanac: An Openoil reference guide. PDF available online. P37.

<sup>722</sup> Ibid.

<sup>723</sup> Ministry of Natural Resources website: Taq Taq PSA. Accessed November 2<sup>nd</sup> 2016.

<http://cabinet.gov.krd/p/p.aspx?l=12&r=296&h=1&s=030000&p=166>

<sup>724</sup> Author discussion with Ashti Hawrami.

<sup>725</sup> Offshore Technology. “Majnoon field, Iraq.” Accessed November 2<sup>nd</sup> 2016. <http://www.offshore-technology.com/projects/majnoon-field/>

To cater for this interest, the KRG established a Ministry of Natural Resources (MNR) in 2006, as the oil ministry of their semi-autonomous region, but essentially a ministry in a bifurcated political system, with a regional oil law passed by the KRG in 2007.<sup>726</sup> Politically the KRI's status was still in question however, since the 2005 Constitution was still being reviewed and subsequently, MNR did not establish a national oil company, leaving the ministry with every responsibility over the sector. These duties included management of revenues, strategic planning and awarding licenses, with a regulatory function.<sup>727</sup> MNR also has shares in all fields with IOC operators, having a management role since there is no NOC to act as a partner.<sup>728</sup>

The KDP (having aspirations for an independent Kurdish region) have made plans for an NOC in the form of the Kurdistan Exploration and Production Company (KEPCO) with a marketing arm, the Kurdistan Oil Marketing Organization (KOMO), with only the latter actually functioning, having been established in 2007 under the KRG oil law, which notes,

“KOMO may market or regulate the marketing of the production from Petroleum Operations, and may, with the agreement of a Contractor to a Production Sharing Contract, market the Contractor's share of Petroleum.”<sup>729</sup>

KOMO directly marketed oil through a Kurdish built pipeline to Ceyhan in January 2014.<sup>730</sup> To license IOC activity, MNR divided the region into 48 exploration blocks, loosely based on geological formations, a strategy overseen by the newly appointed Minister for Natural Resources Ashti Hawrami, who took the position in 2006.<sup>731</sup> Hawrami, who had previously worked both for INOC and BP, personally dealt with

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<sup>726</sup> Rex J. Zedalis *“The Legal Dimensions of Oil and Gas in Iraq”*(Cambridge: Cambridge University Press, 2012),30

<sup>727</sup> Ibid p30.

<sup>728</sup> Hannam and Partners, “Kurdistan Oil and Gas Outlook” December 2015. Accessed July 16<sup>th</sup> 2016. <http://www.hannamandpartners.com/uploads/2015/10/Kurdistan-2.pdf>

<sup>729</sup> Oil and Gas Law of the Kurdistan Region of Iraq, 2007. [http://cabinet.gov.krd/uploads/documents/Kurdistan%20Oil%20and%20Gas%20Law%20English\\_\\_2007\\_09\\_06\\_h14m0s42.pdf](http://cabinet.gov.krd/uploads/documents/Kurdistan%20Oil%20and%20Gas%20Law%20English__2007_09_06_h14m0s42.pdf)

<sup>730</sup> Ministry of Natural Resources announcement on export sales. 8<sup>th</sup> of January, 2014. Accessed November 2<sup>nd</sup> 2016. <http://mnr.krg.org/index.php/en/press-releases/320-ministry-of-natural-resources-announcement-on-oil-export-sales>

<sup>731</sup> David Mackertich, Adnan Samarrai, “The history of hydrocarbon exploration in Iraqi Kurdistan: 1901 to 2012.” Presentation by Petroceltic. Accessed November 2<sup>nd</sup> 2016. <http://www.petroceltic.ie/~media/Files/P/Petroceltic-V2/pdf/Mackertich-Samarrai-2013-Geol-Soc-Zagros-conference-presentation.pdf>

IOCs in allocating exploration blocks, pursuing Production Sharing Agreements as the contract model, with the aim of overcoming investor concerns.<sup>732</sup>

MNR moved to attract investment ahead of any finalisation of the Iraqi Constitution, as noted signing a PSC with Genel in 2002, which later became the first company to work in the KRI, beginning work with Addax Petroleum in 2005 at Taq Taq, which came on line in 2008.<sup>733</sup> This was followed by Norway's DNO, who intentionally finalised a PSC for immediately prior to Iraq's Transfer of Sovereignty in 2004.<sup>734</sup> DNO discovered the Tawke field in 2006, which came on line in 2007, beginning exports in 2009. As DNO were beginning work at Tawke, Canada's Western Oil Sands entered the KRI through the Western Zagros Resources company, having signed a PSC for Kalar-Bawanoor in 2006.<sup>735</sup> By this time, different interpretations over oil and gas rights were already being drawn from the Iraqi Constitution, with the Kurds referencing Article 114 that suggested contracts were legal prior to the ratification of the document.<sup>736</sup> As noted, Minister of Oil Hussein al-Shahristani saw February 2007 as the cut off point for PSCs in the KRI that were acceptable to Baghdad.

Later that year, a consortium of UAE based Dana Gas and Crescent Petroleum signed a service contract for Chemchemical and Khor Mor gas fields, with the intention of using gas from the latter for the electric grid.<sup>737 738</sup> In 2009, OMV and MOL joined the consortium (Pearl Petroleum) taking LPG and condensate as payment for their work. Khurmala in the Kirkuk formation was then transferred from the North Oil Company to the Erbil based KAR Group.<sup>739</sup> By early 2009, these companies had been joined by Korea National Oil Company, Reliance Industries (India) Alfa-Access-Renova (Russia) Talisman (Canada) and Hunt Oil (US) which signed a contract for Ain Sifni, a field in a disputed area of Ninewa.<sup>740</sup> All of these companies took considerable political risk in the absence of any firm agreement between Baghdad and Erbil. In late 2009, Gulf

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<sup>732</sup> Greg Muttitt, *Fuel on the fire: Oil and Politics in Occupied Iraq*. (London: The Bodley Head, 2011), 250.

<sup>733</sup> Robin Mills, "Under the Mountains: Kurdish Oil and Regional Politics" Oxford Institute of Energy Studies Working Paper 63. (Oxford, 2016)

<sup>734</sup> Greg Muttitt, *Fuel on the fire: Oil and Politics in Occupied Iraq*. (London: The Bodley Head, 2011), 127

<sup>735</sup> Ibid.p8

<sup>736</sup> Author discussion with Ashti Hawrami, Kurdish Minister of Natural Resources.

<sup>737</sup> Luay al Khatteeb, "The Geopolitics of Natural Gas Natural Gas in the Republic of Iraq" (Harvard Belfer Center, Rice University's Baker Institute Center for Energy Studies 2013.)

<sup>738</sup> Author discussion with Majid Jafar, Crescent Petroleum CEO.

<sup>739</sup> Ibid.

<sup>740</sup> Robin Mills, Under the Mountains.

Keystone began work at the Shaikan oilfield, which came on line in 2010; Shaikan is one of the larger fields in the KRI with 639 million barrels of reserves as of 2015.<sup>741</sup>

In late 2011, MNR signed six PSCs with ExxonMobil, including in disputed territories although at the time they were also operating West Qurna- 1 in southern Iraq. The public announcement of this news, which MNR proclaimed as legal, was met with immediate condemnation from Baghdad and a threat to MNR, with a statement noting,

“The signing of any contract with the KRG without the approval and the knowledge of the Iraqi central government and the oil ministry will be considered illegal. ExxonMobil could face disqualification and the termination of its contract.”<sup>742</sup>

The following year, Gazprom Neft, Total, Chevron and TAQA (UAE) also signed contracts with MNR, which covered the entire area open to licensing, with the exception of some mountainous terrain.<sup>743</sup> Many of the smaller IOCs were calculating that with enough momentum in the area and continued exploration, more majors would enter the region and buy up their operations.<sup>744</sup>

Aside from the deterrent of political risk, another major constraint on MNR’s ambitions was export infrastructure, which became an ongoing source of contention between MoO and MNR. In 2011, MNR made an arrangement with the federal government which allowed the use of the federal pipeline system in addition to half the revenues of oil transiting the border, totaling \$514 million per month over 14 months, allowing for payments to IOC contractors working on the PSCs.<sup>745</sup> As part of the arrangement, the KRG was required to raise exports to 200,000 BPD.<sup>746</sup> In April 2012 the KRG

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<sup>741</sup> Reuters, “Gulf Keystone says reserves more than double at Shaikan oilfield.” October 1<sup>st</sup> 2015. Accessed November 2<sup>nd</sup> 2016. <http://www.reuters.com/article/gulf-keys-petr-oilfield-idUSL3N1212BP20151001>

<sup>742</sup> Erik Watson, “ExxonMobil nettles Baghdad with Kurdish PSC.” Oil and Gas Journal, November 23<sup>rd</sup> 2011. Accessed 2<sup>nd</sup> November 2016. <http://www.ogj.com/articles/2011/11/exxonmobil-nettles-baghdad-with-kurdish-psc.html>

<sup>743</sup> Ben Lando, “Kurdish oil boom begins.” Iraq Oil Report, re-published by MNR. June 29<sup>th</sup> 2011. Accessed July 16<sup>th</sup> 2016. <http://cabinet.gov.krd/a/d.aspx?a=40542&l=12&r=73&s=010000>

<sup>744</sup> Ibid.

<sup>745</sup> Heritage Oil, Circular to shareholders. 15<sup>th</sup> November 2012. Accessed November 2<sup>nd</sup> 2016. <http://www.heritageoiltd.com/media/10775/miran-divestment-circular-and-notice-of-egm.pdf>

<sup>746</sup> Ibid.

terminated oil exports, alleging that the federal government had delayed payments of US \$1.5 billion, while noting that two of the \$514 million payments had been sent.<sup>747</sup>

The federal government alleged that the MNR was selling crude oil unilaterally and was not sending payments for these sales back to the Baghdad, as had been agreed. A new agreement was negotiated in September 13th 2012 after the MNR re-started exports through the Kirkuk-Ceyhan pipeline.<sup>748</sup> In early 2013, it was alleged that the MNR was selling oil trucked from the oil field at Taq Taq to the Turkish port of Mersin.<sup>749</sup> Baghdad viewed this as a violation of the September agreement, stating that only SOMO had the authority to export and market this oil.

Negotiations between Turkey and the MNR continued through 2013 leading to a December 2013 agreement to use the Iraq-Turkey Pipeline (ITP) to send up to 350,000 BPD from Taq Taq, through Khurmala to storage tanks at Ceyhan, Turkey.<sup>750</sup> MNR announced plans to export up to 1 million BPD through this pipeline. In response to this deal, the federal government of Iraq inserted a provision into the draft 2014 budget which stipulated that the MNR must send 400,000 BPD to the federal export system in order for the KRG to receive their 17% budget share.<sup>751</sup>

Legal threats had been issued through 2014 from Baghdad. In January 2014, Deputy Prime Minister for Energy Affairs Hussein al Shahristani stated that the federal government will take legal and fiscal action against the KRG for ongoing independent Oil and Gas exports through Turkey, since the Oil was “property of the Iraqi people.” On January 17th Minister of Oil Abdul Karim Luaibi announced that the federal government was preparing legal action against Turkey, while the KRG’s budget payments were halted.<sup>752</sup>

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<sup>747</sup> Ibid.

<sup>748</sup> Ministry of Natural Resources Press release, “Oil and gas conference opens in Erbil, exploration capital of the world.” 4<sup>th</sup> December 2012. Accessed 2<sup>nd</sup> November 2016. <http://mnr.krg.org/index.php/en/press-releases/147-oil-and-gas-conference-opens-in-erbil-exploration-capital-of-the-world>

<sup>749</sup> Julia Payne, “RPT-Kurdistan starts independent crude oil exports.” Reuters. 8<sup>th</sup> of January 2013. Accessed November 2<sup>nd</sup> 2016.

<http://www.reuters.com/article/kurdistan-crude-exports-idUSL5E9C7AKW20130108>

<sup>750</sup> Stuart Elliott, “Iraq slams Kurdish move to offer crude for sale at Ceyhan,” Platts, 10<sup>th</sup> January 2014. Accessed November 2<sup>nd</sup> 2016.

<http://www.platts.com/latest-news/oil/london/iraq-slams-kurdish-move-to-offer-crude-for-sale-26609441>

<sup>751</sup> Michael Knights, “Making the Iraqi Revenue-Generating Deal Work,” Washington Institute for Near East Policy, December 3<sup>rd</sup> 2014. Accessed July 16<sup>th</sup> 2016.

<http://www.washingtoninstitute.org/policy-analysis/view/making-the-baghdad-kr-g-revenue-generating-deal-work>

<sup>752</sup> Robin Mills, “Under the Mountains: Kurdish Oil and Regional Politics” Oxford Institute of Energy Studies Working Paper 63. (Oxford, 2016)

On March 20th, the MNR released a statement offering 100,000 BPD as a “goodwill gesture” to the federal export system.<sup>753</sup> This offer was rejected by Prime Minister Nouri al Maliki.<sup>754</sup>

On May 23rd, a statement from the MNR announced that “A tanker loaded with over one million barrels of crude oil departed last night from Ceyhan towards Europe. This is the first of many such sales of oil exported through the newly constructed pipeline in the Kurdistan Region. The revenue from the sales will be deposited in a KRG-controlled account in Halkbank in Turkey.” The federal government of Iraq subsequently filed an arbitration case against the Federal Republic of Turkey and Botaş, Turkey’s state owned pipeline and trading company.<sup>755</sup>

On June 9th, the Ministry of Oil published the following statement in response to the shipment of oil by the KRG:

“The Ministry of Oil ensures for the next time that the marketing of the Iraqi oil from Kurdistan Province without gaining the government's approval is a constitutional violation and federal authority override. The Ministry of Oil have the legal right to prosecute all the parties who are involved with transporting oil illegally without gaining the approval from the Federal Government.”<sup>756</sup>

The federal government also released a statement on the Ministry of Oil website, noting that Turkey was in violation of the 1976 Iraq-Turkey Pipeline agreement. The statement noted that,

“By transporting and storing crude oil from Kurdistan, and by loading that crude oil onto a tanker in Ceyhan, all without the authorization of the Iraqi Ministry of Oil, Turkey and BOTAŞ have breached their obligations under the Iraq-Turkey

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<sup>753</sup> Statement by Prime Minister Nechirvan Barzani, MNR website. 20th March 2014. Accessed November 2<sup>nd</sup> 2016. <http://mnr.krg.org/index.php/en/press-releases/354-statement-by-prime-minister-barzani-krq-oil-export-initiative>

<sup>754</sup> Report on Kurdish situation, Iraq Embassy in Japan. Accessed November 2<sup>nd</sup> 2016. <http://www.iraq.emb-japan.go.jp/documents/a140316.pdf>

<sup>755</sup> Statement by Kurdish Regional Government in response to Iraq Ministry of Oil. 25<sup>th</sup> May 2014. Accessed November 2<sup>nd</sup> 2016. <http://mnr.krg.org/index.php/en/press-releases/374-statement-by-kurdistan-regional-government-in-response-to-federal-ministry-of-oil-announcement>

<sup>756</sup> Iraqi Ministry of Oil website. Accessed November 2<sup>nd</sup> 2016. <https://www.oil.gov.iq/index.php?name=News&file=article&sid=321>

Pipeline Agreement. This agreement governs the operation of two pipelines that run from Kirkuk, Iraq, to the Turkish port of Ceyhan on the Mediterranean Sea, as well as crude oil storage and loading facilities at Ceyhan. It was signed in 1973 and amended several times, most recently in 2010. Under the agreement, Turkey and BOTAŞ committed to reserve the entire pipeline, storage and loading system for the exclusive use of the Iraqi Ministry of Oil, and to handle and load crude oil coming from Iraq exclusively in accordance with instructions given by the Iraqi Ministry of Oil.<sup>757</sup>

MoO then successfully mounted legal action against one of the Kurdish tanker shipments from Ceyhan, the United Kalvytra, and MNR subsequently sought to withhold data on who was buying the oil (following a legal threat to buyers from Baghdad).<sup>758</sup> MNR also shipped oil from Ashkelon in Israel, which would not recognise a legal threat from Baghdad due to the fact that the two nations had no formal relations. MNR also moved oil between tankers at sea to confuse those who were tracking shipments, successfully selling oil to MOL in Hungary and (according to MNR) finding 10 buyers by late 2015.<sup>759</sup>

Despite this, MNR's strategy of unilateral oil sales did not alleviate the KRG's acute financial problems, brought on by the halting of budget transfers from Baghdad and the oil price collapse.

### 5.2.2 MNR Policy Analysis

Despite the collapse in oil revenues, Ashti Hawrami decided to pursue independent exports to finance independence, suggesting the KRI could export 1 million bpd of oil by 2017, arising from some of the 50 PSAs which are unrecognized by Baghdad.<sup>760</sup> This target is reminiscent of MoO's inflated production targets, and possibly points to an over optimistic view of the sector, as with the 2014 inflation of KRI oil reserves by 15 billion barrels, which was unverified. Since then, the KRI has suffered a major setback

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<sup>757</sup> Ibid.

<sup>758</sup> Robin Mills, "*Under the Mountains.*"

<sup>759</sup> Denise Natali, "Stalemate, not statehood, for Kurdistan," Lawfare Blog. November 1st 2015. Accessed July 16th 2016. <https://www.lawfareblog.com/stalemate-not-statehood-iraqi-kurdistan>

<sup>760</sup> Michael Knights, "Baghdad and Erbil closer than ever to a fair deal." Washington Institute for Near East Policy. February 14<sup>th</sup> 2014. Accessed November 2<sup>nd</sup> 2016. <http://www.washingtoninstitute.org/policy-analysis/view/baghdad-krq-negotiations-closer-than-ever-to-a-fair-deal>

with the downgrading of Taq Taq and Barda Rash oilfields, bankrupting Afren and severely hurting the financial position of Genel. This came on top of prolonged delays paying IOCs, which also pushed Gulf Keystone to near bankruptcy, after the long legal battle between MNR and Dana Gas, which further damaged investor confidence. In some respects, the financial losses to the MoO and MNR may have been mitigated by a comprehensive framework whereby the role of IOCs would have been approved at the federal level. Instead, MNR and MoO engaged in a series of legal battles with each other, and IOCs, for example MoO's punishment of Exxon over PSAs in the KRI and the ensuing heightened political risk in the KRI, which deterred investment. This stemmed from the unilateral operations of the MNR.

Despite this situation, MNR initially developed something close to an energy strategy after 2006. Following the unification of both Kurdish administrations governed by the KDP and PUK in 2006, the KRG emulated successful practices around the world by fast-tracking investment and attempting to limit bureaucracy, which initially attracted a similar level of IOC interest as Baghdad. The initial success in the KRG's policy implementation contributed to the development of the upstream sector, turning the KRI into an oil and gas producer, feeding local industries and the power sector with the necessary feedstock that helped create the economic boom witnessed until end of 2012. Fast track gas development of Khor Mor field through the Pearl Consortium also allowed for the rapid restoration of almost 24 hour electricity in the KRI through gas fired plants, in contrast to the slow effort in capturing and processing associated gas in southern Iraq. As noted however, MNR's unilateral strategy on exports succeeded in provoking MoO and creating a confrontational environment, something that conflicts with the Iraqi federal constitution, which emphasizes cooperation between regions and the center.

## 5.3 Case Study 3: Operator

### 5.3.1 Basra Gas Company Joint Venture

Natural gas has been playing an increasingly significant role in the energy mix of the Middle East and North Africa region over the last decade. Middle Eastern energy consumption is steadily growing—beyond 10 percent per annum in some cases—driven by economic and population growth.<sup>761</sup> Gas is also becoming the main feedstock for power generation in the MENA region, meeting 67 percent of the regional demand for electricity.<sup>762</sup> Among the current and potential regional gas producers, Iraq is better positioned than many countries that recently experienced the “Arab Spring” and its troubling dynamics. The country also benefits from being located in the middle of a gas-thirsty region—a potential gas market that comes with its own challenges as a heavy consumer and as a critical transit territory. Political events since January 2011 have greatly influenced plans for strategic gas pipelines.

Before the Arab Spring, Iraq was expecting to play a pivotal role in the planned Nabucco Pipeline from the northern corridor of Iraq and the Arab Gas Pipeline linking the western part of Iraq to regional and European markets. Yet due to the rising local demand in the MENA region and to the current political uncertainties, European gas markets are now putting their plans for countries such as Iraq on the back burner while exploring more sustainable suppliers. Even if Iraq’s regional plans have been called into question, Iraq’s local demand for gas has grown beyond the forecasts of the initial master plans adopted by the various Iraqi administrations that governed Iraq after Saddam Hussein’s fall in 2003. Iraqi policymakers now believe that Iraqi gas, if developed, can serve as a unique economic multiplier and enable the much-needed reconstruction of Iraq’s ravaged economy and devastated infrastructure.<sup>763</sup> Estimates of Iraq’s proven gas reserves vary. Some independent agencies rank the country at number 13 for world gas reserve-holders, while others rank it 11th.<sup>764</sup> Even without additional targeted efforts to find more Iraqi gas, output is set to rise considerably, as over 80 percent of Iraqi gas is in associated form, and the country is in the midst of an effort to

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<sup>761</sup> Jude Clemente, “Rising Middle East Natural Gas Demand Boosts U.S. LNG.” *Forbes*, April 6<sup>th</sup> 2016. Accessed November 2<sup>nd</sup> 2016. <http://www.forbes.com/sites/judeclemente/2016/04/06/rising-middle-east-gas-demand-boosts-u-s-lng/#37a07be031ef>

<sup>762</sup> Luay al Khatteeb, “The Geopolitics of Natural Gas in the Republic of Iraq” (Harvard Belfer Center, Rice University’s Baker Institute Center for Energy Studies 2013.)

<sup>763</sup> Author discussion with Jafar Dhia Jafar.

<sup>764</sup> *Ibid.*

increase current oil production.<sup>765</sup> As much of Iraq's gas is associated and will be a by-product of oil production—unlike other Middle Eastern countries—its production could be cost effective and competitive to regional markets; the development cost of gas is linked to capturing, processing, and transportation, with no cost required for exploration and production. However, due to the lack of infrastructure facilities, 55 percent of current gas production is flared, although estimates vary, leaving very little to feed the deprived national grid and industry.<sup>766</sup>

### 5.3.2 Basra Gas Company Profile

Due to the problem of low gas utilization, the Joint Venture (JV) Basra Gas Company (BGC) was outlined in a Heads of Agreement in September 2008 and approved by Cabinet in November 2011 (beginning operations in May 2013) to capture all of southern Iraq's associated gas and use it for industry and municipal use by 2015, before exporting the surplus once domestic demand was met.<sup>767</sup> The contract for this operation was a Concession, but reliant upon upstream and downstream operations governed by Technical Service Contracts that were finalised with IOCs following the bidding rounds of 2009 and beyond.

Iraq was to become self-sufficient in LQP and export LNG, once a plant for this was constructed. Export of LNG was enabled by the upgrading of the Umm Qasr port by Saipem.<sup>768</sup> Based on an initial capital expenditure estimate of \$17 billion, the LNG plant was costed at \$4.4 billion, with a further \$12 billion slated for investment in gas infrastructure. In 2011, when the project was still being planned, MoO had announced its high production targets of over 12 million bpd by 2020 meaning that the successful installation and upgrading of infrastructure to process this would have been able to exploit over 8 bcf of gas. According to data produced by Wood Mackenzie in 2015, output by 2035 would be equivalent to 99,000 bpd of LPG and over 13,000 bpd of condensate, but processing below the 2 bcfd target due to delays in critical oil infrastructure projects.<sup>769</sup> Shorter term targets in 2011, when the BGC draft contract was

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<sup>765</sup> Ibid.

<sup>766</sup> Ibid.

<sup>767</sup> Integrated National Energy Strategy of Iraq, 2010-2030. Accessed November 2<sup>nd</sup> 2016. [http://www.iier.org/i/uploadedfiles/publication/real/1371283063\\_150613SummaryoftheFinalReport\(IntegratedNationalEnergyStrategy\(INES\)forIraq\).pdf](http://www.iier.org/i/uploadedfiles/publication/real/1371283063_150613SummaryoftheFinalReport(IntegratedNationalEnergyStrategy(INES)forIraq).pdf)

<sup>768</sup> Wood Mackenzie, "Basra Gas Company report." December 2015. Available from Wood Mackenzie. <https://www.woodmac.com/reports/upstream-oil-and-gas-basrah-gas-project-11417088>

<sup>769</sup> Wood Mackenzie, "Basra Gas Company report." December 2015.

signed envisaged an increase from less than 0.5 bcfd to 2 bcfd within 5-7 years, although a planned offshore LPG terminal designed by Saipem and intended to be built by Shell was delayed following the oil price collapse.<sup>770</sup>

The total capacity for gas capture and processing is theoretically 56.6 mcm per day when the project is due to be completed in the early 2020s, a volume which stood at 14 mcm at the start of 2016.<sup>771</sup> Gas is captured from the super-giant Rumaila, West Qurna and Zubair fields.

Understanding the potential and the challenges of the BGC, part of the South Gas Utilization Project, requires a brief overview of Iraq's gas industry. Initial challenges, including the legacy of war, sanctions and poor security, have been given as reasons by representatives of the Basra Gas Company to account for a series of delays in the project.

Flaring of associated gas increased after 2003 from around 30% of gas produced (USGS estimate) to over 70% by 2013, according to Japan International Cooperation Agency (JICA.) At the same time, natural gas production in Iraq rose from 81 bcf in 2003<sup>772</sup> to 771 bcf in 2014.

In 2014, Iraq lagged behind Nigeria in reducing flared gas, with the West African country flaring 379 bcf that year,<sup>773</sup> compared to an OPEC estimate for Iraq of 454 bcf for 2014.<sup>774</sup> This latter figure may be conservative, since one estimate in 2015 put flaring in Iraq at over 600 bcf.<sup>775</sup>

Before the onset of the 1991 Gulf War, Iraq had enough functioning infrastructure to export 400 million scf/d to a processing facility in Ahmadi, Kuwait, from the giant oil field at Rumaila. Over 200 kilometers of pipeline carried this gas, while other gas was utilized for a fertilizer plant at Khor al Zubeir. The Khor al Zubeir plant had been

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<sup>770</sup> Ibid.

<sup>771</sup> Iraq Oil and gas year 2016.

<sup>772</sup> Ibid.

<sup>773</sup> EIA. "Country Analysis Brief: Nigeria." 6<sup>th</sup> of May 2016. Accessed November 2<sup>nd</sup> 2016.

[http://www.ieee.es/Galerias/fichero/OtrasPublicaciones/Internacional/2016/EIA\\_Nigeria\\_6may2016.pdf](http://www.ieee.es/Galerias/fichero/OtrasPublicaciones/Internacional/2016/EIA_Nigeria_6may2016.pdf)

<sup>774</sup> EIA: Country Analysis Brief: Iraq. April 28<sup>th</sup> 2016. [http://www.iberglobal.com/files/2016/iraK\\_eia.pdf](http://www.iberglobal.com/files/2016/iraK_eia.pdf)

<sup>775</sup> Saadallah al-Fathi, "Iraqi claims that have no basis in facts." Gulf News, April 17<sup>th</sup> 2016. Accessed November 2<sup>nd</sup> 2016.

constructed by Mitsubishi in the 1970s.<sup>776</sup> Processing capacity at the South Gas processing plant alone was 1.26 bcf/d, taking gas from Zubeir and Rumaila. For nameplate capacity, this could have produced 960 mmcf/d of dry gas, 4000 bpd of LPG and 1700 bpd of condensate, although wars and sanctions disrupted production.<sup>777</sup>

Following the onset of sanctions, flaring of associated gas began to rise to over 20% of produced gas, eventually putting Iraq in the global top 5 flaring countries by the turn of the century<sup>778</sup>. The nine gas gathering stations established in the 1980s by the South Area Gas Project, with a capacity of 1.5 bcm, fell into disrepair. These facilities included the Khor al Zubair processing plant which was considered state of the art when it came online in 1983. By the time the Basra Gas Company took over at Khor al Zubair in 2011, the facility was operating far below peak capacity. Work to improve facilities had begun in 2008, although not by BGC.<sup>779</sup> Elsewhere, the North Rumaila gas processing facility was processing only a third of its original 680 million scf/d capacity.<sup>780</sup>

By 2004 gas processing was as low as 500m scf/d from an estimated pre-war peak as high as 2.08 bcf. In 2005, Global Gas Flaring Reduction Partnership reported Iraq as among the world's major flaring nations, competing with Nigeria in terms of volumes of gas flaring increasing substantially between 2005 and 2009.<sup>781</sup>

Iraq needed to utilise this gas quickly and efficiently, as one estimate put the volumes flared as being enough to supply 4 million homes,<sup>782</sup> theoretically generating 5.9 GW of electricity. Problematically, the provision of electricity in Iraq rapidly became a contentious political issue, and there have been several riots over poor supply in southern Iraq since 2003.<sup>783</sup>

The Iraqi government has long known the potential of utilizing gas for local industry, such as the Khor al Zubair fertilizer plant, a critical local factory and one of many State

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<sup>776</sup> Wood Mackenzie.

<sup>777</sup> Wood Mackenzie

<sup>778</sup> Bernadette Michalski, "The Mineral Industry of Iraq." US Geological Survey report 1997. <http://minerals.usgs.gov/minerals/pubs/country/1997/9216097.pdf>

<sup>779</sup> Information from the Basra Gas Company website. Accessed November 2<sup>nd</sup> 2016. <http://www.basrahgas.com/gas-processing>

<sup>780</sup> Ibid.

<sup>781</sup> Ibid.

<sup>782</sup> Paul Stevens, "Basra Burning up amid power shortages." MEES. Vol. 58. No. 30 24. July.2015. [https://www.chathamhouse.org/sites/files/chathamhouse/media\\_wysiwyg/20150727MeesIranPaulStevens.pdf](https://www.chathamhouse.org/sites/files/chathamhouse/media_wysiwyg/20150727MeesIranPaulStevens.pdf)

<sup>783</sup> BBC News, "Iraq reconstruction: Energy." April 7<sup>th</sup> 2004. Accessed November 2<sup>nd</sup> 2016. [http://news.bbc.co.uk/1/hi/world/middle\\_east/3605379.stm](http://news.bbc.co.uk/1/hi/world/middle_east/3605379.stm)

Owned Enterprises (SOE) in southern Iraq.<sup>784</sup> Fertilizer, cement, steel and petrochemicals are all industries that were priorities for Iraq to rebuild and would benefit from captured associated gas, a fact pointed out by the 2013 Integrated National Energy Strategy and a 2015 study by Japan International Cooperation Agency.<sup>785</sup> The JICA study and the INES note that cheap and plentiful gas could even give these industries an advantage over competitors in the long term. INES notes that if Iraq were to expand fertilizer production to over 6000 tons a year by 2030 (as planned) this target would require over 260 million scf/d.<sup>786</sup>

Elsewhere, the electricity sector has been forced to rely on burning Heavy Fuel Oil (HFO) to generate electricity, instead of using gas for industrial and municipal power, which creates more pollution (a problem in southern Iraq from the “black flares” of burning off gas) and costs Iraq money. Problematically Iraq already faces a high outlay for fuel imports, lacking enough refining capacity to meet domestic supply. One Iraqi official noted that when locally produced HFO was insufficient for power stations, 5 million litres of gasoil was imported from Iran. Iraq’s oil fired power stations were also prone to breaking down without regular maintenance.<sup>787</sup> A further effect of importing fuel oil was to exacerbate the problem of the black market, which caused price spikes and shortages, since imports were not properly monitored or accounted for.

Despite these problems, it was not until 2008 that the State Company for Oil Projects awarded contracts to repair the North Rumaila and Khor al Zubair facilities, with contracts going to GE to renovate gas compressors.<sup>788</sup> At the time, Iraq had been in talks with Shell since 2004 to implement the Iraq Gas Master Plan.<sup>789</sup> Shell had been early entrants to the Iraq market after 2003, hosting meetings with Iraqi oil officials in Amman in preparation for expected energy sector privatization, or part privatization.<sup>790</sup>

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<sup>784</sup> Ian Seymour, Walid Khadduri, “Reconstruction on The Move In Iraq.” MEES, 15<sup>th</sup> May, 1989. Accessed November 2<sup>nd</sup> 2016.

<https://mees.com/opec-history/1989/05/15/reconstruction-on-the-move-in-south-iraq/>

<sup>785</sup> Japan International Cooperation Agency. “Study on the Gas Master Plan, Final Report.” July 2015. Accessed November 2<sup>nd</sup> 2016. [http://open\\_jicareport.jica.go.jp/pdf/12235248.pdf](http://open_jicareport.jica.go.jp/pdf/12235248.pdf)

<sup>786</sup> Thamir Uqaili, “Analysis on the Integrated National Energy Strategy of Iraq.” Iraq Economists’ Network. August 2013. Accessed November 2<sup>nd</sup> 2016. <http://iraqieconomists.net/en/wp-content/uploads/sites/3/2013/08/Thamir-Uqaili-TG-on-INES-reformatted.pdf>

<sup>787</sup> Rami Ruhayem, “Iraq struggles to solve electricity crisis,” BBC News, 12<sup>th</sup> April, 2013. Accessed 2<sup>nd</sup> November 2016. <http://www.bbc.co.uk/news/world-middle-east-22093992>

<sup>788</sup> Khalid al Ansari, “Iraq Slows Natural Gas Output as Oil Slump Squeezes Spending.” Bloomberg, 30<sup>th</sup> March 2016. Accessed November 2<sup>nd</sup> 2016.

<http://www.bloomberg.com/news/articles/2016-03-29/iraq-slowng-natural-gas-output-as-cheaper-oil-squeezes-spending>

<sup>789</sup> Greg Muttitt, *Fuel on the fire: Oil and Politics in Occupied Iraq*. (London: The Bodley Head, 2011), 284.

<sup>790</sup> <https://next.ft.com/content/5b24f674-f5e6-11dc-8d3d-000077b07658>

In 2005, Shell and Iraq's Ministry of Oil finalised the first stage of the plan to eliminate flaring in Iraq and commercialize associated and nonassociated gas. Jabbar al Luaibi, head of the South Gas Company estimated that \$100 million of investment was needed to repair Iraq's gas capturing and processing infrastructure.<sup>791</sup>

By 2005, the waste of flared gas had caused financial losses to Iraq's economic development, with around \$5 million dollars' worth a day being wasted in the mid part of the last decade, and up to \$12 million being lost per day by 2010.<sup>792</sup> Adding the cost of using HFO or importing lighter fuel for the power plants, as well as the "opportunity cost" represented by what Iraq could have gained (by investing these funds) the losses could be significantly higher. By 2016, it was thought that flaring was costing at a minimum \$4 billion a year, much of it from the southern fields. Figure 15 illustrates that the percentage of flared gas has increased and that while utilized gas has increased by volume, it is more than 50% short of the 2 bcf target envisioned for 2016 when the project was planned in 2011.

However, as an example of the difficulty calculating Iraq's economic losses, INES estimated in 2013 that power losses through blackouts could cost Iraq as much as \$40 billion per year.<sup>793</sup> Therefore, Iraq's domestic and industrial gas and electric demand was a primary reason for the Iraq Gas Master plan to move forward, following successive summers of blackouts and protests over electricity.

A number of delays ensued however. Three years after the Gas Master Plan was first announced, Shell were reportedly still in difficult negotiations involving the Ministry of Oil. According to a US State Department cable, in 2008 Tony Nieman of Shell Iraq met with Qasim Ali Qadim, Technical Manager of South Oil Refinery, to discuss the end of flaring, among other issues.

Nieman estimated that Iraq in 2008 was losing 800 mscf of gas a day through flaring, at an estimated market value of \$1.5 billion a year, while also noting that flaring in Iraq

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<sup>791</sup> Gregg Muttitt, p.284.

<sup>792</sup> Tanya Rosa, "Shutting off the fires: conference proposes turning pollution into profit for Iraq." Military Times, February 24<sup>th</sup>, 2010. Accessed November 2<sup>nd</sup> 2016.  
[http://www.army.mil/article/34870/Shutting\\_off\\_the\\_fires\\_\\_conference\\_proposes\\_turning\\_pollution\\_into\\_profit\\_for\\_Iraq/](http://www.army.mil/article/34870/Shutting_off_the_fires__conference_proposes_turning_pollution_into_profit_for_Iraq/)

<sup>793</sup> Integrated National Energy Strategy of Iraq, 2010-2030. Accessed November 2<sup>nd</sup> 2016.  
[http://www.iier.org/i/uploadedfiles/publication/real/1371283063\\_150613SummaryoftheFinalReport\(IntegratedNationalEnergyStrategy\(INES\)forIraq\).pdf](http://www.iier.org/i/uploadedfiles/publication/real/1371283063_150613SummaryoftheFinalReport(IntegratedNationalEnergyStrategy(INES)forIraq).pdf)

was a serious pollutant.<sup>794</sup> The Shell Vice Manager for Iraq also remarked that he hoped negotiations to finalise Shell's role in the gas capture plan would take little over a year and he was unconcerned by arguments he had witnessed between officials from Iraq's South Gas Company, South Oil Company and Ministry of Oil.<sup>795</sup>

Several months later, in September 2008, the Heads of Agreement (HOA) was finalised for what would become the Basra Gas Company, with Shell's ownership set at 49% and the remaining ownership by the South Gas Company, a sub-entity of the Ministry of Oil. The agreement outlined that access to non-associated gas would be an important part of the project.<sup>796</sup> The HOA suggested that gas would be purchased from producers who would be paid a "fixed percentage of the revenues received by the Joint Venture for selling products."<sup>797</sup> A number of critics noted that the HOA gave Shell a 25-year monopoly, also stipulating that for 12 months MoO was forbidden from negotiating with any other IOC on the gas project, although Shell would have that privilege. Shell subsequently began talks with other energy providers, and an agreement with Mitsubishi was finalised in February 2009.<sup>798</sup>

A year after the HOA was signed, the project encountered political opposition. In 2009, Deputy Oil Minister Ahmed al-Shamma announced that nothing would be finalised until after the January 16 elections in 2010. Al Shamma released a statement, clarifying that this was the result of internal politics, rather than the decision of the Ministry:

"In the current climate, signing the deal and making a decision is very difficult. There is strong opposition, used by politicians for other reasons not related to gas and investment in gas for political objectives. This is my personal expectation. It is not related to the desires of the ministry or the government."<sup>799</sup>

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<sup>794</sup> US State Department cable, US Embassy Baghdad, 8<sup>th</sup> September 2008. Available from Wikileaks. Accessed November 2<sup>nd</sup> 2016. <http://cables.mrkva.eu/cable.php?id=168842>

<sup>795</sup> Ibid.

<sup>796</sup> Author discussion with Jafar Dhia Jafar.

<sup>797</sup> Ben Lando, "Shell-Iraq gas company is a monopoly, secret agreement shows." UPI, 4<sup>th</sup> November 2008. Accessed November 2<sup>nd</sup> 2016. [http://www.upi.com/Business\\_News/Energy-Industry/2008/11/04/Shell-Iraq-gas-company-is-a-monopoly-secret-agreement-shows/13121225814147/](http://www.upi.com/Business_News/Energy-Industry/2008/11/04/Shell-Iraq-gas-company-is-a-monopoly-secret-agreement-shows/13121225814147/)

<sup>798</sup> Ibid.

<sup>799</sup> Reuters, "Shell gas deal seen delayed past Iraq elections." 5<sup>th</sup> of September 2009. Accessed November 2<sup>nd</sup> 2016. [http://www.tradearabia.com/news/OGN\\_166815.html](http://www.tradearabia.com/news/OGN_166815.html)

Concerns that Shell's approach to relationship building with Iraqi government officials (since the company pursued a strategy of technical assistance to the MoO since 2003) had led to further accusations of monopoly. Issam al-Chalabi, Iraq's former Minister of Oil between 1987 and 1990, complained that this was the case, and suggested that the Basra Gas Company's proposed \$4 billion investment was a fraction of what the total value of the gas would be after 20 years of the contract had passed, which he estimated at \$40 billion.<sup>800</sup> Chalabi also complained that no other companies were offering bids on such an important strategic project, which increased opposition in the Iraqi parliament.

Another opponent of the BGC in 2009 was Jabir Khalifa Jabir, secretary of the Iraqi Parliament's Oil and Gas committee. Jabir argued that the deal was illegal, because it contravened Law 97, which stipulates that deals with IOCs should be passed by parliament.<sup>801</sup> In Basra itself, the proposed deal also encountered opposition from the Fadhila party, who ran the governorate at the time.<sup>802</sup>

Despite opposition to the deal, Shell Gas and Power Vice President Mounir Bouaziz reported to the US State Department that meetings with local stakeholders in Basra were constructive. Bouaziz detailed the efforts of Shell to build strong relations with MoO officials in a State Department cable,

“Shell had provided laptops and software to several mid-level MOO executives to introduce to them -- for the first time -- concepts such as net present value and internal rate of return, and to assess the financial impact of differing terms and pricing.”<sup>803</sup>

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<sup>800</sup> Terry McAlister, “Iraqi government fuels 'war for oil' theories by putting reserves up for biggest ever sale.” 13<sup>th</sup> October 2008. The Guardian. Accessed November 2<sup>nd</sup> 2016.

<http://www.theguardian.com/business/2008/oct/13/oil-iraq>

<sup>801</sup> Terry Mcalister, “Iraq parliament promises to push Shell out of gas deal.” The Guardian. 17<sup>th</sup> April 2009. Accessed November 2<sup>nd</sup> 2016.

<http://www.theguardian.com/business/2009/apr/17/iraq-parliament-shell-gas-deal>

<sup>802</sup> Joel Wing, “Shell natural gas deal held up by Iraq.” Musings on Iraq. September 2009. Accessed November 2<sup>nd</sup> 2016. <http://musingsoniraq.blogspot.co.uk/2009/09/shell-natural-gas-deal-held-up-by-iraqi.html>

<sup>803</sup> US State Department Cable. US Embassy Baghdad, June 20<sup>th</sup> 2009. Accessed November 2<sup>nd</sup> 2016. <http://www.scoop.co.nz/stories/WL0906/S00482/cablegate-basrah-shell-still-optimistic-about-flared-gas-project.htm>

Highlighting the close relationship Shell fostered with the Ministry of Oil, the cable reports that Minister of Oil Shahrstani later asked to have the basic training himself.<sup>804</sup> This relationship building continued through the spring and summer of 2010 as the Shell-South Gas Company-Mitsubishi plan went to Cabinet for final approval. Problematically it was reported that Rumaila, West Qurna 1 and Zubair oilfield operators were not committed to deal with associated gas under the plan, according to a statement by Sabah al-Sa'idi, legal director of the Oil Ministry's Petroleum Contracts and Licensing Directorate. Another problem with negotiations involved disagreements over the level of capital expenditure committed by the government and the consortium, amid rumours the government of Iraq would not be able to finance its share of the project.

An additional challenge was the Iraqi government's claim that IOCs were not following their contractual obligations to supply gas, leading to more delays in finalizing plans as the Iraqi government was forced to negotiate with IOCs individually.<sup>805</sup> This was problematic, as BGC Chairman Ali Khudier noted how IOCs wanted low gas pressure at the North Rumaila de-gassing station for oil extraction, in other words there was not enough pressure to utilise the gas.<sup>806</sup>

Despite these difficulties, Shell and the South Gas Company pressed continued to develop some gas gathering facilities, resulting in the capture of 135 mmcf/d or 20% of the government estimate of flared gas in 2010 (note, Iraqi Ministry of Oil estimates of flared gas differ from other estimates, for example INES estimates 40% of associated gas was flared in 2013, while JICA estimate flaring at 70%.)<sup>807</sup> Despite this modest gain, drawn out negotiations over government financing for the project suffered another delay with the long government formation process following Iraq's 2010 general elections.

Negotiations over the scope and financing of the continued until the following Autumn of 2011, when a draft copy of the agreement was leaked. Defining the geographic scope

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<sup>804</sup> Ibid.

<sup>805</sup> Joel Wing, "Shell-Mitsubishi Natural Gas Deal May Be Delayed Indefinitely." Musings on Iraq. May 10<sup>th</sup>, 2010. Accessed November 2<sup>nd</sup> 2016.

<http://musingsoniraq.blogspot.co.uk/2010/04/shell-mitsubishi-natural-gas-deal-may.html>

<sup>806</sup> Iraq Energy Research

<sup>807</sup> Mounir Bouaziz, "Iraq Future Energy." Iraq Energy Institute. September 6<sup>th</sup> 2010. Accessed November 2<sup>nd</sup> 2016. [http://iraqenergy.org/library/interviews.php?detailof=14&content=Iraq-Future-Energy---2010--\(-Mounir-Bouaziz-\)](http://iraqenergy.org/library/interviews.php?detailof=14&content=Iraq-Future-Energy---2010--(-Mounir-Bouaziz-))

of the project, the new terms reaffirmed that IOCs operating Zubair, West Qurna and Rumaila would have to supply all associated gas not used for re-injection to the BGC Joint Venture, as opposed to the South Gas Company, as Technical Service Contracts stipulated.<sup>808</sup>

The new contract outlined how,

“SGC shall procure that all raw gas produced from the dedicated fields (other than utilized gas but including all NGLs) ... shall, on and from commencement of operations, be dedicated solely to the venture. The Ministry shall ensure that SGC fulfils its obligation to supply and make available to BGC all committed volumes and planned volumes of raw gas, including by making available deficit volumes as needed.”<sup>809</sup>

The deal also specified that SGC would not permit other entities to utilise associated gas, potentially giving Shell control of at least 2,000 bcf/d of raw gas. This figure would likely be more if Iraq’s oil production hit any of the proposed targets up to 2020, with the possible plateau of 7 mbpd. Of the exact volumes produced, some 85% would be supplied from SGC to BGC. The draft also noted that once Iraq’s gas needs were met, BGC would be supplied with 600 mmcf/d of feedstock gas for an LNG plant, which Shell could then process and sell on the global market for 20 years.<sup>810</sup>

By November 2011, with new oil minister Abdul Kareem Al-Luaibi in charge, the 25 year deal was finalised in a signing Luaibi called “a historic change in the Iraqi oil industry.” Initial investment from BGC would be as high as \$7 billion, which included the LNG plant (itself estimated to require \$4 billion) and the overall estimated investment to eliminate flaring was put as high as \$17 billion.<sup>811</sup> The initial target of the

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<sup>808</sup> Ahmed Rasheed, “Exclusive: Big oil companies may have to give up Iraq gas.” Reuters, 29<sup>th</sup> August 2011. Accessed November 2<sup>nd</sup> 2016. <http://www.reuters.com/article/us-iraq-gas-exclusive-idUSTRE77S1TO20110829>

<sup>809</sup> Ibid.

<sup>810</sup> Ibid.

<sup>811</sup> Simon Bowers, “Shell signs £11bn deal to fuel Iraq’s power stations with gas.” The Guardian, 27<sup>th</sup> November 2011. Accessed November 2<sup>nd</sup> 2016. <http://www.theguardian.com/business/2011/nov/27/shell-fuel-iraqi-power-stations>

project was to capture and process 700 mmcf of gas from Rumaila, Zubair and West Qurna.<sup>812</sup>

As mentioned in the draft agreement, the target for eliminating flaring was 2018, and 80% of workers hired to complete the project were to be Iraqi.<sup>813</sup> 2018 was a more reasonable target than the Iraqi Integrated National Energy Strategy of 2013, which envisioned the capturing of all associated gas by 2015.<sup>814</sup>

Because of the many delays in finalising the deal and the accompanying shortage of gas for power stations, Baghdad began talks with Tehran to build a pipeline from Abadan to Basra, which would follow on from already agreed Iranian gas imports to power stations in Baghdad and Diyala.<sup>815</sup> These imports would be well under way by 2017, with one report in 2016 suggesting the value of these exports would cost Iraq \$3.7 billion per year<sup>816</sup>.

By January 2012, with Iraq still only processing an estimated 450mmcf/d (a similar amount to the volume processed in 2003) and with flaring over 1.9 bcf/d, more details emerged. SGC director Ali Hussein Khudhier noted the 600 mmcf LNG terminal would cost around \$3 billion, while the BGC would start processing 50 million cubic feet a day by the end of the year.<sup>817</sup> As mentioned, the reason for the relatively low amount of processed gas in 2012, according to Ali Khudair, was IOCs demanding low pressure at the North Rumaila degassing station, forcing BGC to rent compressors. Nonetheless, processing by BGC had increased to 250 million scf/d by June 2013.<sup>818</sup>

Therefore, after much delay, May 2013 saw the official launch of the project, although Shell noted a number of projects were already underway to increase capacity from 400 mscf, including “the new power plant at the Khor Al Zubair gas plant, compressor

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<sup>812</sup> Joel Wing, “Shell-Mitsubishi Natural Gas Deal Takes Another Step Forward After Three Years Of Delays.” November 22<sup>nd</sup> 2011. Accessed November 2<sup>nd</sup> 2016.

<http://musingsoniraq.blogspot.co.uk/2011/11/shell-mitsubishi-natural-gas-deal-takes.html>

<sup>813</sup> EIA: Country Analysis Brief: Iraq. April 28<sup>th</sup> 2016. [http://www.iberglobal.com/files/2016/iraK\\_eia.pdf](http://www.iberglobal.com/files/2016/iraK_eia.pdf)

<sup>814</sup> Luay al-Khatteeb, Harry Istepanian, “Turn a light on: Electricity sector reform in Iraq.” Brookings Doha Center Policy Briefing, 2015. <http://www.brookings.edu/~media/research/files/papers/2015/03/18-electricity-sector-reform-iraq-alkhatteeb-istepanian/alkhatteeb-istepanian-english-pdf.pdf>

<sup>815</sup> Bloomberg News, “Iraq Signs \$365 Million Pipeline Agreement to Import Iranian Gas.” <http://www.bloomberg.com/news/articles/2011-06-30/iraq-signs-365-million-pipeline-agreement-to-import-iranian-gas>

<sup>816</sup> Press TV, “Iran opens \$6 billion gas operations.” 11<sup>th</sup> January 2016. Accessed November 2<sup>nd</sup> 2016. <http://presstv.com/Detail/2016/01/11/445347/Iran-gas-South-Pars-Phases-15-and-16-Rouhani/>

<sup>817</sup> Natural Gas Asia. “Shell JV in Iraq to Produce 50 mcf/d in 2012.” January 26<sup>th</sup> 2012. Accessed November 2<sup>nd</sup> 2016. <http://www.naturalgasasia.com/shell-venture-in-iraq-to-produce-50-mcf/d-in-2012-4361>

<sup>818</sup> Iraq Energy Research.

stations in North Rumaila, as well as leasing compressors to reduce gas flaring in the Zubair field.”<sup>819</sup>. Peter Van Rijs, supply chain manager for Shell in the MENA region also confirmed that compressor stations had been a bottleneck to progress.<sup>820</sup>

### 5.3.3 Commercial and Legal Structure

The legislation that the BGC was incorporated under, as a mixed liability company was The Companies Law No 21 of 1997, in addition to Law no 22 of 1997 on State Companies.<sup>821</sup> The structure and commercial operations are as follows:

- 51% owned by South Gas Company (SGC)
- 44% by Shell and 5% by Mitsubishi

And the Key objectives:

- South Gas Company takes raw gas from the South Oil Company
- South Gas Company sells raw gas to Basra Gas Company
- Basra Gas Company sells LPG and Condensates to the South Gas Company for local market
- Basra Gas Company sells LNG and Condensate through SOMO, coordinated by a Joint Marketing Committee
- Basra Gas Company sells LNG to Shell through SOMO from first phase of LNG project.<sup>822</sup>

### 5.3.4 BGC Policy Analysis

Problems with the BGC and its development can be divided into political and technical. The first issue relates to the nature of the discussions between Shell and the Ministry of Oil and the South Gas Company, which as noted, produced accusations of a lack of transparency and an attempted monopoly. This contributed to lengthy debates in

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<sup>819</sup> Kadhim Adrash, “Shell Starts World’s Largest Gas-Capturing Plant in Iraq.” Bloomberg. May 1<sup>st</sup> 2013. Accessed November 2<sup>nd</sup> 2016.

<http://www.bloomberg.com/news/articles/2013-05-01/shell-starts-world-s-largest-gas-capturing-plant-in-iraq>

<sup>820</sup> Tamsin Carlisle, “Regulation & Environment: Trying to end Iraq’s wasteful natural gas flaring.” Platts, June 17<sup>th</sup> 2013. Accessed November 2<sup>nd</sup> 2016.

<http://blogs.platts.com/2013/06/17/iraq-flare/>

<sup>821</sup> Wood Mackenzie.

<sup>822</sup> Wood Mackenzie.

parliament over the legality of the Joint Venture, delaying implementation of initial rehabilitation of gas infrastructure, and prolonging the wasteful high levels of flaring.

Technical problems relate to the targets envisaged when the project was conceived, and the failure to foresee how a fall in oil prices could impact oil production and subsequently associated gas production, potentially threatening the economic viability of the project. For example, the production plateaus negotiated under the 2009 Technical Service Contracts have been continually revised down from an initial high of 13.5 million, which would have produced 8.5 bcf/d of gas.<sup>823</sup> As of 2015, the production plateau had been revised down to 4.5 mbpd, with an estimated associated gas output of 3.1 bcf/d, based on Gas Oil Ratios (GOR.)<sup>824</sup>

Wood Mackenzie note the risk of conflict between IOCs involved at the four supergiant southern fields and BGC, since they receive no compensation from gas sent to SGC, and also may want to use the gas for re-injection, particularly in light of delays to the Common Seawater Supply Facility (CSSF) water injection project, now known as the Integrated South project. By early 2016, the company were suggesting these conflicts were no longer a barrier to the growth of the project. BGC Managing Director Simon Daman Willems claimed the project was on target to process far more than the 600 mscfd output in February 2016. He also noted,

“Around 70 per cent of the electricity generated in Basrah province last year and 60 to 70 per cent of the all the LPG consumed in Iraq is produced from the project, in addition to a substantial amount of barrels of condensate.”<sup>825</sup>

Willems noted however, that elements of expanding the project had been put on hold until oil prices recovered. If Iraq is able to increase oil production in 2017, perhaps through a scaled down water injection project in the south, this will mean that associated gas will increase, while processing will possibly be constrained by reduced investment, leading to a potentially higher percentage of flared gas.

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<sup>823</sup> Luay al Khatteeb, “The Geopolitics of Natural Gas Natural Gas in the Republic of Iraq” (Harvard Belfer Center, Rice University’s Baker Institute Center for Energy Studies 2013.)

<sup>824</sup> Wood Mackenzie.

<sup>825</sup> Khalid al-Ansari, “Iraq Slows Natural Gas Output as Oil Slump Squeezes Spending.” Bloomberg. March 29<sup>th</sup> 2016.

<http://www.bloomberg.com/news/articles/2016-03-29/iraq-slows-natural-gas-output-as-cheaper-oil-squeezes-spending>

In March 2016, BGC announced that frozen investment amounted to \$2 billion that was intended for a plant to treat liquid gas, according to Deputy Chief Executive Officer Ali Salman Majeed.<sup>826</sup> BGC also announced that the production target for 2 bscfd had been moved back a year to 2018, but that Condensate and LPG exports were planned for that year, which occurred over the spring. As noted, revenues from these shipments have not gone to the Iraqi government, as originally planned, although it is notable that southern Iraq is now self-sufficient in LPG, thanks to the project.

In conclusion, greater transparency in the negotiations with foreign companies is essential in any future mega projects, to ensure politicians and public stakeholders have the chance to assess terms of contracts, and to build public trust and avoid unnecessary political conflict. Secondly, projects should be planned on conservative long term price forecasts, factoring in local market dynamics. For example, Iraq subsidizes gas for domestic consumption and the fertilizer industry, while fertilizer product is also subsidized. While associated gas involves little cost to extract, there is no incentive for IOCs to invest in vital infrastructure when the domestic market price is artificially low, meaning that gas is another area Iraq must focus on for subsidy reduction, especially in the low price environment.

In the following Chapter, the problems of Iraq's Federal and Regional institutions will be examined in more detail with regard to the price collapse of 2014, which exposed many of the underlying problems in the way Iraq's oil and gas industry has been structured and the inherent vulnerability of the system to price shocks.

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<sup>826</sup>ibid.

## Chapter 6: Iraq's Oil Revenue and 2014 Price Collapse

Chapter 5 examined three case studies of the Iraqi Ministry of Oil, the Kurdish Ministry of Natural Resources and, as an example of an Iraqi led Joint Venture, the Basra Gas Company, taking into account inherent institutional weaknesses in these organizations as they have struggled with the transition from autocratic to democratic and meritocratic governance.

Problems identified were typical of these experienced by resource dependent economies such as Nigeria and Russia, examined in chapter 4, including an overall lack of transparency and poor financial planning in the energy sector (in both cases).<sup>827</sup> Sassoon suggests reasons for corruption and lack of institutional capacity in Iraq's energy sector include long term brain drain, due to the Saddam Hussein regime and poor security after 2003, coupled with the sudden influx of revenues and reconstruction funds, which allowed corruption to flourish as auditing capability became overwhelmed.<sup>828</sup> This chapter will examine Iraq's acute dependence on oil revenue and the effects of failed (or never implemented) diversification strategies as the oil price collapsed through 2014 and beyond. Lack of national level planning and diversification has negatively impacted investment requirements in Iraq needed to upgrade refining and pipeline capacity, as well as other vital infrastructure needed to increase output.

Institutional problems, and their attendant corruption and preference for opaque revenue management has in turn impacted Iraq's ability to pay IOCs and sustain work programs in line with ambitious production targets. For Iraq, Sassoon also compares the growth of corruption post 2003 with the experience of Russia after Communism, a comparison that Smith also makes when he notes,

“It is already difficult for Western energy firms to make business decisions in the former Soviet area, due to the deeply rooted lack of transparency in Russian, Ukrainian, and Central Asian commercial dealings and to an absence of impartial court systems to enforce internationally recognized contracts between business firms.”<sup>829</sup>

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<sup>827</sup> Keith C. Smith. “Lack of Transparency in Russian Energy Trade” CENTER FOR STRATEGIC & INTERNATIONAL STUDIES, July 2010

<sup>828</sup> Joseph Sassoon, “Oil prices and economic management” Paper presented at the 15<sup>th</sup> MEEA conference, Doha, March 26<sup>th</sup>, 2016.

<sup>829</sup> Ibid.

This has hindered the significant investment demands of the Russian energy sector to attract enough foreign investment to fully exploit declining fields. Likewise, Akinrele examines how the Nigerian energy sector has resisted attempts to improve transparency, and both authors argue this resistance is intentional, protecting corrupt networks within government.<sup>830</sup> As in Iraq, Nigeria experienced sustained high levels of government corruption, with 60,000 “ghost workers” being discovered in 2016 as the government sought to reform institutions and save money.<sup>831</sup>

Lack of revenue oversight has had a highly damaging effect on these countries during the resource boom between 2010 and 2014, with prices averaging \$105 per barrel, which encouraged high government expenditure and optimistic forecasts that this trend could continue, with Russia basing its 2015 budget on \$100 oil<sup>832833</sup> and Nigeria expecting \$77.50 average oil prices for its 2015 budget.<sup>834</sup> By mid-2015 the average oil price forecast for Brent crude for the year was \$58.<sup>835</sup>

Likewise, welfare spending in Russia increased unsustainably during the resource boom, as Conolly notes, “Defence spending increased after years of savage cuts. Social welfare spending rose dramatically. The state bureaucracy ballooned in size.”<sup>836</sup> In Nigeria, Baunsgaard also notes how government spending increases sharply during resource booms.<sup>837</sup> In Iraq, the continuation of this pattern of sustained high spending has led to a fiscal crisis in 2015-16.

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<sup>830</sup> Adedolapo Akinrele, “Transparency in the Nigerian oil and gas industry” *World Energy Law and Business Journal* April 2014. (Oxford: Oxford University Press, 2014) :1

<sup>831</sup> Zhenbo Hou, Jodie Keane, Jane Kennan and Dirk Willem te Velde, “The oil price shock of 2014.” ODI Working Paper 215, March 2015.

<sup>832</sup> Darya Korsunskaya “Russian finance minister warns on spending as crisis deepens” *Reuters* January 14<sup>th</sup> 2014. Accessed August 3<sup>rd</sup> 2016. <http://www.reuters.com/article/us-russia-crisis-idUSKBN0KN0Q620150114>

<sup>833</sup> The World Bank, “Understanding the Plunge in Oil Prices: Sources and Implications” in *Global Economic Prospects 2015*. Chapter 4

<sup>834</sup> Julia Payne “UPDATE 2-Oil price plunge forces Nigeria to slash 2015 growth forecast” *Reuters* December 17<sup>th</sup> 2014. Accessed August 2<sup>nd</sup> 2016. <http://www.reuters.com/article/nigeria-economy-idUSL6N0U12OO20141217>

<sup>835</sup> Vijaykumar Vidala. “Oil price will average less in 2015: Reuters poll” *Reuters* 30<sup>th</sup> of Jan 2015 accessed August 2<sup>nd</sup> 2015. <http://www.reuters.com/article/us-oil-prices-idUSKBN0L31AX20150130>

<sup>836</sup> [https://www.chathamhouse.org/sites/files/chathamhouse/field/field\\_document/20150224TroubledTimesRussiaConnolly.pdf](https://www.chathamhouse.org/sites/files/chathamhouse/field/field_document/20150224TroubledTimesRussiaConnolly.pdf)

<sup>837</sup> Thomas Baunsgaard “Fiscal Policy in Nigeria: Any Role for Rules?” IMF working paper 03/155 (International Monetary Fund, 2003)

As in Nigeria and Russia, where Nigeria has struggled to overcome the legacy of dictatorship during its democratic transition, with elite led politics still prevalent<sup>838</sup> and Russia has struggled to reform a “large and pervasive” post-Soviet state which still dominates the energy sector,<sup>839</sup> Iraq has struggled to reform government institutions. Meritocracy in institutions is subordinate to political connections of government employees, as Kubba notes.<sup>840</sup> This has left the government unprepared to deal with a host of challenges, but carried the Illusion of sustainability under high oil prices.

In Chapter 3, literature was reviewed that highlighted political hiring of workers, in particular Gunter and Dodge who have charted the rise in state driven employment in Iraq. This correlates to the work of Ali and Elbadawi who suggest a large resource base in Middle East countries is linked to high public sector employment<sup>841</sup> and Conte and Huque who note that many public sectors in developing countries are characterised by inefficiency and corruption.<sup>842</sup> Karl notes that developing countries with a large resource base, even when attempting to spend on economic diversification, have a tendency to overspend, spend inefficiently with little oversight, in part because there is minimal tax collection capability, what he calls “no tax and spend.”<sup>843</sup>

The normalization of profligacy is also explained by Ascher who notes that developing economies can lose fiscal control in the event of high revenue windfalls, a situation that became severe in Iraq, and continued even as oil prices fell through 2009.<sup>844</sup> For example, Gunter notes how even as oil prices fell 30% during the 2009 financial crisis, Iraqi government spending rose by the same level.<sup>845</sup>

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<sup>838</sup> Cyril Obi “Nigeria’s post military transition is not a day job,” *E-International Relations* December 2008 Accessed August 2<sup>nd</sup> 2016. <http://www.e-ir.info/2008/12/01/nigeria%E2%80%99s-post-military-transition-%E2%80%99democracy-is-not-a-day%E2%80%99s-job%E2%80%99D/>

<sup>839</sup> Anders Åslund “Why Has Russia’s Economic Transformation Been So Arduous?” Carnegie Endowment for International Peace” Paper prepared for the Annual World Bank Conference on Development Economics, Washington, D.C., April 28-30, 1999.

<sup>840</sup> Juman Kubba, “*Meeting the New Iraq: A Memoir of Homecoming and Hope*” (London: MacFarland and Company, 2013), 73

Omer Ali and Ibrahim Elbadawi, “*The Political Economy of Public Sector Employment in Resource Dependent Countries*” *Economic Research Forum, Working Paper Series*, 673, 2012, 17

<sup>842</sup> Charles Conteh, Ahmed Shafiqul Huque, “*Public Sector Reforms in Developing Countries: Paradoxes and Practices*,” (New York: Routledge, 2012), 188

<sup>843</sup> Terry Lynn Karl, “The Political Challenge of Escaping the Resource Curse: The Case for a Transparent Fiscal Social Contract” in *Escaping the resource curse* (New York: Columbia University Press, 2012.)

<sup>844</sup> Daniela Kuzu and Danaa Nantogmah, “The Oil Economy and the Resource Curse Syndrome: Can Ghana make a difference?” (Friedrich Ebert Stiftung, Berlin 2010)

<sup>845</sup> Frank R. Gunter, “ISIS and Oil: Iraq’s Perfect Storm” Foreign Policy Research Institute, January 9, 2015. Accessed August 2<sup>nd</sup> 2015. <http://www.fpri.org/article/2015/01/isis-and-oil-iraqs-perfect-storm/>

At the same time, with the size of the state expanding and an ever increasing number of workers dependent on the funds of politically controlled ministries, it became harder for the state to implement spending cuts, delaying measures to resolve the fiscal crisis as oil prices fell through 2014 when Iraq's fiscal break-even price reached \$104.<sup>846</sup> Through that year, government spending again increased, rising 26% compared to 2013, a similar level to the rise seen during the 2009 crash.<sup>847</sup> As in Russia and Nigeria, Iraq has been consistently over optimistic about the forecast oil price, again hindering urgent reforms, with \$60 per barrel calculated for the 2015 budget, and \$46 expected in 2016, while oil actually reached a low of \$59 in 2014<sup>848</sup> and was as low as \$27 in 2016, meaning Iraq's budget was far below operational. Mitra and Krause suggest that resource booms increase government optimism about available funds leading to poor planning, which would apply in the case of Russia, Nigeria and Iraq.<sup>849</sup>

In Iraq, optimism has characterised government projections, failing to take into account the risk of sudden falls in the price of oil. As an example, the Central Bank of Iraq forecast that per capita income would be \$10,000 by 2015,<sup>850</sup> based on the oil price remaining high and assuming that optimistic (and totally discredited) Ministry of Oil production forecasts of 12 million barrels a day by 2017 were correct.<sup>851</sup> Since 2011 saw around \$70 billion in oil revenues between January and September, the GNI per capita forecast may have been warranted. By 2014 however, per capita income was around \$6000 and the oil production target had been revised to a still optimistic 9 million barrels a day by the end of the decade.<sup>852</sup> <sup>853</sup> The latter target now stands at 6 million bpd.<sup>854</sup> (Note, where per capita income is referred to in this thesis, the author is aware it does not take into account inequality, however it has been used as a guide and is frequently referenced by analysis cited in this text.)

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<sup>846</sup> Luay Al-Khatteeb "Gulf oil economies must wake up or face decades of decline" Brookings Institution, August 14<sup>th</sup> 2015 accessed August 2<sup>nd</sup> 2016. <https://www.brookings.edu/opinions/gulf-oil-economies-must-wake-up-or-face-decades-of-decline/>

<sup>847</sup> EIA "Crude oil prices down sharply in fourth quarter of 2014" January 6<sup>th</sup> 2015 accessed August 2<sup>nd</sup> 2016. <https://www.eia.gov/todayinenergy/detail.cfm?id=19451>

<sup>848</sup> Ibid.

<sup>849</sup> Andrew Rosser, "The political economy of the resource curse," Institute of Development Studies Working Paper 268.

<sup>850</sup> Iraq Business News, "Iraq's per capita income to double by 2015," March 14<sup>th</sup> 2011. Accessed August 2<sup>nd</sup> 2016. <http://www.iraq-businessnews.com/2011/03/14/iraqs-per-capita-income-to-double-by-2015/>

<sup>851</sup> Humeyra Pamuk "Iraqi oil output plans overambitious – executives," *Reuters* October 13<sup>th</sup> 2010. Accessed August 2<sup>nd</sup> 2016. <http://www.reuters.com/article/iraq-oil-plans-idUSLDE69C1IE20101013>

<sup>852</sup> World Bank, Iraq country data, accessed August 2<sup>nd</sup> 2016. <http://data.worldbank.org/country/iraq>

<sup>853</sup> Sinan Salaheddin, Iraq eyes 29% boost in oil production in 2014" *USA Today* June 12<sup>th</sup> 2013 Accessed August 2<sup>nd</sup> 2016. <http://www.usatoday.com/story/money/business/2013/06/12/iraq-targets-45-million-barrels-2014/2415427/>

<sup>854</sup> Platts, "Iraq capable of crude production of at least 6 million b/d by 2020: minister" 5<sup>th</sup> of June 2015 Accessed August 2<sup>nd</sup> 2016. <http://www.platts.com/latest-news/oil/vienna/iraq-capable-of-crude-production-of-at-least-27482474>

If the forecast of \$10,000 per capita income had been correct, Iraq's standard of living would have been transformed, possibly spurring the creation of improved financial services and allowing funds for more entrepreneurs to begin business, in spite of the difficulty of starting companies in Iraq. It is logical that such optimism therefore delayed measures to accelerate investment in Iraq and deliver improved public services. By 2014, 250,000 Iraqis entered the labour market each year, with little prospect of employment.<sup>855</sup>

Another deterrent to urgent reforms has been the risk of public opposition to measures to reduce energy subsidies, points covered in relation to Russia, Nigeria and the UAE in chapter 4. In Iraq, electricity tariffs were changed to help poor families, setting a maximum of 1000 MW free usage per month for low income families, however, Gunter points out that this is more electricity than the average US family household would use in a year, with more income to spend on energy intensive appliances.<sup>856</sup>

Another challenge Iraq faces in trying to react to the price collapse is restructuring ministries, which are according to reports by the Special Inspector General for Iraq Reconstruction auditing team, dominated by political patronage when hiring workers.<sup>857</sup> This has led to highly inflated payrolls, with around 70% of the budget devoted to public servant salaries, eroding the ability of the government to invest in vital services such as education and health<sup>858</sup> and increasing oil revenue dependence to the point where Iraq had become (according to the IMF) the most oil revenue dependent nation in the Middle East.<sup>859</sup> Mass government employment has created a situation where estimates vary as to how many people are employed by the state, with Cordesman estimating 3.5 million<sup>860</sup> while some estimates by 2016 were as high as 7 million out of a workforce of around 8 million.<sup>861</sup>

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<sup>855</sup> Frank R. Gunter, *The Political Economy of Iraq: Restoring Balance in a Post-Conflict Society*, (Cheltenham: Edward Elgar Publishing, 2013): 212

<sup>856</sup> Ibid.

<sup>857</sup> Nadje Al-Ali, Nicola Pratt, *What Kind of Liberation?: Women and the Occupation of Iraq*, (Berkeley: University of California Press, 2009)

<sup>858</sup> Luay al Khatteeb, "Iraq's Economic Reform for 2016" Brookings Institute, December 13<sup>th</sup> 2013. Accessed July 16<sup>th</sup> 2016. <https://www.brookings.edu/opinions/iraqs-economic-reform-for-2016/>

<sup>859</sup> Frank R. Gunter, *The Political Economy of Iraq: Restoring Balance in a Post-Conflict Society*, (Cheltenham: Edward Elgar Publishing, 2013), 101

<sup>860</sup> Anthony Cordesman, Sam Khazai, *Iraq in Crisis*, (New York: Rowman and Littlefield, 2014), 322

<sup>861</sup> Niqash, "7 million government employees fear for their jobs," 14<sup>th</sup> Jan 2016 accessed 2<sup>nd</sup> August 2016. <http://www.niqash.org/en/articles/economy/5200>

Given that access to oil revenues is critical for political power and the power to employ tens of thousands, or even hundreds of thousands of loyalists, the struggle for oil revenues has led to inefficient hiring policies, with an adviser to Haidar al-Abadi suggesting that some government workers worked for an average of 15 minutes work a day.<sup>862</sup> Oversight over hiring practices is also evidently deficient, as noted in the case of Nigeria in Chapter 4 where political control of hiring led to payroll fraud and the employment of over 60,000 “ghost workers” in government.<sup>863</sup>

This has been a persistent problem in Baghdad, where in 2011 the Ministry of Justice estimated that 50,000 government employees had falsified qualifications<sup>864</sup> while according to a study by the UN, many ministry employees were not selected on the basis of any qualifications.<sup>865</sup> While these revelations caused political controversy, by 2015 the problem was apparently ongoing in at least some parts of government, with 50,000 “ghost soldiers” found on payrolls at the Ministry of Defence, while the Ministry of Interior complained of similar issues.<sup>866</sup> While PM Haidar al-Abadi made the elimination of payroll fraud a centrepiece of his reform efforts, by 2016 Foreign Minister Hoshyar Zebari was estimating that there may have been around 30,000 ghost soldiers still in the ranks of the MoD.<sup>867</sup>

High levels of government inefficiency have subsequently depleted available funds to invest in vital infrastructure, including the Al Faw port mega project, which is intended to increase Iraq’s capacity to import and export goods, capacity which is currently insufficient as Iraq’s population grows at 1.8% per annum.<sup>868</sup> By one estimate, Iraq would need an oil price of \$80 and an average of 3.3 million barrels a day in exports to

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<sup>862</sup> Kyle McEneaney How Iraq's Economy Can Turn Itself Around Foreign Affairs April 19<sup>th</sup> 2016 accessed August 2<sup>nd</sup> 2016. <https://www.foreignaffairs.com/articles/iraq/2016-04-19/reforming-baghdad>

<sup>863</sup> “Nigeria government's audit removes nearly 24,000 non-existent workers” *BBC News*, 28<sup>th</sup> February 2016. Accessed August 2<sup>nd</sup> 2016. <http://www.bbc.co.uk/news/world-africa-35683354>

<sup>864</sup> Aymenn Jawad al Timimi, “Iraq in Crisis,” Rubin Centre August 29<sup>th</sup> 2011. Accessed August 2<sup>nd</sup> 2016. <http://www.rubincenter.org/2011/08/iraq-in-crisis/>

<sup>865</sup> [https://www.unodc.org/documents/publications/2013\\_Report\\_on\\_Corruption\\_and\\_Integrity\\_Iraq.pdf](https://www.unodc.org/documents/publications/2013_Report_on_Corruption_and_Integrity_Iraq.pdf)

<sup>866</sup> Michael Knights “Bringing Iraq's 'Ghost' Forces Back to Life” *The Washington Institute* December 10<sup>th</sup> 2014 Accessed August 2<sup>nd</sup> 2016. <http://www.washingtoninstitute.org/policy-analysis/view/bringing-iraqs-ghost-forces-back-to-life>

<sup>867</sup> Martin Chulov, “Post war Iraq: ‘everybody is corrupt, including me,’” *The Guardian* 19<sup>th</sup> February 2016 accessed August 2<sup>nd</sup> 2016. <https://www.theguardian.com/world/2016/feb/19/post-war-iraq-corruption-oil-prices-revenues>

<sup>868</sup> Joseph Sassoon, “Oil prices and economic management” Paper presented at the 15<sup>th</sup> MEEA conference, Doha, March 26<sup>th</sup>, 2016.

maintain 2014 levels of infrastructure investment, meaning many projects such as Al Faw urgently need foreign investors, or face closure.<sup>869</sup>

Since Iraq forecast a higher oil price for the 2016 budget therefore, the shortfall for maintaining an operational budget has been as high as \$2.5 billion in 2016. More concerning, Gunter estimated that Iraq would need \$70 per barrel in order to meet basic government functions,<sup>870</sup> while Basra's oil sold (due to discount for market share) at \$21 in January 2016. As in Nigeria and Russia, this forced Iraq to drain currency reserves while negotiating with the IMF, World Bank and other lenders.

This in turn jeopardised Iraq's ability to pay for vital imports of foodstuffs and fuel that are either subsidised or distributed to poorer citizens through the Public Distribution System (PDS). In 2013, the Central Bank of Iraq's foreign-currency reserves stood at \$78 billion, falling to \$59 billion in 2015 and by May 2016, \$43 billion, with estimates of available funds over the summer of 2016 thought to be minimal, with the government only saved from a "fiscal cliff" by the authorization of significant IMF and World Bank lending.<sup>871</sup> Despite these loans, Iraq's deficit widened through 2015 and 2016, reaching 8% of GDP in 2015 and 25% of GDP in 2016, with much pressure to spend going on defence as well as public sector wages, due to the battle against the Islamic State, although the loans, and moderate increases in oil exports and the price of oil managed to reduce the deficit forecast for 2016 to 20%.

This has forced the Abadi government's reform program to examine the State Owned Enterprise (SOE) sector of Iraq, which employs over half a million people. SOEs, many of which were established under the Baath regime, generally have not exported products but served domestic demand, and in the case of some factories, such as the Thi Qar cable factory, exclusively serve government demand.<sup>872</sup> Therefore, in 2003, the CPA decided that 120 of these firms would be privatised, but plans were abandoned due to Iraqi public opposition and deteriorating security, which deterred foreign investors.<sup>873</sup> By 2012, the number of SOEs targeted for reform, employing 630,000 Iraqis, was given

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<sup>869</sup> Frank R. Gunter, "ISIS and Oil: Iraq's Perfect Storm" Foreign Policy Research Institute, January 9, 2015. Accessed August 2<sup>nd</sup> 2015. <http://www.fpri.org/article/2015/01/isis-and-oil-iraqs-perfect-storm/>

<sup>870</sup> Ibid.

<sup>871</sup> Stephen Kalin "Iraq signs IMF monitoring program, to draw on FX reserves" January 12<sup>th</sup> 2016. Accessed August 2<sup>nd</sup> 2016. <http://www.reuters.com/article/us-iraq-imf-idUSKCN0UQ2J020160112>

<sup>872</sup> Iraq Energy Research.

<sup>873</sup> Pete Moore , Christopher Parker , "The War Economy of Iraq" Middle East Research Institute Issue 243 Vol. 37 Summer 2007. <http://www.merip.org/mer/mer243/war-economy-iraq>

as “180 plus,” suggesting the number of these companies actually rose, and by 2016 a more specific figure of 176 was given by a government official.<sup>874</sup> This suggests some SOEs are being targeted for reform, while others are being considered to be left to fail since they drain funds as “employment schemes.” The loss of some SOEs would likely be necessary if Iraq is to reduce the burden of public sector salaries and move salary expenditure to investment, since according to one account, SOEs have taken \$11 billion in government money since 2003 but have made “no profit,” as one consultant remarked,

“Over-employment in these companies ranges from 30% to 50% so you can imagine that when they come to be transferred into private ownership this will cause social issues with unemployment. They will need state benefits and training to find new jobs. It will be very difficult but the government must provide an essential safety net.”<sup>875</sup>

Problematically, even the latter challenge, of gradually transitioning SOE workers to retirement or training has significant costs and some form of compensation will likely be demanded by all those who are made unemployed.

Unemployment, already a persistent problem in Iraq, has risen since the oil price collapse as SOEs have been unable to pay salaries, as oil revenues are diverted to defence to fight the self-declared Islamic State. Highlighting the relationship between the oil price and available funds for public sector salaries, protests were occurring at SOE factories in Kut and Hillah over delayed wages through the summer of 2014, before the steep drop in prices, although prices were already declining.<sup>876</sup> Looney highlights how the SOE model under Saddam Hussein was likely to endure in Iraq post 2003, noting,

“the Baathist economic model provided the government bureaucracy with a pragmatic, albeit doctrinaire framework for setting prices for many goods, controlling the country’s vast oil resources, running nearly two hundred state-owned enterprises, and dominating most aspects of the economy.”<sup>877</sup>

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<sup>874</sup> Sulaiman S. Wasty “Private Sector Development in Iraq: Continuing Constraints” Middle East Institute July 26<sup>th</sup> 2012. Accessed August 2<sup>nd</sup> 2016. <http://www.mei.edu/content/private-sector-development-iraq-continuing-constraints>

<sup>875</sup> Iraq Business News, “More private sector vital for progress,” May 5<sup>th</sup> 2015, accessed August 2<sup>nd</sup> 2016. <http://www.iraq-businessnews.com/2015/05/05/move-to-private-sector-vital-for-progress/>

<sup>876</sup> Adnan Abu Zeed “Iraqi workers protest for wage payment” *Al Monitor* June 10, 2015, accessed August 2<sup>nd</sup> 2016. <http://www.al-monitor.com/pulse/originals/2015/06/iraq-industrial-sector-financial-collapse.html>

<sup>877</sup> Robert Looney, “A Return to Baathist Economics? Escaping Vicious Circles in Iraq” *Strategic Insights, Volume III, Issue 7* Center for Strategic Insights July 2007

A decade after regime change, the UNDP estimated public sector employment at over 4 million, with many males in the work force serving in the police or armed forces. However, while the Iraqi government is burdened paying wages to failing companies, another problematic area is industrial energy subsidies, which have distorted the investment environment.

Estimates of fuel subsidies in Iraq are as high as 14% of GDP in 2011, and as much as \$10 billion per year in 2015.<sup>878</sup> These subsidies make it difficult for SOEs and investors in Joint Ventures with SOEs to know the “bottom line” of these firms since they face few difficulties when operating wastefully due to cheap or free energy. Highlighting government and public sensitivity to the removal of subsidies, one government official in 2015 denied that subsidies would be removed under conditions of an IMF loan agreement.<sup>879</sup> This may appear justified in light of civil unrest in Iraq, since previous attempts to increase energy prices have led to public protests, particularly considering that many Iraqis express dissatisfaction with public services. Subsequently, Iraq has resisted removing subsidies despite removing them from the budget in 2007, only to keep implicit subsidies by lowering the price of fuels refined within Iraq, while domestic power plants have paid far less than international price for fuel.<sup>880</sup>

This creates yet more inefficiency in the energy value chain, firstly because low prices have encouraged smuggling networks and fuel theft by government officials with access to large fuel allocations, with one estimate of the cost to Iraq’s economy at \$4 billion in 2005, with as much as 30% of fuel imported and refined being smuggled out of the country and sold at regional market prices.<sup>881</sup> One report noted how, since fuel was subsidized at 3 cents per litre, imported fuel was stolen, as well as fuel refined in Iraq, describing how,

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<sup>878</sup> Brendan Greeley “Economic Addiction: Emerging economies worldwide struggle to end budget-busting subsidies

Emerging economies worldwide struggle to end budget-busting subsidies” *Bloomberg* March 14<sup>th</sup> 2014 accessed August 2<sup>nd</sup> 2016. <http://www.bloomberg.com/news/articles/2014-03-13/why-fuel-subsidies-in-developing-nations-are-an-economic-addiction>

<sup>879</sup> Majida Mohsen “Iraq has no plans to lift fuel subsidies-govt adviser” *Reuters Zawya* 14<sup>th</sup> Decemer 2015 Accessed August 2<sup>nd</sup> 2016.

[https://www.zawya.com/story/Iraq\\_has\\_no\\_plans\\_to\\_lift\\_fuel\\_subsidiesgovt\\_adviser-ZAWYA20151214052212/](https://www.zawya.com/story/Iraq_has_no_plans_to_lift_fuel_subsidiesgovt_adviser-ZAWYA20151214052212/)

<sup>880</sup> IMF, “Energy Subsidies in the Middle East and North Africa: Lessons for Reform” May 2014. Accessed August 2<sup>nd</sup> 2016. <https://www.imf.org/external/np/fad/subsidies/pdf/menanote.pdf>

<sup>881</sup> Ali A. Allawi, “The Occupation of Iraq: Winning the War, Losing the Peace” (Yale: Yale University Press, 2007): 380

“A 9000 gallon tanker truck carried fuel officially worth around \$250. But the same fuel was worth around a dollar a gallon on the black market. Consequently, according to a report done for the oil industry, even after paying \$500 for protection money or police bribes and \$800 for the truck driver, a smuggler could make \$7,450 bringing in fuel from Jordan and Syria.”<sup>882</sup>

Secondly, as Iraq’s population grows, the outlay for these imports also grows, eroding exports and revenues. For example, in 2005 the cost of fuel imports was estimated to be \$6 billion, while in 2016 this had risen to \$10 billion, in part driven by increased consumption as per capita income rose.<sup>883</sup> Likewise, in 2015 the IMF estimated that if Iraq raised the price of fuel at the pump to 80% of the import price, \$2.5 billion would be saved, although the IMF noted this would have to be examined carefully to avoid public opposition.<sup>884</sup>

Until such measures can be implemented, Iraq’s fuel import outlays and high domestic demand will continue to pressure the country’s limited refining capacity, which requires significant investment, estimated in 2008 at 10 billion dollars, but likely far higher since the loss of the 400,000 bpd Baiji refinery, which was destroyed during fighting in 2014. For example, the Karbala refinery project alone was priced at \$6.5 billion, but was delayed in 2016 due to financial pressures.<sup>885</sup> When the Baiji refinery was destroyed, fuel shortages affected most of Northern Iraq.<sup>886</sup>

Other problems have affected the refinery sector, such as continually revised but difficult investment terms for investors, which have delayed bidding rounds for the 300,000 BPD Nasiriyah refinery, which is planned to be connected to the oilfield of the same name. However, the Nasiriyah Integrated Project, the terms of which were first offered in 2008, has been delayed until 2013, when bidding was indefinitely postponed, ostensibly due to lack of interest.<sup>887</sup>

With delays in making feasibility studies and problems attracting investors, Iraq will now not have enough refining capacity to meet domestic demand until at least 2020, but

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<sup>882</sup> Phil Williams, “Criminals, Militias, and Insurgents: Organized Crime in Iraq” (U.S Army War College Strategic Studies Institute, 2009)

<sup>883</sup> Ibid.

<sup>884</sup> IMF country report, Iraq: Staff report for the 2015 Article IV consultation.

<sup>885</sup> Saadallah al Fathi, “*THE FARCE THAT GOES FOR REFINERY PROJECTS IN IRAQ*” <http://gulfnews.com/business/analysis/the-farce-that-goes-for-refinery-projects-in-iraq-1.1707584>

<sup>886</sup> Iraq Energy Research

<sup>887</sup> Platts, “Iraq seeks to relaunch investment plans for refineries, storage tanks” 29 Aug 2016 accessed August 2<sup>nd</sup> 2016. <http://www.platts.com/latest-news/oil/dubai/iraq-seeks-to-relaunch-investment-plans-for-refineries-27658468>

this assumes the delayed Karbala refinery will be completed on time and that the planned Maysan refinery will also be complete, and in the latter case accusations of corruption may delay the \$6 billion project, with two Iraqi oil experts claiming the company contracted for the work, Satarem, has no experience in refining.<sup>888</sup> More recently, sources apparently close to the project have claimed that the Swiss-Chinese Satarem Corporation behind the Maysan project is partly backed by CNPC, but the fraud accusations point to the dangers of a lack of transparency in the sector.<sup>889</sup> Until the new refineries are complete therefore, Iraq faces a 200,000 bpd deficit of refined fuel.<sup>890</sup> As of September 2016, a new Minister of Oil, Jabar al-Luaibi, entered talks with a number of officials to develop new refining capacity at four new greenfield sites, but this approach has been called into question given the failure to attract new investment over 9 years since Iraq passed and then continually revised investment terms under the Refinery Act of 2007.<sup>891</sup>

These economic inefficiencies further jeopardise the future of the energy sector. As noted, sums of \$10 billion a year for fuel subsidies, as well as losses of hundreds of millions of dollars for flared gas, could be sufficient to fund either new refining capacity or vital infrastructure projects to maintain pressure and output in aging giant oil fields.

Aside from this lack of funding, much of which has been spent on fuelling inefficient power stations with oil which could have been refined or exported, or allowing cheap fuel which, according to some studies, helps wealthier families who consume more, rather than the poor which subsidies are intended to protect, Iraq has also struggled to pay IOCs following the price collapse. Payments to IOCs have also been jeopardised by Iraq's surging war expenditures, which amounted to almost 20% of GDP in 2015.<sup>892</sup>

Nonetheless, Iraq has succeeded in raising exports between 2014 and 2015 despite some field registering declines as capital expenditure reductions took effect. In February

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<sup>888</sup>Robert Brelsford "Iraq lets contract for Karbala refinery," *Oil and Gas Journal* 25<sup>th</sup> June 2016, accessed August 2<sup>nd</sup> 2016.

<http://www.ogj.com/articles/2015/06/iraq-lets-contract-for-karbala-refinery.html>

<sup>889</sup>Platts, "Iraq seeks to relaunch investment plans for refineries, storage tanks" 29 Aug 2016 accessed August 2<sup>nd</sup> 2016. <http://www.platts.com/latest-news/oil/dubai/iraq-seeks-to-relaunch-investment-plans-for-refineries-27658468>

<sup>890</sup> Saadallah al Fathi "IRAQ'S NEW OIL MINISTER MAKES THE RIGHT NOISES" *GULF NEWS* September 4<sup>th</sup> 2016. Accessed August 2<sup>nd</sup> 2016. <http://gulfnnews.com/business/analysis/iraq-s-new-oil-minister-makes-the-right-noises-1.1890405>

<sup>891</sup> Ibid.

<sup>892</sup> Iraqi News "Iraq will spend about 20% of the 2016 budget on defense, says Iraqi Finance Minister" October 28<sup>th</sup> 2015 accessed August 2<sup>nd</sup> 2016 <http://www.iraqinews.com/business-iraqi-dinar/iraq-will-spend-20-2016-budget-defense-says-iraqi-finance-minister>

2014, Iraq managed to export 2.8 mbpd and reached exports of 3.06 mbpd in August 2015,<sup>893</sup> an increase of over half a million barrels compared to 2014. Exports were increasing through 2016, although a number of experts noted the likelihood that if Iraq faced continued problems paying IOCs, a lack of investment would see output decline by as much as 10% per year, a potentially catastrophic amount.<sup>894</sup> Of particular concern to Iraq is the Common Seawater Supply Facility, which is a water injection project needed to maintain pressure in Iraq's five giant southern fields which account for two thirds of Iraqi production.<sup>895</sup>

The lack of available funds for such a vital project has called into question Iraq's Technical Service Contracts, which stipulate that Iraq must pay the IOC investment costs within one Quarter at a fixed per barrel fee. This arrangement saw the government accrue massive revenues at times of high prices, but has strained finances following the 2014 price collapse. Iraq's payments to IOCs subsequently fell behind some time in 2014, reaching a debt of \$8 billion by the start of 2015 and another \$9 billion at the start of 2016.<sup>896</sup>

After the oil price collapse, Iraq responded to this growing financial crisis by writing a letter to IOCs warning of a grave financial crisis and a threat to the stability of the state, asking the companies to slash spending requests for 2015. IOCs duly did so, with Lukoil cutting expenditure to \$2.1 billion from \$2.3 billion, BP cutting costs to \$3.25 billion from \$3.50 billion, and Shell suggesting a reduction to \$1.5 billion from \$2.4 billion. Exxon Mobil meanwhile, announced that investment would remain at \$1.8 billion.<sup>897</sup> The effect of these expenditure reductions were not seen for sometime, although Gazprombank projected that Lukoil would not begin any new work in 2015,<sup>898</sup>

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<sup>893</sup> Nayla Razzouk "Iraq's Oil Output Climbs to Record as South Escapes Fighting" *Bloomberg* August 12<sup>th</sup> 2015, accessed August 2<sup>nd</sup> 2016.

<http://www.bloomberg.com/news/articles/2015-08-12/iraq-boosts-oil-output-to-all-time-high-in-july-iaa-says>  
<sup>894</sup> Nick Cunningham, "Oil Prices Could Surge As This Country Fails To Meet Production Targets" *Oilprice* September 17<sup>th</sup> 2015. <http://oilprice.com/Energy/Crude-Oil/Oil-Prices-Could-Surge-As-This-Country-Fails-To-Meet-Production-Targets.html>

<sup>895</sup> *Ibid.*

<sup>896</sup> Luay al Khatteeb, "Iraq's Economic Reform for 2016" Brookings Institute, December 13<sup>th</sup> 2013. Accessed July 16<sup>th</sup> 2016. <https://www.brookings.edu/opinions/iraqs-economic-reform-for-2016/>

<sup>897</sup> Ahmed Rasheed "Oil companies offer to cut 2015 spending in Iraq" *Reuters* March 12<sup>th</sup> 2015 accessed August 2<sup>nd</sup> 2016. <http://uk.reuters.com/article/iraq-oil-contracts-idUKL5N0WE4OJ20150312>

<sup>898</sup> Gazprombank: Change of recommendation on Lukoil, June 25<sup>th</sup> 2015. Accessed August 2<sup>nd</sup> 2016 [http://www.gazprombank.ru/upload/iblock/0d8/GPB\\_Lukoil\\_rating\\_change\\_250615.pdf](http://www.gazprombank.ru/upload/iblock/0d8/GPB_Lukoil_rating_change_250615.pdf)

while Italy's ENI announced that there would be a decline in production through 2016.<sup>899</sup>

Iraq also changed contracts to allow payments to IOCs in shipments in oil, to minimise the build-up of debt, with BP being an early beneficiary of this arrangement, which allowed Baghdad to maintain payments such as public sector salaries but of course eroded revenues.<sup>900</sup> Furthermore, because of the severity of a 45% price collapse, payments of oil to IOCs doubled.<sup>901</sup> To an extent, the strategy worked in that debt to IOCs was gradually paid off with around \$2 billion in debt outstanding to IOCs by March 2016, meaning that Iraq had successfully paid off almost \$15 billion in debt.

These payments amount to almost \$5 billion more than the maximum estimated funds required to complete the Common Seawater Supply Project (CSSP) which is required to inject around 1.5 barrels of water to extract one barrel of oil from southern fields, on average.<sup>902</sup> The absence of the project, which was supposed to have been completed by 2015 meant that IOCs negotiated with the Iraqi government to upgrade the old Qarmat Ali water treatment facility near Rumaila to provide them with around 300,000 barrels a day of water, while some IOCs rely on the "Third River" drainage canal, which takes agricultural run-off from the rivers of the Tigris and Euphrates.<sup>903904</sup>

This is far short of the originally planned 12.5 million bpd of seawater required for Iraq to hit its target of 6 million bpd production by 2020, in an original plan for 270 kilometres of pipeline, suggesting that initial declines in some fields through 2015 and 2016 may be a sign of more serious problems. By 2014, the CSSP was planned to deliver 7 million bpd of treated seawater, already a significant reduction, while other

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<sup>899</sup> Daniel Graber, "Eni expands capacity in Iraqi oil" March 3<sup>rd</sup> 2016 Accessed August 2<sup>nd</sup> 2016. [http://www.upi.com/Business\\_News/Energy-Industry/2016/03/03/Eni-expands-capacity-in-Iraqi-oil/9791457011054/http://www.upi.com/Business\\_News/Energy-Industry/2016/03/03/Eni-expands-capacity-in-Iraqi-oil/9791457011054/](http://www.upi.com/Business_News/Energy-Industry/2016/03/03/Eni-expands-capacity-in-Iraqi-oil/9791457011054/http://www.upi.com/Business_News/Energy-Industry/2016/03/03/Eni-expands-capacity-in-Iraqi-oil/9791457011054/)

<sup>900</sup> Rania El Gamal "BP says taking more oil from Iraq as payment" *Reuters* April 20<sup>th</sup> 2015 accessed Aug 2<sup>nd</sup> 2016. <http://www.reuters.com/article/us-bp-iraq-oil-idUSKBN0NB1CF20150420>

<sup>901</sup> Platts, "Iraq, IOCs eye changes in oil contracts to mitigate impact of falling crude" 30<sup>th</sup> March 2015, accessed August 2<sup>nd</sup> 2016. <http://www.platts.com/latest-news/oil/baghdad/iraq-iocs-eye-changes-in-oil-contracts-to-mitigate-26052472>

<sup>902</sup> Anoop Menon, "Parsons to design \$10bn Iraq seawater supply project," February 9<sup>th</sup> 2015, accessed August 2<sup>nd</sup> 2016. <http://meconstructionnews.com/8468/parsons-to-design-10bn-iraq-seawater-supply-project>

<sup>903</sup> Washington Post (letters, archives) "The third river, Iraq's main drain," accessed August 2<sup>nd</sup> 2016. [https://www.washingtonpost.com/archive/opinions/1992/09/04/the-third-river-project-iraqs-main-drain/ce4d90c3-b6c4-4edb-921a-f15df51b2e1c/?utm\\_term=.9124d1ccd5b3](https://www.washingtonpost.com/archive/opinions/1992/09/04/the-third-river-project-iraqs-main-drain/ce4d90c3-b6c4-4edb-921a-f15df51b2e1c/?utm_term=.9124d1ccd5b3)

<sup>904</sup> Presentation by Ahmed Mousa Jiyad, Brussels Energy Club, September 11<sup>th</sup> 2014. Accessed August 2<sup>nd</sup> 2016. <http://www.iraq-businessnews.com/wp-content/uploads/2014/09/Ahmed-Mousa-Jiyad-Brussels-Energy-Club-Presentation-WebsiteVersion.pdf>

figures for available water still fall far short of this. Even before projected declines in 2016, Lukoil, Shell and CNPC all revised production targets down by hundreds of thousands of barrels in the absence of the facility.<sup>905</sup>

Subsequently, Iraq went into talks in 2016 with Exxon to return to the project, an unlikely prospect following interviews with those close to the matter. Iraq had previously expelled Exxon from work on the project, following the company's deals with the KRG, which Baghdad declared illegal.<sup>906</sup> Another IOC approached has been PetroChina, with Bin Umar and Ratawi being offered for development in conjunction with the new CSSP deal. Both fields hold almost 9 billion barrels of oil.<sup>907</sup> However, since talks are ongoing, the FEED for the project has not yet been completed by contractor Parsons, suggesting more delays are to be expected.<sup>908</sup>

Faced with these problems, the government of Iraq has sought to again renegotiate contracts with a particular focus on remuneration and extending terms for IOCs, with some suggesting new contracts would more resemble PSAs, which proved highly controversial in the Iraqi parliament in 2009.<sup>909</sup> Aware of this controversy, the Oil Ministry stated that any new contract would not bear relation to a PSA, and has also suggested Iraq's stake in projects could be expanded to 25pc.<sup>910</sup> Previously, the government stake had been revised down in most contracts to only 5pc in 2013, because IOCs were not happy with per barrel cost recovery fees.<sup>911</sup>

Despite facing political uncertainty following protests in the spring of 2016 that saw thousands of protesters enter the Iraqi Parliament and political deadlock that left the government without an Oil Minister, the Ministry of Oil continued negotiations with IOCs and asked them to increase output by 500,000 bpd for 2016. Within the call for this increase in output are stipulations that new contracts must have greater local content provisions.<sup>912</sup> The call for raised output caused some IOCs to unofficially express concern about the Ministry's approach, which was based on the suggestion that higher

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<sup>905</sup> Ibid.

<sup>906</sup> Iraq Energy Research.

<sup>907</sup> Ibid.

<sup>908</sup> Anoop Menon, "Parsons to design \$10bn Iraq seawater supply project," February 9<sup>th</sup> 2015, accessed August 2<sup>nd</sup> 2016. <http://meconstructionnews.com/8468/parsons-to-design-10bn-iraq-seawater-supply-project>

<sup>909</sup> Greg Muttitt, *Fuel on the fire: Oil and Politics in Occupied Iraq*. (London: The Bodley Head, 2011), 243

<sup>910</sup> Analysis: Iraq offers contract renegotiation, *Argus Media* 6<sup>th</sup> of March 2015 accessed August 2<sup>nd</sup> 2016. <http://www.argusmedia.com/news/article/?id=1003910>

<sup>911</sup> Ibid.

<sup>912</sup> Iraq Energy Research.

output would produce more oil to pay IOCs, although one un-named IOC official apparently remarked, “we are not a bank” in reference to this proposal.<sup>913</sup>

As noted in Chapter 5 however, Iraq’s pursuit of oil production targets above 5 million barrels a day risk putting downward pressure on prices and, given the significant investment required, could prove self-defeating, as Fadhil al Chalabi and Frank Gunter have noted, covered in Chapter 3. At the same time, a reduction of output could stabilise global prices, but at the expense of Iraq’s market share if Saudi Arabia and Russia were to maintain high rates of production beyond 2017, since Iraq has previously contributed to price reductions through rapid output. For example, in August 2016, a brief rally in the price of oil ended with the announcement that extra Iraqi production was coming on line from Kirkuk (although other data points such as falling Chinese demand were cited as reasons for the fall).<sup>914</sup>

Output decline was not looking as rapid as the projected 10% fall after 2016 however, as by summer 2016 Iraq had secured a \$5.4 billion IMF loan, having already borrowed \$1.25 from the IMF and \$1.7 billion from the World Bank in 2015.<sup>915</sup> These initial loans were part of an emergency fund raising drive from the government, which included a \$566 million loan from Germany in early 2016, \$2.7 billion loan from the U.S to purchase weapons to fight IS,<sup>916</sup> and a bond issuance, which was eventually dropped because the bonds were not attractive enough for buyers, who demanded too high a yield. With the IMF loan of spring 2016, Iraq agreed to a monitoring program which, if effectively implemented, should reduce energy subsidies, but again risks raising political pressure on Haidar al-Abadi’s struggling government.

One stipulation of the IMF loan was that it would be used to pay off IOC debt, and this appeared to have the desired effect of restoring IOC confidence, with a target of

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<sup>913</sup> Nick Cunningham “Iraq Needs Oil Companies to Drill More, But Can it Pay?” August 24<sup>th</sup> 2016. Accessed August 25<sup>th</sup> 2016 <http://oilprice.com/Energy/Crude-Oil/Iraq-Needs-Oil-Companies-to-Drill-More-But-Can-it-Pay.html>

Barani Krishnan “Oil Down as Rally Snaps on Rising Crude, China Fuel Exports” *Reuters*, August 22, 2016 Accessed August 25<sup>th</sup> 2016. <https://www.bing.com/search?q=oil+down+as+rally+snaps+on+rising+crude%2C+china+fuel+exports&form=EDGNTC&qs=PF&cvid=cbce6e60feba4244b76d4f37c41aa762&pq=oil+down+as+rally+snaps+on+rising+crude%2C+china+fuel+exports>

<sup>915</sup> World Bank: Iraq’s Economic Outlook, Spring 2016. <http://www.worldbank.org/en/country/iraq/publication/economic-outlook-spring-2016>

<sup>916</sup> The Associated Press, “US gives Iraq \$2.7B credit to buy military equipment,” June 29<sup>th</sup> 2016, accessed August 2<sup>nd</sup> 2016. <http://bigstory.ap.org/article/862568796818450db8174452e49ca402/us-gives-iraq-27b-credit-buy-military-equipment>

September 2016 to pay off debt to IOCs and a promise not to accrue more debt beyond summer 2016.<sup>917</sup> Tellingly, while IOCs outlined investment plans for southern Iraq in 2016, these were lower than the revised investment plans noted earlier for 2015, which had already been reduced. Shell for example, had cut investment to just \$742 million, a reduction of almost half from 2015 plans, while Lukoil reduced spending similarly, going from a planned \$2.5 billion in investments for 2015 to \$1.08 billion and BP announcing deeper cuts from \$3.5 billion to \$1.8 billion.

Prolonging negotiations and contractual uncertainty comes with another risk for Iraq, and this is that neighbouring Iran may ramp up exports following the lifting of sanctions, effectively winning foreign investment that may have gone to Iraq. This would depend on Iraq asking for too unattractive terms for new contracts while, at the same time Iran would have to offer highly attractive terms for its new “Iran Petroleum Contract” model, which replaces the “buy back” contract.

Another problem that has seen billions of dollars’ worth of waste in Iraq’s energy value chain is the flaring of associated gas, which is covered in the case study on the Basra Gas Company in Chapter 5. Iraq devised a national plan with Shell in 2005 to capture associated gas from oil wells, based in part on plans to do the same that were devised in the 1980s.<sup>918</sup>

However, a series of political disputes, arising largely from the secretive negotiations between the Ministry of Oil and Shell, and questions over the anticompetitive nature of the deal caused a number of delays in the project, in addition to disputes between Shell and the South Gas Company, and disputes with IOCs who were required under their contracts to supply associated gas the SGC for treatment. The aim of the project was to eliminate flaring by 2015, but this has been delayed to 2022.<sup>919</sup> Because of the political disputes, some gas treatment technical studies were not awarded until the spring of 2014, and the target beyond 2020 means that IEA predictions that Iraq could lose a total

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<sup>917</sup> “Iraq, IOCs agree to increase investment” *The Oil and Gas Year* 11<sup>th</sup> of August 2016 accessed 25<sup>th</sup> August 2016. <http://www.theoilandgasyear.com/news/iraq-iocs-agree-to-raise-investment/>

<sup>918</sup> Kathem Hassan Ali “Associated Petroleum Gas management in the south of Iraq,” (Diss: Mid Sweden University, 2014) <http://www.diva-portal.se/smash/get/diva2:768346/FULLTEXT01.pdf>

<sup>919</sup> Interview with Al-Ghadhban on Iraq's Oil & Gas Sector - 14 Dec 2015 Accessed August 2<sup>nd</sup> 2016. [http://iraqenergy.org/home/news\\_details.php?id=6](http://iraqenergy.org/home/news_details.php?id=6)

of \$70 billion to flaring could be correct.<sup>920</sup> BGC have suggested the lost gas from flaring throughout Iraq could power a total of 15 million homes, if utilized.<sup>921</sup>

Despite these delays, Iraq sent some gas to the national grid in early 2016, allowing for 300 MW of power to be generated for Basra.<sup>922</sup> However, until further work is complete, Iraq has chosen to import gas from Iran, to the value of approximately \$3.7 billion a year, according to Iranian sources.<sup>923</sup> Other problems with BGC have related to funds owed, or problems Iraq has experienced in paying contractually stipulated costs. This means that, although shipments of condensate and LPG began in 2016, the revenues from these shipments have not gone to the Iraqi government, as originally planned, although it is notable that southern Iraq is now self-sufficient in LPG, thanks to the project.<sup>924</sup>

Nonetheless, Ali Khudair, former director of the South Gas Company has estimated that flaring stands at 1000 million cubic feet a day (1000 mcf/d) of gas, with the Ministry of Oil estimating a similar level of captured gas. Other estimates have been higher for both flared and produced gas, based on statements by an Iraqi oil official, at 1800 mcf/d being flared out of 2600 mcf/d production.<sup>925</sup>

The Kurdish Ministry of Natural Resources (MNR) has also had problems with the gas sector, but these have been related to contractual disputes rather than infrastructural and political challenges, as with the case of the BGC. In 2007, Dana Gas, a Sharjah based consortium, signed an agreement with the KRI to supply gas to power stations from the Khor Mor gas field and the Chemchemal field to power stations in the KRI, with future exports planned.<sup>926</sup> In 2009, Dana Gas formed Pearl Petroleum with Austria's OMV and MOL of Hungary, but while the utilization of gas for electricity proved to be a success

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<sup>920</sup> John Lee, "Iraq has lost billions from gas flaring," *Iraq Business News* February 16<sup>th</sup> 2016. Accessed August 2<sup>nd</sup> 2016. <http://www.iraq-businessnews.com/2015/02/16/iraq-has-lost-billions-from-gas-flaring/>

<sup>921</sup> Basra Gas Company. Accessed August 2<sup>nd</sup> 2016. <http://www.basrahgas.com/a-wasted-resource-today>

<sup>922</sup> IEA, "Country Analysis Brief: Iraq," April 28, Accessed August 2<sup>nd</sup> 2016

[http://www.iberglobal.com/files/2016/iraK\\_eia.pdf](http://www.iberglobal.com/files/2016/iraK_eia.pdf)

<sup>923</sup> "Iran to start gas exports to Iraq in a month: official." *Iran Daily* 23<sup>rd</sup> May 2016 accessed August 2<sup>nd</sup> 2016.

[https://www.google.co.uk/search?espv=2&q=iraq+gas+imports+from+iran+3.7+billion&oq=iraq+gas+imports+from+iran+3.7+billion&gs\\_l=serp.3...21508.22828.0.23088.4.4.0.0.0.0.87.297.4.4.0....0...1c.1.64.serp..0.0.0.u5WTDqkxmxs](https://www.google.co.uk/search?espv=2&q=iraq+gas+imports+from+iran+3.7+billion&oq=iraq+gas+imports+from+iran+3.7+billion&gs_l=serp.3...21508.22828.0.23088.4.4.0.0.0.0.87.297.4.4.0....0...1c.1.64.serp..0.0.0.u5WTDqkxmxs)

<sup>924</sup> Khalid al Ansary, "Iraq Slows Natural Gas Output as Oil Slump Squeezes Spending," *Bloomberg* March 30<sup>th</sup> 2016. Accessed August 2<sup>nd</sup> 2016. <http://www.bloomberg.com/news/articles/2016-03-29/iraq-slowng-natural-gas-output-as-cheaper-oil-squeezes-spending>

<sup>925</sup> Saadallah al Fathi, "Iraqi claims that have no basis in fact," *Gulf News* 17<sup>th</sup> April 2016 accessed 25<sup>th</sup> August 2016. <http://gulfnews.com/business/analysis/iraqi-claims-that-have-no-basis-in-facts-1.1714115>

<sup>926</sup> Luay al Khatteeb, "The Geopolitics of Natural Gas Natural Gas in the Republic of Iraq" (Harvard Belfer Center, Rice University's Baker Institute Center for Energy Studies 2013.)

for the KRI, a legal dispute between the Pearl Petroleum Consortium and the KRG over the right to sell shares in the Khor Mor project, as well as payment disputes, has cost the Kurds \$1.98 billion.<sup>927</sup>

The lawsuit has been one of a number of serious setbacks for the KRI's attempt at developing an independent energy sector. Firstly, the KRI has suffered many of the problems described at the start of this chapter, including loss of fiscal control, mass public sector employment and political disputes over oil revenues that have delayed efficient planning and led to the politicised hiring of ministry staff.

The KRI has as much as 70% of its workforce employed by the regional government, which has led to chronic over-employment in ministries, a similar situation to Arab Iraq.<sup>928</sup> According to the US State Department in 2008 for example, the KRG's agriculture ministry employed over 6 times the number of staff in the equivalent organization in California, which had 2000 employees to the KRI's 13,000 despite the fact that California has over 7 times the population of the KRI, or 38 million people.<sup>929</sup>

Since the oil price collapse, this situation has called into question hopes that oil revenues from independent exports may be able to financially sustain the KRI, placing greater political pressure on the ruling KDP, who have been accused of having autocratic tendencies in reports by Reporters Without Borders and Human Rights Watch.<sup>930</sup>

Disgruntlement at the ruling KDP has resulted in renewed political conflict and social unrest in the KRI, with the Patriotic Union of Kurdistan and the Change Movement (Gorran) having repeatedly objected to the KDP holding onto the presidency position, which (according to the Kurdish constitution) should have been passed on in 2013.<sup>931</sup>

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<sup>927</sup> Anthony McAuley "Kurdish outlay saved costs, says Dana Gas" *The National* 6<sup>th</sup> of April 2016, accessed August 2<sup>nd</sup> 2016 <http://www.thenational.ae/business/energy/kurdish-outlay-saved-costs-says-dana-gas>

<sup>928</sup> Simon Kent, "Kurdish Regional Government fights reform battle," *Iraq Business News* December 24<sup>th</sup> 2015, accessed August 2<sup>nd</sup> 2016 <http://www.iraq-businessnews.com/2015/12/24/kurdish-regional-government-fights-reform-battle/>

<sup>929</sup> RTI International Report for USAID, 2008. Accessed August 2<sup>nd</sup> 2016. [http://www.mop.gov.krd/resources/MoP%20Files/PDF%20Files/DCC/Studies/EDA%20Report\\_English.pdf](http://www.mop.gov.krd/resources/MoP%20Files/PDF%20Files/DCC/Studies/EDA%20Report_English.pdf)

<sup>930</sup> Reporters Without Borders, "Kurdish security forces unleash wave of terror on media," October 17<sup>th</sup> 2015. Accessed August 2<sup>nd</sup> 2016. <https://rsf.org/en/news/kurdish-security-forces-unleash-wave-terror-media>

<sup>931</sup> Isabel Coles, "Uncertainty reigns in Iraqi Kurdistan as president's mandate expires," *Reuters* August 20<sup>th</sup> 2015, accessed August 2<sup>nd</sup> 2016. <http://www.reuters.com/article/us-iraq-kurds-presidency-idUSKCN0QP1V620150820>

Until increased political tension following the KDP's refusal to give up the presidency, high oil revenues from federal government transfers had cemented the KRI's political alliance of KDP and PUK, the Democratic Patriotic Alliance of Kurdistan.<sup>932</sup> This changed in January 2014 following a dispute over exports, when Prime Minister Nouri al-Maliki's government decided to cut federal transfers, plunging the region into instantaneous financial crisis.<sup>933</sup>

Severe financial pressure following the budget cut off and the price collapse through 2014 did not appear to deter the KDP's leader Massoud Barzani from pursuing independent exports in the hope that revenues would make the KRI financially viable, aiming for 1 million bpd independent exports by 2017.<sup>934</sup>

This ambition suffered a significant setback when two of the largest producing oil fields in the region had their reserves downgraded. Genel Energy, which operates the Taq Taq oil field, lost 44% of its value, or \$1 billion USD when the field's recoverable oil was re-assessed, which followed the downgrading of Barda Rash oilfield in January 2015, which caused its operator Afren to go bankrupt.<sup>935</sup>

These developments have led some to suggest that the KRI's proclaimed 70 billion barrels reserves may be more than 10 times less, perhaps as low as 7 bbl. and 3.8 bbl of discovered contingent resources.<sup>936</sup> This has added to an overall sense of risk for IOCs entering the KRI, where once PSAs offered were seen as favourable to the TSCs offered by Baghdad. Already, there had been tension between the KRI and oil companies following the budget dispute with Baghdad, which caused Kurdish debt to IOCs to build even before the oil price collapse. Following on from corruption allegations against MNR for alleged insider dealings with DNO, the Dana Gas dispute and Baghdad issued

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<sup>932</sup> Carnegie Endowment for International Peace, "The Kurdish Parties" (2009) accessed August 2<sup>nd</sup> 2016. [http://www.europarl.europa.eu/meetdocs/2009\\_2014/documents/d-iq/dv/d-iq20091202\\_09\\_/d-iq20091202\\_09\\_en.pdf](http://www.europarl.europa.eu/meetdocs/2009_2014/documents/d-iq/dv/d-iq20091202_09_/d-iq20091202_09_en.pdf)

<sup>933</sup> Nassir al-Hassoun "Iraqi Kurdistan economy suffers amid budget dispute with Baghdad" *Al Monitor* May 16<sup>th</sup> 2014. Accessed August 2<sup>nd</sup> 2016. <http://www.al-monitor.com/pulse/en/business/2014/05/iraq-kurdistan-region-budget-dispute-economic-effects.html>

<sup>934</sup> The Economist, "Kurdistan: Ever closer to independence" February 21<sup>st</sup> 2016. Accessed August 2<sup>nd</sup> 2016. <http://www.economist.com/news/international/21644167-iraqs-kurds-are-independent-all-name-they-must-play-their-cards-cleverly-if-they>

<sup>935</sup> John Lee, "Afren slumps on Barda Rash downgrade" *Iraq Business News* January 12<sup>th</sup> 2015. <http://www.iraq-businessnews.com/2015/01/12/afren-slumps-on-barda-rash-downgrade/>

<sup>936</sup> Robin Mills, "Under the Mountains: Kurdish Oil and Regional Politics" Oxford Institute of Energy Studies Working Paper 63. (Oxford, 2016)

lawsuits against KRI exports, investors will be far more wary of entering the KRI energy market.

As with Arab Iraq, the KRI is also forced to discount its oil on the international market, and in several cases has been forced to disguise shipments, with buyers also being threatened by Baghdad with lawsuits.<sup>937</sup> A combination of selling discounted oil and the oil price collapse has led to the KRI being short of hundreds of millions of dollars per month, leading the government to take emergency austerity measures as strikes, sit ins and protests erupted into violence in October 2015, raising fears that intra-Kurdish violence could return.<sup>938</sup> As the KRI took measures to pay IOCs on time (despite debts) further setbacks hit the region when the main Kurdish export pipeline was knocked off line by an explosion, removing 600,000 bpd of exports in an attack blamed on the Kurdish militant PKK, who are targeting the KDP's close relationship with Turkey.<sup>939</sup> Following the resultant drop in exports, Gulf Keystone suffered such serious financial losses as to become insolvent, since the small IOC was already struggling from delayed payments from the KRG.<sup>940</sup>

These negative financial developments in the KRI have not only heightened tension between the Kurdish political parties, but also heightened tension between Baghdad and Erbil, since in the Summer of 2014 Kurdish Peshmerga forces seized a number of oilfields in the Kirkuk formation, Bai Hassan, and Jambur.<sup>941</sup> This was met with immediate condemnation from Baghdad, who saw the move as exploiting the advance of the self-declared Islamic State for territorial gain. Despite this condemnation, and warnings from the Ministry of Oil, the KRG later connected the Avanah Dome of the Kirkuk field, which is linked by pipeline to Bai Hassan, to the Khurmala oilfield, effectively giving it control of oil previously managed by the North Oil Company.

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<sup>937</sup> Dmitry Zhdannikov How Kurdistan bypassed Baghdad and sold oil on global markets," 17<sup>th</sup> November 2015, accessed August 2<sup>nd</sup> 2016. <http://uk.reuters.com/article/uk-iraq-kurdistan-oil-idUKKCN0T61HL20151117>

<sup>938</sup> Isabel Coles, Three killed in violent unrest in Iraq's Kurdistan. 10<sup>th</sup> October 2015. Accessed August 2<sup>nd</sup> 2016. <http://www.reuters.com/article/us-iraq-kurds-protests-idUSKCN0S40JE20151010>

<sup>939</sup> Keith Johnson, "Striking Pipeline, Kurdish Militants Deal Blow to Fellow Kurds," Foreign Policy, 30<sup>th</sup> July 2016. Accessed 2<sup>nd</sup> August 2016.

<http://foreignpolicy.com/2015/07/30/kurdish-militants-strike-pipeline-deal-blow-to-fellow-kurds/>

<sup>940</sup> L. Casiraghi, "Gulf Keystone Creditors to Take Control Following Oil Slump," *Rigzone*, 14<sup>th</sup> of July 2016, accessed August 2<sup>nd</sup> 2016.

[http://www.rigzone.com/news/oil\\_gas/a/145657/Gulf\\_Keystone\\_Creditors\\_to\\_Take\\_Control\\_Following\\_Oil\\_Slump](http://www.rigzone.com/news/oil_gas/a/145657/Gulf_Keystone_Creditors_to_Take_Control_Following_Oil_Slump)

<sup>941</sup> Robin Mills, "Under the Mountains: Kurdish Oil and Regional Politics" Oxford Institute of Energy Studies Working Paper 63. (Oxford, 2016)

At several fields, the Federal North Oil Company then re-injected oil into reservoirs, rather than allow it to be exported by the Kurds to Ceyhan in Turkey, but exports began again in August 2016 under a deal designed ostensibly to prevent reservoir damage from re-injection and extract gas.<sup>942</sup> Given the emotive nature of the issue of ownership of Kirkuk and its oilfields however, it remains to be seen how long such an arrangement can last, considering the previous four failed revenue and exports deals discussed in the previous chapter. To conclude, the extent to which both the KRI and Baghdad had made themselves heavily dependent on oil revenues to ensure ongoing political support through a bloated public sector, has heightened political tension between Baghdad and Erbil since the oil price collapse, and heightened the risk of renewed conflict. This has greatly increased the need for clearer legislation on revenue sharing and exports, not only between Iraq and its one region (the KRI) but also between Iraq and provinces such as Basra.

The next chapter will examine in detail the implications for these policy oversights in Iraq in relation to the experiences of the four federalised countries studied (which will now be cross examined), to find the weakest parts of Iraq's energy strategy and how a new strategy could synthesize the interests of the private and public sectors, in a way that would be broadly politically acceptable to the Iraqi political class, given the tendency of Iraqi politicians and the public to favour public ownership of resources. Key themes that have now been established are separation of regulator and regulated entities, transparency and coordination among government agencies, in addition to clear legislation that follows the democratically ratified constitution. Essentially, a new strategic framework would follow the Iraqi Constitution of 2005, which calls for a modern private investment environment that also provides maximum benefit to the Iraqi people, similar to the UAE's Article 23.

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<sup>942</sup> Stephen Kalin, Kirkuk oil flow resumed to extract gas, avoid field damage - Iraq *Reuters* August 23<sup>rd</sup> 2016. Accessed August 25<sup>th</sup> 2016. PMhttp://www.reuters.com/article/us-iraq-oil-pipeline-turkey-idUSKCN10Y1UU

## Chapter-7: Restructuring Iraq's Energy Sector Analysis

The case studies outlined in preceding chapters illustrate the importance of clear constitutional guidance regarding the development of natural resources. Even in countries with a high per capita income and ethnic and political homogeneity (Canada, UAE) with decades of relative stability to develop petroleum policy, problems developing national level policy have been unavoidable. Global market forces and changing geopolitics change petroleum dynamics within countries, creating new debates about revenue disbursement and taxation, as much as the natural decline of old fields or unexpected discoveries can create new political problems. To take two examples from this study, this has been illustrated by the long dispute that led to the Atlantic Accords in Canada, where new offshore discoveries led to multi-decade legal conflict, and in the UAE, wasteful energy subsidies that have increased the Emirates' need to import natural gas from Qatar to cover an extremely high per capita energy consumption.

In these countries, laws have been implemented to cover new challenges such as rights to offshore oil and gas in Canada and the conservation of the environment in the UAE. In the UAE, the environment is not mentioned in relation to oil and gas in the 1973 UAE Federal Constitution, but covered under legislation passed in 1999,<sup>943</sup> while there is no constitutional basis for the Atlantic Accords, since the federal government is supposed to have jurisdiction over offshore discoveries.<sup>944</sup>

In Iraq, the delayed Federal Oil and Gas Law (FOGL) is the most important law to regulate and manage the petroleum sector. The second most important delayed law is the Federal Revenue Sharing/Distribution bill. The delay in the enactment of the FOGL has led to federal and regional contracts being concluded with no strategic framework as mandated by the Constitution in articles (111 – 112). This resulted in conflicts between the federal and regional governments, and unilateral action by the Kurdistan Region of Iraq. As in Iraq, the examples of Russia and Nigeria illustrate the challenges of devising strategy when there is a weak or non-existent legal framework for government interaction with the energy sector, potentially leading to inefficiency and state corruption, as Shkaeva writes, “as soon as oil revenues increase in a state with fuzzy

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<sup>943</sup> Constitution of the United Arab Emirates, 2004.

<sup>944</sup> Andre Plourde, “Oil and gas in the Canadian federation,” Paper presented at the “Canadian-United States Energy Issues after Copenhagen,” May 28th 2010, Northwestern University, Illinois.

institutional arrangements, political actors will have incentives to “capture” oil revenues rather than invest in other sectors.”<sup>945</sup>

Subsequently, the review in preceding chapters of Iraq’s oil and gas and power sector since 2003 points to a number of inbuilt inefficiencies stemming from direct ministerial interference in day to day oil and gas operations and the politicised allocation of fuel to SOEs at prices far below market value, resulting in fuel smuggling and a culture of corruption and waste. Iraq’s federal oil ministry has retained the ability to unilaterally prepare contractual terms it deems best for Iraq, but noted as economically inefficient by a number of observers including Ghandi and Lin Anaz and Muttitt as well as described as suboptimal for IOC investment (for example, see Nakhle.)<sup>946</sup>

Likewise, a lack of politically neutral technocratic oversight of the ministry and its involvement in oilfield operations has led to a growth in bureaucracy, to include slow ministerial approval processes for essential but relatively small operations, which has slowed contractor work at the giant Rumaila and Zubair oilfields, among others. This led to a representative of ENI saying that the ministry’s bureaucracy was “the most complex they had seen in the world,” an issue covered in the Ministry case study.<sup>947</sup> The political use of contracts as bargaining chips with IOCs has delayed major projects (in the case of Exxon’s removal from CSSP) and a lack of transparency regarding contractual negotiations at ministry level, in the case of the Basra Gas Company. This overall lack of consultation regarding major contracts is interpreted by some as a violation of current Iraqi law, still in effect since 1967, and has subsequently eroded political and public trust in IOC investment.<sup>948</sup>

The ability of the Iraqi Ministry of Oil, and the Kurdish Ministry of Natural Resources to negotiate contract terms in secret and finalise the terms of energy projects without reference to parliament suggests an overarching lack of democratic checks and balances on the industry. This is a similar situation to two of the countries reviewed, Russia and Nigeria.

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<sup>945</sup> Shkaeva, Natlalia, “The resource curse magnitude in federal states,” (Diss: Central European University, Budapest, 2014.)

<sup>946</sup> Carole Nakhle “Iraq’s Oil future: Finding the right framework.” Surrey Energy Economics Centre (University of Surrey, 2008)

<sup>947</sup> Guy Chazan, “Baghdad bureaucracy stymies BP’s ambitions” *The Financial Times* February 23<sup>rd</sup> 2014. Accessed July 16<sup>th</sup> 2016. <https://next.ft.com/content/f1b5ce40-9af1-11e3-946b-00144feab7de>

<sup>948</sup> Nicholas Skibiak “Political and legal obstacles in Iraq” *Middle East Institute* April 26<sup>th</sup> 2010. Accessed July 16<sup>th</sup> 2016. <http://www.mei.edu/content/political-and-legal-obstacles-iraq>

## 7.1 Cross Examining International Examples

Both Nigeria and Russia, in the absence of a comprehensive regulatory framework, have suffered high levels of economic inefficiency in energy operations. As outlined in Chapter 4, Russia has lost tens, possibly hundreds of billions through mismanagement at Gazprom, and now faces possible output decline through lack of IOCs investment, while Nigeria has seen IOCs deterred by regulatory uncertainty or forced to undertake illegal and non-transparent business activities.<sup>949</sup>

In contrast, Canada has a clearly delineated regulatory regime, although it has still faced challenges, with the National Energy Board providing regulatory oversight of energy transport infrastructure at the national level across provincial boundaries and local regulators overseeing IOCs activity within provinces.

Constitutionally, the high degree of provincial control and private sector control over hydrocarbon resources in Canada has been a mitigating factor in disputes between the central government and the provinces. For example, a 2013 a poll found 87% of Canadians viewed the oil industry as “economically important” to Canada<sup>950</sup> while a 2015 poll of Albertans found the majority to be more concerned with expanding the oil industry than fighting climate change.<sup>951</sup>

This contrasts with unfavourable views of a centrally controlled oil industry in Basra, where a 2010 poll found that 71% of residents felt Iraq was going “in the wrong direction” suggesting dissatisfaction with the main income stream for the province.<sup>952</sup> By contrast, the KRG, with a high level of control over how oil revenues were spent and a degree of autonomy over oil operations, had a generally favourable view of the region's economic and political progress, according to a late 2010 poll.<sup>953</sup> While it may be problematic to make direct comparisons between different polls in Alberta, Basra

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<sup>949</sup> Elisha Bala Gbogo, “Nigeria Oil contracts review adds to industry uncertainty,” *Bloomberg* October 8th 2015. Accessed July 16th 2016. <http://www.bloomberg.com/news/articles/2015-10-08/nigeria-offshore-contracts-review-adds-to-industry-uncertainty>

<sup>950</sup> Alberta Energy website. [http://www.aer.ca/documents/about-us/AER\\_Brochure.pdf](http://www.aer.ca/documents/about-us/AER_Brochure.pdf)

<sup>951</sup> Sean Mccarthy, “Albertans want expansion of oil industry, poll shows.” *The Globe and Mail* May 18<sup>th</sup> 2015. Accessed July 16<sup>th</sup> 2016. <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/albertans-want-expansion-of-oil-industry-poll-shows/article24478580/>

<sup>952</sup> Joel Wing, June 2010 Poll Finds Iraqis Have Mixed Views About Their Country *Musings on Iraq* October 6<sup>th</sup> 2010. Accessed July 16<sup>th</sup> 2016. <http://musingsoniraq.blogspot.co.uk/2010/10/june-2010-poll-finds-iraqis-have-mixed.html>

<sup>953</sup> International Republican Institute, “Survey of Iraqi Kurdistan Public Opinion,” December 8<sup>th</sup> -15<sup>th</sup> 2010.

and the KRG, it is interesting that the overall satisfaction of these oil dependent provinces is significantly higher where there is a strongly federal arrangement.

In Alberta, regulators have been merged, with the Energy Resources Conservation Board merging with Alberta Environment and Sustainable Resource Development to form the Alberta Energy Regulator (AER.) AER oversees activity at 60,000 oil and gas facilities in Alberta and operates with relative independence from the provincial government.

AER centralises a number of government functions, coordinating with IOCs as the sole regulating body (and therefore reducing “red tape”) and coordinating with the Alberta government’s environmental ministry, ESRD. As an example, the ministry passed the Natural Resources Conservation Board Act, which reviews projects that may affect water resources in the province, therefore AER coordinate with ESRD on environmental assessments of energy projects.<sup>954</sup>

This arrangement, if replicated in Iraq, would potentially clarify confusion as to which agency, the Ministry of Oil or Environment, would take a lead role in formulating best environmental policy and coordinating with IOCs in the event of an oil spill, confusion which persisted in late 2011 in Basra following a pipeline leak.<sup>955</sup> Similar lack of clarity and regulatory overlap exists in Nigeria, as identified by Adekunle.<sup>956</sup>

New legislation could clarify the exact standards IOCs and operators are supposed to uphold. Currently, Article 41.1 of the 2009 TSCs calls for IOCs to apply the “best international petroleum industry practices” but it would perhaps be beneficial to outline exactly what standards these<sup>957</sup> should be, if only to clarify this to Iraqi policymakers. For example, the World Bank’s Equator Principles are generally regarded as describing a high standard of environmental protection in the extractive industry.<sup>958</sup>

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<sup>954</sup> Province of Alberta “NATURAL RESOURCES CONSERVATION BOARD ACT” Revised Statutes of Alberta 2000 Chapter N-3 December 17<sup>th</sup> 2014.

<sup>955</sup> Iraq Energy Research.

<sup>956</sup> AMID D. ADEKUNLE “The Effect of Multiple Regulatory Regimes on the Nigerian Petroleum Industry,” *International In-house Counsel Journal* Vol. 1, No. 2, January 2008

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<http://www.mondaq.com/canada/x/323474/Environmental+Law/Equator+Principles+Banks+The+New+Global+Regulators>

<sup>958</sup> Michael Torrance, “Canada: Equator Principles Banks: The New Global Regulators,” *Norton Rose Fulbright Canada LLP Mondaq* June 15<sup>th</sup> 2014. Accessed July 16<sup>th</sup> 2016.

This is of critical importance to Iraq, already suffering a high level of pollution and water stress.<sup>959</sup> In Canada, there have been concerns about the Athabasca River, since IOCs take 539 million cubic metres for tar sands extraction, leading one study to note the river faces “acute ecosystem stress.”<sup>960</sup> One poll in 2006 suggested 55% of Albertan residents favoured government imposed regulations on how much water was taken from the river.<sup>961</sup> In highly populated southern Iraq, the absence of a water injection project for the five giant southern fields (CSSP) led IOCs to ask the government of Iraq to extract 100,000bpd of “very high quality” water from the Garraf river for injection, although this water is irrigation run off rather than freshwater.<sup>962</sup>

With conflicting roles and increasing water shortage, it is likely that the Ministry of Environment, Ministry of Water Resources and Ministry of Oil in Iraq will come into more conflict in future. Centralising regulators into one body could help this. Currently, the 2009 TSC imposes a maximum fine in the region of \$20,000 for environmental damage in the event of an accident, an extremely small fraction of the \$18.7 billion fine levied at BP following the Gulf of Mexico oil spill.<sup>963</sup>

Iraq is not alone in this absence of strong regulatory framework, and from the case studies covered in Chapter 4, it is arguable that Russia and Nigeria have been affected more severely by political interference in the energy sector, a problem that may have been mitigated by legislation clearly limiting direct political control of energy matters.

For example, Vladimir Milos, former Russian Deputy Energy Minister, has argued that Russia has pursued a policy of “active and arbitrary use of regulatory powers (taxation, environmental protection) in order to create market advantages to state-affiliated

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<http://www.mondaq.com/canada/x/323474/Environmental+Law/Equator+Principles+Banks+The+New+Global+Regulators>

<sup>959</sup> Norman Ricklefs, Mukdad al Jabbari, Robert Tollast, “Rivers of Babylon: Iraq’s Water Crisis and what Turkey should do.” August 23<sup>rd</sup> 2015. Accessed July 16<sup>th</sup> 2016.

<https://www.foreignaffairs.com/articles/iraq/2015-08-23/rivers-babylon>

<sup>960</sup> Platts, “Cashing in on Tar Sands: RBS, UK banks and Canada’s “blood oil.” December 31<sup>st</sup> 2009.

<sup>961</sup> Pembina Institute, “Albertans’ Perceptions of Oil Sands Development Poll Part 2: Environmental Issues,” April 7<sup>th</sup> -13<sup>th</sup> 2006, accessed July 16<sup>th</sup> 2016.

[https://www.pembina.org/reports/OS\\_Survey\\_Enviro.pdf](https://www.pembina.org/reports/OS_Survey_Enviro.pdf)

<sup>962</sup> Platts, “Oil companies seek independent water facilities in Iraq to boost output.” 3<sup>rd</sup> of November 2014. Accessed July 16<sup>th</sup> 2016. <http://www.platts.com/latest-news/oil/amman/oil-companies-seek-independent-water-facilities-27788170>

<sup>963</sup> Daniel Gilbert, Sarah Kent. July 2<sup>nd</sup> 2015. BP Agrees to Pay \$18.7 Billion to Settle Deepwater Horizon Oil Spill Claims. Accessed July 16<sup>th</sup> 2016. <http://www.wsj.com/articles/bp-agrees-to-pay-18-7-billion-to-settle-deepwater-horizon-oil-spill-claims-1435842739>

companies” and is guilty of a “failure to separate regulatory functions and economic interests of the Government.”<sup>964</sup> Krysiak supports this view, noting how the Russian government could not challenge “intractable” PSAs and was forced to

“employ a variety of regulatory tactics against Kharyaga, Sakhalin-1 and Sakhalin-2 to extract concessions from the operators and increase the government’s control over the projects. The nature of the Russian regulatory environment is such that the investor and the state are locked in a fundamentally confrontational relationship.”<sup>965</sup>

NOCs have also been used as a political tool. Victor describes Gazprom’s use by the government to support wasteful subsidies, noting this policy “reflects Gazprom’s insular history as a Soviet ministry and the fact that political control over the firm is rooted in the Kremlin rather than in production of gas (and now oil).”<sup>966</sup>

Monaghan also notes that Russia has seen such strong political control over the Ministry of Energy that no clear strategy has ever been developed to maximise the economic returns of the sector. Describing differences between ministries over levels of production, environmental issues or withdrawals from the stability fund, Monaghan outlines what he calls “incoherence” and, “a lack of over-all strategic planning for the development of the Russian energy sector in terms of who will achieve what aims, with what resources and in what timeframe.”<sup>967</sup>

The consequences of this policy incoherence have been extremely damaging for the sector and emphasise the importance of limiting Energy/ Oil Ministries to policy proposals, regulatory oversight and international treaty negotiation (eg. OPEC quotas, Kyoto targets) and keeping NOCs limited to commercial operations.

Milos and Kuchins argue that the absence of effective, politically neutral oversight is so damaging that,

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<sup>964</sup> Vladimir Milov, “The role of Russia in the European energy security,” Institute of Energy Policy, Russia. Hearings at the Foreign Affairs Committee of the European Parliament Brussels, February 28th, 2007

<sup>965</sup> Timothy Fenton Krysiak “Agreements from Another Era Production Sharing Agreements in Putin’s Russia 2000-2007” Oxford Institute for Energy Studies Working paper 34. (Oxford, 2007.)

<sup>966</sup> Nadejda Makarova Victor, “Gazprom: Gas Giant Under Strain.” Working Paper 71. (Stanford, 2007.)

<sup>967</sup> Andrew Monaghan, “Russia’s Energy Diplomacy: A Political Idea Lacking a Strategy?” *Southeast European and Black Sea Studies* 7, 2 (New York: Routledge, 2007), 275–288

“Most of the important corruption is not between business and regulators, but between the state and state-owned or parastatal enterprises. Management has neither efficiency nor development on its priority list.”<sup>968</sup>

Milos’ assertions are supported by Coburn and Danchenko, who argue Russian energy policy is “short termist” and “fragmented.”<sup>969</sup> Heinrich argues that strong Russian state intervention in the sector, in particular the habit of the Putin government to appoint “cronies” as heads of major state owned energy corporations and put high level government officials on the boards of state energy firms has led to serious problems with corruption.<sup>970</sup> A number of reports quote an estimate by the Peterson Institute for International Economics that suggests while Gazprom announced profits of \$46 billion in 2011, as much as \$40 billion had been lost due to “corruption and inefficiency.”<sup>971</sup> Nemtsov and Milov suggest this figure may be as high as \$80 billion during Putin’s second term. Such a high level of inefficiency is regarded by many observers to be the result of political cronyism. Rickards notes how the appointment of Alexei Miller may have been purely political, since Miller had less than 3 years’ experience in the energy sector when he was appointed to a cabinet position as Deputy Minister, and later CEO of Gazprom.<sup>972</sup> Khvostonova argues that this inexperience manifested itself in a failure to spot new energy trends.

As an example, Khvostonova notes how in 2011, Miller famously said that “shale gas is a well-planned propaganda campaign, similar to those for global warming or biofuels” despite 138 bcm being produced in Europe at the time.<sup>973</sup> The positioning of a political loyalist to a powerful role in the energy sector, despite having little or no experience in energy echoes the appointment of Hussein al-Shahristani by Nouri al-Maliki to various roles including Minister of Oil and Deputy Prime Minister for Energy Affairs. Summarising Gazprom’s many failings, Khvostonova quotes Russian energy analyst Aleksashenko, who notes,

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<sup>968</sup> Vladimir Milov, Andrew Kuchins, How Sustainable is Russia's Future as an Energy Superpower? *Carnegie India* March 16<sup>th</sup> 2006. Accessed July 16<sup>th</sup> 2016. <http://carnegieindia.org/2006/03/16/how-sustainable-is-russia-s-future-as-energy-superpower>

<sup>969</sup> Coburn, L. & Danchenko, I. (2006) 'Russia's Energy Policy, 1992—2005', *Eurasian Geography and Economics*, 47, 3,

<sup>970</sup> Andreas Heinrich, Under the Kremlin's Thumb: Does Increased State Control in the Russian Gas Sector Endanger European Energy Security? *Europe-Asia Studies* Vol. 60, No. 9 (London: Taylor and Francis, 2008), 1539-1574

<sup>971</sup> Benjamin K. Sovacool, Michael H. Dworkin, “*Global Energy Justice*” (Cambridge: Cambridge University Press, 2014.),171

<sup>972</sup> James Rickards “*Currency Wars: The Making of the Next Global Crisis*” (New York: Penguin, 2011)

<sup>973</sup> Olga Khvostonova, “How Gazprom Snoozed through the “Shale Gas Revolution” Institute of Modern Russia 5<sup>th</sup> of February 2013. Accessed July 16<sup>th</sup> 2016. <http://imrussia.org/en/economy/382-how-gazprom-snoozed-through-the-shale-gas-revolution>

“No company performed as badly as Gazprom. No one managed to lose more than one half of its value (53 percent). Not even BP, which had to deal with the largest catastrophe in the Mexican Gulf that cost the company more than \$20 billion in fines only. Not even Surgutneftegaz, whose ownership structure remains a mystery to many analysts and whose quality of corporate management is the lowest of the low. Not even ENI and Total, which are controlled by their countries’ governments. Every company has a much better stocks dynamic than that of our ‘national treasure.’<sup>974</sup>

Aside from Gazprom’s failings as what Bos calls a “nationalised political weapon,” other companies of Russia’s energy sector have also suffered from strong state intervention.<sup>975</sup> According to a leaked US State Department cable, Deputy Prime Minister Igor Sechin, who then virtually ran the energy sector, ordered Slavneft to cancel an order of foreign equipment, which was described by a member of Slavneft’s board as “clearly superior” to the Russian equipment on offer. In the same document, the board member describes “inbuilt inefficiencies and government influence” slowing down the sector. He goes on to note, these inefficiencies are

“so huge that it would take a very long time to modernize the Russian oil and gas sector. For example, a well that would take 10 days to drill in Canada would take 20 days to drill in Russia. He said moving a drilling rig from one site to another, a process that might take 7 or 8 hours in Canada, takes 28 days in Russia.”<sup>976</sup>

The board member then notes, “multiply that by hundreds or thousands and you can start to imagine the costs to the economy.”<sup>977</sup>

This echoes the situation in Nigeria (and Iraq, as mentioned) where government entities are perceived as being behind international standards regarding bureaucracy. According to interviews conducted by Thurber, Emelife and Heller an official from an IOC in Nigeria claimed contracts for relatively small operations were often approved in 12-18 months, compared to a 3-4 month average in the rest of the world, while low approval

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<sup>974</sup> Ibid.

<sup>975</sup> Macey Bos. “Gazprom: A nationalised political weapon.” (Diss, Georgetown University, 2012.)

<sup>976</sup> US State Department cable, “TNK-BP HAS BRIGHT FUTURE,” 14<sup>th</sup> September 2009. Accessed July 16<sup>th</sup> 2016. Available at Wikileaks. <http://www.scoop.co.nz/stories/WL0909/S00135/cablegate-embassy-moscow.htm>

<sup>977</sup> Ibid.

thresholds for over 85% of contracts led to a slow sign-off process, a similar complaint made by ENI in Iraq.<sup>978</sup>

As noted in Chapter 4, Nigeria has had a more damaging experience than Russia with direct political control of the energy sector and a Ministry of Oil that directly controls the NOC. Unlike Russia however, Nigeria has made modest progress developing a new law, the Petroleum Industries Bill (PIB) which has been held up by political disagreements.

According to the NNPC, decoupling of the regulator and the regulated within the state owned energy apparatus is vital, with the company noting, “at the heart of the PIB is the separation between policy, regulation and monitoring and commercial operations.”<sup>979</sup> This would be achieved with the creation of a regulator by the name of the “Asset Management Company” which would oversee transfer of revenues from NNPC to the government (a highly contentious issue due to missing funds) and also oversee government funds going to JVs managed by NNPC, which would be “partly privatized” to increase efficiency and accountability.<sup>980</sup>

This is clearly needed, as noted in Chapter 4. Revenue Watch International ranked NNPC the world’s least transparent extractive organization in 2011, and a series of allegations against the company in 2012 claimed that \$6.8 billion of fuel imports had been fabricated, and that as much as \$20 billion had not been passed from the company to the Ministry of Finance.<sup>981</sup> Government interests have in turn been accused of “tapping” revenues before they are sent to the state, with an independent audit in 2012 noting how NNPC funds were used for a presidential helicopter worth \$14 million, had lent \$106 million to the state electricity company and \$124 million to a coastal security

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<sup>978</sup> MARK C. THURBER, IFEYINWA M. EMELIFE, AND PATRICK R.P. HELLER, “NNPC AND NIGERIA’S OIL PATRONAGE ECOSYSTEM.” PROGRAM ON ENERGY AND SUSTAINABLE DEVELOPMENT Working Paper 95. (Stanford, 2010.)

<sup>979</sup> Statement on NNPC website. Accessed July 16<sup>th</sup> 2016. <http://www.nnpcgroup.com/PublicRelations/NNPCinthenews/tabid/92/articleType/ArticleView/articleId/458/Nigerias-Oil-Gas-Strategy-in-the-Next-Five-Years.aspx>

<sup>980</sup> Drew Hinshaw. Nigeria’s Oil Revenue Faces an Accounting *The Wall Street Journal* April 11<sup>th</sup> 2014 Accessed July 16<sup>th</sup> 2016.

<http://www.wsj.com/articles/SB10001424052702304026304579449260323592916>

<sup>981</sup> Aaron Sayne, Alexandra Gillies and Christina Katsouris, “Inside NNPC Oil Sales: A Case for Reform in Nigeria.” Natural Resource Governance Institute. August 2015. Accessed July 16<sup>th</sup> 2016. [http://www.resourcegovernance.org/sites/default/files/documents/nrgi\\_insidennpcoilsales\\_execsumm.pdf](http://www.resourcegovernance.org/sites/default/files/documents/nrgi_insidennpcoilsales_execsumm.pdf)

force, which were described as “informal” loans, leading one analyst to suggest NNPC had become in part a “slush fund” for government.<sup>982</sup>

Similarly, Aslund also describes Gazprom as a “slush fund” for the Russian government,<sup>983</sup> and Transparency International ranked Gazprom as the 7th least transparent organization in the world.<sup>984</sup> Likewise, NNPCs potential benefit to the Nigerian state has been significantly reduced, as Thurber, Emelife and Heller note,

“NNPC functions well as an instrument of patronage. Each additional transaction generated by its profuse bureaucracy provides an opportunity for well-connected individuals to profit by being the gatekeepers whose approval must be secured, especially in contracting processes. NNPC’s role as distributor of licenses for export of crude oil and import of refined products also helps make it a locus for patronage activities. Indeed, the implicit government goal for the oil sector appears to be the maximization of patronage opportunities.”<sup>985</sup>

Therefore, Nigeria and Russia serve as examples of weak regulatory systems that allow a high level of political control and interference in NOC activity. As noted, Nigeria already has an understanding of the need for a strong regulatory framework that would lessen political control of the NOC, which would be partly privatised if the PIB is passed.

Russia is also aware of the problems of having weak regulations over the sector, and its Energy Strategy 2030 calls for

“setting up a base for stable and progressive development of the energy sector, including establishing a coherent and approved legal and regulatory framework,” while also envisioning how “direct state participation in the energy sector will gradually dwindle and be replaced by various forms of state private partnership particularly in construction and modernization of energy infrastructure and development of innovations.”<sup>986</sup>

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<sup>982</sup> Joe Brock, Nigeria state oil firm gives government informal loans: audit *Reuters* July 16<sup>th</sup> 2012. Accessed July 16<sup>th</sup> 2016. <http://uk.reuters.com/article/us-nigeria-nnpc-debts-idUSBRE86F0DF20120716>

<sup>983</sup> Anders Aslund, “Gazprom: Challenged giant I need of reform.” In *Russia after the global economic crisis*, (Massachusetts: Peterson Institute for International Economics, 2010.), 152

<sup>984</sup> Paul Gregory, “Confused survey says two Russian energy giants top Google and Apple in corporate transparency.” *Forbes*, November 23<sup>rd</sup> 2014. Accessed July 16<sup>th</sup> 2016. <http://www.forbes.com/sites/paulroderickgregory/2014/11/24/confused-survey-says-two-russian-energy-giants-top-google-and-apple-in-corporate-transparency/#201278f72247>

<sup>985</sup> MARK C. THURBER, IFEYINWA M. EMELIFE, AND PATRICK R.P. HELLER, “NNPC AND NIGERIA’S OIL PATRONAGE ECOSYSTEM.” PROGRAM ON ENERGY AND SUSTAINABLE DEVELOPMENT Working Paper 95. (Stanford, 2010.)

<sup>986</sup> Ministry of Energy of the Russian Federation, “Energy Strategy of Russia for the period up to 2030.”

Likewise, Iraq is also coming to an understanding of the problems associated with having MoO regulate and involve itself in Iraqi National Oil Company operations, but a debate on the re-organizing the energy sector needs to be re-vitalised after it fell from national priorities after the June 2014 ISIS offensive. As of 2016, ISIS are retreating in many parts of Iraq and the government are re-focusing on economic challenges. A number of think tanks and consultancies including Raymond James, Pipher Jaffray and NAMEA, predict the oil price may continue to rise through 2017 above and beyond \$70 or higher, therefore it is imperative that Iraq acts to re-organize its energy sector.<sup>987</sup> This would involve the reconstituting INOC, the limiting of the role of MoO to one of regulator with no involvement in commercial operations of INOC or its subsidiaries, the abolishing of price controls on fuel (subsidies) which have caused market distortions in Nigeria, (with artificially low oil and gas prices) Russia (with low gas prices) and have slowed the development of the refining sector in Iraq, amid many other problems. Nakhle describes the importance of re-organizing the sector:

“Policy makers will need to develop appropriate institutions with clearly defined relationships which separate for example, the aspirations of the NOC, regulation of the Industry and fiscal administration. In other words, there should be a comprehensible separation of power and clearly defined roles between the NOC, the regulator (Ministry of Petroleum) and the tax collector (Ministry of Finance).”<sup>988</sup>

The creation of an energy ministry to merge similar portfolios could also help efficiency in the energy value chain between entities at the Ministry of Oil, Ministry of Electricity and Ministry of Industry and Minerals, which are currently often in conflict.

Merging ministries related to power and energy is a common phenomenon in countries attempting to increase government efficiency. In May 2016, Saudi Arabia announced the merger of the Ministry of Electricity with the Ministry of Oil, with one Saudi official noting, ““In order for the restructuring to succeed, accountability and responsibility has to be concentrated in the same office. This is the reason for assigning all those sectors in one ministry.”<sup>989</sup>

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<sup>987</sup> Rakesh Upadhyay “Is Raymond James’ \$80 Oil Realistic?” *Oilprice* June 30<sup>th</sup> 2016. Accessed July 16<sup>th</sup> 2016. <http://oilprice.com/Energy/Energy-General/Is-Raymond-James-80-oil-realistic.html>

<sup>988</sup> Carole Nakhle “Iraq’s Oil future: Finding the right framework.” Surrey Energy Economics Centre (University of Surrey, 2008)

<sup>989</sup> Angus Mcdowell, “Saudi shake-up rolls on with big reshuffle of economic posts,” *Reuters* Sunday, May 8<sup>th</sup> 2016. Accessed July 16<sup>th</sup> 2016. <http://www.reuters.com/article/us-saudi-reshuffle-idUSKCN0XY0DX>

Other nations have been quicker to re-organize government in this way, with the UAE's Sheikh Zayed bin Sultan Al-Nahyan merging the Ministry of Oil with the Ministry of Electricity and Water before his death in 2004.<sup>990</sup> Nonetheless, in this case the Supreme Petroleum Council retained greater authority than the newly created energy ministry over the oil and gas sector. The 2004 mergers also came at a time when the UAE was planning greater private sector involvement in the water and electricity sectors and the replacement of underperforming ministers with technocrats.<sup>991</sup>

According to Butt by the end of the 1990s the UAE already had a significantly integrated energy and water sector and was seen as a leader regionally in utilising gas, with ADNOC CEO Yusif Omair bin Yusif noting in 1999 how,

“Abu Dhabi's main future gas policy is to develop gas resources to meet growing domestic demand, giving priority to generating water and electricity, supply of gas to new industries, petrochemical projects and any re-injection needs.”<sup>992</sup>

Butt details Abu Dhabi's use of general utility plants, for example a 500 MW of electricity plant and water treatment plant are co-located with the Ruwais oil refinery, with the water plant producing 8 mn gallons. ADNOC awarded the contract for this work, worth \$600 million, to international firm ABB Group. Butt goes on to describe how the UAE were early leaders in the field of utilizing gas, with the Abu Dhabi Gas Liquefaction Company launched in 1977. By the turn of the century, ADNOC was working in Abu Dhabi on ethane and ethylene plants with Borealis (a consortium of Statoil and OMV in a majority ADNOC owned JV). Meanwhile, Ruwais Fertilizers Industries Ltd had been producing fertilizer since 1984, an ADNOC majority owned consortium with TotalFina Elf.<sup>993</sup> With such a highly integrated energy sector even before the ministry merger, one would expect a globally leading energy sector in terms of efficiency. This is not the case according to Jasmi, Al Abd, Saif et al who identify a number of problems within the sector related to subsidies, which were still being phased out as of 2016.

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<sup>990</sup> William Mcsheely, “Female economy minister represents first for UAE.” *The Financial Times*. Accessed July 16<sup>th</sup> 2016.

<sup>991</sup> US State Department Cable, “CABINET RESHUFFLE ENHANCES STABILITY AHEAD OF LEADERSHIP TRANSITION,” November 2<sup>nd</sup> 2004. Accessed July 16<sup>th</sup> 2016. Available at Wikileaks. [https://wikileaks.org/plusd/cables/04ABUDHABI3955\\_a.html](https://wikileaks.org/plusd/cables/04ABUDHABI3955_a.html)

<sup>992</sup> Gerald Butt, “Oil and Gas in the UAE,” from “United Arab Emirates: A new perspective,” Eds. Ibrahim al Abed, Peter Hellyer, (New York: Trident, 2001): 231-248

<sup>993</sup> Ibid.

Noting that subsidies have led to wasteful practices with energy, and the highest per capita energy use in the world, and considering the UAE's dependence on gas for over 90% of power generation, the authors point to mounting problems, including a widening supply deficit due to gas imports from Qatar. Outlining factors for this, they note,

“The NG supply-demand deficit is attributed to a number of factors such as: (a) 26% of local production has to be re-injected for enhanced oil recovery, (b) long-term export contracts and (c) local NG consist of high level of sulfur which makes it less economically feasible when compared to imports.”<sup>994</sup>

The authors also note that, combined with high energy usage and a rapidly rising population, this could pose a challenge to the UAE, although at the time of writing the Emirates had managed to reduce subsidies. The authors note however, that despite the high level of integration in the sector, value chain interventions could still find more efficiencies. Taking two examples, they study 58 oil rigs that occasionally still flare gas and do not receive electricity from the national grid, noting that this gas could be utilised for electricity generation and save costs on generator fuel for operators, and that natural gas fired plants, which consume 50% of the UAE's natural gas, could use Advanced Gas Path technology for efficiency. Such strategies inevitably benefit from merged ministries and co-located gas and electricity officials, therefore it is likely a similar arrangement could yield benefits for Iraq, which has many gas fired power stations.<sup>995</sup>

## 7.2 Cross Examining with INES

It is worth noting here that the Integrated National Energy Strategy (INES) for Iraq written in 2013 in coordination with the World Bank recognises that every part of the energy sector “depends for its own advancement on advances in the others” and calls for “continual coordination among Ministries.” While INES does not suggest merging ministries, instead suggesting a nonspecific “reorganizing” of the sector, it recognized

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<sup>994</sup> MAJID AL JASMI, YOUSIF AL ABD, OMAR SAIF, AHMED KIANI, STEVE GRIFFITHS AND SAMEH EL KHATIB, “Economic Evaluation of Efficiency Enhancement Interventions in UAE Energy Value Chain” in *Recent Advances on Environmental and Life Science* (Masdar Institute of Science and Technology, 2014) 180-188

<sup>995</sup> *Ibid.*

the value of linked industries and linked energy sectors. This understanding could be the basis for merging Iraq's energy, power and industry ministries. INES notes,

“Six industries in Iraq fall into the category of linked industries: petrochemicals, fertilizers, steel, aluminum, cement, and bricks. Each of these industries consumes large quantities of energy in the form of power or heating fuel for its production processes, and two of these industries (petrochemicals and fertilizers) require large quantities of natural gas components as feedstock for their products. Each of these industries provides a foundation for multiple secondary industries.”<sup>996</sup>

But as outlined a number of times in this thesis, one of the downfalls of this strategy was an ambitious production target, in the case of INES 9 million bpd by 2020, which would, as noted, most likely cause a price collapse and undermine investment. This target, announced in tandem with the announcement of INES, is immediately contradicted in the document itself, which notes that long term production targets should consider “world market dynamics.”<sup>997</sup>

This failure to observe what experts such as Gunter and Chalabi have noted as likely price collapse also impacts other elements of INES, which would bring the problem back to conflict between the Ministries of Oil and Electricity over fuel allocations. Like many GOI predictions, INES optimistically foresees the elimination of flaring through a gas master plan that is perfectly executed; in other words, according to INES, flaring is eliminated by 2016, and gas for power stations will be ample. If gas isn't always available, INES notes that new power stations--a total of 40 to be built, can also run on fuel oil.<sup>998</sup> Nowhere does INES consider that flaring reduction targets might be missed, and the old arguments over fuel for power stations, its volume and quality, could re-start, causing more government paralysis and arguments over who is responsible for blackouts. In fact, these arguments have become more heated as Iraq strives to export as much oil as possible to make up for collapsed oil revenues.

Equally problematic is the call in INES for \$620 billion investment in energy to 2030, only 15% of which is to come from the private sector “primarily in refineries and linked industries.” The problem with this projection is that it includes very little reference to

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<sup>996</sup> Integrated National Energy Strategy of Iraq, 2010-2030. Accessed July 16<sup>th</sup> 2016. [http://www.iier.org/i/uploadedfiles/publication/real/1371283063\\_150613SummaryoftheFinalReport\(IntegratedNationalEnergyStrategy\(INES\)forIraq\).pdf](http://www.iier.org/i/uploadedfiles/publication/real/1371283063_150613SummaryoftheFinalReport(IntegratedNationalEnergyStrategy(INES)forIraq).pdf)

<sup>997</sup> Ibid.

<sup>998</sup> Ibid.

subsidies, which have been an ongoing constraint in attracting foreign investors to the refinery sector. INES notes, “indirect subsidization of energy pricing through non-economic pricing should be gradually phased out.” But unless this is a priority, other goals of INES will be undermined.

As an example, INES calls for the construction of new, large scale rather than smaller refineries, or the upgrading of older refineries. This of course required attractive investment terms, but making model contracts attractive enough has been an ongoing problem, as evidenced by the repeatedly delayed bidding rounds for the 300,000 bpd Nasiriyah refinery.

This is a pressing problem because Iraq needs to expand its refining capacity, which has fallen from 750 kb/d to 450 kbd/d since the destruction of the Baiji refinery, to over 1400 kb/d (according to INES) as the population expands. The IEA noted in 2012 that,

“In order to provide the margins that could justify these projects, potential investors have indicated that they favour larger complexes than those proposed by the government and freedom to export petroleum products (given that oil product prices on the domestic market remain subsidised).”<sup>999</sup>

Speaking to Iraq Energy Institute in 2016, former Iraqi Oil Minister Thamir al-Ghadban noted how INES was never implemented, and remarked that MoO has gone on to develop older refineries and smaller refineries, in defiance of INES’ recommendations. Summarising many of the planning problems related to the bureaucracy of MoO, Ghadban notes,

“I believe we have very serious problem in the refining industry, the country will continue to depend on fuel imports for many years to come. The only concrete project in sight is the Karbala 140 kb/d refinery. Various upgrade projects in Dora and Basrah refineries are ongoing but at a slow pace because they are capital intensive. The industry itself is heavily subsidized, crude oil feed is supplied at upstream production cost and the sector is overcrowded with employees to provide jobs for Iraqis. Not to forget the old technology of all the present refineries. A dramatic policy revision is needed; to start with, such revision has been laid down in INES but there was no will and determination to implement.”<sup>1000</sup>

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<sup>999</sup> International Energy Agency: World Energy Outlook 2012: Iraq.

<sup>1000</sup> Iraq Energy Institute, “Interview with Al Ghadhban.” Published on the IEI Website, winter 2015. Accessed July 16<sup>th</sup> 2016. <http://www.iraqenergy.org/news/?detailof=7668&content=Exclusive-Interview-with-Al-Ghadhban-on-Iraq%27s-Oil-&-Gas-Sector>

Therefore, regarding ministry coordination and merging ministries, it is not unreasonable to assume that lack of political will to implement the plans of INES, which focus heavily on the creation of groups to coordinate ministry cooperation, rather than unifying ministries, is due to the lack of a petroleum policy framework authorised by the Council of Representatives. INES recognises this, noting a requirement for “an oversight framework at the highest levels of government to ensure that the right economic and managerial resources are applied.”<sup>1001</sup>

Based upon the case studies and factors specific to Iraq, key points of a proposed petroleum policy framework for Iraq are outlined in the following and final chapter.

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<sup>1001</sup> Integrated National Energy Strategy of Iraq, 2010-2030. Accessed July 16<sup>th</sup> 2016.  
[http://www.iier.org/i/uploadedfiles/publication/real/1371283063\\_150613SummaryoftheFinalReport\(IntegratedNationalEnergyStrategy\(INES\)forIraq\).pdf](http://www.iier.org/i/uploadedfiles/publication/real/1371283063_150613SummaryoftheFinalReport(IntegratedNationalEnergyStrategy(INES)forIraq).pdf)

## **Chapter-8: Conclusion - Proposed Energy Policy Framework**

### **8.1 Prerequisites for a Petroleum Policy Framework**

From a review of the case studies, three main recommendations can be outlined for the reorganization of the energy sector in Iraq. These are:

1. Separation of Powers between the Ministry of Energy (or Oil) and the NOC, whereby the Ministry of Oil's role is limited to proposing petroleum policies, laws and plans, preparing regulations and issuing instructions for the implementation of petroleum policies. These would then be submitted to the long awaited Federal Oil and Gas Council for approval. Additionally, the Oil Ministry would monitor and supervise petroleum operations in light of relevant legislations, contractual terms and adopted international standards.
2. Merging of Ministries. The Iraqi Ministry of Oil, Ministry of Industries & Minerals and the Ministry of Electricity should be merged into one portfolio: the Ministry of Energy and Natural Resources (MENR). Each entity within MENR would be assigned a Deputy Minister, a part of whose responsibility would be to ensure there is an aligned vision and plan across sectors. Additionally, within the MENR there would be a deputy for Industries and Minerals, whose job it would be to oversee feedstock allocations to fertilizer, petrochemicals and cement plants, among other energy intensive industries where Iraq could gain a competitive advantage through affordable energy. A Deputy Minister for Electricity would help harmonise power needs of IOCs and the national grid, and play a role in overseeing gas allocations to power stations and integrating Iraq's Gas Master Plan and other plans into a single MENR strategy. A Deputy Minister for Upstream would coordinate with a Deputy Minister for Environment, who would coordinate with other deputies to ensure environmental regulations were being upheld, and a Deputy for Downstream oil projects would oversee supply/demand and infrastructure. Currently, there is very little coordination, and each ministry defines different strategic visions, resulting in conflict. For example, in 2006, the US State Department reported internally that the Iraqi Ministry of Oil was developing a "National Energy Strategy" while the Ministry of Electricity was developing a separate "Energy Master Plan" despite

ongoing arguments over diesel and heavy fuel oil allocations, with Shahrastani reportedly “worried” that MOE would demand diesel instead of HFO.<sup>1002</sup> Similarly, in 2012, the Ministry of Electricity announced a 5 year plan to boost power generation, in part by bringing more gas to the national grid.<sup>1003</sup> Five months later, there was a public row between both ministries over fuel allocations to power plants.

3. These recommendations should be codified into an overarching petroleum policy framework, which will be outlined at the end of this chapter.

Iraq must re-focus on an overarching hydrocarbon law that will govern revenue distribution and regional and provincial rights to develop hydrocarbon resources.

Failure to do so will result in more ad hoc arrangements and an increasingly difficult environment for creating a national energy strategy, as different provinces will be granted different arrangements outside of any constitutional authority, as had occurred in Russia and Nigeria. Continuing ad hoc arrangements, such as the short-lived revenue and export deals between Baghdad and the KRI discussed in previous chapters, carry the risk of permanent deadlock over hydrocarbon resources, since provinces such as Basra and Anbar are extremely unlikely to want to remain in a federal arrangement that is “asymmetrical” in other words, regional power is distributed unevenly.

One legal dispute, such as the July 2014 Ministry of Oil of the Republic of Iraq v. Ministry of Natural Resources of Kurdistan Regional Governorate of Iraq et al, settled in a U.S. District Court, in Texas (in favour of Iraq) has been damaging to Baghdad--Erbil relations. This came at a time of heightened tension over disputed areas, that has since become violent, although only briefly.<sup>1004</sup> At the same time, Basra has moved in the direction of negotiating oil contracts unilaterally in 2015 and has a history of oil worker union action, so the possibility of what J. Comaroff calls “lawfare” whereby lawsuits are used to hinder certain government or subnational government efforts,

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<sup>1002</sup> U.S State Department Cable, available at Wikileaks. Accessed July 16<sup>th</sup> 2016. [https://wikileaks.org/plusd/cables/08BAGHDAD3309\\_a.html](https://wikileaks.org/plusd/cables/08BAGHDAD3309_a.html)

<sup>1003</sup> Rami Ruhayem “Iraq struggles to solve electricity crisis.” *BBC News*. 12<sup>th</sup> of April 2013. Accessed July 16<sup>th</sup> 2016. <http://www.bbc.co.uk/news/world-middle-east-22093992>

<sup>1004</sup> [Anna Driver](#) “U.S. to seize \$100 million of Iraqi Kurdish oil in tanker off Texas,” *Reuters* July 29<sup>th</sup> 2015. Accessed July 16<sup>th</sup> 2016. <http://www.reuters.com/article/us-usa-iraq-kurdishoil-idUSKBN0FY0KX20140729>

becomes a reality that could threaten efficient strategies that would benefit all of Iraq.<sup>1005</sup>

## 8.2 The Proposed Framework

The federal regulatory board headed by the relevant cabinet members and producing provincial authorities must be formed and mandated by a federal law. The entity is to be known as the Federal Energy Council (FEC), and it should be supported by an advisory body to coordinate activities. The aim of this is to create a coherent and efficient value chain to maximise output from the electricity sector, petroleum sector, and minerals and linked industries such as cement, fertiliser and petrochemicals, boosting economic diversification where Iraq has a competitive edge due to low energy costs for energy intensive industry. This latter advisory organization shall be the Bureau of Independent Advisers.

The new Ministry of Energy and Natural Resources (MENR) will have a well-defined role whereby it cannot intervene in daily operations of state owned enterprises in any sector and is limited to proposing general petroleum policies, planning and regulations.

Within MENR, there shall be a well-defined decoupling of the regulator and regulated bodies in the energy related cabinet portfolios, with the intention to eliminate conflict of interest. Having all state-owned operators of national oil and gas companies, power generation stations, industrial public companies as accountable entities, separate from their traditional ministries of Oil, Electricity and Industries should limit politicized contracting and over hiring. This decision making power should be ring fenced within the technocratic oversight of the operator. The companies must have their own separate board of directors and an independent budget, while being regulated by their respective ministries. A law would be required to initiate the decoupling process between ministries and national operators. In the event that the government decides to merge ministries, a law would be required for this process.

MENR should have 5 main functional sub-entities led by 5 deputies for the minister: Upstream, Midstream, Downstream, Power and Industries. MENR is to have a unified

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<sup>1005</sup> J. L. Comaroff (2001). "Colonialism, Culture, and the Law: A Foreword,". *Law & Society Inquiry* 26: 306.

service directorate managed by Director Generals reporting to the minister with a dotted line reporting to the 5 sub-entities. The directorates to include experts in law, finance, licensing, research and development and human resources. An Inspector General's office should be positioned under the Federal Energy Council (or the Federal Oil & Gas Council, in case the merger is not implemented) to independently inspect the performance of all relevant portfolios. To avoid conflict of interest, the inspector will not report to the minister.

A law is required to initiate the merger of the three main components (oil, electricity, industry) and this law should also include the terms of the decoupling law mentioned to fast-track the legal formation and bypass institutional bureaucracies. Such a plan will fit well with the economic and institutional reforms called for in the Iraqi Federal Constitution of 2005. It will also strengthen Iraq's financial position in relation to World Bank and IMF requirements for sovereign loans, debt management and mega project financing.

The FEC should include federal and regional regulators of oil and gas producing entities and will not include operator representation. Three independent advisors should sit on its boards (covering legal issues, economic strategy and policy). A further seat should be allocated for an independent inspectorate at the federal level. The FEC members (or the FOGC in case that there is no ministry merger) should include the federal portfolios of energy (or oil, electricity and industries in case that there is no merger), as well as finance, and the Central Bank. Regional members should include representatives of the MNR of the KRG, and provincial representatives of producing provinces with 150kb/d oil equivalent capacity in upstream, downstream and/or power generation. This would incentivize provinces where production is marginal, to aim for the status of producing province, effectively creating the aspiration to strengthen Iraqi federalism.

Policies and plans made by MENR would be submitted to the FEC for approval. MENR would also have a regulatory role, to ensure operations in power and petroleum sectors are supported with relevant legislation, international standards and approved fiscal regimes. The intention would be to ensure that regulations across sectors were harmonized, and one desirable effect would be to have each component of MENR being aware of other activity within the MENR, securing maximum transparency.

MENR would propose to the FEC a comprehensive plan for oil and gas exploration across Iraq in consultation with other competent bodies, and work with the FEC to create model Exploration, Development and Production contracts. MENR would also have a role auditing license holders, in addition to oversight by other competent bodies. Lastly, MENR would negotiate international agreements pertaining to trade and investment, and in the case of OPEC, quotas. In this capacity, it would represent Iraq in international forums.

FEC shall formulate federal plans and policies for the Exploration and Development of Fields and export infrastructure and set standards for negotiations with IOCs and NOCs, including qualification criteria for bidding and contractual design, in such a way as to maximise economic efficiency, or in the terms of the constitution provide “the highest benefit to the Iraqi people.”

Criteria for qualifying companies to bid would be publicly available, as would information on contract winning companies explaining why the bid was won. This would aim to allay controversy in parliament and civil society regarding contracts with IOCs and service companies, as happened in the case of the Basra Gas Company, during the formation of which Shell were accused of acting as a monopoly, and the Maysan oil refinery case, where observers were left uncertain as to whether the winning bidder, Satarem, had experience in refining, since there was no public information on the company.<sup>1006</sup> Amendments to existing contracts would also be studied by the FEC, as well as the exploration of new reserves and future contract design.

### **8.3. The Federal Energy Council**

The FEC’s role will help coordinating the role of all its members to ensure energy sectors support and harmonise toward national level strategies, in respect of national laws and international standards. In oil and gas, the FEC will ensure that power sector, industrial mega projects and petroleum field development plans in contract areas are in line with national targets, again with reference to local demand and global market conditions, forecasts and the avoidance of mismanagement.

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<sup>1006</sup> Ahmed Mousa Jiyad, “Doubt surrounds Satarem Missan refinery deal.” *Iraq Business News* December 17<sup>th</sup> 2013, accessed July 16<sup>th</sup> 2016. <http://www.iraq-businessnews.com/2013/12/17/doubt-surrounds-satarem-missan-refinery-deal/>

A FEC shall be established to comprise the following members:

1. Chairman: The Prime Minister of Federal Iraq,
2. Vice Chairman: Minister of MENR,
3. Minister of Finance and Economic Planning,
4. One representative from each producing region or province,
5. Three Advisors on Technical, Economic and Legal competencies

The three FEC Advisors shall be of Iraqi nationals and to be nominated by the federal parliament and endorsed by the absolute majority of the members of the House.

The FEC shall meet to discuss power, industry and petroleum policies, plans, model contracts once a quarter and will vote on decisions which will require a two-thirds majority to pass. Disagreement about functions of the FEC will also be decided upon by a vote requiring a simple majority.

An early task of the FEC shall be to decide who operates export outlets and manages pipelines across Iraq, which shall have a set timeline for decision. Assisting all of the decisions described here, the Bureau of Independent Advisers (represented by the three endorsed members by Parliament) will provide recommendations on the optimum interventions in the energy value chain. Staffing the advisory bureau will be Iraqi and foreign experts, again chosen by a two-thirds majority of the members of the FEC, to work in that capacity for a fixed period.

#### **8.4 The Implementation and Transition Strategy**

The legislative reform process is key to ensuring a smooth transition from the legacy of centralism to federal implementation. The challenge therefore remains the adoption of the federal draft laws of hydrocarbon, reconstitution of INOC and revenue sharing compiled by the Energy Committee of Iraq's Federal Parliament in August 2011. The three drafts underwent rigorous review and achieved a large degree of consensus among competing parties and political factions in Iraq. However, to table the draft laws for the first reading, a political majority should be required to avoid future attempts to derail

implementation. The passing of the three drafts will pave the ground for a successful FEC and a sustainable framework policy.

Subject to the passing of the pending federal laws and the implementation of the prerequisites stated at the beginning of this chapter, the FEC shall issue bylaws to facilitate the implementation of the provisions of the relevant federal energy laws and assess the scope of exceptions within Iraqi federal law, for special cases.

Regarding petroleum contracts concluded by the competent bodies of the FEC prior to the enactment of the hydrocarbon law, the formation of the FEC shall be reviewed by a joint committee comprising the Minister of MENR, the Minister of the Kurdistan Region and the Chairmen of the Energy Committees of the Federal and Regional Parliaments. The joint committee should be assisted by the FEC Advisors, and the process of review and endorsement should not exceed more than six months from the first meeting.

## **8.5 Further Research**

This research could be used as model to serve post conflict MENA countries affected by the Arab Spring such as Syria, Yemen, Libya and other states that hold natural resources and share similar geopolitical conditions to Iraq. Such countries may require the adoption of a federal setting, decentralisation of power and resource sharing to achieve stability and long term peace.

Many of these nations have either experienced violent regime change, or are classed as fragile states with competing tribal, ethnic or religious groups, distributed across areas with a large disparity in the geographic location of natural resources and access to export corridors. For such nations, there has often been a long history of autocratic governance which has sought to capture resource rents and use them for political purposes, heightening historic grievances; therefore, notions of transparency, revenue sharing and technocratic oversight of economic sectors are new concepts.

Undoubtedly, these transitional states may experiment with different types of federalism and power sharing arrangements. Reactionary nationalist forces and local grievances, as well as deep rooted attachment to socialist models of economic development will likely

prove difficult hurdles for these societies to overcome. Nonetheless, the creation of policy frameworks such as the one proposed in this thesis can provide a starting block for the aim of non-violent transition in these conflict prone societies.

## List of Illustrations:

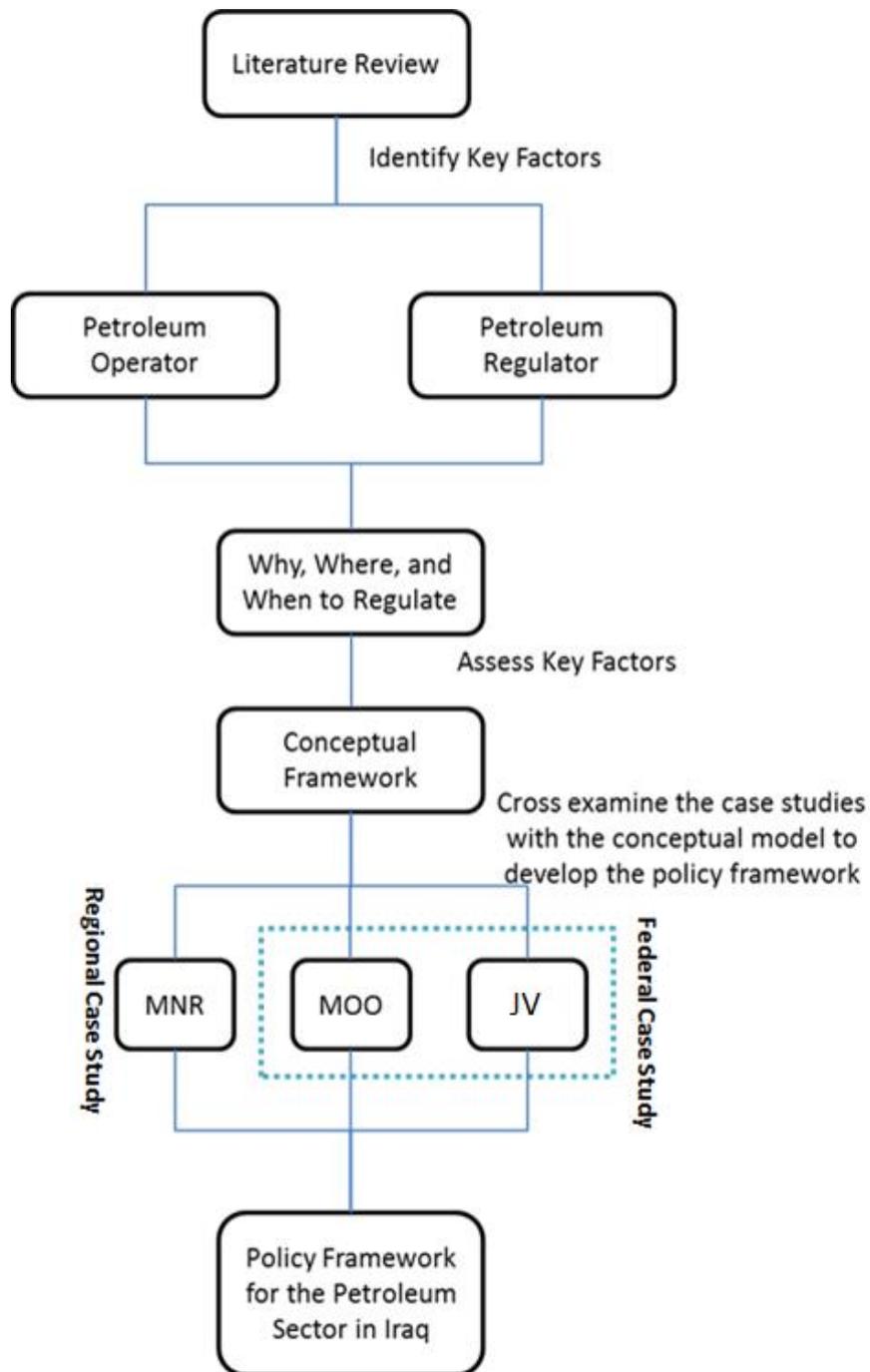
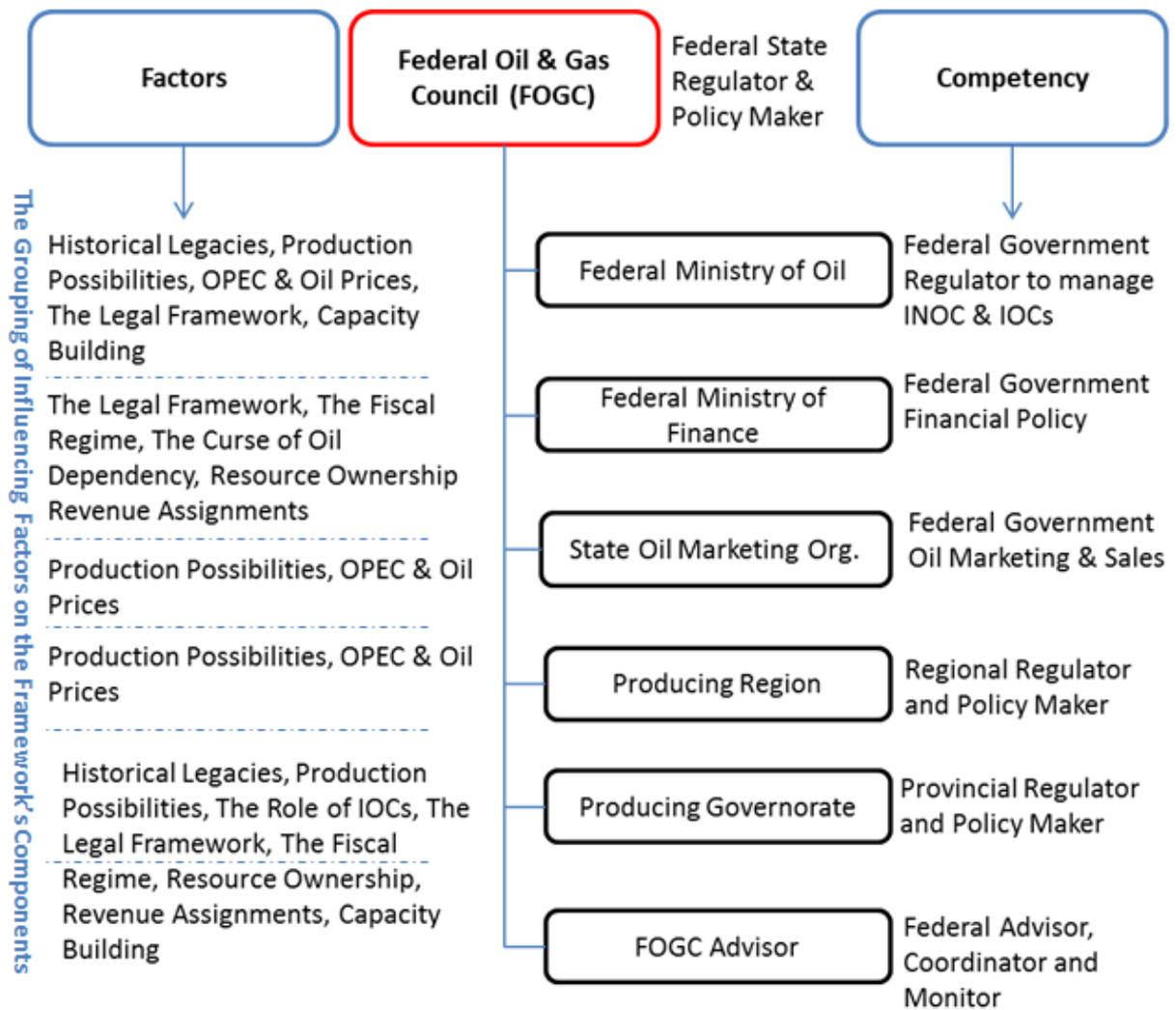


Figure-1: Methodology Structure



**Figure-2: The Initially Proposed Federal Oil & Gas Council**

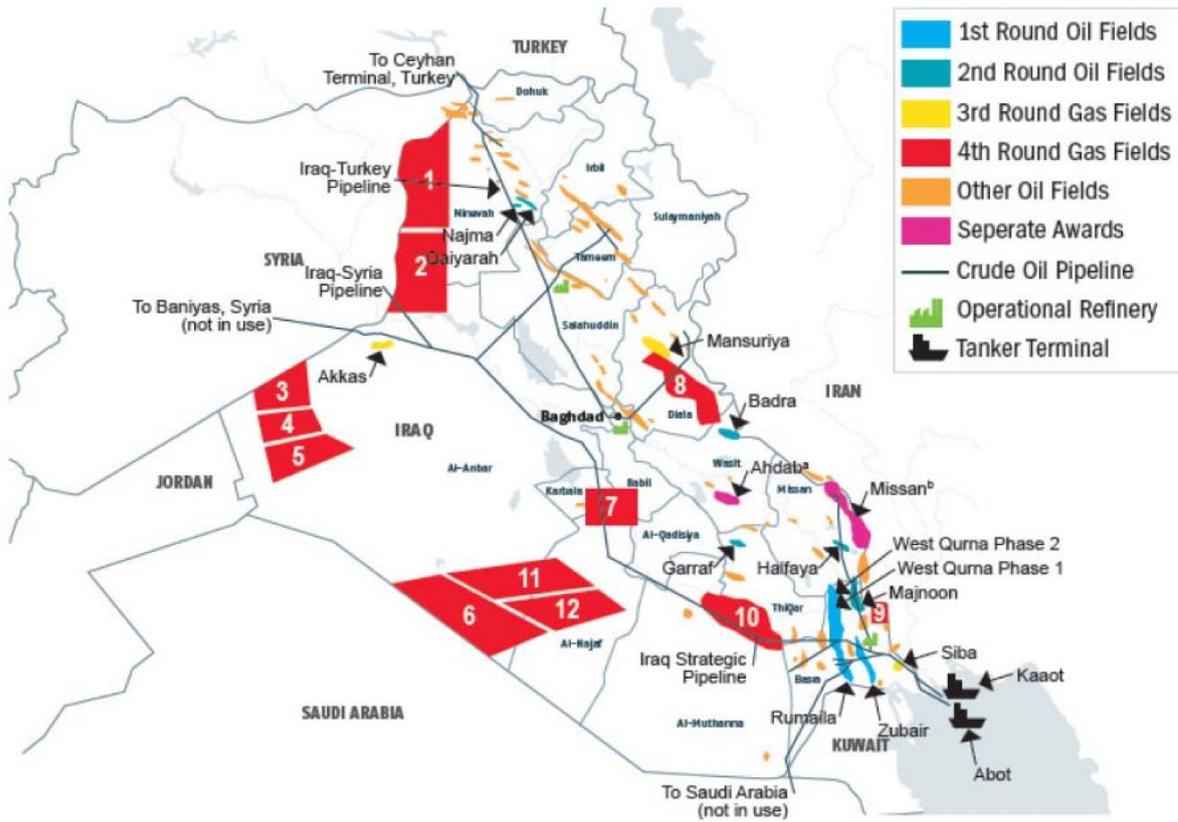


Figure 3: Iraq Petroleum Map (Ministry of Oil - MoO)

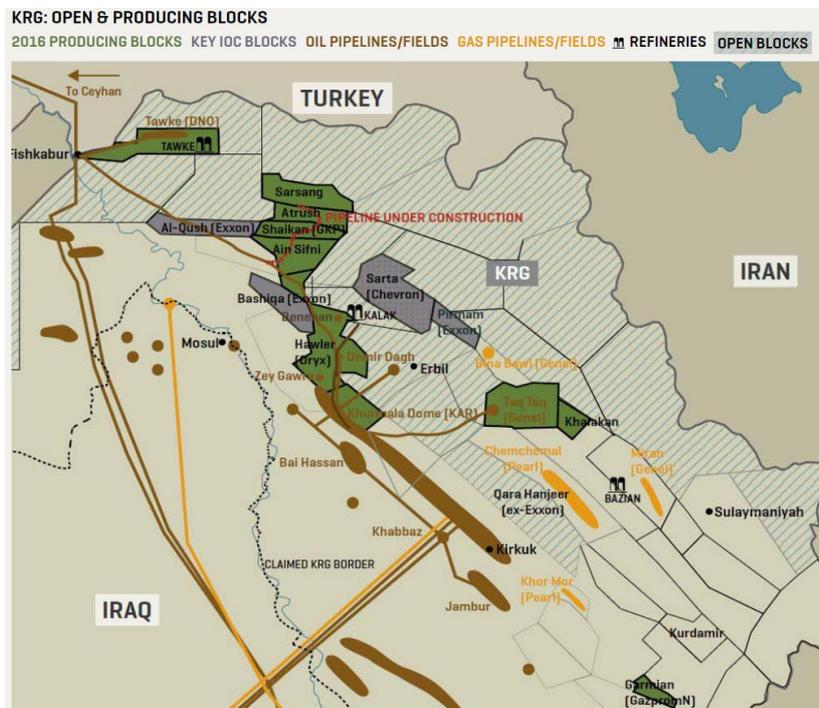
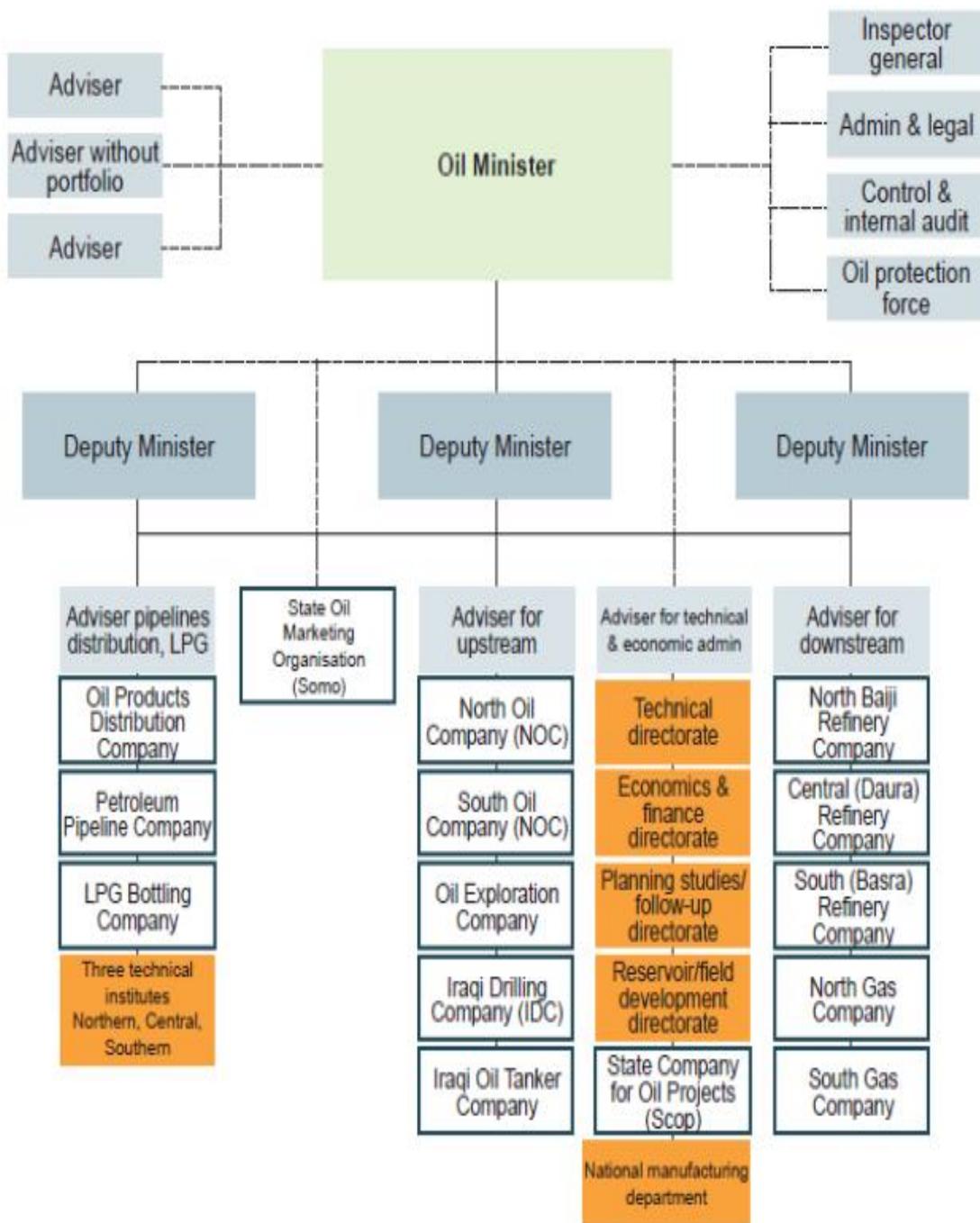


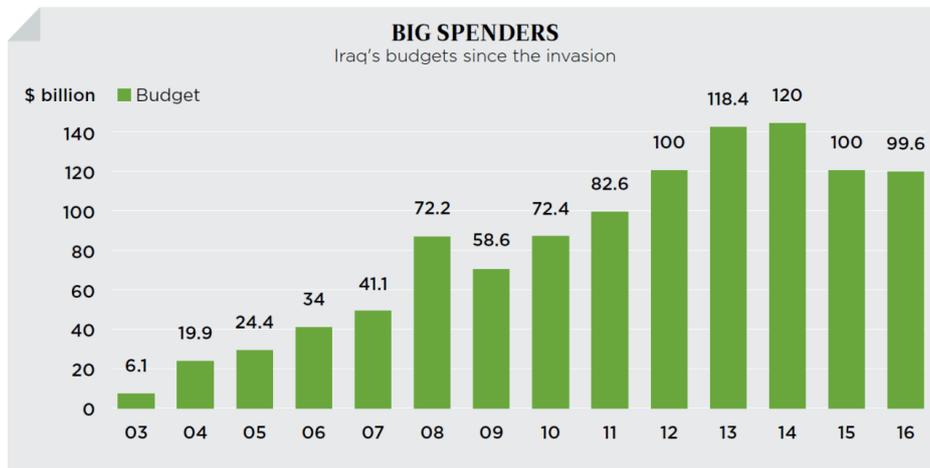
Figure 4: Kurdistan of Iraq Petroleum Map (MEES, MNR)



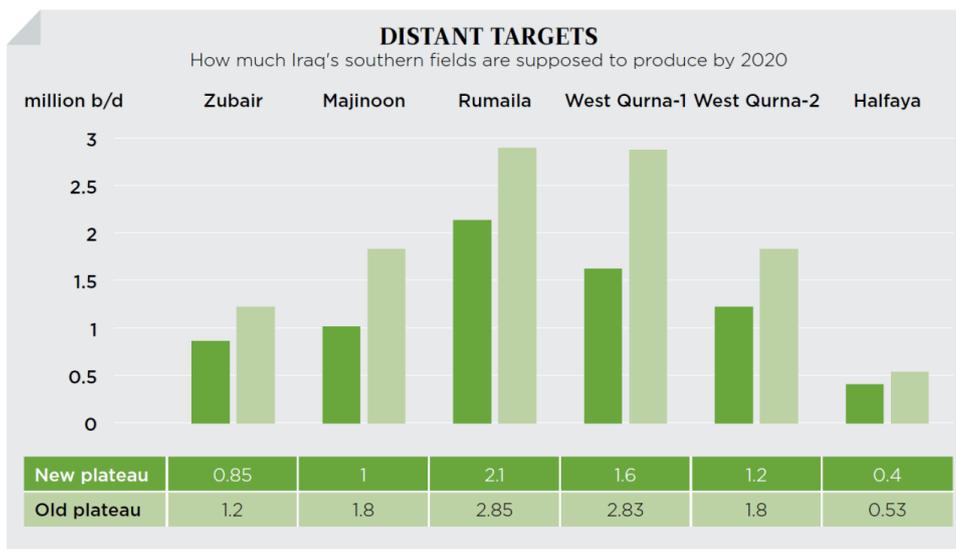
**Figure 5: The Federal Ministry of Oil Organigram (MoO)**

<b>NOC</b>	<b>Sector</b>	<b>Responsibilities</b>
North Oil Company (NOC)	Upstream oil and gas production	Oil and gas production, treatment and separation for all state-operated oil and gas fields in Kirkuk, Ninevah, Erbil, Baghdad, Hilla and Kut governorates
South Oil Company (SOC)	Upstream oil and gas production	Oil and gas production, treatment and separation for all state-operated oil and gas fields in Basra, Thi-Qar and Al-Muthanna governorates
Missan Oil Company	Upstream oil and gas production	Oil and gas production, treatment and separation for all state-operated oil and gas fields in Missan governorate
Midland Oil Company	Upstream oil and gas production	Recently formed to take responsibility for oil and gas production, treatment and separation for all state-operated oil and gas fields in Al-Anbar, Babil, Diyala, Diwaniya, Karbala and Wasit provinces
North Gas Company	Upstream oil and gas production	Development and utilization of associated gas reserves in northern Iraq
South Gas Company	Upstream oil and gas production	Development and utilization of associated gas reserves in southern Iraq
Iraq Oil Pipelines Company	Midstream	Operations and maintenance of nationwide oil and gas pipeline network
North Refineries Company	Refining	Operations and maintenance of Baiji, Senija, Kasik, Kirkuk and Qaiyarah refineries
South Refineries Company	Refining	Operations and maintenance of Basra, Thi-Qar and Missan refineries
Midland Refineries Company	Refining	Operations and maintenance of Daura, Najaf, Haditha, Diwaniya and Khanaqin refineries
Oil Exploration Company (OEC)	Exploration	Oil and gas exploration activities in Iraq outside of the concession areas awarded to IOCs
Iraqi Drilling Company (IDC)	Drilling	Provision and operation drilling rigs
Oil Products Distribution Company	Distribution and storage	Distribution and storage of oil products
State Oil Marketing Organization (SOMO)	Marketing	Marketing, sales and exports of oil and gas
State Company for Oil Projects (SCOP)	Contracting	Acts as client for major oil and gas projects

**Figure 6: The Federal National Oil Companies (MoO)**



**Figure 7: Iraq's Federal Budgets 2003-2016 (Ministry of Finance)**



**Figure 8: The 1<sup>st</sup> Revision of Southern Oil Fields (MoO)**

### MISSING BARRELS:

Iraq's total oil output, September 2016

Company	Number of fields	Production ('000 b/d)
South Oil Company	12	3,234
Missan Oil Company	6	364
Midland Oil Company	4	196
North Oil Company	5	434
Kurdish Iraq	N/A	546
<b>Total Iraq production</b>		<b>4,774</b>

Source: Ministry of Oil

**Figure 9: Iraq's Total Oil Production Peak in 2016 (MoO)**

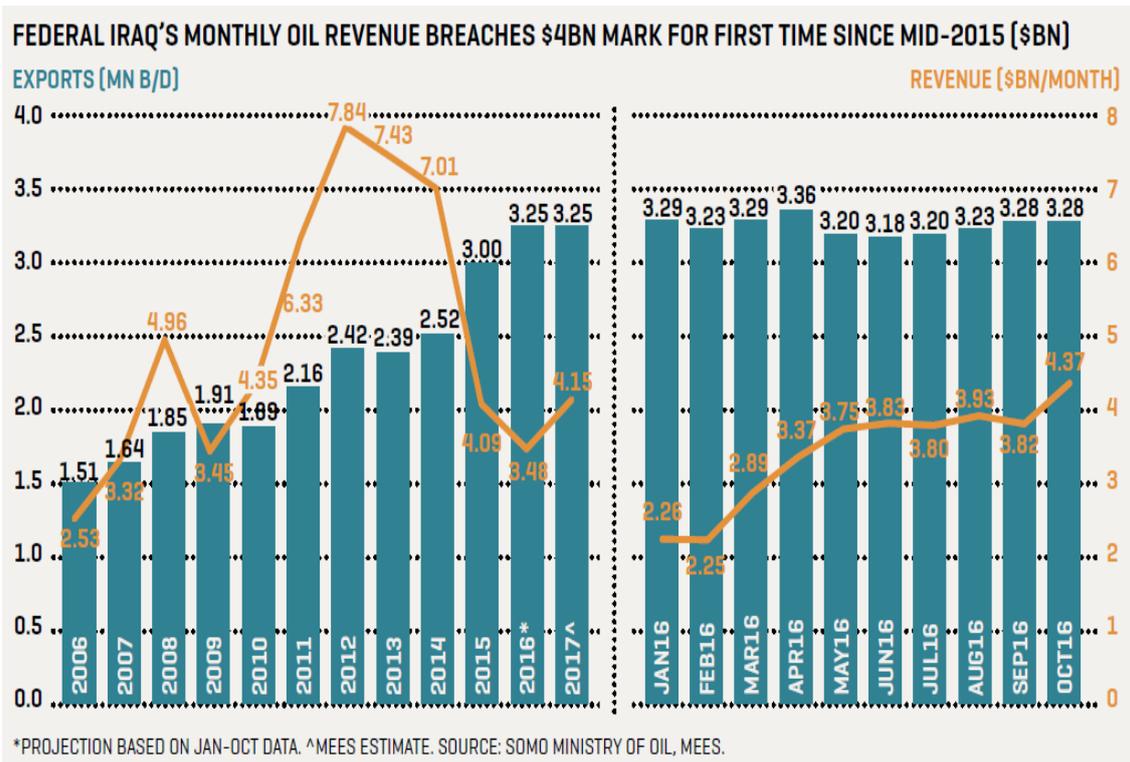


Figure 10: Iraq's Total Oil Production Peak in 2016 (MEES, MoO)

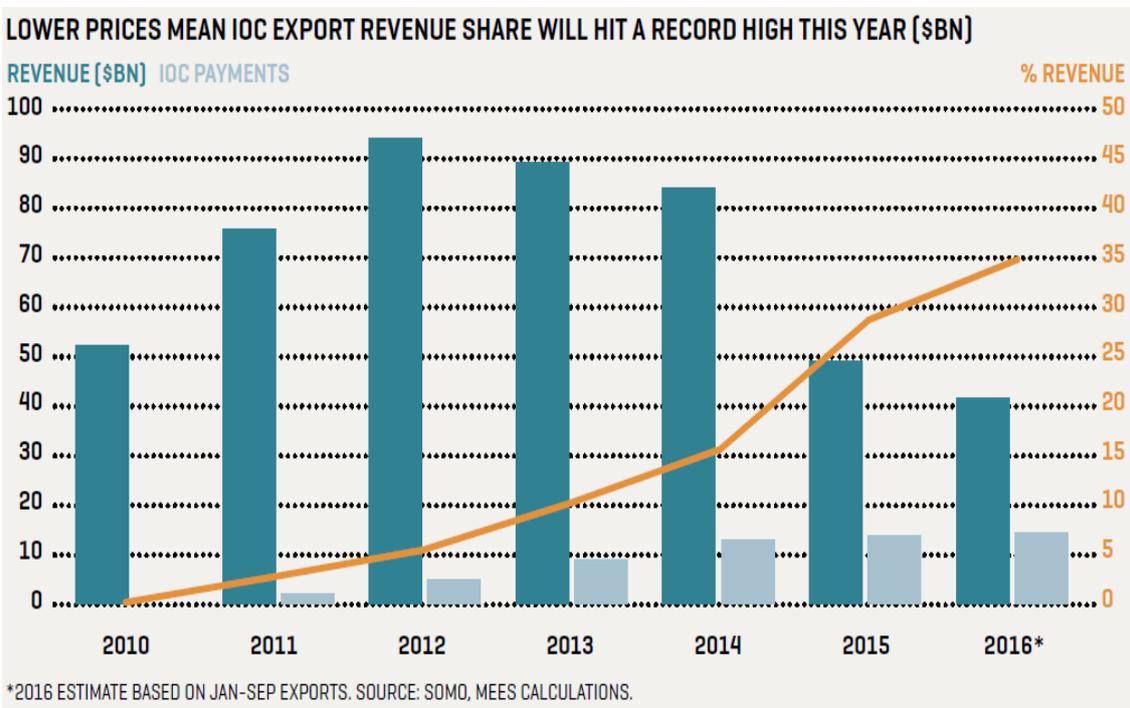
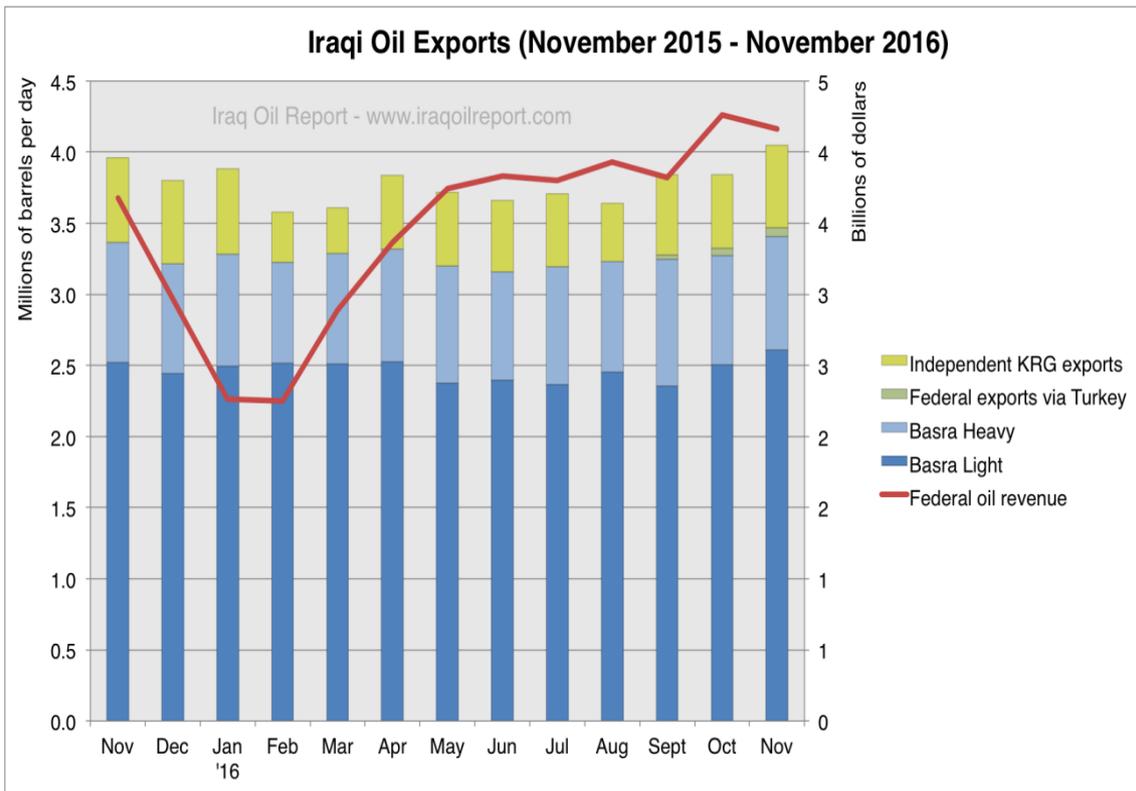


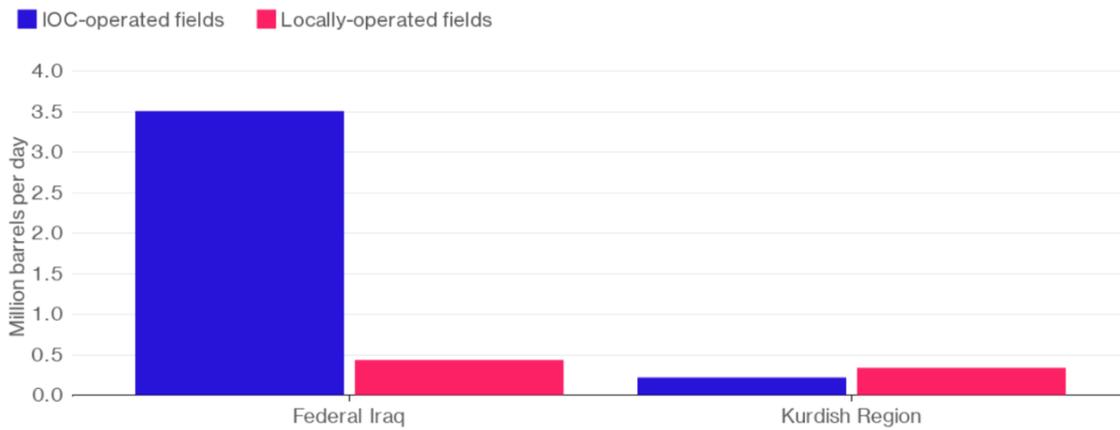
Figure 11: IOCs Revenues from Southern Oil Fields (MEES, MoO)



**Figure 12: Iraq's Oil Exports in 2016 (IOR, MoO)**

### Complex Operation

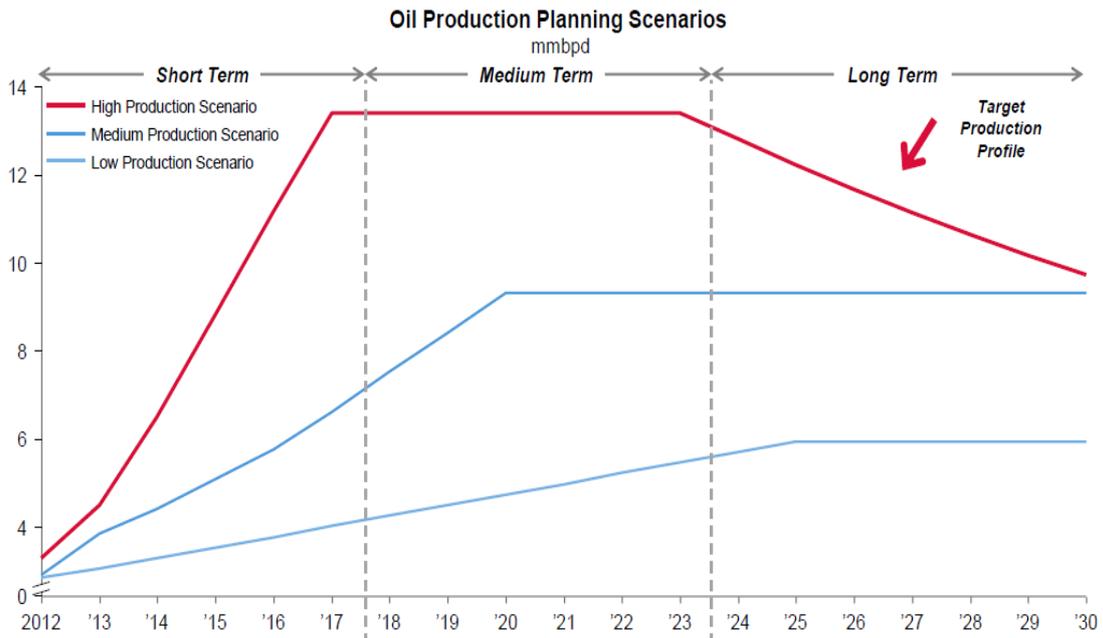
Most of Iraq's oil production is under contract to international oil companies



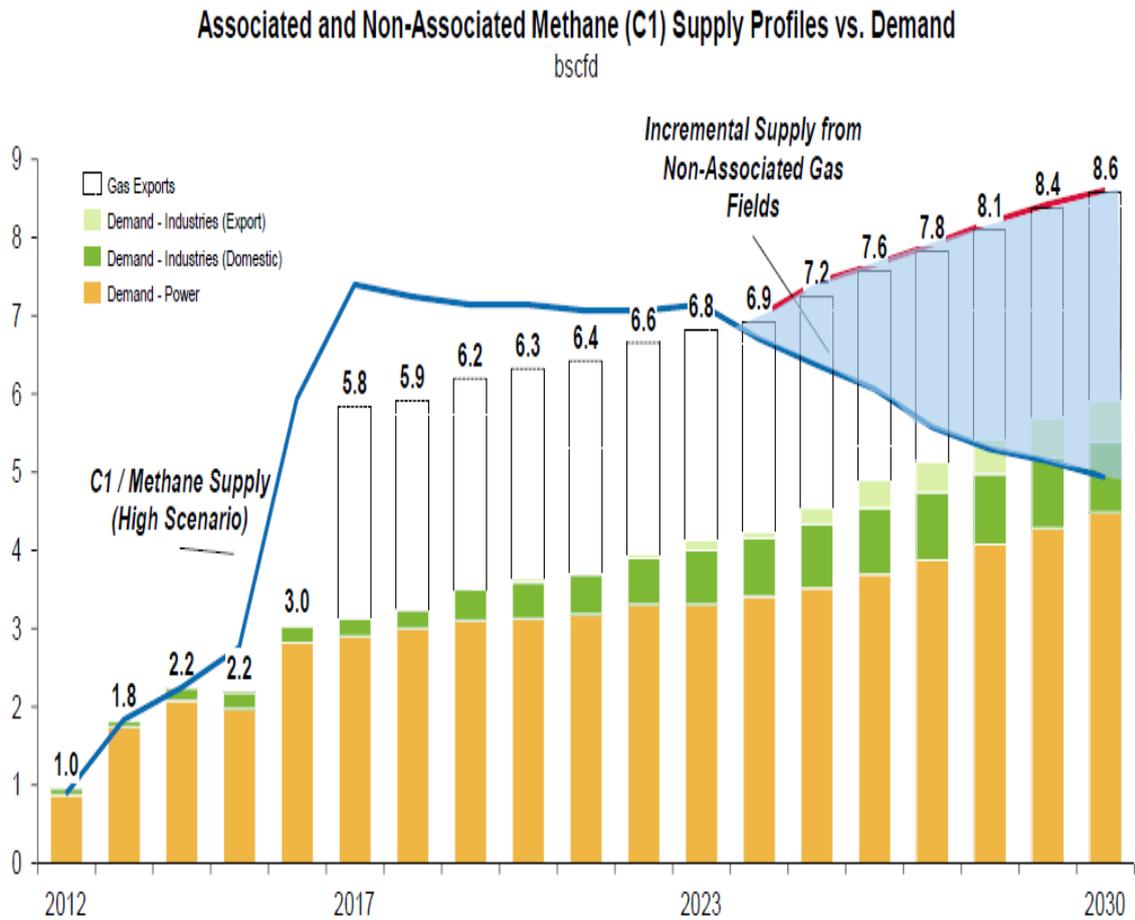
Source: Data published by Iraqi and Kurdish oil ministries  
 Note: Production data for September 2016



**Figure 13: Iraq's Oil Production by IOCs and NOCs (Bloomberg, MoO)**



**Figure 14: INES Scenarios for Oil Production (PM Office)**



**Figure 15: INES Scenarios for Gas Production (PM Office)**

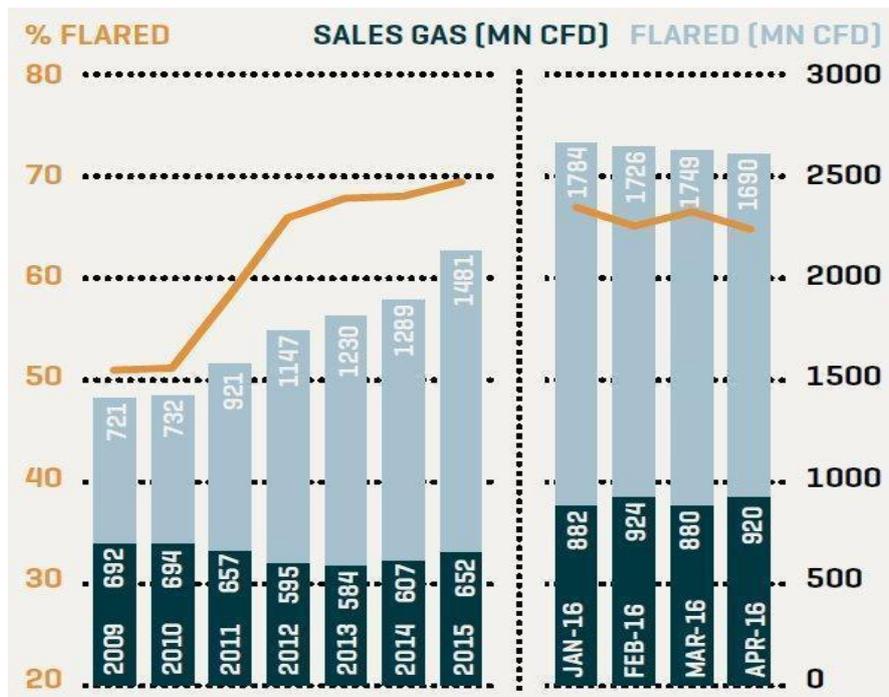


Figure 16: Iraq Gas Production (MEES, MoO)

### % of Total Gas Reserves in Iraq

Associated Gas (AG), Non AG, and Cap Gas

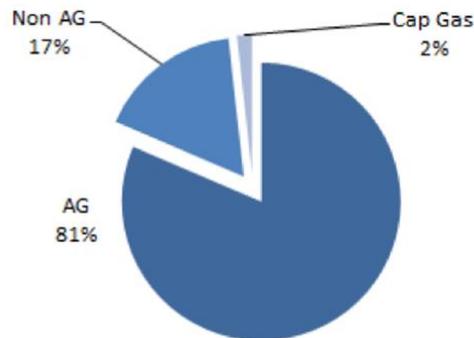


Figure 17: Iraq's Proven Gas Reserves (MoO)

Scenario Analysis	2015	2020	2030
Oil Prod. Plateau (Mb/day)	4.5	7	10
Dry Gas Prod. Plateau (Bcf/day)	4	6.3	9
Total Power Gen. (GW)	18	23	37
Power Gen. by Dry Gas (GW)	8.5	16.5	32
Dry Gas Volume for Power Gen. (Bcf/day)	2.2	4.2	8
Dry Gas Volume for Industry, Oil Installations (Bcf/day)	1	1.3	1.5
Total Local Dry Gas Demand (Bcf/day)	3.2	5.5	9.5
Surplus Dry Gas Bcf/day	0.8	0.08	-0.5

Figure 18: IEI Gas Supply and Demand Scenarios (Iraq Energy Institute)

### IRAQ'S KEY TECHNICAL SERVICES CONTRACTS AND THEIR PLATEAU PRODUCTION TARGETS (MN B/D)

Field	Operator	New PPT	Was	Finalized?
West Qurna-1	ExxonMobil	1.60	2.825	Yes
Zubair	Eni	0.85	1.2	Yes
West Qurna-2	Lukoil	1.20	1.8	Yes
Rumaila	BP	2.10	2.85	Yes (July14)
Halfaya	PetroChina	0.40	0.535	Yes (July14)
Majnoun	Shell	1.00	1.8	Iraq says 1mn agreed, Shell says not
Gharaf	Petronas	unknown	0.23	No
<b>Total</b>		<b>*7.15-7.35</b>	<b>11.24</b>	

\*EXCLUDES GHARAF. SOURCE MEES.

Figure 19: Iraq's TSCs Review Status (MEES, MoO)

### IRAQ GAS PRODUCTION (MN CFD)

	2009	2010	2011	2012	2013	2014	2015	Jan-Aug 16	v 15
<b>Gross Gas Output</b>	<b>1,413</b>	<b>1,426</b>	<b>1,577</b>	<b>1,742</b>	<b>1,814</b>	<b>1,896</b>	<b>2,133</b>	<b>2,650</b>	<b>+628</b>
of which: Flared	721	732	921	1,147	1,230	1,289	1,481	1,683	+277
Sales Gas	692	694	657	595	584	607	652	967	+351
flaring % of production	51.1	51.3	58.4	65.9	67.8	68.0	69.4	63.5	-6.0
Southern Oil & Maysan Oil	968	998	1,152	1,278	1,354	1,596	1,826	2,208	+470
of which: Flared	552	571	767	951	1,008	1,153	1,324	1,476	+210
Sales Gas	415	427	385	327	346	443	502	732	+260
flaring % of production	57.1	57.2	66.6	74.4	74.4	72.2	72.5	66.8	-6.0
Northern & Midland Oil	445	427	426	464	457	300	308	442	+158
of which: Flared	169	160	154	196	222	136	158	207	+67
Sales Gas	276	267	272	267	234	164	150	235	+91

SOURCE: IRAQ OIL MINISTRY, MEES CALCULATIONS.

Figure 20: Iraq's Gas Production History by Region (MEES, MoO)

### KRG 2016 MONTHLY CRUDE OIL SALES OVERVIEW

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Sales at Ceyhan ('000 B/D)	614	414	300	515	515	514	490	412	565
Exports to Ceyhan ('000 B/D)	602	350	327	512	513	500	511	484	524
Value of Exports* (\$mn)	\$423	\$294	\$270	\$489	\$555	\$562	\$495	\$414	\$612
Payments for Liftings (\$mn)^	\$650	\$304	\$407	\$376	\$391	\$591	\$433	\$433	\$423
Implied Overpayment (\$mn)	\$227	\$10	\$137	-\$113	-\$164	\$29	-\$62	\$19	-\$188
IOC Payments (\$mn)	\$75	\$71	\$36	\$59	\$75	\$112	\$43	\$83	\$96
Amount to KRG (\$mn)	\$575	\$233	\$332	\$305	\$315	\$479	\$390	\$350	\$328

\*INCLUDES OFFSET LIFTINGS ^INCLUDES PREPAYMENTS SOURCE: MNR, MEES CALCULATIONS.

Figure 21: KRG Monthly Oil Sales (MEES, MNR)

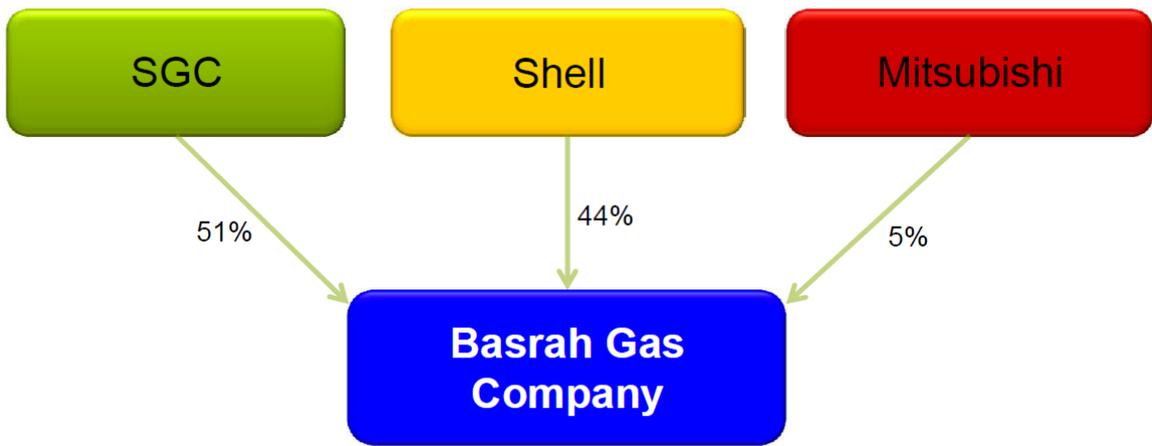


Figure 22: BGC Funding Structure

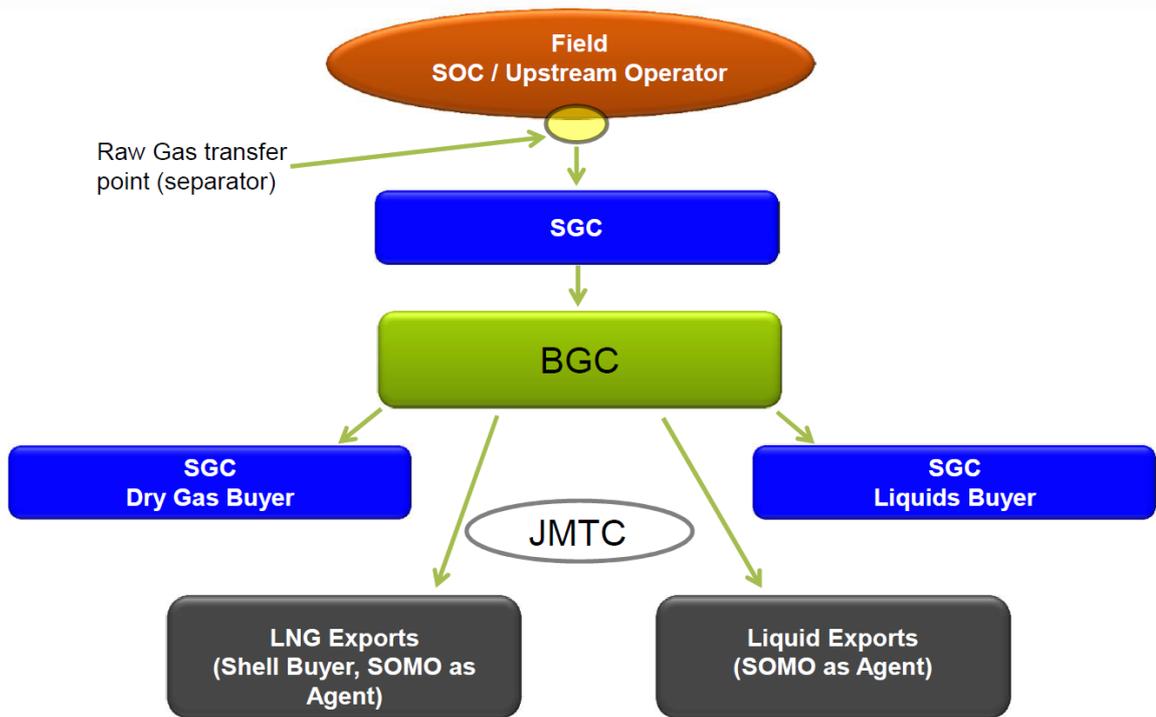
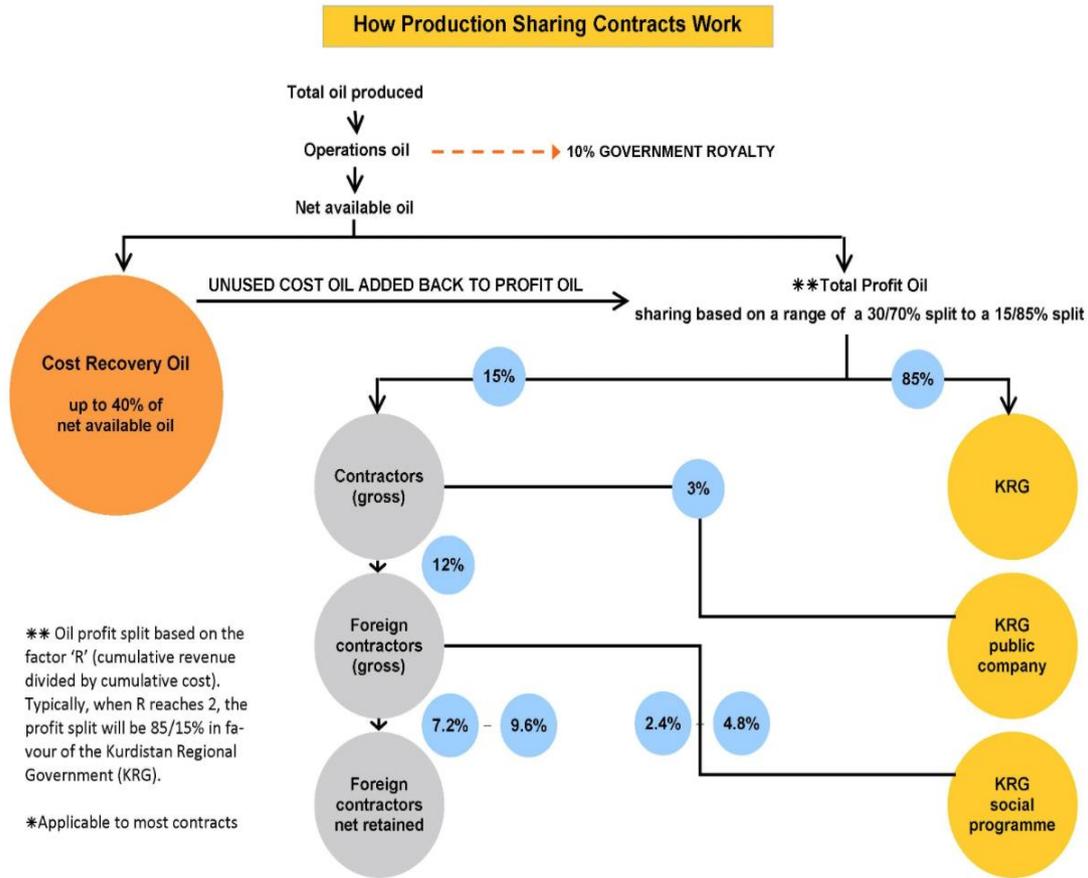
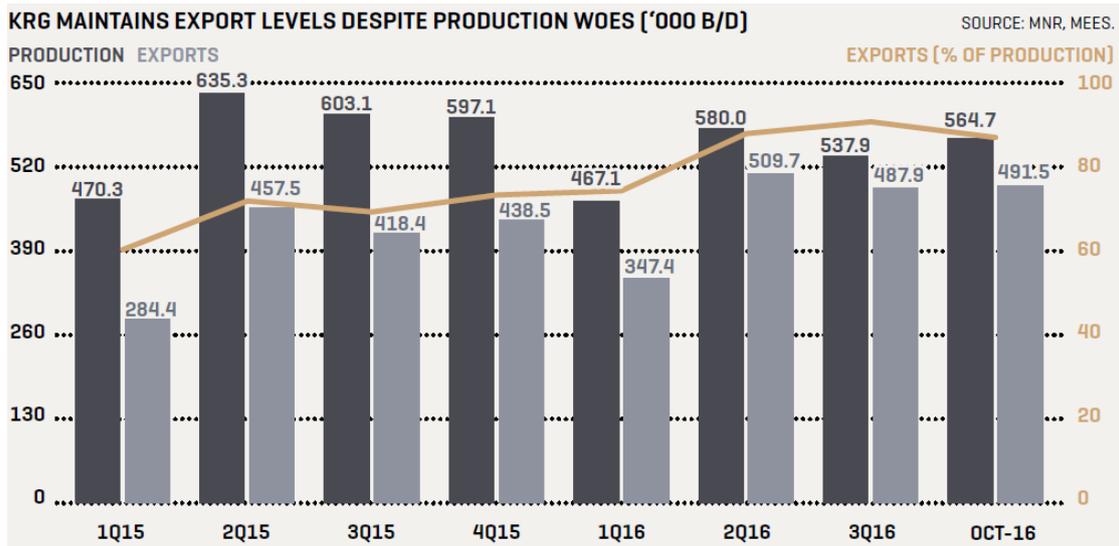


Figure 23: BGC Commercial Structure

This diagram shows how the KRG's production sharing contracts work.



**Figure 24: KRG's PSA Model (MNR)**



**Figure 25: KRG's Export Levels (MEES, MNR)**

## **Glossary:**

ADNOC: Abu Dhabi National Oil Company.  
AER: Alberta Energy Regulator.  
AHF: Alberta Heritage Fund.  
BGC: Basra Gas Company  
BGC: Basra Gas Company.  
CIT: Corporate Income Tax  
CNPC: China National Petroleum Company.  
COM: Council of Ministers (Iraq.)  
COR: Council of Representatives (Iraq.)  
CPI: Corruption Perception Index.  
DPR: Department for Petroleum Resources (Nigeria.)  
EIA: U.S. Energy Information Administration  
EIA: Energy Information Administration.  
EITI: Extractive Industries Transparency Initiative  
EPSA: Exploration and Production Sharing Agreement.  
ESRD: Environment and Sustainable Resource Development (Canada.)  
EU: European Union  
FOGC: Federal Oil and Gas Council (Iraq.)  
GOI: Government of Iraq  
HFO: Heavy Fuel Oil  
HSE: Health, Safety and Environment.  
IEA: International Energy Agency  
IMF: International Monetary Fund  
INOCL Iraq National Oil Company  
INOCs: International National Oil Companies  
IOC: International Oil Company  
ISIL: The Islamic State of Iraq and Levant  
ITP: Iraq-Turkey Pipeline  
JMC: Joint Management Committee  
JV: Joint Venture  
KPC: Kuwait Petroleum Company.  
KRG: Kurdistan Regional Government  
KRI: Kurdistan Region of Iraq  
KRI: Kurdish Region of Iraq  
MENA: Middle East and North Africa  
MNR: Ministry of Natural Resources  
MoO: Ministry of Oil (Iraq.)  
MRH: Major Resource Holder  
NOP: National Oil Policy (Canada.)  
NCS: Norwegian Continental Shelf.  
NEB: National Energy Board (Canada.)  
NNOC: Nigeria National Oil Company.  
NNPC: Nigeria National Petroleum Company.  
NOC: North Oil Company (Iraq.)  
NOCs: National Oil Companies  
OPEC: The Organization of the Petroleum Exporting Countries  
PDVSA: Petróleos de Venezuela SA.  
PPP: Public Private Partnership  
PSA: Production Sharing Agreement  
PSC: Production Service Contract.

SAGD: Steam Assisted Gravity Drainage (Canada.)  
SHF: Saskatchewan Heritage Fund.  
SOC: South Oil Company (Iraq.)  
SOE: State Owned Enterprise.  
SOMO: State Organization for the Marketing of Oil (Iraq.)  
SWF: Sovereign Wealth Fund.  
TSC: Technical Service Contract  
UAE: United Arab Emirates  
UN: United Nations  
USA: United States of America  
WB: World Bank

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