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Nasrollahi Shahri, Nima

University of Dundee

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Nima Nasrollahi Shahri
CEPMLP, Dundee University, Scotland, UK
Nima_nasr@yahoo.com , 00989159055864

Natural resource wealth “A truly double edged sword?” :A comparative study between Iran and Norway

ABSTRACT:

This is an analytical comparative study done from a historical perspective between Iran and Norway as classic examples of countries touched by resource abundance contrastingly. The study tries to highlight the factors which turn oil riches into a curse so as to serve as a brief practical set of guidelines for countries facing the possibility of a natural resource related revenue increase. This study, however, does not purport to cover all the factors in play, but is rather of an interdisciplinary nature demonstrating the significance of Politics in the fate of Oil-rich countries. An abridged account of the petroleum sector and some other relevant information about the two states is initially given. The study then focuses on historical, economic, management and political differences which could have been influential in the way the two countries have been affected by their riches. A number of key differences are listed and elaborated on in more detail with the aid of examples invoked from similar countries. The study finds that factors such as the political structure of a country as well as its population and timing of oil discoveries, as factors not completely controlled by the state, carry a lot of weight in determining how successful a country is likely to be in managing its resources.

Key Words:

Recourse riches, Resource Curse, Iran, Norway

Table of Abbreviations

IRI -----	Islamic Republic of Iran
IRIC -----	Islamic Republic of Iran Constitution
NIOC -----	National Iranian Oil Company
NPD -----	Norwegian Petroleum Directorate
UNSC -----	United Nations Security Council

1. Introduction

Iran, despite holding huge oil and gas reserves, remains still not very successful in its long-running struggle for development and is grappling with plentiful dire economic misfortunes among which a few are alarming unemployment and inflation rates, unequal distribution of wealth and heavy dependence on foreign imports. Oil, alternatively called the black gold, which has always struck Iranians as an infinite origin of fortune and an easy supply for what it should take the country to move on the path of development has in effect , from a perspective¹, hindered the natural move of the country towards development , democracy and equality.

¹ See For Example: Amuzegar. J , 1981-1982, Oil Wealth: A very Mixed Blessing, 60 *Foreign affairs* .

Whether there is a case of resource curse in Iran or not transcends the scope of this study. However, the case appears as very realistic and has been raised sufficiently, as will be discussed, by enough academics.² The reason why one can so easily relate to the idea of a resource curse in Iran might be that the country in following this pattern is in good company.³ For the purpose of this study it is presumed that some of the economic complications in Iran particularly the slow pace of development have to do with the mismanagement of substantial oil reserves. What this study endeavours to touch upon is how oil reserves fail to leave this same impact indiscriminately all around the world; Not only have some countries not been adversely affected by their oil riches but have also managed to make very good use of their reserves. Typical examples of such countries are Botswana⁴, Canada, the United States, the United Kingdom and Norway which have been hugely successful in managing their resources efficiently. Some countries face potentially enormous revenue increases in close future due to new discoveries or new investments in their energy sector in the not too distant future; New investments in Iraqi oil reserves are estimated to increase the country's oil production to over 10 million barrels per day rendering the country by far the biggest oil producer of the world leaving it with massive new-found revenue. Another example is Afghanistan which has recently been announced to have more than three trillion US dollars worth of natural resources. Concern is already being raised in these countries over the adverse effects of such revenues and the required

² *Id.*

³ Some other countries which have been allegedly unsuccessful in benefiting from their natural resources include: Nigeria, Venezuela, Iraq.

⁴ See : Iimii, A., 2007, Escaping from the Resource Curse: Evidence from Botswana and the Rest of the World, 54(4) *IMF Staff Papers*.

legal and political settings for such countries to turn this opportunity into an economically and socially revolutionizing experience is already being discussed. In this study Norway, an indisputable example of a country that has escaped the resource curse, is used as a benchmark for success. The underlying comparison of the survey seeks to inspect the differences between the way oil industry has historically functioned in Iran and Norway as pellucid examples of a resource curse stricken country and one on the other end of the spectrum. To this end a short history of oil related sectors of each country is given. In addition to this, vital information regarding the economic and political infrastructures of the two countries is presented. Next, the differences are listed in more detail to be elaborated on. The stark dissimilarity between the two countries is relevant to the nature of this study. The comparison will be mainly concentrated on economic and geopolitical aspects of oil.

2. Resource curse (Literature & Context):

Studies signify a meaningful reverse correlation between resource abundance and GDP growth leading to a paradox termed “resource curse”⁵. The paradox is that countries which should be better-off as a result of resource availability and big revenues from the export of these resources, on average, function economically

⁵ Sachs, J.D. and Warner, A.M., 2001. The curse of natural resources, 45 European Economics Review.

worse. Terry Lynn Karl in his book entitled “paradox of the plenty”⁶ discusses how oil revenues fail to bring about the much expected prosperity to the producing countries with a special focus on Venezuela. The question whether this strong correlation is reflective of a causal link or not is very difficult to address⁷. However, Ragnar Torvik (2009) concludes based on the literature he presents that:

‘In the last 40 years there is a negative robust correlation between the share of resource exports in GDP and economic growth. This correlation remains even when many other factors are controlled for.’⁸

This robustness is indicative of a probable causal link particularly given that the correlation remains when all other factors are controlled for. Aslaksen (2006) also points to the correlation between resource riches and corruption which is merely one of the examples of the negative influences of resource riches on a country’s political economy.⁹

⁶ Terry Lynn, K., 1997. *The Paradox of Plenty : Oil Booms and Petro-states Studies in International Political Economy*. California: University of California Press.

⁷ Torvik, R., 2009. Why do some resource-abundant countries succeed while others do not?, 25(2) *Oxford Review of Economic Policy* , 241 .

⁸ *Id*

⁹ Aslaksen S., Torvik, R., 2006. A Theory of Civil Conflict and Democracy in Rentier States, 108(4) *Scandinavian Journal of Economics*. 571

Michael L. Ross (2001) discusses the political facet of abundant oil resources; He argues that there exists extensive evidence that oil can hinder democracy¹⁰.

A very intriguing question regarding resource riches is how it touches different countries in oddly varying manners. Not all the countries have been economically affected unfavorably after discoveries of natural resource and for every Venezuela, Nigeria, Iraq or Iran there exists a Norway, Canada, UK, Indonesia, Chile or Botswana. In some studies special attention has been given to how a resource curse can possibly be avoided.

Ragnar Torvik (2009) does an excellent job of pinning down the differences between those countries which have managed to escape the curse and those which were affected by it. He summarizes the differences under six headings:

‘(i) saving of resource income ;(ii) presidentialism versus parliamentarism;(iii) institutional quality;(iv) type of resources; (v) offshore versus onshore oil; and(vi) early versus late industrialization.’¹¹

The differences Torvik refer to appear authentic and benefit from a huge literature support yet vaguely abstract since they do not follow from a concrete comparison between two or more countries and are only supported via selective evidence from countries of both categories.

¹⁰ Ross, M., April 2001. Does oil hinder democracy, 53(3) *World Politics* 325.

¹¹ Torvik, R., 2009. Why do some resource-abundant countries succeed while others do not?, 25(2) *Oxford Review of Economic Policy* , 241 .

In this study the matter is taken to a different and more concrete level through a comparative historical and geo-political analysis of oil and gas sectors in two countries which epitomize poor and skilful resource management. Iran, having had an economic growth rate of -1% in the last forty years¹², has been chosen but for the personal acquaintance the author has with the country and that it shares many similarities with other countries which have proved incapable of efficient resource management.

Stevens (2003) points out that there are very few exceptions of countries that have not suffered from a resource curse and Dutch disease and that the reasons are not yet fully understood¹³. However, there have been a multitude of studies that indicate Norway has been among the lucky few.

Norway, claimed by Gylfasonis (2001)¹⁴ and demonstrated by Larsen (2004) ¹⁵to be a country which has escaped the resource curse, has even benefited from its riches to catch up with and even forge ahead its neighbours economically and

¹² Gylfason, T., 2001. Natural resources, education, and economic development, 45 *European Economic Review* 847.

¹³ P Stevens, P., 2003 . *Resource impact_ Curse or blessing? A literature survey*, (Online) Available from [//www.dundee.ac.uk/cepmlp/journal/html/Vol13/article13-14.pdf](http://www.dundee.ac.uk/cepmlp/journal/html/Vol13/article13-14.pdf) (Accessed 15 January 2010).

¹⁴ Gylfason, T., 2001. Natural resources, education, and economic development, 45 *European Economic Review* 847.

¹⁵ Larsen, R., 2006, Escaping The Resource Curse and the Dutch Disease? When and Why Norway caught up and Forged ahead of its Neighbours., 65(3) *American Journal of Economics and Sociology* 605

carries many important lessons for countries which face the possibility of having to deal with a resource curse due to new hydrocarbon discoveries.

Since this study restricts its scope to a comparison between the two states, it by no means purports to be comprehensive. The most apparent differences striking the author will be listed in a separate chapter and will then be expounded and supported by examples invoked from other similar countries.

3. Iran and a historical study of its petroleum industry:

Iran is a big country, 18th in the world, located in the middle east with a population of 72 million people, a population growth rate of 1.3 (World Bank Organization Statistics) and a vaguely structured political hierarchy which makes judgement as to whether it is ,as claimed, democratic or, as alleged, entirely autocratic very difficult. However, the executive is obviously stronger than the Parliament given the almost limitless authorities of the supreme leader.¹⁶ The country has a GDP of 385 billion dollars¹⁷ and produces 4.174 million barrels¹⁸ of oil a day making it the fourth biggest oil producer and the third biggest oil exporter in the world; The country holds the second largest oil and gas reserves in the World. The

¹⁶ Article 110 of The Iranian Constitution lays out the responsibilities of the supreme leader(An unelected head of the three forces also having extensive executive authorities).

¹⁷ The world Fact book(CIA) , Iran (Online) Available from: <https://www.cia.gov/library/publications/the-world-factbook/geos/ir.html>(Accessed 05 January 2010).

¹⁸ *Id*

unemployment rate is 12.5 percent and 18 percent of people live under poverty line. The Gini index of the country is 44.5¹⁹.

Oil was discovered in Iran in 1907, when the country had a predominantly rural texture with very little population growth due to the high rate of infant mortalities and epidemics. In this setting when Iran did not have a strong central government and was divided between tribe heads was that William Darcy succeeded in discovering oil reserves for the first time in the middle-east.

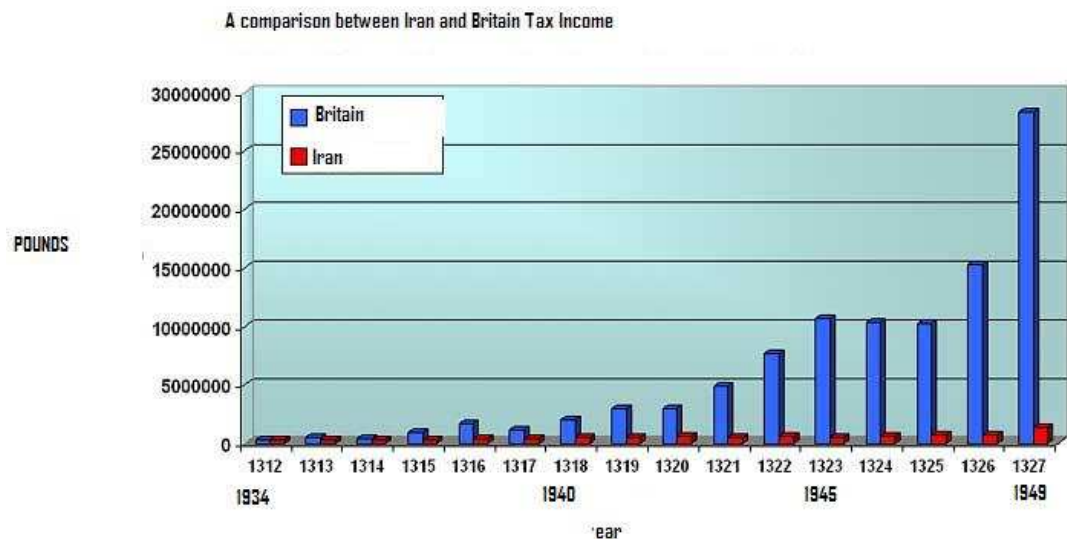
As to the Darcy concession, in 1909 the Anglo-Persian company came into being with the British government acquiring 51 percent of its shares in 1914, unveiling the unimaginable significance of Iranian oil for the British government. On the Iranian side, however, the little royalty paid which was very insignificant in proportion to what was made kept Iranian kings, who were blissfully unaware of the great significance of the commodity, to a point contented.

The economy of the country was for the most part reliant on agriculture and handcrafts. Iran has always been a strategically important country and one in which very cheap oil can be produced without much risk. This has always meant a golden opportunity for IOCs to gain enormous revenues. Oil was discovered in Iran at an age when it had yet to become nearly as important as it is today and the country had little, if any, domestic consumption. All this together made Iran a

¹⁹ *Id*

unique prey for oil companies. The significance of oil began to increase sharply and so did the expectations of the Iranian government leading to conflicts of interest; Darcy concession could not survive for its full term and was replaced with another concession in 1933. The history of oil in Iran is fraught with politics. This is because oil was becoming a vital commodity for any industrial country as an input to the economy and an indispensable commodity for rapidly developing western countries. In the middle of the twentieth century, the predominantly rural population was living in poverty²⁰ grappling with severe conditions when huge money was being made by the Anglo- Iranian oil company. 1951 marks the nationalization of Iranian oil, much earlier than the wave of nationalizations started in the world in the 1970s.

Graph 1



Source: “The story of Oil” at <http://www.tebyan.net/index.aspx?pid=10893>

²⁰ ‘Infant mortality rate was a shocking 500 per 1000, food consumption throughout the nation was the lowest in the Middle-East, tropical diseases were rampant and about 90 percent of people were illiterate.’

J. Walden J., 1962. The International Cartel in Iran: Private Power and the Public Interest, 11 *Journal of Public Law*.

In 1950, the revenue the British government collected merely through tax from the Anglo-Iranian company was far more than the Iranian government was given in total²¹. This Obscene disparity brought about a nationalistic movement which culminated in the oil nationalization Act of 1951. However, politics had its part to play in preventing Iranian cheap oil from escaping from the control of the West and an allegedly British-US backed military coup²² came to the aid of the British, and suddenly a number of major American oil companies, to continue enjoying cheap Persian oil. It was only after the 1973 oil shock that the country started earning substantial revenues from oil which could give momentum to its industrialization. As a result of the oil price increase the country experienced momentarily prosperous days and the acceleration of its development programs. However, the Iranian government's dependence on oil grew as crude oil consisted of a large proportion of the Iranian GDP and an extensive process of urbanization kicked off as a result of oil industry expansion wreaking havoc on the country's agricultural sector. Besides, the imports to the country were tripled, the government budget increased and vast sums of money were wasted on Ceremonial celebrations of the Monarchy. The political structure, the Monarchy, bureaucracy and most importantly blatant corruption hindered equal distributions of oil revenue sparking dissatisfaction among people. However, despite all this, the country with

²¹ *Id.*

²² See *Id* and Elm, M., 1992, *Oil, Power and Principle: Iran's Oil Nationalization and its Aftermath*. New York: Syracuse University Press.

a vast land and only a population of 30 million people could have realized its dream of being among the developed countries if it was not for politics.

Iran spent very huge amounts of money on arms which literally gave the west back most of the money it had lost on the purchase of crude oil; Iran spent some 10 billion US dollars on ammunitions between the years 1972 and 1974²³. However, even worse was to follow. The Iranian oil industry workers went on a nationwide strike in 1978 in continuation of the anti government protests which decreased the oil production to very insignificant amounts. The Iranian revolution tore down all development programs and the new found Islamic regime inevitably took over the reliance on oil revenues. The 1979 revolution moved the country towards state nationalization of most industrial and non industrial sectors. It was after the 1979 revolution that the population started growing in an unprecedented rate reaching a record high climax growth rate of 3.94 percent in 1985(See graph 4).The country underwent an eight year exhaustive war costing it a very huge amount of money with its Iraqi neighbor which harmed the economy in many ways; the oil production did not live up to its previous standards and a large amount of money was inexorably spent on arms and weaponry for the war. Needless to mention, after the Islamic revolution, Iran lost most of its western partners due to its allegedly harsh policies towards the west. Since 1997 new US sanctions²⁴ prevented foreign investors from providing the country with its much needed investment in the oil industry as well as other industrial sectors. The Nuclear crisis

²³ Tabatabayi, M., 2007, *Iranian Petroleum contracts from 1953 Coup until The Islamic revolution(in (in Farsi)*),(Online) at: <http://www.farsnews.com/newstext.php?nn=8512230092>(accessed 10 February 2010).

²⁴ *IRAN AND LIBYA SANCTIONS ACT OF 1996 (House of Representatives - June 18, 1996)*

started in 2001 and continues to the date having brought about numerous UNSC sanctions further tightening the grip. As to gas production, the country suffers from a severe lack of sufficient funding now critically worsened after the new round of sanctions in 2010. In spite of holding the second largest gas reserves in the world, the country produces only about as much as its own domestic consumption²⁵. Politics has also worked against Iran in preventing Iran from striking some important gas sales contracts recently²⁶. Legally speaking, buyback contracts have failed to attract the much needed investment leading to discussions as to an alternative²⁷.

The vaguely bureaucratic fiscal regime of the oil industry has continued thirty years down the line. Huge and wasteful domestic energy consumptions encouraged by government subsidies take a big lump out of the potential oil revenues. Inefficiency is rampant in all Iranian state industries which dominate the economy only allowing private sector to participate in small-scale workshops, farming, and services²⁸. Subsidies are a heavy burden for the government and expenditures on arms continue. Refinement capacity has not expanded enough even to make the country independent of gasoline imports²⁹. The parliament has little supervision over the National Iranian Oil Company and tax evasion plus lenient tax policies mean the country has little dependence on tax collected from

²⁵ IEA Energy Reports (2006).

²⁶ For example see: Verma, S., 2007, Energy Geopolitics and Iran- Pakistan-India gas Pipeline, 35 *Energy Policy*.

²⁷ Shiravi, A., Ebrahimi, N., 2006. Exploration and development of Iran's oilfields through buyback, 30 *Natural Resource Forum*.

²⁸ Islamic Republic Of Iran, Constitution 1979, Article 44.

²⁹ The Iranian government only spent seven Billion Dollars on Gasoline imports in the year 2009. see: <http://www.iranpressnews.com/source/069897.htm>.

people. In recent years Enormous oil revenue increases have failed to produce any tangible differences in people's living standards. The country does not enjoy a high standard of living and the political instability and the deep political divide following the 2009 presidential election has recently been added to all the above problems.

4. Norway:

Norway is a moderately big country in the context of Europe, the 67th in the world. Its economy is a blend of capitalism with government intervention in areas of key importance such as the petroleum sector. It is the third largest gas exporter and seventh largest oil exporter as of 2009³⁰. The petroleum sector accounts for nearly half of exports and over 30% of state revenue³¹. The unemployment rate is 2.6% . The country has a population of 4,756,00 and enjoys a GDP of 450 billion US dollars³².

The political system of Norway is a constitutional parliamentary Monarchy³³.

Norway has a very small army of only 27000 soldiers implying a small Budget and little expenditure on arms. Besides, very low domestic oil and gas consumption, accounting for as little as five percent of oil and seven percent of gas

³⁰ The World Fact book (CIA), Norway(Online) Available from: <https://www.cia.gov/library/publications/the-world-factbook/geos/no.html> (Accessed 20 January 2010).

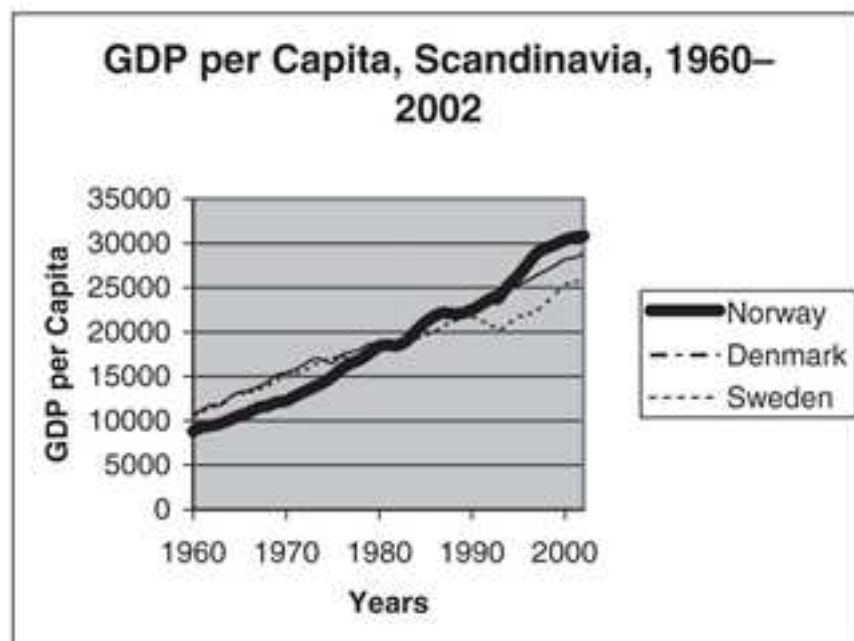
³¹ *Id.*

³² *Id.*

³³ *Id.*

consumption, allows the country to export most of its production. Norway had for decades lagged behind its Scandinavian neighbors in terms of Gross domestic Product before the discovery of oil in 1960s³⁴ but could with the help of ‘deliberate macroeconomic policy, the arrangement of political and economic institutions, a strong judicial system, and social norms’³⁵, which turned its oil resources into a blessing rather than a curse, surpass its neighbours and become the richest Scandinavian country at the turn of the millennium³⁶.

Graph 2³⁷



Note: Data from Bureau of Labor Statistics (2003), Table 1.

³⁴ Larsen, R., 2006, Escaping The Resource Curse and the Dutch Disease? When and Why Norway caught up and Forged ahead of its Neighbours., 65(3) *American Journal of Economics and Sociology* 605-

³⁵ *Id.*

³⁶ *Id.*

³⁷ Graph from Larsen, *Id.*

Oil capable of exploitation was found in Norway on December 23rd in 1969 by Philips when the country was well-equipped to deal with its oil wealth having passed the necessary laws and having proclaimed its sovereignty over its continental shelf and its natural resources, in 1963³⁸. Extraction of oil started in 1971. The country was already industrialized and developed and, therefore, finding oil and gas in abundance put it in a unique position in the world. Initially, the Petroleum Industry was dominated by foreign investors but the government established Den Norske Stats Oljeselskap (**Norway state oil company**)³⁹ in 1972 via an act passed in the Norway parliament with the aim of having participation in the petroleum sector. The company had to provide the Norway parliament with annual reports. Participation in Petroleum industry required Licenses issued by NPD (Norwegian Petroleum Directorate) which functions as a regulator⁴⁰. There has been stability in the legal atmosphere of Norway with very little changes in laws or contractual regimes since 1970s.

Norway could escape Dutch disease partly as a result of the parliament taking conscious steps in 1970s to avoid it by implementing seven deliberate explicit policy schemes.⁴¹

³⁸ Bendixen, F.B., Andresens Bank A. S., 1979. Norway, the development and Significance of its Oil industry with emphasis on current trends in Politics and Economy, *SPE Hydrocarbon Economics and Evaluation Symposium*, USA, Texas, (7736-MS) 6200 N. Central Expwy., Dallas, Texas 75206.

³⁹ "STATOIL".

⁴⁰ Author's translation of , *A study of the structure and Laws of oil and gas resource management in Norway*, (Online) Available from: <http://www.mop.ir/pshr/Departments/HidroCarburiDepartment/Menu2/TahghighVaPajooohesh/Modiriati%20Manabe%20Naft%20va%20Gaz%20Norvej.pdf> (Accessed 21 January 2010).

⁴¹ See Larsen, R., 2006, Escaping The Resource Curse and the Dutch Disease? When and Why Norway caught up and Forged ahead of its Neighbours., 65(3) *American Journal of Economics and Sociology* 605

As part of these policies, The Petroleum Fund of Norway was established in 1990s so that surplus wealth produced by oil revenues could be deposited in it. It later changed name to The Government Pension Fund. The fund was established because of the possibility of running out of oil in the future. Besides, the fund protected the economy from excessive demand and ensured higher wages. ‘Since 1996, every krone the government has earned from oil has gone into a savings fund, which now totals some £240bn -- more than a year’s gross domestic product and equivalent to about £50,000 for each of Norway’s 4.8 million citizens’⁴².

Until the year 2002, approximately 40 percent of all Norway Oil resources and about 10 percent of all its Gas resources were depleted. This risked deriving petroleum revenues to zero in about forty years.⁴³ In response to this eminent threat OG21 set reduction of costs and increase of competition through improvements in technology as a main goal for all active companies in the Petroleum industry given the significance of the sector for the economy of the country and its employment⁴⁴.

⁴² Sandbu, M., *An Iraqi who saved Norway from its oil*, Financial times (London) August 29, 2009.

⁴³ **Author’s Translation of**, *Developing structure of technology(Norway Model) (Online) Available from: <http://www.itan.ir/?Mode=Print&id=1658> (Accessed 16 January 2010).*

⁴⁴ *Id.*

Larsen shows how strong politico-economic institutions as well as a strong legal system, social contract and social norms could minimize rent seeking in Norway⁴⁵.

5. The main differences

In this chapter, the main differences between the two countries will be studied closely inspecting how these disparities might have affected the influence of natural resources on their economy. They are listed in six main categories.

- A. Population and population growth rate:
- B. Political structure and transparency
- C. Timing of oil discoveries
- D. Savings of oil income
- E. Political stability and wars:

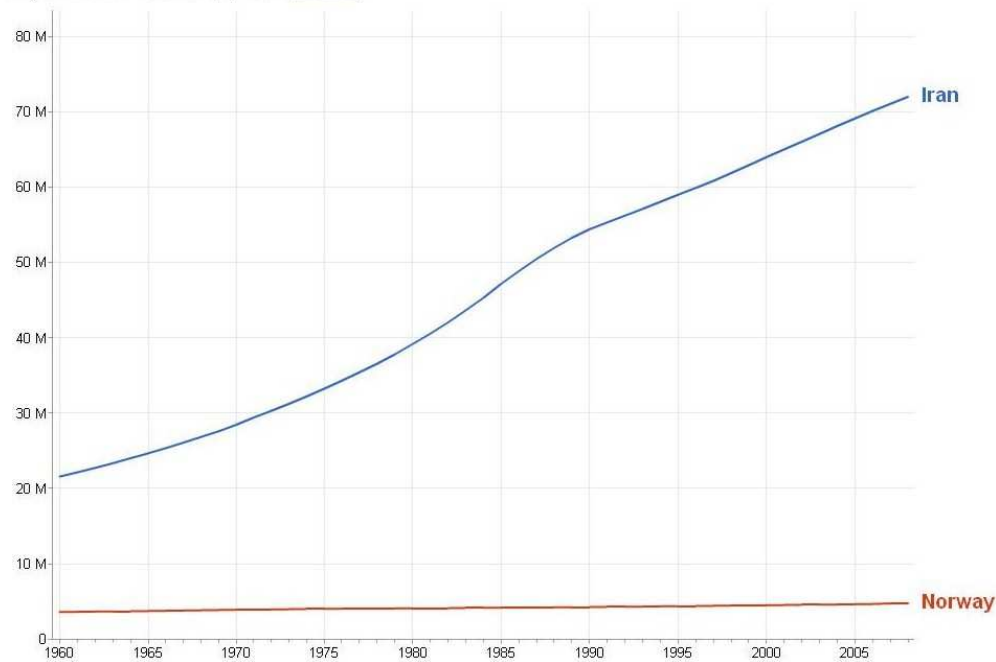
5-1. Population:

Graph 3

⁴⁵ Larsen, R., 2006, Escaping The Resource Curse and the Dutch Disease? When and Why Norway caught up and Forged ahead of its Neighbours., 65(3) *American Journal of Economics and Sociology*.

Population

Midyear estimates of the resident population. [More info >](#)

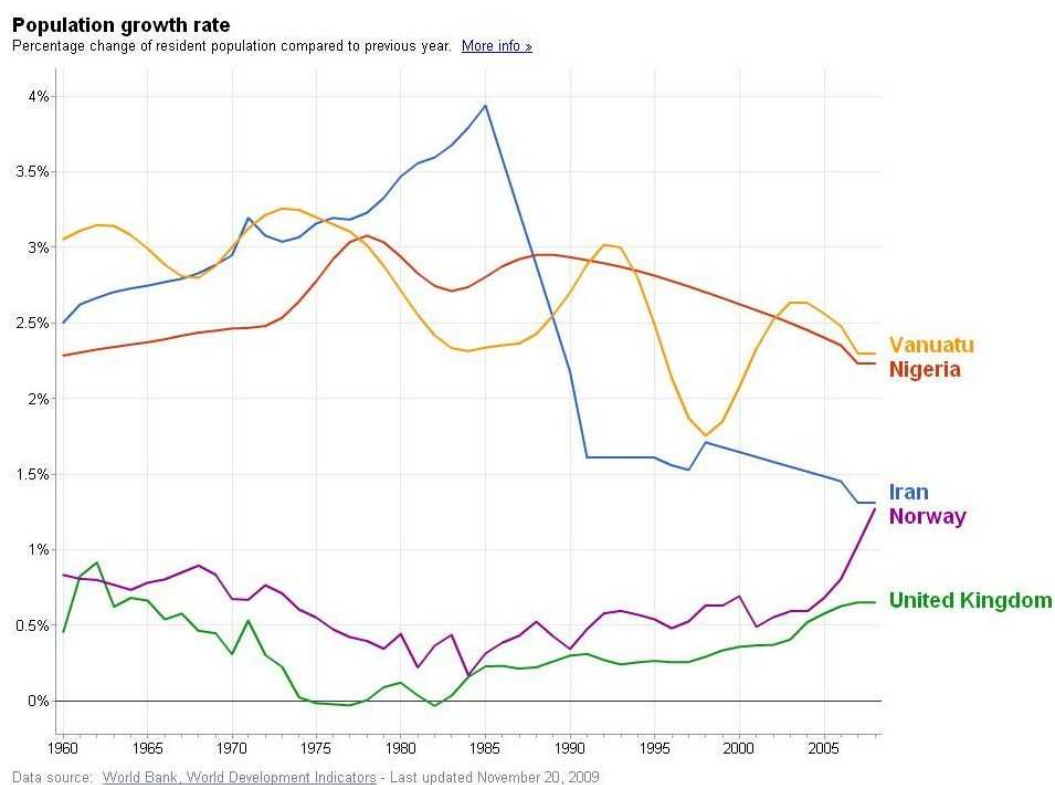


Data source: World Bank, World Development Indicators - Last updated November 20, 2009

An important determinant of the wealth of a country and standards of living is its GDP per capita. Petroleum industry revenues remain the same, except for domestic consumption, despite differences in population or size of the country. Oil production capacity depends almost completely on the size and conditions of the reserves, technology of exploitation and capital. A key distinction between Iran and Norway is the huge difference between the population of the two countries the former being nearly 72 million, the latter being 4 million and seven hundred thousand. If the population growth of the two countries is studied in the course of the last forty years, since when Norway had commercial discoveries of oil and gas, results will be striking. The Population of Iran has increased by 260 percent while in the case of Norway it has only been 12 percent. Iran has had a population increase of more than 43 million people since 1969. This growth rate resembles those of a number of other countries which have not experienced a sufficient economic growth despite resource abundance, as well.

Obviously, population is an important factor when resource management is concerned. First and foremost, a bigger population equals a bigger domestic consumption lowering the exporting capacity of the country. Second, a big population requires a big government budget which inevitably has to be spent on the daily management of the country leaving less for investment and saving.

Graph 4



The graph shows the population growth rates of Iran, Venezuela and Nigeria as examples of countries which have suffered from the curse comparing them with those of United Kingdom and Norway as commonly cited examples of countries which have avoided the curse.

5-2. Political structure:

The political structures of the two countries are vastly different. Michael L. Ross In his study indicates how oil riches can deter democracy provided that oil discoveries happen before the establishment of a democratic regime⁴⁶, obviously the case in Iran, and how oil revenues can assist autocratic countries to hinder democracy. A close look at the political structure of most oil rich Arab Gulf states bears testimony to this claim. However, whether the long standing autocracy in Iran is a reason or a result of oil matters little. Andersen and Aslaksen (2008), however, find that being parliamentary or presidential matters more for the growth effects of natural resources than being democratic or autocratic⁴⁷. In this sense, the executive, the supreme leader and the president, in the Iranian Political structure evidently outweighs the legislative making it a theocratic presidential semi democracy whereas Norway is a constitutional Monarchy with a very strong supervising Parliament.

The political structure is an important factor especially when rent seeking is concerned. State corruption is usually a function of a non-democratic political structure. This is verified by the Global Corruption report of transparency international (2008) which happens to place non-democratic countries such as Zimbabwe (170), Sudan (175), Turkmenistan (168), among the very worst.⁴⁸

⁴⁶ Ross, M., April 2001. Does oil hinder democracy, 53(3) World Politics .

⁴⁷ Aslaksen S., Torvik, R., 2006. A Theory of Civil Conflict and Democracy in Rentier States, 108(4) *Scandinavian Journal of Economics*.

⁴⁸ *The Global Corruption Report 2009*, Table 13: Corruption Perceptions Index 2008 (online) available from:

Intriguingly most oil rich countries also rank poorly in the index. Examples are Venezuela (165), Iran (142) , Iraq(178).

The existence of a correlation between oil and corruption is not very difficult to claim, but establishing a causal link between the two requires more studies with a higher degree of precision.

A number of studies such as (Gylfason 2001)⁴⁹, (Sachs and Warner 2001)⁵⁰ and (Torvik 2002)⁵¹ consider corruption and rent seeking as instrumental elements contributing to a resource curse.

As a result of strong parliamentary supervision in Norway, there is a great degree of transparency as far as oil and gas revenues are concerned. The parliament does not enjoy the same supervisory authority in Iran causing confusion and obscurity. There even exist disparities between the amount of oil exports between government declarations and international claims. Huge amounts of money can go missing from the treasury as has been the case recently in Iran.

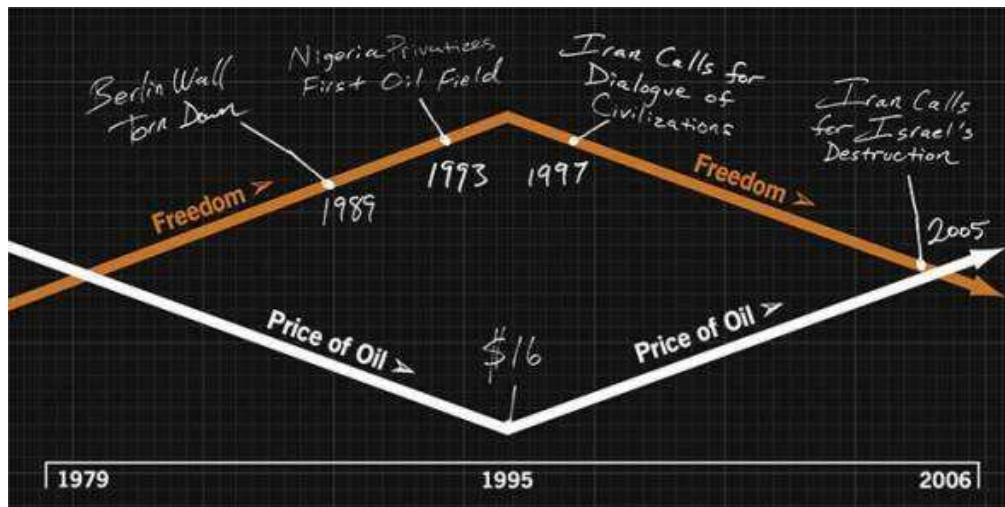
http://www.transparency.lt/new/images/global_corruption_report_2009_170909_2_web%5B1%5Da.pdf
(Accessed 30 January 2010).

⁴⁹ Gylfason, T., 2001. Natural resources, education, and economic development, 45 *European Economic Review*.

⁵⁰ Sachs, J.D., Warner, A.M, 1995, Natural Resources, Rent Seeking and Welfare, 67 *Journal of Development Economics*.

⁵¹ Torvik, R., 2002, Natural Resource Abundance and Economic Growth ,*NBER Working Paper No. 5398* .

Graph 5



This graph comes from Friedman's First law of Petropolitics. In his article, he claims there is a reverse correlation between oil prices and the degree of economic and political freedom in oil-producing countries. He focuses especially on Iran, Venezuela, Nigeria and Russia.

5-3. Timing of oil discoveries:

As one of the most apparent differences between Iran and Norway, it can be claimed that the timing of oil discoveries can be of influence in many ways. Norway had petroleum discoveries as late as the late 1960s when the country was already an industrialized country among the richest in its region if not the world. The country had the legal and technological infrastructure as well as sufficient capital to take advantage of its oil riches. Discoveries happened when Norway did not require much assistance from other countries while in the case of Iran as discussed earlier in chapter two, the petroleum sector was controlled by foreigners for more than forty years resulting in massive loss of national interest. Norway had its first legislations in the year 1963, 6 years before commercial discoveries, while Iran made its first legislation regarding oil in 1951. The Norwegian State oil

company was founded in 1972 establishing a strong foothold for the state, whereas the NIOC(National Iranian oil company) was established only in 1950s, more than forty years after oil discoveries in Iran. In fact, the level of preparedness and the standing of the country in the world have much to do with the efficiency of resource management. Countries that are having natural resource discoveries or revenue increases these years can obviously enjoy a much higher level of readiness to deal with [potential problems.

5-4. Political & legal stability:

The last forty years of Iran have been laden with crisis. The country has experienced a big revolution tearing down all its economic institutions and an eight year war with its neighbouring Iraq. The country, having been continuously threatened by United States and Israel, has had to have huge arms expenditures. A capital intensive nuclear program has also consumed huge capital from government's revenue. Political instability has been going downhill especially after the 2009 presidential election, with the occurrence of the worst protests and riots in the last thirty years. Instabilities, which may have been partly caused by the strategic geo-political position of the country, have distracted the government from its main role of providing its people with welfare. To the contrary, Norway has enjoyed very high political stability with no wars or foreign threats in the last forty years. It has been discussed that countries with oil are more likely to plunge

into violence and civil wars⁵². Regardless of the veracity of this claim, wars and domestic instability can obviously distort the economic performance of states. To this one should add legal stability; Iran has had regular changes in its laws relating to Oil and Gas industry⁵³. This as well as political stability is significant in determining foreign investment levels; thus, there is no surprise that Norway has been very successful in attracting investment. Experience of some other countries grappling with a resource curse bears witness to this claim. A particularly more severe case is Iraq. Nigeria and Venezuela have also had their fair share of political instability.

5-5. Savings of oil income:

Torvik(2009) makes a comparison between the resource-adjusted saving rates⁵⁴ of countries which have escaped the resource curse and those which have not and demonstrates that there is a correlation between resource-adjusted saving rates and how successful countries are in escaping the resource curse acknowledging that a causal link can not be established definitively.

As far as saving oil revenues are concerned, Unlike Iran, Norway has had huge savings of its oil revenues and has a huge resource-adjusted saving rate, among the

⁵² Ross, M., April 2001. Does oil hinder democracy, 53(3) World Politics 325.

⁵³ There have been many changes in the contractual frameworks within which the Iranian government has so far co-operated with IOCs. There have been many changes in legislations as well .

⁵⁴ . Resource-adjusted saving rates do not count oil revenue as income since extracting depletable resources is simply a transformation of assets rather than income. Resource-adjusted savings rate is usually presented as percentage of gross national income.

bests in the world⁵⁵, as well. To the contrary, Iran spends almost all its oil revenue on day to day running of the country which makes the country face serious Budget deficits whenever the oil revenue is less than anticipated due to price fluctuations. Therefore, an important distinction between Iran and Norway could be the way revenues produced from resources is used. Countries like Iran, Nigeria and Venezuela have become increasingly dependent on their oil revenues and can not survive without them, whereas countries like Norway have the luxury of using their natural resource induced revenue on welfare, building hospitals and roads through saving the money in special Funds.

6. Conclusion and Recommendations:

A comparison between Iran and Norway will reveal a number of differences, particularly influential in the way the two countries have been affected by their resources, most of which are not within the control of the government, yet they can be taken into consideration when drafting an energy policy and consequently their effects could be lessened. It is important to note that any country particularly one heavily reliant on revenues from depletable resources would be much better-off with a small population growth rate. Therefore, sound social and cultural policies should be adopted so as to prevent the population from growing uncontrollably. Additionally, Countries with potential huge new-found natural resource revenues like Iraq and Afghanistan should begin anticipating the potential

complications such money could cause and they should consider solutions long before these revenues are realized. Besides, this study shows how geo-political and demographic standings of countries can be of key significance in determining whether they can manage to escape the resource curse or not. However, it can not be denied that any country like Norway can deliberately attempt to address the issue through adopting sound economic polices. Norway is very good example to follow as far as management of income from natural resources is concerned.

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