

The Resource Curse Play: A Comparative Study of Norway and Venezuela

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Abstract: Ever since its nomenclature in the 1990s, the resource curse has been a particular field of study for researchers in economics. The paper analyses the experience of Norway and Venezuela to tackle the problem of resource curse emanating from the abundance of oil in both countries. Tracing a historical trail of the two nations from 1960 to 2015, the post effects of their respective resource management and fiscal policies are compared through economic and socio-economic parameters. Employing statistical observations to analyze the differences in the handling of oil abundance, a conclusion is drawn on Norway's superior resource management over Venezuela's troubled handling of its resources to establish Norway's case as the ideal for other countries suffering from the 'resource curse'.

JEL Classification: H2, H5, H10, N1, Q3

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I. Introduction

Economic research in the 1950s and 1960s on the relation between resources and economic growth suggested a negative relation between the abundance of natural resources and economic development of countries, especially in the low and middle-income group. Conventional economics hypothesizes that the existence of natural resource abundance is considered a prerequisite for economic growth. Auty (1993) named this contradictory observation as 'Resource curse' to describe the disparities in economic growth rate between countries that were resource deficient yet had higher growth rates (Japan, Korea, Singapore etc.) and countries that had resource abundance but had lower growth rates (Angola, Nigeria, Sudan etc). Empirical studies by Sachs & Warner (1995) affirm the existence of a strong correlation between resources and poor economic growth. Frankel (2010) postulates six factors responsible for the sub-standard economic performance despite commodity wealth. Currently, IMF identifies 51 countries as 'resource rich' with Venables (2016) recognising the existence of resource curse in 29 of these identified countries. The current problem faced by the policy makers and researchers is to draw measures to counter the resource curse. Despite the understanding of causes, policy makers have been baffled by the existence of resource curse and aim to find a long-term solution to the same. While studies on African economies do not provide consensus among researchers as to what can be a plausible cure to the resource curse, the Scandinavian country of Norway seemed to have outdone the effects to establish itself as a study in isolation. From the discovery of oil reserves in 1960 to the establishment of petroleum fund, the prudent management of the oil resources reflected the view of Norwegian decision makers of national ownership of the resources and that the development should be beneficial to the society as a whole. On the other hand, despite having the same resource abundance of oil, Venezuela flounders in its management. Despite having the largest oil resources in the world, the Venezuelan case has been marked diminishing GDP growth and reducing economic standards which can be blamed to a number of factors. As such, it seems pertinent to compare the two oil-rich economies to derive the policy differences on the management of the resource curse. The subsequent sections of the paper focus on drawing out parallels and contrasts between Norway and Venezuela and measuring the effects of various initiatives undertaken by their respective government after reviewing the existing literature on the resource curse management in the two countries.

II. Literature Review

Gruben & Darley (2004) focus on the presence of resource curse in Venezuela and the factors responsible for it. The torpid nature of the government in bringing about economic initiatives led to the creation of a vicious cycle encroaching the economy. The authors have done a comparative study of Venezuela with the other Western Hemisphere oil rich countries to highlight its poor growth. A conclusion is derived that in spite of the abundance of oil reserves, the economic struggle from the 1990s has continued and persisted for the worse due to political ineptness. Rossi (2011) further highlights that in spite of the profuse oil wealth of Venezuela; the monetized revenues of its oil wealth have not brought prosperity to the economy. He presents a detailed historical summary, coursing from the discovery to the present day abundance of oil in the country, to

substantiate how the massive oil wealth rent has in effect contributed in rendering the economy into an unproductive society. The paper evaluates the elements that have fuelled the interplay of the Resource Curse and provides a unique insight on the political scenario of the country. Using descriptive and statistical methodologies, the author illustrates the failure of Venezuelan socialist model of development concluding that Venezuela must adopt suitable political and economic measures to deal with the resource curse and move towards productivity.

On the other hand, Havro & Santiso (2008) focus on the experiences of Norway (oil) and Chile (copper) to illustrate that effective resource management can convert the natural resource curse into a blessing. They decode the mechanism of the paradox of plenty and analyse its implication on the countries with poor development indicators through effective statistical means. The authors present an in-depth study of the various elements ranging from fiscal prudence to government involvement and institutional quality responsible for the success of both Norway and Chile in overcoming the curse, thereby providing valuable lessons for other resource wealthy nations. Through this case study on Norway's and Chile's economic policies, the authors substantiate the need and the role of the international development community and technical co-operation with regard to both oil and copper related endowments. This is synchronous to Larsen (2004) who states that as a result of the economic strategies, Norway was able to attain accelerated growth post-oil discovery unlike the other oil-rich countries and was able to surpass the other Scandinavian countries. He argues that Norway managed to escape the resource Curse and the Dutch Disease from the mid-70s to the mid-90s not because of structural adjustment but because of the implementation of unconventional foresighted policies formulated by the policy makers. However, the paper does mention that some signs of the resource curse seemed visible in the late 90s, which he attributes to the political state of affairs. A further analysis conducted by Holden (2013) isolates the factors and policy measures in Norway undertaken in respect of its abundance of petroleum to prevent the resource curse that plagued other nations in similar resource abundance conditions. Timelining the Norwegian case from the discovery of oil resources in the 1960s to the establishment of a fiscal policy of oil revenue spend in 2001, the paper critically analyses the role of an active political system working in consonance with a prescient central bank and efficient state bureaucracy in effectively navigating Norway from the curse of abundant oil resources. Employing a methodology of statistical and descriptive analysis, the author has summed up Norwegian case and its employment of prudent fiscal measures and investment strategies such as creation of a pension fund investing in overseas assets in varied proportion and the promotion of state deficit financing using such real returns to be an ideal model for other countries to learn from for avoiding the resource curse.

III. Research objective

This paper aims at a case study comparison between the two countries Norway and Venezuela which faced the resource curse throughout the 20th century by the abundance of oil. Such comparison is to be facilitated by an analysis of policy measures and their implication as measured by economic and socio parameters. As such the primary objective of the research paper is:

"To comparatively analyse the resource curse management in Norway and Venezuela"

IV. Comparison between Norway and Venezuela

Both Norway and Venezuela have identical timelines of their discovery of petroleum. The respective management of the two countries are explained as under:

Norway

Norway is an exemplary example of a country that was successfully able to combat the resource curse. Efficient revenue collection mechanism, fiscal stability and competent management of the resource coupled with the country's established democracy, visionary policies and facilitative and corruption-free institutions enabled it to accelerate its growth and development.

As of 1st January 2015, Norway had crude oil reserves of 6.4 billion barrels. The petroleum sector is the largest contributor to Norway's revenues. It contributes 22 percent to the GDP, 27 percent of the government revenues and makes up for 67 percent of its exports. The Norwegian government has undertaken manifold steps to ensure an efficacious management of this vast wealth for the prosperity of the economy.

Tax revenues from the petroleum activities are a major source of Norway's revenue. They totalled about NOK 104 billion in 2015. The well-structured tax system is an integral part of the petroleum policy. The oil companies are subject to the ordinary company tax at the rate of 25% as well as an additional special tax, owing to the humongous returns, at the rate of 53%. Hence, the government receives in total 78 percent tax on the profits of the oil companies. The government has paved a path for new companies to venture into this arena by permitting them to carry forward losses if they do not have sufficient revenues from existing fields to cover the costs of exploring new ones. The entire tax system is very neutral and has effectively maintained an equitable balance between generating substantial revenues for the economy and encouraging companies to carry

out profitable production. Although tax rate of 78 percent is rather high, the credibility and the transparency of the system have played a crucial role in making Norway an attractive destination for business.

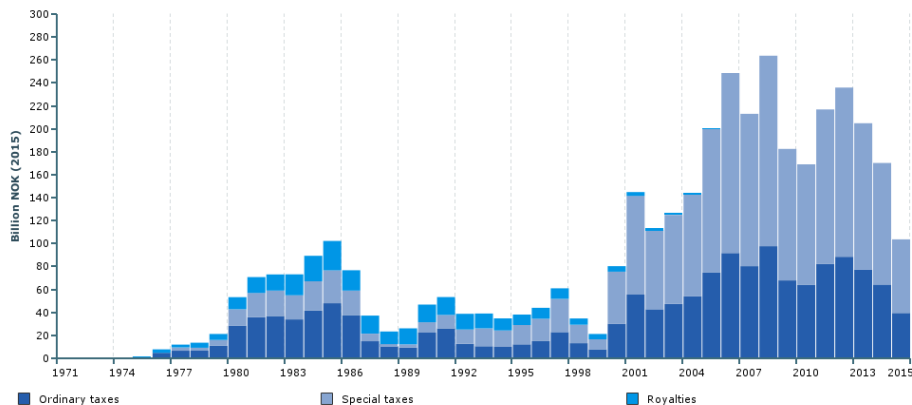


Chart 1: Breakup of Norway's Revenue for the period 1971-2015

The second most important source of revenue is through the channelled system of State's direct financial interest (SDFI), where the state has holdings in numerous oil and gas companies. It also has an ownership share in Statoil, thereby earning dividends from the company. The net cash flow from SDFI in 2015 was NOK 92.7 billion.

One of the key elements of Norway's fiscal policy is the Government Pension Fund Global. Originally called the Government Petroleum Fund, this fund was established in the year 1990 for the management of the petroleum revenues. All the net revenues from petroleum sector are transferred to this fund. It is a part of the ordinary government budget, and in the case of a deficit, the amount is automatically deducted from the Pension Fund. About 179.6 billion kroner was transferred to fund in the year 2015. The budgetary rule of the Norwegian fiscal policy states that during the course of a business cycle, government spending must include only the expected real return on the fund, which is about 4% per year. Utilizing the returns of the fund, and not the capital itself is a means to ensure that the fund will benefit even the stakeholders of the future.

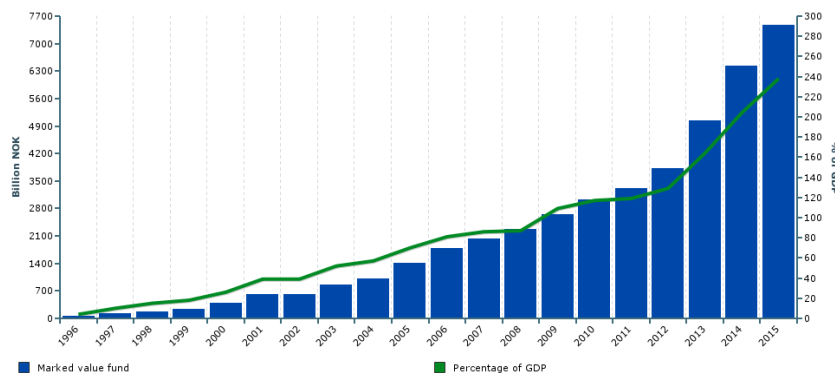


Chart 2: Government Petroleum fund as a percentage of Norway's GDP for the period 1996-2015

Extractive Industries Transparency Initiative is a global standard to promote public awareness and transparency about a country's management of its natural resources. Norway is by far the only OECD country to adopt EITI. A multi-stakeholder group, comprising the representatives of the government, of the companies in oil and mining business, the civil society, plays an active part in the implementation of the EITI standard in Norway.

Norway's quality and functioning of institutions are excellent. It has a reliable and an independent judiciary, a strong ministry of finance, and a reputed civil service. The ministry of finance is responsible for the revenues, including the Pension fund, which is managed by the Central Bank. However, the investment decisions of the fund are dealt with by the Central bank and the Norges Bank Investment Manager. The Parliament regulates the overall framework and the budget. The petroleum sector as a whole is governed by the Ministry of petroleum and energy.

Norway has catered to develop the already flourishing petroleum sector as well focus on the remaining domestic industry. It has adopted a diversification policy to reduce the dependency on the petroleum industry and prevent the economy from the risk imposed by the fluctuations in the oil and natural gas segment.

Venezuela

Venezuela holds the world's largest oil reserves (298 billion barrels, as of January 2015) yet, today the country is one of the most miserable economies across the globe. While Norway, with its high standards of governance and institutional progress, was able to overcome the resource curse, Venezuela has been unsuccessful in its attempt at getting rid of this economic plague. Distorted government policies, soaring levels of corruption and authoritarianism, and a reckless political agenda have only fuelled the crisis.



Chart 3: Crude Oil Production in Venezuela for the period 2006-2015

Venezuela's oil revenues account for roughly 95% of the export earnings, and the oil and gas sector accounts for about 25% of the GDP. Venezuela's oil reserves account for about 24.8% of OPEC's share.

In Venezuela, the oil and gas regulation is reserved to the national government. All the natural hydrocarbons reservoirs within the Venezuelan territory are public domain assets. The Ministry of Energy and Petroleum is responsible for the overall conduct of oil and gas activities. *Petróleos de Venezuela (PDVSA)* is the most important state-owned company in the sector. Along with its subsidiaries, PDVSA is one of the largest vertically integrated oil companies in the world. Private sector companies are allowed to enter the oil and gas sector through joint venture companies (Mixed Companies), in which the Venezuelan government must hold at least a 50% stake. The restrictions applicable to the private players are the same for foreign companies too. Additionally the Venezuelan foreign investment regulations, foreign investors must register their investment with the ministry of oil and mining. In accordance with the Income Tax Law, oil companies are subject to income tax at a flat rate of 50% on net income. They are also subject to a royalty at a rate of 30% based on the volume of the hydrocarbons extracted. There is a general consumption tax which lies between 30% – 50% of the price paid by the final consumer. A value Added Tax at the rate of 12% is levied on the sales in general and the sales of crude oil made to the PDVSA or its subsidiaries are taxed at 0% rate.

During the 1970s and 2000s oil booms, the Venezuela spent bountifully on disintegrated diversification projects, unproductive social welfare programs and far-reaching international aid and development apparatus. The prosperity during the boom made the government complacent and led the government in running up an extraordinary debt whose maintenance depended on ever-increasing oil prices. Hence, the oil booms further advanced the country's liabilities. There were attempts by the government in setting up developmental funds, however right since inception, the funds' provisions were violated. Thus, in a nutshell, Venezuela lacked a reliable economic infrastructure to help the economy cope up during times of turmoil (falling oil prices).

Venezuela has been unsuccessful in capably dealing with its resource windfall. There have been numerous futile attempts in the past to stabilize fiscal expenditure. To begin with, the government created a Venezuelan Investment Fund (FIV) in the 1970s. The fund was utilized to invest in the economy itself during the boom and support diversification. However, investments failed to serve the purpose of reducing volatility. Later in the 1990s, during the period of low oil prices, a stabilization fund FIEM (Investment Fund for Macroeconomic Stabilization) was created. Very soon, the functioning of the fund was modified to suit the need of Chavez administration. It was used as a tool by the executives who got discretion over the disbursement of funds saved by the states. In addition, due to the constant changes made to the rules, FIEM too eventually turned into an unfruitful attempt. A final try at savings has been by the means of the National Development Fund (FONDEN), created in 2005, for the purpose of leveraging economic growth and sustainable development. FONDEN's resources primarily come from two sources. Firstly it receives all the oil revenue taxes paid by PDVSA and by private partners in joint ventures, and any additional resources demanded directly by the nation's president. Secondly, it receives funds from the Central bank. By the end of 2012, FONDEN had assets worth 30.2 billion dollars. It is to be noted that the transfer to the fund has been very erratic. For example, between the years 2005 and 2008, the amount that was transferred to it rose, however, the rise was minimal in spite of the

fact that 2008 was, in particular, the year when oil prices soared high. Discretion over the PVDSA funds by the government bodies prevented an appropriate and sound transfer of funds.

Corruption in Venezuela has been prevalent in many forms, ranging from an increasing level of capture of natural resources by the elite class to an overpowering authoritarian government. In 2015, Venezuela tied for the country with the ninth highest perception of corruption in the world. There exists three levels of corruption in the country – Grand Corruption at the top most policymaking level; Bureaucratic Corruption at the government bureaucracy level; and lastly Systemic Corruption at the interplay between the government and private players. Venezuela’s tryst with corruption dates back to the mid-1970s when the country experienced a sudden oil windfall, which tripled fiscal income. The officials in charge were exposed to extraordinary temptations and it was during this time when corruption went out of control and corruption has remained high, ever since.

There exists an acute irregularity in the management of the state-owned petroleum company PDVSA. Ever increasing state control has led to a decline in the productivity of the company. There is no accurate record of the amount of income flowing into the national treasury. PDVSA has not filed financial statements with the U.S. Securities and Exchange Commission since 2004. The company’s annual financial statements are audited externally, but there are myriad inconsistencies between its annual figures and those estimated by international agencies. For instance, the company claimed a production of about 3.2 million barrels per day, but OPEC placed it almost one million barrels per day less, at 2.3 million barrels per day. Company officials are subjected to disclose their financial interests in oil projects, but this is hardly ever enforced.

Among 58 Latin American and the Caribbean countries, Venezuela ranks poorly on measurements of corruption control and the rule of law. Also, it is at the 38th rank regarding its institutional and legal setting, reflecting the country’s lack of independent licensing system and insufficient public disclosure system. With respect to the reporting practices, the government does publish some information crucial to the key revenue sources; however, fiscal terms, licensing criteria etc. are not given. (Environment Impact Assessments) EIAs are published only after licenses have been granted. These indices clearly indicate the deterioration of Venezuela’s institutions, their overall accountability, and transparency.

Given the historical background and the policy measures undertaken in the two countries, a comprehensive list of economic and social parameters is used to compare the overall progress of the two countries over a period of the last twenty-five years post the policy implications. The parameters not only project the economic health but also shed light on the social and political scenario in the backdrop of the abundance of oil reserves.

GDP Growth

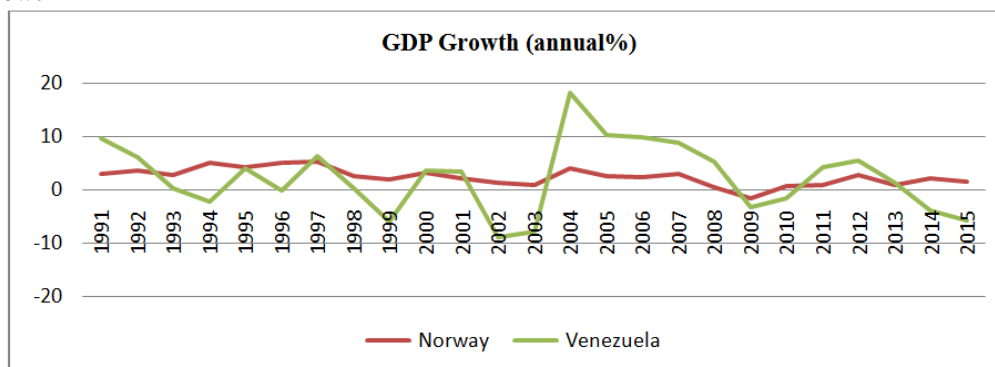


Figure 1: Comparative GDP growth rate of the two countries from period 1991 to 2015

The average annual GDP growth rate for Norway and Venezuela is 2.4 percent and 2.3 percent respectively. Although the average figures are similar, Venezuela depicts a fluctuating growth graph because the annual GDP growth rate of Venezuela is directly correlated to the fluctuations in the oil prices, while Norway denotes a stable one as it had a well-structured policy system and efficient regulatory framework in place.

For Venezuela, besides the reduction in oil prices, the drastic fall in the GDP growth rate in 2002 and 2003 was aggravated by the military coup and the business strike. In 2004, it recovered from a two-months oil industry shut down. The economy grew and there was an increase in both consumption and investment. The inflation was low as well.

In 2009, the growth rate of both Norway and Venezuela suffered due to the global financial crisis. Currently, Venezuela is facing negative growth due to the fall in the oil prices while Norway is maintaining its stability.

GDP per Capita (PPP)

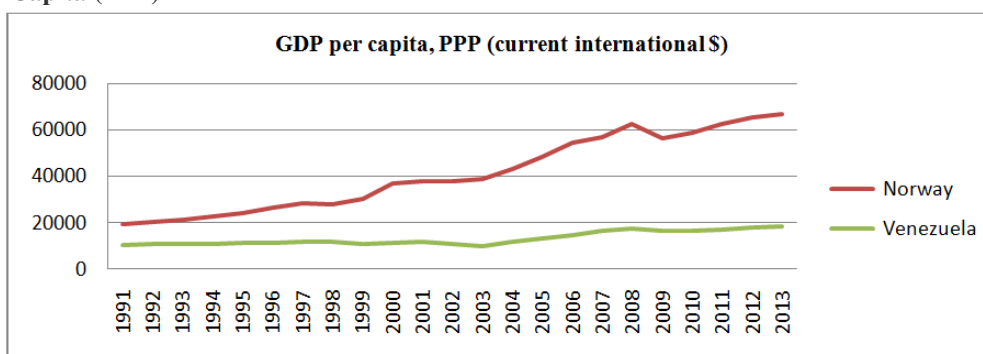


Figure 2: Comparative GDP per capita measured in PPP at Dollar rate of the two countries from period 1991 to 2015

To ensure uniformity in comparison, GDP per capita has been taken on the basis of the purchasing power parity at current international US Dollar. Norway has a lead of about \$ 9007 over Venezuela from 1991 and the gap has increased gradually over the years and increased to a massive \$ 48508 in 2013. Norway has been able to maintain a steady growth of GDP along with a constant increase in population due to which it has been able to achieve an increasing rate of GDP per capita. On the contrary, due to the fluctuating growth of GDP and higher growth rate of population Venezuela has maintained an almost constant GDP per capita with a slight increase 2003 onwards.

Inflation

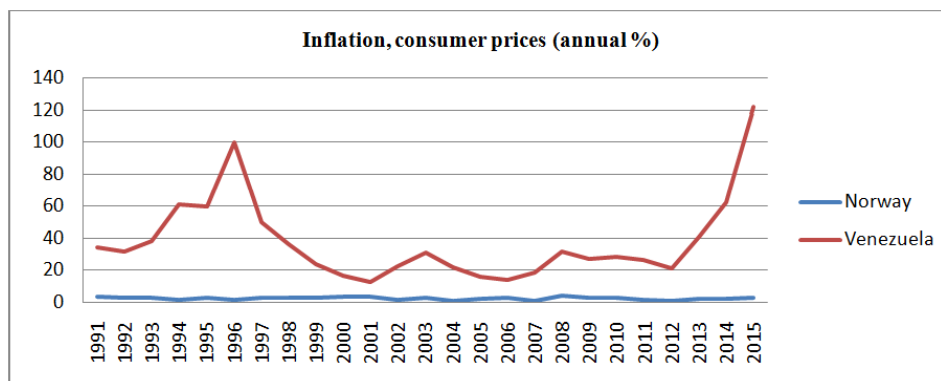


Figure 3: Comparative inflation rate of the two countries from period 1991 to 2015

It can be noticed that Norway has maintained its inflation rate in a tight range between 0.5 percent and 3.4 percent for a period of twenty five years. This has been possible due to two main reasons:

- The economic policies of Norway in the 1970s and 1980s led to high and variable inflation as a result of which in December 1992 the fixed exchange rate system was abandoned and the monetary policies started focusing on inflation targeting.
- The government is not allowed to borrow money directly from the Norges Bank and thus this avoids the situation of deficit financing which is blamed for inflation

The government policies of Venezuela are singularly dependent on the increase in oil revenues for growth. The economy is crippled due to inefficient utilization of its vast oil resources and overvaluation of its currency. Apart from oil, everything is cheaper to import than to manufacture domestically. Since it is mainly dependent on its oil reserves, it has to maintain its productivity by improving its competitiveness and to do this it has to establish partnerships with foreign countries which it is unable to do effectively due to a large number of barriers imposed by the government. Owing to the failed policies of the government and the presence of a corrupt bureaucratic system, the inflation rate has been sky-rocketing. Only in 2001, the inflation was at its lowest at 12.5 percent.

Labour Force Participation

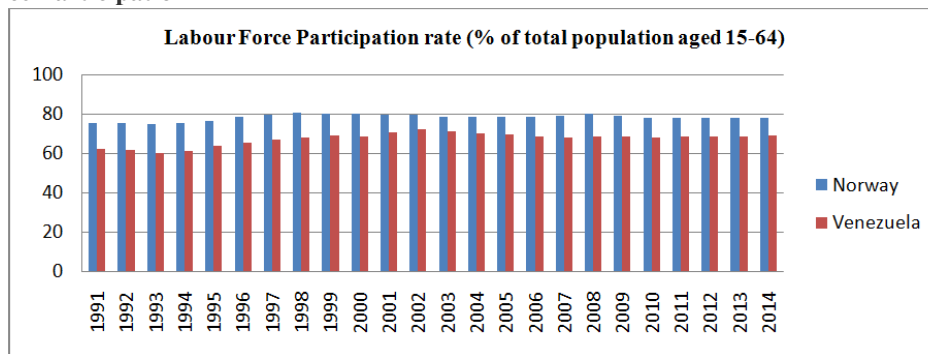


Figure 4: Comparative labour force participation rate expressed as a percentage of total working population of the two countries from period 1991 to 2015

Venezuela has maintained a labour force participation of a minimum 60.2 percent and as of 2014, it stands at 68.9 percent. World of Work Report 2013 states that the labour market situation and job quality had deteriorated between 2007 and 2011. Despite an above average labour force participation rate, the productivity of Venezuela has not been commensurate due to labour market distortions and a weak institutional environment.

Unlike Venezuela, Norway maintains a higher labour force participation rate, with an average of 78.2 percent over 24 years. In 2012, Norway had the highest rate among the OECD countries. However the real participation rate is not that high because of low contractual hours, high number of days lost to sickness leaves and high part-time rate.

Foreign Direct Investment

In Norway, at the end of 1992, about one-third of foreign investment was in the oil and gas sector. The net inflows have been sporadic since the mid-1980s due to the impact of large individual operations and large loan repayments by a subsidiary to its foreign-owned parent company. This led to negative inflows in the year 1991.

In 2002, Venezuela faced the military coup and political instability which caused a significant drop in FDI in the oil industry, thereby leading to a reduction in net inflows from \$ 3704 million in 2001 to \$716 million in 2002. In 2006, as per the World Investment Report 2007, the negative inflows to the oil industry due to the financial transactions between Transnational Companies (TNCs) and the state-owned oil company PDVSA led to a sharp decline in FDI.

In 2009, both Norway and Venezuela faced a slump in FDI inflows; however, the latter was worse hit due to decline in oil prices and political instability.

A stable political environment and a well organised public sector make Norway an ideal hub for FDI. However, as its economy is largely dependent on the oil prices, due to the fall in the global oil prices in 2015, Norway witnessed disinvestments rather than the inflow of foreign investments. Despite large reserves of oil and a large domestic market, Venezuela ceases to be an attractive destination for foreign investments due to the uncertain business climate. A proof of the statement lies in the vast difference in the average figures of FDI inflows which are \$7185.7 million for Norway and \$2395.2 for Venezuela.

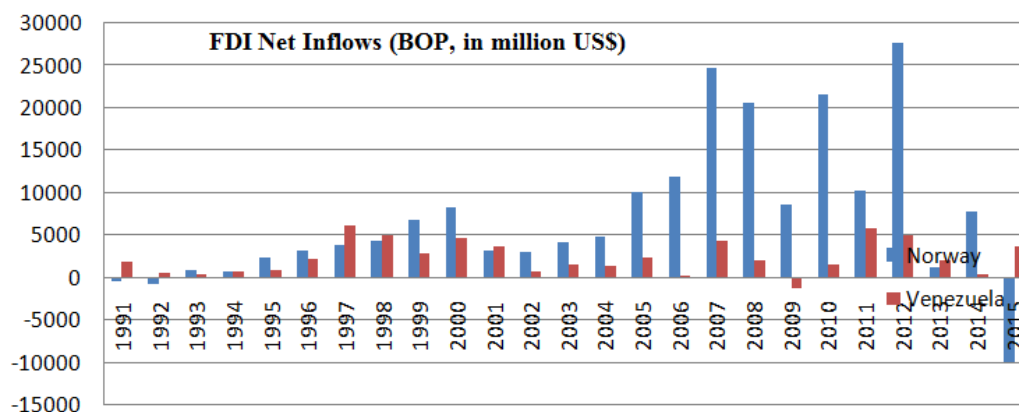


Figure 5: Comparative FDI Net inflows of the two countries from period 1991 to 2015

Corruption and Human Development

Table 1: Comparison of levels of corruption and human development between the two countries

Parameters	Norway	Venezuela
Corruption Perception Index 2014	87(Rank 5)	17 (Rank 158)
Human Development Index 2014	0.944 (Rank 1)	0.762 (Rank 71)

Venezuela is one of the most corrupt countries in Latin America, according to the 2014 report by Transparency International. Corruption in Venezuela has led to several cases of human right violation. Despite being an oil-rich country, Venezuela has lost a huge amount of public funds due to corruption which was accumulated for public welfare during the oil price boom periods.

On the other hand, another report by the same organisation states that Norway is one of the least corrupt countries in the world. However, Norway faces one setback which is limited enforcement of cracking down on bribing in Norwegian companies abroad.

The Human Development Index rankings are based on three basic areas — life expectancy, education, and standard of living. The HDI value of Norway and Venezuela are 0.944 and 0.762 putting them in a very high human development category and a high human development category respectively. Norway was ranked number one in 2014 and has held that position since 2001, except for the years 2007 and 2008.

Between 1980 and 2014, Norway’s life expectancy at birth increased by 6 years, mean years of schooling increased by 2.3 years, expected years of schooling increased by 4.4 years and GNI per capita increased by about 90.7 percent. For Venezuela, the life expectancy at birth increased by 6.1 years, mean years of schooling increased by 4.5 years, expected years of schooling increased by 4.2 years and the GNI per capita decreased by about 11.4 percent between 1980 and 2014.

V. Conclusion

An evaluation of the policies of both Norway and Venezuela analyzed through economic and social indicators, reveals the *causa proxima* to the stark economic differences between the two countries. A host of futuristic policies, systematized governance and a structured management of oil wealth prevented Norway from falling into the resource curse trap. On the contrary, decadent utilisation and management of resources, widespread corruption, excessive state intervention and a ragbag of economic and political decisions made it inevitable for Venezuela to escape this curse. Norway’s experience is a lesson for resource-rich countries, like Venezuela, that how the resource curse can be turned into a blessing with the implementation of right economical and political framework. In a state-led economy like Venezuela, it is vital to curb the illicit usage of revenues at the cost of deteriorating the economy. The Venezuelan government must lay emphasis on a stable inflow of petroleum wealth through mechanisms like the well managed Norway’s Pension Fund. Lastly, since oil reserves are public goods, the government must responsibly bear the onus of managing and utilizing its vast reserves through a scrupulous and transparent apparatus.

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