

Governance & Natural Resources: Evidence from OPEC Countries

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Abstract: The ‘curse’ that accompanies the prevalence of natural resources is well-documented and broadly-accepted. Natural resource wealth has fostered various political pathologies and in turn promoted poor development performance. But this is not certain. While most resource abundant countries have performed poorly in developmental terms, a few have done quite well. Natural resources induce prosperity in some countries but stagnation in others. Whatever the level of government, good management is a precondition for good performance. Natural resources are “governance-intensive” assets. In low-income countries, natural resources make up a very significant share of the total wealth, one that is substantially larger than the share of produced capital. Management of these natural resources can support and sustain the welfare of poor countries, and poor people in poor countries, as they move up the development ladder. Therefore, this study will examine the impact of dependence of natural resources on governance indicators. We will use the recent data available for governance indicators up to 2008 OPEC countries which have access to the relevant statistical data. Our findings based on comparing the mean of governance indicators for OPEC countries and other developing countries using SPSS support a better governance in other developing countries under considerations as compared to OPEC.

Key words: Natural Resources; Governance Indicators; OPEC Countries; SPSS.

INTRODUCTION

It is widely believed that natural resources are desirable. However there is robust empirical evidence for a negative relationship between natural resource wealth and economic growth. This is known as ‘Dutch Disease’. Most relevant here, however, are analyses that link natural resource dependence to poor governance? Natural resource extraction often brings with it localized governance failures and conflicts. And the conflict is derived from social and environmental impacts of the industry, perceived corruption and collusion by state officials with oil firms and limited access to oil receipts. Recently the World Bank has published six important indices concerning government intervention, its relationship with people, its role and its function. These indicators include:

- 1.Voice and accountability
- 2.Political stability
- 3.Regulatory quality
- 4.Rule of law
- 5.Governance efficiency
- 6.Control of corruption

The domain of indices of the factors above is between 1 and 100. The more closer the indicators are to 100, the better the performance of the country is in that field. This is especially true in developing countries, where natural resources play a major role in the composition of wealth. Government complacency linked to the “easy rents” generated by natural resource booms, which reduce incentives for economic reform and diversification. Easy rents often lead to high public consumption rather than investments. In this article, we compare the governance indicators of oil-dependent countries with that of the other developing countries.

Empirical Relationship between Natural Resources & Governance:

Auty (2006) in his study titled "*Sustaining Development in Mineral Economies: The Resource Curse*

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Thesis", expressed that natural resources and natural asset can distort the economy to such a degree that the benefit actually becomes a curse. With reference to six ore-exporters (viz. Peru, Bolivia, Chile, Jamaica, Zambia, and Papua New Guinea) he outlines how natural resources can go badly wrong. He expressed that Sustainable development in mineral economies requires rapid economic growth so that resource-conserving technology can be adopted and diversification is encouraged to complement the depleting mineral asset.

Hamilton (2006) in his study titled "*From Curse to Blessing*", expressed negative relationship between natural resource wealth and economic growth and argued that natural resource wealth partially determines the development paths of countries. He expressed that good governance is crucial to transform natural resource wealth into good economic performance.

Rosser (2006) in his study titled "*The Political Economy of the Resource Curse: A Literature Survey*", expressed that while the literature provides considerable evidence that natural resource abundance is associated with various negative development outcomes, this evidence is by no means conclusive and some political and social factors enable some resource abundant countries to utilize their natural resources to promote development and prevent other resource abundant countries from doing the same.

Shyamsundar & Araral & Weeraratne (2006) in their study titled "*Devolution of Resource Rights, Poverty, and Natural Resource Management*" expressed that the rights of local Communities over natural resources have been strengthened either through power-sharing agreements with the state, increased legal access to natural resources, or decentralization within national agencies. They expressed that the impacts of these institutional changes is important both for governments and other stakeholders. They argued the scope and scale of decentralized natural resource management in different resource sectors and the impacts of devolution, in terms of poverty reduction, resource conservation, and financial implications for governments and local agencies.

McDonald & Jumu (2008), in their study titled "*Can Tax Challenge Bad Governance?*" expressed that the money resource is important, and the money raised from taxation generates stronger state-citizen relationships than both aid and natural resources. They expressed that governments should use resources to increase investment and growth and development instead of relying on natural resources.

Torvik (2009) in his study titled "*Why do some resource-abundant countries succeed while others do not?*" expressed that the most interesting aspect of the paradox of plenty is not the average effect of natural resources, but its variation. Natural resources induce prosperity in some countries but stagnation in others. He discussed different theory models of the resource curse, with a particular emphasis on recent developments in political economy.

Cures resources:

At first we ask that are natural resources bad for development? And then we ask that what causes the resource curse? The composition of natural wealth in poor countries emphasizes the major role of subsoil assets. Oil -exporting countries with a very low share of intangible capital (10 percent) are another manifestation of the resource curse, indicative of very low rates of return to all assets in these economies. Resource poor countries engage earlier in labor intensive competitive manufacturing. Finally there are faster diversifications, higher saving rates, human and social capitals. Resource-rich countries may also pursue this virtuous circle of competitive industrialization, but their reliance on the primary sector tends to dampen industrialization. Moreover, natural resource rents favor the creation of factional states in which those managing the rents tend to create mechanisms to control economic and political power. This results in lower investment efficiency and finally slower economic growth. Long-run declines in primary product prices, which deprive countries of important financial resources over time. In such countries it is easier for states to simply buy votes than have to win them through public service delivery and investing in economic development. This curse is seen particularly with non-renewable resources such as oil. Government complacency linked to the "easy rents" generated by natural resource booms, which reduce incentives for economic reform and diversification. Easy rents often lead to high public consumption rather than investments. There is the interaction between government behavior and natural resource wealth. Good governance is crucial to transform natural resource wealth into good economic performance.

Breaking the curse:

Is there a recipe that a government can pursue to escape the curse? While guessing the intentions of government officials is not easy, judging their policies is much more straightforward. After all, governments' key task is to administer a country's wealth this is important to link performance to the actual changes in value of the portfolio. Countries that escaped the resource curse use resource rents as a source of investment rather than a source of public expenditure. Such countries have been transforming natural capital into produced

capital. Exhaustible resources, once discovered, can only be depleted. The key policy issues are investing resource rents effectively and maintaining fiscal stability. A successful recipe includes avoidance of external debt, diversification of the economy, and the use of public expenditures to counter the boom and bust effect of the natural resource market. For example, by keeping a sharp focus on the fiscal aspects of natural resources, achieve remarkable economic performance. Living resources are a potentially sustainable source of resource rents truly a gift of nature. Therefore Sustainable management of nonrenewable natural resources requires clear and enforced property rights to provide incentives for investment and long term management of the resources.

Model, Data, and Estimation Methodology:

This article divides the world countries into two groups.

- Dependent countries to natural resources (OPEC)
- Other developing countries

In this study, the population includes 212 countries. The statistical data is related to 2008. In this method, we compare and test the means of governance indicators for opec countries and other developing countries. By using the data of 2008 and the SPSS software, the averages of each indicator for the two groups of countries are obtained.

Table1: The mean of governance indicators for OPEC countries

x		v.a2008	p.s2008	r.q2008	r.l2008	g.e2008	c.c2008
1	Mean	29.5455	40.6364	37.4545	36.6364	38.5455	41.0909
	N	11	11	11	11	11	11
	Std. Deviation	2.42502E1	3.35955E1	3.07160E1	3.49665E1	3.14463E1	3.46770E1
Total	Mean	29.5455	40.6364	37.4545	36.6364	38.5455	41.0909
	N	11	11	11	11	11	11
	Std. Deviation	2.42502E1	3.35955E1	3.07160E1	3.49665E1	3.14463E1	3.46770

EISource: authors' analysis on data from World Bank

Table1: The mean of governance indicators for other developing countries

x		v.a2008	p.s2008	r.q2008	r.l2008	g.e2008	c.c2008
0	Mean	51.5556	50.8543	51.1574	51.0603	50.9005	50.7919
	N	198	199	197	199	201	197
	Std. Deviation	2.89467E1	2.87910E1	2.88345E1	2.86659E1	2.90587E1	2.88687E1
Total	Mean	51.5556	50.8543	51.1574	51.0603	50.9005	50.7919
	N	198	199	197	199	201	197
	Std. Deviation	2.89467E1	2.87910E1	2.88345E1	2.86659E1	2.90587E1	2.88687

EISource: authors' analysis on data from World Bank

As it is clear, average of the indicators is almost higher in other developing countries. In this part, in order to review indicators and comparing the impact of natural resources on governance indicators, the test of mean difference has been used. If \bar{X}_{1i} is average governance index in OPEC countries and \bar{X}_{2i} is average governance index in other developing countries, governance indicators tests the following hypothesis.

$$\begin{cases} H_0 : \mu_1 = \mu_2 \\ H_1 : \mu_1 \neq \mu_2 \end{cases}$$

As for the variance inequality for test hypothesis, we use following t test with degree of freedom as

$$n_1 + n_2 - 2$$

$$t = \frac{(\bar{x}_{1i} - \bar{x}_{2i}) - 0}{\sqrt{\frac{\delta_{1i}^2}{n_{1i}} + \frac{\delta_{2i}^2}{n_{2i}}}}$$

With considering significant level and as the freedom degree is $n_1+n_2 -2$, fiscal t placed in critical area, in this case H_0 hypothesis is rejected and H_1 hypothesis is accepted. Results of mean difference test are shown in table3:

Table 3:

	t	df	Test Value=0 sig.(2-tailed)	Mean Difference	95%Confidence Interval of the Difference	
					Lower	Upper
V. A D=0	25.062	197	0.002	51.55556	47.4987	5506124
V. A D=1	4.041	10	0.000	29.54545	13.2539	4508370
P.S D=0	24.917	198	0.000	50.85427	46.8295	54.8790
P.S D=1	4.012	10	0.002	40.63636	18.0666	63.2061
R.Q D=0	24.902	196	0.000	51.15736	47.1058	55.2089
R.Q D=1	4.044	10	0.002	37.45455	16.8193	58.0898
R.L D=0	25.127	198	0.000	51.06030	47.0530	55.0676
R.L D=1	3.475	10	0.006	36.63636	13.1456	60.1272
G.E D=0	24.834	200	0.000	50.90050	46.8588	54.9422
G.E D=1	4.065	10	0.002	38.54545	17.4195	59.6714
C.C D=0	24.695	196	0.000	50.79188	46.7356	54.8482
C.C D=1	3.930	10	0.003	41.09091	17.7946	64.3872

D=0 independence on natural resources

D=1 dependence on natural resources

Findings and Concluding Remarks:

Based on results in table 3, we consider that mean difference test is significant for all indicators. We result that natural resource extraction often brings with it localized governance failures and conflicts. Natural resources are gifts that require proper management to provide sustained growth. Revenues from natural resources have strengthened to the connection between state and citizens. Good governance is crucial to transform natural resource wealth into good economic performance. Moreover, natural resource rents favor the creation of factional states in which those managing the rents tend to create mechanisms to control economic and political power. Rents are deployed through indirect means such as trade protection, unproductive job creation, and overextended public expenditure. The curse may be avoided when strong institutions are already in place, but the question is what to do where those institutions are weak at the outset? The two main solutions focus on *transparency* – ensuring that the amount the state receives for the resources are known to its citizens; and *ownership* – ensuring that natural resources are perceived as belonging to all (rather than the elite). In oil countries oil and gas companies do not sufficiently report on their payments to governments. They call for mandatory reporting of all payments to governments by domestic oil and gas companies at home and abroad. local control of natural resources motivates long-term investments and favors management accountability and performance. Sustainable management of nonrenewable natural resources requires clear and enforced property rights (individual or communal) to provide incentives for investment and long term management of the resources. A crucial aspect in natural resources governance is the involvement of the relevant actors.

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