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Original Article

Does Oil Rent Governance Impact Local Economic Development? Evidence from Congo

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Abstract *- Oil revenue provides considerable financial power and a strategic position on the international scene for exporting countries. However, it remains a source of vulnerability for African oil economies in general and the Congo in particular. The discovery and exploitation of oil resources is not a guarantee of development and growth.This paper seeks to understand why the oil rent did not impact the economic development of the Congo positively.*

Based on the World Bank WDI and the UNDP database, the study used econometric analysis using the error correction vector method (VECM).

The results revealed that oil rent significantly and negatively affects the development of Congo.The declines in growth and development in the Congo are mainly linked to excessive dependence on oil revenues, the deterioration of governance, and the spread of corruption.

Keywords *- oil rent, Economic development, Congo.*

I. INTRODUCTION

One of the most haunting questions in development economics is whether natural resource endowments promote or hamper economic growth and development. Indeed, oil revenues have enabled economic prosperity in many oil-exporting countries through large investments in infrastructure, human capital, and social services. However, many studies report that abundant natural resources may, in fact, be detrimental to the economy. This phenomenon, known as the resource curse, has come to be associated with any perverse consequence of a country's natural resource wealth on its social, political, and economic welfare.Farid GASMI AndImène LAOURARI (2016).

According to Maloney (2002), historical analysis shows that natural resources, especially oil, have often supported the economic development of several great powers.The importance of this resource in the development process seems irrevocable. Oil was at the origin of the second industrial revolution, which allowed the development of the automobile and means of transport in general.Looking at the United Nations human development report (2015), we can see that major oil-producing African nations like Nigeria, Angola, Algeria, Libya, Egypt, Sudan, equatorial guinea, and the Republic of Congo are at the top of the list. However, in Africa, the use of oil revenues by the public authorities raises growing questions because of their impact on the distribution of wealth and development.Congo is recognized as the fifth-largest petroleum producer in sub-Saharan Africa (after Nigeria, Angola, Gabon, and Equatorial Guinea. Petroleum has long become the most important aspect of the national economy, accounting for more than half of GDP, about 85 percent of government revenues, and over 90 percent of exports. Since Oil production commenced in 1957 from the onshore Pointe Indienne field, the country has had a turbulent and disappointing development record and remains significantly oil-dependent. The scramble forcontrol of natural resource rents has contributed to weak oil sector governance and to political upheavals and conflicts.

Indeed, in the mid-1960s, Congo reached a peak output of about 2,500 barrels per day. During the 1980s and 1990s, Congo's crude production quadrupled, from 65,000 barrels per day in 1980 to an average of 280,000 barrels per day. Since then, production has been falling, largely due to a decline in production of mature fields and delays in bringing several new fields online. Congo experienced an almost continuous decline in per capita income between 1985 and 2000. This negative trend took place in the context of an overvaluation of the CFA franc in the second half of the 1980s and early 1990s, an acceleration of rural-urban migration in the 1980s, and three successive civil conflicts in the 1990s. One decade later, Congo has shown some signs of improving governance. After three years (2011, 2012, and 2013) of weak economic growth, the Congo achieved strong growth in 2014. Growth reached 6.0% in 2014, compared with 3.3% in 2013, driven by the rebound in oil production (60% of gross domestic product [GDP]) and the strong performances in the non-oil sector, supported by continued public investment. Inflation declined from 4.6% in 2013 to 3.0% in 2014 as a result of falling food prices.

Despite this improvement, growth remains below the level needed to achieve the country's developmentgoals.(WorldBank2015). Congo remains a poor country, with 70% of its population living below the

poverty line and 35 percent living in conditions of extreme poverty FIDH (, 2004). Gross domestic product (GDP) per capita has remained almost unchanged (still below US$1,200), and there are few signs of multiplier effects from the oil industry.

This situation suggests a reflection on the link between oil revenue and economic development. Does the oil rent contribute to Congo's economic development? In other words, does the oil represent a curse or blessing for the Congolese economy?

The aim of this study is to understand why Congo's oil revenue did not generate economic development.

Hypothesis:mismanagement and dependence on oilrenthamper the economicdevelopment of the Congo.

The importance of this study is to promote economic development through the oil windfall.Thus, this oil windfall should have allowed a process of economic growth and promoted adequate development policies to improve the living standard of the Congolese population.

The remainder of this paper is organized as follows: the second point focuses onthe theoretical and empirical literature on oil revenue and economic development.It will also address the curse of resources.The third point presents the methodology.The fourth point reports the empirical results using a vector error correction model (VECM) to evaluate the impact of oil revenue on the development of Congo, the nextpoint gives Interpretation and discussion,and the last concludes.

II. LITERATURE REVIEW

A. The theoretical review

To understand the notion of rent, we will talk about traditional theories of international trade. Traditional theories of international trade and specialization allowus to understand how differences in factor endowments give rise to trade (Smith A., 1776, Ricardo D., 1817, Heckschern1919, Ohlin1933, and Samuelson, 1948).

Thus, the mercantilists in the 16th century studied the means available to a country to enrich itself. The enrichment of a country should come from the surplus of the trade balance. They advocated protectionism and had the motto: "export more, import less". Moreover, they argued that international trade is like "a zero-sum game. The theory of absolute benefits states that if a country has an absolute advantage in the production of a good over its trading partner, it would be mutually beneficial for everyone to specialize in the good for which they have a benefit. This theory leads to international specialization and the international division of labor. However, the theory of absolute benefits is only valid if each country has at least one product for which it has an absolute advantage. So what happens when a country has no absolute advantage? Ricardo (1817) answers this question by proposing, for this purpose, the theory of comparative advantages. For this theory, it is not the absolute advantage that determines international trade but rather the comparative advantage. By demonstrating that trade between two countries will lead to reciprocal gains, He introduces in his theory the concept of opportunity cost. H-O-S theory states that countries should export goods whose production intensely uses the factors with which they are abundantly endowed. But, given the strong special preferences. Leontief (1953) shows the limits of this theory by the tests on the American economy. Indeed, while the United States has one of the highest per capita capital ratios, it exports relatively intensive products to work. Inversion by demand is presented as one of the explanations of Leontief's paradox (1953).

Two sets of economic arguments are developed to explain the poor performance of resource-rich countries.
The first set of arguments refers to the Dutch disease theory (Dutch disease). The dutch disease establishes the link between natural resource dependence, exchange rate appreciation, and low economic growth.

Two effects are present in dutch disease: the movement effect and the expenditure effect. The second set of economic arguments refers to volatility (instability) in natural resource prices and mainly to the volatility of oil prices (Van der Ploeg, 2007)

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This study is based on the theory of the curse of natural resources, which is in line with the explanations of long-term growth by variables of political economy: The dependence of an economy on a primary resource hampers growth and development.

B. The empirical review

Most of the literature on the economic performance of Africa's natural resource-rich countries does not move away from the "natural resource curse" orientation. However, it should be emphasized that most studies, which are empirical in this framework, do not directly test the natural resource curse hypothesis in a sample of African countries.

Thus, Mouhoubi (2011) presented the undesirable consequences induced by the rent of natural resources. By applying a new method of appropriating the net natural rent that has allowed the economy to reap a large financial windfall quite different from the tax, he argued that the processes of exploiting natural resources generate shortfalls in development.

Aoun (2006), whose purpose was to understand why the oil surplus of the oil-exporting countries did not generate economic development, using the following variables: Human Development Indicator; Life expectancy of the population; Child mortality rate; Population literacy rate; Combined gross enrollment ratio (primary, secondary and tertiary); Per capita health expenditure in purchasing power parity in current dollars; GDP per capita in

purchasing power parity in current dollars; Ratio of oil rent to GDP from the MCO method over the period 1975-2003, found a high dependence of GDP on the oil rent has a negative impact on several development indicators.

Sala-i-Martin, Doppelhofer et al. (2004) rank natural resources as one of the ten most significant and robust variables in their empirical studies of economic growth.

Leite and Weidmann (1999) worked on the period 1970 to 1990. Proceeding by the regression of the least-squares in two stages, the authors show using the variables as the commercial opening, the initial income; natural resources; hydrocarbons, and diamonds have a stronger negative impact on economic growth than agricultural resources.

Moreover, the literature on the link between rent and economic development is very rich. Several empirical studies attempt to examine the link between oil rent and economic development but to different degrees. Generally, the studies evoked proceeded by OLS method, less square weighted...In our study, we use the approach of a Vector Error Correction Model (VECM) applied in the case of Congo to highlight the possible relation of the oil rent with economic development.

C. Factors of the underdevelopment of African oil countries, including the Congo.

In many regions, oil wealth is a source of instability, corruption, and civil wars. The use of oil income does not always contribute to poverty reduction and equitable economic growth. Oil management remains a private affair between the government and the approved petroleum company. (Ngodi 2005 a)

Congo Brazzaville situation

Congo-Brazzaville is the fourth-largest producer after Nigeria, Angola, and Equatorial Guinea. Oil export receipts increased from $ 820 million in 1994 to $ 7 billion in 2008, with oil production of 350,000 b / d (2010 estimates). The French company Total E & P controls 2/3 of its production, and the remaining 1/3 is shared by the Italian companies ENI,Maurel& Prom, in partnership with the national oil company in Congo (SPNC). Black gold accounts for 90% of these export earnings. The opaque management of revenue is accompanied by the expansion of corruption. Oil revenues are expected to provide a sufficient basis for the development of a country of about 4 million inhabitants, but weak institutions and the state's reliance on petrodollars have not put Congo in a position to negotiate well its oil contracts.

Successive civil wars between 1993 and 1999 and dependence on oil have increased fiscal disorder. Congo Brazzaville has never really defined a coherent fiscal strategy to deal with fluctuations in the oil price and the limited nature of its oil resources. If the absence of a savings fund can be explained by the need for the reconstruction of the country's post-war period, the absence of a stabilization fund, designed to cope with the evolution of oil revenues according to oil price fluctuations, is really worrying (Global witness 2017). Global Witness (2003) accuses Elf of institutionalizing opacity, favoring governments that do not respond to their management, massive indebtedness, and chronic instability. The NGO explains how Congo, with about 4 million inhabitants, became the most indebted country in the world with 6.4 billion dollars to repay to foreign creditors. (Smith 2004)

FIDH (2004) has shown that 70% of the Congolese population lives below the poverty line. Yet oil is an important economic potential representing 70% of the GNP, 90% of the exports, and 80% of the revenues of the State. With this observation, the FIDH mandated an international fact-finding mission to answer a double question: Why a country with such economic potential sees its population in such a precarious situation? Where does the oil money go, and what is it for, since it does not improve the fundamental rights of the population? The international conventions that Congo has ratified require it to do so?

To answer these questions, the FIDH has notably conducted an analysis of the state budget and management mechanisms for oil revenue, the main "recipe" of the budget.

The mission report mentions serious violations of human rights. It details the responsibility of all stakeholders involved in oil in Congo-Brazzaville and makes recommendations to each of them. (FIDH 2004)

In the Congo, oil is certainly a great opportunity for development, but its preponderant share in the ever weakly diversified economy has always been perceived as a threat.

III. METHODOLOGY

A. Theoretical model

The model used in this paper is an ad-hoc model. In fact, according to economic literature, a natural resource is an essential factor for growth or even development.For Solow (1976) and Stiglitz (1972; 1973), the natural resource is a factor of economic growth provided that it has a perfect substitution between natural resources and technical progress.In this same vision,Georgekish (1976) thinks that there can be no development without natural resources.Consequently, the development of a country depends on the exploitation of its resource.Thus, if a country is an oil exporter, its development can be formalize as follows: $D = (X, R)$ (1)

D is development, X other factors, and R is the rent from the natural resource. In the context of this thesis, development is captured by HDI, and X is made up of (unemployment rate, GDP/h, and infant mortality rate). (1)become $\mathrm{HD}_t = (\mathrm{GDP/h}, RENT, \mathrm{UNR}, \mathrm{IMR})t$ (2)

and (2) becomes : $HD_t = \alpha lnGDP/h_t + \beta lnRENT_t + \gamma UNR_t + \lambda IMR_t$ (3)

To estimate equation (3) and after linearization, we obtain :

$$IDH_t = C_t + \alpha lnGDP/h_t + \beta lnRENT_t + \gamma UNR_t + \lambda IMR_t + \varepsilon_t \quad (4)$$

With IDH = development;C = constant;RENT = the oil rent;UNR = the unemployment rate;GDP = Gross domestic product per capita;IMR = infant mortality rate;α, β, γ, λ = the elasticities associated with the respective parameters, Ɛt = the term of the error.

B. Variables justification

Based on theoretical work and empirical studies by other authors. We chose five variables that reflect the context of the Congo and present the relationship between oil and the economic development of the Congo.

C. Endogenous variables

a. Human Development Index.

The Human Development Index (HDI) is a composite statistical index created by the United Nations Development Program (UNDP) in 1990 to assess the human development rate of the world countries. The HDI was then based on three criteria: GDP per capita, life expectancy at birth, and education level of children aged 15 and over. The HDI is n composite index, dimensionless, between 0 (execrable) and 1 (excellent).

The choice of this variable is justified by its simplistic definition of human development. It's a very transparent method of and its backing to an important international organization: United Nations

D. Variables of interest

a) Oil rent

As we mentioned above, oil rent can be defined as the share of oil surplus that results from the characteristics of the oil field and various factors that affect the price of oil.

In reality, the empirical literature has not resulted in a consensus on measures of natural resource wealth. But we use the oil-to-GDP ratio measuring dependency on the oil sector, as Atkinson and Hamilton (2003) and Collier and Hoeffler (2005) explained. The data comes from the World Bank, which calculates the (mining) rent as the difference between the total production (sold at the international price of crude) and the cost of production. The choice of this variable is explained by its importance in the Congolese economy, particularly its contribution to the state budget through the petroleum tax system. The expected sign of this variable is negative.

b) GDP per capita (GDP / h)

Gross domestic product per capita is an indicatorof the level of economic activity. This indicator is sometimes used to approximate income per capita, the latter indicator being more rarely available. In general, GDP is used at purchasing power parity (PPP). It is considered one of the best indicators for assessing the level of economic activity. Stigliz (2008) recommends that income and consumption rather than output be referred to in the material well-being assessment. Thus, taking this variable into account will allow us to understand the importance of oil for effective household consumption.

c) The unemployment rate (UNR)

The unemployment rate is the share of the labor force that is jobless, expressed as a percentage. The active population is the population of working age who works or wants to work. An unemployed person is a person who does not have a job and who is looking for one.

The definition of the unemployment rate in the sense of the International Labor Office (ILO) is a recognized definition but subject to small differences in interpretation. Some institutions, such as the OECD, calculate harmonized unemployment rates for international comparisons. The unemployment rate is calculated in the different countries through the employee survey.

We chose this variable because the unemployment rate is an economic statistic heavily used by the media to present the economic situation of a country. The employment rate, which takes into account the distribution of the population among active and inactive, more accurately reflects the use of a country's labor force.

d) The infant mortality rate(IMR)

Infant mortality rate (IMR) is the number of deathsper 1,000 live births of children under one year of age. The **rate** for a given region is the number of children dying under one year of age, divided by the number of live births during the year, multiplied by 1,000. We chose this variable because it is an important determinant of development. It measures the results of development rather than its inputs. It also offers valuable information on a wide range of factors such as nutritional status, income, and food available to the household, access to drinking water, basic sanitation, overall environmental safety of the child ... U N IC E F(2008) All these data were collected over the period from 1987 to 2017 and are available on the World Bank WDI database (2018) and on the UNDP HDI database (2018).

E. Estimation procedure and method

The estimation of an econometric model is conditioned by the existence of stationarity of the variables.We use three stationarity tests: the DuckeyFuller Enhanced Test (ADF), the Philips and Perron (PP) test, and the Kwiatkowski, Phillips, Schmidt, Shin (KPSS) test. The use of these is conditioned by the fact variables must be distributed normally, better still follow a normallaw.

The variable's normal distribution is apprehended from their descriptive statistics:the Jarque-Bera coefficient and its associated probability. The following table presents the summary of the descriptive statistics.

Table 1. Descriptive Statistics of Main Variables Used in Empirical Analysis

	HDI	LNGDP	LNRENT	UNR	IMR
Mean	0.527900	12.65064	3.624994	12.94040	58.31333
Maximum	0.592000	12.80500	4.074858	19.30000	76.60000
Minimum	0.487000	12.50296	2.899901	9.982000	33.20000
Std. Dev.	0.035176	0.085695	0.308279	2.523161	14.32270
Jarque-Bera	2.677033	1.570720	2.084967	3.306664	2.673186
Probability	0.262234	0.455956	0.352578	0.191411	0.262739
Observations	30	30	30	30	30

Source: Authorfrom Eviews7

The results in this table show that on the one hand: the HDI, rent, and GDP / h show a high concentration (low standard deviations) around the average value, and on the other, the unemployment rate and the infant mortality rate showed low concentration (large standard deviations) around the mean value. These small dispersions are justified by the fact that the Congo is an underdeveloped country and depends on the oil rent; the national wealth is unequally distributed.The high dispersion of the unemployment rate and the infant mortality rate is justified because, in Congo, the level of unemployment and infant mortality is high.

***a) Augmented* Dickey-Fuller test.**

In contrast, with the simple Dickey-Fuller tests that are performed under the assumption that the process is white noise, in the Augmented Dickey–Fullertests, there is no reason to consider a priori that the error is not correlated. The Augmented Dickey-Fuller **test**, therefore, take into account the autocorrelation error hypothesis and are therefore under the alternative hypothesis absolute value $\Theta 1 < 1$, on the estimation by Ordinary Least Squares of the following models: Model (A): $\Delta Y_t = \lambda Y_{t-1} - \sum_{i=2}^{k} \text{i}\Delta Yt - i + 1 + \varepsilon_t$

Model (B) : $\Delta Y_t = \lambda Y_{t-1} - \sum_{i=2}^{k} \text{i}\Delta Yt - i + 1 + c + \varepsilon_{t\varepsilon}$

Model(C) : $\Delta Y_t = \lambda Y_{t-1} - \sum_{i=2}^{k} \text{i}\Delta Yt - i + 1 + C + b_t + \varepsilon_t$

b) Phillips and Perron test (1988)

The Phillips and Perron test is built on a nonparametric correction of Duckey Fuller to account for heteroscedastic errors. four stages are necessary:

- Estimate by OLS of the three models of Duckey-Fuller test bases and calculation of associated statistics;
-Estimation of the so-called short-term variance: $\sigma 2 = \frac{1}{n}\sum_{t=1}^{n} e_t^2$
- Estimation of a corrective factor s_t^2based on the structure of the error variances of previously estimated models so that the transformations carried out lead to distributions identical to those of the standard Duckey Fuller:

$s_t^2 = \frac{1}{n}\sum_{t=1}^{n} e_t^2 + 2\sum_{1}^{I}(1 - \frac{i}{I+1})\frac{1}{n}\sum_{t=i+1}^{n} e_t e_{t-1}$

An estimate of the long-run covarianceis necessary to determine the number of delays

estimated according to the number of observations n: I= $4(n/100)^{2/9}$

- Calculating Process Capability (Pp): $t_{\phi 1}^{*}\sqrt{k} \times \frac{\emptyset 1 - 1}{\sigma_{\phi 1}} + \frac{n(k-)\sigma_{\phi 1}}{\sqrt{k}}$ avec k $= \frac{\sigma^t}{s_t^2}$

This statistic must be compared to the critical values of Mac Kinnon

c) The* Kwiatkowski–Phillips–Schmidt–Shin*(KPSS) test

The Kwiatkowski–Phillips–Schmidt–Shin (KPSS) test figures out if a time series is stationary around a mean or linear trend or is non-stationary due to a unit root. A stationary time series is one where statistical properties like the mean and variance are constant over time.

- The null hypothesis for the test is that the data is stationary.
- The alternate hypothesis for the test is that the data is *not* stationary.

the results are reported in Table 2

Table 2. Stationarity test results

Test Variables		With constant and without trend	With constant and trend	Without constant and without trend	critical value at the 0.05 significance level	Test statistic	Decisions
HD	ADF	yes	No	No	2.991878	-3.072932	I(0)
	PP	No	yes	No	3.580623	-5.167402	I(1)
	KPSS	No	yes	No	0.146000	0.188574	I(0)
RENT	ADF	yes	No	No	2.967767	-3.569115	I(0)
	PP	yes	No	No	2.967767	-3.463051	I(0)
	KPSS	yes	No	No	0.463000	0.379000	I(0)
UNR	ADF	No	No	yes	2.971853	-7.077170	I(1)
	PP	No	No	yes	1.953381	-8.754585	I(1)
	KPSS	No	yes	No	0.146000	0.101537	I(0)

GDP/h	ADF	No	No	yes	1.953381	-4.749153	I(1)
	PP	No	No	yes	1.953381	-4.749918	I(1)
	KPSS	yes	No	No	0.463000	0.316018	I(0)
IMR	ADF	No	Oui	No	3.580623	-7.348432	I(0)
	PP	No	No	No	1.953858	-0.271532	I(2)
	KPSS	yes	No	No	0.463000	0.443922	I(0)

Source: Author from Eviews7

Respectively by the stationarity tests of ADF, PP, and KPSS. The results show that some of the study variables are stationary in level and others in first difference. The variables used in this study are integrated into order 1.

The variables being integrated of the same order, we can then proceed to the study of their long-run behaviors, that is to say, to check if there is at least a cointegration relation between variables can be tested by Johansen Cointegration Test.

d) Johansen cointegration test

Johansen's test is another improvement over the Engle-Granger test. It avoids the issue of choosing a dependent variable as well as issues created when errors are carried from one step to the next. As such, the test can detect multiple cointegrating vectors. Severaltest statistics like Akaike Information Criterion (AIC) or Schwarz Bayesian Criterion (SBC) are used to select the order of Vector Autoregressive Models (VAR) in Johansen's cointegration technique.

Table 3. Results for the Cointegration Tests

Data Trend:	**None**	**None**	**Linear**	**Linear**	**Quadratic**
Test Type	No Intercept	Intercept	Intercept	Intercept	Intercept
	No Trend	No Trend	No Trend	Trend	Trend
Trace test	3	4	5	4	5
Maximum Eigenvalue Test	2	2	2	2	2
*Critical values based on MacKinnon-Haug-Michelis (1999)					

Source: Author from Eviews7

IV. ESTIMATION RESULTS

The results obtained from the estimate are divided into results relating to the speed of adjustment towards the long-run target and those relating to the estimation of the short-term model.

The exogenous variables used in this study explain the endogenous variable at 82.5936% (R2 = 82.5936%). This model validation allowschecking the reliability of the error correction model. According to estimation results, the model to be retained is D (HDI), a value of restoring force is negativeand significantly different from zero. The coefficient associated with the error term is negative and significantly different from zero at the 5% threshold (0.916394; [-4.82992]), then we can confirm the existence of an adjustment relation towards the long-run equilibrium. Table 5 shows different adjustment speeds of the VECM.

Table 4. The*speed* of *adjustment towards* the long-run *target*

(HDI)	**D(LNGDP)**	**D(LNRENT)**	**D(UNR)**	**D(IMR)**
-0.916394**	-2.008967	6.925969	156.3173**	19.06620
[-4.82992]	[-1.60210]	[0.54136]	[3.44615]	[1.14688]

Source: Author from Eviews7

NB: numbers in square brackets are the t-student, and ** represent the significance at the 5% threshold. Besidesrestoring force coefficient,which is negative and significant, all autocorrelation function terms (single and partial) are within the confidence interval represented by the vertical lines and are not significantly different from zero. So H0 hypothesis is confirmed based on the absence of self-correlation between errors. The residue is white noise, and the results can be analyzed.

Table 5. *Estimation result* of *long-run model*

HDI(-1)	1.000000	
LNGDP(-1)	-0.074102	[-2.74779]**
LNRENT(-1)	-0.024961	[-4.74622]**
UNR(-1)	-0.003292	[-9.11607]**
IMR(-1)	0.002675	[13.6369]**

Source: Author from Eviews7

This table shows that in the long term: the GDP / h, the dependence on the oil rent, and the infant mortality rate have a significant and negative impact on the development of the Congo. So, a 1% increase in GDP / h decreases the development by 0.074102%. Both variables move in opposite directions. A 1% increase in oil dependency decreases Congo's growth by 0.024961%. Both variables move in opposite directions. The increase of one unit of unemployment decreases the development of 0.003292 units. The infant mortality rate is positive and significant. Both variables move in the same direction. The increase of one unit of infant mortality increases the development of 0.002675unit.

Table 6. *Estimation result* of *short term run model*

D(HDI(-1))	0.308913	[1.77076]
D(HDI(-2))	0.122419	[0.72323]
D(LNGDP(-1))	-0.080891	[-1.85110]
D(LNGDP(-2))	0.011662	[0.31234]
D(LNRENT(-1))	-0.017961	[-3.36205]**
D(LNRENT(-2))	-0.010906	[-1.89700]
D(UNR(-1))	-0.000842	[-1.47767]
D(UNR(-2))	-0.000786	[-1.50237]

D(IMR(-1))	-0.012662	[-4.97757]**
D(IMR(-2))	0.016241	[4.79387]**
C	0.004197	[2.59886]**

Source: author from the results obtained on Eviews 7

As evidenced in the table, the key finding is that, in the short term: the dependence on the oil rent is negative and significant. The increase of 1% of the dependence on the oil rent decreases the development by 0.017961%. Both variables move in opposite directions. The infant mortality rate is negative. The increase of one unit of infant mortality decreases the development of 0.012662unit. The GDP / h and Unemployment are likely to impact the development of Congo negatively.

V. INTERPRETATION AND DISCUSSION

The results show that in the short term as well as in the long run, the dependence on oil rent has a negative effect on the HDI. The main lesson is that reliance on oil revenues has a negative impact on development.

In fact, the unrestrained exploitation of hydrocarbons accelerates the drying up of deposits in the long run and threatens the destiny of future generations if the success of public development policies put into effect proves to be a failure. The activities of the extractive industry and the consumption of hydrocarbons have a decisive impact on the environment. Pumping facilities, pipelines, refineries, and marketing infrastructure most often result in deforestation, forced displacement of people, pollution, and other serious environmental damage. Oil consumption is one of the major factors of global warming, which is detrimental to sustainable development.

Import, not production, becomes the indirect counterpart for the transfer of rent. In addition to the evil effects of oil revenues, the satisfaction of galloping consumption and investment needs of agents in the oil-producing countries in general and in Congo in particular forces the public authorities to incur colossal external debts. This, in the hope and hypothesis of the sustainability of export earnings of hydrocarbons. The disappointing results in economic development and poverty in Congo are attributed to poor governance. Institutions and governance roles become paramount in an oil economy like the Congo. The expansion of the petroleum sector encourages the adoption of rent-seeking behavior by many entrepreneurs. These activities also fuel corruption. The oil industry has for many decades been characterized by a very heavy opacity and regular diversions of financial flows. Moreover, oil revenues are delaying democratic reforms, as the state is moving away from taxing citizens. In certain extreme situations, rent can even result in total institutional collapse and generate conflicts and civil wars for the appropriation of resources. The Congo suffers from the natural resource curse phenomenon.

There is opposition to Maloney's (2002) thinking that there is little evidence of the relative underperformance of resource-rich countries over the long run. According to him, historical analysis shows that natural resources, especially oil, have often supported the economic development of several great powers. Thus the results validate the work of Aoun (2006),Sala-i-martin and Subramanian (2003), Ross (2001a), who argued that a high dependence of GDP on oil rent has a negative impact on development.

This econometric analysis supports the consensus established by several authors on the failures of development policies in economies dependent on a natural resource. Looking at the Human Development Index (HDI) as an indicator of Congo's development, we find that dependence on oil revenue is a drag on economic development.

GDP / h has a negative coefficient in the long term. This result is due to the fact that Congo's oil revenues are unequally distributed. Indeed, this result shows that the presence of oil did nothing to reduce poverty; she rather exacerbated it.

The infant mortality rate has a positive long-run coefficient. This result is mainly due to the fact that over the last decades, oil revenues have been used to reduce infant mortality from 75 per 1000 live births in 2005 to 39 per 1000 in 2011. Important measures have been implemented by the authorities for the reduction of infant mortality: free vaccines, advanced vaccination strategy, integrated management of childhood illnesses, use of community relays, etc.The unemployment rate influences development in a negative way. In the long run, Congo's economic growth is largely due to the mining sector (oil), which is poorly integrated with the rest of the economy,which can create enough jobs.

The high level of youth unemployment is the result of several factors. The main reasons for youth unemployment are the lack of job creation in the formal sector due to the weak diversification of the economy, the regulatory and institutional environment that is not conducive to the development of the private sector and therefore to jobs creation and, to a lesser extent, labor regulations. This statement highlights the need to promote the development of non-oil sectors in order to increase the number of jobs in line with growth.

VI. CONCLUSION

The negative effect of oil wealth on economicdevelopment and poverty of oil-producing countries has generated a global awareness of the oil curse phenomenon. The discovery and exploitation of oil resources is not a guarantee of development and growth. On the contrary, the experiences of the African oil economies in general and the Congo, in particular, prove that the oil rent is rather a curse.

The objective of our study was to understand why the oil rent did not generate the economic development of the Congo. Then, we used econometric analysis using the error correction vector method (VECM). As a result, oil rent significantly and negatively affects the development of Congo. The declines in growth and development in the

Congo are mainly linked to excessive dependence on oil revenues, the deterioration of governance, and the spread of corruption. Our hypothesis has been verified.

To ensure Congo's development: It is necessary to manage oil resources in a professional manner by creating funds provided for future generations and by investing in the diversification of economic activities. The government must also establish a rate of exploitation and polluter pays to protect the environment in order to achieve sustainable development.

In order to overcome the curse of natural resources: the government must work for the fair distribution of the fruits of oil by investing the revenues generated in the social sectors by offering the services at a reduced cost to the populations; the government must also invest in other sectors than oil (agricultural, manufactured ... ..) in other words the economic diversification.

Other measures would include better involvement of civil society in decision-making processes, including the dissemination of information on the exploitation of oil and other resources; consultations of organized groups in the drafting of contracts. Each actor would be called upon to contribute to the transparency of oil revenues for development to avoid rent-seeking behaviors.

VII. REFERENCES

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