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JOBLESSNESS IN THE MIDST OF RICHES: WHAT FACTORS REINFORCE THE RESOURCE-CURSE SYNDROME IN NIGERIA?

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ABSTRACT

Despite the large inflow of government revenue through crude oil sales, unemployment rate still soars, and Nigeria's inability to fully utilize its potentials has been cited as the basis for its recent economic recession. Our paper investigates the impact of oil revenue on unemployment situation in Nigeria in an attempt to provide current empirical evidence for Nigeria's resource-curse syndrome. Based on the Keynesian theory of output, income and employment, we estimate a dynamic multivariate autoregressive distributed lag (ARDL) model using Nigeria's quarterly time series data for the period 1991Q1 to 2016Q4. In addition to capturing the dynamic characteristic of oil revenue-unemployment relation, the model also allows for oil revenue interaction with institutional framework and corruption tendencies as defined respectively by quality of institution and corruption perception indexes. We find positive impacts of oil revenue on unemployment for the first and second quarters after which it turned negative in the third quarter. We also find that weak institutions and high level of corruption reinforces resource-curse syndrome in Nigeria. We therefore conclude that building strong institutions is a prerequisite for quelling the negative effect of oil revenue on unemployment.

Keywords: Nigeria, oil revenue, resource-curse, unemployment

JEL: E24, F43

Introduction

Unemployment rate is an important macroeconomic variable which reveals the health status of an economy as well as gauges the number of people who do not have jobs but are actively searching for one. It is currently is a serious threat to the Nigerian economy because labour, which is an active ingredient for Nigeria's industrialization process, is in abundance but

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underutilized. Idle manpower therefore constitutes economic wastes, social disorder, and a source of human suffering to the Nigerian economy.

The production and export of crude oil play a significant role in the Nigerian economy as it accounts for about 97% of its export earnings (Kachukwu, 2016**)**. Studies have shown that resource-rich countries are prone to various levels of unemployment depending on how well revenue accruable from these natural resources are harnessed and utilized (Halvor, Moene, & Ragnar, 2006; Sachs & Warner, 1997). The oddity of resource-poor economies surpassing resource-rich economies in terms of economic progress has been a constant subject of debate (Olayungbo & Adediran, 2017). For instance, while resource-rich economies like Angola and Nigeria have low economic growth with high unemployment rates, nations with fewer natural resources such as the Asian tigers - Singapore, Hong Kong, Taiwan, and Korea are enjoying high economic growth and low unemployment rates (Sachs, 2005). The *resource curse scenario*, a situation in which nations with rich resources have low growth rate and high unemployment rate, may be credited to institutional arrangements which may be *producer-friendly* or *grabber-friendly*, depending on the quality control put in place by the economic and resources managers (Halvor, Moene & Ragnar, 2006). Grabber-friendly institutions are recognized in the presence of weak rule of law, corruption and malfunctioning bureaucracy (Olayungbo & Adediran, 2017).

The connection between oil revenue and unemployment is indirect: Cash inflow from sale of crude oil enhances the capacity of the government to provide and distribute productive resources in the economy. As Keynes argued, increased fiscal action of this sort raises the productive capacity of the country leading to increased demand for labour which expectedly reduces unemployment rate. This implies that, though indirect, the theoretical relationship between oil revenue and unemployment is negative because oil producing nations generate huge amount of revenue from crude oil sales and thus should be in better positions to contain unemployment through efficient market system as well as infrastructural development.

Nigeria ranks the 13th oil producing nation in the world. According to the Global Economy (2016), world ranking for oil rents placed Nigeria on the top 21st position and Nigeria also maintains the eighth position among the 15 countries that exported the highest value worth of crude oil in 2017. Expectations are that spin-off in efficient allocation of resources should create jobs on a regular basis. Successive Nigerian governments have made various efforts targeted at addressing the persistent unemployment problem even as its economy prospers from crude oil sales. For instance, the military rule, which hitherto, has been blamed for misappropriation of revenue generated from crude oil sales, has been displaced by democracy since 1999 but the issue of unemployment still persists. Fiscal and monetary policies geared towards curtailing Nigeria's swelling unemployment rates have not yielded much. In addition to this, there have been heavy government funding of the Graduate Internship Scheme (GIS) and the Subsidy

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Reinvestment and Economic Empowerment Programmes (SURE-P) introduced in 2012, as well as the N-Power programme introduced in 2016 by the current federal government, all designed to solve the problem of youth unemployment. There is also the inclusion of entrepreneurship studies in tertiary education curriculum to prepare graduates for self-employment. Despite these efforts, the level of unemployment increased from 13.3% in Q2 2016 to 13.8% in Q3 2016 and further to 14.2% in Q4 2016. The increase continued in the second quarter of 2017 as it stood at 16.2%, 18.8% in Q3 2017, 22.7% in Q2 2018 and 23.1% in Q3 2018 (NBS, 2017, NBS, 2018).

Some influential studies have discussed oil revenue-economic growth nexus (Ogbonna & Ebimobowei, 2012; Hamdi & Sbia, 2013; Aregbeyen & Kolawole, 2016; Nweze & Edame, 2016; Nwoba & Abah, 2017). There are, however, limited studies on the extent to which oil revenue impacts on unemployment in Nigeria. More so, the resource-curse literature has ignored the incorporation of institutional dynamics into the explanation of this prevalence. This study is an attempt to fill these identified gaps. We expect our efforts to provide policy makers with recommendations which will re-enforce programs and projects designs geared toward reduction of unemployment in Nigeria. The introduction of institutional framework into our analysis also aims at providing deeper understanding on how institutional framework amplifies the oil revenue effect on unemployment in Nigeria.

The rest of this paper is organized as follows: Section two provides stylized information on oil revenue and unemployment in Nigeria, Section three provides a review of extant literature, Section four describes the methods employed in the study. Section five presents the results and provides policy implications while Section six concludes the study.

Stylized Facts on Oil Revenue and Unemployment in Nigeria

From the 1950's to the early part of 1970's, even though agriculture was the main stay of economic activity in Nigeria and constituted its major export component, its import was dominated by manufactured goods. Since the late 1970s when oil became the mainstay of the Nigerian economy, government revenue pattern changed with oil sources accounting for a large chunk. Before this period, agriculture contributed about 70 percent of the country's gross domestic product, employed about 70 percent of the populace and accounted for about 90 percent of its foreign exchange earnings and government revenue (Gaiya, Ikenna-Ononugbo & Ajala, 2016).

This aggravated Nigeria's dependence on oil and made it vulnerable to world oil price fluctuations. The revenue sources in Nigeria are divided into oil and non-oil. Oil revenue sources comprise of receipts from crude oil export, domestic crude oil sales, royalty, petroleum profit tax, gas sales, and gas flare penalty while non-oil revenue includes company income tax,

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education tax, broad receipts from custom/excise duties, rents on government property, independent revenue of the federal government, and value added tax (Gaiya et al., 2016). Despite fluctuations in oil revenue due to volatility in oil price, oil revenue remains the main contributor to total revenue in Nigeria. Figure 1 shows that oil revenue has remained the major contributor to Nigeria total revenue. In percentage terms, it increased from an average of 69.6 per cent in 1981-1985 to 71.4 per cent in 1986-1990. It further increased to 80.4 per cent in 1991-1995 and fell to 75.7 per cent in 1996-2000. The global financial crisis which occurred between 2008 and 2009 further affected oil contribution to total revenue as there was a drastic fall in international oil prices leading to a decline in oil of 77.6 per cent in 2006-2010 from 79.4 per cent in 2001-2005, while the drop in oil price in the second quarter of 2014 also led to a further drop to 73.1 percent in 2011-2014. The non-oil sources of revenue have been relatively low except in 2016 where its contributions to total revenue were higher than oil revenue.

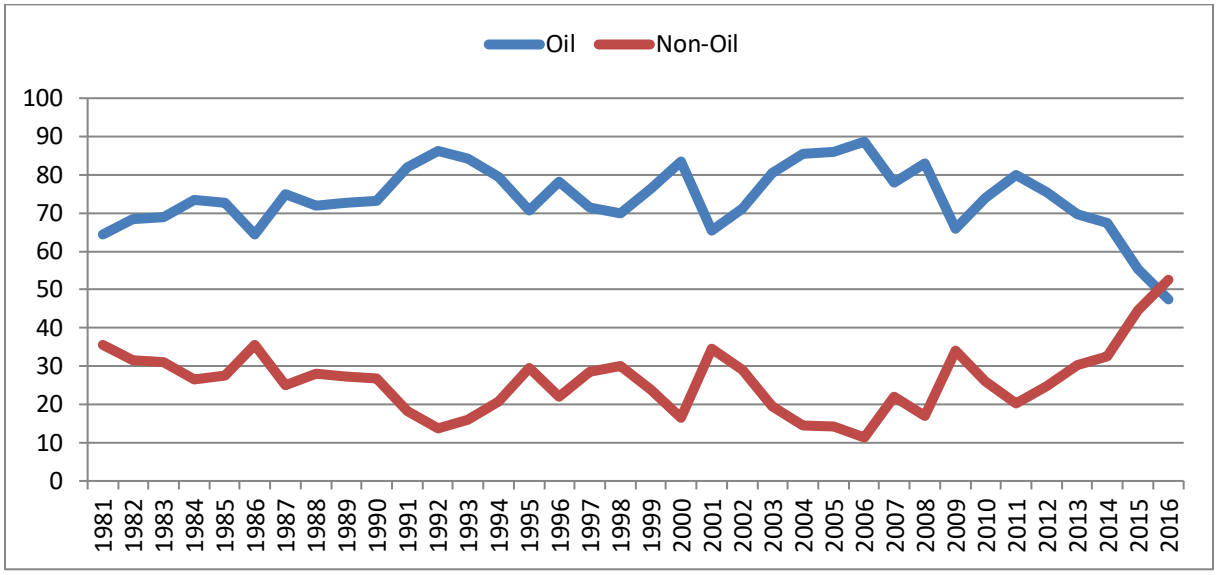

Figure 1: Oil and Non-oil Revenue as a ratio of Total Revenue (%)

Source: Authors' computation using data from the CBN Statistical Bulletin, 2016

As a percentage of GDP, oil revenue remains the major contributor to Nigeria's GDP. Oil revenue's contribution to GDP had been stable since the 1980s but rose sharply after 1998 showing the impact of oil price volatility on economic growth of Nigeria (Gaiya et al., 2016).
Since the turn of the new millennium, Nigeria's unemployment rate has been on the increase. As indicated in Figure 2, Nigeria's unemployment rate has grown at a compound annual average of 4.8 percent, even as it continues to intensify.

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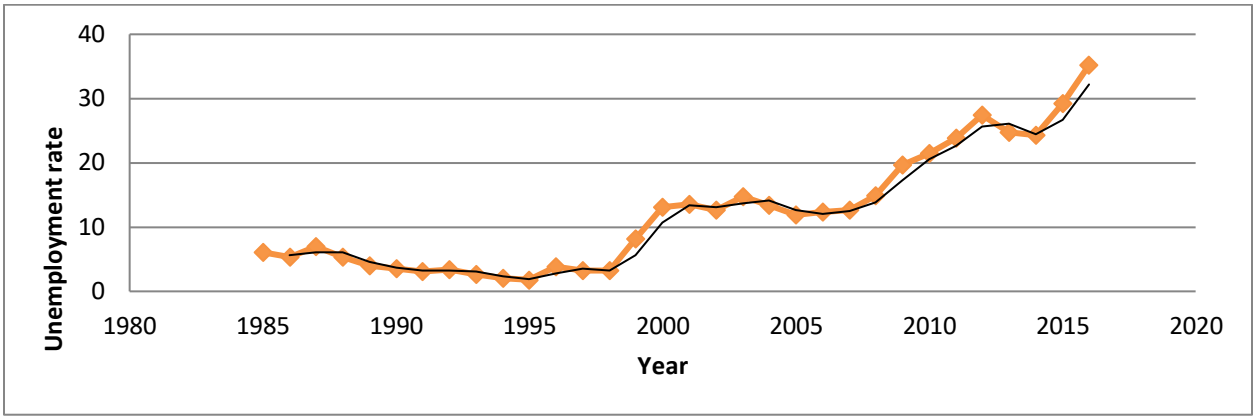

Figure 2: Unemployment in Nigeria (%)

Source: National Bureau of Statistics (Various Years)

Regardless of the high prevalence of subsistence farming, rural unemployment is on the increase as opportunities continue to shift away from agriculture (see Table 1).

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Table 1: Unemployment and Underemployment by Resident and Sex

	Unemployment rate				Underemployment rate			
Year	Urban	Rural	Male	Female	Urban	Rural	Male	Female
2015q1	8.8	7.0	6.3	8.9	8.6	20.0	13.9	19.6
2015q2	10.1	7.4	6.9	9.6	9.6	23.8	15.4	21.6
2015q3	12.1	9.0	8.3	11.6	9.0	21.0	14.6	20.4
2015q4	12.8	9.5	8.8	12.3	9.7	22.6	15.7	22.0
2016q1	15.0	10.8	10.3	14.0	9.5	23.5	16.2	22.2
2016q2	17.8	11.3	11.5	15.3	9.6	23.8	16.4	22.4
2016q3	18.3	11.8	12.0	15.9	9.8	24.4	16.7	22.9
2016q4	18.4	12.3	12.3	16.3	10.5	25.8	17.9	24.2
2017q1	17.1	13.2	12.7	16.2	10.2	25.0	17.7	23.2
2017q2	20.3	14.4	14.0	18.2	8.8	26.4	20.4	22.0
2017q3	23.4	16.4	16.5	21.2	9.0	26.9	20.5	21.8
2017q4	18.7	21.1	19.3	21.6	13.8	23.2	19.2	21.8
2018q1	20.2	22.7	20.8	23.0	14.5	23.0	18.2	22.5
2018q2	21.5	23.3	20.0	26.1	15.5	22.3	15.4	25.9
2018q3	21.2	23.9	20.3	26.6	13.7	22.8	15.4	25.9

Source: NBS (Various Years)

The main reasons for the large variations across the rural and urban labour categories are caused by stagnating production and low productivity in the sector where majority of the rural population is engaged (Ajakaiye, Jerome, Nabenna, & Alaba, 2016). World Bank (2015) notes that the unemployment rate is much higher in the northern part of Nigeria where majority of the population is engaged in subsistence agriculture and relatively lower in the southern part of the country where a large number of persons are self-employed. In terms of gender, there is a higher incidence of unemployment for women than men, with their access to quality job opportunities declining even further in recent times.

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Table 2: Unemployment and Underemployment by Age Distribution

	Unemployment					Underemployment				
Year	15-24	25-34	35-44	45-54	55-64	15-24	25-34	35-44	45-54	55-64
2015q1	13.7	8.2	4.9	4.7	5.2	30.6	17.7	11.0	10.4	11.5
2015q2	14.9	8.9	5.4	5.1	5.6	33.8	19.5	12.1	11.5	12.7
2015q3	17.8	10.8	6.5	6.2	6.8	31.8	18.5	11.5	10.9	12.1
2015q4	19.0	11.4	6.9	6.5	7.1	34.5	19.9	12.3	11.7	13
2016q1	21.5	12.9	8.1	7.6	8.5	34.6	19.9	12.8	12.2	13.6
2016q2	24.0	14.5	8.1	8.3	9.1	34.2	20.5	13.2	11.3	13.8
2016q3	25.0	15.0	8.5	8.6	9.5	34.9	20.8	13.5	11.5	14.1
2016q4	25.2	15.4	8.8	8.9	9.8	36.5	22.1	14.5	12.4	15.1
2017q1	25.3	15.0	9.8	9.3	10.3	34.8	21.6	13.9	13.3	14.7
2017q2	29.5	17.4	9.9	10.1	10.8	35.1	22.2	16.6	11.7	15.4
2017q3	33.1	20.2	11.7	12.0	12.7	34.2	22.3	17.0	12.0	15.7
2017q4	32.8	22.2	14.8	14.1	14.1	34.8	20.5	16.1	11.9	15.7
2018q1	36.0	23.9	15.5	14.2	14.2	33.4	20.6	16.0	11.5	16.2
2018q2	38.0	24.8	15.9	14.4	14.8	32.4	20.4	16.7	11.3	16.0
2018q3	36.5	24.4	16.1	16.5	19.1	32.1	20.7	17.0	11.4	15.5

Source: NBS (Various Years)

On the other hand, Nigeria's youth unemployment is increasing (see Table 2) and is at the crises level. This presents a dangerous scenario which is expected to erode human capital and cause misery, tension within the family, mental health issues, de-skilling, rise in poverty levels, loss of motivation, and social exclusion among other expectations (Nedeljkovic, 2014). Bakare (2011) envisages that youth unemployment can also result in psychological crisis including hopelessness, frustration, loss of confidence and self-esteem, hostility and gradual drift of some of the unemployed youth into all manners of criminality.

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In recent times, there are increasing concerns that the character and strength of an economy's institutional environment could have nontrivial implication for its macroeconomic outcomes. Although both the classical and neoclassical theorists assumed away the place of institution in economic process, Stein (1994) argued that this neoclassical view has been countered by the institutionalists' views led by Coarse (1992). Coarse (1992) and Laitner (2000), relying on the same neoclassical precepts, see institutions as frameworks that must be concertedly established to reduce transaction and information costs. The institutional environment of an economy defines the legal and administrative framework within which individuals, firms, and governments interact. It determines the quality and efficiency of both public and private transactions and has a strong bearing on an economy's competitiveness and growth (World Economic Forum, 2018). It influences investment decisions, organization of production and trade, and plays a key role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies.

Institutional environment (which define how the superstructure operate, infrastructure are assigned, and the rules of the game) determine the nature and magnitude of economic outcomes. In assessing an economy's institutional framework, the logistic performance index (LPI), custom efficiency index, quality of infrastructure index, quality of institution index and competiveness index are engaged.

Whereas the logistic performance index (LPI) is an interactive benchmarking tool created to help countries identify the challenges and opportunities they face in their performance on trade logistics; the custom efficiency measures efficiency in custom clearance service, quality of infrastructure measures the extent to which quality of infrastructure support production and trade; quality of institution index captures the extent to which strength of legal and administrative framework of an economic influences the efficiency and behavior of both public and private institutions; while the global competitiveness index captures the fundamentals of an economy and is a compendium of indicators which measure of how well an economy can sustain basic economic activities of production and consumption.

Table 3 show that Nigeria score very low in all measures of institutional framework.

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Table 3: Logistic performance index, Custom, Infrastructure and Economic Complexity Ranking for Selected Countries (2018)

Countries		Germany	Singapore	Belgium	South Africa	Nigeria
Score (Rank)	Logistic Performance Index (LPI)	4.23(1st)	4.14(5th)	4.11(6th)	3.78(20th)	2.68(90th)
	Custom Efficiency	4.12(2nd)	4.18(1st)	3.83(13th)	3.6(18th)	2.46(92nd)
	Quality of Infrastructure	4.44(1st)	4.2(6th)	4.05(14th)	3.78(21st)	2.4(96th)
	Quality of Institution Index	5.30(21st)	6.08(2nd)	5.02(25th)	3.81(76th)	3.17(125th)
	Global Competitive Index	5.57(4th)	5.72(2nd)	5.25(11th)	4.39(49th)	3.46(124th)

Source: World Economic Forum (2018)

In 2018, Nigeria was ranked 90th 92nd, 96th and 124th in LPI, custom efficiency, quality of infrastructure, quality of institution and competitiveness respectively. In all the rankings, the gap between Nigeria and South Africa (which is Nigeria's closest rivalry in terms of GDP size) is quite wide. This is suggestive of the poor institutional framework that characterizes Nigeria's economic environment. Thus we argue that institutional environment is the macroeconomy pass-through for oil revenue.

A Review of Extant Literature

Keynesian economics stress the relationship between income, output and employment. It maintains that employment first depends on effective demand and then results to output. Output, in turn, creates income and income furthermore provides employment opportunities. Since Keynes assumed equality between effective demand, output, income, and employment; employment is thus regarded as a function of income and effective demand is determined by interactions between aggregate supply and aggregate demand. While aggregate supply depends on physical (technical) conditions which may remain unchanged in the short run, Keynes focused on aggregate demand to fight depression and unemployment such that the level of employment in the short run is dependent on the effective aggregate demand of products. Increases in effective demand thus increases employment, vice versa. A decline in effective demand would therefore increase unemployment of resources.

Implicitly, it is unexpected that resource-rich countries like Nigeria should experience unemployment situations because with increases in oil revenue, government expenditures are expected to boost private consumption by a multiplier. In theory, increases in government expenditure have tendencies to increase per capita income, consumption, investment, output and employment. Alternatively, increased inflow of oil revenue should reduce domestic tax propensity, leaving more disposable income in the hands of the people for entrepreneurial development and employment generation. The Keynesian theory of income, output and

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employment provides theoretical solutions to the unemployment problem as it explains how increasing government intervention through fiscal actions like raising expenditure would help to solve unemployment problems. It therefore underscores the theoretical basis for our study.

There are plethora of studies on the nexus between crude oil dynamics and the macroeconomic environment over the past three decades. For instance: Studies have investigated relationships between oil price and macroeconomic variables. The seminal work of Hamilton (1983) for the United States of America as well as Jiménez-Rodríguez and Sánchez (2004), for Canadian, Norwegian, Japanese, German, France and United Kingdom economies, found evidences of granger causality from oil price to economic growth. For the Ghanaian economy, Awunyo-Vitor, Samanhyia, and Bonney (2018) found an inverse relationship between oil price changes and economic growth although this was not statistically significant in the long run.

Evidences from Chikwe, Ujah, & Uzoma (2016) showed a significant relationship between oil price and macroeconomic variables for the Nigerian economy. Using the ordinary least square method, Malik (2010), Mhamad and Saeed (2016), and Burakov (2017) all found positive and significant impacts of oil prices on economic growth for Pakistan, Iranian and Russian economies respectively. Conversely, while Olaokun (2000) found that oil price increase impacted negatively on economic growth for both Ghana and Nigeria, Kim and Willett (2000) reported the same result after interrogating a panel data for OECD countries. Gadea, Gómez-Loscos, and Montañés (2016) did not find any significant effect between oil prices changes and economic growth in the United States' economy.

Other studies have established relationships between oil price and employment generation. For instance, Alkhateeb, Mahmood, Sultan, and Ahmad (2017), using Saudi Arabia's time series between 1980 and 2015, found positive contributions of oil price increase on employment generation. Hooker (1996) explored the casual link between oil price, economic growth and employment in USA and found a causal effect running from oil price increase to income and employment increases in first period but insignificant effects on subsequent periods. Altay, Topcu, and Erdogan (2013) probed the causality between oil price, economic growth and employment in Turkey and reported a short run unidirectional effect from oil prices towards employment as well as a positive long run effect of oil prices on both employment and economic growth.

Millington (2016) divulged the hostile effects of falling oil prices on employment in the Canadian economy while Hamilton (2016) found that employment declined in West Texas was due to declines in oil prices. Using cointegration approach, Gil-Alana (2003) found that oil price was a major factor responsible for unemployment in Australia.

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Studies for the Nigerian economy have established mixed evidences. For instance, while Ogbonna and Ebimobowei (2012) reported a positive and statistically significant impact of oil revenue on each of per capita income and economic growth in Nigeria, Hamdi and Sbia (2013) as well as Aregbeyen and Kolawole (2016) proved that oil revenue remains the principal source for growth and the major channel which government spending is financed. Asogwa and Okpongette (2016) also found positive and significant impact of oil revenue on economic growth in Nigeria. Similar result was reported by Nwoba and Abah (2017) using ordinary least square and Olayungbo and Adediran (2017) discerned that in the short run, oil revenue advanced economic growth but impacted negatively on oil revenue in the long run. Nweze and Edame (2016) confirmed that oil revenue negatively impacted on economic growth in the short run but established positive impact in the long run. Adedokun (2012) confirmed that oil export revenue had a positively significant impact on Nigeria's economic growth and on the relationship between oil revenue and industrial growth, while Ijirshar (2015) confirmed that in the long run, oil revenue positively and significantly impacted on industrial growth in Nigeria.

The rich empirical literature on the relationship between oil dynamics and the Nigerian macroeconomy focused on the oil price-economic growth/employment relationship on one hand and oil revenue-economic growth relationship on the other. To this end, we focus on filling this knowledge gap as literature survey show a dearth of studies on the impact of oil revenue on unemployment in Nigeria.

Data and Estimation Procedure

We utilize quarterly time series on oil revenue (oilrev), unemployment (unem), institutional quality index (IQI) and corruption perception index (CPI). The dataset was obtained as annual data and then converted to quarterly data using Denton (1971) frequency conversion methodology. Oil revenue data was obtained from the Central Bank of Nigeria (2016) Statistical Bulletin. Unemployment data was obtained from National Bureau of Statistics, (2014, 2016) and institutional quality index (IQI) was obtained from World Bank global competitive index. The institutional quality index is a composite indicator computed from the following indices: regulatory quality, government effectiveness, rule of law, corruption, voice and accountability; it measures the strength of public institutions. Corruption perception index was obtained from Transparency International. For estimation purposes, oil revenue was adjusted using IQI and CPI in order to account for how institutional dynamics affects the impact of oil revenue on unemployment in Nigeria. In this regard, institution-adjusted oil revenue and corruption-index-adjusted oil revenue were derived as follows:

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Institution-adjusted oil revenue (iiaoilrev) = oil revenue x IQI

Corruption-index-adjusted Oil revenue (ciaoilrev) = oil revenue x CPI

Following Pesaran and Shin (1999), an ARDL (1, q_k) model was specified as follows:-

$$unem_t = \Pi + \Omega_t + \beta unem_{t-1,i} + \sum_{p=1}^{P}\sum_{q=0}^{Q} X_{j,t-i},'\omega_{.j,i} + \Phi rgdpg_t + \varepsilon_t$$

Where X is a *1 x k* vector of explanatory variables such that X = oilrev, iiaoilrev and ciaoilrev. Ω_t and $unem_{t-1}$ are time effect and lagged unemployment. Controlling time effect and unemployment is very important to capture first order endogeneity due to unobserved heterogeneity and omitted variables. RGDPG entered the model as a fixed deterministic regressor. Three regressions were estimated for i= 0, i = 1 and i = 2. Before feeding the time series into the ARDL framework, OILREV was smoothed using Hodrick-Prescott (H-P) filter. H-P is a two-sided linear filter that chooses to minimize:

$$\sum_{t=1}^{T}(y_t - s_t)^2 + \gamma\sum_{t=2}^{T-1}((s_{t+1} - s_t) - (s_t - s_{t-1}))^2$$

Where *s* is the smoothed series of y (= OILREV). γ is the penalty parameter that controls the smoothness of the series *s*. Also, as γ approaches ∞, *s* approaches a linear trend. All analyses were done using the econometric views software version 10.

Result Presentation and Policy Implications

Table 1 presents a summary of the regression results for the first, second, and third estimates.

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Table 1. Summary of Regression Results for First, Second and Third Estimations.

Explanatory variables[a,b]	(1)	(2)	(3)
$Unem_{t-1}$	0.183527	0.236396	1.121281***
	(0.229943)	(0.311409)	(0.405280)
OILREV	-0.015820***	-0.012049**	-0.003308
	(0.005299)	(0.006440)	(0.005282)
$OILREV_{t-1}$		-0.084021***	-0.010557
		(0.005927)	(0.006859)
$OILREV_{t-2}$			0.021030***
			(0.007097)
OILREV x CPI	0.046010***	0.020030***	-0.000912
	(0.006065)	(0.007057)	(0.000746)
$(OILREV \times CPI)_{t-1}$		0.106080	0.001994*
		(0.700505)	(0.001017)
$(OILREV \times CPI)_{t-2}$			0.001801**
			(0.000674)
OILREV x IQI	0.070106***	0.040920***	0.010706
	(0.020801)	(0.005042)	(0.000704)
$(OILREV \times IQI)_{t-1}$		0.030601***	0.001458
		(0.011073)	(0.001006)
$(OILREV \times IQI)_{t-2}$			0.101809
			(0.001331)
RGDPR	0.493564**	0.046957	0.001517***
	(0.204085)	(0.118428)	(0.000493)
Intercept	Yes	Yes	No
Time Effect	Yes	Yes	Yes
Obs	108	104	106
R-squared	0.553	0.682	0.796
F-statistic(Prob)	26.27(0.001)	24.76(0.001)	38.94(0.001)

a. Standard error for each parameter is shown in the bracket underneath the parameter

*b. *,**, and *** indicate statistically significant at 10%, 5% and 1% significance level.*

We observe that increases in oil revenue are associated with falls in unemployment in the first and second quarters. However, in the third quarter oil revenue becomes positively associated with unemployment. Specifically, unemployment falls by 0.016% and 0.08% in the first and second quarter respectively and then rises by 0.02% in the third quarter as oil revenue increases by ₦1. We also notice that in all three regressions, the effect of oil revenue on unemployment diminished progressively. This is shown clearly in row 3.

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As the lag length increased from 0 to 1 and to 2, the effects of current oil revenue on unemployment diminished in magnitude from 0.02 to 0.01 and 0.003 respectively. This trend suggests that as oil revenue increases, revenue expectation effect materializes immediately thereby raising employment marginally but unemployment gradually return to its previous level (and also surpasses its previous level) as expectation dies gradually from the second quarter.

However, as oil revenue interacts with corruption and quality of institution, its effect on unemployment reverts. Notice that average Transparency International Corruption perception index for Nigeria is 1.73 on a 10-point scale. The World Bank Global Competitive Index also indicates that Nigeria's average quality of institution index is 3.09 on a seven-point scale. Both indicators advocate that Nigeria has high corruption level with a weak institutional framework. Evidences obtained from the estimates shown on Table 2 indicate that corruption and weak institutions suppress the negative impact which oil revenue could have had on unemployment. These findings do not only reinforce the resource-curse hypothesis in Nigeria but also provide plausible explanation for its prevalence.

Oil revenue constitutes over 97% of export earning accruing to the Nigerian government. As oil sales increase, the surge of capital inflow, following rises in crude oil sales, appreciates the naira exchange rate (a dutch disease syndrome). Except this revenue surge is utilized in creating incentives for market processes, the distortion-effects of this phenomenon is retardation in economic activities in the tradable sectors of the Nigerian economy (including manufacturing and solid mineral sectors).

The suboptimal institutional and regulatory frameworks deny the tradable sectors opportunities of increased economic activities especially when macroeconomic costs of increased oil revenue more than offset the benefits of oil revenue. Consequently, unemployment rises more intensely in the tradable sectors (and marginally in the oil sector) as the non-tradable sectors of the Nigerian economy (especially the agricultural and service sectors as well as the informal market economy) can barely absorb minimal labour.

When an economy is bedeviled with high corruption and weak institution, the capital surge effect of oil revenue dominates and as Ross (1999) asserts, this rent-capturing effect reinforces unemployment. Ross (1999) further argues that the interaction between oil-rent and institution is a dynamic process. First, oil-rent first weakens the institutional framework; political office holders as well as public servants who draw large oil largesse are likely to dismantle any institutional framework that can hinder their amassment drive. In turn, through the resulting weak institutions, revenue leakages are sustained over time. Hence the interaction between weak institution, corruption and oil revenue short circuits the theoretical effect of oil revenue on unemployment. In resource-rich countries like Nigeria, oil revenue is largely diverted from

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source due to absence of accountability which is reinforced by the presence of weak institutions. Also, remitted revenue that enter into the budget process are either siphoned or misappropriated thereby weakening the fiscal multiplier (Ajibolade & Oboh, 2017). It is this internalized large-scale corruption and the perceived institutional weaknesses that largely discourage investments and expansion of economic activities in the tradable sector thereby shrinking macro employment opportunities in Nigeria. In other words, instead of engendering productivity gains and employment, oil windfalls amplifies deindustrialization of the Nigerian economy which in turn leads to worsening unemployment crisis in the country.

Conclusion

This study has, as its key finding, evidences to support the fact that forces of corruption and institutional weakness reinforce the resource-curse syndrome in Nigeria. Large flow of oil revenue into government coffers do not translate into acquisition of social and productive capital, technology and infrastructural facilities that could enhance job creation. Today, oil rents have deteriorated and further de-industrialized Nigeria's crude oil and other tradable sectors. Good macroeconomic policies are precursors of economic progress and development. Such policies should include establishing frameworks to ensure that bureaucracy is reduced and revenues from crude oil sales are adequately channeled towards developing and maximizing activities in the non-oil sector. It is expedient therefore that the Nigerian government pays primary attention towards building strong institutions and implementing policies aimed at reducing Nigeria's corruption index.

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