

Effect of Mining Generated Revenue on the Economic Development of the Niger Delta Region of Nigeria

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ABSTRACT: *The Niger Delta Region in Nigeria's economy has been a focus of mining companies in recent years, and this has caused economic instability, thus this research looks into the relationship between earnings from mining and Niger Delta's overall growth. The study focused on which factors influence the profits of Mining businesses in Nigeria, and especially looked at how the values of crude petroleum and gas, solid mineral, manufacturing, and agriculture are influencing profit. The research drew information from annual reports and other documents produced by oil companies. According to the findings, the value of crude petroleum and gas (VCPG) has a role in determining the personal income of mining businesses in Nigeria. Per capita income will rise during the duration of the research because of VCPG's positive effect on the two mining businesses. There's a correlation between the value of mineral minerals and mining businesses' per capita income in Nigeria. It follows that VSM has increased the size of the per capita revenue of the companies substantially. The worth of the building has a considerable influence on the income of mining organizations in Nigeria. In addition, we have evidence that the Value of Manufacturing decreases the price of a company's ordinary share throughout the study. The relationship between the value of agriculture and mining business per capita income in Nigeria is negligible. Based on the findings, the researcher recommends that the government develop consistent policy guidance, which will create an enabling environment for the private sector to invest more in mining and help the country with new jobs and greater wealth, among other things.*

KEYWORDS: Per capita income, Revenue from Mining, economic growth, crude petroleum and gas, the value of manufacturing, the value of agriculture.

INTRODUCTION

Akonji & Wakili (2019) contend that Nigeria is abundant in reserves of immobile natural resources spread across its geospatial zones. At present, Nigeria possesses more than 450 mineral-rich sites in which various varieties of commercial-grade minerals are located. Developing solid minerals, considering the huge amounts of this material in Nigeria, may help the nation's economy expand faster and generate money while creating jobs and reducing poverty. Akonji and Wakili (2019)

cite Edeme, Onoja, and Damulak (2018), who highlight that real mineral development, due to its capacity to provide quick economic growth and drive job creation, is the essential instrument for economic diversification in Nigeria.

Many countries' economic and social growth is tied to the presence of some types of rock. Even though there is an inconsistency in the natural resource scenario: Nations and areas with a lot of non-renewable resources, including minerals and fuels, have slower economic growth and inferior development results compared to countries with few natural resources (Akujuru, 2016). Studies like those on the environmental impacts of resource extraction in Nigeria reveal that natural resources, such as mineral deposits, provide challenges to economic prosperity. Sachs and Warner's study discovered that nations with lots of natural resources tended to have a slower economy compared to those without natural resources. This was shown by a 20-year study (1970-1990) they did on natural resources. Their findings suggest that, after everything is accounted for, mineral resources do not have a substantial impact on economic growth, and that as such, there is a correlation between resource scarcity and economic growth. A rise in the appreciation of the revenue from this resource leads to volatility in revenue due to government mismanagement of corrupt and unstable institutions and agencies, which results in an appreciation of the country's revenue from the sole resource, leaving other economic sectors in ruin, according to Przeworski (2017). In Akujuru (2016), government receipts from the discovery of natural resources are highlighted in particular. People think that resource plenty will lead to more corruption and inefficiency in government and that governments would rather spend on basic needs (roads, etc.) than invest in production and growth.

Ameh (2019) points out that when natural resources cause dependency on trade partners and hurt the industrial sector and the training of human capital, they produce a paradox of abundance. The last two decades of dismal non-oil industry performance left nothing to look forward to. Despite oil production rising 8% from 2011 to 2012, the non-oil sector had a negative growth of -0.35% (Ayodele, Akongwale, & Nnadozie, 2019). This is a pattern that has existed for some time and made Ogbonna (2019) note that creating an economy that is not dependent on oil revenues and boosting the economy's growth moving forward is a crucial goal; diversification into new revenue streams such as solid mineral exports, and mitigating the oil export dependence by encouraging a rise in mineral exploitation will be required.

Resource mobilization drives growth, and balanced and successful resource mobilization enables any organization to develop. Resources have several types, each of which has its benefits for the economy. One cannot ignore that Nigeria has incredible people and natural resources, but it seems the government prioritizes oil exporting, leaving many businesses in the country hurting for revenue. A smaller share of overall government revenue comes from mining earnings in Nigeria than in other countries. Revenue for development, which comes mostly from oil, makes up the bulk of overall revenue. The federal government receives 80% of its revenue from the crude oil industry, while 20% comes from the mining of solid minerals. Similarly, although income from the oil industry accounted for 54.4% in 1972, the solid mineral sector accounted for 45.6% that year. 82.1% of total income came from oil in 1974, whilst 17.9% was from the mining industry.

With the fall in oil's portion of total income, the non-oil sector's share grew in 1978. This came after a price glut and a drop in oil's share of total revenue. In addition, with an exception of two periods, since 1984, the oil sector's share in overall income has increased steadily but occasionally dropped before rising again. Between 2006 and 2010, the percentage of revenue earned from oil was 88.6 per cent, whilst just 11.4 per cent was from other sources. The non-oil industry only makes up 21.3% of total income, whereas the oil sector, which makes up 78.8% of total revenue, has the largest proportion (Ayeni, 2019). As a result, the economy has grown disproportionately reliant on the petroleum industry at the expense of the other sectors and the various sources of money that may be gleaned from them.

Nevertheless, even though this is true, the advantages of hard minerals in the country shouldn't be diminished in the economy. For this reason, mining has been seen as a driver of economic growth. The sector's contributions to diversification, especially in mining, are critical in providing overall social and economic welfare. However, in many poorer nations, this type of contribution has proven irrelevant in the growth process (Edame, &Efeiom, 2019). For Nigeria to quickly advance economically, it is critical to get away from a mono-cultural economy and make growth its primary aim. In addition to the aforementioned advantages, solid mineral development in Nigeria is anticipated to improve the country's infrastructure and decrease poverty, inequality, and unemployment.

Although Nigeria has tremendous mining potential, her GDP contributions, albeit 0.5 per cent now, are much lower than her sub-Saharan neighbours in regards to mining GDP and export value. The sector's underperformance is mostly the result of poor exploration investment, resulting in poor prospects in the economy. The Paper tries to investigate how mining money affects the Niger Delta Region of Nigeria's economic growth. This research work aims to examine the effect of mining-generated revenue on the economic development of the Niger Delta Region of Nigeria. The specific objectives of this study include the following; to examine the effect of the value of crude petroleum and gas on the per capita income of Mining firms in Nigeria, to determine the effect of the value of solid minerals on the per capita income of Mining firms in Nigeria, to access the effect of the value of manufacturing on the per capita income of Mining firms in Nigeria and also to determine the effect of the value of agriculture on the per capita income of Mining firms in Nigeria.

REVIEW OF RELATED LITERATURE

Conceptual Issues

Countries' social and economic advancement depends on mining, minerals, and metals. Minerals are obtained from both surface extraction and deep extraction. Open-pit mining and shaft mining are terms that refer to different methods of extraction used in the mining industry. Quarrying takes occurs with limestone and marble, whereas mining is used with iron, coal, and gold (Edame, &Efeiom, 2019). The mining industry in Nigeria might turn around the country's financial prospects (compared to its current contribution of less than 1.0 per cent of GDP). The increase in the industry will offer several benefits: it will spread out the national economy, limiting

dependency on Oil and Gas revenues. The economic development will be sustained thanks to the upstream and downstream efforts of the industry. The Nigerian government has mining rights, which they bestow to different firms, who then go on to extract, explore, and sell minerals. The Ministry of Solid Mineral Development was created in 1995 and monitors all mineral resources, in particular those controlled by the country's Mining Regulation Committee. The federal Mining Act, first passed in 1999, has been revised twice, most recently in 2016. Domestic mining is still primitive in Nigeria, making the country dependent on the import of resources it could have obtained within its borders, a variety of factors are responsible for this, including over-reliance on the oil and gas sector, which has led to the neglect of other critical sectors of the economy, inadequate legislation and lax law enforcement, and depleted surface alluvial deposits (especially tin) among others (Edeme, Onoja&Damulak 2018).

Many things are included in the term "economic development," which includes significant improvements in providing jobs for the people, access to quality education, and having basic healthcare available to the majority of the population (Eyre, &Agba, 2016). A better grasp of the word "economic growth" helps to clarify the meaning of the term "development." Growth in real production per capita over time is what we call economic growth. Because economic growth and development go hand in hand, they complement one other. The process alternates back and forth, and that too is sequential. While growth is defined as an increase in output, economic development involves anything like implementing new technology or revising the law. As well as fueling economic growth, economic development may help bring a fairer income and wealth distribution (Herb, 2019).

There are diverse perspectives on natural resources concerning a country's economic growth. In the 1970s and 1980s, Dutch disease model variations had varied ideas on the assets used to spur growth. The crux is that we need to push the manufacturing sector more than natural resources output, which will result in a greater quality of life via a stronger division of labour. Dutch Disease models, which showed the connection between a natural resource-based sector and the tendency of spreading and shifting employment in the economy, were developed to further the understanding of the dynamic resource patterns. Long-term economic growth may be impacted by this sectoral change. Roderick (2018) conducted a qualitative analysis of the long-term financial feasibility of mining, using qualitative methods to describe how the mining process might affect the financial security of miners. The research points to ways that miners can prolong the advantages of mining even when an operation is set to go down when the ore runs out. But mining is a burden since if not handled properly, it leads to social, economic, and environmental problems. In an additional investigation, Hlavova (2016) analyzed the solid mineral sector, using both quantitative and qualitative methods to show that the sector possesses enormous potential to provide a significant contribution to the economy. Specifically, Hlavova suggested that the sector is capable of becoming a source of employment and thus eradicating poverty. This is to say that the government can step in and create a business-friendly environment to ensure that the private sector dominates the sector, as the economy becomes less and less dependent on the hydrocarbon sector. In a study on the influence of war on mining in Nigeria, the researchers found that it is in

the interest of those engaged in mining to take advantage of growth opportunities that are widely available in that industry (Ogbonna et al., 2019).

A research study led by Przeworski (2018) assessed the impact of Nigerian mining projects' compliance with environmental regulations and analyzed the business environment of the mining sector. According to his study, using both qualitative and quantitative analysis, Nigeria could benefit from the development of the solid minerals sector. Roderick (2018) showed the potential for the mineral industry to add significantly to the Nigerian economy, by combining qualitative and quantitative research methods. The investigation concludes that the growth of the mineral industry may assist reduce poverty in Nigeria through the creation of jobs and their relation to other economic sectors. In the end, it may be able to assist relieve some of the issues that arise from the peculiar character of the Nigerian economy, which has been incredibly susceptible to global oil prices. The government also has to let the private sector take the lead in the industry. As Olalekan, Afees, and Ayodele say, corruption may be reduced by making better adjustments and improvements in administrative structures.

Infrastructure development follows mineral development. As an example, the construction of buildings, railroads, pipelines, electricity lines, and communication infrastructure is needed to open mines to get ore. Despite the acknowledgement of significant expenditures in infrastructure and social services by mining companies in a few nations, the mining companies' distinct enclave nature in emerging economies has been seen as limiting the kinds of investments in the extraction of natural resources (Olumide, Akongwale, &Udefuna, 2019).

Per capita income (PI)

The average income earned per person in a certain location (city, region, nation, etc.) in a given year is known as per capita income or average income. The measurement is determined by dividing the overall earnings of the region by its entire population. Per capita income is a country's income per resident. People use per capita income to assess their average income, comparing various populations' wealth. A country's level of life is typically evaluated by the country's per capita income (Sachs, & Warner, 1997). Because it's calculated based on freely accessible GDP and population figures, it's a well-known way to measure financial success comparing nations. To verify a country's developmental standing, this is essential. One of the three human development index components is how much education citizens have. The income of each individual in a given population is what we mean when we refer to "average income."

Theoretical Review

This section discussed the two theories; Cost management and proficiency theory and transaction economic theory as they relate to the topic under discussion.

Cost Management and Efficiency Theory

This hypothesis, established in 2016 by Steliaros, goes against the belief that managers use the information on when and where costs arise and what costs add to the value of a product to limit their expenses. Costs are divided into fixed and variable in the "conventional model of cost

behaviour." The activity driver affects variable costs, whereas the relevant range causes fixed costs to remain the same (Steliaros, 2016). Managers in the second model respond to fluctuations in volume by intentionally adjusting resources. Even if the necessary modifications are made to resource usage, many outside variables might inhibit effective production. These variables are believed to cause "sticky" cost behaviour, where costs fluctuate asymmetrically changing faster when demand increases than when it decreases (Suberu, Ajala, Akande & Olure-Bank, 2015).

An important aspect of figuring out if an adjustment happens is how much it costs. For instance, you may find yourself needing to pay for extra recruiting and training, but your savings would have to come out of severance compensation. Managers are in a tough spot when they are required to put resources into use in a scenario where activity increases. Doing so costs money, therefore they would rather put resources into use when activity drops. An adjustment happens if it is more expensive to adapt than to benefit from producing more effectively (UNEP, 2011). Alignment issues between workers and managers can occur when workers have incentive plans that differ from the firm's bottom line. For instance, if a manager feels that his position in the hierarchy is strengthened or undermined depending on how many of his workers have been lost or gained, his choices on how to deal with an increase (or decrease) in staff resources may be clouded by private expenditures (Akonji, & Wakili, 2013).

Agency theory posits that private adjustment costs push managers to out-grow instead of under-shrink. As a result, researchers might develop models focused on understanding the costs of adjusting to changes in personal circumstances, which would benefit the study of how to avoid wasting money in times of crisis. If that's the case, then one argument is that it's because the business has proper controls and internal rivalry for resources, making it harder for managers to show a difference in management costs by causing resources to remain with them (because they cannot be used elsewhere in the firm) (Akonji, & Wakili, 2013).

Aside from expenses associated with readjustment, having to guess about future occurrences stands in the way of having to be readjusted. Managers may simply estimate when they can recover money spent to ensure the correct levels of production for future years based on the confidence they have in knowing the future amount of demand. The amount of time required to fix a problem may vary depending on whether or not the changes in supply are expected to last and whether or not the expenses of the adjustment are moderate. Since demand for our product isn't definite, this becomes a more challenging calculation. The main issue is that while companies know the exact cost of fixing up the new location, they are unsure of when they will get that money back (Akujuru, 2015). Some ambiguity about how we'll respond in the future is evident, and that's partly because we may need to implement more new and different changes later. When substantial ambiguity exists, the "do nothing" alternative often turns out to be favourable, and it is crucial to keep in mind that that decision is an action, rather than an inaction.

Additionally, and contrary to what the thesis states, theory suggests that uncertainty isn't tied to asymmetric adjustments, favouring shifts upward over those that go downward. Additionally, no study of the cost of adjusting is complete without understanding how managers make judgments

about using resources inefficiently. Failure to change would lead to increased expenses for the company, with rivals that adjust or join the market with new production capacity getting equal pricing in the market (Ameh, 2009).

Kaizen Costing System Theory

In 1971, Allahverdizadeh, a concept coined from two Japanese words: change (kai) and better (zen), was introduced. It was propagated by Kaizen, the brainchild of Masaaki Imai (Rof, 2012). (Rof, 2012). Kaizen Costing is a costing strategy based on Kaizen approaches to process improvement. It was created by Yashuhiro Monden in Japan (Industrial and Financial Systems, 2011). The 'continuous improvement' method may be described by this idea (Rof, 2012; Sani and Allahverdizadeh, 2012). Kaizen Costing is a method to make slow, minor but continual gains in the production process at a low cost (Rof, 2012). Ellram (2010, quoted in Modarress, Ansari, and Lockwood, 2014) discovered that Kaizen Costing allows goods to be both profitable and competitive in the market by ensuring they fulfil or surpass the need for "quality, functionality, and pricing" that customers have for them. In Rof's opinion (2012), this may be accomplished by eliminating any manufacturing steps that raise costs without commensurate gains in product value. In keeping with their belief in self-betterment, their policies always favour quality of life. These developments have taken place in management policies across the world, including in Japan (Ameh, 2009). Kaizen costing is an application of continuous improvement to lower costs, focusing on manufacturing and service delivery processes that may be made more efficient (Ayodele, Akongwale, & Nnadozie, 2013). Kaizen costing involves implementing modest, incremental improvements to a process instead of major changes. Kaizen costing, unlike target costing, is applied to the manufacturing of the product during the entire life cycle (Target cost is applied during the design stage).

Ayeni (2013) claimed that Kaizen costing is the process of continuous improvement, whereby participants learn to continuously and gradually reduce their targets over time by making their targets tighter. This research is anchored in Kaizen Costing System Theory, which allows value analysis and value engineering to be used to define cost reduction objectives for each process and subsequently accomplish those objectives. Target costing is used for more emphasis on the product, and it's best used for product design that will bring about lower costs. This research was based on the kaizen costing system idea, which relates to the issue.

Empirical Review

Studies have compared the economic effects of extracting different minerals. The involvement of multinational corporations plays a significant part in explaining the underperformance of these economies, and one example of this is the structuralist thesis. With regard to Jamaica, less than 3 per cent of the overall value-added produced by the bauxite-aluminium manufacturing chain accrued to the country, as claimed by proponents like Evans (2017). The market is controlled by six businesses. These corporations are part of the problem because of how they function. Aluminium and oligopolistic market structures also contribute to the problem. Furthermore, it is said that Multinational Corporations will charge lower prices to decrease their tax responsibilities. Evans' research on Brazil (2017) found comparable results to Girran's (2017).

The "stable thesis" is another theory on the links of mining to the domestic economy. The theory follows that the effects of mineral rent are multifaceted. This argument claims that rents resulting from various mining projects over time have played a part in developing the United States, Canada, and Australia. There are several methods available to governments to allocate resources within their territories. It is noted by Akujuru (2016) that copper's profits built Sweden's expansion in the 17th century, while gold supported comparable prosperity in Australia and South Africa. Additionally, the other side of the argument is that British property is influenced by income from mining in the colonies. The main point of the research is that host economies must promote policies to direct the profits of mining towards their economic growth. A significant technique for accomplishing this goal is a more meticulous distribution of monetary earnings to other levels of government and other stakeholders. The Peruvian mining legislation, which pays regional authorities a predetermined percentage of income raised by the central government, is known to have this provision. But as a result of 'budget constraints,' the federal government has put off transferring the money. Countries have very few programs to help distribute money at a regional level.

Roderick (2018) examines mining and economic sustainability, relying largely on qualitative analysis in his current research. He discovered that the advantages of mining could be extended via well-timed answers to problems of mining and development; that even when a mine or mining town failed as ore resources declined, the benefits of mining could still be perpetuated. But mining is a burden since if not handled properly, it leads to social, economic, and environmental problems. In their study of the regulatory framework for discovering solid minerals for long-term prosperity in Nigeria, Ayodele, Akongwale, and Nnadozie (2019) employed a mostly qualitative analysis. The study concluded that any country blessed with mineral deposits needed to rely on the solid mineral sector to achieve economic development, wealth creation, and poverty alleviation. Therefore, it recommended that the Nigerian government should implement best practices and mechanisms to formalize and regulate mining explorations so that sustainable development in the mining sector could be achieved.

Edame and Efeiom (2019) use qualitative and quantitative (descriptive) analysis to investigate the impact of Nigerian mineral resources on economic diversification. The study discovers that Nigeria's mineral resources hold a great amount of promise in developing the Nigerian economy. This shows that investment in the mineral industry may lead to job creation and alleviate poverty in Nigeria by extending to other sectors of the economy. The advantages of increased foreign investment are clear. In addition, with its aid, Nigeria will be able to minimize the dangers of its oil-dependent economy, which is traditionally so volatile that it depends on changing world prices for oil. The study found that if Nigeria strengthened its present mineral development strategy and created an environment where the private sector could flourish, the potential of the country's natural resources might be unlocked.

His (2019) research on the effects of civil strife in Nigeria's mining industry shows that more may be earned from mining operations than is often assumed, and that failure to develop mining operations would cause considerable loss. Hlavova's 2016 study uses qualitative and quantitative

(descriptive) analysis to evaluate the sustainability of natural resources in the mining sector in Nigeria. The study found that the country could benefit from a strong mining sector and recommends that the government encourage private investment in mining.

Olumide, Akongwale, and Udefuna (2019) also examined the non-oil sector and the mineral-based economy using both quantitative and qualitative analysis to highlight the sector's considerable economic potential in creating jobs and helping to eliminate poverty and also assist in eliminating issues linked to the country's "enclave" economy by supporting sector policies and the government establishing a positive environment in which the private sector is in control. Research examined how mining was affected by violence in Nigeria. According to Adekeye (2019), one of the greatest gains to be made from mining sector development is that there is more profit to be made from this than one may anticipate, and a great deal to be lost by failing to undertake mining sector development. The analysis, as shown by Agba (2016), of how natural resources sustainability in the mining sector in Nigeria, both quantitatively and qualitatively, demonstrates the value of creating a supportive environment for private sector investment.

METHODOLOGY

This research work adopted an *ex-post facto* research design. *Ex-post facto* means after the event, meaning that the events under investigation had already taken place and data exist. The geographical area covered by the study is the whole country of Nigeria. The oil and gas firms that are quoted on the Nigerian stock exchange as of the time of the research 2011 to 2020. The study made use of secondary data from annual financial statements covering 2011-2020 of oil and gas firms in Nigeria, Journals of accounting and other related disciplines, textbooks and Internet websites.

In this study, the population is made up of all Oil and gas firms in Nigeria as of 31st December 2020 quoted in the Nigerian Stock Exchange. The sample of the study was arrived at through a non-probabilistic sampling technique with a purposive sampling technique while particularly relying on the data availability criterion. Purposive sampling (also known as judgment, selective or subjective sampling) is a sampling technique on which the researcher will rely. The sample size of the study is made up of four (3) Oil and gas firms viz; The sampled firms include, ETERNA Oil Plc, MRS Oil Plc and OANDO Oil Plc.

To evaluate a multiple regression model was formed and it was specified as follows:

$$PI_t = B_0 + B_1VCPG_t + B_2VSM_t + B_3VMF_t + B_4VAGR_t + e_t \dots \dots \dots (1)$$

Where

- PI = Per Capita Income
- VCPG = Value of Crude Petroleum and Gas
- VSM = Value of Solid Mineral
- VMF = Value of Manufacturing
- VAGR = Value of Agriculture
- B₀ = Constant or intercept
- B₁ – B₃ = Coefficient for independent variables

t = Current Period
 e = The error term

Multiple regression analysis was used in the study. The effect exhibited by the independent variables included in the study upon per capita income (PI) was measured through the regression coefficient. The study also involved a test of the significance of parameter estimates by using t-statistics at a 5% level. This enabled us to compare the probability of computed t-statistics at various situations of empirical analysis with the critical value at 5% to establish significance.

The statistical tools for analysis in this study include;

1. The descriptive statistics analysis.
2. Multiple regression analysis.

Descriptive Statistics highlights research variables' characteristics. It shows things like maximum and lowest values, along with the standard deviation and other distribution information such as the mean and median. When there are numerous independent factors impacting the dependent variable, we use multiple regression analysis. In a nutshell, regression analysis is the set of calculations used to locate the regression line. This is a method for obtaining the best straight line or linear approximation of the relationship between independent and dependent variables. The analysis will use independent and dependent variables defined for each study variable. This study looks at four variables: VCPG, VSM, VMF, and VMG (VAGR). While per capita income is the dependent variable (PI).

DISCUSSION OF FINDINGS

Data Analysis

	PI	VCPG	VSM	VMF	VAGR
Mean	321.9226	12301276	1.040949	83263988	35907329
Median	147.9900	432011.7	0.220000	62265413	31524701
Maximum	1216.000	62240317	11.90000	3.14E+08	1.72E+08
Minimum	-134.0000	-2615886.	0.007000	33263.50	6411.300
Std. Dev.	296.9202	17096453	2.089711	98768132	50747654
Skewness	1.093632	1.460830	3.851329	0.889943	1.677467
Kurtosis	3.645045	4.472761	19.90485	2.621546	4.895550
Jarque-Bera	8.450338	17.39583	560.7955	5.380732	24.12911
Probability	0.014623	0.000167	0.000000	0.067856	0.000006
Sum	12554.98	4.80E+08	40.59700	3.25E+09	1.40E+09
Sum Sq. Dev.	3350142.	1.11E+16	165.9420	3.71E+17	9.79E+16
Observations	30	30	30	30	30

Source: Author's Compilation using Eview 9.0

The descriptive statistics in table 4.2.1 presents the statistical characteristics of all the observations. These include measures of central tendency the mean and median. Dispersions in the series are also indicated using the standard deviation. The results show the mean to stand at -N321.9226, 12301276, 1.040949, 83263988 and 35907329 for Per Capita Income, Value of Crude Petroleum and Gas, Value of Solid Mineral, Value of Manufacturing and Value of Agriculture respectively.

In addition to the statistical description of the panel above, the descriptive statistics also test or check for the normality of the observed variables. In other words, the test helps us to ascertain if the variables are normally distributed. To reject the null hypothesis that the data are not normally distributed, the JB (Jarque-Bera) statistics must be significant at a critical value of 0.05 (Gujarati and Porter, 2009). The normality test results, therefore, reveal that there is strong evidence that the panel variables and dataset are normally distributed as the probability of JB-statistic for each of the variables is < the critical value of 0.05. Hence, the null hypothesis (H_0) is rejected in favour of the alternative (H_1) that the residuals of the distribution of the model are normally distributed.

Test of Hypotheses

The Least Squares were used in the test of hypotheses. One of the major benefits of using panel data as compared to cross-section data on individuals is that it enables us to control for individual heterogeneity. Not controlling for these unobserved individual-specific effects leads to bias in the resulting estimates.

Table 4.3.1 Panel Regression Results

Dependent Variable: PI

Method: Panel Least Squares

Date: 06/14/21 Time: 16:07

Sample: 2011 2020

Periods included: 10

Cross-sections included: 3

Total panel (unbalanced) observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VCPG	3.52E-06	5.18E-06	5.680299	0.0011
VSM	16.33831	18.21672	6.896885	0.0363
VMF	4.50E-06	1.29E-06	3.485975	0.0014
VAGR	-2.24E-06	3.43E-06	-0.651440	0.5193
C	515.9427	56.41116	9.146111	0.0000
R-squared	0.618094	Mean dependent var		321.9226
Adjusted R-squared	0.545078	S.D. dependent var		296.9202
S.E. of regression	221.1850	Akaike info criterion		13.77651
Sum squared resid	1614452.	Schwarz criterion		14.03245
Log likelihood	-262.6420	Hannan-Quinn criter.		13.86834
F-statistic	7.095627	Durbin-Watson stat		0.761343
Prob(F-statistic)	0.000133			

Source: Author's Compilation using Eview 9.0

From the model above, R^2 of 0.618094 shows that a 62% variation in the per capita income of mining firms in Nigeria was explained by changes in the independent variables. The adjusted R^2 of 0.545078 which considers more repressors explains that 55% of variations in the dependent variable (per capita income) are caused by the independent variables and lagged values of per capita income. The results further indicate that the overall regression is significant as explained by the prob(F-statistics) of 0.000133 which is significant at 0.05 or 5%. This implies that the entire model is significant. The Durbin-Watson statistics (DW) of 0.761343 shows no trace of autocorrelation in the model.

Table 4.3.1 shows that the coefficient of 3.52E-06, 16.33831 and 4.50E-06 for VCPG, VSM and VMF respectively are positive, the t-statistics of 5.680299, 6.896885 and 3.485975 for VCPG, VSM and VMF respectively > 2 and the probability value of for 0.0011, 0.0363 and 0.0014 for VCPG, VSM and VMF respectively < 0.05 and significant at 5% critical value. Thus, the study rejects the null hypotheses I, II and III but accepts the alternative that the value of crude petroleum and gas, the value of solid minerals and the value of manufacturing have a positive and significant effect on the per capita income of Nigerian oil and gas firms. For VAGR we have a coefficient of -2.24E-06, t-Statistic of -0.651440 and probability figure of 0.5193 indicating that the value of agriculture has a negative and insignificant effect on the per capita income of Mining firms in Nigeria. A study demonstrates that the value of crude petroleum and gas (VCPG) of manufacturing businesses rises if the market price of ordinary shares goes up. This conclusion supports the results of Ebrahimi and Chadegani (2011), who discovered that per capita income impacts listed company performance, meaning that companies may be made more profitable by increasing per capita income.

As is shown by the results of hypothesis two, there is a strong and negative impact of stock market prices on the value of solid minerals in Nigerian manufacturing firms. This conclusion matches with studies conducted by Kothari, Lewellen, and Warner (2017) about the significance of a stock price decline on the total value of mineral resources of manufacturing firms. It was shown that the Per capita income of mining businesses in Nigeria is not influenced by the Value of Manufacturing. The study of Umar and Musa (2019) showed that company EPS and stock prices in Nigeria had no meaningful association.

Hypothesis four's results point to a positive and substantial link between the total equity of Nigerian manufacturing businesses and the Value of Agriculture (VAGR), as indicated by the research of Mlonzi, Kruger, and Nthoesane (2012). The data revealed that a meaningful connection existed between company valuation and share value, showing that a strong connection exists between share price and the worth of manufacturing businesses.

CONCLUSION

To boost revenue in other areas, the research emphasized the importance of the Nigerian economy is diversified. The research has shown how important it is to put solid mineral development in a leading role in the country. Infrastructure improvements, a prime source of income, the creation

of jobs and a poverty reduction. However, this is feasible provided the proper procedures are set in place and are fiercely enforced.

A country's economic success depends largely on the mineral resources it possesses. Extraction of natural resources like coal, copper, gold, and others often yields economic rewards, as there are both direct and indirect benefits. A significant part of the money earned from a mine is used for employment, but the money earned can also be invested in different commodities, which are purchased by a domestic or international market. This empirical research provided strong evidence of a significant contribution to Nigerian economic development from the value of crude petroleum and gas, agriculture, and industry. Overall, data show that during the research period, economic development (per capita income) is positively linked to the value of both solid mineral and agricultural resources. While in the long-term equilibrium, Per Capita Income and Crude Petroleum and Gas values are negatively connected because of the huge number of expatriates engaged in the petroleum business in Nigeria, leading to few locals working in it. The report finds that Nigeria must invest more of its public and private money in the nation's mining projects. The findings of this study show;

- i. That there is a significant effect of the Value of Crude Petroleum and Gas (VCPG) on the Per capita income of mining firms in Nigeria. This implies that VCPG can significantly grow the per capita income of the two mining firms during the period of the study.
- ii. That Value of Solid Mineral has a significant effect on the Per capita income of mining firms in Nigeria. This goes to imply that VSM has grown significantly the size of the per capita income of the firms.
- iii. That Value of Manufacturing has a significant effect on the Per capita income of mining firms in Nigeria. This implies that the Value of Manufacturing significantly and negatively affects the price of the ordinary share of the firm during the period of the study.
- iv. There is an insignificant effect of the Value of Agriculture on the Per capita income of mining firms in Nigeria.

Government should come up with a long-term mining strategy that allows the private sector to invest more in mining operations, boost transparency, and establish processes of accountability and openness in the mining industry so the country's economy would benefit.

Nigerians might be doing a lot better with their economy, because of the prevalence of a natural resource that could fuel a prosperous nation. The Nigerian government has to tackle corruption and bureaucracy to be able to fully control the markets for natural resources so that it can improve its economy and provide everyone equal opportunities.

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