

Investment Prospects and Solid Minerals Sub-Sectors Performance in Developing Economy

Adesola Adebayo AKANDE (Ph. D)

*Department of Accounting & Finance, Faculty of Humanities, Social and Management Sciences
Elizade University, Ilara – Mokin, Nigeria*

ABSTRACT

Every capital intensive projects needs a critical analysis, evaluation of financial performance, sector prospects and analysis of attached risks before a rational investor can be convinced to subscribe his funds and as such this study examined the economic prospects of solid minerals sector in Nigeria with a view to determine the viability of the subsector of economy among others in developing economy. To achieve this, both primary and secondary data were extensively explored. The collected data were analyzed with the statistical method of ranking correlation and simple percentage method. The study result showed a positive correlation of z-value of $0.003 > 0.005$ level of significance which implied that the industrial performance is lucrative and the prospects of investing in the solid mineral sector's performance variables in the economic subsector is above average and as such series of untapped benefits awaits investors in this sector of economy. The study also discovered that unregistered miners domineering acts in the operations constitute a big risk to external investors' and this results to meagre contribution of this subsector to the GDP of the country. The local miners are seen preventing outsiders from adequate participation in the mining business which is grossly detrimental to revenue generation potentiality of the country. Thus, the low patronage rate was found to be caused by high capital base requirements for listed companies despite the fact that performance of the economic subsector is vibrant as 72.3% respondents implicitly affirmed to this position. The study therefore recommends enabling policies and legislation capable of encouraging participation of both local and international investors in the solid mineral sub sector of Nigeria economy.

KEYWORDS: Solid minerals, Columbite, Performance indicators, Minning

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I. INTRODUCTION

Generally, Nigeria is richly endowed with vast natural resources that are widely distributed across the country, among which are solid minerals, petroleum and natural gas. As at the beginning of 21st century, about fifty solid minerals have been discovered in five hundred locations in the country (Alison-Madueke, 2009). According to Central Bank of Nigeria (CBN, 2000), before independence in 1960, the Nigerian economy was mainly agrarian both in production for domestic consumption and exports. Early manufacturing activities predating independence were limited to semi-processing of primary agricultural products as adjuncts to the trading activities of foreign companies. The Agro-based manufacturing units that were established included vegetable oil extraction and refining plants, starch making, tobacco processing, pottery, raffia crafts, mat making, saw milling, then followed by textiles, breweries, cement, rubber processing and plastic products.

Recently, it is obvious that the country is faced with the problem of diversification and harnessing other God given natural resources for assessment of its full potentials for her growth and development especially when we relate the values of these resources to the dollar rate in the world market. According to Adegbite & Adeniyi (2010), Post-independence Nigeria witnessed national development plans, which provides the conceptual framework for the development of solid minerals in Nigeria but more often than not it is only the crude oil that Nigeria is predominantly living on compared to country like Australia where economic diversification has been optimally utilized hence the high percentage of financial contribution of the sector to her economy. Thus, this study considered it necessary to explore into the financial contributions of the solid minerals sector as alternative to economic growth and development influencers which the recent dwindling of oil prices in the world oil market has played a dominating roles. Thus, the increased emphasis needed to be placed on the potential importance of the solid minerals sub-sector of the Nigerian economy by expounding on its potentials to both national and international investors. The quest for diversification of the national economy and in particular, the importance attached to breaking the dominance role of crude oil in the export structure of

the Nigeria economy necessitates looking at other natural resources which can not only be adequately harnessed except both internal and external investors were encouraged to come in. For this set of investors to come in the performance variables that will expound the prospects and risk embedded should be critically analyzed and as such, this study focused on the sub-sector as an alternative towards the diversification of the revenue base of the Nigerian economy.

Theoretical Framework

Natural resources formed the basis of the economic and social progress of any country. In Nigeria, resources from petroleum and crude oil related products are extensively and largely tapped with adequate regulations and monitoring since its contributed to the country Gross Domestic Products massively. It is the main stay of the economy and as such other natural resources financial contribution to the economy is largely ignored to the extent that in most cases it is the state that is overseeing its operations which out rightly negate the assertion that it is the federal and not region or state where the mineral is located that has responsibility of legislating on mineral resources of any economy. Financing issues is a factor that call for more investors to operate in this vital economic subsectors with friendly policies and adequate monitoring which is what developing economy need largely for even growth and economic development.

Natural resources

Natural resources form the base of the economic and social progress of any country. Although these natural resources including such mineral as petroleum, limestone, tin, columbites, gold and silver, coal, zinc, etc. These resources are grossly under tapped in Nigeria economy as only mining and quarrying are very central to the development process in contrast with modern mining activities including crude petroleum, solid minerals and associated gas production. Mining and quarrying sector has become the dominant sector in any viable economy, followed by agriculture in terms of its performance and contribution to the Gross Domestic Product (G.D.P.) of economy of developed countries like Australia.. The impressive performance of the mining and quarrying sub-sector in the share of the G.D.P. and its total monopoly of foreign exchange earnings accounted for by a major mineral product: in this country call for attention in of policy formulators to allow massive participation of investors in developing economy.

There is no universal definition of natural resources, so there are several definitions from different international organizations. The World Bank (Soubbotina, 2004) defines natural resources as all gifts of nature such as air, land, water, forests, wildlife, top-soil, minerals used by people for production or for direct consumption. According to the UN methodology, used by OECD (UN, 1997) natural resources are “natural assets (raw materials) occurring in nature that can be used for economic production or consumption”. Natural resources require application of capital and human resources (mental or physical labor) to be explored (extracted, processed, refined) for the realization of their economic value, hence there is need to advocate for more patronage from National and international investors so that the potentials of this sector of economy can be utilized maximally.

In Nigeria, resources such as coal and tin ranked high as Nigeria's foreign exchange earners in the early 1990's, other minerals such as limestone, gold, marble, clay etc. were mined to a lesser degree mainly for local consumption (Adekeye, 1999). The solid minerals industry were drastically affected to an extent that the overall contribution of mining to the national Gross Domestic Product (GDP) in Nigeria has been on declining trend to about 0.5% in this 21st century. This has positioned Nigerian economy to amino product economy, volatile to international oil politics and its repercussions on the masses is becoming alarming and regretful. Any economy that is not productive inclined will suffer a lot of economic vices such as unemployment, high cost of living and social insecurity to mention but few.

Categorization of Solid Minerals in Nigeria

Coal - Coal deposits were discovered for the first time in Nigeria in the early 19th century near Yeli in Anambra state. This discovery created further incentives that intensified the search for coal, bearing in mind the increasing level of local consumption and the possibility of establishing markets across the borders. Nigerian coal is of sub-bituminous class, which has high ash content but is suitable for the production of tar and synthetic fertilizer. It can also be used for ordinary steam raising purposes including the generation of electricity, and also for the manufacture of chemicals and liquid fuels. As a result of its richness in hydrocarbons, waxes and resins, for over a decade, Nigeria coal was considered as non-coking, but in 1961 Simon-carves Ltd. Of Britain disproved this by showing that blending about 15 percent of pitch with the Enugu Coal, a high temperature coke suitable for metallurgical purposes could be obtained. In other West African countries. As a result of these investigations, several deposits of coal were discovered around Enugu in Enugu state, and Kabba in Kogi state. The Enugu coal deposit has been the only ones mined until the Nigerian civil war when mining was closed down temporarily. To meet local demand, the Kabba mine had to be exploited for the

first time. The actual reserves are in the order of 360 million tons and all of these are located around Enugu in Enugu state and Kabba in Kogi state.

Nigerian coal is of sub-bituminous class, which has high ash content but is suitable for the production of tar and synthetic fertilizer. It can also be used for ordinary steam raising purposes including the generation of electricity, and also for the manufacture of chemicals and liquid fuels. As a result of its richness in hydrocarbons, waxes and resins, for over a decade, Nigeria coal was considered as non-coking, but in 1961 Simon-carves Ltd. Of Britain disproved this by showing that blending about 15 percent of pitch with the Enugu Coal, a high temperature coke suitable for metallurgical purposes could be obtained.

The two major consumers of coal are the Nigerian Railway Corporation (NRC) and the power generating companies. Coal is now being consumed mainly by the Nigerian cement companies, particularly in cement factory at Nkalagu in Enugu state, which found that coal is still a cheaper source of fuel and energy because of its proximity to the mines. The iron and steel complex, which is under construction provides a potential market also. It is estimated that about 200,000-270,000 tons of it would be needed annually at the initial production period to produce black and galvanized sheets by the iron and steel company.

Tins and Metal- Various outliving deposits of tinstone, as it is sometimes called, have been reported in Oyo, Plateau, Bauchi and parts of Kaduna, Kano and Benue States. However, the most important deposit lies in an area centered on the Jos Plateau in Plateau state. A thicker belt of volcanic basalt, which renders the deposits beneath it almost inaccessible, covers a larger area of this tin field. The first deposits to be worked in the early 19th century were those in riverbeds. These have long been exhausted and the companies have since turned their attention to the older deposits, which lie under a layer of earth many meters deep.

Initially, the mining of tin was mainly for domestic consumption until the advent of the British. With increasing foreign participation in the industry, tin has been mined both for export and domestic use. Within the mining and quarrying sector, tin is an important earner of foreign exchange, second only to crude oil, although its contribution to the sector's total foreign earnings fell from about 60 percent in 1950 to 7.5 percent in 1974 (). Domestically it had also been source of revenue to the government, although its contribution in the period under review had been marked with fluctuations as a result of changes in output and reduction in rents and royalties. Unlike royalties from other minerals, the royalty on it is progressively calculated by a sliding scale based on the price of tin metal.

The tin industries, like any other industry, had suffered from lack of personnel and transportation facilities, especially before 1963. Lack of good roads hampered the opening up of new deposits because both machinery and labor could not be transported easily to the new mining fields. And when new roads were built to connect potential tin fields, they were never opened up because of the inelastic demand and unstable world market price for tin. These factors, in addition to the existence of good investment opportunities in the oil industry, discouraged further investment in the new tin fields. It seems that Nigeria's tin output in the future will continues to decline, given the pattern it has taken since the last decade.

Columbite - This is a mineral, which was formerly regarded as an impurity occurring with tinstone from which it had to be removed by means of magnetic separators. Its deposits are located at the tin fields, being a by-product of tin ore. The most important deposits lie in an area around the Jos Plateau, which is the most important location of tin mining. The dumps of certain tin mines in Nigeria have proved remunerative sources of Columbite.

Limestone - There are several deposits of limestone scattered all over the country. The known deposits of significance are located in Ogun, Olo, Ondo, Anambra, Imo, Edo, Kwara and all the Northern states of the country. This mineral became of importance only in 1960 when 240,000 tons were produced for domestic use. Its production rose as a result of its requirement as a raw material for cement plants which were established in the country; the local demand for this mineral increased sharply, and by 1974 its output was about 1.8 million tons

Companies Performance Evaluation Theories

Mining companies engaged in the tapping and processing of solid mineral resources across the regions in Nigeria are to duly registered and follow the operational modalities hinging on some notable financial theories.

Proprietary and residual equity theory

Proprietary equity theorists such as Husband (1938) insisted that the accounting process of companies must be conducted from the shareholders' perspective. Staubus (1952, 1959) developed the residual equity theory, which considered that the accounting must be done from the perspective of the residual equity holders, which for a going concern purpose coincides with that of the common shareholders. Residual equity theory is often regarded as a more restrictive form of proprietary theory. Under the proprietary view, transactions and events are analyzed, recorded and accounted for as to their immediate effect on the proprietors. Financial statements are

prepared from the viewpoint of the proprietors and are meant to measure and analyses their net worth expressed by the accounting equation: **Assets – Liabilities = Equity, proprietorship's net worth**

Entity Theory and Enterprise/ Social Theory

Under the entity view, transactions are analyzed as to their effect on the accounting entity. Financial statements are prepared from the viewpoint of the entity. The income statement is meant to calculate income for distribution and analyze the company's performance over a period, whereas the statement of financial position serves to indicate the security or riskiness of the company's financial position. Under the different varieties of entity theory the accounting equation may take the following forms.

Σ Assets = Σ equities + Σ liabilities (Hendriksen& Van Breda, 1992)

In the entity view as expressed in the equation, the assets are considered the company's assets, and the liabilities are the company's liabilities. Alternatively, the assets are considered the company's assets and the equities are all the financial stakeholders' equities. Entity theory views the entity as "having a separate existence – an arm's length relationship with its owners. The relation to the owners is regarded as not particularly different from that to the long-term creditors, the government as a taxing and regulatory authority and the public at large. (Hendriksen and Van Breda, 1992; Kam, 1990; Suojanen, 1954) Suojanen traces this institutionalization of the large enterprise to the separation of management and ownership leading to increasingly large proportions of income being retained within the company to reduce the corporation's dependence on external financing. Large corporations may decide to pay only 'conventionally adequate dividends' because this ties in with their survival and growth objectives.

Financial reports according to the enterprise theory are to be prepared from the perspective of the enterprise as a social institution. Income generated by the enterprise is analyzed to measure the contribution of the enterprise to society using the concepts developed in national income analysis. Therefore, ultimately, the SFP is secondary to output, income and value added consideration.

Assets = Investors' input contributions

DuPont Mean- Variance of Portfolio Investment Theory

According to Adebimpe (2009) who adopted DuPont equation stated that, it is an expression, which breaks return on equity down into three parts. The name comes from the DuPont Corporation, which created and implemented this portfolio formula into their business operations in the 1920s. It was adopted from Markowitz Mean-Variance Portfolio theory, which states that profit of a firm is a function of total sales, total assets, shareholder equity contribution and the liabilities (debts). This formula is known by many other names, including DuPont analysis, DuPont identity, the DuPont model, the DuPont method, or the strategic profit model.

ROE = Net income/sales × sales/total assets × Total assets/Average shareholders equity

In the DuPont equation, ROE is equal to profit margin multiplied by asset turnover multiplied by financial leverage. Under DuPont analysis, return on equity is equal to the profit margin multiplied by asset turnover multiplied by financial leverage. By splitting ROE (return on equity) into three parts, companies can more easily understand changes in their ROE over time. Components of the DuPont Equation: Profit Margin: Profit margin is a measure of profitability. It is an indicator of a company's pricing strategies and how well the company controls operating costs. Profit margin is calculated by finding the net profit as a percentage of the total revenue. As one feature of the DuPont equation, if the profit margin of a company increases, every sale will bring more money to a company's bottom line, resulting in a higher overall return on equity.

Components of the DuPont Equation: Asset Turnover Asset turnover is a financial ratio that measures how efficiently a company uses its assets to generate sales revenue or sales income for the company. Companies with low profit margins tend to have high asset turnover, while those with high profit margins tend to have low asset turnover. Similar to profit margin, if asset turnover increases, a company will generate more sales per asset owned, once again resulting in a higher overall return on equity.

Components of the DuPont Equation: Financial Leverage: Financial leverage refers to the amount of (liabilities) debt that a company utilizes to finance its operations, as compared with the amount of equity that the company utilizes. As was the case with asset turnover and profit margin, increased financial leverage will also lead to an increase in return on equity. This is because the increased use of debt as financing will cause a company to have higher interest payments, which are tax deductible. Because dividend payments are not tax deductible, maintaining a high proportion of debt in a company's capital structure leads to a higher return on equity.

The Modern Portfolio Theory (MPT)

Harry Markowitz (1991), an American economist in the 1950s developed a theory of "portfolio choice," which allows investors to analyze risk relative to their expected profit. For this work Markowitz, a professor at Baruch College at the City University of New York, shared the 1990 Nobel Memorial Prize in Economic Sciences with William Sharpe and Merton Miller.

Markowitz's theory is today known as the Modern Portfolio Theory, (MPT). The MPT is a theory of investment which attempts to maximize portfolio expected profit for a given amount of portfolio risk, or equivalently

minimize risk for a given level of expected profit, by carefully choosing the proportions of various assets. Although the MPT is widely used in practice in the financial industry, in recent years, the basic assumptions of the MPT have been widely challenged. The Modern Portfolio Theory, an improvement upon traditional investment models, is an important advance in the mathematical modeling of finance. The theory encourages asset diversification to hedge against market risk as well as risk that is unique to a specific company. The theory (MPT) is a sophisticated investment decision approach that aids an investor to classify, estimate, and control both the kind and the amount of expected risk and profit; also called Portfolio Management Theory. Essential to the portfolio theory are its quantification of the relationship between risk and profit and the assumption that investors must be compensated for assuming risk. Portfolio theory departs from traditional security analysis in shifting emphasis from analyzing the characteristics of individual investments to determining the statistical relationships among the individual securities that comprise the overall portfolio. The fundamental concept behind the MPT is that assets in an investment portfolio should not be selected individually, each on their own merits. Rather, it is important to consider the profitability of the company.

William (2011) noted that the best measure of a company is its profitability, for without it, it cannot grow, and if it does not grow, then its stock will trend downward. Increasing profits are the best indication that a company can pay dividends and that the share price will trend upward. Investors will put their money at a cheaper rate to a profitable company than to an unprofitable one; consequently, profitable companies can use leverage to increase stockholders' equity even more. The common profitability measures compare profits with sales, assets, equity and liabilities: net profit margin, return on assets, and return on equity. Although most financial services publish these ratios for most companies, they can be calculated independently by using net profit and total revenue from the Income Statement of a company's financial report, and total assets and stockholders' equity from the Balance Sheet, (Iyiola 2012).

The net profit margin is equal to the net profit (net income) after taxes and excluding extraordinary items divided by total revenues. Net Profit Margin Formula:

$$\text{Net Profit Margin} = \frac{\text{Net Profit after Taxes}}{\text{Total Revenues}}$$

II. METHODOLOGY

The major source of data used in this study is secondary data. The data comprised of the financial statements of selected companies for a period of 5 years, CBN financial reports and investment literatures. In other to analyze the data obtained for this study, descriptive statistic tools were largely utilized. This is to show the prospects in this sub-sector of economy and to enable potential investors' have understanding of what obtains in the sector for investing purposes. The study is hinged on modern portfolio theory which is capable of guiding the investment decision of prospective investors.

III. DATA ANALYSIS AND RESULTS

Financial information is needed to predict, compare and evaluate a firm's earning ability. It is also required to aid in economic and investment and financing decision-making. Thus, financial statement is an important part of the fabric of organizational life and the need to be evaluated in their wider managerial, organizational and environmental context. Therefore the effectiveness of financial report not only depends on the purposes of such systems but also depends on contingency factors of each organization, as effective financial statement should systematically provide information, which has a potential effective on investment decision-making by the prospective investors.

This research is out to examine the financial statement of companies in the solid mineral sector of Nigerian economy using Multiverse Mining & Exploration Plc. and Dangote Cement Nigeria Plc. which are companies that meet the ₦100 million capital base requirement of Nigeria Government for a company to operate in the solid mineral sector and to be listed on the Exchange Markets.

Attempt have been made to assess both organizations' financial performance from different angles, this paper cannot be conclusive on the performance of both of them. The summary of the financial statements of Multiverse Mining and Exploration Plc. and Dangote Cement Nigeria Plc. Were examined from 2017 to the first quarter of 2021 as presented below to reflect the financial ratios capable of showing their performance over time so as to allowed national and international investors form opinion to invest in this sector of economy.

**Table 1: Financial Performance of Selected Solid Minerals Companies in Nigeria.
Multiverse Mining Plc. (2017-2021)**

| Ratio | Definitions | 2017 | 2018 | 2019 | 2020 | 2021 |
|------------------------------------|---|-------|-------|-------|-------|-------|
| (A) Liquidity | | | | | | |
| 1. Current Ratio | $\frac{\text{Current Asset}}{\text{Current Liab.}}$ | 0.07 | 0.04 | 0.15 | 0.56 | 1.06 |
| (B) Asset Management | | | | | | |
| 2. Inventory Turnover | $\frac{\text{COS}}{\text{Av. Inventory}}$ | 1.97 | 5.47 | 1.31 | 0.99 | 1.33 |
| 3. Total Asset Turnover | $\frac{\text{Sales}}{\text{Total Assets}}$ | 0.01 | 0.01 | 0.06 | 0.12 | 0.13 |
| Profitability Ratio | | | | | | |
| 4. Gross Profit Margin | $\frac{\text{Sales} - \text{COS}}{\text{Sales}}$ | 20.5% | 71.4% | 64.6% | 59.5% | 44.8% |
| 5. Returns on Stockholder's Equity | $\frac{(\text{EAT})}{\text{Stakeholder's Equity}}$ | 30% | 34.5% | 25.5% | 1.14% | 0.69% |
| 6. Returns on Investment (ROI) | $\frac{\text{Earnings After Taxes (EAT)}}{\text{Total Assets}}$ | 8.17% | 11.7% | 11% | 0.56% | 0.51% |

Source: Author's Computation (2021)

Table 1 shows the financial performance of Multiverse Mining and Exploration Plc. The result also shows the firm's ability to meet short-term financial obligations, how efficient the firm is using its assets to generate sales, and how the firm's management generates profits on sales, assets and stockholders' investment. However, based on the current ratio, the firm's current liabilities are 0.07, 0.04, 0.15, 0.56, and 1.06 times covered by its current assets in the year 2017, 2018, 2019, 2020, and 2021 respectively. On the basis of asset management ratio, the firm's inventory turnover is moderately high in the 2017 than other year's inventory turnover which records low ratio and this could be indicative of excessive inventory balances, or that some inventory is slow moving or even obsolete. In the same manner, the total asset turnover of the firm shows a ratio of 0.13, 0.12, 0.06, 0.01, and 0.01 for the 2011 to 2015 respectively and thus implies that, the firm has not been effective in the use of its total resources to generate sales over the periods.

Lastly, on the basis of profitability ratio, the gross profit margin of 2017 increases more than other years under consideration and thus implies an effective firm's management decisions regarding pricing and the control of production costs in 2017 than other financial years under study. Consequently, the return on shareholder's equity record a higher percentage in 2017 than other financial years under study and thus implies that, the firm earns a higher rate of returns on stockholder's equity in 2017 than other years. In the same manner, the returns on investment favors a higher percentage in 2017 than other years that is, the firm is above-average performance on return on stockholders' equity but not on return on investment and thus implies a heavy debt load taken on by the firm, and with relatively higher debt financing, the firm is able to spread its net income over a smaller base of stockholders' equity, thereby increasing the returns on stockholders' equity. Table 2: shows the total current liabilities of Dangote Cement Plc. for the year (2011-2015). The result records the company's total current liabilities increases as at the year ended from 2011-2015. This implies that the

company's debts increase overtime and as a result, the company's returns on investment reduce over the last five years as shown in table 4.3 above.

Dangote Cement Nigeria Plc. (2017-2021)

| Ratio | Definitions | 2017 | 2018 | 2019 | 2020 | 2021 |
|------------------------------------|--|-------|-------|-------|-------|-------|
| (A) Liquidity | | | | | | |
| 1. Current Ratio | <u>Current Assets</u> <u>Current Liabilities</u> | 0.80 | 1.12 | 0.91 | 0.85 | 1.03 |
| (B) Asset Management | | | | | | |
| 2. Inventory Turnover | | 6.80 | 2.17 | 10.9 | 9.60 | 14.5 |
| 3. Total Asset Turnover | <u>Cost of sales</u> <u>Average Inventory</u> | | | | | |
| | <u>Sales</u> <u>Total Assets</u> | 0.35 | 0.11 | 0.45 | 0.46 | 0.46 |
| Profitability Ratio | | | | | | |
| 4. Gross Profit Margin | <u>Sales – Cost of sales</u> <u>Sales</u> | 66.5% | 66.5% | 65.7% | 82.9% | 59.5% |
| 5. Returns on Stockholder's Equity | <u>Earnings After Taxes (EAT)</u> <u>Stockholder's Equity</u> | 57.3% | 43.1% | 36.8% | 35.4% | 42.3% |
| 6. Returns on Investment (ROI) | <u>Earnings After Taxes (EAT)</u> <u>Total Assets</u> | 56.3% | 37.9% | 25.6% | 23.4% | 23.2% |

Source: Financial Statement of Dangote Cement Nigeria Plc. (2011-2015)

Table 4.8 shows the financial performance of Dangote Cement Nigeria Plc. The result also shows the firm's ability to meet short-term financial obligations, efficiency its assets to generate sales, and how the firm's management generates profits on sales, assets and stockholders' investment. However, based on the current ratio, the firm's current liabilities are 0.08, 1.12, 0.91, 0.85, and 1.03 times covered by its current assets in the year 2015, 2014, 2013, 2012, and 2011 respectively. On the basis of asset management ratio, the firm's inventory turnover is high in 2011 than other years and this could be indicative of excessive inventory balances, or that some inventory is slow moving or even obsolete. In the same manner, the total asset turnover of the firm shows a ratio of 0.46, 0.46, 0.45, 0.11, and 0.11 from 2011 to 2015 respectively and thus implies that, the firm has been effective in the use of its total resources to generate sales over the periods.

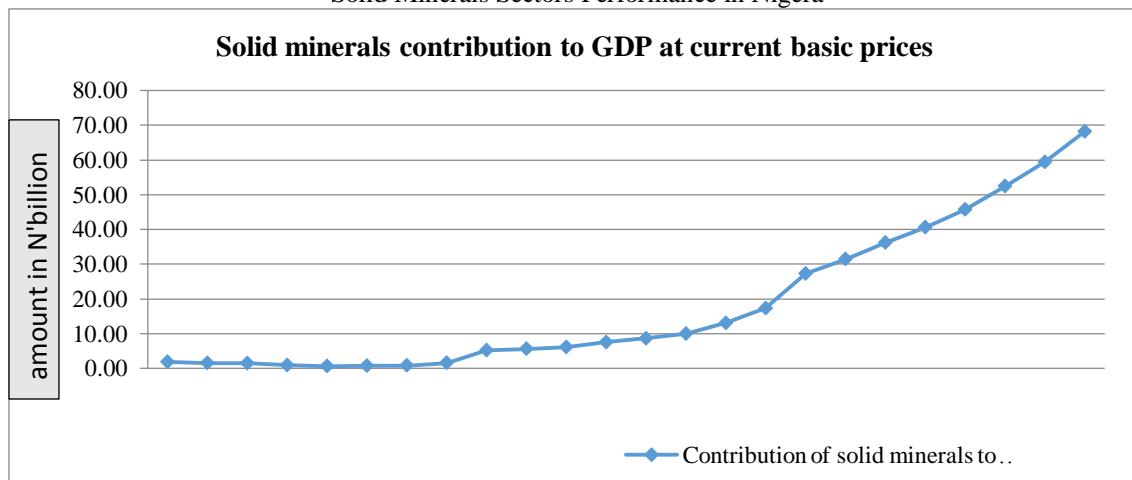
Lastly, on the basis of profitability ratio, the gross profit margin of 2012 increases more than other financial years under consideration and thus implies a more effective firm's management decisions regarding pricing and the control of production costs in 2012 than other financial years under study. Consequently, the return on shareholder's equity recorded a higher percentage in 2015 than other financial years under study and thus implies that; the firm earns a higher rate of returns on stockholder's equity in 2015 than other years. In the same manner, the returns on investment favors a higher percentage in 2015 than other years that is, the firm is above-average performance on return on stockholders' equity but not on return on investment and thus implies a heavy debt load taken on by the firm, and with relatively higher debt financing, the firm is able to spread its net income over a smaller base of stockholders' equity, thereby increasing the returns on stockholders' equity. Having analyzed the financial position of each company separately, there is need to identify the financial strength and weakness of the firms through a comparative analysis. The table below shows the comparison that

indicates the financial position and performance between Multiverse Mining and Exploration Plc. and Dangote Cement Plc.

Table 4.9 lists a number of selected financial ratios to analyze the financial performance of Multiverse Mining and Exploration Plc. and Dangote Cement Plc. (assessment column is shown on the right of the table). However, liquidity ratio of Multiverse Plc. is ranked below average relative to Dangote Cement Plc. measures. With respect to asset management ratios, the inventory turnover and total asset turnover ratio of Multiverse Plc. appear to be significantly worse than Dangote Cement Plc. More so, profitability ratio of Multiverse Plc. is ranked below average relative to Dangote Cement Plc. profitability measures.

It is evident from the table that, Dangote Cement Plc. has performed well over the period of time than Multiverse Plc. as its finances are sourced through a higher shareholder's equity, bank loans and overdrafts, loans from government institutions, and BOI restructured loans. Similarly, the investors who have invested their money in the shares of Dangote Cement Plc. are assured of better returns.

Solid Minerals Sectors Performance in Nigeria



Source: Author's Computation from CBN Statistical Bulletin (2021)

It can be observed from the above graph that the contribution and performance of solid mineral sector to the Nigerian economy has experienced an upswing and downswing trend in the 1980's and not until the 1990's the trend has been an upward trend. The likely factor of the trend in the 1980's could be attributed to the over dependence on crude oil, while the upward trend could be likened to impact of the reforms in the sector. It should be noted that this upward trend does not mean the sector is viable and has achieved the country's aim of diversification because the solid minerals captured here are just; coal mining, metal ore, quarrying and other mining activities. Also the contribution of the sector to the economy from 2010, 2011, 2012 and 2013 are just 0.13 percent, 0.14 percent, 0.14 percent and 0.16 percent of total Gross Domestic Product (GDP). This figure is worrisome and thus confirms that the sector is yet to be a strong force as a source of revenue base for the country and therefore need more investor to allow for competitiveness and growth in the economic activities in Nigeria.

IV. CONCLUSION AND RECOMMENDATIONS

Based on the analysis of data conducted above, the following findings are articulated:

Solid minerals economic sectors is more efficient as it records a higher amount of cash and marketable securities but low amounts of inventories overtime. The result depicts that the sector total shareholders' equity decreases because of low level of investment in the sector which implies that a decrease in the value after taking into account all long-term and short-term liabilities - the net worth of the sector decreases accordingly. On the other hand, efficient investment in the sector via efficient assets -handling practices it records a higher amount of cash and marketable securities and other current assets. The result depicts the sector total shareholders' equity increases as at the year ended from 2011-2015 consequently. This implies that, the company's net worth increases overtime as shareholder's equity is increases. The sources of finance in this sector can be from borrowings from banks as revealed from the analyses of their source of finance. These borrowings are not long term as required to finance operations of firms in the solid mineral sector and as such can be corroborated with Government incentives and assistance to the extent that they can readily motivate the owners of capital to invest their funds profitably..

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APPENDIX

Source of Computed Financial Performance of Listed Solid Mineral Companies in Nigeria

Table 1; Financial Statement of Multiverse Mining and Exploration Plc. (2017-2021)

| Current Assets | 2017 ₦M | 2018 ₦M | 2019 ₦M | 2020 ₦M | 2021 ₦M |
|-----------------------------|------------------|------------------|------------------|------------------|------------------|
| Inventories | 46,643 | 51,412 | 156,778 | 553,725 | 545,530 |
| Trade and other receivables | 51,712 | 20,073 | 23,413 | 53,828 | 64,746 |
| Cash and cash equivalents | 42,445 | 7,246 | 23,503 | 54,888 | 10,642 |
| Total current assets | 140,800 | 78,731 | 203,694 | 662,441 | 620,919 |
| Total Assets | 4,734,436 | 4,740,564 | 4,986,749 | 5,488,123 | 5,022,154 |

Table 4.2 Total Shareholders' Equity of Multiverse Mining and Exploration Plc. (2011 - 2015)

| Shareholders' Equity | 2017 ₦M | 2018 ₦M | 2019 ₦M | 2020 ₦M | 2021 ₦M |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|
| Issued capital | 2,130,969 | 2,130,969 | 2,130,969 | 2,130,969 | 2,130,969 |
| Share premium | 1,242,082 | 1,242,082 | 1,242,082 | 1,242,082 | 1,242,082 |
| Earnings | (2,084,031) | 1,773,335 | 1,220,927 | 671,599 | 351,430 |
| Total shareholders' equity | 1,289,020 | 1,599,716 | 2,152,124 | 2,701,452 | 3,724,481 |

Source: Financial Statement of Multiverse Mining and Exploration Plc. (2017-2021)

Table 4.3:Total Current Liabilities of Multiverse Mining and Exploration Plc. (2011-2015)

| Current liabilities | 2017 ₦'M | 2018 ₦'M | 2019 ₦'M | 2020 ₦'M | 2021 ₦'M |
|---|------------------|------------------|------------------|------------------|------------------|
| Interest-bearing Loans and Borrowings | 1,484,593 | 946,755 | 794,139 | 910,349 | 356,907 |
| Accounts Payable and Accrued Liabilities | 628,576 | 851,609 | 517,971 | 256,544 | 211,895 |
| Income tax payable | 39,883 | 33,476 | 25,555 | 20,000 | 15,963 |
| Total current liabilities | 2,153,053 | 1,831,840 | 1,337,665 | 1,186,893 | 584,765 |
| Total Liabilities | 3,445,417 | 3,140,846 | 2,834,625 | 2,786,671 | 1,297,672 |
| Total Liabilities and shareholder's Equity | 4,734,437 | 4,740,563 | 4,986,749 | 5,488,123 | 5,022,153 |

Source: Financial Statement of Multiverse Mining and Exploration Plc. (2011-2015)

Table 4.5 Total Assets of Dangote Cement Plc. (2011 - 2015)

| Current Assets | 2017 ₦'M | 2018 ₦'M | 2019 ₦'M | 2020 ₦'M | 2021 ₦'M |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|
| Inventories | 38,369 | 30,838,033 | 23,576,746 | 30,853,539 | 13,438,142 |
| Trade and other receivables | 4,252 | 3,978,275 | 7,898,802 | 4,990,785 | 3,394,812 |
| Due from related parties | 52,003 | 4,100,876 | 2,246,118 | 4,121,464 | 74,554,538 |
| Prepayments and other | 17,962 | 31,905,875 | 34,552,454 | 24,279,076 | 4,811,904 |

| | | | | | |
|---------------------------|------------------|--------------------|--------------------|--------------------|--------------------|
| assets | | | | | |
| Cash and cash equivalents | 112,586 | 107,805,852 | 67,442,862 | 41,698,513 | 17,771,523 |
| Total current assets | 112,586 | 178,628,912 | 135,716,982 | 105,943,377 | 113,970,919 |
| Total Assets | 1,124,475 | 880,311,648 | 820,477,742 | 624,000,619 | 524,045,921 |

Source: Financial Statement of Dangote Cement Plc. (2011-2015)

Table 4.6 Total Shareholders' Equity of Dangote Cement Plc. (2011-2015)

| Shareholders' Equity | 2017 ₦'M | 2018 ₦'M | 2019 ₦'M | 2020 ₦'M | 2021 ₦'M |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|
| Share capital | 8,520 | 8,520,254 | 8,520,254 | 8,520,254 | 7,745,685 |
| Share premium | 42,430 | 42,430,000 | 42,430,000 | 42,430,000 | 42,430,000 |
| Capital contribution | 2,828 | 2,828,497 | 2,828,497 | 2,828,497 | 2,828,497 |
| Currency translation reserve | - | - | - | - | |
| Employee benefit reserve | (1,007) | (465,792) | (465,792) | (746,282) | (473,946) |
| Retained earnings | 695,708 | 568,729,329 | 518,249,867 | 359,108,635 | 241,787,811 |
| Equity attributable to owners of the company | 748,479 | 622,042,287 | 571,562,826 | 412,141,104 | 294,318,046 |
| Non-controlling interest | - | - | - | - | - |
| Total shareholders' equity | 1,124,475 | 622,042,287 | 571,562,826 | 412,141,104 | 294,318,046 |

Source: Financial Statement of Dangote Cement Plc. (2017-2021)

Table 4.7: Current Liabilities of Dangote Cement Plc. (2017-2021)

| Current liabilities | 2017 ₦'M | 2018 ₦'M | 2019 ₦'M | 2020 ₦'M | 2021 ₦'M |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Bank overdraft | - | - | - | - | 4,169,563 |
| Trade and other payables | 79,584 | 90,906,792 | 73,289,339 | 54,110,567 | 36,181,236 |
| 201Current income tax payable | 1,305 | 565,737 | 565,737 | 2,504,925 | 4,276,176 |
| Deferred revenue | 37,169 | 402,408 | 541,736 | 602,101 | 240,207 |
| Borrowings | 22,528 | 47,098,378 | 55,431,396 | 50,433,729 | 35,769,950 |
| Due to related parties | - | 20,354,804 | 19,942,600 | 16,728,896 | 29,719,801 |
| Total current liabilities | 140,586 | 159,328,119 | 149,770,808 | 124,380,218 | 110,356,933 |
| Total Liabilities and shareholder's Equity | 281,172 | 880,311,649 | 820,477,742 | 624,000,619 | 524,045,921 |

Source: Financial Statement of Dangote Cement Plc. (2011-2015)

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