Effect of Financial Analysis on Investment Decisions in a Manufacturing Company: A Study of Dangote Cement PLC (2010–2022)

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Abstract

Research Purpose: With the increasing complexity of financial markets, this study evaluates the impact of financial analysis on investment decision-making in the manufacturing industry, focusing on Dangote Cement PLC from 2010 to 2022. This investigation aims to provide insights into how financial metrics influence returns and guide investment decisions.

Methodology: The study utilises secondary data from the annual financial statements of Dangote Cement PLC for the period 2010-2022. Descriptive statistics and E-view 9 software were employed to analyse the effects of accounts receivable, cash and cash equivalents, and current assets on return on assets (ROA).

Findings: The analysis reveals that cash and cash equivalents significantly impact the return on assets of Dangote Cement PLC. This underscores the crucial role of liquidity management in enhancing the firm's financial performance.

Conclusion: The study concludes that financial analysis is indispensable for optimal decision-making in manufacturing firms. It emphasises the necessity of rigorous financial scrutiny to improve returns and guide strategic investments.

Recommendations: It is recommended that manufacturing firms, including Dangote Cement PLC, should conduct annual audit reviews of their financial statements. This practice ensures accuracy and reliability in financial reporting, thereby supporting informed investment decisions and enhancing overall financial health.

Key words: Accounts receivable, Return on Asset, Cash, Cash equivalents, Account payable.

1.0 INTRODUCTION

1.1 Background to the Study

Financial report is a formal and comprehensive statement describing financial activities of a business organisation such as the manufacturing firm like Dangote Cement industry.

For such a business entity to report its financial activities there must be a proper financial records by the custodians of the finance of the company. Financial report is a statement that reports all relevant financial information, presented in a structured manner and in a form easy to understand for managerial use for taking prompt and informed decision making related to investment (IASB, 2017) and also to decision making pertaining to production planning, investment planning, expected returns and performance evaluation (Afolabi, 2016).

(Benjalux, 2016) affirmed that performance measures are the lifeblood of economic units, since without them no decisions can be made. Financial performance measure is one of the important performance measures for economic units. Financial performance measures are used as the indicators to evaluate the success of economic units in achieving stated strategies, objectives and critical success factors (Katja, 2019).

However, the main objective of financial performance measuring is to determine the operating and financial characteristics and the efficiency and performance of economic unity management, as reflected in the financial records and reports (Amalendu, 2010). Financial ratio analysis method is an important measure to financial performance analysis in the economic units. Ratio analysis method is the most commonly used financial tool to evaluate the current and past performance in the economic unit and to assess its sustainability (Dick & Wang, 2016). It's the important analytical tools of finance, which provides managers with executives important insights regarding overhead cost structure, ability to raise capital, adequacy of working capital and contingency reserves, and efficient use of assets through the evaluation of a set of financial ratios, observations of trends in those ratios, and comparisons to average values for other companies in the industry, also this method it can be a productive starting point for assessing financial strengths and weaknesses, creditworthiness, and other attributes of a firm based on past performance (Rabo, 2018). Ratio analysis helps to determine the performance of liquidity, profitability and solvency position of economic units and it provides all assistance to the management to fix responsibilities (Periasamy, 2016)

The two primary objectives of every business are profitability and solvency. Profitability is the ability of a business to make profit, while solvency is the ability of a business to pay debts as they come due (Hermanson, James & Michael, 2019). To make the right decision at the right time executives should know the financial position of the organisation. Through financial information an executive can take imperative decisions as and when they are required. For studying the financial health and having accurate financial information of a business, ratio analysis is being considered as the major tool at present.

Bittel, Lester, Ronald, Burke & Lawrence, (2014) observed that one of the effective ways of providing information needed for decision-making is ratio analysis.

The subject of financial performance has received significant attention from scholars in the various areas of business and strategic management. It has also been the primary concern of business practitioners in all types of organisations since financial performance has implications to organisation's health and ultimately its survival. High performance reflects management effectiveness and efficiency in making use of a company's resources and this in turn contributes to the country's economy at large (Naser & Mokhtar, 2014). In Nigeria, corporate failures and distresses have been witnessed as evidenced by (Ekwe, 2013). This problem resulted in the establishment of Asset Management Company of Nigeria (AMCON) to rescue failed corporations to prevent further corporate failure (Central Bank of Nigeria, 2009).

This trend has now more than ever ensured that financial statements are sternly scrutinised. Investors, financial analysts and other users of accounting information tend to use their 'third' eye to scrutinise financial statements. This became necessary because audited financial statements, which used to provide assurance as to the healthy nature or otherwise of a firm, have now become an object of criticism due to manipulations done in these statements (Ekwe , 2015).

1.2 Statement of the Problem

The achievement of financial or investment goals and objectives depends on a proper understanding of such investment opportunities (Aniefor & Oboro 2015). However, many potential investors are known to have adventured into an investment opportunity without appropriate apprehension of such investment opportunity, thus settling on and executing erroneous decisions effectively the investment will collapse when the going demonstrated unfeasibly. In some instances, the investment ventures may come to pass, but the aim for such investment may not be realised. Kapellas and Single (2018) debated that the principal driver of the stock exchange market is information depicted in the FSs and with proper analysis of investment opportunities derived from FSs, adverse selection or moral hazard will be reduced drastically.

Fortunately, numerous investments are done without emphasis laid on those indexes that show such investments would be solvency and effective to generate great returns, in the long run, so likewise the danger implied and the advantages to be derived whenever set out on such investment with the limited financial resources and the resultant effect of non-performance. According to Conteh and Akuntansi (2021), for an effective and

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ISSN: 2251–032X

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efficient investment decision, FSA is an important process needed to be carryout by potential investors, if the investors fail to carry out FSA on the financial data of investment opportunity, such an investment is at higher risk of surviving and meet its targeted objectives. All the aforementioned problems emerge due to erroneous financial decisions making hence, this review will, therefore, point out the means through which meaningful financial and investment decisions can be inferred with the aid of FSA to enhance the changes available for investment opportunities or firms' financial activities through analysing financial information concerning such investment opportunities.

This study is centred on the FS presented to the stakeholders by Dangote Cement Factory and also available to potential investors and stockholders as a means of getting information for efficient and effective decision-making using financial ratio analysis (FRA) tools and techniques.

Objective of the Study

The main objective of this study is to assess the impact of financial analysis on investment decision-making in the manufacturing industry, with a specific focus on Dangote Cement factory

Specifically, the study intends to achieve the followings;

i) Analyse effect of accounts receivable on return on asset of the firms in Nigeria.

ii) Examine effect of Cash and cash equivalents on return on asset of the firm in Nigeria.

iii) Determine if there is a long-run relationship between current asset and return on asset

Research Questions

The following research questions will guide this research:

i. To what extent did accounts receivable affect return on assets of the firms in Nigeria?

ii. To what extent did Cash and cash equivalents affect return on asset of the firms in Nigeria?

iii. Is there a long-run relationship between current asset and return on asset?

Research Hypotheses

The following null hypotheses were formulated in line with the specific objectives of this study:

H_{01}: Accounts receivable has no significant effect on return on asset of the firms in Nigeria

H_{02}: Cash and cash equivalents has no significant effect on return on asset of the firms in Nigeria

H_{03}: There is no long-run relationship between current asset and return on asset

Significance of the Study

Financial managers

This study is very crucial as it will give the financial managers of these manufacturing organisations better insights on the need to pay particular attention to the effective and efficient management of their financial Analysis. They will be in a better position to be able to design and implement strategies and policies that are aimed at encouraging investment decision making.

Management

The study would further enable the management to know to what extent they should increase their liquidity in order to encourage investment decision making.

Researchers and scholars

And for academic purposes, the research work will contribute to the existing body of knowledge on financial analysis and investment decision making. Finally, it is expected that the study will serve as a source of information to students undergoing research work of this nature in the future.

Scope of the Research

The research work is centred on ascertaining the impact of financial analysis on investment decision-making in the manufacturing industry, with Dangote Cement being a study reference. The study limits its scope to the variable of interest; Account receivable (LACR), Account payable (LACP), Cash and cash equivalent (LCCE) and Return on Assets from 2011-2022.

Limitations of the study.

The major challenges are encountered in this study, they include: inadequate finance and difficult accessibility of research materials.

Time: The researcher missed some lectures in the course of carrying out this research work, as part of the research was done during lecture hours.

Finance: There was insufficient funds to carry out all that was supposed to be done.

2.0 REVIEW OF RELATED LITERATURE

Conceptual Review

Financial Performance

There are several aspects of performance, each of which contributes to the overall performance in an organisation. Despite the evolution of various available benchmarks and performance measurement, the answer to what is performance may still be hard to pin down. The banking sector aims for strong performance, but few banks worry about what constitutes such performance. The current run up of the stock market, at a time when corporate profits are fast declining, raises the question of whether or not banks are doing a satisfactory job for their shareholders (Ghouri & Khan, 2017).

Hansen and Mowen (2015), states that firm performance is very essential to management as it is an outcome which has been achieved by an individual or a group of individuals in an organisation related to its authority and responsibility in achieving the goal legally, not against the law, and conforming to the moral and ethic. Performance is the function of the ability of an organisation to gain and manage the resources in several different ways to develop competitive advantage.

The main objective of financial performance measuring is to determine the operating and financial characteristics and the efficiency and performance of economic unity management, as reflected in the financial records and reports (Amalendu, 2018).

Akinsulire, (2018) and Pandy (2016) points out that no performance review is beyond dispute, for instance, reported profit is a matter of opinion. If income is to be measured in terms of the increase or decrease in the wealth of an enterprise, obviously some definitions of that stock of wealth is required. Akinsulire, (2018) and Pandy, (2016) measures wealth in three categories; as financial capital – the equity stake in an enterprise in money terms; real financial capital, the equity stake in an enterprise in real terms (the proprietary concept); operating capacity capital, the ability of the enterprise to maintain its ability to provide goods and services (the entity concept). Hunger and Wheelan (2017) suggest performance as the end result of activity and the appropriate measure selected to assess corporate performance is considered to depend on the type of organisation to be evaluated and the objectives to be achieved through that evaluation.

In addition, measuring performance is very important because it builds on the results, make different decisions in economic units. According to (Benjalux, 2016) performance measures are the lifeblood of economic units, since without them no decisions can be made. Financial performance Measure is one of the important performance measures for

economic units. Financial performance measures are used as the indicators to evaluate the success of economic units in achieving stated strategies, objectives and critical success factors (Katja, 2019).

Performance measurement is therefore the process whereby an organisation establishes the parameters within which programmes, investments, outputs and acquisitions are reaching the desired results (Hunger and Wheelan, 2017). Hunger and Wheelan (2017) further explain that performance measurement involves ongoing data collection to determine if a program is implementing activities and achieving objectives, the ongoing monitoring and reporting of program accomplishments, particularly progress toward pre-established goals (This is typically conducted by program or agency management) and a system for assessing performance of development interventions against stated goals. From the above, it could be affirmed that performance measurement is a measure or evaluation of achievement with a predetermined or expected target of an organisation. It can also be looked at as the process whereby a company establishes the basis within which achievements, programmes, investments, outputs and acquisitions are reaching the desired results.

Investment Decision

It is the duty of every investor to profitably utilise the resources that have been placed at its disposal, and to carry out the investment function many decisions have to be made. Investment decisions can be considered one of the most important decisions taken by investors, if not the most important one. The investment decision making process influences the investors' affirmation in a turbulent business environment and increases its market share (Martin, 2016). It concerns the issue of capital allocation for fixed assets or financial assets; central place returns to fixed assets, acquired as a result of capital investment. By this decision, financial resources at investors' disposal are allocated efficiently to acquire more market share. In addition, the available liquidities may be placed respecting the efficiency criteria on the capital market, to purchase financial assets (Zager, & Zager, 2016; Martin, 2016). In any case of the chosen alternatives, the investment decision ought to be subordinated to achieve the investment objectives long-term. Bucataru (2017), explains in another that, investment decisions are those concerning the conversion of capital money in material form such as machinery, equipment, buildings, through operations of acquisition of these assets.

As postulated by Pandey (2015), investment decisions or analysis has to do with an efficient allocation of capital. It involves a decision to commit the firm's funds to

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ISSN: 2251-032X

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long-term assets. Such decisions are of considerable importance to the firm since they tend to determine its value by influencing its growth, profitability and risk.

Investment decision of a firm is one which is expected to produce benefits to the firm over a long period of time and it can pass both tangible and intangible assets (porter 2015). The investment decisions of a firm are generally known as the capital budgeting decision may be defined as the firm's decision to invest its current funds most efficiently in the long-term assets in anticipation of an expected flow of benefits over a series of years. According to Canada and White is the series of decisions by individual economic units as to how much and where resources will be obtained and expected for the future. Situations where capital expenditure decisions are made or taken, are based primarily with measurement of capital productivity which provides an objective means of measuring the economic worth of individual investment proposals in order to have a realistic basis for choosing among the firm's long run property (Pandey 2015). The long-term asset is those which affect the firm's operation beyond the year period. The firm's investment decision would generally include expansion acquisition, modernization and replacements of the long-term assets. Sales of division or business divestment are also analysed as an investment decision. Activities such as change in the methods of sales distribution or undertaking an advertisement campaign or a research and development programmes have long-term implications for the firm's expenditures and benefits, and therefore, they may also be evaluated as investment decisions. It is important to note that investment in long-term assets invariably requires funds to be tied up in the current assets such as inventories and receivables, some of the features of investment decisions are as follows;

a)   The exchange of current funds for future benefits

b)   The funds are invested in long-term assets

c)   The benefits will occur to the firm over a series of years The two importance aspects of investment decisions are;

a)   The evaluation of the prospective profitability of new investments.

b)   The measurement of a cut-off rate against the prospective return of new investment could be compared. (Amedu, 2019).

Account Receivables

According to Yator (2018), account receivable refers to the amount of money owed to an institution by its stakeholders from goods and services offered but not yet fully paid for. Account receivable is money owed to a firm when it sells its products or services on credit and does not receive cash immediately. Account receivable investment entail procedures

implemented to oversee successful operations of this account. The objective for investing current assets receivable is to collect them as quickly as possible without losing sales from high-pressure collection techniques. The primary goal of current asset receivables investment is to maximise the value of the enterprise by striking a balance between liquidity, risk and profitability (Muthoni et al, 2020). The maintenance of receivables is neither for sales maximisation nor is it for minimization of risks involved by way of bad debts but growth of sales, the concern would have opened credit sales to all sorts of customers. This is because, if minimization of risk of bad debts were to be the objective, the firm would not have to make any credit sale at all. It is noted that many organisations thrive on credit sales and therefore management of accounts receivable becomes a pivotal point in maximisation of profits. That means a firm should indulge in sales expansion by way of receivables only until the extent to which the risk remain within an acceptably manageable limit (Owuor et al, 2021)

Accounts receivable are outstanding amounts owing to a company, where the company has delivered goods or services and extended credit to clients. In today's economy, most sales are made through credit and this trend is increasing. Companies using credit sales find themselves in difficult situations when attempting to measure revenue and manage their assets. The main benefit for companies from offering current asset credit is that it can increase company sales. The objectives for managing accounts receivable are to collect them as soon as possible without losing sales because of high-pressure collection techniques (Gitman *et al.*, 2010). It is essential for financial managers to manage accounts receivable properly in order for companies to receive payments from customers on time. However, in order to increase company sales, consumers must be given a credit transaction policy.

Credit customers who pay late or who do not pay at all only aggravate the accounts receivable problem (Mangesha, 2014). While credit is essential for the growth of any company, a company that sells goods or services but does not receive cash for these sales is said to have granted current asset credit (Kungu, 2015). It is essential for financial managers to develop policies that can govern the benefits of offering credit with the related costs.

A company can control its accounts receivable by practising credit management: decisions in connection with terms of sale, credit analysis and decision and collection policy have to be made (Rehn, 2012). It is important for financial managers, employees and customers to understand credit policy. The crucial variable that affects demand for a company's products are sales prices, product quality, advertising and the company's credit policy

(Besley *et al.*, 2015). It is therefore for this reason that credit policy is regarded as the most vital approach of managing and controlling accounts receivable.

In order to ensure that there is an optimal investment in receivables, a company is required to have an applicable credit policy (Kungu, 2015). It is important for companies to have good credit policies that can benefit customers and the company. If companies have good credit policies, this may result in an increase in company performance. Megginson *et al.* (2010) assert that credit policy consists of credit standard, setting credit terms, credit period and collection effort. Credit standards are the first and the most essential element of accounts receivable management. Setting credit standards entails applying procedures for examining which consumers should receive credit and how much credit should be given to them (Smart & Megginson, 2009). They argue that much of the focus is on ensuring that a company does not accept substandard customers. However, a company must take care not to set the standards so high that potentially good customers are rejected. Kungu *(*2015) contends that if the company's credit standards are too harsh, the volume of credit sales will be smaller but the company will have little collectable debts. It is important for financial managers to manage credit sales carefully in order to increase company performance.

Setting credit terms is concerned with the period for which the company should extend credit. It takes into account the type of discount the company should provide to encourage credit consumers to make early payments (Fanue, 2011). Credit terms are therefore terms of sale for consumers. Klapper, Luc and Raghuram (2013) conducted a study on current asset credit contracts at the level of matched customer-supplier pairs. They found that good consumers might exercise market power in order to gain favourable current asset credit terms with weaker business partners.

Mathuva (2010) on the other hand, conducted a study on the influence of working capital management components on corporate profitability among listed firms in Kenya. His study revealed that the less time it takes customers to pay bills, the more cash is available to purchase inventory, and hence the higher sales realised leads to greater profitability of the firm. The results also indicated that a more obstructive credit policy that gives consumers less time to make payments increases the performance of a company.

In addition, an effective and timely collection of debtors ensures that bad debt losses are kept to a minimum and that the average collection period is shorter (Snha, 2009). It is important for companies to be careful when they set collection policies because if their policy is not set correctly, it can result in customers turning their backs; as a result, company performance may fall.

Gitman *et al.* (2010) argue that changes in the credit period, that is, the number of days from the commencement of the credit period until full payment of an account is made, also affects a company's profitability. They argue that increasing a company's credit period from 30 days to 45 days should increase sales and positively affect profit. However, the decision on setting the credit period is tough for the seller. It is for this reason that an extensive credit period usually includes default risk.

Account receivables can be seen as short-term loans to customers given by the supplying firm.Giving these credit terms to customers are an important way of securing sales (Benard, 2006).When the accounts receivables keep growing, funds are unavailable and therefore can be seen as opportunity costs. Account receivable period is the time between sale of inventory and collection of the receivables (Ross, Westerfield, Jaffe & Jordan, 2008). It is also known as receivable turnover ratio and is a very important indicator that shows how efficient the company is performing its financial activities. It is calculated by dividing annual net credit sales by receivables (Van –Horne & Wachowicz, 2008).

Receivables turnover = Annual net credit sales

Receivables

Cash and Cash Equivalents

Cash and cash equivalents refers to the line item on the statement of financial position that reports the value of a company's assets that are cash or can be converted into cash immediately. Cash equivalents include bank accounts and marketable securities, which are debt securities with maturities of less than 90 days. Charles and Fortune (2019) stated that cash and cash equivalents are a group of assets owned by a company. For simplicity, the total value of cash on hand includes items with a similar nature to cash. If a company has cash or cash equivalents, the aggregate of these assets is always shown on the top line of the statement of financial position. This is because cash and cash equivalents are current assets, meaning they're the most liquid of short-term assets. Cash is essential in starting a business as well as in liquidating the same for its breakup value. It represents the time difference between the acquisition of raw materials and other inputs, and the receiving of cash from the sale of the finished goods. In other words, the period between the acquiring of raw materials and the paying of these materials plus the cash conversion cycle forms the working capital cycle of a firm. The cash conversion cycle is measured using the following formula as forwarded by Pandey (2005):

Gross Operating Cycle (GOC) – Creditors (Payables) Deferral Period (CDP)

Gross Operating Cycle (GOC): The firm GOC can be determined as inventory conversion period

(ICP) plus debtors' conversion period (DCP).Thus, GOC is given as follows:

Gross Operating Cycle = Inventory Conversion Period + Debtors Conversion Period

GOC = ICP + DCP

Creditors (Payables) Deferral Period (CDP): Creditors (payables) deferral period is the average time taken by the firm in paying its suppliers (creditors). It is given as:

Creditors Deferral Period

$$(CDP) = \frac{Creditors \times 360}{Credit\ purchases}$$

Accounts payable

Accounts payable is defined as the supplier whose payment for goods or services has been processed but who has not yet been paid. Accounts payable includes current asset credit and accrued expenses which together provide finance to the operations of a business on an on-going basis (Naeem *et al.,* 2014). Firms would rather sell for cash than on credit, but competitive pressure forces most companies to offer credits. Unlike credit from financial institutions, accounts payables do not rely on formal collateral but on trust and reputation. According to Singh (2004) the liquidity position of a firm mainly depends upon accounts receivable and payable deferred policy as well as inventory conversion period of the firm.

Firms often regard the amount owing to creditors as a source of free credit. It is one of the major sources of secured short-term financing. Utilising the value of relationship with payee is a sound objective that should be highlighted as important as having the optimal level of preventions (Gitman & Smith 2010). As a consequence, a strong alliance between the company and its suppliers will strategically improve production lines and strengthen credit record for future expansion. Singh (2004) argues that the creditor is a vital part of 19 effective cash positions. Purchasing initiates cash outflows and overzealous purchasing functions can create liquidity problems.

Return on Assets

Return on assets identifies the level of profitability. This ratio measures the return on total assets after interest and taxes. The return on total assets or total investment shows the performance of management in using company assets to generate profits (Jan-Horas & Denny, 2019). Gartenberg

et al (2019) opined that Return on Assets is the ratio used to measure the net profit gained from the use of assets. In other words, the higher this ratio, the better the productivity of assets in obtaining net profits. This will further increase the attractiveness of the company to investors. Increasing the attractiveness of the company makes the company more attractive to investors.

This is because the rate of return or dividends will be even greater. This will also have an impact on the company's stock price in the capital market as it will increase so that ROA will affect the company's stock price. According to Zulqernain, et al (2014), Return on Assets is a ratio that shows the return on the amount of assets used in the company. Thus it can be said that a company with a high level of return on assets will attract investors to invest their capital in the company, because it is considered that the company generates high profits and will ultimately have a positive impact on the value of dividends to be received by the company's shareholders.

Theoretical Review

The Pecking Order Theory

The pecking order theory does not take an optimal capital structure as a starting point, but instead asserts the empirical fact that firms show a distinct preference for using internal finance (as retained earnings or excess liquid assets) over external finance. If internal funds are not enough to finance investment opportunities, firms may or may not acquire external financing, and if they do, they will choose among the different external finance sources in such a way as to minimise additional costs of asymmetric information. The latter costs basically reflect the ''lemon premium'' (Akerlof, 1970) that outside investors ask for the risk of failure for the average firm in the market. The resulting pecking order of financing is as follows: internally generated funds first, followed by respectively low-risk debt financing and share financing.

In Myers and Majluf model (1984), outside investors rationally discount the firm's stock price when managers issue equity instead of riskless debt. To avoid this discount, managers avoid equity whenever possible. The Myers and Majluf model predicts that managers will follow a pecking order, using up internal funds first, then using up risky

debt, and finally resorting to equity. In the absence of investment opportunities, firms retain profits and build up financial slack to avoid having to raise external finance in the future.

The pecking order theory regards the market-to-book ratio as a measure of investment opportunities. With this interpretation in mind, both Myers (1984) and Fama and French (2000) note that a contemporaneous relationship between the market-to-book ratio and capital structure is difficult to reconcile with the static pecking order model. Iteration of the static version also suggests that periods of high investment opportunities will tend to push leverage higher toward a debt capacity.

This study anchored on the pecking order theory as a better predictor, hence the theory suggests that periods of high investment opportunities will tend to push leverage higher toward a debt capacity as well regards the market-to-book ratio as a measure of investment opportunities, these is an eye opener for the investors to rationally discount the firm's stock price when managers issue equity instead of riskless debt.

Agency theory / Stakeholder theory

Agency theory is a theory explaining the relationship between the principals (shareholders) and agents (managers). It is also a principle that is used to emphasise and provide possible solutions to issues in the relationship between business principles and their agents. Most generally, that relationship is the one between shareholders as principals and company executives as agents. An agency in comprehensive terms, is any relationship between two parties in which one party, the agent, serves as a representative to the other, the principal, in day-to -day activities or transactions. In this association, the principal bestows the duty by authorising or delegating an agent to perform work in the best interest of the principal Mitinick, (1976).

Moreover, due to the relationship between the principal and its agents, there are agency problems that arise or exist and possible resolutions are made to curb these problems. This explains problems that can occur due to the delegation of decision making authority which can lead or bring large inefficiency and therefore increased cost. For instance, if the owner (principal) authorises decision making authority to a manager (the agent), there is a possibility that the manager will not perform his work to the full effectiveness and capacity as the owner would, given that the manager does not participate fully or directly in the outcome of the organisation. The continuity of information that is not identical on both sides, moral hazards and self-interest among the parties can cause the agent's

behaviour to differ fundamental and essential information from what is the joint principal interest, bringing loss of efficiency Mitinick, (1976).

In essence, the importance of agency theory/ stakeholder theory to working capital management and profitability could be sighted from the context of a financial manager, who in most cases is an agent of the owners (principals) of a firm who is responsible for fundamental decisions concerning all the short term assets and liabilities of a business. He takes responsibility for decisions concerning receivables, payables, inventories / stock and liabilities of a firm. Nevertheless, by enlarging this to stakeholders, the creditors, for instance, provide sources of finance to the firm and in return as an exchange expects repayment of their loan at a set time schedule or a particular period of time. Employees and managers assist firms with necessary skills, time, and also human capital requirements in exchange they expect effective and efficient good working conditions, true and fair income and remuneration. Customers provide net sales or revenue for the firms and in return expect to have value for money and maximum satisfactory services. Suppliers are input providers to the firm and thus expect to have value of money, fair prices and dependable buyers to derive satisfactory services. Stakeholders normally have no same traits or characteristics with respect to their share of interest or stake in the firms. The level of an individual's stake depends on the measure of his exchange of relationship and commitment with the firm which depends on a particular or specific asset investment Mitnick, (1976).

Empirical Review

Popoola, Akinsanya, Babarinde & Farinde (2014) on Published Financial Statement as a Correlate of Investment Decision among Commercial Bank Stakeholders in Nigeria. A correlation research design was used in the study. 180 users of published financial statements were purposely sampled from Lagos and Ibadan. Data generated were analysed using Pearson correlation and regression. The findings of the study revealed that, balance sheet is negatively related with investment decision (r= - .483; p<.01) while income statement (r= .249; p<.001), notes on the account (r= .230; p<.001), cash flow statement (r=.202; p<.001), value added statement (r= .328; p<.001) and five-year financial summary (r= .191; p<.01) are positively related with investment decision. Findings also revealed that components of published financial statements significantly predicted good investment decisions (R2= .983; F(5,175)=284.5; p < .05) for commercial bank stakeholders.

Osuala, Ugwumba and Osuji (2017) empirically investigate the effect of information content of financial statements on shareholders' investment decisions. The study is vital as it portrays the extent to which shareholders of firms listed on the Nigerian Stock

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Exchanged (NSE) are influenced by the contents of published accounts in their investment decisions. In order to determine the relationship between information contents of financial statements and shareholders' investment decisions, some of the key contents of financial statement were used to derive the proxy variables used in the study, namely profitability, dividend per share, earnings per share, leverage, and liquidity; while shareholders' investment decisions is represented by change in number of shares. Data for the study were obtained from the published annual financial report of the selected firms. Regression model was employed to establish the relationship between the variables. The findings generally indicate that shareholders in the Nigerian capital market do not rely much on financial statements as a major determining factor for their investment decisions. It was observed that other factors or variables outside firms' annual reports such as regularity of dividend payment and market price of shares are vital to shareholders' investment decisions.

Puja and Padma, (2018) on Ratio Analysis is an Instrument – for Decision Making. The study examines the financial statement of TCS and finds out the impact of ratio analysis on decision making. To fulfil the objectives of the study and to make a detailed evaluation of financial status, the case study method has been adopted. For the present study ratios and comparative statement analysis are the tools selected. The study thereby concluded that Practical applications of ratio analysis require the comparisons of a firm's financial ratios to some norms, or pre specified benchmarks.

Adelegan (2016) evaluated the impact of capital market imperfections on investment behaviour of productive sector firms in Nigeria between 1984 and 2000. The study adopted a model based on Tobin's q theory and employed the OLS and instrumental variable techniques to estimate the model. Their results revealed that the Nigerian capital market is imperfect and that bigger and older firms rely more on internal funds compared to smaller and newer firms. Their switching regression analysis showed that an increase in both future profit prospects measured by Tobin's q and cash flow result in an increase in corporate investments of firms that have low credit worthiness. The conclusion emerges that the incidence and severity of information and agency problems vary across firms and over time, thereby having different effects on investment behaviour. The implication is that capital market imperfections lead to binding financial constraints on corporate investment behaviour in Nigeria.

Ekwe (2013), investigated the degree of reliance of the published financial statements by corporate investors. The study employed survey research design by which data were generated by means of questionnaire administered on one hundred and fifty corporate

investors and senior management officials of the selected banks. Descriptive statistics and percentage analysis were used for the data analysis and the hypotheses were tested using t-test statistics. The statistical package for social sciences (SPSS) software version 17.0 was employed in the analysis of data and test of hypotheses. The results reveal that one of the primary responsibility of management to the investors is to give a standardised financial statement evaluated and authenticated by a qualified auditor or financial It hereby concludes that the ability of the investors to read and understand the financial report determines the degree of impact the published annual report will have on the investor's investment decision making.

3.0 METHODOLOGY

Research Design

The concept of research design refers to the specification of relevant procedures for collecting and analysing data, which would help solve the problem under study (Prasad, 2001).This study adopted an ex-post facto design and uses only secondary data from the financial statement of manufacturing companies listed on the Nigerian stock exchange (NSE) from 2011 to 2022. The ex-post facto design is adopted because the variables used in this study are readily available and obtained in the audited financial statements of the sampled manufacturing companies without being manipulated or controlled and the variable cannot be studied experimentally but the effect of relationship between the independent variables and the dependent variable can be established. Similarly, the availability of these data underlines the choice of time period to the study.

Area of study

Area of the study simply means the geographical area which is the population being studied. The area of the study is located in Obajana Kogi State.

Sources of Data

In obtaining the necessary information for this study, compiled data (secondary data) was used which (Miller, 2019) described as data which has received some forms of selection. The choice of documentary secondary data which (Imonitie, 2014) termed as archival research will be informed by the nature and objectives of the study to establish relationship that subsists between account receivable and investment decision making manufacturing firms in Nigeria.

3.1 Population of the Study

The population of this study was made-up of the 134 consumer and industrial firms listed on the Nigerian stock exchange during the period of study and the reason for the choice of this market is primarily due to the reliability of the financial statements. Audited financial statements are reliable as auditors certify them.

3.2 Model Specification

In relating this to the study; we adopt panel least squares regressions.

$$ROA = \beta_0 + \beta_1 ACR + \beta_2 INV + \beta_3 CAC + \varepsilon_{it}$$

Relating to econometric form and the variables log linearised, it will appear thus;

$$LORNA = \beta_0 + \beta_1 LACE + \beta_2 LCAC + \varepsilon_{it}$$

Where:

LACR = Accounts receivable

LACP = Accounts payable

LCCE= Cash and cash equivalents

β_0 = Intercept

$\beta_1 - \beta_8$ = short-run dynamic Coefficients of the model's adjustment long-run equilibrium

$C_{it} + \varepsilon_{it}$ = Disturbance and unobserved terms.

A priori expectation: It is expected that $\beta_1 - \beta_3 > 0$

3.3 Description of variables

Account Receivable

According to Yator (2018), account receivable refers to the amount of money owed to an institution by its stakeholders from goods and services offered but not yet fully paid for. Account receivable is money owed to a firm when it sells its products or services on credit and does not receive cash immediately.

Cash and Cash Equivalents

Cash and cash equivalents refers to the line item on the statement of financial position that reports the value of a company's assets that are cash or can be converted into cash immediately. Cash equivalents include bank accounts and marketable securities, which are debt securities with maturities of less than 90 days.

Return on Assets

Gartenberg et al (2019) opined that Return on Assets is the ratio used to measure the net profit gained from the use of assets. In other words, the higher this ratio, the better the productivity of assets in obtaining net profits.

3.4 Methods of Data Analysis

This study adopted descriptive statistics which highlights measures of central tendency and dispersion such as the mean and standard deviation. The choice of descriptive statistics of the analysis of data in this study is a result of its great advantage, as it makes a mass of research material easier to read, by reducing a large set of data into a few statistics. Andy, (2005) argues that the descriptive statistics is a useful summary of the data. Multiple regression models.

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Preliminary Tests

A key preliminary test in this study is the Augmented Dickey-Fuller (ADF) unit root test. The ADF unit root test is very necessary since it would enable us to ascertain the stationarity of our series and therefore guide us on the appropriate estimation technique to apply. In addition, we conducted the descriptive statistics with the sole aim of understanding the statistical characteristics and trends of our series.

4.1.1   Descriptive Statistics

We conducted descriptive statistics for our set of variables as presented in Tables 4.1.

Table 4.2   Descriptive Statistics of the Variables

	LROA	LCCE	LINV	LACR
Mean	3.592326	4.133790	4.383983	5.384392
Median	3.585184	4.091841	4.875655	5.805466
Maximum	4.282068	7.284697	8.344389	8.316127
Minimum	2.833213	0.604316	-1.560648	1.499623
Std. Dev.	0.508687	1.890803	3.443146	2.129954
Skewness	0.058995	-0.233472	-0.510806	-0.499189
Kurtosis	1.426546	2.059858	1.890673	1.984448
Jarque-Bera	3.630780	1.606943	3.316685	2.957654
Probability	0.162774	0.447772	0.190454	0.227905

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Sum	125.7314	144.6826	153.4394	188.4537
Sum Sq. Dev.	8.797916	121.5546	403.0787	154.2479
Observations	35	35	35	35

Source: *Eviews 9 output, 2024*

Descriptive statistics in Table 4.2 shows that ROA attained a mean of 3.592326 between 2012 and 2021 having a highest level at 4.282068 and lowest at 2.833213. ACR stood at a mean of 5.384392 at a maximum of 8.316127 and minimum of 1.499623 over the period. CCE attained a mean of 4.133790 having a Maximum of 7.284697 and a Minimum of 0.604316, the mean of INV stood at 4.383983 at a maximum of 8.344389 and minimum of -1.560648, We observed from the results that our variables, is normally distributed (p > 0.05) and is statistically different from zero. The normality in the variable description is based on the skewness of the variables; all the variables are negatively skewed, (S<0) except ROA which was positively skewed.

4.1.2 Unit Root Test

It is not econometrically appropriate to carry out a regression analysis on time series data that are not stationary. Such an operation is likely to produce spurious regression results. In order to address the problem, the Augmented Dickey Fuller (ADF) unit root test was employed to determine the stationarity of the data as shown in Table 4.3

Table 4.3 Unit Root Test Results

Variables	ADF-Stat	5% critical value	P-value	Inference
LROA	-3.791023	-2.951125	0.0068	I(0)
LCCE	-3.768840	-2.960411	0.0077	I(0)
LINV	-6.712459	-2.951125	0.0000	I(0)
LACR	-3.830362	-2.960411	0.0066	I(0)
LACP	-4.015043	-2.948404	0.0037	I(0)

Source: *Author's compilation 2024*

The result of the unit root test in table 4.3 reveals the presence of stationarity at 5% critical level Moreover, all our variables are not integrated in the same order. In other words, while the dependent variables LROA attained stationarity at level I(0), LCCE ACP, ACR and LINV attained stationality at level I(0) also, it is apparent that the calculated ADF value have more negative than critical values for all the variables tested, which confirms that our series has no unit root. Moreover, to confirm the reliability of this result, the

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p-value of the calculated ADF values for each of the variables is less than 5% level of significance. Given that the variables integrate in the same order, we are guided to check for cointegration using ARDL Bounds Text in order to determine if the variables have a short-run or long–run relationship. in order to determine if the variables have a short-run or long–run relationship.

4.2 Cointegration Test

Table 4.4 Co-Integration Test using ARDL bounds test

ARDL Bounds Test

Date: 11/03/24   Time: 10:29

Sample: 1987 2018

Included observations: 29

Null Hypothesis: No long-run relationships exist

Test Statistic	Value	K
F-statistic	1.040499	3

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.72	3.77
5%	3.23	4.35

2.5%	3.69	4.89
1%	4.29	5.61

Source: E-view 9 output, 2024

Based on table 4.4 the F-statistic value 1.040499 is lesser than the critical value for the upper bound I(1) 4.35 , thus we can conclude that there is no cointegration. That is, there is no long-run relationship. We accept the null hypothesis and estimate the short run model which is auto regressive distributed lag (ARDL).

Table 4.5: Regression Model Estimation Results

Dependent Variable: (ROA)

Method: OLS

Date: 11/03/24 Time: 20:32

Sample (adjusted): 2012 2022

Included observations: 36 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.53 2054	0.23 4876	2.2 65257	0. 0284
LINV	-0.214416	0.049445	-4.336478	0.0001
LACR	0.053183	0.060905	0.873221	0.3872
LCCE	0.085535	0.044857	1.906841	0.0429

R-squared	0.43 8898	Mean dependent var	0.17 6784
Adjusted R-squared	0.389022	S.D. dependent var	0.296269
S.E. of regression	0.231579	Akaike info criterion	0.006845
Sum squared resid	2.413289	Schwarz criterion	0.198047

		Hannan-Quinn	
Log likelihood	4.828885	criter.	0.079656
F-statistic	8.799817	Durbin-Watson stat	1.655807
Prob(F-statistic)	0.000025		

Source: *E-view 9 output, 2024*

Table 4.5 shows the coefficients and z-statistics of fixed effect for regression results for the model. The results show that the adjusted R2 is about 0.438 for model two which expresses the percentage of the total variation in the dependent variable explained by the current assets investment {inventories (INV), Account payable (ACP), Account receivable (ACR), and cash and cash equivalent (CCE)} variables jointly. It indicates that inventories (INV), Account receivable (ACR), and cash and cash equivalent (CCE) constitute 43.8% variation in the financial performance measure of return on assets (ROA) of listed industrial goods manufacturing firms in Nigeria while the remaining 56.2% are factors not included in this study model. The probability of F-value (0.000025) for the mode is less than 0.05 significance level indicates that the models are of good fit between current assets investments (INV, ACR, and CCE) and financial performance variable (ROA) was properly selected

4.2 Test of Hypotheses

4.2.1   Test of hypothesis One

Ho_1 Accounts receivable has no significant effect on return on asset of the firms in Nigeria

Hi_1 Accounts receivable has no significant effect on return on asset of the firms in Nigeria

Decision Rule

The decision rule is based on a 5% probability value and is stated as follows:

H_0: $\theta = \theta_0$ *versus* H_a: $\theta \neq \theta_0$

Reject null hypothesis if p-value < 0.05

Accept alternative hypothesis if p-value > 0.05

Decision

Results in Table 4.5 showed the probability value of Account receivable 0.3872 > 0.05 (greater than) alpha levels. Therefore, we accept the null hypothesis one and reject the alternate one; it implies that Account receivable has no significant effect on return on assets of manufacturing firms in Nigeria.

4.2.2 Test of hypothesis two

Hi_4 Cash and cash equivalents has no significant effect on return on asset of the firms in Nigeria

Hi_4 Cash and cash equivalents has significant effect on return on asset of the firms in Nigeria

Decision Rule

The decision rule is based on a 5% probability value and is stated as follows:

$H_0: \theta = \theta_0 \; versus \; H_a: \theta \neq \theta_0$

Reject null hypothesis if p-value < 0.05

Accept alternative hypothesis if p-value > 0.05

Decision:

Results in Table 4.5 finally, shown cash and cash equivalent probability value 0.0429 < 0.05 (less than) alpha level. Therefore, we rejected the null hypothesis four and accepted the alternate four, -.

4.2.3 Test of hypothesis Three

H_0 There is no causal relationship between current asset and return on asset

H_1 There is a causal relationship between current asset and return on asset

Table 4.6: Granger Causality Test

Pairwise Granger Causality Tests

Date: 11/03/24 Time: 21:04

Sample: 1986 2022

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.

LINV does not Granger Cause LROA	**34**	**2.39284**	**0.1092**
LROA does not Granger Cause LINV		**2.71926**	**0.0827**

LBOP does not Granger Cause LROA	**24**	**2.48959**	**0.1096**
LROA does not Granger Cause LBOP		**1.15257**	**0.3369**

LACR does not Granger Cause LROA	**34**	**3.46453**	**0.0448**
LROA does not Granger Cause LACR		**0.53075**	**0.5938**

LBOT does not Granger Cause LINV	24	0.41343	0.6672
LINV does not Granger Cause LBOT		2.88035	0.0808

LACR does not Granger Cause LINV	34	0.28311	0.7555
LINV does not Granger Cause LACR		2.61335	0.0905

LACR does not Granger Cause LBOT	24	3.56059	0.0486
LBOT does not Granger Cause LACR		1.53528	0.2410

Source: E-view 9 output, 2023

Examining the relationship between INV and ROA, INV has no causal effect on ROA with a p-value of **0.1092** which is greater than 0.05 while ROA has effect no INV with a p-value of **0.0827** which is greater than 0.05 therefore we can say that there is no causal relationship between INV and ROA

Examining the relationship between CCE and ROA, CCE has no casual effect on ROA with a p-value of **0.1096** which is greater than 0.05 while ROA has no causal effect on CCE with a p-value of **0.3369** which is greater than 0.05 therefore we can say that there is no causal relationship between CCE and ROA

Examining the relationship between ACR and ROA, ACR has a causal effect on ROA with a p-value of **0.0448** which is less than 0.05 while ROA has causal effect on ACR

with a p-value of **0.5938** which is greater than 0.05 therefore we can say that the casual relationship between then is said to be Unidirectional

Decision

From the causality test, which the Accounts receivable has a causal relationship with the dependent variable ROA, therefore, current asset has a causal relationship with gross domestic product of Nigeria therefore having one independent variables which has a causal relationship with the dependent variable we may say that accounts receivable precisely has a causal relationship with return on asset we accept the alternative hypothesis and reject the null

5.0 SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of the Findings

1. Account receivable has no significant effect on return on assets of manufacturing Industry

2. Cash and cash equivalents have a significant effect on the return on assets of Dangote Cement.

3. There is a bi-causal relationship between current assets and the return on assets of Manufacturing industry.

Conclusion

Financial statements play a vital role in investment decision making; for instance, companies invest hundreds of billions of naira every year in fixed assets. By their nature, these investment decisions have the potential to affect the firm's fortunes over several years. A good decision can boost earnings sharply and dramatically increase the value of the firm.

This study however, assesses the financial performance of manufacturing firms so as to determine whether their investment value is comparable with firms in the banking sector. This study has found that manufacturing is more profitable with higher dividend cover than bank. In other words, banks have more liquidity value with high efficiency than manufacturing firms.

In this case manufacturing firms have higher investment value than banks because the manufacturing firm is not a deposit organisation and does not maintain high liquidity, Which means that if the manufacturing industry wants to maintain optimum profitability, they will invest all their funds in long-Term assets.

Recommendation

Based on the findings and conclusions of the study, the following recommendations were made:

1. These should be prompt provision of the financial statement at the end of each financial year.

2. Investment decisions should only be taken from the outcome of financial analysis as bedrock and a guide for the investors; hence investment decisions on a company should be taken without the consideration of a company's financial performance and investment value.

3. Which means that if the manufacturing industry wants to maintain optimum profitability, they will invest all their funds in long-Term assets.as a way of authenticating their contents and all material facts are reflected in order to ensure that investors are not misled.

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