

Current Assets Management and Financial Performance: Evidence from Listed Deposit Money Banks in Nigeria

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Abstract

The concepts of current assets management and financial performance have been adopted in many research fields but they are scarcely attempted on in developing countries. The structure and size of current assets and its impact on the financial performance of the firm cannot be over-emphasised. A literature gap exists, thus motivating the author to come up with a multiple correlation and regression model that uses current assets management to forecast changes in financial performance of deposit money banks in Nigeria. These varying parameters include the cash and bank balances, financial assets held for trading, derivative assets, loans and advances to banks and loans and advances to customers. An OLS model was formulated to compute the effect of CAM on financial performance. For model validation purpose, five year data analysis was conducted. The study's sample utilizes data from 2010-2014 belonging to 15 deposit money banks operating in financial services sector as listed by the Nigerian Stock Exchange (NSE). In empirical analyses, robust estimator was used. The results of the conducted analyses suggest a positive relation between the cash and bank balances, financial assets held for trading, loans and advances to customers and Return on Asset. Another result of the study, on the other hand, suggests that derivative assets, loans and advances to banks have negative impact on return on asset.

Keywords: Current assets management, deposit money banks, financial performance, Nigeria

1. Introduction

Performance is the bottom-line for every organization, business and non-business alike. It is essential because non-performance can spell failure. This study, however, focuses on financial performance of firms. The question this study attempts to answer is whether the management of current assets could affect financial performance of a firm? Financial performance is a subjective measure of how well a firm can use assets from its primary and non-primary modes of business and generate revenues (Investopedia, 2015). The term, financial performance, is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. Financial performance refers to the act of performing financial activity. In broader sense, financial performance refers to the degree to which financial objectives being or has been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms.

There are many different ways to measure financial performance, but all measures should be taken in aggregation. All organizations have financial performance measures as part of their performance management, although there is debate as to the relative importance of financial and non-financial indicators. Proponents of financial performance measures argue that they are necessary because of the primary objectives of firms (Kaplan Financial, 2015). Line items such as gross revenue from operations, operating income or cash flow from operations can be used, as well as return on total assets. Financial performance exists at different levels of the organization. This study is mostly concerned with measuring the financial performance of the organization as a whole. Traditionally, financial performance measures are split into the following categories: profitability, liquidity/working capital, gearing and investor ratios. This study uses return on total assets (ROTA) as measure of financial performance. This is because return on total assets takes care of return on equity (ROE) and return on capital employed (ROCE/ROI). Total assets comprise of equity capital, non-current liabilities and current liabilities. ROTA measures return on equity capital, non-current liabilities and current liabilities.

The corporate financial management literature conventionally focuses on the study of long-term financial resources where a number of studies have analyzed the topics related to capital structure, investments, dividends and firm valuation (Smith, 1980; Grablowsky, 1984; McMahon & Holmes, 1991; Weston & Copeland, 1992; Ganesan, 2007; Kavita, 2009 & Dong & Su, 2010). However, the short-term investments of a firm with maturity less than a year in the form of current assets also represent a major share of total assets on the statement of financial position of the firms. The management of these short terms assets falls in the area of current asset management (CAM). Current assets could represent a significant component of firm's total assets. For a number of organizations, current assets management can make or mar the organization's financial performance.

Current asset was described as the life blood of every firm by Flanagan (2005), who also emphasized



that the primary task of every manager is to keep current assets flowing and use the cash flows to generate profits. Current asset management is the handling of the current assets of a firm (Wisegeek, 2015). Any asset that a firm has that is the equivalent of cash or can be liquidated into cash in the period of a year is considered a current asset. Typically, current assets are the inventory a company has, as well as the accounts receivables and any current investments it has in place. The main principle in current asset management is to keep the proper flow of income in balance. Managing current assets also takes into account the non-current investments of a firm, but current asset is important in determining the liquidity of a firm. The measure of liquidity is really the measure of how well and how fast a firm can raise enough cash to pay off its debts.

Current assets management is considered to be the primary goals of working capital management (Jain, Singh, & Yadav, 2013). Current asset management refers to all the actions and decisions of the management which affects the size and effectiveness of current asset. Current asset management requires special attention in present days when cost of capital is rising and funds are scarce. It has been generally established that the performance/profitability of a firm largely depends upon the manner of its current asset management. If a firm is inefficient in managing current asset, it will not only reduce profitability but may also lead to financial crisis. Both inadequate and excessive current asset is detrimental for a firm. The excessive current asset can result in idle funds which could be used for earning profit while the inadequate current asset will interrupt the operations and will also impairs profitability (Chowdhary & Amin, 2007).

It is within this context that this study explores the relationship between current assets management and firm's financial performance. International financial reporting standards adoption requires that current assets are classified by deposit money banks into five major categories: cash and bank balances, financial assets held for trading, derivative assets, loans and advances to banks and loans and advances to customers. Cash and bank balances constitute the amount of cash available to the bank for daily operations. It comprises of cash in hand and demand deposits. Cash equivalents are short term liquid investments that are readily convertible to known amounts of cash and that are subject to an insignificant risk of changes in value. Cash equivalents comprise deposits held at call with banks and other short-term highly liquid investments with original maturities of three months or less. For the purposes of the cash flow statement, cash and cash equivalents include cash and non-restricted balances with central banks. Cash and balances with central banks include cash and restricted and non-restricted deposits with the central bank. The carrying amount of balances with other banks is a reasonable approximation of fair value which is the amount receivable on demand. The amount and quality of cash and balances can improve the income of a bank and thus increase the bank's financial performance. This leads to a hypothesis that:

H₁: Cash and bank balances have a positive impact on the financial performance of deposit money banks.

Financial assets held for trading comprise of treasury bills and government bonds. A financial asset is classified as held for trading if it is acquired or incurred principally for the purpose of selling or repurchasing it in the near term or if it is part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking. Derivatives are also categorized as held for trading unless they are designated and effective as hedging instruments. Financial instruments included in this category are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in net gains (losses) from financial instruments at fair value in the statement of profit or loss. Interest income and dividend income on financial assets held for trading are included in interest income and other operating income respectively. The amount and quality of financial assets held for trading can improve the income of a bank and thus increase the bank's financial performance. This leads to a hypothesis that:

H₂: Financial assets held for trading have a positive impact on the financial performance of deposit money banks.

Derivative assets are investments in foreign exchange transactions. The amount and quality of investments in foreign exchange if well managed can improve the income of a bank and thus increase the bank's financial performance. However, it must be noted that banks do not have control over the variability in foreign exchange rate, which occurs from time to time. This variability is managed by the central bank of the country. This leads to a hypothesis that:

H₃: Derivative assets have a positive impact on the financial performance of deposit money banks.

Loans and advances to banks consist of placements with banks and discount houses, including balances with other banks within and outside Nigeria and short term placements. The carrying amount of balances with other banks is a reasonable approximation of fair value which is the amount receivable on demand. The estimated fair value of fixed interest bearing placement is based on discounted cash flows using prevailing money-market interest rates for the debts. The carrying amount represents the fair value which is receivable on maturity. The amount and quality of loans and advances to banks can improve the interest income of a bank and thus increase the bank's financial performance. This leads to a hypothesis that:

H₄: Loans and advances to banks have a positive impact on the financial performance of deposit money



banks

Loans and advances to customers consist of overdraft, term loans, staff loans and commercial papers. The general creditworthiness of a corporate customer tends to be the most relevant indicator of credit quality of a loan extended to it. However, collateral provides additional security and banks generally request that corporate borrowers provide it. The bank may take collateral in the form of a first charge over real estate, floating charges over all corporate assets and other liens and guarantees. Loans and advances to customers are net of charges for impairment. The estimated fair value of loans and advances represents the market value of the loans, arrived at by recalculating the carrying amount of the loans using the estimated market rate for the various loan types. The amount and quality of loans and advances to customers can improve the interest income of a bank and thus increase the bank's financial performance. This leads to a hypothesis that:

 H_5 : Loans and advances to customers have a positive impact on the financial performance of deposit money banks.

It is apt to conduct this study in Nigeria because it is a growing economy and there are a lot of differences in the situation faced by deposit money banks in developed and developing countries. Prior research focuses on the effect of working capital (current assets less current liabilities) management on financial performance. Very few prior research works consider current assets management as a merit on its own. For deposit money banks, the quality of management of current assets can make or mar them and a study, therefore, on the association between current assets management and financial performance is apt and relevant. Bank managers would benefit from the study findings, conclusions and recommendations because current assets are the fulcrum of assets earning income. Non-current assets do not generate income as fast as current assets. This study will contribute to the limited literature on the effect of current assets management on financial performance of deposit money banks in Nigeria. The rest of the study is organized as follows. First, the literature review and second the data and methodology, and data were discussed. Also, empirical findings of the study are discussed under results and discussions and finally, conclusions and recommendations are made.

2. Literature Review

Most of the empirical studies regarding the relationship between current asset management and financial performance support the traditional belief that reducing current assets proportion in total assets in order to reduce current asset investment, would positively affect the profitability of the firm. Also, efficient current asset management is very important to create the value for shareholders. However, divergent to traditional belief, more investment in current asset (conservative policy) might also increase profitability. When high inventory is maintained, it reduces the cost of interruptions in the production process, decrease in supply cost, protection against price fluctuation and loss of business due to scarcity of products (Blinder & Maccini, 1991). Czyzewski and Hicks (1992) conclude that firms with the highest return on assets hold higher cash balances but they did not consider liquidity management beyond static cash and assets ratio. Soenen (1993) employs return on total assets as an index of financial profitability. Although return on equity might be of greater interest to investors, return on total assets was not influenced by the financial leverage of the firm. The Net Trade Cycle and the return on total assets were calculated for all firms in each industry for every single year from 1970 to 1989 to find out the inverse relationship between Net Trade Cycle and return on total assets. The results showed that although there was some influence of the Net Trade Cycle on corporate profitability, the trade cycle did not influence profitability very much. The right associations of a short Net Trade Cycle with high profitability and the combination of a long Net Trade Cycle with low profitability was found in 18 of the 20 industries. However, using the Chi-square test, the negative relationship between the Net Trade Cycle and corporate profitability was statistically significant for eight industries. The results demonstrated that shorter Net Trade Cycles were most commonly associated with higher profitability while the reverse was also true. Analysis at the specific industry level indicated that the inverse association between the Net Trade Cycle and the firm's profitability was very different, depending on the type of industry. The results showed that, in most firms in these industries, managing the corporate cash cycle efficiently has a direct impact on corporate profitability.

The relationship between liquidity measure in terms of Cash Conversion Cycle and corporate returns was examined by Jose, Lancaster and Stevens (1996). They perform an industry wise analysis and measured liquidity by Cash Conversion Cycle for 2,718 firms for twenty years time period from 1974 to 1993. Controlling industry and size differences they conclude that more aggressive liquidity management is associated with higher profitability for several industries. The negative relationship between CCC and profitability was found to be significant when size differences were controlled. They also find that aggressive policies of current asset management tend to enhance performance and the industries where aggressive policies were adopted, they were more profitable. The benefits appear in terms of both assets management return measured by return on investment and leveraged return measured by return on equity. The comparison between association of traditional current asset ratios and alternative current asset ratios to the return on investment in order to found the improvement in the later was carried out by Smith and Begemann (1997) specifically on industrial firms listed



on the Johannesburg Stock Exchange (JSE). They emphasized that those who promote current asset theory share that profitability and liquidity comprised the salient goals of current asset management. The problem arises because the maximization of the firm's returns can seriously threaten liquidity and the pursuit of liquidity had a tendency to dilute returns. Analysis was based on data set of 135 firms, representing all industrial firms listed on the JSE for the years from 1984 to 1993. The results of the stepwise regression corroborated that total current liabilities divided by funds flow accounted for most of the variability in Return on Investment (ROI). The results also showed that a traditional current asset leverage ratio, current liabilities divided by funds flow, displayed the greatest associations with return on investment. Well-known liquidity concepts such as the current and quick ratios have insignificant associations whilst only one of the newer current asset concepts, the comprehensive liquidity index, indicated significant associations with return on investment.

The implication of efficient current asset management for value creation of shareholders was highlighted by Shin and Soenen (1998). It actually resulted from time lag between expense on raw material purchase and collection of cash against sale of finished goods. The way current asset is managed has a significant impact on profitability and liquidity. They empirically investigated whether short Net Trading Cycle (NTC) is beneficial for the company's profitability. The relationship between the length of Net Trade Cycle, firm's profitability and risk adjusted stock return was examined using correlation and regression analysis. The analysis was carried out using a sample of 58,985 firms during period 1975-1994. The results of study found a strong negative relationship between firm's net-trade cycle and profitability. Furthermore, shorter NTCs are associated with higher risk adjusted stock returns. Another important study on the relationship between liquidity management and operating performance was conducted by Wang (2002). The study examines the relationship between liquidity management and corporate value for firms in Taiwan and Japan. The study found negative relationship between Cash Conversion Cycle, return on assets and return on equity which was also sensitive to industry factors. The results of the study indicated that although there were differences in financial system and structural characteristics of both countries, still aggressive liquidity management increased the performance which also leads to increase in the corporate value for Japanese and Taiwanese firms.

Another important contribution with reference to current asset management was by Deloof (2003), who emphasized that most firms had a large amount of cash invested in current asset. It can therefore, be expected that the way current asset was managed, had a significant impact on the profitability of firms. He investigated the relationship between current asset management and corporate profitability for a balanced panel set of 1,009 Belgian firms over the 1991–1996 periods. According to him, a longer Cash Conversion Cycle lead to larger investment in current asset and longer Cash Conversion Cycle might increase profitability because it leads to higher sales. However, corporate profitability might also decrease with the Cash Conversion Cycle, if the costs of higher investment in current asset rose faster than the benefits of holding more inventories and/or granting more trade credit to customers. Number of days' accounts receivable, accounts payable and inventories were used as trade credit policy and inventory policy while the CCC was used as a comprehensive measure of current asset management. He found a significant negative relation between gross operating income and the number of days' accounts receivable, inventories and accounts payable by Belgian firms. On the basis of these results, he suggested that managers could create value for their shareholders by reducing the number of days' accounts receivable and inventories to a reasonable minimum. The negative relation between accounts payable and profitability was consistent with the view that less profitable firms wait longer to pay their bills.

Current asset management efficiency in Indian Cement Industry for the period 1992-93 to 2001-02 was examined by Ghosh and Maji (2003). For measuring the efficiency of current asset management, the performance, utilization, and overall efficiency indices were calculated instead of using some common current asset management ratios. Setting industry norms as target-efficiency levels of the individual firms, they also tested the speed of achieving that target level of efficiency by an individual firm during the period of study. Findings of the study indicated that the Indian Cement Industry as a whole did not perform remarkably well during this period. One of the important studies on the liquidity and profitability trade-off was conducted by Eljelly (2004). According to him, current assets and liabilities must be properly planned and controlled in such a way that the risk of inability in meeting short term obligations should be eliminated and avoid excessive investment in current assets under efficient liquidity management. The relationship between liquidity and profitability was examined using a sample of 29 Saudi joint stock companies. This relationship was analyzed by cash gap (CCC) and Current Ratio using correlation and regression analysis. The results of the study found significant negative association between liquidity and profitability of firm. Furthermore, this relationship was more apparent in firms with high Current Ratios and longer CCC at the industry level, however, the study also found that the CCC was of greater importance than current ratio as a liquidity measure which affects firm profitability. Moreover, the size of the firm was found to have significant effect on profitability at the industry level.

The relationship of corporate profitability and current asset management was also investigated by Lazaridis and Tryfonidis (2006) for 131 firms listed in Athens Stock Exchange during period 2001 to 2004. They



reported that there was statistical significant negative relationship between profitability measured through gross operating profit and the Cash Conversion Cycle. Furthermore, managers can create profit by properly handling the individual components of current asset which include accounts receivable, inventory and accounts payable to an optimal level. The trend in current asset management and its impact on firm's performance was examined by Padachi (2006). He explained that a properly implemented current asset management was expected to contribute in creating value for the firm. The relationship between current asset management and profitability was investigated for 58 small Mauritian manufacturing firms for a period 1998 to 2003. Results indicated that high investment in inventories and receivables is associated with low profitability and also showed an increasing trend in the short term component of current asset financing. Also, Afza and Nasir (2007) find no significant relationship between working capital management policy and financial performance among the 208 public limited companies listed in the Karachi Stock Exchange. They measured aggressive working capital investment policy in terms of low level of investment in current assets as percentage of total assets. On the other side of the spectrum are companies with high investments in current assets vis-à-vis total assets, which they classified as advocating conservative working capital management policy.

The impact of overall current asset policies on the profitability of Pharmaceutical firms listed at Dhaka Stock Exchange was investigated by Chowdhary and Amin (2007). Primary and secondary data were used for the period 2000 to 2004 to analyze the current asset management policies. The results indicated that for the overall performance of the Pharmaceutical industry, current asset management played a vital role and there existed a positive relationship between current assets management and performance of firms. On the other side, the questionnaire data used for the study highlighted that firms in this industry have been efficient in managing their cash, accounts receivables and accounts payable. Furthermore, the industry maintained large volume of inventories but maintaining large inventories did not reflect inefficient management for this industry. With reference to small and medium sized Spanish firms, the impact of current asset management on the profitability was empirically tested by Gracia-Teruel and Martinez-Solano (2007). They used panel data methodology and collected the data for 8,872 small and medium sized firms covering period 1996 to 2002. The robust test was also used for any possible presence of endogeneity problem. The results suggested that current asset management was very important in case of small and medium sized firms and managers can create value for the shareholders by reducing the inventories level and receivable outstanding days. Further short Cash Conversion Cycle is also associated with improvement in profitability. However, their results did not confirm the impact of accounts payable days on profitability because this relation loosed its significance when controlled for endogeneity problem. The role of current asset management policies on firm performance and the importance of a trade-off between liquidity and profitability were investigated by Vishnani and Bhupesh (2007). They provided two basic reasons behind the trade-off between profitability and liquidity. On the one hand, if a firm wanted to take higher risk for higher profits, than it reduced the level of its current asset. On other hand, if firm wanted to improve liquidity, it increased the amount of current asset which puts a negative impact on the profitability of firm.

Another study on the impact analysis of current asset management on profitability of firms with reference to Turkey was presented by Samiloglu and Demirgunes (2008). The quarterly data was collected for a sample of manufacturing firms listed at Istanbul Stock Exchange for the period 1998 to 2007. The results suggested that receivable and inventory period with liquidity has a negative impact on the profitability of the firm while growth was positively associated with profitability. However, CCC, size and financial assets did not have significant effect on the profitability of the firms. The relationship of one of the comprehensive measure of current asset management called as Cash Conversion Cycle with firm size and profitability was examined by Uyar (2009) for firms listed at Istanbul Stock Exchange. The results showed retail/wholesale industry has shorter CCC than manufacturing industries because retail/wholesale industry do not manufacture goods and sell them on cash basis or for very short credit period. Furthermore, they find significant negative correlation between CCC and profitability as well as between CCC and firm size. The impact of current asset management on firm profitability was also examined by Falope and Ajilore (2009) using data for 50 Nigerian non-financial listed firms on Nigerian Stock Exchange during period 1996 to 2005. They used combined time series and cross sectional observations in a pooled regression to estimate the relationship between current asset measures and firm's profitability. They found significant negative relationship between profitability and current asset measures such as average collection period, inventory turnover in days, average payment period and cash conversion cycle. They also compared this impact between large and small firms but did not find significant variations among these firms.

The relationship between efficiency in current asset management and profitability was also analyzed in another study by Sen and Oruc (2009). Using quarterly data for 49 production listed firms during 1993 to 2007 on Istanbul Stock Exchange, they explained the relationship between different indicators of current asset management efficiency and return by two models. The results of their study indicated a significant negative relationship between return on total assets and different current asset measures such as, account receivable



period, inventory period, cash conversion cycle, net current asset level and current ratio. In this study, although the sample was small but sector wise results were also compared where, the results were similar to the one for the overall sample firms. Similarly, Wajahat and Hassan (2010) study 37 listed companies in the OMX Stockholm Stock Exchange show no significant relationship between profitability and working capital management policy when grouped as aggressive, defensive or conservative based on cash conversion cycle. The ratio of current asset to total assets of the observations in this study was another proxy variable for working capital management, but the data failed the tests of normality. Because of this limitation, dummy variables were used instead to capture the effect of working capital management policy on profitability. Charitou, Elfani and Lois (2010) empirically investigate the effect of working capital management on firm's financial performance in an emerging market. They hypothesized that working capital management leads to improved profitability. Their data set consists of firms listed in the Cyprus Stock Exchange for the period 1998-2007. Using multivariate regression analysis, their results support their hypothesis. Specifically, their results indicate that the cash conversion cycle and all its major components; namely, days in inventory, days sales outstanding and creditors payment period - are associated with the firm's profitability. The results of this study should be of great importance to managers and major stakeholders, such as investors, creditors and financial analysts.

One of the studies on the relationship between current asset management and profitability was conducted by Gill, Biger and Mathur (2010) for American firms listed on New York Stock Exchange. They used the data for a sample of 88 American firms for a period of three years from 2005 to 2007. They found statistically significant relationship between current asset management and firm's profitability. Furthermore, it was observed that there was a negative relationship between average days of accounts receivable and firm profitability while positive relationship between cash conversion cycle and profitability. As per their finding, the managers can enhance profitability of their respective firms by properly handling cash conversion cycle and also by keeping the accounts receivable at an optimal level. Moreover, negative relationship between firm's accounts receivable and profitability suggested that less profitable firms pursue a decrease in their accounts receivables to reduce the cash gap in CCC. Niresh (2012) investigates the relationship between working capital management and financial performance of listed manufacturing firms in Sri Lanka. A sample of 30 manufacturing firms listed on the Colombo Stock Exchange was used for this study. Data were collected from annual reports of sampled firms for the period of 2008 to 2011. Performance was measured in terms of return on assets and return on equity while cash conversion cycle, current assets to total assets and current liabilities to total assets were used as measures of working capital management. Correlation and regression analysis were used for the analysis. The findings reveal that, there is no significant relationship between cash conversion cycle and performance measures. The study also concludes that manufacturing firms in Sri Lanka follow conservative working capital management policy. Taani (2012) examines the impact of working capital management policy and financial leverage on financial performance of Jordanian companies measured in terms of net income, return on equity (ROE) and return on asset (ROA). Pearson's rank correlation test, ANOVA F-test, and multiple regression analysis were used on 45 companies included in the industrial sector in Jordan ranked in terms of gross revenues. Results of the study indicated that firm's working capital management policy, financial leverage, and firm size have significant relation to net income. However working capital management policy has no significant impact on return on equity (ROE) and return on assets (ROA).

Arbidane and Zelgalve (2012) explore and analyse the structure of current assets, the effectiveness of the indicators characterizing the Latvian business changing economic conditions. The research was based on the data obtained by the Central Statistics Bureau. The research covers the period of 1995-2010. The study involves the use of conventional logic analysis and synthesis methods, content analysis and analysis of monographic. The current assets of companies in Latvia, their structure and indicators to a large extent are influenced by the economic situation in Latvia. Under conditions of a stable and flourishing economic situation companies have stable development indicating balanced increase of financial indicators. Upon increase of net turnover the amount of current assets also increases. When the national economy and business indicators improve, the proportion of assets flexibly reacts by increasing the proportion of current assets in the total structure of assets. However, when business activity decreases, the proportion of assets in the total structure of assets reduces. As a result of analysis there can be observed a correlation that the amount of stock and debts of debtors are interrelated with the net turnover of companies. The dynamics of cash and short-term securities shows that in the economic recession period it even increases. The economic situation in the state does not change very significantly the indicators of the current assets structure. Slight changes in the proportion of stock and cash prove that under condition of recession the managerial staff of Latvian companies pays attention to introduction of effective current assets management. The changes of current assets and their decrease in the recession period indicate that economic processes influence this indicator. The analysis of liquidity indicators did not reflect significant correlation between economy and changes of these indicators; however, the companies of Latvia typically do not have high liquidity indicators which shows some problems, but which cannot be identified not knowing certain conditions. The analysis of the structure and indicators of current assets using a maximally



longer period of time enables to make timely and effective managerial decisions.

Bratland and Hornbrinck (2013) investigate what impact working capital policies have on the stock performance on the Swedish stock market during the years 2009-2012. The study explores if the firm size or industry of the firms have any impact on the working capital policy and if the theory of risk/return tradeoff indicating that an aggressive policy should generate a higher risk premium holds. A quantitative research method was used and data collected from companies listed on the Swedish stock exchanges annual reports and stock prices from the Thomson Reuters Datastream. The Pearson's correlation was used to find correlation between working capital and stock return, beta and standard deviation. The results of this study show no clear relationship between Swedish firm's working capital policy and the stock return. Regarding the relation with risk and return, the result indicates that working capital has a significant correlation with risk and that the aggressive policy of managing working capital is more risky. Moreover the size of firms does neither affect the relationship between working capital policies and stock return nor the risk/ return tradeoff. Makori and Jagongo (2013) analyze the effect of working capital management on firm's profitability in Kenya for the period 2003 to 2012. For this purpose, balanced panel data of five manufacturing and construction firms each which are listed on the Nairobi Securities Exchange (NSE) is used. Pearson's correlation and Ordinary Least Squares regression models were used to establish the relationship between working capital management and firm's profitability. The study finds a negative relationship between profitability and number of day's accounts receivable and cash conversion cycle, but a positive relationship between profitability and number of days of inventory and number of day's payable. Moreover, the financial leverage, sales growth, current ratio and firm size also have significant effects on the firm's profitability. Based on the key findings from this study it has been concluded that the management of a firm can create value for their shareholders by reducing the number of day's accounts receivable.

Korankye and Adarquah (2013) empirically analyses working capital management and its impact on firm profitability. Panel data was obtained from the financial statements of listed manufacturing firms in Ghana from 2004 to 2011 inclusive. In all, six (6) out of seven (7) manufacturing firms quoted on the Ghana Stock Exchange with complete financial data constituted the research sample. This paper uses working capital cycle and gross operating profit margin as proxies for working capital management and profitability respectively. Whiles leverage, interest cover and the ratio of current assets to total assets are used as control variables. The study employs descriptive statistics, Pearson correlation and ordinary least squares regression analyses. The results reveal that working capital cycle significantly affects firm profitability negatively. This means that less profitable listed manufacturing firms in Ghana have longer working capital cycle. From the correlation analysis, the study also finds that inventory turnover period, account receivables collection period and account payables payment period each negatively correlates with profitability. Finally while leverage negatively but significantly relates to profitability, interest cover and the ratio of current to total assets have significantly positive relation with profitability. Panigrahi (2013) examines the relationship between inventory conversion period and firms' profitability. The dependent variable, gross operating profit is used as a measure of profitability and the relation between inventory management and profitability is investigated for a sample of five top Indian cement companies over a period of ten years from 2001-2010. This study employs Regression analysis to determine the impact of inventory conversion period over gross operating profit taking current ratio, size of the firm, financial debt ratio as control variables. The results indicate that there is a significant negative linear relationship between inventory conversion period and profitability. The results of this research are in line with the previous findings. The findings indicate that Inventory conversion period has an inverse relationship with firms' profitability. It was found that, the firms' profitability as measured by GOP has a negative relationship with financial debt ratio. This implied that profitability increases with decrease in financial debt ratio. Furthermore in this study the relationship between the firm size and GOP was positive which indicates that profitability increases with an increase in firm size. The relationship between current ratio and the GOP was negative.

Mwangi, Makau and Kosimbei (2014) investigate the effect of working capital management on the performance of non-financial companies listed in the Nairobi Securities Exchange (NSE), Kenya. The study employed an explanatory non-experimental research design. A census of 42 non-financial companies listed in the Nairobi Securities Exchange, Kenya was taken. The study used secondary panel data contained in the annual reports and financial statements of listed non-financial companies. The data were extracted from the Nairobi Securities Exchange hand books for the period 2006-2012. The study applied panel data models (random effects). Feasible Generalised Least Square (FGLS) regression results revealed that an aggressive financing policy had a significant positive effect on return on assets and return on equity while a conservative investing policy was found to affect performance positively. The study recommended that managers of listed non-financial companies should adopt an aggressive financing policy and a conservative investing policy should be employed to enhance the performance of non-financial companies listed in the NSE, Kenya. Ikpefan and Owolabi (2014) investigate the relationship between working capital management and profitability using Nestle Nigeria Plc and Cadbury Nigeria Plc as case studies. The study used correlation and regression analysis to analyse data. Quick ratio was used to measure liquidity, current ratio, trade receivable collection and trade payables payment periods were



used as efficiency variables to capture the working capital management policy adopted by these companies while return on equity was used as the profitability variable. Liquidity and efficiency variables were correlated against return on equity. The study found a negative relationship between the liquidity, two of the efficiency ratios and return on equity for Nestle Nigeria Plc while it found a positive relationship between the liquidity, efficiency ratios and return on equity of Cadbury Nigeria Plc.

Gamayuni (2015) tests empirically the relationship between intangible assets, financial policies, and financial performance on the firm value at going-public company in Indonesia. Path analysis was used to ascertain the relationship between intangible assets, financial policies, financial performance, and firm value at going-public company in Indonesia in the year 2007 to 2009. This study also provides empirical evidence that Intangible assets, financial policies, financial performance have significant influence to the firm value simultaneously. Intangible assets have no significant influence to financial policies, but has positive and significant influenced to financial performance (ROA) and firm value. Debt policies and financial performance (ROA) influenced firm value positive and significant. Financial statements limitation in measuring and disclosing intangible assets is the cause of significant difference between book value equity and market value equity. Measurement and disclosure of intangible assets (intellectual capital) precisely and accurately is very important, because intangible assets have a positive and significant effect on the firm value.

Yahaya, Kutigi and Mohammed (2015) investigate whether or not financial performance can be explained by the elements of the country specific characteristics. Fourteen country specific characteristics were tested over a period of ten years (2004-2013) using panel data collected from 15 listed deposit money banks in the Nigerian Stock Exchange against two dependent variables used to measure financial performance (gross earnings to total assets and changes in gross earnings). The explanatory variables include foreign direct investment as a percentage of gross domestic product, inflation rate, exchange rate, interest rate, per capita income, GDP growth rate, gross domestic product constant price, unemployment rate and age as a control variable. It is found that financial performance is significantly affected by interest rate, change in foreign direct investment, inflation rate and GDP growth rate. However, financial performance is negatively related to per capita income, age, exchange rate and GDP. The study provides some evidence to support the theory of the firm and the general systems theory. The results consistently support the link between bank financial performance and some country specific characteristics. The study finds no evidence to establish any relationship between bank financial performance and unemployment rate, GDP by constant prices, FDI nominal value, change in PCI, change in inflation rate, and change in GDP growth rate.

3. Data and Methodology

This section discusses the data collection and research methodology. Sample of 15 was selected from the population of 21 deposit money banks listed in Central Bank of Nigeria website. The sample is made up of the 15 listed deposit money banks on the floor of the Nigerian Stock Exchange. Data was collected from Nigerian Stock Exchange factbook and individual bank's annual reports for 2010 to 2014 financial periods. Empirical analysis is done on panel data, according to scholars, it controls for individual heterogeneity and multicollinearity (Kyereboah-Coleman, 2007). An ordinary linear regression model (OLS) was estimated and tested as follows:

ROTA_{i,t} = $\alpha + \beta_1 CBB_{i,t} + \beta_2 FAHT_{i,t} + \beta_3 DASS_{i,t} + \beta_4 LAB_{i,t} + \beta_5 LAC_{i,t} + \varepsilon$

Whereas:

ROTA = Return on Total Assets

 α and $\beta 1$ to $\beta 5$ are beta coefficients respectively

CBB = Cash and bank balances

FAHT = Financial assets held for trading

DASS = Derivative assets

LAB = Loans and advances to banks

LAC = Loans and advances to customers and

 ε is the error term, i, t are bank and time scripts

are set of explanatory variables

4. Results and Discussions

The section presents the empirical findings and analysis of the data. First are the descriptive statistics, followed by correlation results and regression results. The descriptive statistics of dependent variables and explanatory variables are reported in Table I using IBM SPSS Statistics 22. It shows the average indicators of variable computed from the annual reports of listed deposit money banks in Nigeria.



Table I Descriptive Statistics

	N Range Minimum Maximum Mean		Std. Deviation	Variance				
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
ROTA	75	.07	.00	.07	.0199	.00164	.01419	.000
CCB	75	2.09	3.82	5.91	5.0523	.06180	.53519	.286
FAHT	75	5.83	.00	5.83	4.1488	.15798	1.36818	1.872
DASS	75	4.80	.00	4.80	2.1693	.21515	1.86321	3.472
LAB	75	5.76	.00	5.76	4.5258	.13522	1.17108	1.371
LAC	75	1.71	4.65	6.36	5.6289	.04343	.37611	.141
Valid N (listwise)	75							

Source: IBM SPSS Statistics 22 Output

From table I, the average statistic value of return on total assets is 2% with a standard error of 0.16%. It has a standard deviation statistic value of 1.42% and a variance statistic value of 0.0%. It has a range statistic value of 7% with a minimum statistic value of 0.0% and maximum statistic value of 7%. The mean statistic value of cash and bank balances is 5.05 with a standard error of 0.06. It has a standard deviation statistic value of 0.535 and a variance statistic value of 0.286. It has a range statistic value of 2.09 and a minimum statistic value of 3.82 and a maximum statistic value of 5.91. Also, the average statistic value of financial assets held for trading is 4.15 with a standard error of 0.157. It has a standard deviation statistic value of 1.37 and a variance statistic value of 1.87. It has a range statistic value of 5.83 with a minimum statistic value of 0.0 and maximum statistic value of 5.83. The mean statistic value of derivative assets is 2.17 with a standard error of 0.215. It has a standard deviation statistic value of 1.86 and a variance statistic value of 3.47. It has a range statistic value of 4.8 with a minimum statistic value of 0.0 and maximum statistic value of 4.8. The average statistic value of loans and advances to other banks is 4.53 with a standard error of 0.135. It has a standard deviation statistic value of 1.17 and a variance statistic value of 1.37. It has a range statistic value of 5.76 and a minimum statistic value of 0.0 and a maximum statistic value of 5.76. Finally, the mean statistic value of loans and advances to customers is 5.63 with a standard error of 0.04. It has a standard deviation statistic value of 0.376 and a variance statistic value of 0.141. It has a range statistic value of 1.71 and a minimum statistic value of 4.65 and a maximum statistic value of 6.36.

The multiple correlation analysis calculates the correlation between variables and is used to measure the strength of linear association between two or more variables. Two types of multiple correlation analyses are easily available: Pearson product moment correlation and Spearman correlation analysis. For the purpose of this study, the Pearson product moment correlation analysis was used to analyze the relationship between current assets management and financial performance of deposit money banks in Nigeria. The results of the correlation coefficients are reported in table II.

Table II Correlation Matrix

	VARIA	BLE	ROA	CCB	FAHT	DASS	LAB	LAC
Pearson	ROTA	Correlation Coefficient	1.000	.292*	.307**	111	083	.347**
		Sig. (2-tailed)		.011	.007	.344	.479	.002
		N	75	75	75	75	75	75
	CCB	Correlation Coefficient	$.292^{*}$	1.000	066	004	.165	.838**
		Sig. (2-tailed)	.011		.571	.975	.158	.000
		N	75	75	75	75	75	75
	FAHT	Correlation Coefficient	.307**	066	1.000	.080	020	.008
		Sig. (2-tailed)	.007	.571	•	.497	.864	.947
		N	75	75	75	75	75	75
	DASS	Correlation Coefficient	111	004	.080	1.000	.275*	.123
		Sig. (2-tailed)	.344	.975	.497		.017	.295
		N	75	75	75	75	75	75
	LAB	Correlation Coefficient	083	.165	020	.275*	1.000	.392**
		Sig. (2-tailed)	.479	.158	.864	.017		.001
		N	75	75	75	75	75	75
	LAC	Correlation Coefficient	.347**	.838**	.008	.123	.392**	1.000
		Sig. (2-tailed)	.002	.000	.947	.295	.001	
		N	75	75	75	75	75	75

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Source: IBM SPSS Statistics 22 Output

^{**.} Correlation is significant at the 0.01 level (2-tailed).



Table II shows that the relationship between cash and bank balances and return on total assets is positive and significant (t = 0.292, p = 0.011). This leads to the acceptance of the alternate hypothesis which states that cash and bank balances have a positive impact on the financial performance of deposit money banks. This is not surprising since we expect that the cash and bank balances with the bank are available to the bank to take on investment opportunities available. Also, table 2 shows that the relationship between financial assets held for trading and return on total assets is positive and significant (t = 0.307, p = 0.007). This leads to the acceptance of the alternate hypothesis which states that financial assets held for trading have a positive impact on the financial performance of deposit money banks. Similarly, the relationship between derivative assets and return on total assets is negative and not significant (t = -0.111, p = 0.344). This leads to the acceptance of the null hypothesis which states that derivative assets have negative impact on the financial performance of deposit money banks. Also, the relationship between loans and advances to banks and return on total assets is negative and not significant (t = -0.083, p = 0.479). This leads to the acceptance of the null hypothesis which states that loans and advances to banks have negative impact on the financial performance of deposit money banks. This result is expected since the money with other banks does not earn sufficient interest income when compared with loans and advances to customers. Finally, the relationship between loans and advances with customers and return on total assets is positive and significant (t = 0.347, p = 0.002). This leads to the acceptance of the alternate hypothesis which states that cash and bank balances have a positive impact on the financial performance of deposit money banks. This result is expected since deposit money banks actually make money by way of granting loans and advances to customers to earn interest income.

The results of regression analysis are reported in tables III and IV. The adjusted R^2 which is 95.1% measures the extent to which variability in return on total assets is explained by the explanatory variables.

Table III Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.981ª	.963	.951	143.61	1.145

a. Predictors: (Constant), LAC, FAHT, DASS, LAB, CCB

b. Dependent Variable: ROA

Source: IBM SPSS Statistics 22 Output

Table IV Regression Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	043	.025		-1.717	.090
	CCB	.001	.005	.038	.197	.844
	FAHT	.003	.001	.248	2.177	.033
	DASS	001	.001	157	-1.332	.187
	LAB	004	.002	294	-2.179	.033
	LAC	.012	.008	.309	1.450	.152

a. Dependent Variable: ROA

Source: IBM SPSS Statistics 22 Output

From table III, the Durbin-Watson statistic is 1.145, which is slightly higher than 1.0, suggesting that there is no autocorrelation problem in the study data (Durbin & Watson, 1951). A further analysis by multiple regression as shown in table IV shows that the relationship between financial assets held for trading and return on total assets are positive and significant ($\beta = 0.248$, p = 0.033) and the relationship between loans and advances to other banks and return on total assets are negative and significant ($\beta = -0.294$, p = 0.033).

5. Conclusions and Recommendations

Many scholars have conducted studies on the association between current assets management and financial performance of firms and have proposed various theories to explain the association. But the issue is still under debate. This study attempts the following question: to what extent does current assets management influences the financial performance of deposit money banks in Nigeria? A multiple correlation and regression model is applied on 15 deposit money banks listed in Nigerian stock exchange. Results show that the management of cash and bank balances, financial assets held for trading and loans and advances to customers have positive and significant impact in determination of the financial performance of deposit money banks in Nigeria. Similarly, results show that the management of derivative assets and loans and advances to other banks has negative impact on the financial performance of listed deposit money banks in Nigeria. From the findings of this study, it is evident that deposit money banks that manage their cash and bank balances, financial assets held for trading and loans and advances to customers properly will be more profitable for shareholders. The results are in line with the previous studies. Overall, the study concludes on the basis of the empirical findings that listed deposit money banks having well managed current assets tend to have a better financial performance. This study contributes to



the literature of current asset management and firm financial performance, since we find significant effect of current assets on profitability of listed deposit money banks in Nigeria. There is a need to further analyze with respect to effects and factors that can determine the influence of current asset management on financial performance of listed deposit money banks in Nigeria. Further study may extend the present study by the use of generalized model to examine the behaviour of current assets components.

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