



Working Capital Management and Entrepreneurial Development in Nigeria

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ABSTRACT

Working capital is the amount of funds that a company needs to finance its day-to-day operations. Thus, working capital is required essentially to meet the daily financial needs of a business enterprise in order to ensure smooth operations. The main objective of the study is to investigate the effect of working capital management on entrepreneurial development in Nigeria. Specifically, the study investigate the effect of average collection period on entrepreneurial development in Nigeria, examine the effect of average payment period on entrepreneurial development in Nigeria, analyze the effect of cash conversion cycle on entrepreneurial development in Nigeria and access the effect of inventory turnover on entrepreneurial development in Nigeria. *Ex-post facto* research design was adopted because the data for the study are secondary data which were analyzed with econometric techniques involving Descriptive Statistics, Augmented Dicker Fuller tests for Unit Roots and Ordinary Least Square (OLS). The result of the study indicates that average collection period, average payment period and inventory turnover have positive and significant effect on entrepreneurial development in Nigeria while cash conversion period has negative and insignificant effect on entrepreneurial development in Nigeria. The study concludes that working capital management have positive effect on entrepreneurial development in Nigeria. The study recommends that entrepreneur should exhibit carefulness in handling of stock/investors at least to ensure that their stock level will not be below the minimum stock level. Increase the time at which customers make payments to the entrepreneurial for goods bought.

Keywords: Working Capital Management, Entrepreneurial Development, Nigeria

INTRODUCTION

Working capital is the finance needed to generate daily revenue for a firm. According to Adamu, and Hussaini, (2015), Working capital management plays a significant role in determining success or failure of firm in business performance due to its effect on firm's profitability as well on liquidity.

In many Nigerian manufacturing firms, cash is unnecessarily tied up in stock and receivables due to the inability of finance managers to put in place measures that will ensure optimal combination of the various components of working capital. The problem of satisfying the conflicting requirement of corporate liquidity and profitability has remained a source of major concern to financial managers in the face of high level of competition, increasing cost of capital and hyperinflation (John, Oko, Ezugwu & Arzizeh, 2018).

There are two types of working capital; gross working capital and net working capital. Gross working capital refers to a firm's current assets used in operations, including cash, marketable securities, accounts receivable, and inventory. Working capital refers to the relations between current assets and current liabilities where this net is calculated by current assets minus current liabilities.

The platform on which business operates is asset. This asset is broadly classified into fixed and current assets. Fixed assets are: Land and Building, Machinery, Motor Vehicle, Equipment etc. while current assets are: cash (both in Bank and on hand), marketable securities, receivables, inventory and prepayment. Both categories of assets are dependent on one another and are necessary for smooth running of a going concern. Fixed assets cannot stand in isolation of current assets and vice versa. The ratio of current assets to fixed assets varies from one sector of the economy to another. For instance, current assets needed in a manufacturing firm are more than half of the total assets, while retail business it is even more. The size and relative volatility of current assets makes it necessary for such assets to be monitored closely (Adebimpe, & Ekubiat, 2015)

Working capital is an important concept in financial management. It is a trading capital that is required to meet the short term financial obligations of a firm. In the opinion of AL Shubiri (2011) working capital refers to current assets minus current liabilities. Current assets consist of cash, receivables and inventory while current liabilities comprise trade creditors, bank overdraft, and other debt obligations due within one year. In a nutshell, working capital is the difference between current assets and current liabilities in one accounting year.

For all firms, in both developed and developing economies, one of the fundamental objectives of working capital management is to ensure that they have sufficient, regular and consistent cash flow to fund their activities (Dauda,2015).

According to Huynh and Jyh-tay (2010), some promising investments with high rate of return had turned out to be failures and were frustrated out of business because of inadequacy of working capital. In the light of this, working capital management of food and beverages manufacturing firms which is a growing and dynamic sub-sector of the Nigerian manufacturing sector should be given proper attention so that profitability and shareholders wealth can be maximized.

Statement of the Problem

Osuma, Ikpefan, Romanus, Ndigwe and Nkwodimmah (2018) examine how profitability of entrepreneurial development in Nigeria can be enhanced through the working capital management. panel data which consist of ten (10) deposit money banks in Nigeria for seven years (2010–2016) employing the panel fixed effect, panel random effect and the pooled OLS for the two models, which were used to examine the best measure for entrepreneurial development, with the indicators of working capital; net interest income, current ratio, profit after tax, and monetary policy rate. The results of the study showed that working capital management has a significant effect on the profitability of entrepreneurial development in Nigeria

Adamu and Hussaini (2015) examined the effect of working capital management of entrepreneurial development in Nigeria. The study covers the period of six years 2007 to 2013. Data for the study were extracted from the firms' annual reports and accounts. After running the OLS regression, a robustness test was conducted for validity of statistical inferences, the data was empirically tested between the regressors and the regressed, A multiple regression was employed to test the model of the study using OLS. The results from the analysis revealed a strong positive relationship between current ratio and quick ratio and ROA of entrepreneurial development in Nigeria, while cash ratio was found to be inversely but significantly related to ROA of entrepreneurial development in Nigeria.

Samuel and Fidelis (2015) investigated the effect of effect of working capital management on the performance of commercial banks in Nigeria. The results showed that there is a strong negative relationship between working capital management and profitability. Liquidity had a positive and strong significant relationship with return on assets. Age also had a positive relationship with profitability while accounts receivable had a negative significant relationship with return on assets as to increase firms' profits

Osundina and Osundina(2014) investigated the effect of working capital management on market value of quoted food and beverages manufacturing firms in Nigeria. The study found out that working capital management had significant positive effect on market value of food and averages manufacturing firms in

Nigeria. Also, the outcome of this study shows that cash conversion cycle, account collection period, inventory conversion period, account payment period, and aggressive investment policy had significant effect on market value of food and beverages manufacturing firms in Nigeria.

Dauda, (2015) indicate that the two profitability proxies are positively affected by all the elements of working capital management.

However, most of these studies were done in an environment outside that of Nigeria; Most of the ones done in Nigeria do not include the core variables, while most of them do not use the standard econometric methodology.

Again, the time frames considered in these studies were short and the results from these studies are conflicting. These shortcomings have somehow contributed to the knowledge gap in the literature, thus warranting more systematic and comprehensive study on the effect of working capital management on entrepreneurial development in Nigeria

This study seeks to improve on the past studies by making use of a broad data set spanning 2016 to 2021 such data set is far more than those used in the previous studies. This work will attempt to distinguish between long and short run effects of the variables in the model and determine the causalities among the variables used in the study.

Review of Related Literature

Conceptual Framework

Working capital

Working capital refers to the life-blood of any organization. It is lifeblood of business, in the sense that without it, there is no business (Umara, Sabeen, & Qaisar 2009). Working capital is the amount of funds that a company needs to finance its day-to-day operations. Thus, working capital is required essentially to meet the daily financial needs of a business enterprise in order to ensure smooth operations.

In an attempt to define working capital, Ramachandran and Janakiraman (2009) refer to it as funds invested in current assets, which in the ordinary course of business can be turned into cash within a short period without being devalued and without disruption in the operation of the organization. They further assert that current liabilities are debts which are intended to be paid in the ordinary course of business within a short time.

Working Capital Management

Working capital management has to do with using the fund that is needed to run the day-to-day operations of an organization efficiently in order to achieve the aims and objectives of the organization (Nwankwo and Osho, 2010). According to Kehinde (2011), Working Capital Management is the totality of management of cash, debtor, prepayments, stocks, creditors, short term loans, accruals, etc. to ensure profitability of the firm. From the assertions made above, it could be said that it is possible to have enough working capital but not making maximum profit from it because of poor management of its components.

In a simple form, working capital management can be referred to as the administration of both current assets and current liabilities components (Uremadu, 2004; as cited in Egbide, 2009). The point here is that optimal balance should be maintained in the management of working capital. There should not be over investment or under investment in working capital. The main objective of working capital management is to maintain an optimal mix of inventories, receivables and payables (Bellouma, 2010). To achieve optimal mix, Egbide (2009) opines that rash decision due to urgency should be minimized in the management of working capital.

Working capital management is important in business because of its impact on a firm's profitability and risk, and consequently its value (Sonia and Pedro, 2010). Efficient management of working capital is crucial to the growth and survival of firms.

Entrepreneurship

Entrepreneurship can be defined as the process of identifying opportunities in the market place, marshalling the resources required to pursue these opportunities and investing the resources to exploit the opportunities for long term gains. It involves creating wealth by bringing together resources in new ways to start and operate an enterprise (Vural, Sökmen & Çetenak, 2012).

According to Ogborne (2000), he opines that entrepreneurship occurs when an enterprising individual pursues lucrative business opportunities, mobilizing men, materials, machines and financial resources in order to produce new products and to serve new market

Gupta and Khanka (2006) define an entrepreneur as the person who bears risk, unites various factors of production and carries out innovation

According to Ogborne (2000), he opines that entrepreneurship occurs when an enterprising individual pursues lucrative business opportunities, mobilizing men, materials, machines and financial resources in order to produce new products and to serve new market. He added that it is the process of looking for things in such a way that possible solutions to problems, needs, ethics, standards and dealings evolved based on morals and values. Entrepreneurship is a process by which individuals pursue opportunities, fulfillments of needs through innovations without regards to the resources they currently control (Ramachandran & Janakiraman, 2018).

Entrepreneurship cuts across academic discipline, age and gender. Recently, it was discovered that there are more male entrepreneurs than females. Entrepreneurship is the key to industrialization. The concept of entrepreneurship is further refined when principles and terms from business, managerial and personal perspective are considered. In particular, the concept of entrepreneurship from a personal perspective has been thoroughly explored in the country.

Olagunju (2004) defines entrepreneurship as an undertaking in which one is involved in the task of creating and managing an enterprise for a purpose (The purpose may be personal, social or developmental).

Entrepreneurship is the process of identifying opportunities in the market place, marshalling the resources required to pursue these opportunities and investing the resources to exploit the opportunities for long term gains (Wasiuzzaman & Arumugam, 2013). It involves creating wealth by bringing together resources in new ways to start and operate an enterprise (Mbah 2017)

Kao and Harvard (1984) define entrepreneurship as the attempt to create value recognition of business opportunity, the management of risk-taking appropriate to the opportunity and through the communication and management skills to mobilize human, financial and material resources necessary to bring a project to fruition.

Schumpete, (1991) viewed an entrepreneur as a necessary destabilization force, stating the economic equilibrium which optimizes what already exists does not create healthy economics.

Dynamic economy takes as it forms the equilibrium brought about by the conscience charge and innovation (Schumpeter, 2013).

Peter Drucker (1994) defines an entrepreneur as someone who always searches for change, responds to it and exploits it as an opportunity. The term later became broader to include anyone who engaged in economic activity and came to be associated with essential characteristics of innovation and risk taking.

Gupta and Khanka (2006) define an entrepreneur as the person who bears risk, unites various factors of production and carries out innovation. Drucker (1994) defines entrepreneur as “the owner or manager of a business enterprise who, by risks and initiative, attempts to make a profit”. He organizes the factors of production – that is land, labour, capital and his own enterprise to transform a business idea into profitable reality. The risk referred to in the definition according to him arises from the fact that these factors or resources are committed now in expectation of a reward that lies in the future and this reward may not happen.

An entrepreneur is the individual or a group of individuals who try to create something new, who organizes production and undertakes risk involved in the establishment and operation of a business enterprise.

To an economist, an entrepreneur is one who brings resources, labour, materials and other assets into combinations that make their value greater than before, and also one who introduces changes, innovations and a new order.

To a psychologist, an entrepreneur is typically driven by certain forces, the need to obtain something, to experiment, to accomplish or perhaps to escape the authority of others.

To a business-man, an entrepreneur appears as a threat, an aggressive competitor, whereas to another business-man, the same entrepreneur may be an ally, a source of supply, a customer or someone who creates wealth for others as well as find better ways to utilize resources, reduce waste and produce jobs that are financially beneficial to others.

An entrepreneur is an exploiter or an idea, one who spots a gap in the market or opportunity in the economy and mobilizes the factors of production in order to give something of value to the society in return for profit.

To be an entrepreneur is to be an active player in the economy that is one who innovates products. Some entrepreneurs set up new companies and ventures, others acquire and revive established concern.

Theoretical Framework

The theoretical framework of this study anchored upon the operating cycle theory of working capital management, the operating cycle considers the receivables and inventories relating to working capital and usually, it commences with receipts of raw- materials to collection of receivables from debtors of the stock sales produced from those materials. This theory suggest that granting more credit terms to customer will lead to higher tendency of having a bigger but less liquid investment in cycle (inventory turnover).

Resource Based theory: This theory is of the opinion that survival and growth of a firm depends on either the human or material resources of the firm. Resources means the inputs that are pushed into production process and are considered as fundamental unit of analysis and such include brand name, human skill, capital equipment, patent, finance etc.

Empirical Review

Osuma, Ikpefan, Romanus, Ndigwe and Nkwodimmah (2018) examine how profitability of banks can be enhanced through the working capital management. To empirically carry out the analysis, panel data which consist of ten (10) deposit money banks in Nigeria for seven years (2010–2016) employing the panel fixed effect, panel random effect and the pooled OLS for the two models, which were used as proxies for bank profitability, which includes return on asset (ROA) and return on equity (ROE) to examine the best measure for bank profitability, with the indicators of working capital; net interest income, current ratio, profit after tax, and monetary policy rate. Results of the study showed that working capital management has a significant effect on the profitability of the selected banks and that return on asset is a better measure for bank profitability. Therefore, the study recommends that there should be a periodic review of the minimum capital base of the Nigerian deposit money banks so as to mitigate the effects of inflation and inculcate the consequence of time value of money, because the purchasing power of one (₦1) naira or one (\$1) dollar today would not be sufficient to purchase what it can purchase today for tomorrow.

John, Oko, Ezugwu and Arzizeh (2018) determined the effect of intellectual capital management on revenue generation of listed deposit money banks in Nigeria. The specific objectives of the research were to ascertain the effect of human capital efficiency on revenue growth, to examine the effect of structural capital efficiency on revenue growth and to determine the effect of intellectual capital management on revenue growth. Descriptive research design was adopted for the study considering the total population of

all the twenty-one listed deposit money banks in Nigeria. Data were gathered via secondary source from Six (6) public annual reports of the listed deposit money banks and analyzed using percentages and ratios. Multiple regressions was employed in data analysis and testing the hypotheses; in determining if there is a significant effect of human capital efficiency, structural capital efficiency and Intellectual Capital management on revenue growth of listed deposit money banks in Nigeria. The study revealed that Human Capital Efficiency (HCE) has a positive and significant effect on revenue growth, Structural Capital Efficiency (SCE) has a positive but no significant effect on revenue growth and concluded that Intellectual Capital Management has a positive and no significant effect on revenue growth of listed deposit money banks in Nigeria. Based on the findings, the study recommends that management of deposit money banks in Nigeria and the financial service industry should invest in human capital in order to enjoy increase in revenue generation coupled with the need to determine optimally the level of intellectual capital management so that layoff and underutilization would be highly discouraged and for management to strengthen Intellectual capital management in order to enhance improved performance in revenue generation.

Binti Mohamad and Elias (2013) investigates the practice of working capital management in 150 public listed companies from seven different sectors that were listed in Bursa Malaysia Main Market covering the period of 2002-2011 was undertaken. The study used CCC and working capital as a proxy for working capital requirement while debt, capital expenditure, free cash flow, gross domestic product and firm growth are used as the determinant variables. The result of the study showed that there are significant associations between working capital and its determinants factors.

METHODOLOGY

Research Design

The data for the analysis are secondary data therefore the researcher used an *ex-post facto* research design. The study used secondary data that was sourced from financial publications such as the Nigeria stock exchange (NSE) Fact Book and Daily Official List. Central Bank of Nigeria Statistical Bulletin, CBN Annual Reports and Accounts for the period under review

Model Specification

The model used for the study was the adaption and modifications from the work of lawal, abiola and Oyewole (2015) they analyzed the effect of working capital management on entrepreneurial development in Nigeria

The model is stated thus:

$$PED=f(ACP, APP, CCC)$$

Where

PED= Performance of entrepreneurial development

ACP= Average Collection Period

APP= Average Payment Period

CCC= Cash Conversion Period

The model was adopted and modified by introducing inventory turnover

$$PED=f(ACP, APP, CCC, IVT)$$

This equation can be transformed into a linear function thus:

$$PED=b_0 + b_1 ACP + b_2APP + b_3CCC + b_4IVT + Ut \quad - \quad - \quad - \quad - \quad 1$$

Where:

PED= Performance of entrepreneurial development

ACP= Average Collection Period

APP= Average Payment Period

CCC= Cash Conversion Period

INT= Inventory Turnover

b0 = the constant

B1- b3 = the coefficients of the explanatory variables

Ut = Error term

Method of Analyses

The data were analyzed with econometric techniques involving Descriptive Statistics, Augmented Dickey Fuller tests for Unit Roots and the Ordinary Least Square (OLS).

DATA PRESENTATION AND ANALYSIS

Unit Root Test

Table 1 Unit Root Result

Variables	T-statistics	Probability	Order of Integration
PED	-6.088595	0.0001	1(0)
ACP	-3.867397	0.0043	1(0)
APP	-4.619034	0.0030	1(0)
CCC	-5.531824	0.0005	1(0)
INT	-9.281478	0.0002	1(0)

Source: E-view Version 9.0

The result of the analysis indicate that performance of entrepreneurial development, average collection period, average payment period, cash conversion period, inventory turnover attained stationarity at level. Therefore, all the variables are stationary.

The Ordinary Least Square Regression

In this section, we provide the benchmark test of the significance of the independent variables in explaining the effect working capital management on entrepreneurial development in Nigeria

Dependent Variable: PED

Method: Least Squares

Date: 11/23/20 Time: 12:07

Sample: 2016 2021

Included observations: 24

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PED	3.332806	1638155	2.034488	0.0518
ACP	2.660510	9.234924	2.880923	0.0047
APP	1.832566	6.905754	2.653680	0.0132
CCC	-0.301044	9.365032	-1.204520	0.7353
IVT	15.32652	37842856	2.479032	0.0002
R-squared	0.948027	Mean dependent var		16568137
Adjusted R-squared	0.722253	S.D. dependent var		26065603
S.E. of regression	6263745.	Akaike info criterion		34.25837
Sum squared resid	1.06E+15	Schwarz criterion		34.44340
Log likelihood	-527.0047	Hannan-Quinn criter.		34.31868
F-statistic	164.1679	Durbin-Watson stat		2.173199
Prob(F-statistic)	0.000000			

Source: E-View 9.0

Average Collection Period: the coefficient of (AVP) is 2.660510 with probability of 0.0045 and t-Statistic of 2.034488 which means that average collection period has positive and significant effect on the performance of entrepreneurial development. A unit increase in average collection period (AVP) will cause performance of entrepreneurial development to increase by 2.660510 units.

Average Payment Period: The coefficient of average payment period (APP) is positive at 1.832566 with probability value of 0.0132 and t-Statistic of 2.653680 which means that average payment period (APP) has positive and significant effect in performance of entrepreneurial development within the period under study. A unit increase in average payment period (APP) will lead to a unit increase in performance of entrepreneurial development by 1.832566

Cash Conversion Period: the coefficient of cash conversion period (CCP) is negative at 0.301044 with probability value of 0.735 and t-Statistic of 1.204520 which means that cash conversion period (CCP) has negative and insignificant effect on performance of entrepreneurial development. A unit increase in cash conversion period (CCP) will lead to a decrease on performance of entrepreneurial development by 30.01044 units.

Inventory Turnover: The coefficient of inventory turnover (IVT) is positive at 15.32652 with probability value of 0.0002 and t-Statistic of 2.479032 which means that inventory turnover (IVT) has positive and significant effect on performance of entrepreneurial development within the period under study. A unit increase in inventory turnover (IVT) will lead to a unit increase in performance of entrepreneurial development by 15.32652

Finally, the Adjusted R-squared is 0.722253 which is approximately 70%. This means that 70% of total variation in return on equity (ROA) can be explained by the variables namely ACP, APP, CCC and IVT while the remaining 30% is due to other stochastic variables. The Durbin-Watson statistics is (2.173199) this means the model is free from autocorrelation.

CONCLUSION

In line with the objective of the study. The result of the study indicates that average collection period, average payment period and inventory turnover has positive and significant effect on on performance of entrepreneurial development while cash conversion period has negative and insignificant effect on performance of entrepreneurial development

The study therefore concludes that working capital management has positive effect on the performance of Nigerian firms within the period under study.

RECOMMENDATIONS

Following our findings, the study recommends that,

- The management of manufacturing firms in Nigeria should exhibit carefulness in handling of stock/investors at least to ensure that their stock level will not be below the minimum stock level.
- Increase the time at which customers make payments to the company for goods bought.
- Professionals should be hired by these companies to ensure effective and efficient working capital management
- Much attention should be paid to cost of sales to ensure that it will not negatively affect prices of stock.

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