Article

Short-Term Asset-Mix Accounting (STAMA) and Profitability of Manufacturing Conglomerates in Nigeria

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Abstract
Short-Term Assets (STA) are the essence of a business; their prudent management can uplift and sustain the continuous flourishing of a company and can consequently determine its success. The efficient management of these various components creates a problem of how to achieve a balance or trade-off between liquidity and profitability. The study will examine the relationship between different components of STA and the impact that effective STAM has on the profitability of manufacturing companies in Nigeria. The study adopts the explanatory research methods examining STAM and profitability in a causal relationship. Data were gleaned from the annual reports of five sampled Manufacturing Companies (MC) covering the period of 2010-2014. Using regression analysis, the study tests the influence of debtors' collection period, creditors' payment period and inventory on profitability of a sample of 17 Consumer Goods manufacturing companies listed on the Nigerian Stock Exchange. The study found that debtors' collection period and creditors' payment period have negative significant impact on the profitability of consumer goods manufacturing companies in Nigeria while Inventory turnover have a negative but insignificant influence. The study recommends, among other things, that manufacturing firms should ensure that sound credit collection policies (CCP) are instituted within the organization; that efforts should be made to ensure that payments to creditors are not stretched beyond the credit period.

Keywords
Creditors' payment period, inventory turnover, profitability, short-term assets, working capital

Introduction

The need for Short-Term Asset-Mix (STAM) to run the day-to-day activities of firms cannot be over stressed because, without proper STAM there would be

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inefficiency in virtually all sections of the firm. The effective and efficient use of short-term assets promotes and enhances profitability. Short-Term Assets (STA) are the essence of a business; their prudent management can uplift and sustain the continuous flourishing of a company and can consequently determine its success. The life of a firm largely depends on the proper accounting of its STA in making appropriate profit. STAM is the lifeblood which passed through the vein and arteries of corporation's structure, energizes every part of the structure given courage to the brain (administration) and muscle (workforces), digest the raw material used and by its constant, regular rapidly purifies itself and return to the heart (dough account) for another journey (Billichel, 1998; Mathuva, 2010).

STAM plays an important role for firms in all sectors of the Nigerian Economy. Not paying serious attention to STAM by manufacturing companies in Nigeria could be devastating to their operations and financial activities. The ability of a firm to meet its obligations as and when due will depend largely on their liquidity. Since STA plays an imperative role in the day-to-day operations of the business, an assessment of STAM becomes necessary in any business for its profitability and survival.

There is no doubt that the ultimate objective of any firm is to maximize profit. However, the preservation of the liquidity of a firm is an important objective and therefore, it is the efficient accounting of the various components of STA that helps to preserve liquidity. However, the problem lies in the efficient management of these various components that makes up the working capital by managers. This problem arises as a result of the fact that most managers fight to increase inventory turnover in a bid to increase profitability without being mindful of the need to speed up the debtor collection period and to delay creditor payment period as far as possible, so as to provide the funds needed to keep the cycle flowing. This puts the firms in poor liquidity position and it consequently affects the profitability of such firms. Therefore, given this position, it is expedient to examine the effect of STAM on profitability of manufacturing firms in Nigeria.

Prior studies indicate that STAM impacts on the profitability of the firms. Studies conducted by Adina (2010), Alipour (2011), Chattejee (2010), Falope and Ajilore (2009), Hayajneh & Yassine (2011), Karaduman, Akbas, Ozsozgun & Durer (2010), Mohamad & Saad (2010) and Uyar (2009) found a negative relationship between STAM and profitability. On the other hand, Singh & Agress (2010) and Bhunia *et al.* (2011) found a positive relationship between STAM and profitability, interestingly; these studies were conducted in India. This indicates the possibility of the effect of the economy or business environment. However, studies conducted by Akinlo (2011) and Braine (2012) both in Nigeria reported mixed results. While some components of STAM have positive relationship others have a negative relationship. The results from

the above studies point to the fact that studying STAM and profitability is ongoing and inconclusive.

This study intends to add to the existing body of knowledge on the relationship between STAM and consumer goods manufacturing companies' profitability in Nigeria, and to use more recent data as it was observed by the researchers that there exist only a few studies in Nigeria in recent times that have used such data. The study will examine the relationship between different components of STA and the impact that effective STAM has on the profitability of manufacturing companies in Nigeria.

Literature Review

Working capital (STAM) is the difference between an organization's current asset and its current liabilities. STAM can be defined as the capital available for conducting the day-to-day operations of any business represented by its net current assets (NCA). STAM is defined as "a margin or buffer for meeting obligations with the ordinary operation cycle of the business" (Dong, 2010). STAM also refers to as the items that are required for the day-to-day invention of goods and services by a business organization. It can be defined as the excess of current assets over current liabilities (Adeniji, 2008; Akinisulire, 2008; Myers & Brealey, 2003). Additionally, STAM is defined as the circulating capital of business organization. STAM components are Stock of trading goods, raw materials and work-in-progress; all receivables; Bank and cash balance and Marketable securities and other short-term claims on third parties (Afza & Nazir, 2009; Mansoori & Muhammad, 2012; Myers & Brealey, 2003).

STAM could be seen in the light of perpetual and variable STAM.

a. Perpetual STAM (PSTAM): This is the least level of Current Assets (CA) which is continuously required by the firm to carry on its business operation within an operating cycle (OP).
b. Variable STAM (VSTAM): This represents extra assets required at certain times during the year.

Various studies on STAM have mostly relied on Agency Theory (AT) and Risk and Return Theory (RRT).

The relevance of AT to STAM could be viewed from the perspective of financial manager, who in most cases is an agent of the owners (principals) of a firm, and who takes all the important decisions regarding all the STA and liabilities of a business. He takes charge of decisions regarding receivables, payables, inventories/stock and liabilities of a firm. However, by extending this to stakeholder relevance, the symbiotic association of firm and various stakeholders, the creditors for instance, provides sources of finance to the firm and in exchange expects repayment of their loans on schedule. The shareholders supply the firm`s capital and in return expects a maximized risk-

adjusted return from their investment. Employees and manager help firms with required skills, time, as well as human capital requirements in exchange; they anticipate good working condition, fair income, and remunerations. Customers provide the source of revenue to the firms and in exchange expect to have value for money and satisfactory services. Suppliers are input providers to the firm, and hence expect fair prices and dependable buyers. Stakeholders normally differ with respect to their stake in firms. The level of individual`s stake depends on the extent of his exchange of relationship and commitments with the firm which is based on specific asset investments (Williamson, 1984; Mathuva, 2010).

The RRT is one of the most important theories in the field of Portfolio Management (PM). The Risk and Return Relationship (RRR) has received considerable attention from researchers in business, economics, and finance (Mukherji, Desai &Wright, 2008). Furthermore, every decision with respect to investment is based on RRR (Richard, Stewart & Franklin, 2008). Relating to that, two conflicting attitudes are always associated with the risk. That is, the Risk-seeking behaviour (RB) and the Risk Aversion (RA). Risk Seekers (RS) always prefer choices involving a higher potential loss/or a greater probability of a loss and of course with a strong notion of over estimating gains. The main focus of RS is on the opportunities for gain (Raheman, Mohammed, Abdul & Ahmad, 2011; Singh & Agrees, 2010; Raheman & Nasr, 2007; Tiegen & Brun, 1997). Conversely, RA is completely opposite of RS, in the sense that they overestimate losses and underestimate gains.

However, in order to integrate the RRT into STAM, it is imperative to stress that one of the cardinal decisions in STAM is the trade-off between liquidity and profitability. If a firm chooses to be liquid it should not be at the expense of the profit and vice-versa. Any of these two conflicting decisions may result in either of excess or shortage of the components of STAM and the success of a business.

This study, therefore, has its theoretical basis on the two theories of AT and RRT. The study is underpinned by these theories, because, of the nature of variables considered STAM where managers as the agents are expected to develop more efficient ways of proper handling of each STAM components and keeping them at optimal as well as reducing the debtors collection period and inventory conversion period which can increase returns (profitability) for the shareholders who are the principals.

Empirical Studies on STAM and Profitability

Many researchers and scholars alike have studied STAM from different standpoints and in different environments. The following are some of the many works of effective STAM. In a study of the Relationship of Cash Conversion Cycle (CCC) with firm size and profitability in Turkey by Uyar (2009), using

data from the financial statements of the corporations listed on the Istanbul Stock Exchange (ISE). The study revealed a significant negative correlation between CCC and the variables of firm size and the profitability. In another study on the effects of STAM on the profitability of selected companies in the Istanbul Stock Exchange for the period 2005-2008 by Karaduman *et al* .(2010). The results showed that a company's return on assets is increased by shortening the number of day's accounts receivables, accounts payable and days in inventory. Therefore, reducing the CCC provides a positive contribution to company's return on assets.

Examining STAM adequacy and its impact on profitability, a study by Singh & Agress (2010), used data from 250 firms for the period of 10 years in India, thus, a 2500 firm-year observation. The results showed that sales and CCC have highly positive significant effect to determine required current liabilities. The result of a negative relationship between profitability and liquidity is statistically inconsequential. In Adina (2010), analyzing the efficiency of STAM of companies, using a sample of 20 annual financial statements of companies covering 2004-2008, a 100 firm-year observation. The study found that, there was a weak negative linear correlation between STAM indicators and profitability rates. In another research work by Chattejee (2010), analyzing the influence of STAM on the profitability of listed companies in the London Stock Exchange with a sample of 30 UK companies for a period 2006-2008, thus, 90 firm-year observation. The findings are in line with those of previously mentioned studies. As the CCC increases, this will lead to decreased profitability of the firm and the managers can create a positive value for the shareholders by reducing the CCC to a possible minimum level. The researcher further found that, there is a significant negative relationship between liquidity and the profitability of the UK firms and that there exists a positive relationship between the size of the firm and its profitability.

In a research work on STAM and its effects on the performance of Malaysian listed companies from the perspective of market valuation and profitability, Mohamad & Saad (2010) offered empirical evidence. The study period covered 2003-2007 with a sample of 172 listed companies from the Bursa Malaysia main board, a 860 firm-year observation, by exploring the effects of STAM components to the firm performance by looking at the firm's value and profitability. The result revealed that there was a significant negative relationship between STAM and firm performance. Thus, it highlighted the importance of managing STAM requirements to ensure an improvement in firm's market value and profitability. In a study by Bhunia *et al*. (2011), investigating the Liquidity Management Efficiency (LME) and Liquidity-Profitability Relationship (LPR), the data utilized was extracted from the income statements, statement of financial positions, and cash flow statements of sampled firms from the Indian Stock Exchange and CMIE data base. The results of the study revealed that correlation and regression results are significantly positive and related to the firm profitability.

The impact of overall STAM on profitability in different sector was examined by Raheman *et al.* (2011), their study cover period of ten years from 1998 to 2007, for 204 manufacturing, and trading companies and classified them in 24 sectors, a 2,040 firm-year observation. They concluded that all textiles sectors are among the laggard sectors in terms of STAM measures. Additionally, Alipour (2011) demonstrated the relationship between STAM and profitability in Iran. CCC was used as a measuring tool to calculate the efficiency of STAM for the period 2001-2006 for companies listed on the Tehran Stock Exchange. The result showed that there was a significant negative correlation between account receivable period and profitability, a negative significant relation between inventory turnover in days and profitability, a direct significant relationship between account payable periods and profitability and a negative significant relation between CCC and profitability. Hayajneh & Yassine (2011) investigated the relationship between STAM efficiency and profitability of the 53 Jordanian manufacturing firms listed on the Amman Exchange Market for the period 2000-2006, a 424 firm-year observation. The results found a negative significance relationship between profitability and the Average Receivable Collection Period (ARCP), Average Conversion Inventory Period (ACIP) and Average Payment Period (APR), and also the CCC which expresses the efficiency of STAM. The study revealed a positive significance relationship between the size of the firm, growth of sales and current ratio from this side and profitability from the other side. Finally, financial leverage related negatively with profitability.

In Nigeria, the following findings were also made by different scholars revealing the impact of STAM on the profitability of Nigerian manufacturing firms. Falope & Ajilore (2009), in their study of STAM and profitability of listed companies in Nigeria, using a data of 50 quoted companies on the Nigerian Stock Exchange between 1996 and 2005, a 500 firm-year observation. Their studies revealed that, all components of STAM influence profitability with varying levels of significance; with Debtor's Collection Period (DCP) having the highest and significant influence, which is negative. Their study also revealed an insignificant variation in the effects of STAM in between small and large firms and suggest, therefore, that, managers can create value for their shareholders if they can manage their STAM in more efficient ways with proper handling of each STAM components and keeping them at optimal as well as reducing the DCP and Inventory Conversion Period (ICP). These findings were supported by the studies of Charitou, Elfani & Lois (2010), and Al-debie (2011). It is good to say, that, Charitou *et al.* (2010) added that efficient utilization of the firm's resources will lead to increased profitability and reduces volatility, which leads to reduction in default risk and thus improves the firm's value. Therefore, if the components of CCC are efficiently managed, they will add value to the firm since they increase the firm's profitability.

In the study of Akinlo (2011), investigating the effect of working capital on profitability of 66 firms listed on the Nigerian Stock Exchange (NSE) for the period 1999 to 2007, thus, using a 594 firm-year observation. The study adopted the dynamic panel general method of moments in analyzing the data. The results of the estimation showed that sales growth, CCC, account receivables and inventory period affect firm positively, while leverage and account payable affect firm profitability negatively. In Braine (2012) study, examining STAM efficiency and corporate profitability of 22 quoted firms from eight sectors of the Nigerian Stock Exchange for the year 2010. Research results from compared STAM costs and resumes evidenced improved gross STAM positions. Using the difference between means showed that the costs of STAM exceed the returns on STAM investments thereby, affecting their profitability. All these studies have undertaken a cross-sector analysis, thus, their results failed to account for specific industry trend and analysis.

From the foregoing, we therefore hypothesize that;

H_{o1}: Debtors collection period (DCP) has no significant influence on the profitability of Consumer Goods Manufacturing Companies.

H_{o2}: Creditors payment period (CPP) has no significant influence on the profitability of Consumer Goods Manufacturing Companies.

H_{o3}: Inventory Turnover (IT) has no significant influence on the profitability of Consumer Goods Manufacturing Companies.

Methodology

This research work adopts the explanatory research methods examining STAM and profitability in a causal relationship. The population of the study covers the entire Consumer Goods Manufacturing Companies (CGMC) listed on the Nigeria stock exchange totalling 23 companies as at 31st December, 2016 (NSE, 2016). However, the researcher employed Non-probabilistic sampling techniques for the basis of selecting a sample size of 17 quoted CGMC, thus, having a 85 firm-year observation. This research has considered two criteria for choosing the CGMC appropriate for the study; CGMC that are quoted on the Nigerian Stock Exchange (NSE) for more than five years with their financial statements available for the periods of the study.

Data were obtained from the annual reports of 17 sampled CGMC covering the period of 2010-2014 and Nigeria Stock Exchange (NSE) fact book. The data generated from the financial statements of the sampled companies and NSE Factbook is the amount of accounts receivable, accounts payable and inventory which are proxy for STAM. The amount of Profit after Tax (PAT) and Total Assets (TA) are used for Return on Assets (ROA) which is a proxy to profitability.

In order to assess the profitability of the company under review, Financial Ratios (FR) were calculated. The FR computed help in the use of models that facilitates the testing of hypothesis and predicts the behaviour of both dependent and independent variables under study. Additionally, the descriptive

Statistical method of data analysis was adopted to calculate the ratios and summarize the data in various statistical measures such as minimum, maximum, mean and standard deviation. Correlation and regression analysis were also used for testing the dependent and the predictability of the independent variables respectively of the selected CGMC using STATA® 12. The relationship between the dependent and independent variables were analyzed using the model presented below in examining the hypothesis of the study:

$ROA = f\ \{DCP, CPP, IT\}$ ---------- (i)
The explicit form of equation (1) above is represented as follows;
$ROA_{it} = \alpha_{it} + \beta_1 DCP_{it} + \beta_2 CPP_{it} + \beta_3 IT_{it} + \beta_4 Size_{it} + \mu_{it}$ ---------- (ii)
Where

ROA	=	Return on Assets
RCP	=	Debtors Collection Period
APP	=	Creditors Payment Period
IT	=	Inventory Turnover
Size	=	Natural Log of Total Assets – Control Variable
α	=	Intercept of the regression line
β(1 to 4)	=	Coefficient of independent variables
μ	=	the Error Term

The independent variables of this study consist of DCP, CPP and IT, while the dependent variable is the profitability. ROA was used in this study to proxy profitability. Table II below is shown the dependent and independent variables used.

Table I: Dependent and Independent Variables

VARIABLES	PROXY	COMPUTATION
Dependent	ROA	Profit After Tax/Total Assets
Independents	DCP	(Receivables/Sales) X 365
	CPP	(Payables/cost of sales) X 365
	IT	(Inventory/Cost of sales) X 365
Control	Size	Natural Log of Total Assets

Source: Researcher Computation, 2017

The a priori expectation of the model is $\beta 1 < 0$, $\beta 2 < 0$, $\beta 3 < 0$ and $\beta 4 > 0$. This means that a negative relationship is expected between the dependent variable (ROA) and independent variables (DCP, IT, and CPP) and a positive relationship between ROA and Size.

Data Presentation and Analysis

The statistical testing was carried out using STATA® 12. The researchers employed various statistical measures. Descriptive statistics is to summarize the data in various statistical measures such as minimum, maximum, mean and standard deviation. Table III below, shows the nature and properties of data used in the research.

Table II: Descriptive Statistics Table

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis	P-value
DCP	81	6.855933	469.7794	55.2633	57.33492	4.972632	35.2814	0.0000
CPP	81	10.70619	2293.98	265.0224	484.5021	2.992684	11.0548	0.0000
IT	81	21.85681	193.7321	74.25293	35.44638	1.158899	4.14133	0.0006
ROA	81	-0.441613	0.2651654	0.070964	0.1227406	-1.26644	5.72678	0.0000
TA	81	176,726	350,000,000	60,400,000	67,700,000	1.921859	7.20229	0.0009

Table II shows that DCP has a mean 55.2633 and a standard deviation of 57.33492 with a minimum of 6.855933 and maximum of 469.7794. This indicates that the average mean of DCP of the companies studied approximately 55 days. The standard deviation indicates that the date deviate from both sides of the mean by about 57.33%. Generally, shorter credit periods are seen as financially sensible, but the length will also depend upon the nature of the business.

The CPP has an average of 265.0224 and standard deviation is 484.5021 with a minimum of 10.70619 and a maximum of 2293.98 resulting from 81 observations. Though the mean is low compared to the maximum, the standard deviation proves that the data set for CPP are widely spread across the mean indicating that some companies have increased payables days while the others have less. Generally, increasing payables days suggests that advantage is being taken of available credit but there are risks.

The IT has an average of 74.25293 while its standard deviation is 35.44638 with a minimum value of 21.85681 and maximum of 193.7321. The standard deviation implies that the data is spread widely across the mean value. Also the maximum is too high compared to the minimum, that is, some companies hold inventory very long while the others do not. It is very expensive to hold inventory and thus minimum inventory holding usually points to good practice. Additionally, the mean on ROA is 0.070964 while its standard deviation is 0.1227406 with a minimum value of -0.441613 and a maximum of 0.2651654. Therefore, the standard deviation implies that ROA can deviate from mean to both sides by 12%.

Total asset recorded an average of N60.4 Million and a standard deviation of 67.7, indicating that total asset is widely spread. All the variables are normally distributed based on skewness, kurtosis and their p-value.

Correlation Matrix

The correlation matrix presents the relationships that exist between variables used in the research analyses. This helps to understand the interrelationship that exists among variables, especially the independent variables.

Table III: Correlations Matrix Table

	ROA	DCP	CPP	IT	LnTA
ROA	1				
DCP	-0.5402**	1			
CPP	0.5462**	0.4183**	1		
IT	-0.0125	0.0602	-0.1503	1	
LnTA	0.3665**	-0.2514*	-0.2772*	0.2273*	1

*, ** for 5% and 1% significance

Table III above shows that ROA is positively related with CPP at 0.5462, but negatively related to DCP and IT at 0.5402 and 0.0125 respectively. Size proxied by LnTA is positively related to ROA. All the independent variables are significantly correlated to the ROA at 1% except IT.

Among the independent variables DCP positively correlates with CPP at the 1% significance while it correlates negatively with LnTA (size) at the 5% significance. However, DCP has no significant correlation with IT. On the other hand, CPP correlates negatively with IT though not significant, but negatively and significantly correlated to Size (LnTA) at 5%. IT has a positive significant correlation with LnTA at 5% level. DCP and CPP has the highest correlation which is also positive. This indicates that the firms adopt strategies to balance it debtors collection period with its creditors' collection period.

Table IV: Regression Results

Variables	Coefficients
DCP	-0.0005713**
CPP	-0.0000763**
IT	-0.0002341
LnTA	0.0156412*
Constant	-0.1286388
R-Square 0.4539	
Adjusted R 0.4252	
F-significance 0.000	
Wald Chi2 33.54	

** 1% significance * 5% significance

Table VII shows the result from estimated regression for variable and from the table, DCP has a correlation coefficient of -0.0005713 and P-value below

1%. This implies that for every 1 day increase in DCP, there is a consequent of 0.06% decrease in ROA holding all other variables constant. The result reveals that DCP has negative significant effect on ROA. This is expected as increase in debtor collection period will affect the short-term liquidity of the firm which will in turn impacts on profitability.

CPP records a negative significant impact on ROA with a coefficient of -0.0000763 and a p- value below 1%, indicating that an increase in CPP by 1 day results in a 0.008% decrease in ROA. This result is also expected as research has showed that increase in creditors' payment period impacts negatively on profitability. The regression results above also reveals that IT has an insignificant negative impact on profitability with a coefficient of -0.0002341 and a p-value above 5%, indicating that a 1 day increase in IT will insignificantly impact negatively on profitability.

Overall, the model is fitted with Wald Chi2 of 33.54 and significant at 1%. The model R square of 0.4539 indicates that DCP, CPP, IT and LnTA accounts for 45.4% variation in ROA. However, after adjusting for the effect of the number of independent variables the model adjusted R square of 0.4252 to indicate that DCP, CPP, IT and LnTA jointly accounts for 42.5% variation in ROA. Thus, profitability measured by ROA is influenced to the extent of 42.5% by debtors' collection period, creditors' payment period, Inventory turnover and size of CGMCs.

The model can be re-written as:

$$ROA = -0.1286388 - 0.0005713DCP - 0.0000763CPP - 0.0002341IT + 0.0156412LnTA + 0.0001619$$

Discussion of Findings

DCP and Profitability of manufacturing companies from the first hypothesis discussed, revealed that DCP has a negative influence on the profitability of Nigerian manufacturing companies, confirming studies conducted by Falope & Ajilore (2009), Charitou *et al.* (2010) and Al-Debie (2011) and contradicting studies by Akinlo (2011), Bhunia *et al.* (2011) and Singh and Agress (2010). Thus, we reject the null hypothesis which states that DCP has no significant influence on the profitability of manufacturing companies.

CPP and Profitability of manufacturing companies: The results show a negative and significant influence of CPP on ROA. This is in line with the results obtained by Falope & Ajilore (2009), Charitou *et al.* (2010) and Al-Debie (2011) and contradicting studies by Akinlo (2011), Bhunia *et al.* (2011) and Singh and Agress (2010). On this basis, the null hypothesis is also rejected, therefore, CPP has significant influence on the profitability of manufacturing companies.

IT in Days and Profitability of manufacturing companies: From the above analysis results show a negative, but insignificant influence of IT on ROA. This, however, contradicts Falope & Ajilore (2009), Charitou *et al.* (2010) and Al-Debie (2011) and confirms studies by Akinlo (2011), Bhunia *et al.* (2011)

and Singh and Agress (2010). Thus, the null hypothesis is accepted, IT has no significant influence on the profitability of manufacturing companies.

Conclusion and Recommendations

This research examined the impact of STAM on profitability of selected listed consumer goods manufacturing companies in Nigeria. STAM is an important part in firms' financial management decision. The ability of the firm to operate continuously and for a long period depends on how it deals with investment in STAM. From the result, the study reveals that DCP are significantly and negatively related to ROA. It was also observed that, in the CPP exhibited a significant negative relationship with the ROA but an insignificant negative relationship between IT and ROA. The results of the analysis provided sufficient evidence to conclude therefore, that, STAM has consequential impact on the profitability of manufacturing companies in Nigeria. This means that managers of manufacturing companies need to improve on each of the different component of STAM by keeping them to a possible optimum level in order to create value for their companies and maximize wealth for shareholders.

Based on these findings, the study puts forward the following recommendations: that Manufacturing Companies should put in place proper inventory management policies to ensure that an optimal level of inventory is kept; that Managers of manufacturing firms should ensure that optimum cash balance is held at any point in time; that managers of manufacturing firms should ensure that sound credit collection policies (CCP) are instituted within the organization; that efforts should be made to ensure that payments to creditors are not stretched beyond the credit period; and finally, manufacturing companies should make concerted effort to manage their cash, accounts receivables, inventories and accounts payable so as to increase their profitability.

References

Adeniji, A. (2008) *An Insight into Management Accounting.* 4th Edition, Lagos: El-Toda Ventures Ltd., 45-66.

Adina, D. (2010) Working Capital Management and Profitability. A Case of Alba County Companies. *Annales University Apulencies Series Economica*, 15: 32-43.

Afza, T. & Nazir, M. (2009) Impact of Aggressive Working Capital Management Policy on Firms' Profitability. *The IUP Journal of Applied Finance*, 15(8): 20-30.

Akinsulire, C. (2008) *Financial Management.* 5th Edition, Lagos: Ceemol Nigeria Ltd., 45: 67-86.

Akinlo, O.O. (2011) The Effect of Working Capital on Profitability of firms in Nigeria: Evidence from General Method of Moments (Gmm). *Asian Journal of Business and Management Sciences,* 2: 130-135.

Al-Debi'e, M.M. (2011) Working Capital Management and Profitability: The case of industrial firms in Jordan. *European Journal of Economics, Finance and Administrative Sciences*, 36: 75-86.

Alipour, M. (2011) Working capital management and corporate profitability: Evidence from Iran. *World Applied Sciences Journal*, 12(7): 1093-1099.

Barine, N. (2012) Working Capital Management Efficiency and Corporate profitability: Evidence from Quoted Nigerian Firms. *Journal of Applied Finance and Banking*, 2(2): 215–237.

Bhunia, A., Khan, I. & MuKhuti, S. (2011) A Study of Managing Liquidity. *Journal of Management Research,* 3(2): 1-27.

Billichel, N. (1998) The relationship between working capital management and profitability: Evidence from the United States. *Business and Economics Journal*, 10: 1-9.

Chatterjee, S. (2010) The Impact of Working Capital Management on the Profitability of the Listed Companies in the London Stock Exchange. *Working Paper, SSRN Electronic Library*, SSRN –ID: 1587249.

Charitou, M.S., Elfani, M. & Lois, P. (2010) The effect of working capital management on firms profitability: Empirical evidence from an emerging market. *Journal of Business & Economics Research (JBER),* 8(12): 63-68.

Dong, H.P. (2010) The Relationship between Working Capital Management and Profitability. *International Research Journal of Finance and Economic*, 49: 34-38.

Falope, I. & Ajilore, T. (2009) Working capital management and corporate profitability: evidence from panel data analysis of selected quoted companies in Nigeria. *Research Journal of Business Management,* 3: 73-84.

Hayajneh, S.O. & Yassine, A.L.F. (2011) The Impact of Working Capital Efficiency on Profitability–an Empirical Analysis on Jordanian Manufacturing Firms. *International Research Journal of Finance and Economics*, 66: 67-76.

Jensen, M. & Mackling, S.I. (1977) Impact of Working Capital Management on Firms' Performance: Evidence from Non-Financial Institutions of KSE-30 index. *Interdisciplinary Journal of Contemporary Research in Business*, 3(5): 481- 492.

Karaduman, A., Akbas, E., Ozsozgun, A. & Durer, S. (2010) Effects of Working Capital Management on Profitability: the Case for Selected Companies in the Istanbul Stock Exchange (2005-2008). *International Journal of Economics and Finance Studies*, 55: 65-76.

Lazaridis, J. & Tryfonidis, D. (2006) Relationship between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange. *Journal of Financial Management Analysis,* 19: 26-35.

Mansoori, E. & Muhammad, H. (2012) The Effect of Working Capital Management on Firm's Profitability: Evidence from Singapore. *Interdisciplinary Journal of Contemporary Research in Business,* 4(5): 472-486.

Mathuva, D.M. (2010) The Influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms. *Research Journal of Business Management,* 4(1): 1-11.

Mohamod, E. & Saad, B. (2010) Working Capital Management: The Effect of Market Valuation and Profitability in Malaysia. *International Journal of Business and Management,* 5(11): 140-147.

Mongrut, S. (2008) Evaluating the Impact of Working Capital Management Components on Corporate Profitability: Evidence from Indian Manufacturing Firms. *International Journal of Economic Practices and Theories*, 2(3): 2247-7225.

Mukherji, A., Desai, A. B., & Wright, P. (2008). A contingent relationship between risk and return: toward a behavioral model of decision making. *Journal of Behavioral and Applied Management*, 9(3): 240-257

Myers, B. & Brealey, E. (2003) Measuring Association between Working Capital and Return on Investment. *South Africa Journal of Business Management*, 28: 1-5.

Nigerian Stock Exchange Fact Book (2014).

Nimalathasan, B. (2010) Working capital management and its impact on profitability: A study of selected listed manufacturing companies in Sri Lanka. *Information Management*, 12: 76-83.

Pandey, M. (2005) *Financial Management.* 9th Edition, New Delhi: Vikas Publication Ltd.

Raheman, A., Mohammed, A., Abdul, R., Ahmad, K. (2011) Working Capital Management and Corporate Performance of Manufacturing Sector in Pakistan. *International Research Journal of Finance and Economics*, 47: 151-163.

Raheman, A. & Nasr, M. (2007) Working Capital Management and Profitability: Case of Pakistani Firms. *International Review of Business Research Papers*, 3(1): 279-300.

Richards, A.B., Stewart, C.M. & Franklin, A. (2008) *Principles of Corporate Finance.* (9th ed.). New York: Wiley and Sons.

Rose, S.A. (1973) The Economic Theory of Agency: The Principal's Problem. *American Economic Review*, 63: 134-139.

Singh, P. & Agress, S. (2010) Impact of Working Capital Management on the Profitability of Hindal co Industries Limited. *Icfai University Journal of Financial Economics,* 6(4): 62-72.

Tiegen, H.K. & Brun, W. (1997) *Anticipating the future: Appraising risk and uncertainty*. New York: Routledge Dress.

Uyar, A. (2009) The Relationship of Cash Conversion Cycle with Firm Size and Profitability: An Empirical Investigation in Turkey. *International Research Journal of Finance and Economics,* 24: 186–193.

Williamson, O.E. (1984) Corporate Governance. *Yale Law Review*, 93: 1197-1230.