

EFFECT OF INVENTORY TURNOVER ON INVESTORS' DECISIONS OF LISTED MANUFACTURING FIRMS IN NIGERIA

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Abstract

The study investigated the effect of inventory turnover on investors' decision of listed manufacturing firms in Nigeria for the periods of 2010 to 2021. Inventory turnover is measured with cash conversion cycle, current ratio and quick ratio while investors' decision is measured with volume of shares traded. The study made use of ex post facto research design. The population consists of forty-three (43) listed manufacturing firms in the Nigerian Exchange Group (NEG) as at December 2021. Using filtering sampling technique, the sample size of this study is made up of thirty-nine (39) manufacturing firms that have been consistently listed on the Nigerian Exchange Group and have published their financial reports within the periods under review. Panel multiple regression technique was employed as the technique of data analysis. The regression result revealed that cash conversion cycle has negative significant effect on investors' decision of listed manufacturing firms in Nigeria while current ratio and quick ratio has positive insignificant effect on investors' decision of listed manufacturing firms in Nigeria. Consequently, it concludes that manufacturing companies with more efficient inventory management, as reflected in a shorter cash conversion cycle, tend to attract a higher level of investor interest and trading activity in their shares. A shorter cash conversion cycle may be a driver of investor attraction, potentially leading to a higher demand for the company's shares. This can result in increased liquidity and potentially higher share prices. The study recommends that manufacturing companies should focus on optimizing their inventory management, particularly by reducing the time it takes to convert inventory and accounts receivable into cash. This can be achieved through improved inventory turnover, faster collections of accounts receivable, and efficient payables management.

Keywords: Inventory Turnover, Investors' Decision, Cash Conversion Cycle, Current Ratio and Quick Ratio

Introduction

Survival of any business depends largely on its ability to manage its resources most especially its inventory, which are cash and other related short-term assets. Investors often look at a company's inventory turnover ratio to assess its operational efficiency and financial health. A healthy ratio can instill confidence in shareholders and potential investors. High inventory turnover can reduce

waste in the form of excess or obsolete inventory. This is especially important in industries with short product lifecycles, as it minimizes write-offs and waste disposal costs.

The manufacturing unit is one of the largest units of the Nigerian economy, and it plays a vital role in developing a nation's economy (Ademola & Kemisola, 2014). Manufacturing firms often have a significant portion of their capital tied up in inventory. An efficient inventory turnover ratio allows these firms to free up capital that can be used for other purposes, such as expansion, R&D, debt reduction, or investing in new machinery and technology. In addition, a high inventory turnover ratio means that products are sold quickly, leading to faster cash inflow. This is crucial for manufacturers as it allows them to cover their operating expenses, invest in growth, and meet their financial obligations. Therefore, maintaining an appropriate level of inventory ensures that manufacturing firms can respond to changes in demand more effectively. This helps prevent stockouts and overproduction, which can be costly and lead to customer dissatisfaction.

Efficient management of inventory influences liquidity as well as profitability of organizations. The levels of financial performance displayed in Nigeria by most business organizations is not sufficient especially with regards to inventory management (Abiodun & Samuel, 2014). In spite of the effort made to attain a good inventory management, there is continuous declining in the level of working capital in the nature of inadequate inflow of cash which cannot sustain daily cash needs of the manufacturing firms. Reduced working capital specifically limit cash, in the long run, causes poor financial performance and survival for the business as it cannot easily pay off creditors (Egbide, et al, 2013). Therefore, efficient inventory turnover is a basic component of the overall organization policy which assists in generating fund to shareholder.

The major body of empirical research examines either the effect of liquidity ratios on investment decisions, the effect of leverage ratios on investment decisions, effect of profitability ratios on investment decisions and turnover ratios on investment decisions in isolation (Fajaria & Isnalita, 2018; Mabinda, 2018; Della Fauzi & Rukmini, 2018; Adam & Quansah, 2019; Julius & Lucky, 2020; Udenwa et al., 2020; Nursari & Suriawinata, 2020; Dwi Sihono & Widarti, 2021; Hasanuddin et al., 2021). Although Olaifa (2018); Edem et al. (2018); Sanyaolu et al. (2020); Ebe et al. (2021); Oluwayemisi et al. (2022); Ali et al. (2022) focused on the Nigerian banking sector while Edore and Ujuju (2020) concentrated on Five (5) selected companies in Nigeria, Osundina and Osundina (2014); Udenwa et al. (2020) focused on working capital management and market value of quoted food and beverages manufacturing firms in Nigeria. Likewise, Ogbebor et al.

(2020) focused on four (4) selected companies in Nigeria, while Olayinka (2022) used Nestle Nigeria Plc as a case study indicating research gap in terms of the domain of the study. Also, the period covered in this study is more recent compared to the previous studies.

The main objective of the research is to assess how the investment decision of listed manufacturing firms in Nigeria are affected by inventory turnover while the specific objectives are to:

- i. ascertain the effect of cash conversion cycle on investors' decision of listed manufacturing firms in Nigeria.
- ii. examine effect of current ratio on investors' decision of listed manufacturing firms in Nigeria.
- iii. determine the effect of quick ratio on investors' decision of listed manufacturing firms in Nigeria.

To address the problem of the study, the following hypotheses are tested:

H₀₁: Cash Conversion Cycle has no significant effect on the investors' decision of listed manufacturing firms in Nigeria.

H₀₂: Current ratio has no significant effect on investors' decision of listed manufacturing firms in Nigeria.

H₀₃: Quick ratio has no significant effect on investors' decision of listed manufacturing firms in Nigeria.

Literature Review

Inventory Turnover Ratio

It measures the number of times inventory turns over into sales during the year or how many days it takes to sell inventory. This is a good indication of production and purchasing efficiency. A high ratio indicates inventory is selling quickly and that little unused inventory is being stored or could also mean inventory shortage). If the ratio is low, it suggests overstocking, obsolete inventory or selling issues.

According to Harvey (2012), inventory turnover is a measure of how often the company sells and replaces its inventory. It is the ratio of annual cost of sales to the latest inventory. One can also interpret the ratio as the time to which inventory is held. For example a ratio of 26 implies that

inventory is held, on average, for two weeks (365 days in a year divided by inventory turnover ratio of 26 equals 14 days per 2 weeks average inventory holding period). It is best to use this ratio to compare companies within an industry (high turnover is a good sign) because there are huge differences in this ratio across industries.

According to Farlex (2012), it is a measure indicating the number of times a firm sells and replaces its inventory during a given period and calculated by dividing the cost of goods sold by the average inventory level. A relatively low inventory turnover may indicate ineffective inventory management (that is, carrying too large an inventory) or carrying out-of-date inventory to avoid writing off inventory losses against income. A high inventory turnover is generally desirable.

According to Winston (2015), a company's inventory turnover ratio refers to how quickly goods enter and leave storage at the business. It is most often used in relation to companies that deal in perishable goods, such as foodstuffs or high demand retail items. It is easy to calculate in theory but it is not always easy to interpret. According to Balle (2015), when discussing turnover in relation to inventory, posted that it is a reference to how quickly the company is pulling in product sales. To determine inventory turnover, organizations need to keep close track of the movement of stock into and out of the business. After analysing inventory figures, organizations will discover that the inventory rate is a key factor used to determine how well the business is performing.

Investors' Decisions

According to Bodie et al. (2001), investment is the commitment of current funds or other resources in the expectation of reaping future benefit. The major tool for these investment decisions is the ratio analysis. It provides a quick diagnostic look at an entity's financial health and provokes subsequent financial and operational analysis. From the foregoing, the figures are used in the financial analysis are being extracted from the financial statements which in turn inform investment decisions.

The motivation of investors investing in the capital market is to get a return. Stock return is the level of income obtained by subtracting the current closing price from the previous stock closing price divided by the previous year's closing price. Therefore, investors need an assessment of the company's financial performance before investing capital in that company. The performance appraisal of a company can be done by analyzing the

company's financial ratios. Financial ratio analysis is conducted to determine the strengths and weaknesses of company's financial performance (Santosa et al., 2020).

Empirical Review

Cash conversion Cycle and Investment Decision

Alawneh (2022) analyzed the effect of the represented asset management efficiency represented by total asset turnover, fixed asset turnover, and working capital turnover on the EPS of industrial companies listed on the Amman Stock Exchange (IASE) as the data were obtained from the Amman Stock Exchange (ASE) from 2005 to 2019, where the unit root test was analyzed for the time series of the study variables. Results revealed that all the variables stabilize at the first differences, several diagnostic tests, such as variance instability, Ramsay stability, and serial correlation tests were also performed, all of which confirmed the fit and validity of the model used. Results showed the positive and strong impact of the asset turnover rate on EPS, the positive and strong impact of the fixed asset turnover rate on the return on profitability, and the positive impact of the working capital turnover on EPS. Therefore, asset management efficiency positively affects the EPS. Moreover, this result indicates the efficiency of industrial companies in managing assets during the study period.

Ademola and Kemisola (2014) ascertained the association between working capital efficiency and firm value using Nigerian Stock Exchange-listed food and beverages firms using survey research design and primary data. Working capital management indicators are debtors Collection Period, stock Conversion duration, creditors Payment duration, Cash conversion Circle, as well as Aggressive Investment Policy while market value was measure by Tobin Q. They found that ACP, ICP, APP, and CCC had a significantly positive effect on market value (Tobin Q). Also, AIP had a positive effect on Tobin Q. The method of data collection used by Ademola and Kemisola may lead to biased result since not every staff will decide to give accurate information about their working capital hence, the result may not generalised.

Emmanuel and Agyapong (2017) study correlation among working capital management and firm value of quoted firms in South African. Regression analysis was employed to obtain the outcome for 75 companies spanned 2003-2012. A significant positive correlation among company value and both inventory conversion as well as receivables conversion periods were obtained from the study. Also, the correlation among the cash conversion cycle and company value is positive but

insignificant; while there is a significant positive correlation among accounts payable deferral duration as well as profitability; company size as well as value are significantly positively associated, and there is a significant inverse correlation among leverage and firm value.

Current Ratio and Investment Decision

Udenwa et al. (2020) examined the effect of working capital management on market value of quoted food and beverages manufacturing firms in Nigeria. Working capital management is proxied by cash conversion cycle, current ratio and quick ratio as independent variables while market value is proxied by market capitalization as dependent variable. Ten years period was covered in the study from 2008 to 2017. Descriptive research design was adopted in the study and multiple regression analysis was used to ascertain the effect of working capital management on firm market value. The result revealed that cash conversion cycle has a negative significant effect on market value of food and beverages manufacturing firms in Nigeria. Current ratio has a positive but insignificant effect on market capitalization and quick ratio has a positive insignificant effect on market capitalization of food and beverages companies in Nigeria. The study concludes that an increase in cash conversion cycle will reduce market capitalization of food and beverages manufacturing firms in Nigeria.

Althaqafi (2020) explored the effect of inventory management on financial performance of Saudi manufacturing company. It also examines factors that draw back the process of inventory control. The results showed that the profitability of a company has a significant relationship with inventory management, and this suggests that if the management of inventory is done effectively, it ensures more profitability, while poor management translates to a poor financial performance. The study was carried out in Saudi Arabia while this current study is in Nigeria.

Rodrigo (2020) analysed the effect on financial performance of inventory management measured in terms of inventory conversion time and inventory turnover measured in terms of return on assets, cash flow from operations and market value added of listed manufacturing companies in Sri Lanka. The study adopted a quantitative research approach. Secondary data was collected for a period from 2014 to 2018 using published annual reports of Listed manufacturing Companies in the Colombo Stock Exchange, Sri Lanka. The sample size included 29 manufacturing companies and the sample was selected through the judgmental sampling technique. Results of this study show

that inventory conversion period has a significant negative relationship on return on assets, cash flow from operations and market value added of a firm. Thus, lower the time taken to convert inventories to sales, higher the financial performance vice versa. However, the results indicate that inventory turnover is insignificantly related to financial performance of manufacturing companies in Sri Lanka.

Dedunu and Weerasinghae (2018) investigated the relationship between company performance and inventory management. The researcher used inventory days as a dependent variable and gross profit and net profit as an independent variable. Now a days most of companies highly consider about inventory management some of the organization implement different tool such as JIT some are applied ERP, SAP systems to control their inventory efficiently and effectively hence the study employed descriptive analysis, correlation analysis and regression analysis using STATA package to investigate effect of inventory management, on the listed manufacturing company performance. According to the analysis result in the researcher identified inventory management and gross profit had a positive relationship, net profit had a negative relationship and inventory management significantly affect to gross profit margin and net profit margin.

Quick Ratio and Investment Decision

Wasiuzzaman (2015) ascertained the correlation among working capital efficiency and firm value and the influence of financing challenges on this association, in Malaysia. Using ordinary least square regression technique, the study finds that improvement in working capital efficiency via decrease in working capital investment leads to high firm value. Nevertheless, the association is influenced by the financing challenges faced by a firm. In terms of financially challenges by the firm, working capital efficiency significantly increases firm value, but it is discovered to be insignificant for unchallenged organizations.

Mwaura (2017) determined the level of association between inventory turnover and financial performance of medium and large retail supermarkets in Kenya. Independent variables for this study were inventory turnover, debt ratio, firm size and liquidity. The study adopted descriptive cross sectional research design. The data to be collected included sales, cost of goods, current assets and liabilities, total assets, total liabilities, profit before interest and tax, closing inventory balance and net profit for each year. The results were analyzed using stata software. The data collected covered the years 2012-2016. From the results of correlation analysis,

there is a strong positive and statistically significant correlation between inventory turnover and financial performance of medium and large retail supermarkets in Kenya. The study also found out that there is a positive and significant correlation between debt ratio and financial performance of medium and large retail supermarkets in Kenya. Firm size was also found to have a positive and significant association with financial performance of medium and large retail supermarkets in Kenya. Finally, liquidity was found to have a positive and significant association with financial performance of medium and large retail supermarkets in Kenya. Regression results showed that inventory turnover had a strong positive and statistically significant relationship with financial performance of medium and large retail supermarkets in Kenya, debt ratio has a positive and statistically significant relationship with financial performance of medium and large retail supermarkets in Kenya. Finally, regression results showed that liquidity has a positive and statistically significant relationship with financial performance of medium and large retail supermarkets in Kenya. The study established that inventory turnover has a positive and statistically significant relationship with the financial performance of medium and large retail supermarkets in Kenya. The study found out that there is a positive and statistically significant relationship between debt ratio and financial performance of medium and large retail supermarkets in Kenya. Firm size was also found to a positive and significant relationship with financial performance of medium and large retail supermarkets in Kenya.

Anokye and Quansah (2017) determined the effects of working capital management policies on shareholder value creation for six manufacturing firms listed at the Ghana Stock Exchange for the period of 2000-2013. Data were gathered from the annual reports of the firms and the publication of Ghana Stock Exchange. The study employed a longitudinal explanatory non-experimental research design applied to a dynamic panel Autoregressive Distributed Lags methodology framework for analysing the data. The results indicated that conservative current asset investment policies increase economic value added, whereas aggressive current asset investment policies enhance market-to-book ratio and Tobin's Q in the long-run. On the other hand, conservative current asset financing policies enhance market-to-book ratio, Tobin's Q, and economic value added in the long run. Thus, investors discount aggressive current assets' financing policies.

Onikoyi et al. (2017) examined the effect of inventory management practices on financial performance of Larfage Wapco Plc, Nigeria, by analyzing the extent to which value of stock carried and inventory policies employed has on cost of goods sold and profitability respectively in the firm. Survey design method was adopted for this work, which made use of Annual audited financial reports. Field design coupled with descriptive statistics was also used. The findings of study for hypothesis 1 showed that there was a significant relationship between the value of stock carried and cost of goods sold over the years between 2005 – 2013. This study revealed that there was positive relationship between inventory management and control policy and profitability in Larfage Wapco Plc.

Abdullahi et al. (2016) investigated the effect of trade receivables and inventory management on SMEs profitability in Malaysia. 66 sample of SMEs Manufacturing covering from 2006-2012 was used for the analysis. OLS regression is used to estimate the relationship between independent and dependent variable. The result indicated that days account receivable and inventory turnover in days are negatively related to SME profitability proxies i.e. ROA, ROE and NOP. The result implies that profitability of SME manufacturing depends upon effective of working capital components management. The study was carried out in Malaysia while the current study is in Nigerian, also, the study area was on SMEs while this current study is on manufacturing firms in Nigeria.

Mohamad et al. (2016) in a case study of a textile chain store in Malaysia, examined the relation between inventory management and company performance and found that there inventory days was significantly related to return on assets (used proxy for company performance). The study identified that the textile chain store company had unorganized inventory arrangement, large amount of inventory days and lacked accurate stores balances due to unskilled workers. The study was carried out in Malaysia while the current study is in Nigerian, also, the study area was on Textile chain store while this current study is on manufacturing firms in Nigeria.

Sitienei and Memba (2015) examined the effect of inventory management on the profitability of cement manufacturing companies in Kenya. The study findings revealed that inventory turnover, inventory conversion period, and inventory storage costs were negatively related to profitability. The study was carried out in Kenya while the current study is in Nigeria. Shardeo (2015) analysed the impact of inventory management on the financial statement of the firm. The study also consists

of different parts where the inventory management concepts are discussed, different inventory control techniques are discussed, and their interrelationship with the financial. The study found that there is relationship between the inventory turnover ratio and financial condition of the firms.

Osundina and Osundina (2014) examined the effect of working capital management on market value of quoted food and beverages manufacturing firms in Nigeria. Working capital management was proxied by Account Collection Period (ACP), Inventory Conversion Period (ICP), Account Payment Period (APP), Cash Conversion Cycle (CCC) and Aggressive Investment Policy (AIP) while market value was proxied by Tobin Q. Survey research design was employed using primary data. Pearson Product Moment Correlation and multiple regression analysis were used to determine the effect. The study found out that working capital management had significant positive effect on market value of food and beverages 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.

Erik and Hornbrinck (2013) investigated the impact the working capital policies on the stock performance on the Swedish stock market during the years 2009-2012. In order to come up with answers to the research questions a quantitative research method has been used and data has been collected from the companies listed on the Swedish stock exchanges annual reports and stock prices from the Thomson Reuters Datastream. As statistical test the Pearson's correlation was used to find if there is and 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. The industrial sector had significant correlations between level of working capital and risk/return.

Trade - off Theory

The trade-off theory means a design that organizations select the combinations of debt finance as well as equality fund to use by considering both the cost and benefits on it. The classical view of the hypothesis goes back to Kraus and Lichtenberger (1973) who taking a balance among the deed–

weight. The cost of bankruptcy and the serving benefit of debt. Often agency costs are also included in the balance.

Trade-off theory is seldom set up as a competitor theory to the pecking order theory of capital combination. The principal purpose of this theory is the exchange of information which states that corporation is normally financed partially with liability and partially with shares. It opined that there is an edge to fund with liability the tax benefits of debt and there is a cost of financing with debt the costs of financing distress including bankruptcy cost for instance staff leaving, creditors demanding disadvantage payment conditions, bondholder/stockholder internal strife, etc. the marginal benefits of additional increase in debt diminishes as debt proliferate while the marginal cost soars, so that the company that is perking up its total value will aim on this trade-off when selecting how much liability and equity to use for financing.

The verifiable significance of the trade-off theory has often been questioned by Miller (1977) for instance compared this balance between horse and rabbit content in a stew of one horse, and they are confident, while bankruptcy is rare and, according to Miller, it has cheap deed – weight cost. For that reason, he recommended that if trade-off theory were correct, firm ought to have much higher debt level than we observe in actuality. Meyer (1994) was a predominantly fierce opponent in his presidential address to the American Finance Association meeting in which he planned what he termed the pecking order theory. Fama and French (1992) criticized both the trade-off theory and the pecking order theory in various ways. Welch (2012) stated that company do not undo the effect of the stock price as they showed under the basic trade-off.

Though, some literatures had supported the liquidity/profitability trade-off theory. These comprised; Bhunia and Brahma (2011); Welch (2012); Sunny (2013); Ehiedu(2014) and Ravivathani (2015). In these literatures, the significantly negative correlation between liquidity management and profitability were the results. However, this study will draw its base from both the Trade-off Theory and Operating Cycle theory.

Methodology

The study utilised ex post facto research design. The population consists of the forty-three (43) listed manufacturing firms in the Nigerian Exchange Group (NEG) as at December 2022. Using filtering sampling technique, the sample size of this study is made up of thirty-nine (39) manufacturing firms that have been consistently listed on the Nigerian Exchange Group and have published their financial report for the period under review, and are listed

within the periods of 2010 and 2021. Paints and Coatings Manufacturing Plc, Multi-trex Integrated Plc, Dangote Cement Plc and Austin Laz & Company Plc were listed in the 2010 and 2012. Therefore, these four manufacturing firms are excluded. Hence, this study is left with thirty-nine listed manufacturing firms as the sample size.

The study utilized secondary data from the listed manufacturing firms annual financial reports and accounts for 12 years (2010 -2021). Panel multiple regression technique was employed as the technique of data analysis. The panel multiple regression model is stated below;

$$\text{VOL}S_{it} = \beta_0 + \beta_1 \text{CCC}_{it} + \beta_2 \text{CR}_{it} + \beta_3 \text{QR}_{it} + \mu_{it}$$

Where,

VOLS = Total Volume of Shares Traded

CCC = Cash Conversion Cycle

CR= Current Ratio

QR= Quick Ratio

β_0 = Intercept or Regression Constant

β_1 - β_3 =Regression Coefficient

μ = error term

it = individual firm and Time covered by the study

Table 1: Variables Measurement

Variable	Nature	Measurement	Source
Investors' Decision proxied with Volume of Shares Traded (VOLS).	Dependent variable	Volume is simply the number of shares traded in a particular stock over a specific period of time.	Osuala et al., (2012); Patrick et al. (2017).
Cash conversion cycle (CCC).	Independent Variable	Days Inventory Outstanding (DIO) + Days Sales Outstanding (DSO) - Days Payable Outstanding (DPO)	Ademola and Kemisola (2014)
Current ratio (CR).	Independent variable	Current Assets / Current Liabilities	Udenwa et al. (2020)
Quick Ratio (QR).	Independent variable	Current Assets- Inventory / Current Liabilities	Wasiuzzaman (2015), Ebe et al. (2021).

Source: Authors Compilation, 2023.

Data Analysis and Results

Table 2: Descriptive Statistics

	VOLS	CCC (days)	CR	QR
Mean	20632.21	56.40000	0.924000	0.495000
Median	1158.250	73.00000	0.865000	0.430000
Maximum	4600000	98.00000	1.440000	0.840000
Minimum	6.300000	8.000000	0.560000	0.240000
Std. Dev.	292118.2	38.20054	0.300992	0.212531
Skewness	0.121687	-0.302082	0.370848	0.382813
Kurtosis	3.227485	1.242283	1.724309	1.681797
Observations	468	468	468	468

Source: E-view 12 Output, 2023

Table 2 shows the minimum value of Volume of Shares Traded (VOLS) to be 6.3 and the maximum value is 4600000. This implies that one of the listed manufacturing firms has the highest VOLS of 4600000 and a manufacturing firm possesses the lowest VOLS of 6.3. The mean value of VOLS is 20632.21; this value represents the industry value of VOLS of listed manufacturing firms in Nigeria.

Cash conversion cycle (CCC) has a Mean of 56.40000 which means that the time taken for manufacturing firm to convert their raw material to cash is 56.40000 with Median of 73.00000. The maximum and minimum days taken to convert raw to cash are 98 days and 8 days respectively. The standard deviation of cash conversion cycle is 38.20054 while, Skewness is -0.302082 and Kurtosis value of 1.242283. The current ratio (CR) mean is 0.924000 with a median of 0.865000. It also has a standard deviation of 0.300992 and skewness of 0.370848 while the kurtosis stands at 1.724309. In the same way, the maximum and minimum CR is 1.440000 and 0.560000 respectively.

Furthermore, quick ratio has a mean of 0.775000 with median of 0.670000. Furthermore, its standard deviation is 0.495000 and 0.382813 for Skewness and 1.681797 for kurtosis. The

maximum and minimum value of quick ratio is 0.80000 and 0.240000 which means that the quick ratio has a maximum distribution based on working capital management to the extent of 0.80000

Table 3: Correlation Analysis

	VOLS	CCC	CR	QR
VOLS	1.000000			
CCC	-0.517949	1.000000		
CR	-0.526343	0.431523	1.000000	
QR	-0.422106	0.226925	0.372602	1.000000

Source: E-view 12 Output, 2023.

The correlation result indicates that volume of shares traded has a negative correlation with all inventory turnovery as indicated by the result with cash conversion cycle to the extent of -51.8% while -0.526343 to current ratio and -0.422106 to quick ratio.

Table 4 Hausman Specification

Correlated Random Effects - Hausman Test
Equation: Untitled
Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	0.979050	3	0.9130

Source: E-view 12 Output, 2023

From the result of Hausman test, random model is more appropriate because the P-value is 0.9130 which is greater than 5%. Therefore, the interpretation of the result is based on the random model result.

Table 5: Summary of Regression Result

Variables	Coefficient	t-values	P-values
Constant	7.931604	83.79022	0.0000
CCC	-0.008232	-9.208415	0.0000
CR	0.082517	0.246208	0.8062
QR	0.049299	0.128401	0.8982
R ²	0.547092		
Adj. R ²	0.541057		
F-stat.	140.3441		
F-sig.	0.000000		

Source: E-view 12 Output, 2023

The coefficient of determination R-square is 0.541057 which means that the independent variables used in the study explained variation in Volume of Shares Traded to the extent of 54% while the remaining variation is explained by other variables not captured in the model. The model is fit with f-statistics of 0.000000 which is less than 5% significance level.

Cash conversion cycle has a negative significant effect on Volume of Shares Traded with p-value of 0.0000. Since cash conversion cycle reflects the efficiency of a company's working capital management and operational effectiveness, an efficient CCC, which means a shorter cycle, implies that a company is able to convert its investments in inventory and accounts receivable into cash more quickly. As a result, companies with efficient CCCs may experience higher demand for their shares, potentially driving share prices up.

Current ratio has a positive but insignificant effect on volume of shares traded with p-value of 0.8062 which is greater than 5% level of confidence. This means that current ratio has no significantly influence the volume of shares traded of manufacturing firms in Nigeria. Quick ratio has a positive but insignificant effect on volume of shares traded of manufacturing firms in Nigeria.

Table 6: Variance Inflation Factor

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
CCC	7.26E-07	1.736430	5.413815
CR	0.101981	4.980561	4.723940
QR	0.133839	2.007070	3.091025
C	0.008135	4.212186	NA

Source: E-view 12 Output, 2023

Variance inflation factor of cash conversion cycle, current ratio and quick ratio is 5.413815, 4.723940 and 3.091025 respectively which indicate that the independent variables are moderately correlated. Hence, there is no multicollinearity between the variables.

Table 7: Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	11.92503	Prob. F(3,76)	0.3220
Obs*R-squared	25.60505	Prob. Chi-Square(3)	0.2527
Scaled explained SS	20.45802	Prob. Chi-Square(3)	0.1170

Source: E-view 12 Output, 2023

Breusch-Pagan Godfrey was used to test for the presence of heteroskedasticity and the results shows Obs R-square and prob of 25.60505 and 0.3220 respectively. The result indicates the absence of heteroskedasticity.

Conclusion and Recommendations

The study indicates that the Cash Conversion Cycle (CCC) has a significant and positive effect on the volume of shares traded. This suggests that companies with more efficient working capital management, as reflected in a shorter CCC, tend to attract a higher level of investor interest and trading activity in their shares. A shorter CCC may be a driver of investor attraction, potentially leading to a higher demand for the company's shares. This can result in increased liquidity and potentially higher share prices.

The study indicates that there is a positive, albeit statistically insignificant, relationship between a company's current ratio and the volume of shares traded. This implies that while companies with higher current ratios may see increased trading activity, this effect is not robust enough to be considered statistically significant. Furthermore, the study indicates that there is a positive, but statistically insignificant, relationship between a company's quick ratio and the volume of shares traded. This suggests that companies with higher quick ratios may experience increased trading activity, but this effect is not robust enough to be considered statistically significant. The study recommends that:

Manufacturing companies should focus on optimizing their working capital management, particularly by reducing the time it takes to convert inventory and accounts receivable into cash. This can be achieved through improved inventory turnover, faster collections of accounts receivable, and efficient payables management.

Continued Financial Monitoring: Companies should continue to monitor their financial ratios, including the current ratio, and make adjustments as necessary to maintain a healthy financial position. While it may not be a primary driver of trading activity, maintaining a strong current ratio is important for overall financial health.

References

- Abdullahi, H.G., Rahima, A.A., & Abass, A. (2016). Effect of trade receivables and inventory management on SMEs Performance. *British Journal of Economics, Management & Trade*, 12(4).
- Abiodun, S. A., & Samuel, O. L. (2014). A Comparative Analysis on Working Capital Management of Brewery Companies in Nigeria. *International Journal of Finance and Accounting*, 3(6), 356–371. <https://doi.org/10.5923/j.ijfa.20140306.04>
- Adam, H. (2014). Corporate finance and accounting: Financial analysis, <https://www.investopedia.com/terms/h/heteroskedasticity.asp>
- Ademola, O. J., & Kemisola, O. C. (2014). The Effect of Working Capital Management on Market Value of Quoted Food and Beverages Manufacturing Firms in Nigeria. *International Journal of Business and Social Science*, 5(8), 168–177.
- Aithaqafi, T. (2020). Effect of inventory management on financial performance: Evidence from the Saudi manufacturing company: Case study. *European Journal of Accounting, Auditing and Finance Research*, 8(10), 13-26.
- Bhunia, A., & Brahma, S.B. (2011). The importance of Liquidity Management on Profitability. *Asian Journal of Business Management*.3(2) 108-117.
- Bodie, Z., Marcus, J., & Kane, A. (2001). *Investments* (5th ed). McGraw-Hill/Irwin Publishers.
- Della Fauzi, I., & Rukmini, R. (2018). The effect of financial performance measured with rentability ratio against dividend payout ratio (empirical study on manufacturing companies group listed on BEI). *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 2(01).
- Dwi Sihono, R., & Widarti, R. (2021). Effect of profitability financial, ratios return on assets, return on equity, gross profit margin and inflation level of stock return manufacturing company recorded activities in LQ 45. *Research Journal of Finance and Accounting*, 12(24), 49-64.
- Ebe, C. O., Adegbe, F. F., & Ajibade, A. T. (2021). Effect of internationalization on earnings per share in deposit money banks in selected African Countries.
- Edem, I. N. (2018). The inter-play between financial ratios and stock market prices of deposit money banks in Nigeria. In *The inter-play between financial ratios and stock market prices of deposit money banks in Nigeria: Edem, IN*.
- Egbide, B.-C., Uwuigbe, O., & Uwalomwa, U. (2013). Liquidity Management and Profitability of Manufacturing Companies in Nigeria. *Journal of Business and Management*, 9(1), 13–21. <https://doi.org/10.9790/487X-1821167176>
- Ehiedu, V. C. (2014). The Impact of Liquidity on Profitability of Some Selected Companies : The Financial Statement Analysis (FSA) Approach. *Research Journal of Finance and Accounting*, 5(5), 81–90.
- Emmanuel, K.O. & Agyapong, G. (2017). Working capital management and shareholders' wealth creation: evidence from non-financial firms listed on the Johannesburg Stock Exchange. *Investment Management and Financial Innovations*, Volume 14.
- Jensen, M. C. & Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3: 305-360.
- Julius, O., & Lucky, E. (2020). Effect of financial leverage on value of firms in Nigeria. *International Journal of Management Sciences*, 8(2), 22-45

- Kraus, A. & Litzenberger, R. (1973). A state-preference model of optimal finance leverage. *The Journal of finance*, 28(4), 911-922.
- Mohamad, S. J. A. N., Suraidi, N. N., Rahman, N. A., & Suhaimi, R. D. S. (2016). A study on relationship between inventory management and company performance: A case study of textile chain store. *Journal of Advanced Management Science*, 4(4) 299 – 304.
- Mwaura, C. N. (2017). *The effect of inventory turnover on the financial performance of medium and large Retail supermarkets in Kenya* (Doctoral dissertation, University of Nairobi).
- Myers, S.C. (1984). The capital structure puzzle. *Journal of Finance*, 39, pp. 575–592.
- Ogbebor, P., Osundina, O., & Oyamendan, N. (2020). Internal Control and the Financial Performance of Selected Deposit Money Banks Listed in Nigeria. *Developing Country Studies*, 10(4), 61-73.
- Olayinka, A. A. (2022). Financial statement analysis as a tool for investment decisions and assessment of companies' performance. *International Journal of Financial, Accounting, and Management*, 4(1), 49-66.
- Oluwayemisi, A. M. B., Samson, F. B., & Favour, A. A. (2022). Effects of Financial Statement on Financial Decision of Listed Deposit Money Banks in Nigeria. *Acta Universitatis Danubius. Economica*, 18(3).
- Onikoyi, I.A., Babafemi, E.A., Ojo, S.O., & Aje, C.O. (2017). Effect of inventory management practices on financial performance of LafargeWapco Plc. Nigeria. *European Journal of Business and Management*, 9, 113-122.
- Ravivathani, F. (2015). The Effects of Liquidity Management on Firm Profitability : Evidence from Sri Lankan Listed Companies, 6(5), 129–135.
- Rodrigo, W.L.M.P.U., Rathnayake, R.M.S.S., & Pathirawasam, C. (2020); Effect of Inventory Management on Financial Performance of Listed Manufacturing Companies in Sri Lanka; *IAR Journal of Business Management*, 1(4), 383-389.
- Santoso, B., Sidharta, E. A., & Wardini, A. K. (2020). The impact of fundamental factors on stock return of the engineering and construction services company. *Jurnal Organisasi dan Manajemen*, 16(2), 158-170.
- Sanyaolu, W.A., Odunayo, J., Akintan, I.O., & Ogunmefun, G.T. (2020). Financial statement analysis and investment decision of Nigerian banks. *Accounting and Taxation Review*, 4(4), 32-43.
- Shardeo, V. (2015). Impact of inventory management on the financial performance of the firm. *IOSR Journal of Business and Management (IOSR-JBM)*, 17(4), 01-12.
- Sitienei, G., & Memba, F. (2015). The effect of inventory management on profitability of cement manufacturing companies in Kenya: A case study of listed cement manufacturing companies in Kenya. *International Journal of Management and Commerce Innovations*, 3(2) 111 – 119.
- Sunny, O. I. (2013). The Impact of Liquidity Management on the Profitability of Banks in Nigeria. *Journal O F Finance a Nd Bank Management*, 1(1), 37–48.
- Wasiuzzaman, S. (2015). Working capital and firm value in an emerging market. *International Journal of Managerial Finance*, 11(1), 60–79.