THE EFFECT OF LIQUIDITY MANAGEMENT ON FINANCIAL PERFORMANCE OF SELECTED LISTED FOOD AND BEVERAGE FIRMS IN NIGERIA

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ABSTRACT

This study was embarked upon to investigate the effect of liquidity management on financial performance of listed foods and beverage firms in Nigeria. The study adopted an ex-post-facto research design and secondary data was gathered to analyze the relationship between the variables. The population of the study consisted on twenty-one (21) food beverages firms listed on the NSE, however, only eight (8) samples were selected from the population. The data was collected from their annual financial report covering a period of ten (10) years (2010-2019). The collected data were analyzed using Ordinary Least Square (OLS) regression analysis. From the results of the findings, it was revealed that the cash conversion cycle has positive and significant effect on financial performance of listed food and beverage firms in Nigeria ($p<0.0046$); current ratio has positive and significant effect on financial performance of listed food and beverage firms in Nigeria ($p<0.0379$), however, quick/acid test ratio has no significant effect on financial performance of listed food and beverage firms in Nigeria. ($p>0.6580$). The study concluded that current ratio is not a significant predictor of food and beverage performance in Nigeria. Acid test ratio as a liquidity measurement ratio maintained a positive and significant relationship with financial performance of listed food and beverage firms in Nigeria and also acid test ratio is a strong liquidity predictor of the financial performance of listed food and beverage firms in Nigeria.

Keywords: Liquidity Management, Foods and Beverages firms, Cash Conversion, Acid Test Ratio, Liquid Test Ratio

INTRODUCTION

Management of liquidity has emerged as a significant issue of discussion in modern finance and accounting. This is due to the fact that a lack of management of an organization's cash not only poses a threat to its performance but also puts the

company at risk of going bankrupt, particularly in circumstances such as when a bank suspends its overdraft facilities or when creditors demand immediate payment on delivery for supplies, even if the business is unable to convert a sufficient amount of its current assets into cash in a timely manner. The reason for this is not far from the fact that a lack of management of an organization's (Christopoulos et al., 2020). The capacity of businesses to satisfy their short-term commitments at the time they are due by using the cash and other components of current assets that are available is the primary emphasis of liquidity management. The capacity of a company to satisfy its present commitments without going into default is one aspect of liquidity management. Another aspect of liquidity management is measuring how fast an asset may be turned into cash in the short-term (Bordeleau & Graham, 2019).

Studies such as those carried out by Agyei and Yeboah (2021), Qasim and Ramiz (2011), Owolabi and Obida (2012), Priya and Nimalathasan (2013), Ben-Caleb et al., (2013), Ofumbia (2016), and Bala et al., (2016), to name just a few, offer greater insight for a deeper understanding of the nexus between liquidity management and manufacturing performance. According to the findings of other research (Nwangi et al. 2017; Musa & Adamu, 2018), the level of liquidity may be influenced by both micro and macroeconomic variables. These criteria, which include the firm's book value, dividends per share, profits per share, price-earnings ratio, and profitability, are all important considerations (Olagunju et al, 2020).

Even in security markets, liquidity management serves as the main weapon, which they operate as a facilitator between savers and users of capital by means of pooling of funds, sharing risk, and transferring wealth. Liquidity management has become the nucleus of every organization, playing a vital role in the running of day-to-day activities of every organization by fostering capital formation and sustaining the business from the production stage to the end users. The functioning of stock markets is critical to the development of a nation's economy because they direct financial capital to the most lucrative investment possibilities (Udegbunam & Eriki, 2011). The maximization of profits need to be a company's major focus in order to achieve their full potential. Only in light of the impact of management's liquidity management on the firm's performance, which can be measured in a variety of ways including return on assets, return on equity, return on capital employed, net profit margin, profit after tax, retained earnings, dividend per share, and earnings per share, among other metrics, can the success or failure of management decisions be evaluated.

Some of the material that is now accessible in Nigeria has a few errors here and there

and leaves a few holes that need to be addressed. For instance, Olubukunola and Uwuigbe (2013), Majeed et al. (2018), and Bala, Garba and Ibrahim (2016) focused on macroeconomic factors that impact company performance rather than firm-specific ratios. The following factors are taken into consideration: the interest rate, the levels of prior stock returns, the money supply, and the exchange rate. Yabuku and Fuseini (2017) and Musa and Adamu (2018) employed total assets as a proxy for business success. On the other hand, in the modern research, firm performance has generally been quantified in terms of the market capitalization of shares (i.e. in a study that involve the determination of liquidity management and stock market returns).

In addition to this, the sample for these studies was comprised of all of the companies that are listed on the Nigerian Stock Exchange (NSE), the research did not focus on a particular industry, and the results seem to be too generic and not specific. It is necessary to take into consideration the distinctions across industries as well as the similar traits that are associated with each sector. Therefore, gauging the success of a company by looking at its stock price at the end of the fiscal year would not provide an accurate depiction of the connection between stock price and company performance. It is on the basis of these that the study is considered essentials attempt to fill these literature gaps by taking the liquidity management as a measure of firm value on food, tobacco and beverages industry which is a component of the manufacturing sector.

The primary objective of this study is to examine the effect of liquidity management on financial performance of listed manufacturing companies on Nigeria Stock Exchange.

The specific objectives are to:

i. examine the effect of cash conversion cycle on financial performance of listed food and beverage firms in Nigeria;

ii. evaluate the effect of current ratio on financial performance of listed food and beverage firms in Nigeria;

iii. investigate the effect of quick/acid test ratio on financial performance of listed food and beverage firms in Nigeria.

LITERATURE REVIEW

The process of managing a company's investments in current assets, current liabilities, short-term borrowings, and short-term investments of excess cash, all of which have an impact on the company's profitability, is referred to as liquidity management and is performed on a regular basis. It is identical with the efficient administration of the two

components of working capital, which are the current assets and current liabilities. In other words, it refers to the management of current assets and current liabilities (Pandey, 2010). It entails planning and regulating both current assets and current liabilities in such a manner that: I the risk of not fulfilling short-term commitments that are due is removed; and (ii) the danger of making an excessive investment in current assets is avoided (Priya & Nimalathasan, 2013). Therefore, a company is considered to be liquid if it has sufficient funds, in the form of cash, to satisfy its maturing financial commitments as opposed to locking those funds down in other current assets' investments.

The stock market is a characteristic that can be found in every contemporary economy. It is widely held that the stock exchange is responsible for crucial capital allocation functions, which in turn support economic growth and drive the development of the industrial sector. In many developed nations, the stock exchange is seen as the key indicator of how well the economy is doing. This is because there is a direct correlation between the capital markets and the economy in these nations. According to Okoye, Nwisienyi, and Eze (2013), the capital market serves as the primary source of funding for businesses in emerging countries like Nigeria. This is especially true for manufacturing companies. They were of the opinion that it was important to remember that either the technical know-how needed for industrial growth could be developed locally or imported, but either way, large financial resources would be necessary.

The Nigerian capital market is made up of two different marketplaces (the main and secondary markets) as well as a few institutions that are actively trading. The Securities and Exchange Commission (SEC), which is at the apex and represents the regulatory authority for the market, the Nigerian Stock Exchange (NSE), the issuing houses, and the stock broking firms are the primary institutions that make up the Capital Market. The SEC is located at the top of the Capital Market. The Nigerian Stock Exchange (NSE) is the country's secondary market. In general, the Nigerian capital market contributes to the economic growth and development of the country by helping to boost industry. (Menaje, 2012).

The ratios Inventory Conversion Period (ICP), Inventory Turnover (IT), Accounts Receivables Collection Period (ARCP), Accounts Receivables Turnover (ART), Accounts Payable Payment Period (APPP), Accounts Payable Turnover (APT), Cash Conversion Cycle (CCC), Liquidity Ratio (LR), Current Ratio (CR), Quick Ratio (QR), etc. are used to measure liquidity. Other ratios include Accounts Receivables Collection Period (ARCP The factors that decide a company's working capital are inextricably linked to the factors that decide the company's liquidity requirements. (Priya & Nimalathasan, 2013)

The return on assets (ROA), the return on equity (ROE), the return on sales (ROS), the earnings per share (EPS), the growth in market capitalization, the gross and net profit margin, economic profit, and Tobin's Q are all measures of performance that are commonly used, according to most of the studies that have been reviewed on performance. The measurement of profitability can also apply the use of market capitalization growth. The traditional financial indicators and accounting ratios that are utilized by businesses as a measurement of their profitability are included in ROA. The meaning of this notion has been interpreted and used in a variety of ways. The return on assets, or ROA, of a corporation is a measure of how profitable the company is in relation to its total assets. It provides an indication of how well management is using the company's assets in order to create profits (Olaniyan et al,,2021).

Both the resource-based theory and the operational theory served as the foundation for this investigation. The underlying hypothesis presented in Barney's article from 1991 Since the resources might be either human or material, it is necessary to differentiate between resources and capabilities while conducting an inventory of a company's available assets. The resources could be either human or material. The resources that are put into production are known as the basic unit of analysis because of their role as inputs in the process. A company's resources may include things like capital equipment, patents, brand names, the talent associated with specific personnel, financial resources, and so on. Other examples of resources are brand names and brand names. There is a diminishing return on investment for individual resources. Any productive action requires need the coordination and collaboration of teams of resources, while a capability may be seen as the ability or capacity of a team of resources to carry out a certain activity or job. As a result, by inference, resources are the sources from which a particular company derives its capabilities. (Grant, 2001)

According to the operating cycle theory, when businesses offer more generous credit terms to their customers, there is a higher tendency for the business to have a larger, but ultimately less liquid investment in cycle. This is because the inventory turnover shows the number of times with which business firms convert the entirety of their raw materials stock, their work in progress, and ultimately the finished goods into product sales. (Owolabi & Alu, 2012).

Owolabi et al. (2016) investigate the influence of liquidity management on the financial performance of publicly traded food and beverage firms in Nigeria over a period of ten years, from 2004 to 2013. This research covers the years 2004 to 2013. According to the findings of the study, Current Ratio, Cash Conversion Cycle, and Leverage all have insignificantly negative relationships with Return on Equity, while Size, Leverage, and

Cash Conversion Cycle all have significant positive relationships with Return on Investment. The study also found that Current Ratio has an insignificantly positive relationship with Return on Investment, while Cash Conversion Cycle, Size, and Leverage all have significant positive relationships with Return on Investment.

Yakubu, Alhassan, and Fuseini (2017) investigated the effect that effective management of working capital has on the profitability of non-financial businesses in Ghana. Utilizing secondary data from five publicly traded non-financial companies from 2010-2015, we found that. According to the findings, a favorable connection exists between the average payment time and the current ratio and the success of the company. On the other side, a negative association exists between business performance and factors such as the average collection duration, inventory turnover, cash conversion cycle, and firm size.

Researchers Qasim and Ramiz (2011) looked at the effect that liquidity had on the profitability of food and beverage enterprises in Pakistan over a period of six years, from 2004 to 2009. This study covered the period from 2004 to 2009. For the purpose of this research, the OLS multiple regression approach was used to do the data analysis. As indicators of profitability, it used ROA, ROE, and ROI, and as indicators of liquidity, it utilized LR, CR, and QR. The research uncovered a substantial inverse connection between customer retention and return on investment (ROI). According to the findings of the research, the ratios of a company's liquidity have an effect on the profitability ratios of food and beverage businesses in Pakistan.

Over the course of a decade, beginning in 1997 and continuing through 2006, Richard (2014) conducted research on the connection between short-term liquidity and the profitability of private sector steel businesses that were traded on the floor of the Indian Stock Exchange. For the purpose of this research, a purposive sample design approach was used, and for the purpose of data analysis, correlation and OLS multiple regression techniques were utilized. According to the findings of the research, a non-significant negative association exists between ROCE and CR, LR, DER, AOI, and AOD; nevertheless, a non-significant positive relationship exists between ALR and AOC and ROCE.

Ben-Caleb (2013) looked at the ways in which manufacturing businesses manage their liquidity and how profitable they are. The link between liquidity and profitability was investigated in this research using data from a sample of thirty manufacturing businesses that were listed on the Nigerian Stock Exchange for a period of five years, from 2006 to 2010. It used a quantitative approach, and for the purpose of data analysis, both descriptive statistics and OLS multiple regression analysis were carried out with the assistance of SPSS 15.0. According to the findings, CR and QR have a negligible

positive influence on ROCE, whilst CCC has a negligible negative impact on ROCE.

The influence of Cash Management on Firms' Financial Performance: A Study of Some Selected Manufacturing Firms in Nigeria was investigated by Panigrahi (2013). The research was conducted in Nigeria. This finding lends credence to the hypothesis that there is an inverse connection between the cash conversion cycle and the cash conversion efficiency of manufacturing companies. This suggests that the growth in profitability of manufacturing companies is directly correlated to a reduction in the length of their cash conversion cycle.

METHODS

This research used an ex-post facto research design, sometimes known as "after the fact research," which makes use of data that had already been collected. Due to the restricted amount of time available for the study, only ten (10) of the twenty-one (21) food and beverage companies that are listed on the Nigerian Stock Exchange will be included in the sample for the research. The population includes all of these companies. The sample size for the study included companies such as Coca-Cola Company, PepsiCo, Nestle, Tyson Foods, Unilever, Heineken, Danone,7-Up Plc., Olam International, and Hormel Foods Corporation for a period of ten (10) years spanning from 2010-2019. These companies served as the sample size for the study. The sample size covered 43 percent of the population. For the collecting of data, this research relied on secondary sources. The information used in the research came only from secondary sources, such as the annual reports of the companies that were investigated and the fact book published by the Nigerian Stock Exchange. The time frame that this investigation covers spans 10 years, beginning in (2008 - 2018).

The Ordinary Least Square (OLS) regression analysis was used by the researcher who was engaged to determine the nature of the influence that the dependent variables had on the independent variable. The value of the dependent variation could be most accurately anticipated by using the regression approach, which included estimating the coefficient of the linear equation. The F-statistics were employed in the research to determine whether or not the regression model was significant, while the t-statistics were used to determine whether or not the regression coefficients were significant. The F-statistic and the t-statistic were both tested at a confidence level of 95 percent. Additionally, a correlation matrix was used in order to provide an explanation for the connection that exists between the factors of liquidity management and financial success.

Sample and Sampling Techniques

This study randomly selected 10 food and beverage companies out of 21 existing food and beverage companies in Nigeria. This study covered 10 years, from 2008 to 2018. These companies were selected because they are still in operation. Also, due to availability and consistency in their financial statements thus, the 10 foods and beverage firms that were sampled in this study are as depicted on Table 3.1.

Table 3.1: Food and beverage firms sampled on the Nigeria Stock Exchange

S/N	Firms	Reports covered
1	Coca-Cola Company	2009-2018
2	PepsiCo	2009-2018
3	Nestle	2009-2018
4	Tyson Foods	2009-2018
5	Unilever	2009-2018
6	Heineken	2009-2018
7	Danone	2009-2018
8	7-Up Bottling Plc.	2009-2018
9	Olam International	2009-2018
10	Hormel Foods Corporation	2009-2018

Source: Author's Compilation (2022)

Model Specification

The study follows a similar research method used by Orshi (2016), in the model the dependent variable was measured with Return on Investment, return on Equity and Earning per share while, liquidity management was measured with Current ratio, Cash conversion cycle as independent variables, firm size and leverage as control variables.

The model is specified as:

$$Y_{it} = \alpha + \beta_0 X_{it} + \varepsilon_{it} \quad \text{.....3.1}$$

Y_{it} = f (ROI, ROE, and EPS) 3.2

X_{it} = f (CR, CCC, SIZE and LEV) 3.3

This model can for the purpose of simplicity be stated in equation terms as depicted below:

ROA = ∞ + β_{1A}+ β_{2ICP}+ β_{3ACR}+ μ----------Eqn (3.4)

Where

ROA = Return on Asset

CCC = Cash Conversion Cycle

CTR = Current Ratio

ATR = Acid Test Ratio

PRESENTATION AND DISCUSSION OF RESULTS

Summary of Descriptive Statistics

	ROA	CCC	CTR	ATR
Mean	0.610881	0.334100	0.949619	0.742231
Median	0.120653	0.240000	0.790000	0.620000
Maximum	6.050000	1.380000	2.450000	2.140000
Minimum	0.011293	0.060000	0.490000	0.330000
Std. Dev.	1.542904	0.315118	0.436394	0.376614
Skewness	2.777878	2.572208	1.380189	2.056393
Kurtosis	8.953368	8.670637	4.386052	7.505614
Jarque-Bera	276.2876	244.2547	39.75343	155.0648
Probability	0.610000	0.056700	0.691200	0.079400
Sum	61.08809	33.41000	94.96190	74.22308
Sum Sq. Dev.	235.6746	9.830619	18.85355	14.04199
Observations	100	100	100	100

Note: *ROA= Return on Asset (%), CCC= Cash Conversion Cycle (days), CTR= Current Ratio (%), ATR= Acid Test Ratio (%)*

Source*:* Author's Computation, 2022

The descriptive nature of the sample series pertaining to the influence of liquidity management on the financial performance of selected listed food and beverage enterprises in Nigeria can be found in Table 4.1. These companies are located in Nigeria. According to Table 4.1, the current ratio has the highest average value possible, which comes in at 0.95. This is followed by the acid test ratio, which comes in at 0.74, and return on assets, which comes in at 0.61. The cash conversion ratio has the lowest possible average value, which comes in at 0.33. When looking at the standard deviation from the sample mean values, the cash conversion circle has the lowest value of 0.32 for its standard deviation, which indicates that all of its observations during the time period covered by this research cluster very tightly around its mean value. The next ratio is the acid test ratio, which has a standard deviation value of 0.38, which is also low and indicates that the observations are not spread too far from the mean value; the situation is the same for the current ratio, which has a coefficient of deviation from the average value that is 0.44. Following this is the current ratio, which has the same situation. In addition, the mean values of each of these variables fall somewhere in the range between the lowest and highest possible mean values. Return on assets has the greatest value of standard deviation, which is at 1.54 and this means that its observations are not densely grouped around its mean value. The value of return on assets has the highest value of standard deviation. In general, the standard deviation value of all of the sample series, with the exception of the return on assets, is quite low in relation to their respective sample mean values, and this indicates that there is likely to be little in the way of estimate risk or mistake. It is reasonable to assume that normal skewness should have a value of zero, since this parameter, which quantifies the degree to which the series is asymmetrical, will always be zero. All of the variables are positively skewed, which means that the right tail of their distributions will always be longer and include more extreme values than the sample mean.

The thickness of the series' distribution may be measured using kurtosis to get an idea of how flat it is. In order for a distribution to be considered normal and, by extension, mesokurtic, the value of its kurtosis must be 3. Because of this, each of the variables has a kurtosis value that is greater than 3, which indicates that the distributions will have a greater number of values that are higher than the sample mean value. Since all of the variables are leptokurtic and have a peaked curve, it can be deduced that this will be the case. The Jarque-Bera statistics compare the skewness and kurtosis of each of the variable series to those derived from the normal distribution. They then calculate the difference between the two. The assumption that the distribution is normal serves as the Jarque-Bera test's "null hypothesis." As a result, all of the variables have Jarque-Bera probability values that are higher than the significance threshold of 0.05; hence, there is no sufficient cause to reject the null hypothesis. This information can be found in Table

4.1. As a result, we may draw the conclusion that every one of the variables has a normal distribution curve.

4.3 Hausman Test

A statistical test known as the Hausman test was carried out in order to compare the random effects estimator with the fixed effect estimator. This comparison was done in order to determine which model is the most suited to estimate. A model in which the omitted heterogeneity is treated as fixed and correlated with the explanatory variables will be compared to another model in which the omitted heterogeneity is treated as random and independent of the explanatory variables. The purpose of this test is to determine which of these two models is more appropriate to use. This is how the hypothesis for the test should be stated:**H0**: Random effects are independent of explanatory variables;

H1: H0 is not true.

The decision criteria is that if the test statistic exceeds the critical value, null hypothesis is accepted and alternative hypothesis rejected; hence, fixed effects model is rejected in favour of random effects model and vice versa.

Table 4.3: Hausman Test Result

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.397666	3	0.0361

Source*:* Author's Computation, 2022

From Table 4.3, the probability of chi-square is 0.0361 which is lower than the critical value at 0.05 significant levels, therefore, there was no sufficient evidence to reject alternative hypothesis. Thus, H1 was accepted and null hypothesis (H0) rejected. The foregoing implies that fixed effect model gives the most consistent and efficient estimates and hence, should be estimated in this study.

4.4: E*ffect of cash Conversion Circle, Current Ratio and Acid Test Ratio on Return on Assets of selected food and Beverages Company in Nigeria.*

This section presents an analysis of the effect of liquidity management, measured by cash conversion circle, current ratio, and acid test ratio, on the performance of selected listed food and beverage companies in Nigeria. The title of this section suggests that the analysis will present an examination of the effect liquidity management has on the performance of the companies. In addition, following the outcome of the Hausman test that was carried out in section 4.3, which determined that fixed effect estimates were the most reliable and productive estimation technique to use in this investigation, the estimated result of the fixed effect model is displayed on Table 4.4 and then discussed in the following section. Kurtosis is a measurement that determines the thickness of the flatness of the series distribution. In order for a distribution to be considered normal and, by extension, mesokurtic, the value of its kurtosis must be 3. Because of this, each of the variables has a kurtosis value that is greater than 3, which indicates that the distributions will have a greater number of values that are higher than the sample mean value. Since all of the variables are leptokurtic and have a peaked curve, it can be deduced that this will be the case. The Jarque-Bera statistics compare the skewness and kurtosis of each of the variable series to those derived from the normal distribution. They then calculate the difference between the two. The assumption that the distribution is normal serves as the Jarque-Bera test's "null hypothesis." As a result, all of the variables have Jarque-Bera probability values that are higher than the significance threshold of 0.05; hence, there is no sufficient cause to reject the null hypothesis. This information can be found in Table 4.1. As a result, we may draw the conclusion that every one of the variables has a normal distribution curve.

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Table 4.4: Fixed Effect Model Result

Dependent Variable: ROA				
Method: Panel Least Squares				
Date: 01/05/22 Time: 02:53				
Sample: 2009 2018				
Periods included: 10				
Cross-sections included: 10				
Total panel (balanced) observations: 100				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.671917	0.111122	6.046649	0.0000
CCC	0.013780	0.117580	0.117200	0.9070
CTR	-0.379975	0.223942	-1.696757	0.0933
ATR	0.397707	0.199451	1.994006	0.0493
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.976042	Mean dependent var		0.610881
Adjusted R-squared	0.972737	S.D. dependent var		1.542904
S.E. of regression	0.254757	Akaike info criterion		0.223724
Sum squared resid	5.646395	Schwarz criterion		0.562396
Log likelihood	1.813790	Hannan-Quinn criter.		0.360791
F-statistic	295.3574	Durbin-Watson stat		1.451228
Prob(F-statistic)	0.000000			

Source: Author's Computation, 2022

The estimated panel regression model result can be found on Table 4.4. It can be seen that the fixed effect cross-sectional specific estimation result reveals that when the heterogeneity effect across selected food and beverages firms sampled in the study is incorporated into the model as an intercept term, cash conversion circle maintained a positive but insignificant relationship with return on assets with a coefficient of 0.013780 (p = 0.9070 > 0.05). This indicates that a one percent increase or reduction in cash conversion circle was related with about a one and a half percent increase or decrease in the return on assets of the chosen food and beverage industries in Nigeria. In addition, it was discovered that the current ratio has a negative and insignificant relationship with return on assets, with a coefficient of -0.3791 (p=0.0533 = 0.05); this indicates that if the current ratio were to increase by 1 percent, there would be a resultant decrease of approximately 38 percent in the return on assets of the selected firms, and vice versa. In a similar manner, the link that was shown by the acid test ratio was one that was direct and significant with a coefficient of 0.3977 (p=0.0493 0.05). This basically indicates that if there were to be a one percent rise in acid test ratio, it would result in about a 38 percent increase on the average in return on assets of the chosen food and beverage firms in Nigeria and vice versa. 4.3 Hausman Test

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4.5 Diagnostic Test

4.5.1 Cross-Section Dependence Test

When modelling panel data, it is common practice to make the assumption of the independence of disturbances across cross sections, particularly when dealing with high cross section dimensions. However, there is a substantial amount of data suggesting that cross-sectional dependency is often present in the panel regression approach. Ignoring this reliance may have major repercussions, including a reduction in the estimator's efficiency and the invalidation of test statistics. Table 4.5 reflects the outcome of the test to determine whether or not there is a cross-section dependency. In order to determine which model is better suited for estimation, a statistical test known as the Hausman test was carried out to compare the random effects estimator

with the fixed effect estimator. The results of this test were compared to one another. A model in which the omitted heterogeneity is treated as fixed and correlated with the explanatory variables will be compared to another model in which the omitted heterogeneity is treated as random and independent of the explanatory variables. The purpose of this test is to determine which of these two models is more appropriate to use. This is how the hypothesis for the test should be stated:

Table 4.5: Residual Diagnostic Test: Cross-Section Dependence Test

Residual Cross-Section Dependence Test			
Null hypothesis: No cross-section dependence (correlation) in residuals			
Equation: Untitled			
Periods included: 10			
Cross-sections included: 10			
Total panel observations: 100			
Cross-section effects were removed during estimation			
Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	118.0081	45	0.0740
Pesaran scaled LM	6.641638		0.0000
Bias-corrected scaled LM	6.086083		0.0000
Pesaran CD	4.872004		0.0000

Source*:* Author's Computation, 2022

The null hypothesis for this test is that no cross-section dependence (correlation) in residuals. Thus, from Table 4.5, the test statistics value is 118.00 and the associated degree of freedom and probability are 45 and 0.0000 respectively. Since the p-value = 0.0740>0.05 and the X^2 upper tail t-statistic value i.e t-cal =118<153, null hypothesis (H0) was strongly accepted and we concluded that no cross-section dependence in residuals of the estimated panel model in this study.

Table 4. 6: Coefficient Diagnostic Test: Redundant Variables Test

Redundant Variables Test				
Null hypothesis: CCC CTR ATR are jointly insignificant				
Equation: UNTITLED				
Specification: ROA C CCC CTR ATR				
Redundant Variables: CCC CTR ATR				
	Value	Df	Probability	

F-statistic	45.652 70	(3, 87)	0.0383	
Likelihood ratio	5.5424 91	3	0.1361	

Source*:* Author's Computation, 2022

The null hypothesis for this test is that all the explanatory variables are insignificant and irrelevant jointly. Table 4.6, reveals test statistics value of 1.653 and the associated probability value 0.1832 >0.05. 45. Consequently, null hypothesis (H0) which states that all the explanatory variables are insignificant and irrelevant jointly was strongly accepted and we concluded that no redundant variables were included in the study's panel model.

4.5. Hypothesis Testing

Table 4.7: Fixed Effect Result Summary

	Probability Value	**Remarks**
CCC	0.9070	+ve & NS
CTR	0.0933	-ve & NS
ATR	0.0493	+ve & SIG

Note: +ve = positive, -ve= negative, SIG= Significant at 5%, NS= Not significant at 5%.

Source*:* Author's Computation, 2022

4.5.1. Cash conversion circle and financial performance of selected listed food and beverage firms in Nigeria

Table 4.7 demonstrates that cash conversion circle has a statistically positive but minor influence on the return on assets of the chosen listed food and beverage firms in Nigeria. This is the conclusion that can be drawn from the data shown in the table. This suggested that the cash conversion circle had a direct but indirect relationship with the return on assets, such that a rise in the cash conversion circle would result in an infinitesimally increased return on assets and vice versa. Along these same lines, given that the prob value 0.9070 was greater than 0.05, there was not sufficient evidence to reject the null hypothesis. As a result, the null hypothesis H01, which states that the cash conversion cycle does not have a significant effect on the financial performance of publicly traded food and beverage companies in Nigeria, was accepted.

4.5.2 Current ratio and financial performance of selected listed food and beverage firms in Nigeria

When one takes a look at Table 4.7, it becomes immediately apparent that the current ratio, which is used as a liquidity management variable, had a negative influence on return on assets that was statistically insignificant. The conclusion that can be drawn from this body of information is that the current ratio represented a significant barrier to the return on assets achieved by the chosen publicly traded food and beverage companies in Nigeria. *As a result, given that the p-value for the test was more than 0.05, the null hypothesis (H0), which asserts that the current ratio does not have a significant influence on the financial performance of publicly traded food and beverage companies in Nigeria, was validated*. As a result, the findings of this research offered adequate empirical data to support the conclusion that the current ratio does not have a major impact on the economic performance of Nigerian food and beverage companies that are publicly traded.

4.5.3 Acid test ratio and financial performance of selected listed food and beverage firms in Nigeria

The results shown in table 4.7 demonstrate, unequivocally and in the same way as the current ratio, that a positive and substantial relationship exists between acid test ratio and return on assets. Indicating that the current ratio was one of the characteristics associated with liquidity management that significantly facilitated and improved return on assets in the companies that were chosen. Therefore, in light of the fact that the p-value was 0.0493 or less, it was clear that the null hypothesis (H0) should be rejected in favor of the alternative hypothesis (H1). It seems that the alternative hypothesis, which states that the acid test ratio has a substantial influence on the financial performance of listed food and beverage enterprises in Nigeria, is accepted in this research. This finding lends support to the suggestion that the alternate hypothesis is accepted

CONCLUSION

A business should balance liquidity and illiquidity by managing working capital and liquidity well. Both excessive and inadequate liquidity are problematic; excessive liquidity connotes idle money that make no returns, while insufficient liquidity degrades the firm's profitability and causes production interruptions and inefficiencies. This research demonstrated a positive and insignificant association between cash conversion circle and financial performance listed food and beverage enterprises in Nigeria; null hypothesis was accepted with p-value = 0.9070>0.05. This research concludes that cash conversion circle is not a predictor of food and beverage enterprises' financial success in

Nigeria. This research found a negative and negligible association between current ratio and ROA for selected food and beverage enterprises in Nigeria. The negligible impact led to the rejection of the alternative hypothesis at p-value = 0.0933>0.05 and the acceptance of the null hypothesis that current ratio had no meaningful influence on financial performance of listed food and beverage enterprises in Nigeria.

This research shows that current ratio is not a significant predictor of food and beverage enterprises' financial success in Nigeria. Acid test ratio as a liquidity measurement ratio maintained a positive and significant relationship with financial performance of listed food and beverage firms in Nigeria; this evidence led to the rejection of the null hypothesis and the acceptance of the alternate hypothesis at p-value = 0.04930.05. The study concludes that acid test ratio is a strong liquidity predictor of the financial performance of listed food and beverage firms in Nigeria. Overall, the estimated model's F-stat was 295.36 with a p-value of 0.00000.05, attesting to its robustness and the combined influence of the explanatory variables to predict the financial performance of listed food and beverage enterprises in Nigeria. This research concludes that liquidity management is a key predictor of food and beverage enterprises' financial success in Nigeria. According to Qasim and Ramiz (2011), who studied the influence of liquidity on the profitability of food and beverage enterprises in Pakistan from 2004 to 2009, liquidity ratios impacted profitability ratios. Venkataramana et al (2013) found that liquidity management had a substantial influence on profitability in four Indian food and beverage enterprises.

RECOMMENDATIONS

This study's results recommend:

i. Financial managers spend most of their time on liquidity management problems, thus it's important to manage the cash conversion circle to maximize returns on investment and reverse its little positive effect on food and beverage companies in Nigeria.
ii. Food and beverage firms in Nigeria must understand that there is a risk-return trade-off between liquidity represented by current assets and profitability represented by returns; that to reserve high liquid position, a firm's profitability will suffer and that to pursue higher profitability, a firm may have to sacrifice its liquidity and carry low level of current assets relatively. So they must balance the two extremes.
iii. The acid test ratio was found to improve financial performance in this study; therefore, a credit policy that reduces unnecessary inventory accumulation and an inventory management strategy that minimizes investment in stock and maximizes profitability should be adopted by food and beverage firms in Nigeria.

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