WORKING CAPITAL MANAGEMENT AND FIRM VALUE OF CONSUMER GOODS MANUFACTURING AND CONSTRUCTION FIRMS IN NIGERIA (2010 to 2023).

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Abstract

This study evaluates the effect of working capital management on the firm value of listed consumer goods manufacturing firms in Nigeria from 2010 to 2023. The specific objectives are: (i) assessing the effect of the current ratio on market capitalization, (ii) examining the influence of net working capital on market capitalization of consumer goods manufacturing and construction sectors in Nigeria. The study is anchored on the matching /hedging plan theory of working capital. This theory indicates that no long term funds are used to finance short term seasonal needs; that is, current assets are equal to current liabilities. The ex-post facto design were adopted using the secondary data sourced from the central bank of Nigeria bulletin, Nigeria stock exchange and financial reports of the sampled firms. Twenty consumer goods manufacturing and construction firms were purposively selected. Using the GMM model , the findings reveal that the current ratio has no significant effect on the market capitalization of listed consumer goods manufacturing and construction firms (negative coefficient = -0.3428, significance level = 0.8010> 0.05). However, net working capital shows a non-significant, positive effect on market capitalization (negative coefficient = 0.020814, significance level = 0.7464> 0.05), The study observed that some studies had explored working capital management with conflicting results among scholars using ordinary least squares (OLS) and fixed or random effect model, there was a limited research specifically focusing on the consumer goods manufacturing and construction sector in Nigeria. Prior investigations into the liquidity management of firms and its subsequent effects on performance in Nigeria have produced inconclusive findings. The study recommends as follows: (i) Striking a balance between liquidity and operational efficiency as a key to optimizing resource utilization and enhancing long-term performance.(ii) Managers should regularly monitor and adjust net working capital to support smooth operations while maximizing profitability and firm value.

Key words:working capital, market capitalization, current ratio,consumer goods, ARDL model, Unit root

1.1 Introduction

Working capital management constitutes a pivotal strategic element within the sphere of financial management, accentuating the necessity for the efficient integration of short-term assets and liabilities to enhance business financing [1]. Attaining an optimal equilibrium between short-term assets and liabilities is vital for fostering robust financial health and resilience within organizational operations. The governance of working capital is essential in assessing a firm's financial solidity and its performance trajectory over an extended period [2]. The adept administration of working capital is imperative for sustaining financial stability and profitability, as it markedly and positively affects firm performance [2]. Nonetheless, the interplay between working capital management and firm performance is intricate and influenced by various factors, including the firm's size and prevailing financial limitations [3]. Furthermore, the ramifications of working capital management on firm performance may fluctuate during periods of economic recession, as illustrated by the divergent effects observed during the COVID-19 pandemic relative to the financial crisis of 2008 [4]. In summary, the empirical evidence underscores the significance of customized working capital management strategies that are appropriate for firms of varying sizes to enhance their financial performance [2]; [3]; [4].This research employs a novel approach by through the concentration of cash flow managerial ability and the cash conversion cycle (CCC) relevant to publicly traded companies within the consumer goods sector of the Nigerian Exchange Group (NEG).On a global scale, [5] astutely observed that prior to the financial crisis of 2007, organizations exhibited minimal concern regarding working capital management due to the accessibility of financing at favorable interest rates. Consequently, managers perceived little necessity to engage in cash management practices. Nevertheless, the past thirteen (13) years have presented a contrasting scenario, wherein the availability of capital and credit has notably diminished, and clients now demonstrate extended periods in settling their accounts, while the prevalence of delayed payments has increasingly become intolerable for suppliers 6]. The cumulative ramifications of these elements have negatively impacted the liquidity positions and the short-term cash flows of the organizations, thereby heightening the necessity for a reinvigorated emphasis on the management of working capital.

Statement of the Problem

Numerous manufacturing establishments have been compelled to either temporarily or permanently cease operations due to their failure to meet financial obligations punctually, a situation primarily ascribed to a deficiency in liquidity. A considerable proportion of the Nigerian workforce has been involuntarily propelled into the unemployment sector, resulting in an unfortunate dependence on familial assistance, a direct outcome of the disruption of their organizational functions stemming from insufficient management of working capital. Profitability and liquidity constitute two essential elements of the operational sustainability of any manufacturing entity. The capital investment endeavors executed by various manufacturing organizations are intrinsically laden with risks and challenges, as they strive to maximize profitability from their investments, necessitating the judicious allocation of available resources

while remaining prepared to fulfill their financial obligations at all times. A substantial body of contemporary scholarship has validated the existence of choosing one at the expense of the other between the management of working capital with the resultant financial performance metrics. Moreover, numerous lucrative investment ventures characterized by heightened rates of return are failing and ultimately withdrawing from the market due to inadequate working capital. A considerable number of organizations have encountered challenges in fulfilling their financial commitments in a timely manner, attributable to their liquidity constraints. Unfortunately, the capital and financial markets in Nigeria do not play a significant role in mitigating this predicament; rather, they often exacerbate the situation by imposing stringent requirements that are frequently unattainable for firms on the verge of insolvency.

1.3 Objectives of the Study

The scholarly investigation aimed to assess the effects of working capital management on the valuation of selected publicly traded consumer goods manufacturing and construction firms within the Nigerian context. The delineated objectives of the study are enumerated as follows:

(i) To investigate the repercussions of the current ratio on the market capitalization of selected consumer goods manufacturing and construction firms that are publicly listed in Nigeria.

(ii) To examine the ramifications of net working capital on the market capitalization of selected publicly traded consumer goods manufacturing and construction firms in Nigeria.

1.4 Research Hypotheses

In accordance with the objectives of the study, the following hypotheses have been formulated:

Ho1: The current ratio does not significantly impact the market capitalization of selected publicly listed consumer goods manufacturing and construction firms in Nigeria.

Ho2: Net working capital does not exert a significant influence on the market capitalization of selected publicly listed consumer goods manufacturing and construction firms in Nigeria.

1.5 Scope of the Study

The study was designed to assess the ramifications of working capital management on the valuation of selected publicly traded consumer goods manufacturing and construction enterprises in Nigeria. The temporal scope of the investigation was established within the confines of the year 2010, which was characterized by the Constitutional Amendment for Presidential Succession. Following the protracted illness and subsequent passing of President Yar'Adua, Nigeria faced a constitutional quandary. The National Assembly enacted the "Doctrine of Necessity," thereby facilitating the ascension of then-Vice President Goodluck Jonathan to presidential authority. This event marked a significant turning point in Nigerian democracy, highlighting the essential function of legal frameworks governing succession. The temporal scope is constrained to the year 2023 due to the availability of data.

REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

2.1.1 Working capital Management

The notion of working capital is intrinsically complex, as articulated by [7], where the differentiation between current assets and current liabilities is specifically termed net working capital; nevertheless, financial managers frequently refer to this differentiation in a more colloquial manner as working capital. In a more rigorous context, gross working capital signifies the total capital allocated to current assets within a corporate structure, while net working capital represents the surplus of current assets over current liabilities of an organization within a specified temporal framework [8]. Net working capital is characterized as the capital that is not allocated on a permanent basis; however, the traditional understanding of net working capital is

the differential between the book value of current assets and current liabilities [9]. As posited by[10], working capital holds critical importance.for businesses due to its application in various operational activities, including the acquisition of raw materials and spare components, remuneration of wages and salaries, addressing daily operational expenditures, and meeting credit commitments.

2.1.2 Firms Value

The concept of firm value pertains to the economic importance of an organization, which can be assessed through various lenses, including its market valuation, financial performance, and strategic positioning. It encompasses both tangible and intangible factors, reflecting the organization's ability to generate anticipated cash flows, satisfy stakeholder expectations, and sustain a competitive advantage.

Firm value is commonly defined as the current value of all the anticipated future benefits derived from the ownership or operation of the organization. These benefits may be articulated when it comes to market value: the amount that investors are willing to allocate towards the organization's equity and debt, as represented by market capitalization and enterprise value [11]; and intrinsic value: the present value of projected future cash inflows that was discounted, which illustrates the organization's fundamental worth based on its operational performance and growth prospects [12].

2.1.3 Market Capitalization

[13]Articulated that market capitalization provides a comprehensive evaluation of a corporation's intrinsic worth, founded upon its performance in the stock market. This metric is regularly utilized as a significant indicator of the size of a firm and liquidity in financial markets, thereby influencing investment strategies. [14]: In their foundational research, Fama and French identified market capitalization as a crucial factor influencing stock returns. They observed that smaller firms (defined by low market capitalization) typically generate higher returns; however, this is often accompanied by increased risk exposure. [15]Argued that market capitalization is vital for the delineation of the equity market. Companies with substantial market capitalizations usually provide stability, whereas mid- and small-cap firms offer growth potential alongside heightened volatility.

2.1.4 Current Ratio

The total current assets over total current liabilities, a fundamental indicator of financial liquidity, is widely utilized to evaluate an organization's efforts to meet its current liabilities through its assets of short- term nature. It represents a corporation's financial health by indicating whether it possesses sufficient assets to cover its obligations within a short time frame. Despite its widespread application, numerous scholars have expressed conceptual concerns and interpretations regarding its relevance, reliability, and limitations. [16] Critiques the current ratio for its failure to incorporate cash flow analysis. An organization may report a extraordinary current proportion yet still express challenges in fulfilling its responsibilities if its cash flow cycle does not align with its liability structure. In acknowledgment of these theoretical complexities, academics advocate for the enhancement of the existing ratio by taking into consideration some liquidity metrics in terms of ratios.

2.2 Conceptual Framework

The theoretical framework which involved the issue of management of working capital is crucial for comprehending how an oversight of short-term liabilities and assets influences a firm's overall efficacy. The fundamental focus of the term "working capital management" is to guarantee situations where an organization maintains sufficient resources to sustain its

operations, fulfill short-term obligations, and augment profitability alongside operational efficiency.

Collection Period and Its Impact on Performance: The collection period, frequently referred to as the bills receivable duration, quantifies the average interval necessary for a firm to receive payment from customers subsequent to a sale.

2.4 Theoretical Review

A vast array of theoretical constructs exists within the realms of finance and economic theory that elucidates the interconnections among various components involved in the management of working capital , including the receiving period, current ratio , cash conversion cycle, credit period, , , and inventory turnover, all of which collectively enhance the overall performance of an enterprise. These theoretical frameworks establish a foundation for comprehending the mechanisms through which effective working capital management can exert an influence on profitability, liquidity, and operational efficiency.

Matching/Hedging Plan Theory of Working Capital

The inquiry is grounded in the matching/hedging plan theoretical framework of working capital management. This theoretical construct posits that long-term financial resources should not be allocated to address short-term seasonal needs; essentially, current assets ought to align with current liabilities [17]. It advocates for a judicious policy that harmonizes assets and liabilities in accordance with their respective maturities. [18]; [19] emphasize that the current acid test and cash ratios serve as balance sheet metrics that fail to provide a holistic and accurate understanding of the effectiveness of working capital management. The hedging theory encompasses an element of risk, as it almost necessitates the exhaustive deployment of a firm's capacity to utilize short-term financing, which may hinder the ability to fulfill short-term obligations during exigent circumstances.

2.6 Empirical Review

[20] Conducted an empirical study evaluating the impact of working capital management on organizational performance within the context of the Nigerian economy. The findings of the research indicated that return on assets, return on sales, and return on investment are significantly and positively influenced by the cash conversion cycle. In contrast,[21] identified a statistically significant inverse relationship between a firm's financial performance and the cash conversion cycle in a separate investigation conducted in Nigeria. As a result, the subsequent hypothesis was formulated and rigorously tested to fulfill the objectives of the research. A plethora of scholarly inquiries indicates a considerable positive correlation between effective working capital management and corporate profitability. For example, an examination of manufacturing firms listed on the Ghana Stock Exchange revealed a robust positive linear association between working capital management (WCM) and profitability, suggesting that adept management of inventory and receivables contributes to enhanced overall firm performance [22].

[23] Explored the implications of working capital management and return on assets (ROA) among steel enterprises listed on the Stock Exchange of Vietnam. The study utilized secondary data encompassing the period from 2010 to 2019. The findings indicated that the cash conversion cycle (CCC) displayed a negative and statistically insignificant association with ROA, whereas the current ratio (CR) demonstrated a positive and statistically significant correlation with ROA.

Findings expressed a divergence from numerous previously published studies, attributable to the specificity of industries and their respective stages of economic development, alongside state-linked policies. Consequently, it is advised that managerial practitioners can enhance profitability through the implementation of good revenues, debt, and better credit management strategic plans to achieve profitability and, in turn, optimize shareholder wealth and corporate reputation.

[24] Conducted a thorough investigation into credit management policies and their effects on the profitability of emerging manufacturing enterprises in Southwestern Nigeria within the temporal parameters of 2009 to 2018. The findings of their analytical pursuits indicated a positive yet statistically insignificant relationship between the current ratio, creditors' payment duration, and the profitability of the selected emerging manufacturing enterprises. Conversely, significant negative associations were identified between the debtors' collection duration and the profitability of the enterprises examined. The study posited that a robust debtor collection strategy must be devised and executed to ensure sustained liquidity and the capacity to fulfill short-term financial obligations.
[25] Undertook an empirical investigation into the effects of working capital management on corporate profitability. The methodological framework employed for this study was a panel design, which encompassed a sample of 9,883 operational entities within the food sector across Southeast Europe. The measure of organizational profitability was operationalized through return on assets (ROA), while working capital was assessed using metrics such as current liquidity, the ratio of current to total assets, the ratio of current liabilities to total assets, financial leverage, and firm size.. The data employed for this investigation were secondary in nature, spanning the period from 2010 to 2014. The model estimation methodology utilized was probit regression analysis, which indicated that all examined the components of working capital management exhibit a statistically significant effect on the probability of achieving improved profitability, with the notable exceptions being current liquidity, the ratio of current liabilities to total assets, and financial leverage.

Furthermore, [26] executed a research investigation aimed at assessing the contributions of internal control systems and working capital management to the financial performance of supermarkets. The study utilized cross-sectional data acquired from a sample of 110 supermarkets located in Uganda. The inquiry was theoretically grounded in the agency relationship and the cash conversion cycle, employing a simple random sampling methodology.
The metrics utilized for the dependent variable included profitability, liquidity, and return on equity. The independent variables were represented by the inventory conversion period, average conversion period, and average payable period. The research incorporated control activities, information systems, risk assessment; stock management, cash management, creditors' management, and debtors' management as control variables. Data were gathered through a questionnaire survey targeting the identified variables over a one-year timeframe, specifically in 2019. The model estimation techniques employed by the researchers entailed both correlation and regression analysis. The study's findings indicate that working capital management functions as a significant predictor of financial performance, whereas internal control systems fail to exhibit a notable predictive capability regarding financial performance.

1.8 Research Gap

Identifying a research gap in the domain of working capital management (WCM) and its influence on the profitability of publicly traded consumer goods manufacturing enterprises in Nigeria necessitates a comprehensive review of the extant literature, thereby illuminating areas that remain insufficiently explored. The investigation revealed that while several studies have scrutinized working capital management, the findings among scholars utilizing ordinary least squares (OLS) as well as fixed or random effect models are often contradictory; moreover, there exists a paucity of research specifically targeting the consumer goods manufacturing sector in Nigeria. Previous explorations into the liquidity management of corporations and its subsequent implications for performance within Nigeria have yielded ambiguous results. Analyzing how working capital management practices distinctly influence profitability in this sector may yield significant insights through the employment of GMM model. This represents a methodology for investigating this specific area of study. In addition, this study aims to address potential endogeneity concerns by utilizing an econometric diagnostic test model.

METHODOLOGY

3.1 Research Design

The research design implemented in this study is predicated on an ex post facto and analytical research framework, as it primarily concentrated on evaluating the impact of working capital management on the value of publicly listed consumer goods manufacturing and construction firms in Nigeria. This research design is utilized in contexts where the manipulation of variables is either impractical or ethically questionable. Researchers analyze naturally occurring variations among groups to derive conclusions regarding possible causal influences [27].

3.2 Nature and Source of Data

The data utilized in this study were sourced from secondary sources. Secondary data, having been previously processed and aggregated, can be readily accessed within the statistical financial reports of the sampled publicly listed consumer manufacturing and construction firms as well as the central bank's statistical bulletins. The selected publicly listed manufacturing firms will be employed in the application of panel data to conduct the statistical analysis. [28]Posits that panel data is conceptualized as data pertaining to multiple units (individuals, firms, countries), wherein the results and characteristics of each unit are examined across multiple time points. Furthermore, panel data is advantageous in that it allows for the contemporaneous reporting of dynamic behaviors and their potential heterogeneity among countries, an analysis that is not feasible with time series or cross-sectional data [29].

3.3 The Population Size

The demographic focus of this investigation encompasses all seventeen publicly traded consumer manufacturing and construction enterprises within the Nigerian Exchange Group. These enterprises are classified as consumer manufacturing entities listed on the Nigerian Exchange Group (NGX) under the "Consumer Goods" category: Dangote Sugar Refinery PLC, BUA Foods PLC, Cadbury Nigeria PLC, Champion Breweries PLC, Guinness Nigeria PLC, International Breweries PLC, Golden Guinea Breweries PLC, Nigerian Breweries PLC, Nestle

Nigeria PLC, Honeywell Flour Mill PLC, Flour Mills of Nigeria PLC, Northern Nigeria Flour Mills PLC, Unilever Nigeria PLC, and PZ Cussons Nigeria PLC., NASCON Allied Industries PLC, Vitafoam Nigeria PLC, Union Dicon Salt PLC, and Multi-Trex Integrated Foods PLC are entities that function across diverse sectors, encompassing food and beverage, personal care, and household goods and all the listed construction firms in Nigeria .These construction firms are (CCECC Nigeria Ltd – *China Civil Engineering Construction Corporation (Nigeria) Limited*, RCC– *Reynolds Construction Company (Nigeria) Limited***,** Dantata & Sawoe Construction Co. Ltd **–** Setraco Nigeria Ltd **–***Setraco Nigeria Limited* ,Arab Contractors O.A.O Nigeria Ltd **–***Arab Contractors (O.A.O.) Nigeria Limited*, CGC Nigeria Ltd – *China Geo-Engineering Corporation (Nigeria) Limited*, PW Nigeria Ltd – *PW Nigeria Limited* (formerly Public Works Nigeria Limited), CHEC Nigeria Ltd – *China Harbour Engineering Company (Nigeria) Limited*, MCC **–** *Ministry of Construction Company Nigeria Limited and Julius Berger Nigeria limited*

3.3.1 Sample Size andSampling Technique

The twenty enumerated consumer goods manufacturing and construction enterprises, which were used for parameter estimation as a result the firm size (revenue), shall constitute the sampled events utilized for the purposes of this study.Data were procured employing a purposive sampling technique whereby the twenty enumerated consumer goods manufacturing and construction firms were incorporated based on the average highest revenue over the period under study (2010-2023)

3.4 Specification of Model Variables

The theoretical framework relevant to this investigation is articulated and refined in alignment with a comprehensive examination of empirical studies conducted by a multitude of researchers who have explored the dynamics between organizational profitability and management of working capital. That inquiry incorporates the conclusions drawn by [30], which scrutinized the binding factor that holds the working capital and firm profit. A cohort consisting of five prominent firms was selected, and their financial statements spanning from 2012 to 2016 were subjected to rigorous analysis using the Ordinary Least Squares (OLS) regression framework.

We have substituted their dependent variable (ROA) with market capitalization as the dependent variable, while subsequently replacing the OLS model with the GMM in order to accommodate the panel data set .

The model (GMM) is specified as follows:

MCPT= f (CR, NWC, FM)

MCPT= market capitalization – dependent variable

CR = current ratio –independent variable

NWC = net working capital –independent variable

FM = firm size as control variable

3.5 Techniques of Data Analysis

The study scientifically analyze the effect of working capital management on the value of publicly listed consumer goods manufacturing and construction firms in Nigeria.Validity tests were undertaken, incorporating all pertinent variables. Various preliminary analyses were conducted, including parametric evaluations like panel unit root,graphical representation of panel unit root, parameter stability tests (CUSUM tests),lag length selection ,bounds co-integration test, error correction model and GMM estimation . The models delineated in sections one to five, which are of considerable relevance, utilized to evaluate the research hypotheses.

4 DATA PRESENTATION AND ANALYSIS

4.1 Panel Unit root test

Decision: Reject the null hypothesis if the augmented Dickey-fuller statistic (ADF) is more negative than the critical value at 5% level of significance, otherwise accept the null.

Table 4.3:GroupUnit root Table

Method	Statistic	Prob**	Cross Sections	Obs
Levin,Lin &Chu t*	-25.0020	0.0000	4	1047
ADF-Fisher Chi-sq	435.470	0.0000	4	1047
PP- Fisher Chi-sq	312.356	0.0000	4	1081

Source: Researchers computation
Note: CR = Current ratio, MKTCAP = Market capitalization, FM= Firm size, NWC = Net working capital, DNWK= Days net working capital

Table 4.3 displayed the outcome of the stationary series as tested. The stationary properties of the variables were examined using panel unit root tests, and the results are presented in Table X. Four series were considered, namely market capitalization (MKTCAP_BN_), net working capital (NWC__M_), current ratio (CR__), and revenues (REVENUES_BN_). The Levin, Lin and Chu (LLC) test, which assumes a common unit root process across the cross-sections, produced a test statistic of –25.0020 with a probability value of 0.0000. This outcome is significant at the 1% level, thereby leading to the rejection of the null hypothesis of a unit root. Similarly, the ADF–Fisher Chi-square statistic (436.470, p = 0.0000) and the PP–Fisher Chi-square statistic (312.356, p = 0.0000), both of which assume individual unit root processes, confirmed this result. In all cases, the tests strongly rejected the null hypothesis that the series contain a unit root.

Given these outcomes, it is evident that the panel data series employed in this study are stationary at level, implying that they are integrated of order zero, I(0). This means that the series exhibit stable statistical properties over time and do not require differencing to achieve stationary. Consequently, the data are suitable for subsequent panel regression and co integration analyses without the risk of spurious results.

4.2 Graphical Representation of Panel Unit Root Test

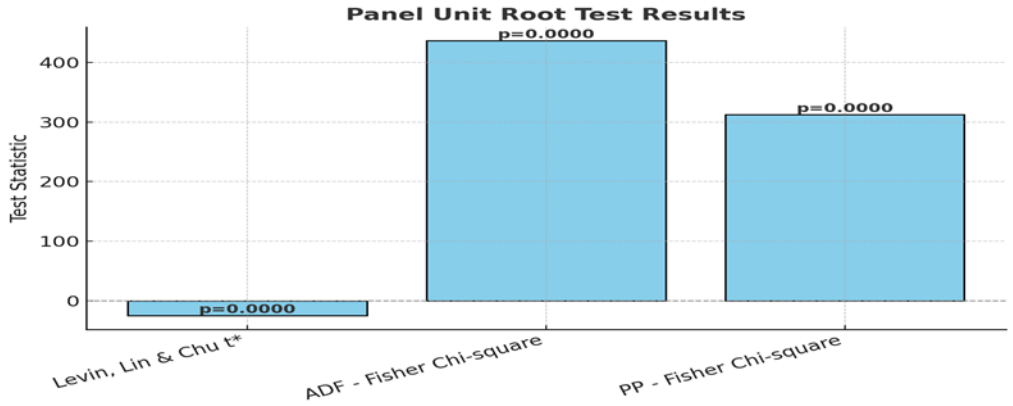

Figure 1

The graph illustrates the test statistics of the three panel unit root tests, where the Levin, Lin & Chu statistic is strongly negativewhile the ADF-Fisher and PP-Fisher statistics are large positives**,** all indicating strong rejection of the unit root hypothesis. The annotated p-values of 0.0000 confirm statistical significance across all methods. This means the variables are stationary at level**,** making them reliable for further panel econometric analysis.

4.3 Parameter Stability Test (CUSUM)

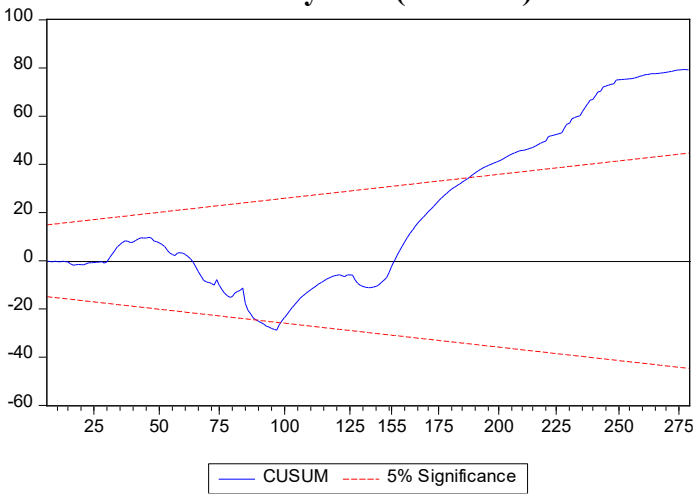

Figure 2: Parameter stability graph

Figure 2 displayed the graphical movement of all the parameters jointly tested using CUSUM test. The blue line which represents CUSUM crossed the two red lines (5% significance) which means that estimated parameters crossed the red line at a point (205) over the long period as there is evidence of deviation and convergence over the period under study.

4.4 Lag length Selection

Table 4.4 Lag Length table

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-179.2346	NA	0.024314	7.634774	7.790707	7.693701
1	40.95902	394.5135	4.92e-06*	-0.873262	-0.093626*	-0.578655*
2	44.93075	6.454050	8.25e-06	-0.372114	1.031286	0.158233
3	59.64290	21.45522	9.03e-06	-0.318454	1.708680	0.447603

Source: Researchers computation

Based on the results of the VAR lag order selection criteria, the appropriate lag length for the model is onelag**.** Most criteria (*LR, FPE, AIC, SC, HQ*) point to Lag 1 as the optimal lag length.

Co-integration is particularly useful in economics and finance, where it is often used to model For instance, if two variables are co-integrated, it implies that they share a common long-term trend, even though they may deviate from each other in the short term. See table 4.4

4.5 Bounds Co-integration Test

Decision Criteria : Accept the null hypothesis if the value of F-statistics is greater than i(o) bounds ,otherwise reject the null hypothesis.

Table 4.4**ARDL model Long Run Relationship (**MCPT= f (CR, NWC, DWK, INF)

Bounds Test				Result	Next
F-Statistic	i(0)	i(1)			
6.4612	3.1	3.87	@ 5%	Co-integrated	ECM

Source: Researchers computation

Table 4.4 disclosed the value of F-stat is 6.4612, while the value of i (0) bounds at 5% level of significance is 3.1 The outcome of the test implied that there is evidence of lung run relationship among the variables .This implied that any deviation in the short run, will be corrected in the long run .The speed at which this correction is effected need to be known through the error correction model (ECM).

4.6 Error Correction Model

Table 4.5 **Error Correction Model Table**

Variable	Coefficient	Std. Error	t-Statistic	Prob
CointEq(-1)*	-0.134563	0.02620	-5.112579	0.0000

Table 4.5 explain the speed at which the variables can run to equilibrium in the long run, if there is evidence of deviation in the short run, since co-integration has been established in table 4.5.The co-integrating equation row (CointEq(-1)*) that shows the coefficient value of (-0.1345) and probability value of T-stat (0.0000) show that any deviation that occurs in the short run can be adjusted for at 18% speed, there by bringing the deviation which occurred in the short run to normal during the long run process. This is significant at (0.0000) as indicated in the Table 4.5 since the probability value is less than 5% level of significance.

4.7 Generalized Method of Moment Model (GMM) Estimation

Table 4.7 GMM Model Regression Table

Variable	**Coefficient**	**Std Error**	**t-Statistic**	**Prob**	**R^2**	**DW**	**J-ST**	**INST**
CR--	-0.342898	1.359348	-0.252252	0.8010	0.537	0.258	0.000	4
LNNWC M	0.020814	0.064289	0.323751	0.7464				
LNFIRMSIZE	0.571858	0.083016	6.888534	0.0000				
C	10.35948	2.662472	3.890927	0.0001				

Source: Researchers computation

Note: CR = Current ratio, MKTCAP = Market capitalization, FM= Firm size, NWC = Net working capital, DNWK= Days net working capital

Table 4.7, showed the outcome of the GMM model test .The result of the Generalized Method of Moments (GMM) estimation with market capitalization (LNMKTCAP_BN_) as the dependent variable is presented in Table X. The explanatory variables included in the model were the current ratio (CR__), net working capital in logarithmic form (LNNWC__M_), and firm revenues in logarithmic form (LNFIRM SIZE), with a constant term also added.

The findings show that the coefficient of the current ratio was negative (-0.3429) but statistically non-significant with a probability value of 0.8010. This indicates that liquidity, as measured by the current ratio, does not exert a meaningful influence on market capitalization within the study period. Similarly, the coefficient of net working capital was positive (0.0208) but also statistically non-significant (p = 0.7464). This suggests that changes in working capital management do not significantly contribute to variations in firm market value.

On the other hand, firm size exerted a positive and highly significant effect on market capitalization. The coefficient of LNFIRMSIZE was 0.5719 with a probability value of 0.0000, which is significant at the 1 percent level. This implies that a 1 percent increase in firm size (revenues) leads to approximately a 0.57 percent increase in market capitalization, holding other variables constant. Thus, revenue growth emerges as the primary determinant of firm value in this model. The constant term was also positive (10.3595) and significant (p = 0.0001), indicating the presence of additional factors not captured by the included explanatory variables that nonetheless contribute to market capitalization.

The model's goodness-of-fit statistics revealed an R-squared value of 0.5372 and an adjusted R-squared of 0.5319. This means that the explanatory variables jointly account for about 53 percent of the variation in market capitalization among the sampled firms, which is reasonably strong for financial and economic models. The Durbin-Watson statistic, however, was 0.2582, suggesting the presence of serial correlation in the residuals despite the HAC robust correction employed in the GMM estimation. This points to the possibility of omitted variables or the need for a dynamic model to capture persistence in market capitalization. Finally, the J-statistic was 0.0000, indicating that the model is exactly identified and that the chosen instruments are valid for the estimation.

4.8 Test of Hypotheses

Test of Hypothesis One

Statement of null and alternate hypothesis.

H_0:Current ratio has no significant effect on the market capitalization of listed consumer goods manufacturing and construction firms in Nigeria.

H_1:Current ratio has a significant effect on the market capitalization of listed consumer goods manufacturing and construction firms in Nigeria.

Decision Criteria: Accept the null hypothesis if the probability of t-statistic is not less than 5% level of significance, otherwise reject the null hypothesis.

Table 4.7, showed the outcome of the GMM model test where some coefficients of the explanatory variables are associated with negative values. One of these variables is the current ratio (CR) with the coefficient value of -0.342898, t- statistics -0.25225 and the corresponding probability value of t-statistics is 0.8010.This implied that current ratio had a negative and non-

significant effect on market capitalization of listed consumer goods manufacturing and construction firms in Nigeria from 2010 to 2023 year of the study.
Decision: The study failed to reject the null hypothesis and state that current ratio had no significant effect on the market capitalization of listed consumer goods manufacturing and construction firms in Nigeria.

4.9 Test of Hypothesis Two

Statement of null and alternate hypothesis.

$H_{0:}$Net working capital has no significant effect on the market capitalization of listed consumer goods manufacturing and construction firms in Nigeria.
$H_{1:}$Net working capital has a significant effect on the market capitalization of listed consumer goods manufacturing and construction firms in Nigeria.
Decision Criteria: Accept the null hypothesis if the probability of t-statistic is not less than 5% level of significance, otherwise reject the null hypothesis.

Table 4.7, indicated the outcome of the GMM model test where the lagged value of networking capital had a positive coefficient of 0.020814,t-statistics of 0.32375 and the corresponding probability value of t-statistics is 0.7464 which is less not less than 5% level of significance. This implied that networking capital had a positive and non-significant effect on market capitalization of listed consumer goods manufacturing and construction firms in Nigeria from 2010 to 2023 year of the study.
Decision: The study accept the null hypothesis and state that networking capital had no significant effect on the market capitalization of listed consumer goods manufacturing and construction firms in Nigeria.

4.10 Discussion of the Results

4.10.1 Hypothesis One: Current ratio has no significant effect on the market capitalization of listed consumer goods manufacturing and construction firms in Nigeria.There is an evidence of negative effect of current ratio on market capitalization. The study failed to reject the null hypothesis and state that current ratio had no significant effect on the market capitalization of listed consumer goods manufacturing firms in Nigerian Studies in emerging markets, such as that by [31], emphasize the unique dynamics of liquidity and valuation due to market inefficiencies and economic volatility. Data were collected from the financial statements of 50 companies listed on the NSE from 2010 to 2023. Market capitalization data were extracted from the NSE database, while current ratio values were computed from the companies' balance sheets. Panel regression analysis was conducted using both fixed-effects and random-effects models. Hausman tests determined the appropriate model for the study. The relationship between current ratio (CR) and market capitalization (MC) was modeled using panel data regression: Where market capitalization of firm at time, Current ratio of firm at time, Firm size (log of total assets), Leverage (debt-to-equity ratio)and Error term were used for parameter estimation. The result of their study indicated a positive relationship. The positive relationship between the current ratio and market capitalization highlights the importance of liquidity management in enhancing firm value. Firms with healthier liquidity profiles are perceived as less risky, thereby attracting investors and boosting market valuation. However, excessive liquidity may lead to suboptimal asset utilization, as suggested in prior studies. The variations of these outcomes could be as a result of policy difference in organizational structure and operating environments since the

current ratio is a key liquidity measure, indicates a firm's ability to cover short-term liabilities with short-term assets. While liquidity is fundamental to operational stability, its impact on market perception and valuation remains a topic of interest. Market capitalization, the total market value of a company's outstanding shares, reflects investor confidence and serves as a critical metric for corporate valuation.

4.10.2 Hypothesis Two: Net working capital has no significant effect on the market capitalization of listed consumer goods manufacturing and construction firms in Nigeria.. The networking capital had a negative and significant effect on market capitalization of listed consumer goods manufacturing firms in Nigeria from 2010 to 2023 year of the study .Ahmed and Malik carried out a study on the impact of net working capital on market capitalization of some selected manufacturing firms in Nigeria. Their findings revealed that efficient working capital management enhances operational performance, which in turn improves investor confidence. Conversely, excessive working capital can tie up resources unnecessarily, reducing profitability. This study is in line with our study although carried out within the same period and location. The positive relationship between NWC and market capitalization underscores the importance of efficient working capital management in enhancing firm value. Firms with healthier working capital positions are perceived as more stable, attracting investors and boosting market valuation. However, excessive working capital may lead to resource misallocation, as suggested in prior studies

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings which emanated from this work within the period are summarized as follows:

(i) Current ratio had no significant effect on the market capitalization of listed consumer goods manufacturing and construction firms in Nigeria..(Negative coefficient = -0.342898,Significant level = 0.8010> 0.05)

(ii) Networking capital had no significant effect on the market capitalization of listed consumer goods manufacturing and construction firms in Nigeria.(Negative coefficient = -860.36,Significant level = 0.7464 > 0.05

5.2 Conclusion

The study investigated the effect of working capital management on the market capitalization of listed consumer goods manufacturing firms in Nigeria from 2010 to 2023. The findings therefore implied that current ratio had no significant effect on the market capitalization of the firms. This suggests that liquidity, as measured by the current ratio, is not a primary determinant of firm value in this sector. Firms should not overly focus on maintaining high levels of liquidity at the expense of operational efficiency or investment opportunities, as excessive liquidity may indicate idle resources that could otherwise be utilized for value-generating activities.Net working capitalhad a significant effect on the market capitalization, implying that the balance between current assets and liabilities is critical to enhancing firm value. Firms should adopt effective working capital management strategies to ensure optimal levels of net working capital. Properly balancing short-term assets and liabilities can improve financial health and foster investor confidence, ultimately driving higher market valuations. Days net working capitalalso had no significant effect on the market capitalization, emphasizing the importance of managing the cash conversion cycle. Reducing the number of days required to convert working capital into cash enhances liquidity and operational efficiency, which positively impacts firm value. Therefore, firms should focus on minimizing delays in receivables collection, optimizing inventory levels,

and extending payables without harming supplier relationships. The findings underscore the importance of efficient working capital management as a driver of firm value in Nigeria's consumer goods manufacturing sector. While liquidity alone may not directly influence market capitalization, firms that strategically manage their net working capital and cash conversion cycles are better positioned to enhance shareholder value and maintain a competitive edge. Policymakers and financial managers should prioritize the design and implementation of working capital policies that support sustainable growth and long-term value creation.

5.3 Recommendation of the study

(i) Firms should avoid placing excessive emphasis on maintaining high levels of liquidity, as this does not significantly affect firm value in the consumer goods manufacturing sector. Instead, they should focus on utilizing available liquid resources for productive investments or growth opportunities. Striking a balance between liquidity and operational efficiency as a key to optimizing resource utilization and enhancing long-term performance.

(ii) Managers should regularly monitor and adjust net working capital to support smooth operations while maximizing profitability and firm value.

Contribution to knowledge

The study equips businesses, investors, policymakers, and other stakeholders with actionable insights into the role of working capital management in enhancing firm value. It promotes more efficient resource utilization, improved financial decision-making, and sustainable economic growth in society.

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