WORKING CAPITAL MANAGEMENT AND THE FINANCIAL PERFORMANCE OF CONSUMER GOODS MANUFACTURING COMPANIES IN NIGERIA

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ABSTRACT
The study examined the effect of working capital management and the profitability of consumer goods manufacturing companies in Nigeria. Other objective of this study was to determine the effect of inventory turnover on return on investments. The population of this study comprised twenty-four consumer goods firms listed on the Stock Exchange Group as at 2021. Purposive sampling technique was adopted by the study to select ten listed consumer goods firms that have adequate information. The source of data for this study data was secondary obtained from the published audited annual reports of consumer goods firms especially the income statement and statement of financial position for a period of ten years from 2013 to 2022. The regression analytical method was adopted for this study and it was found out that inventory turnover had a positive relationship with return on investment (ROI) of consumer goods firm as indicated by a regression co-efficient of -0.000872 and this relationship was statistically significant at 5% level with a probability value of 0.8007. It was suggested that management of organizations should make sure that there is development of adequate or sufficient and efficient working capital policy for the organizations.

Introduction

Working capital management (WCM) is one of the challenges faced by companies, which can provide a convenient and appropriate level of liquidity for enabling companies to cover their short-term financial obligations resulting from financing their operations in order to ensure the continuity of the companies' business and maximize their profitability. Working capital management relates to current assets and current liabilities that represents an essential part of companies' total assets (Adu, Uchehara, Williams, Oguntuase, and Oke-Potefa, 2023).

Investors all over the globe put their money and resources into a business with a view to having some return on investment irrespective of whether it is in a proprietorship, partnership and corporations. In small and medium businesses, owners have direct or indirect control over the management of the business, so they themselves are answerable and responsible for the profit and loss. On the other side, the management of the business in multinational businesses manages the company's business on

behalf of shareholders; however, managers need management to take such choices and decisions which can offer positive signal to promote market, increase the worth of the firm, enhance profitability and maximize holding period return (Adu, and Majeobaje, 2024).

The world is a global village and, it is moving at a fast and competitive pace. If a company has everything set up and working for them without proper management of its assets, all its efforts are in vain. Companies with the right amount of working capital are usually more profitable and more likely to attract investors. Efficient working capital management facilitates the proper running of operations and, it additionally helps to increase the company's earnings and profit. The amount of working capital a company requires is usually defined by the industry it works in, the number of credit days creditors allow, the number of credit days offered to debtors, and the amount of stock it must keep on hand (Kosgey and Njiru, 2019).

Statement of the Problem

Working capital management is important to manufacturing firms because it comprises over half of the total assets of a firm. Many manufacturing firms are said to be struggling to thrive and that some key players have been forced to move their operations to other countries, others have shut down their operations. All these firms cite high operation costs as the main cause of the precarious financial situation. Firms are closing doors and others are operating at breakeven point. Closure of a business can only be brought about by profitability and liquidity problems. Due to the financial crisis happening in the world today, managers of organizations have been forced to wake up and realize the relevance and necessity of effective and efficient resource management, particularly short-term investments, as not much attention is invested in them, unlike long term investments (Uguru, Chukwu, and Elom, 2018).

The inability of financial manager to effectively and efficiently manage the components of working capital has led to business failures. The efficient management of working capital is very vital for a business survival. This is based on the fact that having too much capital signifies that the survival of the firm is shaky. Most manufacturing firms do not hold the right amount of stocks, debtors, cash and other component of working capital. Due to this reason, the firm is unable to meet its maturing short-term obligations and its upcoming operational needs. Lack of adequate working capital also means that a firm is unable to undertake expansion projects and increase its sales, therefore limiting the growth and profitability of the business. The firm under study is faced with the problem of striking a balance between excess stock and stock inadequacy, fluctuation in the working capital management, dynamics, ineffective and inefficient mix of their working capital components and long operating circle (Abimbola and Kolawole, 2017).

Research Objective

The main objective of this study is to determine the effect of working capital management on the financial performance of consumer goods manufacturing companies in Nigeria while the specific objective is to;

determine the effect of inventory turnover on return on investments.

Research Question

The research question for this study is:

To what extent is the relationship between inventory turnover and return on investment?

Research Hypothesis

H_0: There is no significant relationship between inventory turnover and return on investment

Literature Review

Conceptual Review

Working capital management, which refers to a company's managerial accounting strategy is designed to monitor and exploit the two components of working capital, current assets, and current liabilities, to ensure the ascertain the most financially efficient operation of the company. The principal target of working capital management is to guarantee the company always maintains sufficient cash flow to meet its short-term operating costs and short-term debt obligations. Efficient working capital management helps maintain the unconstrained operation of the operating cycle (the minimum amount of time required to change net current assets and liabilities into cash) and can also help

to enhance the company's earnings and profitability (Adu, and Oke-Potefa, 2024).

Concept of Working Capital Management

Wang, Akbar and Akbar (2020) opined that working capital management deals with the determination of levels and compositions of current assets and ensuring that right sources of funds are tapped to finance current assets and ensuring that current liabilities are paid in time. Also, working capital management involves making appropriate investment in cash, marketable securities, inventories and receivables as well as the level and mix of short-term financing. Working capital management entails short term decisions generally relating to the next one-year period which are reversible (Doan, 2020).

Financial Performance (Profitability)

Profitability is a measurement of efficiency. It is a metric that is used to determine the scope of a company's profit in relation to the size of the business and ultimately its success or failure. Profitability can tell key stakeholders whether a company is able to sustain its position in the market and continue to grow (Otekunrin, Nwanji, Fagboro,Olowookere and Adenike, 2021). It is the extent to which a company earns a profit. There are two parts to a company's profitability: revenue and expenses. As such, a company is profitable if its revenue exceeds its expenses.Every company's principal goal is to be profitable. The business will not survive in the long run if it is not profitable. Profit maximization is the organization's driving factor as a result, assessing current and previous profitability and forecasting future profitability is essential (Obafemi, Tajudeen, and Oluseye, 2021). One of the most crucial objectives for business managers is to increase profitability. Managers are continuously looking for methods to boost profitability by changing the business. Ratios such as Return on Equity, Return on Assets and Net Interest Margin are used to calculate and measure profitability. The ratio of net revenue after taxes to total equity capital is known as return on equity (Adu and Ajigbotoso, 2024).

Return on Investment (ROI)

Return on investment (ROI) is a performance measure used to evaluate the efficiency or profitability of an investment or compare the efficiency of a number of different investments. ROI tries to directly measure the amount of return on a particular investment, relative to the investment's cost. The result is expressed as a percentage or a ratio. ROI is closely interconnected with various other economic tools used for comparing the advantages and disadvantages of a project, such as cost-benefit analysis and cost-effectiveness analysis (Siddique, Khan and Khan, 2021).

ROI= Net profit /Total investment

Methodology

Population of the Study

The population of this study comprised 24 consumer goods firms listed on the Stock Exchange Group as at 2021.

Sampling Size and Sampling Technique

Purposive sampling technique was adopted by the researcher to select 10 listed consumer goods firm that have adequate information.

Method of Data Collection

The source of data for this study data was secondary obtained from the published audited annual reports of consumer goods firms especially the income statement and statement of financial position for a period of 10 years from 2013 to 2022.

Data Analysis, Results and Discussion of Findings

Data Anaysis and Interpretation

MODEL: $ROIit = \beta_0 + \beta_1 ITit + \beta_2 CRit + \beta_3 DRit + e0it$

Regression Analysis

Since the unit test carried out showed that all variables are stationery at level as presented in Table 4.3, the study went further to estimate the pooled OLS against the Fixed and random effect model and decide on the best model to use. The Redundant test was used to determine the most appropriate between the Pooled OLS and Fixed effect

Table 1 Pooled Ordinary Least Squares

Dependent Variable: ROA
Method: Pooled Least Squares
Date: 05/20/24 Time: 04:38
Sample: 2013 2022
Included observations: 100
Cross-sections included: 2
Total pool (balanced) observations: 200

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEBT_RATIO	0.080175	0.023943	3.348635	0.0010
CR	0.030761	0.010653	2.887493	0.0043
INVT	0.002115	0.002398	0.882145	0.3788

R-squared	-0.083415	Mean dependent var	0.088567
Adjusted R-squared	-0.094414	S.D. dependent var	0.077076
S.E. of regression	0.080633	Akaike info criterion	-2.182938
Sum squared resid	1.280822	Schwarz criterion	-2.133464
Log likelihood	221.2938	Hannan-Quinn criter.	-2.162917
Durbin-Watson stat	0.683573		

Source: Researcher computation, 2024

Hypothesis for Fixed Effect Redundant Test

Null Hypothesis (H_0): Fixed effects is appropriate

Alternate Hypothesis (H_1): Pooled Ordinary Least Squares is appropriate.

Table 2: Redundant Fixed Effects Tests

Effects Test	Statistic	d.f.	Prob.
Period F	6.514467	(9,77)	0.0001
Period Chi-square	56.675268	9	0.0000

Source: Researcher's computation, 2024

According to the null hypothesis for the redundancy fixed effect, Fixed effect is the appropriate estimator to give the best consistent result which can only be accepted when the probability is less than 5%. The result of the test gave a probability of 0.0000 (P<0.5) as presented in Table. Hence, the null hypothesis was accepted, and concluded that the Fixed effect model is the best estimator.

Table 3 Panel Fixed Effect

Dependent Variable: ROA
Method: Pooled Least Squares
Date: 05/20/24 Time: 04:39
Sample: 2013 2022
Included observations: 100
Cross-sections included: 2
Total pool (balanced) observations: 200

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.090215	0.021398	4.216048	0.0000
DEBT_RATIO	-0.021435	0.033341	-0.642913	0.5210
CR	0.011591	0.011214	1.033595	0.3026
INVT	-0.000752	0.002405	-0.312476	0.7550
Fixed Effects (Cross)				
SERIES--C	-1.48E-17			
01--C	-1.48E-17			

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.007093	Mean dependent var	0.088567
Adjusted R-squared	-0.013275	S.D. dependent var	0.077076
S.E. of regression	0.077586	Akaike info criterion	-2.250174
Sum squared resid	1.173823	Schwarz criterion	-2.167716
Log likelihood	230.0174	Hannan-Quinn criter.	-2.216805
F-statistic	0.348243	Durbin-Watson stat	0.705169
Prob(F-statistic)	0.845043		

Source: Researcher's computation, 2024

It has been confirmed, using Redundant Test that the Fixed Random effect is the most appropriate for the study but the study proceeded to use the Hausman test to determine the best appropriate model between the fixed and random effect.

Hypothesis for Hausman test

Null Hypothesis (H0): Random Effect is appropriate

Alternative hypothesis (H1): Fixed effect is appropriate

Table 3: Hausman Tests

Test summary	Chi-Sq. Statistics	Chi-Sq.d.f	Prob.
Cross-section random	0.000000	4	1.0000
Period random	0.000000	4	1.0000
Cross section and period random	0.000000	4	1.0000

Source: Researcher's computation, 2024

According to the null hypothesis for the Hausman test, Random effect is the appropriate estimator to give the best consistent result which can only be accepted when the probability is greater than 5%. The result of the test gave a probability of 1.0000 (P>0.5) as presented in the Table. Hence, the null hypothesis was accepted, and concluded that the Random effect model is the best estimator.

Table 4 Panel Random Effect

Dependent Variable: ROI
Method: Pooled Least Squares
Date: 05/20/24 Time: 04:41
Sample: 2013 2022
Included observations: 100
Cross-sections included: 1
Total pool (balanced) observations: 100

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.089935	0.030651	2.934137	0.0042
DEBT_RATIO	-0.023650	0.047758	-0.495200	0.6216
INVT	-0.000872	0.003445	-0.253194	0.8007
CR	0.012130	0.016063	0.755126	0.4520
Fixed Effects (Cross)				
FIRMS--C	-4.82E-17			

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.008008	Mean dependent var	0.087277
Adjusted R-squared	-0.022991	S.D. dependent var	0.077698
S.E. of regression	0.078586	Akaike info criterion	-2.210073
Sum squared resid	0.592870	Schwarz criterion	-2.105866
Log likelihood	114.5037	Hannan-Quinn criter.	-2.167899
F-statistic	0.258336	Durbin-Watson stat	0.660892
Prob(F-statistic)	0.855223		

Source: Researcher's computation, 2024

It has been confirmed, using Hausman Test that the Random Effect model is the most appropriate for the study. Therefore, the Random Effect results in Table 4.6 were interpreted for the study. The table summarized the results of the regression model estimation showing the coefficients (β) of the independent variables and the intercept as well as their

probability values. The constant from the regression results (β_0) has a coefficient of 0.089935 and presented a probability value of 0.0042.

Interpretation of Results

Inventory Turnover was found to be of a positive relationship with return on investment (ROI) of consumer goods firm as indicated by a regression co-efficient of -0.000872 and this relationship is statistically significant at 5% level with a probability value of 0.8007. This result indicaed that an increase in inventory turnover would increase the return on investment of consumer goods firm listed in Nigeria.

Testing of the Hypotheses

Restatement of Hypothesis 1

H_{01}: Inventory Turnover has no significant impact on return on investment of Nigerian listed consumer goods firm

Table 5: Summary of Hypothesis One

Relationship	Coefficient	Std. Error	t-Statistic	Prob.	Decision
INVTO>ROI	0.001985	0.003432	0.578521	0.5043	Accept

Source: Researcher's computation, 2024

Results: DR (β_1 =0.001985, t= 0.578521 and p= 0.5043 > 0.05). These values indicated that inventory turnover has no significant effect on return on invesment of Nigerian listed consumer goods firm.

Decision: since the p-value < 0.05 at α= 0.05 level of significance, the first null hypothesis is rejected and we concluded that there is no significant relationship between inventory turnover and return on investment of Nigerian listed consumer goods firm.

Summary, Conclusion and Recommendations

Summary

From the findings of the study, it was summarized that inventory turnover has a significant relationship with return on investment

Conclusion

Inventory turnover has a significant role to play in determining the returns on investment.

Recommendations

From the findings, the following recommendations were made that:

i. firms should ensure that there are set controls and limits to monitor cash more appropriately.

ii. management should intensify initiatives and intellectual skills to encourage greater understanding and acceptance of working capital components that boost financial performance(profitability) of the consumer goods sector in Nigeria.

iii. management of organizations should make sure that there is development of adequate or sufficient and efficient working capital policy for the organizations

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