Global perspective of cash management for profitability of Nigerian manufacturing sectors

Iliya Bawa[1] and Mohammed Munirat Nma[2]

[1] Department of Business Administration, Federal University Lokoja Kogi State, Nigeria

[2] Department of Business Administration and Management, Federal Polytechnic Nasarawa, Nigeria

Correspondence Author: Iliya Bawa

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Abstract

Excessive investment in short term assets is capable of making a company realize low return on investment while insufficient investment in short-term assets may lead to stoppage in the production cycle, lost of customers and low inflow of cash. The study looked at cash management of Nigeria manufacturing sectors in relation to profitability. The study used historical data source from CBN statistical bulletin. The analysis was done using regression. The study concluded and recommended that companies need to remain their inflow above their outflow for them to remain in business for a long time. They also need o manage their working capital since it is the ingredient that is required to keep the production process working continuously to generate profit.

Keywords: cash management, profitability, global, relievable management, regression analysis

Introduction

Business entities are engaged in the sales of either product or services to their buyers. Raising their sales to its greatest value is also what they desire. Different policies are therefore put in place to attract buyers in an attempt to increase the volume of sales, and offering trade credit is an example of these policies. An organization making sales now but expecting payment at a specified future date is issuing trade credit. Fabozzi and Peterson (2003) [5] pointed out that accounts receivable or trade credit is created when an entity permits buyers to make payments for goods and services at a future date. Since the company will not be able to meet the need for investment in other areas with these funds until they are collected, opportunity cost is therefore associated with trade credit (account receivables). More trade credit can result to increased sales which will also increase profit but it might turn difficult to realize the effect of high opportunity cost of money invested in trade credit and unrecoverable debts. Therefore, it is needful for the credit managers to make careful analysis and prudently manage the trade credit of the organization.

Statement of the problem

The primary aim of managing liquidity is to enhance the generation of profits of business entities and to make sure that they have enough working capital to carry out short-term financial obligations as the need arise and remain vibrant in their businesses. This is most necessary in the manufacturing industry, since inefficient working capital management might result to illiquidity, which is capable of triggering firm distress. Liquidity is not negotiable in manufacturing firms. A proper trade-off (optimal mix) must be achieved between profitability and liquidity in order to ensure that neither insufficient nor excessive funds are invested in current assets. Management of short-term resources is one of the significant aspects of corporate finance because of its direct correlation with the ability of firms to generate profit. Mbawuni, Mbawuni and Nimako (2016) [8], concluded that circulating capital and profitability form two major and important aspects of companies. None of the two should be considered more important than the other. For example, profit generation should not be pursued at the expense of liquidity and vice versa. A reasonable percentage of failures in business have been linked to inefficient planning and control of the short-term resources and liabilities by the financial managers. Researchers have discovered that liquidity was one of the main causes of the world financial crisis experienced in 2008. Excessive investments in short-term assets is capable of making a company realize low return on investment while insufficient investment in short-term assets may lead to stoppages in the production cycle, lost of customers and low inflow of cash. Hence business organizations in Nigeria need efficient working cash management.

Objectives of the study

This study intend to look at cash management of Nigeria manufacturing companies in relation to profitability as they embark in international transaction

Literature Review

Cash Management

Cash management is a valuable asset in an organization, therefore, the need to ascertain the most favorable level of cash needed within an operating cycle, depending on the nature of business of an entity is the purpose for cash management. Brealey and Myers (2003) [4] pointed out that cash is paramount to the prosperity and survival of an entity, and basically indicates how well a business is doing. Included in cash is the money at bank and in hand. Cash is needed by companies for transaction and speculation purposes. Cash provides more liquidity than marketable securities and is considered crucial for the smooth running of an organization. Investing in securities can for certain earn an entity some interest but when

need arise for settlement of obligations, the need for cash will arise and converting these securities to cash will attract transaction cost. Therefore, it is fairly possible that the benefit for holding marketable securities may be less than their cost. It is justified for firms to maintain a cash reserve but how much cash should a firm have? The fact that insufficient cash may take an organization to the point where paying its short-term liabilities will not be possible make this question very critical. Maintaining excess cash on the other hand will not yield any return. In cash management, it is a challenging task to strike a balance between marketable securities and cash to a suitable level where risk of too little funds for business activities and opportunity cost of maintaining excess cash is decreased (Filbeck, Krueger & Preece, 2007) [6]. As a result, how competent an entity is in harmonizing inflows and outflows of cash for the formulation of strategy for cash management by employing the use of cash budgeting and forecasting is pertinent for any organization.

Receivable Management

Maximization of the firm value by realizing a trade-off between profitability and risk is the objective of receivables management. Therefore obtaining the most favorable value of sales, and controlling costs of receivables, collection, unrecoverable debts, administrative expenses and the costs of forgone alternative of resources blocked in the trade credits should be done by the finance manager. Furthermore, maintaining the book debts at its minimum with regard to the policy of the firm pertaining credits offered to customers as well as taking into consideration the cost of receivable and cost of forgone alternative of resources stuck in the receivables when offering suitable cash discounts should be done by the financial manager (Gallagher & Joseph, 2000) [7]. In short, management of trade credit needs cost and benefit analysis. Business entities are engaged in the sales of either product or services to their buyers. Raising their sales to its greatest value is also what they desire. Different policies are therefore put in place to attract buyers in an attempt to increase the volume of sales, and offering trade credit is an example of these policies. An organization making sales now but expecting payment at a specified future date is issuing trade credit. Fabozzi and Peterson (2003) [5] pointed out that accounts receivable or trade credit is created when an entity permits buyers to make payments for goods and services at a future date. Since the company will not be able to meet the need for investment in other areas with these funds until they are collected, opportunity cost is therefore associated with trade credit (account receivables). More trade credit can result to increased sales which will also increase profit but it might turn difficult to realize the effect of high opportunity cost of money invested in trade credit and unrecoverable debts. Therefore, it is needful for the credit managers to make careful analysis and prudently manage the trade credit of the organization.

Empirical Review

Okwo, Ugwunta and Agu (2012) [9] studied the determinants of the profitability of the Nigerian beer brewery companies. Multiple regression analysis was employed in analyzing annual data obtained from the annual reports of the sampled beer brewery companies within the period of eleven years (2000 to 2011). The outcome revealed that the ratios of inventory to cost of sales, accounts receivable to sales, and general expenses to sales have significant impact on gross profit margin. This may not really affect profitability since gross profit is not the real profit of a firm.

Abdulrasheed, Khadijat, Sulu and Olanrewaju (2011) [1] examined inventory management in Nigeria selected small businesses in Kwara State. Using regression analysis to elaborate the impact of inventory value on performance measured by profit over a period of ten years, the research revealed that one Naira change in inventory would cause almost one Naira (92 Kobo) change in profitability of the selected businesses. Outcome indicated a significant positive association among inventory and profitability of small businesses in Kwara State of Nigeria. They therefore inferred that more profit can be made by small business if their inventories are effectively managed. In spite of the fact that there will be rise in profitability as a result of rise in sales, if the costs withheld in circulating capital are more than the benefits of maintaining additional stock and/or allowing more trade credit to buyers, it may have unfavorable impact on profitability.

Angahar and Agbo (2014) [3] also carried out an investigation on the effect of liquidity management on profitableness of cement industry in Nigeria during the period 2002 to 2009 (eight years). Data were collected from four cement companies listed on the Nigeria capital market. Multiple regression analysis and descriptive statistics were used to analyze the data gathered. The investigation discovered that negative insignificant correlation exist between accounts receivable days and profitability. Significant negative relationship was also found to exist between the profitableness of the cement companies and the inventory conversion period. Finally, the work also found that the link between the cash conversion cycle and profitability is significantly positive.

Theoretical Framework

Pecking Order Theory

Donaldson in 1961 introduced Pecking Order Theory and it was improved upon by Stewart C Myers and Nicolas Majluf in 1984. This theory states that the cost of financing a business goes higher when one party has better information for decision than the other (asymmetric information). Businesses are financed from retained earnings, debt and new equity. When companies want to raise funds they will prefer internal financing, debt and then issuing new equity, respectively. The pecking order theory makes predictions about the maturity and priority structure of debt. In most cases short term debt are considered first before long-term debt.

This theory avers that business entities prioritize their sources of financing according to the law of least effort. It indicates clearly that companies will always prefer internal sources of finance to external sources. External sources of finance are regarded as "last resort". Usually companies raise the bulk of their finance internally when they are prosperous. But when internal finance is not enough or available then they will issue debt beginning with the cheapest and the safest debt, then bonds and once this is exhausted they then issue hybrid securities like convertible bonds until it is no longer reasonable to issue any more debt, then new equity is issued. Akinsulire (2008) in summary, this theory maintains that companies obey a hierarchy of financing sources and desire internal financing

when available and debt is preferred over equity whenever external financing is required.

Research Methodology

The study adopt expost-factor research design and the secondary data used for the study were historical data sourced from the CBN statistical bulletin.

Data Presentation

This section presents the data collected and interprets the results obtained from quantitative research. Data on import, export, total trade, foreign direct investment inflows and balance of trade and Gross Domestic Product are presented below.

Table 1

Year	Foreign Direct Investment (Inflow)	Total Trade	Total Import	Total Export	Balance of Trade	Gross Domestic Product at Current Basic Prices
2002	8988.50	3256.87	1512.70	1744.18	231.48	11332.25
2003	13531.20	5168.12	2080.24	3087.89	1007.65	13301.56
2004	20064.40	6589.83	1987.05	4602.78	2615.74	17321.30
2005	26083.70	10047.39	2800.86	7246.53	4445.68	22269.98
2006	41734.00	10433.20	3108.52	7324.68	4216.16	28662.47
2007	54252.20	12221.71	3911.95	8309.76	4397.81	32995.38
2008	37977.70	15980.87	5593.18	10387.69	4794.51	39157.88
2009	56297.30	14086.98	5480.66	8606.32	3125.66	44285.56
2010	65130.40	20175.45	8163.97	12011.48	3847.50	54612.26
2011	72428.40	26232.53	10995.86	15236.67	4240.80	62980.40
2012	80822.50	24905.88	9766.56	15139.33	5372.77	71713.94
2013	90526.80	24701.44	9439.42	15262.01	5822.59	80092.56
2014	93411.30	23499.27	10538.78	12960.49	2421.71	89043.62
2015	94218.40	19921.23	11076.07	8845.16	-2230.91	94144.96
2016	96255.30	18315.98	9480.37	8835.61	-644.75	101489.49
2017	98292.20	24792.99	10804.85	13988.14	3183.30	113711.63
2018	99065.90	32725.15	13445.11	19280.04	5834.93	127762.55

Source: CBN Statistical Bulletin, 2019

Regression Analysis

Table 2: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-598.983	4929.673		-.122	.905
	Foreign Direct Investment (Inflow)	.225	.211	.195	1.066	.307
	Total Import	4.414	1.482	.469	2.979	.012
	Balance of Trade	.728	.959	.045	.759	.462
	Total Trade	10.348	1.675	2.355	6.179	.000
	Total Export	-11.740	2.964	-1.510	-3.962	.001

a. Dependent Variable: Gross Domestic Product

Regression equation results

GDP = -598.983 + 0.225FDII + 4.414IMP + 0.728BOT + 10.35TT – 11.74EXP

(-0.122) (1.066) (2.979) (0.759) (6.179) (-3.962)

* The parenthesized figures below the coefficients are the t-values.

Table 3: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.984[a]	.968	.958	7631.60149	1.072

a. Predictors: (Constant), Balance of Trade, Foreign Direct Investment (Inflow), Total Import, Total Trade, Total Export

b. Dependent Variable: Gross Domestic Product

Multiple R: 0.984

R-Square: 0.968

Adjusted R-square: 0.958

Standard Error: 7631.60149

F- Statistics: 91.262

Durbin Watson: 1.072

Findings

Foreign Direct Investment Inflow is found to be positive at a t–ratio of 1.066 and it has a positive impact on Gross Domestic Product, having the value of its coefficient as 0.225. The sign indicate that coefficient of Foreign Direct Investment Inflow is positively related to Gross Domestic Product.

Total Import is found to be positive and significant at a t– ratio of 2.979. It has a positive impact on Gross Domestic Product, having the value of its coefficient as 4.414. The sign indicate that Total Import is positively related to Gross Domestic Product.

Balance of Trade is found to be positive and insignificant at a t– ratio of 0.759 and it has a positive impact on Gross Domestic Product, having the value of its coefficient as 0.728. The sign indicate that Balance of Trade is positively related to Gross Domestic Product.

Total Trade is found to be positive and significant at a t– ratio of 6.179 and it has a positive impact on Gross Domestic Product, having the value of its coefficient as 10.348. The sign indicate that coefficient of Total Trade is positively related to Gross Domestic Product.

Total Export is found to be negative and insignificant at a t–ratio of -3.962. It has a negative impact on Gross Domestic Product, having the value of its coefficient as -11.740. The sign indicate that Total Export is negatively related to Gross Domestic Product.

Coefficient of determination (R^2)

The R-Square is 0.968, which suggests a strong positive relationship between the dependent variable that is: Gross Domestic Product and the independent variables: Foreign Direct Investment (Inflow), Total Trade, Total Import, Total Export, Balance of Trade and Gross Domestic Product at Current Basic Prices. The adjusted R^2 of 0.958 suggests that 96% of the total change in Gross Domestic Product can be attributed to the Independent variables.

Table 4: Anova[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.126E10	4	5.315E9	91.262	.000[a]
	Residual	6.989E8	12	5.824E7		
	Total	2.196E10	16			

a. Predictors: (Constant), Balance of Trade, Foreign Direct Investment (Inflow), Total Import, Total Trade, Total Export

b. Dependent Variable: Gross Domestic Product

F-Test

If F*>F, we reject the null hypothesis and if otherwise, we accept the null hypothesis. Given the results on the ANOVA table, the observed F* = 91.262

At 5% level of significance, our theoretical F, given our level of significance and degree of freedom is $F_{0.05}$ = 91.262 comparing these values

$F^* > F_{0.05}$

i.e. 91.262 > 3.23

The conclusion from such result is that we reject our null hypothesis that all bi are zero and accept our alternative hypothesis that all bi different from zero.

Discussion of findings

Nigerian companies just like their counterparts all over the world, make use of cash for efficient operation. To ensure that the set standard is complied with, these companies plan for and maintain their cash and inventories among others. Materials are required for manufacturing products; finished stocks are required to satisfy customer needs, sales and return target of companies. The liquidity requirement of Nigerian companies is necessitated by cash. Nigerian companies create account receivable by granting trade credit due to the economic situation and its effects on income of buyers in Nigeria. The remaining circulating capital at the disposal of Nigerian companies is efficiently utilized to avoid disconcert in operations.

The circulating capital of organizations in Nigeria has been badly affected because of inefficient use by companies, degraded infrastructure, fluctuating monetary policies, unavailability of local raw materials, fluctuating foreign exchange market low level of per capital as well as disposable income, multiple taxation, high finance cost among others. The liquidity position for these companies is undesirable because of high finance cost for obtaining bank loans for settlement of current liabilities and defective trade credit terms to buyers. The financial distress of Nigerian firms has been worsened due to multiple taxes from the local, state and federal government. Fluctuating foreign exchange and monetary policies influences imported raw materials in Nigeria. The stock of raw materials is therefore influenced by insufficient foreign exchange, poor transportation network and delays in clearing at the Nigerian port. Therefore the manufacturing activities of companies in Nigeria as well as supply of goods to buyers are affected. These elements also affect importers of finished products. Bad transportation facilities has obstructed transportation of raw materials to manufacturers and finished products to buyers within Nigeria. The purchases of company's goods have been affected by low per capital and disposable income of buyers in Nigeria. This is unfavorable to maintaining huge stock with attendant costs. The just-in-time system is therefore preferred by organizations because dilapidated facilities do not negatively affect it.

Conclusion

Profitability is the reason why businesses keep operating. Thus it is important for a firm to find the ways that will help it maximize its profitability and reap the full potential. Profitability is the return that companies get from investing in particular assets and the profitability of shareholders or equity holders is the returns that they get on the money they have invested. Thus, a business that wants to perform excellently well requires enough resources that will be efficiently managed for continuous existence of the business, enhancement in profits and general performance.

Recommendations

Companies need to keep their inflow above their outflow for it to remain in business for a long time. On the other hand, they also needs to properly manage their working capital since it is the ingredient that is required to keep the production process working continuously to generate profit. Business organizations can attain their profit maximization goal and maintain liquidity through effective and efficient management of short-term assets and liabilities; proper working capital management makes it possible for businesses to operate both efficiently and profitably. Profit making is the main reason why shareholders release their hard earned scarce resources to make investment in companies; therefore, managers should ascertain the possibility of current assets making reasonable return before making investment.

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