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Cash conversion cycle and profitability of listed consumer goods companies in Nigeria

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Abstract
Cash conversion cycle is a significant financial unit that used to determine the efficiency of converting organization's inventory into sales and orderly into cash. It is also one of most widely used measure in liquidity management on assessing capabilities of current assets and liabilities. To be successful and remain into existence, profitability would necessarily have concerned by organizations at their business operations. The objective of the study was to ascertain the effect of Cash Conversion Cycle on consumer goods companies' firms in Nigeria. The study used the ex-post facto research design. The population for the study comprised quoted Consumer Goods Companies on the Nigerian Stock Exchange (NSE). The sample size of the study was ten quoted consumer goods companies purposively drawn from all the consumer good. The study focused on secondary data sources; obtained from annual financial reports and accounts. The dependent variable was proxied as cash flow from operations scaled by revenue. The data was analysed using correlation analysis and panel data regression. The sensitivity and robustness check were done using Robust Least Squares. The study results showed that inventory turnover period had a negative significant effect; secondly, average collection period had a non-significant negative effect. The study recommends that managers monitor inventory levels to ensure that unnecessary funds are not tied up in inventories. Therefore, it can be concluded that, there is a significant relationship between cash conversion cycle and firm's profitability in consumer goods Companies operating in Nigeria by implying that there is a severe need to address on working capital requirement issues appropriately.

Keywords: Cash Conversion Cycle, Profitability

1. Introduction

The cash conversion cycle was introduced by Richards & Laughlin (1980) who proposed it as a dynamic indicator in liquidity analysis. As it became part of the financial management education and textbooks it has drawn the attention of many other authors. As such it has been used as a metric for working capital management (see Hutchison, Farris II, & Anders, 2007; Lind, Pirttilä, Viskari, Schupp, & Kärri, 2012) and was incorporated in practitioner journals (Cagle, Campbell, & Jones, 2013). Research was extended to the study of the impact of the CCC on firm's profitability (see Deloof, 2003; Shin & Soenen, 1998; Yazdanfar & Öhman, 2014). The concept has been incorporated in the study of a network of firms in the context of supply chain management (Grosse-Ruyken, Wagner, & Jönke, 2011; Pavlis, Moschuris, & Laios, 2018). Given its relevance and importance in financial management and analysis, the cash conversion cycle is a concept included in the cost per action (CPA) and Chartered Financial Analyst (CFA) exams, and available in common financial information systems, such as Bloomberg terminals.

Technically a cash conversion cycle can be traced for each item from sourcing of raw

materials, to work-in-progress, the sale and payments for finished goods and payment for the purchases needed for production. In reality, it is difficult to track a large number of individual transactions taking place on an on-going basis. Therefore, cash conversion cycle is typically estimated using firm-wide accounting data. In particular, the cash conversion cycle is derived from three components: inventory conversion period, receivable conversion period, and payable deferral period. The following is a generally accepted formula that determines the cash conversion cycle.

The cash conversion cycle (CCC) is frequently used as a measure of working capital management. Therefore, it refers to the end of period between the spikes at which a firm pays for raw materials and at which it secures payment for finished goods (Megginson, Smart & Graham, 2010). Cash Conversion Cycle employed components such as inventory conversion period (ICP), average collection period (ACP) and average payment period (APP) as proxies of working capital management, consistent with other studies such as Omesa, Maniagi, Musiega and Makori (2013); Hassan, Imran, Amjad and Hussain (2014); and Kumaraswamy (2016). Singh and Kumar (2014) argued that a longer Cash Conversion Cycle means more investment in short term assets and short-term liabilities, which has a negative impact on cashflows and firm performance. However, managing working capital by reducing the Cash Conversion Cycle to a minimum level, generally, leads to an increase in profitability (Deloof, 2003; Karaduman, Akbas, Caliskan & Durer, 2011).

Profitability is the primary goal of all business ventures. Without profitability the business will not survive in the long run. So, measuring current and past profitability and projecting future profitability is very important. Profitability is measured with income and expenses. Income is money generated from the activities of the business. For example, if crops and livestock are produced and sold, income is generated. However, money coming into the business from activities like borrowing money do not create income. This is simply a cash transaction between the business and the lender to generate cash for operating the business or buying assets. Expenses are the cost of resources used up or consumed by the activities of the business. For example, seed corn is an expense of a farm business because it is used up in the production process. Resources, such as a machine whose useful life is more than one year, are used up over a period of years. Repayment of a loan is not an expense; it is merely a cash transfer between the business and the lender. Profitability is measured with an "income statement." This is essentially a listing of income and expenses during a period of time (usually a year) for the entire business. Whether you are recording profitability for the past period or projecting profitability for the coming period, measuring profitability is the most important measure of the success of the business. A business that is not profitable cannot survive. Conversely, a business that is highly profitable has the ability to reward its owners with a large return on their investment. Increasing profitability is one of the most important tasks of business managers. Managers constantly look for ways to change the business to improve profitability.

Profitability in a firm measure management's dimensions to use a firm's assets proficiently to generate sales and make profit (Parrino, Kidwell & Bates, 2011). For instance, the greater the profitability ratios, the better firm performance will be. Using gross operating profit (GOP) to measure profitability, it is defined by Almazari (2014), as the cost of goods sold from the total assets of the company's production. Profitability is the ability of a business to earn a profit. A profit is what is left of the revenue a business generates after it pays all expenses directly

related to the generation of the revenue, such as producing a product, and other expenses related to the conduct of the business activities.

There are many different ways for you to analyze profitability. This lesson will focus on profitability ratios, which are a measure of the business's ability to generate revenue compared to the amount of expenses it incurs. Let's look at a few of the primary analytical approaches.

Profitability is a situation in which an entity is generating a profit. Profitability arises when the aggregate amount of revenue is greater than the aggregate amount of expenses in a reporting period. If an entity is recording its business transactions under the accrual basis of accounting, it is quite possible that the profitability condition will not be matched by the cash flows generated by the organization, since some accrual-basis transactions (such as depreciation) do not involve cash flows. Profitability can be achieved in the short term through the sale of assets that garner immediate gains. However, this type of profitability is not sustainable. An organization must have a business model that allows its ongoing operations to generate a profit, or else it will eventually fail. Profitability is one of the measures that can be used to derive the valuation of a business, usually as a multiple of the annual amount of profitability. A better approach to business valuation is a multiple of annual cash flows, since this better reflects the stream of net cash receipts that a buyer can expect to receive. Profitability is measured with the net profit ratio and the earnings per share ratio. The net profit ratio compares after-tax profits to revenues, while the earnings per share ratio presents profits on a per-share basis.

Research has been conducted on the management of working capital and profitability in developed economies and how to make difference in company development, scholarly work has been done in developing and emerging market economies (Makori & Jagongo, 2013; Mbithi, Muiruri & Kingi, 2015). It is important to manage work capital adequately since it has a direct effect on profitability, liquidity and growth of the firm (Atrill, 2006). Mathuva (2010) contends that if firms have substantial sales owing to soft credit policy, this, in the long run, enhances the cash cycle. Hence, an extensive Cash Conversion Cycle, in this case, may increase the firm’s profitability. On the other hand, a traditional view concerning the CCC and profitability relationship is that an extensive cycle can hurt the profitability of the firm (Deloof, 2003). As a result, financial managers of these firms need to look after working capital carefully to improve their firm's profitability, in order avoid suffering financial loss emanating from spoilage products, a problem generic to the industry. Therefore, this study aimed to assess the Cash Conversion Cycle and Profitability of food consumer firms in Nigeria. Therefore, to examine this particular topic in consideration with the firms focus on perishable and fast-moving consumer goods, requiring them to turn over inventory quickly and to generate high sales volumes, while simultaneously maintaining adequate inventory levels without running out of stock, it need to assert and employ different working management capital strategies from those of companies in other industries such as manufacturing or retail.

Cash Conversion Cycle has been one of the major causes of business failures in Nigeria (Kosgey & Njiru, 2016). A large number of business failures in the past had been blamed on the manager’s inability to plan and execute those plans effectively (Dwommor 2017) noted that poor working capital management is the primary cause of business failure. It creates more inadequacies in the proper operations of a business, such as high bad debt, mismanagement of funds and reduction of liquidity on a large scale. The need to protect the interest of stakeholders is the

reason for further enlightenment of managers on proper care of resources.

2. Literature Review

The cash conversion cycle (CCC) is a process by which firms follow a cycle in which they purchase inventory, sell goods on credit and then collect accounts receivable (Brigham & Daves, 2010). There are three components of CCC such as inventory conversion period (ICP), average collection period (ACP) and average payment period (APP) (Knight 2017). ICP measures the time required to change raw materials into finished goods and then to sell those goods (Besley, Brigham & Sibindi, 2015). While, ACP is defined as the time taken to gather cash from consumers (Makori & Jagongo, 2013). Furthermore, APP is the average length of time between the purchase of raw materials and labour and the payment of cash for them (Besley et al., 2015). On the other hand, profitability enables financial analysts to estimate the firm's profits regarding a given level of sales, a certain level of assets (Agha & Mphil, 2014).

Every organisation needs efficient management of its short-term and long-term assets to ensure its sustained growth. In as much as crucial decisions of any firm primarily focus on long-term investment and assets, it in most cases results in financial managers not considering the importance of working capital (Singhania & Mehta, 2017). Yet in the present intense and uncertain financial markets, it restricts external financing for short-term assets and liabilities, thus they need to be managed effectively (Singhania & Mehta, 2017). In their pioneering work, Walker (1964) and Smith (1980) contend that managing working capital is crucial to firm survival since it affects a firm's profitability and risk; and ultimately the firm and shareholder value. In the process of managing a firm, an asset-liability mismatch may arise, resulting in an improvement in profitability in the short run, yet threatening liquidity. In showing how changing the level of the company's current assets ratio influences its profitability and risk, the trade-off will be indicated by using the current assets to total assets ratio. This ratio shows the percentage of total assets that is current (Gitman et al., 2010).

2.1 Concept of Cash Conversion Cycle

The level of accounts receivables, payables and inventories affects the liquidity position of the firm, while current and liquidity ratios have recognized traditionally. Both these ratios are static and their appropriateness for liquidity analysis is questionable. Jordan and Jordan (2013) state that CCC is an important metric in companies that rely heavily on cash management policies. Cash management decision is a very important decision considering cash is the most liquid assets to be used in the company's operations. The existence of cash will greatly affect the performance of the company to compete in the market. Cash management policies and procedures depend on the company's financial situation and should be consistent with competitors' policies in the market so that the company can compete and survive. The ultimate goal is having low CCC, if possible negative on account of the shorter cash conversion cycle, more efficient the company in managing its cash flow.

The cash conversion cycle depicted the interrelationship of sales, cash collections, and trade credit in a manner that the individual numbers may not. To the extent a firm uses credit, the length of the cash (operating) cycle is reduced.

CCC produces a significant impact on the financial habit of the business, which is Return on Equity (ROE) and Return on Assets (ROA). Both ratios were employed as a proxy for profitability in this study. Concentrating on the cash conversion cycle through administrative control of receivables, stock inventories, and payables. The CCC provides for liquidity and profitability creation (Hossain, 2020). Additionally, inventory stock management

surely requires liquidity from management to maximize profitability. Examining the effect of the CCC decision on gross profit (GP) as a measure of firm performance. It comes from an optimistic partnership between the CCC and the GOP. Numerous investigations, however, have initiated an adverse link between the CCC and firm monetary performance (Doan & Bui, 2020). Shah (2019) examined the impact on ROA and ROE of account receivable turnover, inventory turnover, account payable in days, and cash conversion processes and initiated an adverse relationship between CCC and its components. The results revealed an unfavourable association between ROA and the cash conversion cycle. Notably, the difference in Tobin's Q model shows that CCC had no meaningful impact on companies' net worth (Sawarni et al., 2020).

2.1.1 Inventory and Inventory Conversion Period (ICP)

Inventory management is typically much more complicated for exporters in general and for multinational companies in particular, than for purely domestic firms. The product and manufacturing economics of scale that might be expected from selling products globally may prove elusive if product must be tailored for individual local market, as very frequently happens, or if actual production takes place in factories around the world (Gitman, 2003). Inventory affects both income statement as well as balance sheet. Through income statement, inventory is a vital part in determining result of operation of a particular period of balance sheet. Ross et.al (2003) defined inventory as composed of raw material to be used in production, work in process and finished goods. Furthermore, inventory divided into two categories such as optimum inventory and average inventory. The optimum inventory is an exact amount of inventory which is required to support immediate production needs while average inventory is the additional inventory beyond the minimum inventory required supporting immediate production requirements (Farris & Hutchison, 2002).

2.1.2 Account receivables and Account Receivable Conversion Period (RCP)

Accounts receivable is a series of accounting transactions that dealt with the billing of customers for goods and services received by the customers. In most business entities this is typically done by generating an invoice, mailing or electronically delivering it to the customers point, who in turn must pay. Inventory Conversion Period measures the average time needed to turn a company's inventory into sales revenue. Generally speaking, the shorter the C1 period is, the better the company's liquidity. If product handling time from inventory to sales is too long, it will reflect on the day number of CCC. That is, such a company has a bad liquidity. On the other hand, the current ratio is a static equation, which contains inventory and accounts receivable into current assets. Thus, it is difficult to see such liquidity level by using the current ratio only.

2.1.3 Account Payables and Payable Conversion Period (PCP)

Accounts payable are the major source of unsecured short-term financing for business firm. They result from transactions in which merchandise is purchased but no formal note is signed to show the purchaser's ability to the seller. The purchaser agrees to pay the supplier's amount that required in accordance with credit terms normally stated on the supplier's invoice (Gitman, 2003). Payable Deferral Period measures the time a company defers the payment of accounts payable (without paying interest). Longer deferral implies a benefit to working capital. But the reduction of current ratio (and quick ratio) caused by deferred accounts payable may instead cause concern about the company's liquidity instead. Cash Conversion Cycle (CCC) is the summarization of these three periods,

which indicates the operating cycle for cash inflow and outflow of a company from purchasing raw materials, settling cash expense resulting from production costs, to selling the products, creating accounts receivable and converting accounts receivable into cash. In theory, smaller CCC values implies better working capital management. If a company has an excellent working capital management, then its CCC value may even be negative.

2.2 Concept of Profitability

Profitability is the ability of a business to earn a profit. A profit is what is left of the revenue a business generates after it pays all expenses directly related to the generation of the revenue, such as producing a product, and other expenses related to the conduct of the business activities.

There are many different ways for you to analyze profitability. This lesson will focus on profitability ratios, which are a measure of the business's ability to generate revenue compared to the amount of expenses it incurs. Let's look at a few of the primary analytical approaches.

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Profitability is one measure for the performance of a company. Profitability of a company shows the ability of a company in generating profits during a certain period at a certain level of sales, assets and capital stock (Hanafi, 2004). Increasingly losing companies increasingly high probability of financial distress (Andre, 2013). Negative relationship profitability of the company on the probability of financial distress in an enterprise supported by research conducted by Andre (2013) and Gobenvy (2014). This means that the higher profitability of the company the possibility of companies experiencing financial distress in the future will be smaller.

2.3 Empirical Review

Chuke, Elias and Ibe-Lamberts (2018) investigated the effect of CCC on the return on assets (ROA) of selected Nigerian quoted insurance firms for the period (2000–2011). The ROA is used as a measure of profitability. Data were collected from the annual financial reports of sampled insurance companies. Multiple regression technique was used in analyzing the model for testing the hypotheses. ROA was used as the dependent variable. While CCC was presented as the explanatory variable, current ratio, debt asset ratio, fixed financial total asset ratio, Growth and Size were all incorporated in the model as control variables. The results indicated that CCC had negative and significant effect on profitability.

Musa and Norhani (2017) investigate the relationship between cash conversion cycle and firm performance of small and medium-sized entities (SMEs) in Nigeria. SMEs are potentials for Nigerian economy

growth; contributing to gross domestic product, employment generation, poverty reduction and industrialization. The study employed the panel data regression analysis using financial data from a sample of 311 Nigerian SMEs for the period 2007-2013. The findings of the study revealed a negative association between cash conversion cycle, inventory holding period and accounts payable period with SMEs profitability; and a statistically significant negative relationship between accounts receivable period and SMEs' profitability. The findings also found a significant positive relationship between firm size, leverage, growth opportunities and firm age and SMEs' profitability. Thus, the result of the study indicates that Nigerian SMEs with a shorter cash conversion cycle and low growth.

Murtala and Sani (2016) empirically found the effect of cash conversion cycle on corporate profitability of the ICT firms listed on the floor of the Nigerian Stock Exchange. Data are collected from all the listed firms from 2010 to 2014. The data are analyzed using multiple linear regression analysis and the robustness check shows that the data are normal. The findings indicate significant positive relationship between cash conversion cycle and corporate profitability.

Kabiru, Aliyu and Usman (2019) examined the impact of cash conversion cycle on the profitability (ROE and ROA) of listed cement companies in Nigeria. Panel data were extracted from the annual report and accounts of the companies for the period 2008-2017 and are analyzed using descriptive statistics, correlation and multiple regression technique via STATA 13.0 software. Findings from the study revealed that cash conversion cycle has anegative significant relation with return on equity whereby positive significant relationship where foundwith return on Assets

Godswill, Ailemen, Osabohien, Chisom and Pascal (2018) examined working capital management and bank performance of 10 deposit money banks in Nigeria from 2010 to 2016. Their findings highlighted that the management of working capital has a significant impact on bank profitability, when profitability is assessed using the return on assets proxy. Kabuye, Kato, Akugizibwe and Bugambiro (2019) considered the effect of internal control systems, and working capital management on financial performance of 110 supermarkets in Uganda, through a survey questionnaire. Their findings suggest that short-term assets and liabilities are a significant predictor of financial performance of firms. They argue that once the firm has effective short-term assets and liabilities, it is expected to also have effective internal control systems to improve financial performance (Kabuye et al., 2019).

In line with the above, the following hypotheses were developed:

H0: What is the effect of branding on consumer buying behavior

H0: There is no significant impact of inventory conversion cycle on profit after tax.

H0: There is no significant effect of average payment period on profit after tax.

2.4 Theoretical Review

Two key theories underpin working capital management, they are derived from capital structure aspects of financial management. The first is Jensen and Meckling's (1979) agency theory, which posits that there should be a separation of ownership between managers of the firm (agents) and shareholders of the firm (principal). Conflicts between agent and principal could have a negative impact on investment and other financial management decisions for the firm by managers. The theory further states the agency relationship there is a contract in which the principal gives the task the agent to perform a service on behalf of the principal and authorized the agent to make the best decisions for the principal.

Principal employs an agent to perform tasks related to company operations including economic decision making, not least when the company in financial distress. Agent as a manager will make decisions for various strategies in order to maintain the company's business continuity. The other applicable theory is Myers' (1984) pecking order theory which relates to the choice of source of funding for firms. Assuming that there is no agency problem between managers and shareholders, then firms would ideally use internal funds such as retained earnings, followed by debt and lastly the issuance of new equity shares in order to finance the business. Such action by managers would thus allow the firm to maximize profits and earnings by using low-cost internal funding, which would later relate to higher shareholder in an increased share price (Nyeadi, Sare and Aawaar, 2018).

3. Methodology

The study adopted ex-post facto research design and the population is 10 consumer goods companies listed on the Nigerian stock exchange during the period of study. The study uses judgmental sampling techniques to select the sample based on the following criteria: Companies must remain listed on the Nigerian Stock Exchange (NSE) during the 2016 – 2021 periods. Companies must have complete financial statements for the period under review and companies must be operational within the period under investigation. The study collected data from secondary source such annual financial statement of the selected firms. To analyze the panel data, the researcher used Pearson's Product Moment Correlation Coefficient and regression analysis which is used to describe and evaluate the relationship between the given variables.

3.1 Variable Description

In order to analyze the effects of cash conversion cycle on the firm's profitability, Operating Income is given as the dependent variable, while the independent variables, cash management was measured by cash conversion cycle (CCC). Cash conversion cycle focuses on the length of time between when a firm makes payment and when firm receives cash inflow.

Cash conversion cycle is calculated as the number of days of average trade debtors (ATD) plus the number of days of average trade inventories (ATI) minus the number of days of average trade creditors (ATC). In this respect, ATD is calculated as Average trade debtors/ (sales/365). ATD represents the number of days that a firm takes to collect payments from its customer. ATI is calculated as Average trade inventories/ (cost of sale/365). This variable reflects the average number of days of stock held by a firm. ATC is calculated by Average trade creditors / (cost of sale/365). This measure indicates the average time firm takes to pay their suppliers.

Control Variables

Control variables are introduced as the growth in firm sales and its leverage. Sales growth (SG) is calculated as: (Sales1 – Sales0)/Sales0. The leverage (DR) measured by debt ratio is calculated thus: Total debt divided by Total asset. In addition, current ratio (CR) which is calculated by dividing current asset by current liability was included as one of the control variables.

3.2 Model Specification

Seemingly unrelated regression (SUR) was the main method used to identify the combination of variables that best estimated the influence of the independent variables on the dependent variable. This model is appropriate when the sample consists of panel data, which can suffer from error terms considered to be correlated across the equations (Zellner and Theil, 1962). Moreover, despite this advantage, to our knowledge, the SUR model has not yet been used to analyse the impact of CCC on profitability.

The following model was formulated to identify and quantify the variables that explain the impact of CCC and of the

control variables (i.e. size and age) on profitability in the sample of Nigerian Consumer goods firms.

The Equation is thus:

Operating Income= *F (Cash Conversion Cycle; Current Ratio; Debt ratio and Sales Growth)*

The Econometric Model is as follows: OI = *b0*+ *b1*CCCt+ *b2*CRatiot+ *b3*DRatiot+*b4*SGt

4. Results and Discussion

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Operating income	75	-.04542	.49027	.1786098	.12414367
Cash conversion	75	-230	184	34.12	75.257
Profitability	75	.07326	3.18086	1.2229419	.55653774
Debt ration	75	.24550	1.11822	.6302424	.19142402
Sales growth	75	-.38319	2.00610	.1964643	.29325020
Current ration	75	-.25791	3.10064	.2140312	.41054300

Source: Researchers calculation

The results from the descriptive statistics show the average operating income for the whole sample at17.86% with a standard deviation of 12.41%. The Cash Conversion Cycle portrays an average of 34 days with a standard deviation of 75 days. This indicates that on the average it takes 34 days before cash is collected from sales measured from when the inventory is actually paid for in the manufacturing industry. The average current ratio is 1.2 with a standard deviation of 0.56. On average the manufacturing firms' Sales growth is also seen to be 19.64%.

Table 2: Correlation Result

		Operating income	Cash conversion	Profitability	Debt ratio	Sales growth	Current ration
Operating income	Person correlation	1					
	Sig, (2-tailed)						
	N	75					
Cash conversion	Person correlation	-.228(*)	1				
	Sig, (2-tailed)	.049					
	N	75	75				
Profitability	Person correlation	.036	.527(**)	1			
	Sig, (2-tailed)	.759	.000				
	N	75	75	75			
Debt ration	Person correlation	-.152	-.107	-.653(**)	1		
	Sig, (2-tailed)	.193	.362	.000			
	N	75	75	75	75		
Sales growth	Person correlation	.245(*)	-.222	-.199	-.056	1	
	Sig, (2-tailed)	.034	.056	.088	.0634		
	N	75	75	75	75	75	
Current ration	Person correlation	.245(*)	-.222	-.199	-.056	-.026	1
	Sig, (2-tailed)	.032	.049	.098	.0741	.0913	
	N	75	75	75	75	75	75

Source: Researchers calculation

From table 2, the correlation coefficient between cash conversion cycle and operating income is negative (-0.228), this Implies that the lower the cash conversion cycle, the higher the operating income, this also corresponds to the a priori expectation. Also, debt ratio is negatively correlated to profitability with the correlation coefficient at -0.152. However, sales growth and current ration are positively correlated to profitability with the coefficient of .036 and 0.245 respectively.

Table 3: Regression Result

	Coefficient	Significant value
Constant	0.13015	0.23904
Cash Conversion Cycle	-0.00049	0.03945
Profitability	0.04827	0.25804
Debt Ration	0.01937	0.85418
SG	0.09319	0.06497
Current ration	0.08119	0.09321
R-squared	0.1336	
Adjusted	0.0841	
F-statistic	2.699	
Sig. (F-statistic)	0.0375	

Source: Researchers calculation

From table 3, the regression coefficient relating Cash Conversion Cycle (CCC) to Operating Income (OI) is -0.00049. The result confirms a negative relationship between the cash conversion cycle and firm profitability. This negative relationship is significant at 5% and 10% (0.03945). This confirms the a priori expectation of the research that as Cash Conversion Cycle reduces, profitability of consumer firms increases. Based on the significant relationship recorded, we therefore accept the alternate hypothesis at the expense of the null hypothesis.

The implication of this is that a firm with a relatively short time of cash conversion cycle is more profitable. Therefore, reducing the firm's Cash Conversion Cycle is potential way for the firm to create additional shareholder's value. This is in line with Deloof (2003), Eljelly (2004), Shin and Soenan (1998) and Rahemen and Nasr (2007) who found a strong negative relationship between Cash Conversion Cycle and Profitability. For conventional measure of liquidity, the current ratio is positively related to profitability (0.04827). This relationship is though not consistent with the study of Shin and Soenon (1998), however the positive relationship is also not significant.

Furthermore, profitability is negatively associated with leverage (0.01937) which is measured by debt ratio. It is further interpreted that if the firm increases its debt financing, it will lead to decreasing profitability of the firm in terms of financial cost. This debt ratio coefficient exhibits a non significant relationship. For the sales growth, evidence is positively related to profitability (0.09319) and also significant at 10%. This is consistent with prior studies (Dess and Robinson (1984) and Markman and Gartner (2002), that growth is part of the feature for firm profitability and the creation of shareholder's value.

5. Conclusion and Recommendation

The research is set to determine the Cash Conversion Cycle and firm profitability using a sample of consumer goods firms in Nigeria. In conveying the above work, the researcher uses operating profit (OP) as a proxy of profitability, tested against different components of working capital.

This action should however be used cautiously to ensure that the firms' credibility to meet short term obligations as they fall due, is not tarnished.

Therefore, going by the above research, it was able to conclude that the need for efficient cash conversion cycle on the consumer goods companies is one of the paramount objectives. This is because, the research work showed that the overall profitability and shareholders' value in the Nigerian consumer goods companies in enhancing cash properly measured by the cash conversion cycle. The study further concludes that the shorter the cash conversion cycle, the more efficiently cash is managed and ultimately the more profitable the firm as less borrowing cost is involved. On the other hand, the longer the cash conversion cycle, less cash is available and ultimately decreasing profitability due to increased borrowing cost.

However, future research should put effort in increasing the trend of analysis to determine the effect of cash conversion cycle on profitability overtime and also use a different model to prove the significant negative relationship between cash conversion cycle and profitability. The scope of further research may also be extended to the working capital components management including marketable securities, receivables and inventory management.

The study recommends that in order to ensure better cash management in a firm, that is shorter cash conversion cycle, which would invariably lead to better profitability in the consumer goods firms in Nigerian's economic sector, the duration of time that goods are held in inventory should be reduced. This can be accomplished by improving the inventory control process and also, accounts receivable should be collected more quickly by improving the efficiency of the collection process as debt should be collected in line with the agreed credit terms.

Managers of the consumer goods firms. While the consumer goods firms in Nigeria could enhance the inventory conversion period by increasing the cost of sales, this may lead to a reduction in sales, and likewise, a reduction in a firm's profitability. Therefore, the financial managers should shorten their ICP by cutting selling prices to improve sales revenue, and in the process - strengthen firm profitability. Longer cash conversion cycle has negative effect on net operation profitability of a firm. The Cash Conversion Cycle offer easy and useful way to check working capital management efficiency. For value creation of shareholders, firms must therefore, try to keep these numbers of days to minimum level.

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