

WORKING CAPITAL MANAGEMENT AND PROFITABILITY OF SMALL AND MEDIUM SCALE ENTERPRISES (SMES) IN RIVERS STATE

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ABSTRACT

This study empirically investigated the relationship between working capital management and profitability of small and medium scale enterprises (SMEs) in Rivers State. The study made use of primary data of which 100 copies of the structured questionnaire were used in collecting the relevant data. However, the study analyzed data from seventy-eight copies of the questionnaire retrieved and deemed usable. The study made use of descriptive statistics such as tables, frequencies, simple percentages and mean scores to analyze the personal data of the respondents and to answer the research questions while regression analysis was used to test the hypotheses formulated at 5% level of significance. The data analysis was facilitated by Statistical Package for Social Sciences (SPSS) version 2.1. Findings emanating from the study showed that: there is a positive and significant relationship between the measures of working capital management (Account Payable and Profitability and Cash Conversion Cycle) and profitability with regards to Earnings per Share and Return on Investment of small and medium scale enterprises (SMEs) in Rivers State. The study concluded that working capital management significantly improves profitability of small and medium scale enterprises (SMEs) in Rivers State.

Keywords: Working Capital Management, Profitability, Account Payable, Cash Conversion Cycle.

INTRODUCTION

Working capital management of a firm, which deals with the management of current assets and current liabilities, has been recognized as an important area in financial management. Working Capital refers to the firm's investment in short-term assets. Pandey (2005) classified working capital into gross and net concepts. He defined gross working capital as the firm's in current assets. Current assets are the assets which can be converted into cash within an accounting year and these include cash, short-term securities, debtors, bills receivables and stocks. He described net working capital as the difference between current assets and current liabilities. Current liabilities are those claims of outsiders which are expected to mature for payment within an accounting year. These include trade creditors, bills payable, bank overdraft and short-term loan. Management of these short-term assets and liabilities is important to the financial health of any business organization of all sizes. This importance is hinged on the fact that the amounts invested in working capital are often high in proportion to the total assets employed and therefore warrants a careful investigation (Kruger, 2012). He maintained that Working capital, therefore, should neither be more nor less, but just adequate for the smooth running of a firm. While excess amount of working capital results in the reduction of firm's profitability, holding of inadequate amount of it leads to lower levels of the firm's liquidity and stock outs resulting in difficulties in maintaining smooth operation (Krueger, 2012).

VanHorne and Wachowicz, (2004) observed, the success of any business depends heavily on the ability of the financial managers to effectively manage accounts receivable, inventory and account payable (which are component of working capital). Therefore, working capital management explicitly impacts both the profitability and level of desired liquidity of a business (Raheman and Nasir, 2017). He maintained that; Efficient management of working capital is very essential in the overall corporate strategy in creating shareholders value. In furtherance, Padachi (2016) opines that the management of working capital is important to the financial health of businesses of all sizes. This is because, first, the amounts invested in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used efficiently. Secondly, the management of working capital directly affects the liquidity and the profitability of firms and consequently their net worth. Agreeing with the view, Eljelly (2014) noted that, the benefits of having an efficient working capital

management are the firm's ability to meet its short-term obligations, increased profitability and maintain adequate liquidity position in order to continue operation of the firms. With respect to these, this research is designed to investigate the relationship between working capital management and profitability of small and medium scale enterprise (SMEs) in Rivers State. Therefore, the following research question guided the conduct of the study

1. To what extent does account payable affect profitability of small and medium scale enterprises (SMEs) in Rivers State?
2. To what extent does cash conversion cycle affect profitability of small and medium scale enterprises (SMEs) in Rivers State?

More So, the following hypothesis in their null form were tested

Ho₁: There is no significant relationship between account payable and earnings per share of small and medium scale enterprises (SMEs) in Rivers State.

Ho₂: There is no significant relationship between account payable and return on investment of small and medium scale enterprises (SMEs) in Rivers State.

Ho₃: There is no significant relationship between cash conversion cycle and earnings per share of small and medium scale enterprises (SMEs) in Rivers State.

Ho₄: There is no significant relationship between cash conversion cycle and return on investment of small and medium scale enterprises (SMEs) in Rivers State.

LITERATURE REVIEW

Theoretical Review/Foundation

Pfeffer (1982) in Ibama (2011) noted, every nascent intention in social philosophy is fixed to some ground laying principles or theories; the knowledge which enables their analysis and categorizations easier. With regard to the foregoing, the theoretical formulations and/or foundations which relate Working Capital Management in ascertaining Profitability in a firm with respect to earnings management and profitability of small and medium scale enterprises (SMEs) in their operating umbworld (environment) could be to such baseline social/organizational theories such as; Cash Conversion Cycle theory.

Cash Conversion Cycle Theory

The cash conversion cycle theory approach was developed by Richards and Laughlin (2008). In their work, they saw the need to have a critical look at working capital management and its individual components. They felt that,

although a substantial portion of financial manager's time is spent on decision relating short-term assets and liabilities, little attention has been given by most of the literature and researchers in this direction. Accordingly, they describe the receivables, inventories and payables as the constituents of the cash conversion cycle model. The Cash Conversion Cycle is used as a comprehensive measure of working capital as it shows the time lag between expenditure for the purchase of raw materials and the collection of sales of finished goods (Padachi, 2006).

Conceptual Review

The conceptual review of this research is discussed under the following heading: (i) concept of working capital, (ii) working capital management, (iii) accounts payable, (iv) cash conversion circle, (v) profitability, (vi) earnings per share (vii) return on Investment (ROI).

Concepts of Working Capital

Working capital is an important issue during financial decision making since its being a part of investment in asset that requires appropriate financing investment (Francis, 2015). However, many authors have different perceptions about the concept "Working Capital". Khan and Jain (2005) defined working capital as the funds locked up in materials, work in progress, finished goods, receivables and cash equivalent.

More so, Pandey (2005) also argues that working capital is a two faced concept-gross and net working capital. He defined gross working capital as the firm's investment in current assets while the net working capital is the difference between current assets and current liabilities. Net working capital can be positive or negative. It will be positive if current assets are less than current liabilities. Working capital represents the current assets of a firm which is the portion of financial resources of business that changes from one type of resources to another during the day to day execution (Gitman, 2003). Thus, Working Capital means the company's current asset minus current liabilities.

Working Capital Management

The working capital management (WCM) is one of the contentious issues in short term financial management and it is key as well as tricky financial decision for any company because it has an influence on return and liquidity of a firm. The basic purpose of managing working capital is controlling of current financial resources of a firm in such a way that a balance is created between profitability of the firm and risk associated with that profitability (Ricci and Vito,

2000). Asghar and Syed (2012) defined working capital management as decisions made in respect of current assets.

However, to Adamu and Hussaini (2015) observed, working capital management has to do with the administration of all aspects of current assets, namely cash, marketable securities, stock and current liabilities. It is the functional area of finance that covers all the current accounts of the firm. It entails short term decisions generally relating to the next one-year period (Nwude, 2012). Working capital management involves the determination of optimum level of working capital to keep monitoring and controlling the level of individual component of working capital (Akinsulire, 2005).

Accounts Payables

Accounts payable is one of the major sources of secured short-term financing. Utilizing the value of relationship with payee is a sound objective that should be highlighted as important as having the optimal level of preventions. Inadequate management of companies' payables can cause problem which may bring disaster to the company (Okpe and Duru, 2015). Accounts payable ratio represents the rate firms pay to their suppliers. It is one of the major sources of secured short-term financing (Gitman, 2003).

The accounts or trade payables deferral period is the average time taken by a company to pay its trade payables, i.e. its suppliers (Uyar, 2009). Uyar (2009) further opined that accounts payables or creditors turnover ratio is used to know how much credit time received by the firm from its trade creditors. Creditors' turnover ratio shows the breathing time received by the firm in terms of payment of credit purchase. Here, it has been assumed that all of the purchases have been made as credit purchases. The account payables period is computed by dividing account payables by net purchases multiplied by 365 days (Raheman, et al., 2011).

Cash Conversion Cycle

In order to manage working capital efficiently, a firm has to be aware of how long it takes them, on average, to convert their goods and services into cash. In order to measure how well a firm manages its working capital, a financial performance metric called cash to cash cycle (abbreviated as CCC) which was developed by Richards and Laughlin in 1980. This metric which basically indicates length of the period between paying suppliers and being paid by customers, has three determinants: days payable outstanding, days of inventory and days of

receivable outstanding.

Cash conversion circle definition is not constant, as Stewart (2009) defined cash conversion cycle as a composite metric describing the average naira investment in material into a dollar collected from a customer: However, shorter cash conversion cycle could be associated with high profitability because it improves the efficiency of using the working capital. It is a composite metric that has been described as “the average days required to turn a dollar invested in raw material into a dollar collected from a customer” (Stewart, 2009).

Uyar (2009) observed, the longer the cash conversion cycle, the greater the amount of investment required in working capital. The length of cash conversion cycle depends on the length of the inventory conversion period, the trade receivables collection period and the trade payables deferral period. The length of the cash conversion cycle is given by; $CCC = \text{Inventory days} + \text{Trade receivable days} - \text{Trade payable days}$. Cash conversion cycle measures the length of time it takes to convert inventory of raw materials through work in process, through finished goods, through receivables and back to cash. It is the sum of inventory period and receivable period. It measures working capital management efficiency. The shorter the conversion cycle, the more liquid the firm becomes.

Profitability

According to Raheman and Nasr (2011), profitability is the ability to make profit from all the business activities of an organization, company, firm or an enterprise. Consequently, it shows how efficient the management can make profit by using all the resources available in the market. One of the most frequently used tools of financial ratio analysis is profitability ratios, which are used to determine the company's bottom line. However, profitability measures management efficiency in the use of organizational resources in adding value to the business. Raheman and Nasr (2011) maintained that, profitability ratios show a company's overall efficiency and performance. Thus, profit is an excess of revenues over associated expenses for an activity over a period of time. Terms with similar meanings include 'earnings', 'income' and 'margin'.

As Harward and Upton (1991) noted, profitability is the ability of a given investment to earn a return from its use. Profit is an absolute term, whereas, the profitability is a relative concept. However, they are closely related and mutually interdependent, having distinct roles in business. Profit refers to the net income

earned by the enterprise during the specific period, while profitability refers to the operating efficiency of the enterprise.

Earnings per Share

Earnings per share (EPS), is said to be the portion of a company's profit allocated to each outstanding share of common stock. Howbeit, earnings can cause stock prices to rise and when they do, investors make money. If a company has high earnings per share, it means it has more money available to either reinvest in the business or distribute to stockholders in the form of dividend payments. In either scenario, the investors win. According to Zainab, Helen and Tokan, (2018), earnings per share is planned to indicate each shareholder's proportionate company's earnings per share. An utter increase in remaining revenue is not an ample indicator as net earnings may upshot to increase investment.

Return on Investment (ROI)

Return on investment is a measure that investigates the amount of additional profits made due to certain investment. Return on investment is a performance measure used to evaluate the efficiency of investment or to compare the efficiency of several investments. To calculate return on investment, the net benefit (return) of an investment is divided by the cost of the investment; the result is expressed as a percentage or ratio. Return on investment is a fraction, the numerator of which is 'net gain' (return profit and benefit) earned as a result of the project (activity, system and operations), while the denominator is the 'cost' (investment) spent to achieve the result (Pandy, 2005). Thus, the Rate of return (ROR) is also known as return on investment (ROI).

Empirical Review

Many researches were conducted in the area of working capital management and profitability, the result of which shows divergent conclusions. Few of the empirical work in this area are highlighted as follows: Zainab, Helen and Tokan (2018) examined the impact of working capital management on financial performance of listed manufacturing firms in Nigeria for a period of seven years (2011 to 2016). The population consists of ninety-one (91) listed manufacturing firms in Nigeria Stock Exchange and the study used forty-seven (47) firms as the sample size. The study aimed to investigate whether working capital management (proxy by cash conversion cycle and inventory turnover in days), have any significant contribution on the firm's financial performance. The study adopted Simple Regression Analysis Techniques and data were collected from secondary source through the audited annual reports and accounts of the firms.

The findings reveal that working capital management influences firm's performance. The study recommended that the listed manufacturing firms should maintain a considerable number of days in managing the process of converting raw materials to finished goods and cash collection to improve firms' performance. With regard to the foregoing, the works of Zainab, Helen and Tokan (2018) is different from this research because this research empirically investigated the relationship between Working Capital Management and Profitability of Small and Medium Scale Enterprises (SMEs) in Rivers State.

METHODOLOGY

This study was designed as a cross sectional survey. In order to determine the outcomes for this research, 100 copies of a structured questionnaire were administered to the staff of some small and medium scale enterprises (SMEs) in Rivers state. These small-scale enterprises are in different sectors. Out of the 100 copies of the questionnaire distributed, 78 were returned and used for data analysis. The descriptive statistical tool which involves frequency distribution, average and simple percentage was employed for primary data analysis, while regression analysis was used to test the hypotheses formulated at 5% level of significance through the aid of statistical package for social sciences (SPSS).

DATA ANALYSIS AND RESULT

This section focuses on the univariate analysis of the data on the dimensions of the independent variable (working capital management) as well as the measures of dependent variable (profitability).

Table 1 Univariate Analysis of Accounts Payables

S/N	Questionnaire Items on Account Payables	SA (%)	A (%)	U (%)	D (%)	SD (%)	MEAN
Q1	Accounts payable is one of the major sources of secured short-term financing adopted by our organization	25 (33.4%)	39 (52%)	1 (1.3%)	6 (8.0%)	4 (5.4%)	4.53
Q2	Our organization has good record of rates of payable to our suppliers	30 (40.0%)	22 (29.3%)	7 (9.3%)	6 (8.0%)	10 (13.3%)	3.74
Q3	Inadequate management of payables can cause problem which may bring disaster to the organization	29 (38.7%)	29 (38.7%)	5 (6.7%)	7 (9.3%)	5 (6.7%)	3.93

Source: *Field Survey, 2020.*

Results in table 1 indicated that respondents subscribed to items 1-3 which are on account receivables. The items in these areas were accepted since their mean values were above the criterion mean of 3.0. In summary, it is evident that the respondents agreed that the variables identified are account receivables.

Table2 Univariate Analysis of Cash Conversion Cycle

S/ N	Questionnaire Items on Cash Conversion Cycle	SA (%)	A (%)	U (%)	D (%)	SD (%)	MEAN
Q1	The length of time the organization's cash is tied up in working capital before that money is finally returned when customers pay for the products sold or services rendered is short.	26 (34.7%)	28 (37.3%)	6 (8.0%)	8 (10.7%)	7 (9.3%)	3.79
Q2	In most cases, it takes our organization a shorter time on average, to convert its goods and services into cash.	22 (29.3%)	30 (40.0%)	7 (9.3%)	8 (10.7%)	8 (13.3%)	3.67
Q3	Our organization is efficient in managing its capital across the supply chain.	19 (25.3%)	33 (44.0%)	2 (2.7%)	11 (14.7%)	10 (13.3%)	3.53

Source: *Field Survey, 2020.*

Results in table 2 indicated that respondents subscribed to items 1-3 which are on Cash Conversion Cycle. The items in these areas were accepted since their mean values were above the criterion mean of 3.0. In summary, it is evident that the respondents agreed that the variables identified are Cash Conversion Cycle.

Table 3 Univariate Analysis of Earnings per Share

S/N	Questionnaire Items on Earnings per Share	SA (%)	A (%)	U (%)	D (%)	SD (%)	MEAN
Q1	High portion of the organization's profit is allocated to each outstanding share of common stock.	23 (30.7%)	35 (46.7%)	10 (13.3%)	4 (5.3%)	3 (4.0%)	3.95
Q2	Our organization experiences increasing earnings per share and dividend annually.	26 (34.7%)	30 (40.0%)	3 (4.0%)	12 (16.0%)	4 (5.3%)	3.83
Q3	Our organization sustains considerable growth in earnings.	29 (38.7%)	29 (38.7%)	5 (6.7%)	7 (9.3%)	5 (6.7%)	3.93

Source: *Field Survey, 2020.*

Results in table 3 indicated that respondents subscribed to items 1-3 which are on earnings per share. The items in these areas were accepted since their mean values were above the criterion mean of 3.0. In summary, it is evident that the respondents agreed that the variables identified are earnings per share.

Table 4 Univariate Analysis of Return on Investment

S/N	Questionnaire Items on Return on Investment	SA (%)	A (%)	U (%)	D (%)	SD (%)	MEAN
Q1	Our organization frequently enjoys high return on its investment compared to its competitors.	27 (36.0%)	27 (36.0%)	4 (5.3%)	6 (8.0%)	11 (14.7%)	3.71
Q2	Our organization is capable of generating a return that is worth whatever risk the investment may entail.	23 (30.7%)	31 (41.3%)	3 (4.0%)	10 (13.3%)	8 (10.7%)	3.68
Q3	Higher amount of additional profits is made in our organization due to a certain investment made.	25 (33.3%)	29 (38.7%)	4 (5.3%)	9 (12.0%)	8 (10.7%)	3.72

Source: Field Survey, 2020.

Results in table 4 indicated that respondents subscribed to items 1-3 which are on return on investment. The items in these areas were accepted since their mean values were above the criterion mean of 3.0. In summary, it is evident that the respondents agreed that the variables identified are return on investment.

Test of Research Hypotheses

The hypotheses formulated are tested in this section by t-test through the help of Statistical Package for Social Sciences (SPSS) 21.0 version. The decision rule for accepting or rejecting any of the hypotheses is stated below.

Decision Rule

If the t-calculated value is greater than the t-tabulated value, reject the null hypothesis at significance level 5%

If the t-calculated value is less than the t-tabulated value, retain (i.e., do not reject) the null hypothesis at significance level 5%.

Hypothesis One

Ho₁: There is no significant relationship between Account Payable and Earnings per Share of small and medium scale enterprises (SMEs) in Rivers State.

Table 5: Regression Analysis on Account Payable and Earnings per Share

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.019	.149		.125	.901
1 Account Payable	.674	.062	.784	10.792	.000

A dependent variable: Earning per Share

Source: Field Survey, 2020.

The result in table 5 shows that there is a positive relationship between Account Payable and Earning per Share. Also, since the calculated t-value (10.792) for is greater than the tabulated t-value (1.96) at 5% level of significance, we therefore reject the null hypothesis and conclude that there is a significant relationship between Account Payable and Earnings per Share of small and medium scale enterprises (SMEs) in Rivers State.

Hypothesis Two

Ho₂: There is no significant relationship between Account Payable and Return on Investment of small and medium scale enterprises (SMEs) in Rivers State.

Table 6: Regression Analysis on Account Payable and Return on Investment

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
	(Constant)	.023	.151	.248	.711	
1	Account Payable	.781	.137	.834	12.553	.000

A Dependent Variable: Return on Investment

Source: Field Survey, 2020.

The result in table 6 shows that there is a positive relationship between Account Payable and Return on Investment. Also, since the calculated t-value (12.553) for is greater than the tabulated t-value (1.96) at 5% level of significance, we therefore reject the null hypothesis and conclude that there is a significant relationship between Account Payable and Return on Investment of small and medium scale enterprises (SMEs) in Rivers State.

Hypothesis Three

Ho₃: There is no significant relationship between Cash Conversion Cycle and Earnings per Share of small and medium scale enterprises (SMEs) in Rivers State.

Table 7 Regression Analysis a Cash Conversion Cycle and Earnings per Share

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.	
	B	Std. Error	Beta			
	(Constant)	1.019	.090	11.342	.000	
1	Cash Conversion Cycle	-.330	.042	.674	-7.795	.000

A Dependent Variable: Earning per Share

Source: Field Survey, 2020.

The result in table 7 shows that there is a negative relationship between Cash Conversion Cycle and Earnings per Share. Also, since the calculated t-value

(7.795) is greater than the tabulated t-value (1.96) at 5% level of significance, we therefore reject the null hypothesis and conclude that there is a significant relationship between Cash Conversion Cycle and Earnings per Share of small and medium scale enterprises (SMEs) in Rivers State.

Hypothesis Four

The null hypothesis Four (H_{04}): There is a significant relationship between Cash Conversion Cycle and Return on Investment of small and medium scale enterprises (SMEs) in Rivers State.

Table 8: Regression Analysis on Cash Conversion and Return on Investment

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.023	.151		.248	.711
1 Account Payable	-.781	.137	.834	-12.553	.000

A Dependent Variable: Return on Investment

Source: Field Survey, 2020.

The result in table 8 shows that there is a negative relationship between Cash Conversion Cycle and Return on Investment. Also, since the calculated t-value (12.553) for is greater than the tabulated t-value (1.96) at 5% level of significance, we therefore reject the null hypothesis and conclude that there is a significant relationship between Cash Conversion Cycle and Return on Investment of small and medium scale enterprises (SMEs) in Rivers State.

DISCUSSION OF FINDINGS

The study to investigate the relationship between working capital management and profitability of small and medium scale enterprises (SMEs) in Rivers State. The study found that there is a positive and significant relationship between Account Payable and Earnings per Share of small and medium scale enterprises (SMEs) in Rivers State. This finding is supported by the work of Adamu (2016) who found that Account Payable is a major determinant of Earnings per Share as it significantly contributes to Earnings per Share of Pharmaceutical firms in Nigeria. Also, the study found that there is a positive and significant relationship between Account Payable and Return on Investment of small and medium scale

enterprises (SMEs) in Rivers State. This finding is supported by the work of Adamu and Hassaini (2015) who established that a significant relationship exists between Account Payable and Return on Investment of deposit money banks in Nigeria.

Furthermore, the study found that there is a negative and significant relationship between Cash Conversion Cycle and Earnings per Share of small and medium scale enterprises (SMEs) in Rivers State. This finding is consistent with the work of Francis (2015) which indicated that Cash Conversion Cycle significantly influences profitability of cement companies. Lastly, the study found that there is a negative and significant relationship between Cash Conversion Cycle and Return on Investment of small and medium scale enterprises (SMEs) in Rivers State. This finding is supported by the work of Osundina (2014) which established a significant negative relationship between Conversion Cycle and Return on Investment of quoted food and beverages manufacturing firms in Nigeria.

CONCLUSION

The importance of managing working capital of a business efficiently cannot be denied. Working capital management explicitly impacts both the profitability and level of desired liquidity of a business. Efficient management of working capital is very essential in the overall corporate strategy in creating shareholders value. In line with the importance of working capital management, this study investigated the relationship between working capital management and profitability of small and medium scale enterprises (SMEs) in Port Harcourt. Based on findings, the study concludes that working capital management significantly improves profitability of small and medium scale enterprises (SMEs) in Rivers State.

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