

Working Capital Elements and its Impact on Entity Performance

*Angbari Ebi Samson & Bob Torunarigha

Bayelsa State Polytechnic Aleibiri

*Corresponding Author

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ABSTRACT

Over the years, scholars have delve into the study of capital structure and entity performance, however gap still exist in literature, hence we examined the impact of working capital elements and its impact on manufacturing entity performance with data covering from 2014 to 2022, data were extracted from the published financial statement of the companies, the regression showed a statistical non-significant relationship between working capital elements and performance, however net working capital (NWC) was significant, based on the regression output we recommended that managers of industrial goods sector companies in deciding the sources of finance should consider finances structure that will improve and add more value to the shareholders and stakeholders alike both in the short and long-run.

Keywords: Performance, Entity and Working capital

INTRODUCTION

Working capital of an entity can also be ascribe as revolving fund, this fund has a critical role to play in the formation of an entity and it performance. The goal of all investors is to increase its wealth however this cannot be achieve if the entity is not running at a profit. An impact of working capital elements on entity performance for this study aimed to add to the existing body of knowledge which would be useful to external and internal stakeholders such the board of directors and to the shareholders alike. Scholars such Van-Horne and Wachowicz (2010) asserted that working capital management is the investment in current liabilities and current assets which are liquidated within one accounting. From the foregoing definition we can deduced that working capital elements are those component of finances and liabilities that are used in the day to day activities of the entity. Wanjiku (2013) good working capital management is central to a firm's overall performance including profitability and ability to pay dividends to stakeholders. It is important for managers to hit the balance between liquidity and profitability by making efforts and time to manage working capital efficiently and effectively.

REVIEW OF EMPIRICAL LITERATURE

Abdulrahman, Jamilu and Taophic (2023) employed secondary data covering from 2011 into 2021 and examined the influence of working capital management on the financial performance of listed industrial goods companies in Nigeria, while they also used the generalized method of moments (GMM) estimator technique and discovered that inventory turnover and receivable collection positively impact financial performance, also inventory turnover, and receivable collection have statistical significant effect on return on equity with the coefficient (-0.6150, and 0.0067) and p-value (0.000 and 0.009) at 5% level of significant respectively. Based on their findings they recommended that governments should endeavor to provide adequate infrastructure such as constant and stable electricity supply, good road network and rail system to facilitate the cost of production at minimum cost and movement of goods.

Maad, Jitian and Tingting (2022) employed multiple regression to examine working capital management policies' effect on the profitability of manufacturing companies listed on the Qatar Stock Exchange with secondary data covering from 2015 to 2019, and discovered that companies with shorter receivables collection periods and cash conversion cycles are more profitable, Longer inventory turnover periods and accounts payable payment periods are related to higher profitability of the firms, hence they recommended that managers must know how to manage working capital as it is essential to the profitability and performance of companies.

Karethio (2013) did a study on the relationship between dividend payout ratio and financial performance among listed firms in the Nairobi Securities Exchange. Correlation analysis was done to establish the relationship between the dividend pay-out ratio and the performance of the firms in the Nairobi securities exchange. Multiple regression analysis was carried out to establish the relationship between financial performance as the dependent variable and dividend payout ratio was given by dividend per share divided by earnings per share, firm size was measured by natural logarithm of market capitalization, tangible assets was measured by natural logarithm of tangible assets of the firm and leverage was given by total debt divided by shareholders equity as the independent variables. The data was obtained from the Nairobi Securities Exchange and was analyzed using SPSS. The findings indicated that dividend payout ratio was a major factor affecting financial performance. Their relationship was also strong and positive.

Oladipupo and Ibadin (2013) in Nigeria examined the relationship between working capital management practice and dividend payout ratio of manufacturing companies quoted in Nigeria Stock Exchange. Working capital management was measured by the net trade cycle, current ratio and debt ratio. Data was obtained from twelve manufacturing companies quoted on the Nigeria Stock Exchange between 2002 and 2006. Data collected was analyzed using the Pearson product moment correlation technique and ordinary least square regression technique. The results of the study revealed that dividend payout ratio was influenced positively by profitability and net trade cycle. Corporate profitability, working management, and growth in earnings had statistical insignificant effects on the dividend payout ratio at 5% confidence level. Hence, the study noted that working capital management is not significant in dividend policy decision.

Jecheche (2013) conducted a study to determine the impact of dividend policy and stock price volatility in Zimbabwe. A sample of 60 companies listed in Zimbabwe Stock Exchange for a period of ten years from 2001 to 2011 was selected. Across sectional regression analysis research design was used in the study. Stock Price volatility was taken as dependent variable and dividend payout as independent variables. The empirical estimation was based on a cross sectional regression analysis of the relationship between stock price volatility and dividend policy after controlling for firm size, earning volatility, leverage and asset growth. The study found that both the dividend policy measures had a significant positive impact on the share price volatility.

Mitau (2013) studied working capital management and its effect on firm's profitability in Kenya a survey of non-financial institutions listed on the Nairobi Securities Exchange. Working capital management was measured by accounts receivables period, inventory turnover period and accounts payables period while firm's profitability as dependent variable was measured with return on assets. Regression analysis was used to determine the cause-and-effect relationship between working capital management and firm's profitability. The result of study indicated that there exist a negative relationship between accounts receivables period and firm's profitability among nonfinancial institutions listed in the NSE and a negative relationship between inventory turnover period and firm's profitability among the same institutions. However, the relationship between accounts payables period and firm's profitability was positive. The study observed that non-financial institutions in Kenya follow conservative working capital management policy.

Makori and Jagongo, (2013) analyzed working capital management and firm profitability of manufacturing and construction firms listed on Nairobi securities exchange. Working capital management was taken as the

independent variable, while firm's profitability as dependent variable. Pearson's correlation and ordinary least squares regression models were used to establish the relationship between working capital management and firm's profitability. The study found a negative relationship between profitability and accounts receivable day's and cash conversion cycle, but a positive relationship between profitability and number of days of inventory and number of day's payable. The study suggested that managers can create value for their shareholders by reducing the number of day's accounts receivable and increasing the accounts payment period and inventories to a reasonable maximum.

Ajanthan (2013) researched on the relationship between dividend payout and firm profitability of listed hotels and restaurant companies in Sri-Lanka Colombo Stock Exchange. The main aim of the study was to find out the relationship between dividend payout and firm profitability. Correlation research design was utilized in the study. Dividend payout was taken as independent variable whereas firm profitability was used as dependent variable. Variables in the study were dividend payout, net profit and revenue. Regression and correlation analysis was carried out to establish the relationship between dividend payout and firm profitability. The findings indicated that dividend payout is positively correlated with firm performance.

Murekefu and Ouma (2012) studied the relationship between dividend payout and firm performance of listed companies in Kenya. The purpose of the study was to establish the relationship between dividend policy and firms performance using correlation analysis as the research design. The data used in this research was obtained from the annual reports of companies listed in the Nairobi securities exchange for a nine year period, from 2002 to 2010. Dividend payout was measured by the actual dividends paid out and firm performance was measured by the net profit after tax. Regression analysis was carried out to establish the relationship between dividend payout and firm performance. The study revealed a strong and positive relationship between dividend payout and firm performance.

Gakure, John, Jared, and Victor, (2012) examined the relationship between working capital management and performance of manufacturing firms listed at the Nairobi Securities Exchange (NSE). The 29 study used secondary data from a sample of 18 companies at the NSE. A regression model was used to determine the relationship between performance the dependent variable and working capital management the independent variables. Pearson's correlation and regression analysis were used for the analysis. The results indicated that there is a strong negative relationship between firm's performance and liquidity.

Habib, Kian, and Khan (2012) studied dividend policy and share price volatility in Pakistan. The main objective of the study was to examine the relationship between dividend policy and share price volatility in Pakistan. Correlation research design was used in the study. Dividend policy was taken as the independent variable while share price volatility was used as the dependent variable. Dividend policy was measured by dividend payout and dividend yield and share price volatility by share price, controlling variables were size, debt and growth. Cross sectional regression analysis was used to measure the share price with these controlling variables. The findings of this study were that payout ratio and price volatility is significantly positively related. The size and debt are negatively related with share price volatility.

Kioko (2011) analyzed the relationship between prior period dividends and financial performance of firms listed at the Nairobi stock exchange. The purpose of the study was to determine the relationship between prior period dividends and the financial performance of firms listed at the NSE. A survey research design was used in the study. The target population of the study was all companies listed in the NSE and a sample of 34 companies was selected. The variables in the study were EPS and DPS. Secondary data was collected from the company's websites, CMA and NSE. The results of the study revealed that majority of firms enjoy a better financial performance as it was indicated by their EPS after issuing dividends. The study indicated that a relationship exists between prior period dividend payments and financial performance of a firm.

Khalid et al (2010) did a study on dividend policy and stock price volatility in United Kingdom. The

objective of the study was to examine the relationship between dividend policy and the volatility of stock price. Correlation research design was used in the study. Dividend policy was taken as the independent variable while stock price volatility was used as the dependent variable. Regression analysis was used as the research methodology. The study revealed that there is a significant negative relationship between the payout ratio of a firm and the volatility of its stock price and a negative relationship between dividend yield and the volatility of stock price.

Mathuva (2010) conducted a study on the influence of working capital management components on corporate profitability within the listed firms in Kenya. Working capital management was used as the independent variable while corporate profitability as the dependent variable. A sample of 30 firms listed on the Nairobi Securities Exchange (NSE) for the periods 1993 to 2008 was used. Both the pooled ordinary least square and the fixed effects regression models were used to analyze the findings. The study revealed mixed results; firstly, there was a negative relationship between the time when the cash was collected from the customers and the firm's productivity. Secondly, there was a positive relationship between the inventories when they were brought in and the period to which they are sold and the firm's profitability.

Kyalo (2010) studied the relationship between working capital management and profitability of cement companies in Kenya. The objective of the study was to establish the relationship between working capital management and profitability in cement companies in Kenya. The population of interest was all the cement companies operating in Kenya as at 30th December 2010. Working capital management was measured by cash conversion cycle, accounts receivables period, inventory turnover period and accounts payables period. Spearman's Correlation analysis was used to establish the relationship between working capital management and profitability. Findings of the study indicated that working capital management increases profitability, and hence a negative relationship existed between the working capital management and profitability variables. The study revealed that efficient management of working capital increases profitability.

Theoretical Underpinning

Agency Theory

Agency theory implies that firms that adopt high dividend pay-out will have a high value. As a remedy, dividend policy can be used to resolve the agency problem by reducing the agency cost between owner managers and outside owners of the firm. Thus, payment of dividends solves the agency problem since management would have to ensure continued profitability of the firm so as to maintain steady dividends. Additionally, steady dividends also remove excess cash from the hands of the management which would have been misused in the generation of income. Furthermore; payment of dividends thus would force management to enhance the future financial performance of firm. Thus, firms that pay more dividends outperform their counterparts who do not pay in terms of financial performance in the subsequent periods (Jensen, 1986).

Literature Gap

This study thus seeks to address the observed literature gap by examining the impact of working capital management on dividend policy of firms in Nigeria using listed financial firms and to add to the existing body of knowledge on the relationship that exist between working capital management and dividend policy of firm's listed in Nigeria., the lack of consensus among scholars was also one the driven force that motivated the researchers as well. Therefore the findings from this study would be useful to the board of directors of listed financial firms in deciding an appropriate dividend policy, and to the shareholders in making informed investment decisions.

METHODOLOGY

Research Design

This study adopted ex-post factor to analyzed secondary data extracted from the company website and Nigeria Exchange group to evaluate the elements of working capital on entity performance, this approached was to ensure data used are reliable as the researchers have no power to manipulate the data. Descriptive statistics and regression analysis was adopted by the researchers using E-view. The hypotheses were tested using the analysed result from the study; the decision rule was to reject the hypotheses if the calculated the p-value is less than 5% (0.05).

Sources of Data

The study employed secondary data that covering from 2014 to 2022 which was extracted from Nigeria Exchange group and the entities web site using their published audited annual financial statements based on the availability of data with help of some liquidity variables such as quick ratio, current ratio, log of net working capital (by ignoring the negative sign), while earning per share employed as the dependent variable.

Data Analysis Techniques

Descriptive statistics and regression analysis was adopted using E-view to test for the hypotheses in the study, the decision rule was to reject the null hypotheses if the calculated p-values is less than 5% (0.05) significance level.

Model Specification

The model specification adopted for the study was based on the theoretical and conceptual foundation, in other to establish impact of liquidity management on entity performance. The model adopted in this study conforms to the one used by researchers such as Etale, Edoumiekumo, Kpolode, and Nkak, (2020) as stated below:

$$EPS = f(QR, CR, NWC)$$

Which can be expressed as:

$$EPS = \alpha + \delta_1 QR + \delta_2 CR + \delta_3 NWC + u$$

Where:

EPS = Earnings per share

QR = Quick ratios

CR = Current ratios

NWC = Net working Capital

α = Constant term

u = stochastic error term

DATA PRESENTATION AND ANALYSIS

The data used and presented in this study were extracted from Nigeria Exchange group and the company published financial statements that are uploaded on their web site.

YEAR	QR	CR	NWC	EPS
2014	0.73	1.00	4.22	0.82
2015	0.45	0.62	7.19	1.45
2016	0.66	1.11	6.33	4.64
2017	0.43	0.65	7.12	4.75
2018	0.54	0.79	7.08	2.32
2019	0.53	0.8	7.15	6.73
2020	0.68	0.96	6.36	7.7
2021	0.68	0.94	6.69	7.49
2022	0.54	0.77	7.36	6.94

Source: Authors computations via audited financial statements

Table above showed the operationalizing ratios that will be used for the analysis and hypotheses testing which ranges from 2014 to 2022 with the following variables which are Quick ratio (QR) and its respective values: 0.73, 0.45, 0.66, 0.43, 0.54, 0.53, 0.68, 0.68 and 0.54 respectively, the ratios are below the normal accepted quick ratios of 1:1 hence this may mean that the entity must have invested its resources into profitable investment or they suffer liquidity problems, which may make the entities default in its short term financial obligations.

The current ratios of the entities which range from 2014 to 2022 are: 1.00, 0.62, 1.11, 0.65, 0.79, 0.8, 0.96, 0.94 and 0.77 respectively the ratios are below the normal accepted quick ratios of 1:2 hence this may mean that the entity must have invested its resources into profitable investment or they suffer liquidity problems, which may make the entities default in its short term financial obligations although the entity was a little buoyant in 2016 (1.11) however it may also mean tie down of resources which may have been invested in profitable projects.

The entity log of net working capital that was employed for this study ranging from 2014 to 2022 are: 4.22, 7.19, 6.33, 7.12, 7.08, 7.15, 6.36, 6.69 and 7.36 respectively although with respect to table one, the only time the entities recorded positive NWC was in 2014 and 2016 while the remaining years the entities employed short term external resources than are more than its short term assets, although borrowing is good if an only if it will be deployed into profitable projects that are more than its cost of capital.

The earnings per share for the respective eight sampled entities covering from 2014 to 2022 are: 0.82, 1.45, 4.64, 4.75, 2.32, 6.73, 7.7, 7.49 and 6.94 respectively, the ratios indicated that the entities performance was increasing however this contradicted table one above (profit after tax) and at the same time the performance also reduced in 2022 which may likely be attributed to the pandemic.

Descriptive Statistics

	EPS	QR	CR	NWC
Mean	4.760000	0.582222	0.848889	6.611111
Median	4.750000	0.540000	0.800000	7.080000
Maximum	7.700000	0.730000	1.110000	7.360000

Minimum	0.820000	0.430000	0.620000	4.220000
Std. Dev.	2.673425	0.108372	0.164198	0.970238
Skewness	-0.33439	-0.0588	0.081161	-1.84401
Kurtosis	1.553650	1.582988	1.887582	5.288450
Jarque-Bera	0.952201	0.758157	0.473933	7.064447
Probability	0.621201	0.684492	0.789018	0.029240
Sum	42.84000	5.240000	7.640000	59.50000
Sum Sq. Dev.	57.17760	0.093956	0.215689	7.530889
Observations	9	9	9	9

Source: Authors computations via E-view financial statements

The table above summarized the descriptive statistics of the Mean 4.760000, 0.582222, 0.848889 and , 6.611111, Median 4.750000, 0.540000, 0.800000, 7.080000, Maximum 7.700000, 0.730000, 1.110000, 7.360000, Minimum 0.820000, 0.430000, 0.620000, 4.220000 and Standard deviation 2.673425, 0.108372, 0.164198, 0.970238 of the variables (EPS, QR, CR and NWC) for the study respectively. The indication is that EPS the most dispersed variable in the study while CR is the least dispersed among the variables. Jarque-Bera statistics and the associated probability values also showed that the EPS, QR, CR and NWC are normally distributed except for NWC.

Regression Output

Dependent Variable: EPS				
Method: Least Squares				
Date: 10/26/23 Time: 12:22				
Sample: 2014 2022				
Included observations: 9				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
QR	28.24767	21.31792	1.325067	0.2425
CR	-2.54534	12.10339	-0.210300	0.8417
NWC	3.212267	1.182844	2.715714	0.0420
C	-30.7624	12.97798	-2.370350	0.0639
R-squared	0.608160	Mean dependent var	4.760000	
Adjusted R-squared	0.373056	S.D. dependent var	2.6734250	
S.E. of regression	2.116812	Akaike info criterion	4.638801	
Sum squared resid	22.40446	Schwarz criterion	4.726457	
Log likelihood	-16.8746	Hannan-Quinn criter.	4.449641	
F-statistic	2.586772	Durbin-Watson stat	2.77255	
Prob(F-statistic)	0.165881			

Source: Authors computations via E-view financial statements

From the analytical output in the Table, the independent variables combined significantly explained the variations in the dependent variable with F-statistics probability value of 0.165881 (at 5% significant level). The R-squared (coefficient of determination) value 0.608160 indicates that 61% approximately of changes in the dependent variable are accounted for by the combined effect of variations in the independent variables .The regression showed that all are variable excepts for NWC are not statistically significant also the overall

mode; is not significant, this study agree with Etale and Ekpulu (2019) study on capital structure.

CONCLUSION AND RECOMMENDATIONS

We examined the impact of working capital elements and its impact on manufacturing entity performance with data covering from 2014 to 2022, data were extracted from the published financial statement of the companies, the regression showed a statistical non-significant relationship between working capital elements and performance, this implies that capital structure doesn't influencing the performance of firms, this study concur Etale and Ekpulu (2019) findings however contradicted Oladeji, Tolulope, Ikpefan and Olokoye (2015) study on working capital and entity performance. Hence, we recommended that managers of industrial goods sector companies in deciding the sources of finance should consider finances structure that will improve and add more value to the shareholders and stakeholders alike both in the short and long-run.

FURTHER RESEARCH

Further research can be carried out by interested researchers by increasing the sample size and also by using other performance proxy variables that where not employed in this study.

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