

Effect of Working Capital Management Practices on Financial Performance of Retail Firms in Garowe, Puntland State of Somalia

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Abstract

This study adapts a cross sectional survey method to establish the effect of working capital management practices on the performance of retail firms in Puntland State of Somalia with specific reference to retail firms located in Garowe, the Headquarters of the Puntland State of Somalia. It covers a five-year period 2012-2015. It relies on four theories namely agency theory, and corporate governance theory to help explain how the financial management practices affect financial performance. A descriptive research design is used in the study. The target population of the study are 61 medium to large scale retail firms located in Garowe as at June 2017. Accordingly, purposive sampling based on the firms that prepare financial accounts is used to study a sample of 53 retail firms determined based on Slovin's formula. Both descriptive and inferential statistics are used in the evaluation. Descriptive findings show that retail firms in Puntland State of Somalia generally have a poor financial performance as indicated by a low mean return on assets. The performance however varies widely across the firms as indicated by a very high coefficient of variation. Inferential statistics indicate that the null hypothesis that working capital management practices have no effect on financial performance is rejected as it is found to have a positive effect on financial performance. The study covered only retail firms in Puntland State hence it is recommended that a similar study be carried out not only for other types of firms like financial institutions, but also adapts a wider geographical scope to cover the whole of Somalia.

1. Introduction

In line with Brigham, Gapenski and Ehrhardt (1998) working capital management practices relate to the decisions with respect to the management of current assets and current liabilities. They involve judicious assessment of the levels of investment in current assets and current liabilities (Brigham, Gapenski, & Ehrhardt, 1998). Numerous studies from the various parts of the world have been carried out with mixed findings as to the effect of working capital management practices on financial performance especially for retail firms like supermarkets.

In Malaysia, Zariyawati, Annuar, Hassan and Abdulrahem (2009) investigate the effect of working capital management on corporate performance. The study's main objective was to examine the relationship between working capital management and firm profitability. The study uses cash conversion cycle as a metric of liquidity management. The research design used is panel data analysis leading to 1628 firm-year observations covering an eleven-year period of 1996-2006 that consist of six different economic sectors which are listed in Bursa Malaysia. The coefficient results of Pooled OLS regression analysis provide a strong negative significant relationship between cash conversion cycle and firm profitability. This reveals that reducing cash conversion period results to profitability increase.

In India, Jain (2010) carried out a study to establish the effect of working capital management on profitability of Indian Oil drilling firms. The study uses a sample of 4 Indian Oil Drilling and Exploration over a time series period of five years covering 2005 through 2009. The study focused on the effect of different variables of working capital management including the Cash conversion cycle and Current ratio on the profitability of the firms. The findings indicate that there is a negative significant relationship between cash conversion cycle and firm profitability and positive relationship between Current Ratio and profitability of firms. In summary, the study reveals that reducing cash conversion period and increasing the current ratio results into profitability increase.

In Somalia, Jama, Samantar and Muturi (2017) evaluated the effect of cash management practices on the profitability of bottled purified companies in Garowe and Bosaso towns of Puntland in Somalia. Cash management is a key management tool seeks to establish the financial position of an organization. Their study had 46 firms and used the questionnaires approach to collect data. Using multiple regression analysis, and at 95% confidence interval, the study finds that cash flow management has a positive effect on profitability of bottled purified water companies. Whereas the study provides useful insights into the role of working capital management on profitability, it ignores other aspects of financial management practices, especially investing and

financing practices. In addition, it focuses only on water companies and therefore fails to capture the effect of liquidity management on other types of companies.

In another study in Somalia, Mohamed and Omar (2016) carried out a study to investigate the effects of cash management on profitability of private schools in Mogadishu, Somalia. The study was based on the descriptive research design. Data was analyzed statistically using SPSS computer package. The study finds out that the Private schools cash collection positively affects the financial performance of Private Schools. The findings indicated that cash management has high effect on financial performance of Private secondary schools in Mogadishu, Somalia. The results revealed that all variables were significant in explaining Financial Performance of Private secondary schools in Mogadishu, Somalia.

From the foregoing, it is clear that whereas retail firm adopt various working capital management practices, it is not clear how these affect their financial performance. This is especially because existing studies provide varying results about how various financial practices affect financial performance. Mohamed and Ali (2013) for instance revealed a moderate positive relationship between budgeting and the performance of remittance companies in Somalia. This study focused only a small segment of companies with a bias to remittance companies. This is supported by Jama, Samantar and Muturi (2017) who while studying water companies find a strong positive effect of working capital management on performance of water purifying companies. In Pakistan, Hunjra (2016) similarly find a positive relationship between the performance of listed companies on the Karachi stock Exchange and the working capital management practices. From a contradictory perspective Afza and Nazir (2008) found out that there is a negative relationship between the profitability measures of firms and degree of aggressiveness of working capital policies of public companies in Pakistan. Similar findings have been shown in Malaysia where Zariyawati, Annuar, Hassan and Abdulrahem (2009) find a negative relationship between cash conversion cycle, an indicator of working capital management, and firm profitability.

The study is designed as a survey of retail firms including supermarkets and general merchandisers operating in Garowe, the headquarters of the Puntland State of Somalia as at August 2017. It covers a period of five financial years of 2012 to 2016. The surveyed firms must have been in existence over this time period. Supermarkets and general merchandisers are considered as an appropriate representation of retail firm in Puntland. They are also important because the medium size and large retail firms have a high level of financial controls that are important in providing financial information necessary in carrying out this study. In addition, secondary data is required in this study and the nature of operations of supermarkets and general merchandisers is such that they are able to provide data on financial performance, investments, working capital management and financing options they use.

2. Literature Review

Various theories help explain how working capital management practices affect financial performance of retail firms. The agency theory of Jensen and Meckling (1976) suggests that the private interests of managers make them to work in ways that compromise on firm performance by and instead divert firm resources to selfish personal gains. Agency considerations may make managers reluctant or unwilling to take more than moderate risk in working capital management if they perceive that too much risk may result in a loss of job and damage to personal wealth.

In addition, corporate governance and control theory attributed of Hart (1995) indicates that the kind of corporate governance structures, internal control systems and ownership structures can influence working capital managerial practices and thereby affect how these practices affect financial performance of the affected businesses. In this respect, corporate governance effectiveness is reflected by the strength of a firm's internal control systems. Very strong systems provide very effective financial management practices (Hart, 1995).

Another critical aspect of corporate governance that affects financial management practices is ownership structure. There are various forms of such structures the most common of which are family ownership, block ownership, institutional ownership, insider or managerial ownership and public ownership (Isenmila & Elijah, 2012). Isenmila and Elijah (2012) are of the opinion that family ownership aligns the interests of managers and owners and that even where the family hires managers to run a family business, the family ownership structure provides incentives to monitor managers and hence reduce the managerial agency conflict behavior that could harm financial performance.

From an empirical perspective, several studies have been done to establish how working capital management practices affect financial performance. Chebet (2015) sought to establish the effect of working capital management on financial performance of manufacturing firms in Nairobi. This study relied on qualitative research design and randomly sampled 22 manufacturing businesses in the Nairobi County of Kenya using their annual financial statements as the source of data. Both descriptive and inferential statistics were used in data analysis with the primary data analysis model being linear regression. Regression analysis was used to determine the cause-and-effect relationship between working capital management and firm's performance (Chebet, 2015). The results from regression analysis indicated that only 60.9 percent of variations on financial performance of

manufacturing firms could be attributed to working capital management and the remaining portion being influenced by other factors. This study found out that there is an inverse relationship between financial performance and working capital constructs including receivables collection duration, inventory conversion period and deferred payment period. The Ordinary Least Square (OLS) regression analysis established that found that cash conversion cycle is positively associated to the Return on Equity (ROE). According to Chebet (2015) managers can improve their performance by managing working capital efficiently. Whereas the study fits well in existing literature, it is only limited to manufacturing companies in Kenya which may be operationally different from retail firms not only in kunya but also in Puntland state of Somalia where the current study is based.

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Wambugu (2014) carried out a study in Kenya to determine the effects of working capital management practices on profitability of Small and Medium Enterprises (SMEs) in Nairobi County of the country. The study adopted a cross-sectional survey research design and in-depth interviews which allowed the collection of primary quantitative data through structured questionnaires. The population of the study included all the SMEs operating in Nairobi County in the year 2013. The study used stratified random sampling method by dividing the population into six subpopulations or strata. Both descriptive and inferential statistics were used in data analysis. Data was analyzed for descriptive and inferential statistics. It relied on a linear regression model to evaluate quantitative data and to test the relationship between working capital constructs and SME profitability. The findings indicate that working capital management has a significant effect on profitability of SMEs. According to Wambugu (2014) managers of SMEs should adopt the correct working capital management practices and identifying critical areas that may improve the profitability of SMEs. Whereas the study provides additional support of how working capital influences profitability, it focuses on firms in Nairobi. The findings may also not be generalizable because the study uses a composite of all types of SMEs yet better findings should depend only on the same class of firms (Butt, Hunjra, & Rehman, 2010).

Shikhdon and Kavale (2016) carried out a survey to establish the liquidity management factors affecting in financial performance of the commercial banks in Mogadishu, Somalia. Descriptive study design was used based on a population of 112 employees of commercial banks in Mogadishu. A purposive sample of 87 respondents was selected for the questionnaire instrument that was used in data collection. The key findings were that liquidity management drivers individually had a positive influence on the financial performance of commercial banks in Mogadishu-Somalia. The overall results indicated that there was a significant linear relationship between debtors' management, creditors and cash management on financial performance of commercial banks in Mogadishu. This study gives useful insights from Somalia. The method used is however not good because it relies on a questionnaire when secondary data from financial statements of the banks would have provided a better measure of financial performance as well as liquidity.

3. Research Methodology

The study uses a descriptive research design by helping describe the key relationships between working capital management practices and financial performance of retail firms in the Puntland state of Somalia. The total population of 61 firms in the study is all the general retail stores located in the Puntland State of Somalia in line the Chamber of Commerce, Industry and Agriculture of the Puntland State of Somalia (Chamber of Commerce, 2017). The study covers a period of 5 years covering the periods 2012 to 2016. This is considered long enough to provide adequate data to provide generalizable conclusions. It is also a period over which Garowe and Puntland have experienced tremendous growth such that the findings from the study are likely to have wide implications.

The study uses a purposive sampling by considering medium and large retail firms in Garowe that have prepared financial accounts. These include the general stores as shown by the Chamber of Commerce, Industry

and Agriculture of the Puntland State of Somalia. To determine the sample size, Slovin's formula is used from a target population of 61 to establish a sample size of 53. Accordingly, a purposive sample of 53 was chosen. These retailers provided from the list of Puntland Chamber of Commerce. The study was carried out to cover a period of 5 years from the year 2012 to the year 2016.

The study uses secondary data obtained from financial statements of the organizations under research. Where the statements are not available, the study relied on an interview guide to obtain the financial statement values from the accountants of the sample firms. The data that was collected related to firstly current assets and current liabilities which were used in calculating working capital. This is in line with (Brigham, Gapenski, & Ehrhardt, 1998) who take working capital as the difference between current assets and current liabilities. To measure financial performance both net profit was compared total assets to determine return on assets respectively. These in line with (Brigham, Gapenski, & Ehrhardt, 1998) who measure the financial performance of a firm from a balance sheet perspective.

The analytical model used in the study is the linear regression model that relates financial performance to three independent variables as described in the equation below.

$$FP = \beta_0 + \beta_1 X_1 + e$$

FP is financial performance as shown by return on assets X1 is the working capital financial management practice as shown by the working capital ratio (WCR)

4. Research Findings and Analysis

The findings on the dispersion and central tendency attributes of financial performance as indicated by return on assets in shown in Table I.

Table I Descriptive Statistics

	ROA	WCR
Mean	0.04034	0.18294
Median	0.04478	0.05964
Standard Deviation	0.14010	0.29775
Coefficient of Variation	3.47330	1.62760
Count	53	53

The findings in the table I show that the mean return on assets is 4.034%. This clearly indicates that retail firms in the Puntland State of Somalia experience a mean positive return on assets although the positive profitability of the assets is still low. This means that the assets are not effectively being used to generate profits for retail firms. This is consistent with the expectations of low profit margins among retail firms in general. This can be attributed to the low trading activity and possibly the small population that translates to low demand which may not translate to high sales or profits.

The median of 4.478% is close to the mean although it is marginally more than the mean. The implication of this is that the profitability of the retail firms in the Puntland State of Somalia is mostly limited to the low values indicated in the mean with a slight skewness to the left. When the standard deviation is compared with the mean, a coefficient of variation of 3.4733 is established. This indicates that for every dollar of return on assets, there is expected to be a variability of \$3.4733. This reflects a very high standard deviation in profits per unit of profit and therefore indicates a high level of risk in the retail business among firms in the Puntland State of Somalia. The high risk could be attributed to the largely unregulated environment in the State.

The figure I indicates that there is a wide spread in the ROA of the various manufacturing firms in Puntland State of Somalia. Whereas some are profitable, there is also a large number of retail firms that report average negative mean profitability as indicated by ROA. With respect to working capital ratio (WCR) the indicator of working capital management practices, table I indicates that the mean working capital ratio is 0.18294. This clearly indicates that retail firms in the Puntland State of Somalia experience a mean positive ratio of working capital to total assets and that the firms are slightly liquid. This means that there is adequate working capital to enable the firms to run on a day to day basis. This is consistent with the expectations of positive working capital levels among retail firms in general since they require such working capital to facilitate their day to day activities (Brigham, Gapenski & Ehrhardt, 1998). The moderate level of the WCR can be attributed to prudence in management since excessive working capital usually leads to very high opportunity cost of tied up funds in the working capital (Brigham, Gapenski & Ehrhardt, 1998).

The table I indicates that the median WCR among the retail firms in the Puntland State of Somalia over the study period is 0.05964. The median is lower than the mean. This implies that the WCR of the retail firms in the Puntland State of Somalia is mostly limited to the low values indicated in the mean with a skewness to the left. When the standard deviation is compared with the mean, a coefficient of variation of 1.62760 is established. This

indicates that for every dollar of the total assets of these firms, there is expected to be a variability of \$1.63. This reflects a very high standard deviation in working capital per unit assets. Again, this indicates a high level of risk in the retail business among firms in the Puntland State of Somalia. The high risk could be attributed to the largely unregulated environment in the State. It also points out the variations in the working capital required to run a retail firm on a day to day basis as well as the dormant use of cash transactions in retail firm operations (Brigham, Gapenski & Ehrhardt, 1998)

Inferential statistical findings first relate to the test of the goodness of fit of the model as shown in table II. The R-Square value was used as an indicator of the explanatory power of the financial management practices on financial performance. The table 4.6 shows that the R-square value of the regression output is 0.67657. Berenson, Levine, Szabat, and Krehbiel (2012) explain that the value is used to show the percentage changes in the dependent variable as a result of a change in the independent variables. In this respect, there is expected to be a 67.657% change in financial performance of retail firms as a result of a unit change in the changes in financial management practices.

Table II: Model Goodness of Fit

R Square						0.41124
Standard Error						0.11148
Observations						53
Model ANOVA						
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	3	0.22507	0.07502	4.62064	0.00634	
Residual	49	0.7956	0.01624			
Total	52	1.02068				

A further diagnostic test on the model involved the use of ANOVA to check if the regression model is significant in explaining the relationship between financial performance and financial management practices. The null hypothesis in the test is that the model is not suitable or significant in explaining the relationship between the variables. The findings are indicated in table 4.7. According to Berenson, Levine, Szabat, and Krehbiel (2012)), the model's significance is tested by using an F-test. From table 4.7, the regression F value is 4.62064. This value is compared with the significance F value of 0.00634. The findings indicate that the model F is greater than the significance. Accordingly, the model suitability null hypothesis is rejected with the conclusion that the model best suits the data and therefore can be used in the regression data analysis.

After confirming the explanatory power of the regression model using the R-square test and also testing for the suitability of the regression model in explaining the effect of financial management practices on financial performance, a regression analysis was carried out. The findings are indicated in table III.

Table III: Model Regression Statistics

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	0.06788	0.02343	2.89724	0.0237	0.13978
WCR	0.12327	0.05381	2.29073	0.02632	0.02314

Using the coefficients from table III, the actual regression output from the study sample is consequently presented as.

$$ROA = 0.06788 + 0.12327WCR$$

The regression output in table III provides the coefficient of the working capital ratio (WCR), the indicator of financial management working capital management practices as +0.12327. The corresponding t value from the regression is 2.229073. This regression output-value is greater than the critical t from the t-distribution tables of 2.0000. This implies that the null hypothesis that WCR has no effect on ROA is rejected with the conclusion that WCR has a positive and significant effect on ROA. This is confirmed by the p-value of 0.02632 which is less than the critical value of 0.05. The implication is that working management practices have a positive effect on the financial performance of retail firms in the Puntland State of Somalia.

This finding can be compared with that of Sheikhdon and Kavale (2016) who found out that liquidity management drivers had a positive influence on the financial performance of commercial banks in Mogadishu-Somalia. This could be due to the fact that both studies are done in Somalia and therefore face the same economic and market conditions. The finding however, contradict those of Chebet (2015) who found an inverse relationship between working capital management and financial performance among manufacturing firms in Nairobi County in Kenya. Similar to the findings by Chebet (2015), Jain (2010) in India and Zariyawati, Annuar, Taufiq and Rahim (2009) in Malaysia had also arrived at similar conclusions. The variations in the conclusions could be attributed to the significantly different economic situations of Puntland state of Somalia and the other countries in which the rest of the studies are derived.

5. Conclusion and Recommendations

Financial performance, as measured by return on assets (ROA), the findings indicate that the mean performance is a low positive ROA with wide variations in performance as shown by the coefficient in variation of ROA. This is largely due to the variations in the size of the retail firms in the Puntland State of Somalia. The findings also indicated that firms in Puntland State of Somalia had a positive working capital ratio. This was an indication that they hold more current assets than current liabilities. This is reasonable given that the core business of retail firms includes holding inventory, cash and receivables all of which increase their working capital. The findings also indicated a moderate level of fluctuations in the working capital ratio.

When the inferential statistics are analyzed, the study rejected the null hypothesis and found out that the working capital practices have a significant positive effect on financial performance. This shows that the higher the working capital ratio, the greater the return on assets and vice versa. This is expected to boost investment in inventories which should boost turnover.

Several conclusions can be drawn from the study. Firstly, is that retail firms in the Puntland State of Somalia on average perform relatively poorly with respect to profitability as measured by return on assets although there are wide disparities between the poor and high performers.

Secondly it can be concluded that the level of fluctuations in the financial management practices' parameter varies from low to high indicating some form of instability among the retail firms in Puntland state of Somalia in as fair as their financial management practices are concerned.

Thirdly, working capital financial management practices and investing financial management all have a positive effect on financial management. Improving on these practices is likely to improve on the financial performance of the retail firms in the Puntland State of Somalia.

The following three are the recommendations for further study. Firstly, it is recommended that a study be carried out to determine the effect of financial management practices among retail firms in the entire Republic of Somalia. This is because this study focused on Puntland State only, yet the economic fundamentals of the other States of Somalia are likely to have different effect on financial management practices and their effect on performance. The study also recommends that a similar study be carried out for other types of firms other than retail firms. This could include such firms as service firms, importers, exporters, financial institutions as well as manufacturing firms.

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