

Contribution of Working Capital Management on the Performance of Commercial Banks in Rwanda: A Case Study of Equity Bank Rwanda Limited

UWASE Fildaus¹, Dr Patrick Mulyungi²

^{1,2}Jomo Kenyatta University of Agriculture and Technology

Abstract: *The research purpose was to assess working capital management and performance of commercial banks. Because many financial institutions face challenges like insolvency, disappointments to clients who come to the bank and fail to get their savings and lack of loanable funds due to poor working capital management. The study was achieved by use of three specific objectives, namely; To analyse the effect of cash budgeting on the performance of Equity Bank, Rwanda Ltd; To determine the contribution of capital planning on the Performance of Equity Bank, Rwanda Ltd and to examine the effect of capital control on the performance of Equity Bank, Rwanda Ltd. The research design used was descriptive and analytical based on quantitative and qualitative data. The population of the study was 120 and sample size was 92 respondents. The researcher use questionnaires as a tool for data collection and Bank's reports for secondary data. In the findings it was established that working capital management contributes to financial performance of financial Institution in Rwanda, simply because working capital components like cash budgeting, capital planning and capital control has significant contribution to profitability of Equity bank. The respondents N is 92 and the significant level is 0.01, the results indicate that independent variable has positive moderate correlation to dependent variable equal to .673** and the p-value is .000 which is less than 0.01. When p-value is less than significant level, therefore researchers conclude that variables are correlated and null hypothesis is rejected and remains with alternative hypothesis. This means that there is a moderate relationship between working capital management and financial performance. Researcher can therefore conclude working capital management contribute positive to financial Performance of Equity bank.*

Keywords: Working Capital, Working Capital Management, Performance of Commercial Banks

1. Introduction

A commercial bank can be endowed with profitability and short of liquidity especially if its assets cannot readily be converted into cash. Positive working capital is required to ensure that a firm is able to continue its operations and that it has sufficient funds to satisfy both maturing of short term debt and upcoming operational expenses (Abuzar, 2004). Working capital management involves the relationship between a firm's short-term assets and its short-term liabilities. The goal of working capital management is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short-term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivable and payable and cash (Oguntimehin, 2001). A firm is required to maintain a balance between liquidity and profitability while conducting its day to day operations. Liquidity is a precondition to ensure that firms are able to meet its short-term obligations and its continued flow can be guaranteed from a profitable venture. The importance of cash as an indicator of continuing financial health should not be surprising in view of its crucial role within the business. This requires that business must be run both efficiently and profitably. In the process, an asset-liability mismatch may occur which may increase firm's profitability in the short run but at a risk of its insolvency. On the other hand, too much focus on liquidity at the expense of profitability and it is common to find finance text books. It's through proper working capital management that organizations can be able to safe guard itself against the day to day need of a business (Afza & Nasir 2007). The working capital management enables the organizational management to meet the short-

term financial requirements. The need for maintaining an adequate working capital can hardly be questioned just as circulation of blood is very necessary in the human body to maintain life, the flow of funds is very necessary to maintain business. If it becomes weak, the business can hardly prosper and survive. Working capital starvation is generally credited as a major cause if not the major cause of small business failure in many developed and developing countries. The cash flow problems of many small businesses are exacerbated by poor financial management and in particular the lack of planning cash requirements (Anand, 2001).

Management of working capital which aims at maintaining an optimal balance between each of the working capital components, that is, cash, receivables, inventory and payables is a fundamental part of the overall corporate strategy to create value and is an important source of competitive advantage in businesses. In practice, it has become one of the most important issues in commercial banks with many financial executives struggling to identify the basic working capital drivers and the appropriate level of working capital to hold so as to minimize risk, effectively prepare for uncertainty and improve the overall performance of their businesses (Falope, 2009a). The existence of efficient working capital management practices can make a substantial difference between the success and failure of a commercial bank. In the world of business, the ability to seize every opportunity and to seek practical business tools and techniques to improve the financial performance are of paramount importance for success. Accounting reports provide different measures of a firm's financial performance like net income, return on asset (ROA), or return on equity

(ROE). Although not all business activities are for profit, business needs resources to support all its activities.

The maintenance of cash at a desirable level for the purpose of settling liabilities on maturity and using the investment opportunities that are indicative of the flexibility of the economic entity, moreover the availability of material needed for production in order to enable the entity to provide the needs of its customers is indicative of the importance of working capital, efficient management of working capital is vital for the success, survival and performance of commercial banks to enhance performance and contribution to economic growth. Working capital management involves the relationship between a firm's short-term assets and its short-term liabilities. The goal of working capital management is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short-term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivable and payable and cash (Oguntimehin, 2001).

The faster a business expands the more cash it needs for working capital and investment. The cheapest and best sources of cash exist as working capital right within business.

Good management of working capital enables organizations to generate cash, improve profits and reduce risks. While the performance levels of businesses have traditionally been attributed to general managerial factors such as manufacturing, marketing and operations, working capital management may have a consequent impact on business survival and growth. The management of working capital is important to the financial health of businesses of all sizes. 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 in an efficient and effective way. However, there is evidence that some businesses are not very good at managing their working capital given that many of them suffer from under capitalization, the importance of exerting tight control over working capital investment is difficult to overstate (Falope, 2009b). A firm can be very profitable, but if this is not translated into cash from operations within the same operating cycle, the firm would need to borrow to support its continued working capital needs. Thus, the twin objectives of profitability and liquidity must be synchronized and one should not impinge on the other for long. Investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers and a proper management of same should give the desired impact on either profitability or liquidity (Deakins & Steele, 2001).

2. Statement of the Problem

Working capital management is considered to be a very important element to analyze the organizations' performance while conducting day to day operations, by which balance can be maintained between liquidity and profitability operations (Horne and Keown, 2003). Maintaining liquidity on daily base operation to make sure it's running and meets its commitment is a crucial part required in managing

working capital. It is a difficult task for some managers to make sure that the business function running in well-organized and advantageous manner (Nikoomram, 2007). There are chances of inequality of current assets and current liability. During this procedure bank growth and profitability will be affected and if this occurs and firm manager wouldn't be able to manage working capital efficiently hence effect on return on investment.

For the case of Rwanda many commercial banks are closing because of poor working capital management hence liquidation and eventually closure of the companies and other merging, it is believed that Equity bank is faced with a challenge of capital management. It is against that background that the researcher carried out this research on working capital management and the performance of financial institution with reference of Equity Bank Rwanda.

3. Objectives of the Study

General objective

The general objective of this research was to examine the contribution of working capital management on financial performance of financial Institution in Rwanda.

Specific objectives

The specific objectives of the researcher were the following

- 1) To analyse the effect of cash budgeting on the performance of Equity Bank, Rwanda Ltd
- 2) To determine the contribution of capital planning on the Performance of Equity Bank, Rwanda Ltd.
- 3) To examine the effect of capital control on the performance of Equity Bank, Rwanda Ltd.

3.1 Research questions

The research guided by the following research questions

- 1) What is the effect of cash budgeting on the performance of Equity Bank, Rwanda Ltd?
- 2) What is the contribution of capital planning on the Performance of Equity Bank, Rwanda Ltd?
- 3) What is the effect of capital control on the performance of Equity Bank, Rwanda Ltd.?

4. Significance of the Research

The research significant to different stakeholders including the researcher, academicians, commercial banks, National bank of Rwanda; The completion of this research helped the researcher to expand understanding in the field of working capital management, performance of financial institutions and the contribution of working capital management on the performance of financial institutions. It will further help the researcher to complete part of the requirements for the award of a Masters Degree in business Administration in finance option. The research will further provide future researchers with basics of writing research reports. They may use this research to identify different steps followed when writing a research report and may also be a source of secondary data and literature review. The research will help to identify different ways through which it has benefited from working capital management. This may help the banks to know what can be changed or improved for the better

performance of the banks. The researcher may further provide other commercial banks in Rwanda and beyond with an opportunity to identify different ways of managing working capital that can facilitate performance. They may be able to take examples from Equity Bank Rwanda. The Central Bank of Rwanda may use the research to identify the various ways through which financial institutions in Rwanda are managing their working capital. This can provide the government with a basis for which decision can be made.

5. Scope of the Study

The scope is according to geographical, content and time: The geographical exposure is a key variable to an industry since it refers to the countries and regions where the company operates. The study covered the Equity Bank Rwanda at national level. The research is focused on the contribution of working capital management on the performance of commercial banks in Rwanda. It specially concentrated on how working capital management is made, how to interpret performance based on the efficient of working capital. The research was carried out in Equity bank Rwanda covering the period from 2011 to 2014. This made the research more specific to a ascertain period of time.

6. Research Methodology

6.1 Research Design

Researcher uses descriptive research design based qualitative and quantitative approach.

6.2 Target Population

Grinnell and Williams (1990) defined population as the totality of persons or objects with which a study is concerned. The target population was 120 employees of Equity Bank Rwanda in finance and treasury department at head office located in Nyarugenge district-Kigali city.

6.3 Sampling Method and Sample Size

Sampling techniques provides a range of methods that enable you to reduce the amount of data you need to collect by considering only data from a subgroup rather than all cases or elements. A non-probability sampling method mainly purposive sampling method was used in the sample size of respondents who participated in the study. It is commonly called a judgmental sample is one that is selected based on the knowledge of a target group and the purpose of the study.

6.4 Sample Size Determination

The study employed stratified random sampling in which the respondents was stratified into three categories of operational managers, tactical managers and strategic managers. Sample size was determined using Taro Yamane, (1967) formula was used to determine the sample size. The sample size in each stratum was then be proportionately obtained.

According to Yamane, (1967):

$$n = \frac{N}{1 + Ne^2} = \frac{120}{1.3} = 92$$

Where

N= is the population

n= is the sample size

e= is the error limit (0.05 on the basis of 95% confidence level)

6.5 Data Collection

Data collected from both primary and secondary sources. Primary sources are employees of Equity bank Rwanda of finance department, and secondary sources were text books, journals, bank's reports and internet sources related to the study topic.

6.6 Data Analysis

After all primary data was collected; the researcher classified it in accordance with variables. Excel spread sheet and Statistical package for social sciences (SPSS) software was used to generate descriptive statistics, pie charts, bar graphs, and percentages and frequencies for variables. and statistical tests.

Qualitative data was thematically coded and then statistically analyzed. Qualitative data which is from the open ended questions was analyzed using content analysis. The findings from the qualitative data were then presented in a prose form. A multivariate regression analysis was used to determine the relationship between the dependent and the independent variables.

The multivariate regression model was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y = Profitability;

β_0 = Constant Term;

$\beta_1, \beta_2,$ and β_3 = Beta coefficients;

X_1 = Capital budget;

X_2 = Cash planning;

X_3 = Cash control;

ε = Error term

The study used a 95% confidence level. A 95% confidence interval reflects a significance level of 0.05. This shows that for an independent variable to have a significant effect on the dependent variable, the p-value should be below the significance level (0.05).

Chi square (X^2) statistics was used to investigate whether distributions of categorical variables differed from one another. The ANOVA table was used to compare the tallies of categorical responses between the independent and dependent groups of the research.

7. Research Findings and Discussions

This chapter presents empirical findings in reference to the research objectives in chapter one. These findings were obtained from both primary and secondary sources. They were presented and analyzed using frequency tables, percentages, mean and standard deviation were used to

examine the effect of Working Capital Management on financial performance of Equity Bank in Rwanda.

of 0.000, the model performance is statistically significant or good.

7.1 Cash budgeting and profitability of Equity Bank

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.638 ^a	.407	.399	1.47270

a. Predictors: (Constant), Cash budgeting

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	107.194	1	107.194	49.425	.000 ^b
	Residual	156.157	72	2.169		
	Total	263.351	73			

a. Dependent Variable: Profitability
b. Predictors: (Constant), Cash budgeting

R-square =0.40.73 (40.7%). 40.7% variations in profitability have been captured by the model used. Since the p-value is

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	4.577	1.607		2.848	.006	1.373	7.781
	Cash budgeting	.417	.059	.638	7.030	.000	.299	.536

a. Dependent Variable: Profitability

Regression Analysis on Cash budgeting and profitability in Equity

From the table the researcher deduces the regression equation

Where; Y = profitability;

B₁ = Constant Term

β₁= Beta coefficients

X₁ = Cash Budgeting

Y= 4.577+0.417X₁ (Cash Budgeting).....Equation (i)

indicates that the effect is statistically significant at 5 % test level.

Capital Planning on the Profitability in Equity Bank

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.847 ^a	.717	.713	2.51410

a. Predictors: (Constant), Profitability

R-square =0.71.7 (71.7%). 71.7% variations in profitability have been captured by the model used. Since the p-value is of 0.000, the model performance is statistically significant or very good

The fining shows that Cash budgeting has significant effect on profitability. The results indicate that Cash budgeting has relationship with profitability. The coefficient of determination is 0.000 which indicates that there is positive relationship (0.417) between Cash budgeting and profitability of Equity Bank. These results provide reasonable evidence to the consistent view that, there is increase in financial performance hence they improved profitability of Equity Bank. The beta of Cash budgeting is 0.838 with a t-statistic of 7.030. The positive coefficients mean a 1% increase in Cash budgeting leads to a 0.417% increase in profitability and the positive t-statistic value

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1153.627	1	1153.627	182.516	.000 ^b
	Residual	455.089	72	6.321		
	Total	1608.716	73			

a. Dependent Variable: Profitability
b. Predictors: (Constant), Capital planning

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	-12.148	2.925		-4.153	.000	-17.979	-6.316
	Capital Planning	1.408	.104	.847	13.510	.000	1.201	1.616

a. Dependent Variable: Profitability

Regression Analysis on Capital Planning and profitability in Equity

From the table the researcher deduces the regression equation

Where; Y = profitability;

B₂ = Constant Term

B₂= Beta coefficients

X₂ = Cash planning

Y= -12.148 + 1.408X₂ (Cash planning).....Equation (ii)

significant effect on Profitability of Equity Bank. The results indicate that Capital Planning has relationship with Profitability. The coefficient of determination is 0.000 which indicates that there is positive relationship (1.408) between Capital Planning and Profitability in Equity Bank. These results provide reasonable evidence to the consistent view that, there is increase in Profitability hence they improved financial performance. The beta of Capital Planning is .847 with a t-statistic of 13.510. The positive coefficients mean a 1% increase in Capital Planning leads to a 1.408% increase in Profitability and the positive t-statistic value indicates that the effect is statistically significant at 5 % test level.

H1: Capital Planning has significant effect on Profitability Hypothesis H1 proposes that Capital Planning has

7.2 Capital Control on profitability of Equity Bank

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802 ^a	.643	.638	2.39247
a. Predictors: (Constant), Capital Control				

R-square =0.643 (64.3%). 64.3% variations in profitability have been captured by the model used. Since the p-value is of 0.000, the model performance is statistically significant or good.

ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	743.339	1	743.339	129.866	.000 ^b
	Residual	412.121	72	5.724		
	Total	1155.459	73			
a. Dependent Variable: Profitability						
b. Predictors: (Constant), Capital Control						

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	24.884	11.922		2.087	.040	1.119	48.649
	Capital Control	.999	.088	.802	11.396	.000	.824	1.174
a. Dependent Variable: Profitability								

Regression Analysis on Capital Control and profitability in Equity

From the table the researcher deduces the regression equation

Where; Y = Profitability;

B₃ = Constant Term

B₃= Beta coefficients

X₃ = Capital control

Y= 0.316 + 0.726X₃ (Capital control)..... Equation (iii)

The findings show that Capital Control has significant effect on profitability of Equity Bank. The results indicate that Capital Control has relationship with profitability. The coefficient of determination is 0.000 which indicates that there is positive relationship (0.999) between Capital Control and profitability of Equity Bank. These results provide reasonable evidence to the consistent view that, there is increase in profitability hence they improved financial performance. The beta of Strategic Capital Control is 0.802 with a t-statistic of 11.396. The positive coefficients mean a 1% increase in Capital Control leads to a 0.999% increase in profitability and the negative t-statistic value indicates that the effect is statistically significant at 5 % test level.

8. Summary of Findings, Conclusion and Recommendations

The chapter covers the summary, conclusion and recommendation of the findings. The summary covers the findings in relation to the objectives of the study. The

summary is followed by the conclusion which is based on the findings of the study. And recommendations to the challenges facing the bank

8.1 Summary of Findings

The study was mainly concerned about the Effect of Working Capital Management on financial performance. This summary was based on the objectives of the study.

Effect of Cash Budgeting on financial performance of Equity Bank

The finding shows that that Cash budgeting has significant effect on profitability. The results indicate that Cash budgeting has relationship with profitability. The coefficient of determination is 0.000 which indicates that there is positive relationship (0.417) between Cash budgeting and profitability of Equity Bank. These results provide reasonable evidence to the consistent view that, there is increase in financial performance hence they improved profitability of Equity Bank. The beta of Cash budgeting is 0.838 with a t-statistic of 7.030. The positive coefficients mean a 1% increase in Cash budgeting leads to a 0.417% increase in profitability and the positive t-statistic value indicates that the effect is statistically significant at 5 % test level.

Effects of Capital Planning on financial Performance of Equity Bank

Finding shows that that Cash budgeting has significant effect on profitability. The results indicate that Cash budgeting has relationship with profitability. The coefficient of determination is 0.000 which indicates that there is positive relationship (0.417) between Cash budgeting and profitability of Equity Bank. These results provide reasonable evidence to the consistent view that, there is increase in financial performance hence they improved profitability of Equity Bank. The beta of Cash budgeting is 0.838 with a t-statistic of 7.030. The positive coefficients mean a 1% increase in Cash budgeting leads to a 0.417% increase in profitability and the positive t-statistic value indicates that the effect is statistically significant at 5 % test level.

Effects of Strategic capital control on financial performance of Equity Bank

The finding shows that Capital Control has significant effect on profitability of Equity Bank. The results indicate that Capital Control has relationship with profitability. The coefficient of determination is 0.000 which indicates that there is positive relationship (0.999) between Capital Control and profitability of Equity Bank. These results provide reasonable evidence to the consistent view that, there is increase in profitability hence they improved financial performance. The beta of Capital Control is 0.802 with a t-statistic of 11.396. The positive coefficients mean a 1% increase in Capital Control leads to a 0.999% increase in profitability and the negative t-statistic value indicates that the effect is statistically significant at 5 % test level.

8.2 Conclusion

In the findings it was established that working capital management contributes to financial performance of financial Institution in Rwanda, simply because working capital components like cash budgeting, capital planning and capital control has significant contribution to profitability of Equity bank. The respondents N is 92 and the significant level is 0.01, the results indicate that independent variable has positive moderate correlation to dependent variable equal to .673** and the p-value is .000 which is less than 0.01. When p-value is less than significant level, therefore researchers conclude that variables are correlated and null hypothesis is rejected and remains with alternative hypothesis. This means that there is a moderate relationship between working capital management and financial performance. We can therefore conclude working capital management contribute positive to financial Performance of Equity bank.

8.3 Recommendations

The researcher has identified the following recommendations to be considered;

- 1) The bank should have strategic cash planning because system in order to plan effectively for different requirements in the bank.
- 2) The bank should ensure that budgeting is effectively done in order to promote effective and efficient operations in the bank.
- 3) The bank should establish effective control system in place in order to manage cash both before and after use.