CASH MANAGEMENT AND PROFITABILITY IN SELECTED COMMERCIAL BANKS IN BUJUMBURA, BURUNDI

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A RESEARCH REPORT SUBMITTED TO THE COLLEGE OF ECONOMICS AND MANAGEMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER'S DEGREE IN BUSINESS AND ADMINISTRATION OF KAMPALA INTERNATIONAL UNIVERSITY

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DECLARATION

I **Iradukunda Ella Marlene,** hereby declare that this is my original work, and to the best of my knowledge, it has never been submitted by any other person for any academic award in and out of Kampala International University.

Sign……………………………………

Date……………………………………….

APPROVAL

I hereby certify that this research report was compiled under my supervision, and is here in submitted for examination with my approval as the designated University supervisor.

Sign…………………………………………

Date……………………………………….

DEDICATION

I dedicate this research work to my family especially my father Mr. KABURA Jean Charles and my mother Ms. BIRUTEGUSA Virginie, and others family members to their impact they have contributed towards my education and all the encouragement, moral and financial support that has got me to where I am today. I thank also my friends and classmates for their support.

Thank you for being there.

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LIST OF ABBREVIATIONS AND ACRONYMS

BANCOBU	Banque Commerciale du Burundi
BCB	Banque de Credit de Bujumbura
BRB	Bank of the Republic of Burundi
CAPM	Capital Asset Pricing Model
CD	Certificate of Deposit
COMESA	Common Market for Eastern and Southern Africa
IFMS	Integrated Financial Management System
NPV	Net Present Value
REPSS	Regional Payment and Settlement System
ROA	Return on Asset
ROE	Return on Equity
SIRESS	South African Development Council Integrated Regional Electronic Settlement System
VANs	Value-Added Networks

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ABSTRACT

There is low level of profitability among most commercial banks in Burundi. This was attributed to the fact that most commercial banks have been making losses in their return on assets and return on equity. The study was investigated the effect of cash management and profitability in selected commercial banks in Bujumbura, Burundi". The purpose of the study was to evaluate the effect of cash management on the profitability in selected commercial banks. The study was based on three specific objectives; to examine the effect of cash control on profitability in selected commercial banks, to analyze the effect of cash budget in selected commercial banks. The significance of the study is to understand the current framework of the cash management in selected commercial banks in Burundi and how it affects profitability. The study adopted a descriptive cross-sectional design, with the study population comprised of 58 employees of three selected commercial banks. Data were collected using questionnaires, and the data collected was analyzed using descriptive and regression analysis to determine the effect of cash management on profitability in selected commercial banks. The study revealed cash control significantly affects profitability of commercial banks in Burundi (Adjusted R Square=0.212, p=0.00). The study further revealed that cash budgeting significantly affects profitability of commercial banks in Burundi (Adjusted R Square=0.394, p=0.00). Additionally, the study revealed that there is a positive and significant relationship between cash management and profitability among selected commercial banks in Bujumbura ($r=.708^{**}$, p=0.00). The study concluded that that both cash control and cash budgeting have significant effect on profitability, while cash management have a positive relationship have a significant relationship with profitability. The study makes the following recommendations: the management of commercial banks should encourage the use of net cash balance, cash inflows, and cash payment so as to accurately understand the dynamics of their profitability; furthermore, the management of commercial banks in Burundi should always emphasize accurate forecasts of both short term and long term cash budgeting plans so as to determine profit level; lastly, the management of commercial banks should emphasize the proper use of cash management since it is essential to every business that desires to meet up with its short term financial obligations. The study adds to the body of knowledge by measuring cash management using cash control and cash budgeting, and profitability using performance ratio. The study found a positive effect of cash control and cash budgeting on performance ratio. This study therefore closes both the contextual and content gaps of the previous studies in the banking industry in Burundi.

CHAPTER ONE
INTRODUCTION

1.0 Introduction

This study aims to examine the effect of cash management on profitability in commercial banks, which specific reference to commercial banks in Bujumbura, Burundi. This chapter presents the background of the study, the statement of the problem, purpose of the study, objectives, research question, scope and significance of the study.

1.1 Background to the Study

1.1.1 Historical perspective

Since the 20th century, technology was thought of as the tool that would the march of progress would harmonize practices and push progress. With this, it was thought that cash management would centralize, payments standardize, and global treasury would become common (Porter, 2000). Yet cash management has remained fairly regional, or even local, due to several key differences between Europe and North America which emerged early on in the 21^{st} century. The process of managing cash in Europe has undergone some significant changes since the 1950s, with three issues particularly notable: developments in liquidity management; transaction management trends; and an increased focus on product development (Keen, 2001). An increasing trend for banks to debit negative credit interest rates force many corporates to split their cash between a number of different banks.

In Europe, the evolution of cash management strategy can be traced back to 1976, with the putting in place of the internal information systems infrastructure that enabled data to be shared easily between companies. This was driven by the technological advances witnessed in the early 1970s. After that, there were major changes in information technology, strategic direction, and focus while the system kept on growing (Venkatraman & Short, 2002). The objective was to improve cash management among companies across countries. A currency netting system was applied to transactions between companies to achieve cost savings by reducing both cash flows and the amount of foreign exchange deals effected for international payments. This concept was extended to include suppliers and involved the extensive use of value-added networks (VANs) and cooperation with banks. The emphasis was to improve the management of the financial aspects of supplier relationships as well as to increase the benefits of reduced cash flows and foreign exchange savings already achieved (Meier & Sprague, 2001).

In Africa, during the first part of this century, the continent experienced significant economic growth and this is widely expected to continue for the predictable future. This growth was helped by the gradual liberalization and relaxation of the regulatory and business regimes which pertain in many African countries as they sought to attract investment. The differing regulatory regimes across the continent have historically prevented, or made more difficult, the free flow of capital that is available elsewhere in the world. Throw into the mix that only a few banks had both a local and regional presence, clearing and settlement systems differed in each country and cash was the predominant payment method (with only about 22% of Africans having a bank account by 1990), according to Hart & Estrin (2001), which all added to the fiscal challenges that already existed.

There have however been positive developments in the recent past, with some African regions seeking to implement cross border common clearing platforms. Examples include the South African Development Council Integrated Regional Electronic Settlement System (SIRESS) across South Africa, Lesotho, Namibia and Swaziland; and the Regional Payment and Settlement System (REPSS) across the 19 countries that are members of the Common Market for Eastern and Southern Africa (COMESA). Clearly, corporates need to select counterparties that have the expertise to help them achieve their objectives; including banks that have both local and pan regional capability to ensure optimal cash management and treasury solutions are put in place.

In East Africa, Tanzania adopted a policy of cash budgeting in 1996, where the Integrated Financial Management System (IFMS) was introduced in 1998 to better control expenditures and avoid a buildup of unauthorized arrears. The introduction of the new Public Finance Act and associated regulations, provided an ideal opportunity to undertake a more stringent control of new arrears and reinforce the importance of budget discipline across the government (Hooyman, 2007). In 2009, the member countries of the East African Community adopted common financial management transfer policies to harmonize their business dealings within the region by simplifying payment procedures.

1.1.2 Theoretical perspective

The study was guided by three main theories which are: Dynamic theory of profit, Free cash flow theory, and Residual theory of risk.

1.1.2.1 Dynamic theory of profit

In theory of profit of Clark (2009), which suggests that profit is generated in a society which is dynamic in nature. The dynamic nature of a society means that the population, size of capital, level of output, taste and preferences of people of that society are changing. Thus, profit is not generated in static society. Thus, entrepreneur claims profit as a reward of undertaking these risks or uncertainties in the dynamic society.

The theory suggests that entrepreneur's profit depends on his risk-taking behavior. That is, how much risk the entrepreneur will bear during the production determines the amount of profit enjoyed by him. During production the entrepreneur may not know the exact demand for his product in the market or change in consumers' taste and preferences that affects the market demand (Hawley, 2007). If the entrepreneur's production exceeds the demand, he will acquire loss for not selling his entire output. This implies that there is a demand side risk associated with production. If there is no compensation or reward for risk, there will be no incentive for taking risk. The nature of risk and the risk bearing capacity vary across industries (Mills, 2014). The higher the risk under taken, the more will be the profit earned. However, it should be noted that, the amount profit actually depends on how efficiently risk is managed by the entrepreneur not the amount of risk borne by him.

1.1.2.2 Free cash flow Theory

The free cash flow hypothesis advanced by Jensen (1988) states that managers endowed with free cash flow will invest it in negative net present value (NPV) projects rather than pay it out to shareholders. Jensen defines free cash flow as cash flow left after the firm has invested in all available positive NPV projects. Free cash flow is important because it allows a company to pursue opportunities that enhance shareholder value. Without cash, it's tough to develop new products, make acquisitions, pay dividends and reduce debt. Firms could pay out free cash flow as dividends, use cash to reduce debt or equity financing, hold cash as precautionary savings, or spend the additional cash flow on investment. How firms use internally generated cash could affect the recovery speed from a recession, which is accompanied by improvements in profitability (Chang, Dasgupta, Wong, & Yao, 2014).

The FCF is the excess cash flow over what is required to fund all projects (Jensen, 1986) with a net positive present value (NPV). According to the FCF hypothesis, firms with free cash flows tend to face higher agency costs due to conflict of interest between stakeholders and managers (Zhang, Cao, Dickinson, & Kutan, 2016). Firm managers have incentives to invest rather than distribute the FCF as dividends despite poor investment opportunities (represented by a negative NPV).

1.1.2.3. Residual theory of risk

The residual risk is the amount of risk or danger associated with an action or event remaining after natural or inherent risks have been reduced by risk controls. According to Hawley, the profit consists of two parts: One representing the compensation for the actuarial loss suffered due to several classes of risks assumed by the entrepreneur; Second part represents the inducement to bear the consequences due to the exposure to risk in the entrepreneurial adventures.

Hawley's risk theory of profit is based on the assumption that profits arise from the factor ownership, as long as the ownership involves risk. Hawley believed that an entrepreneur must assume risks to qualify for the additional rewards (profit). On the contrary, if he avoids the risk by insuring against it, then he would cease to be an entrepreneur and would not be entitled to profits.

1.1.3 Conceptual perspective

Cash management refers to the management of cash resource in such a way that meets the business objectives of an organization. It is the ability of a management in recognizing the problems related with cash which may come across in future course of action, finding appropriate solution to curb such problems if they arise, and finally delegating these solutions to the competent authority for carrying them out. The choice between liquidity and profitability creates a state of confusion (Reed, 2013). It is cash management that can provide solution to this dilemma. Cash management may be regarded as an art that assists in establishing equilibrium between liquidity and profitability to ensure undisturbed functioning of a firm towards attaining its li business objectives.

Profitability is ability to make a return from all the business activities of an organization, company, firm, or an enterprise. It shows how efficiently the management can make a return by using all the resources available in the market. However, the term 'Profitability' is not synonymous to 'efficiency'. Profitability is an index of efficiency and is regarded as a measure of efficiency and management guide to greater efficiency. Though, profitability is an important measure for measuring the efficiency, the extent of profitability cannot be taken as a final proof of efficiency. Sometimes satisfactory profits can mark inefficiency and conversely, a proper degree of efficiency can be accompanied by an absence of profit.

1.1.4 Contextual Perspective

In Malaysia, operating a business and keeping it running is demanding. Cash Management Solutions, you can focus on your core business and still be in control of your day-to-day cash flow needs. Cash Management solutions are personalized for companies to accelerate collections, manage payments, maximize the use of excess cash and minimize cost of funding. The objective is to provide customers with cost-effective solutions for the efficient management of their working capital, process, information and risk management.

South Africa falls behind other third world countries with regards to promoting the development and sustainability of small businesses. Small businesses are vital for employment and job creation in South Africa. According to a report by the Supplier Development Program (SDP), Business Environmental Specialists (2009:1-2), 45% of the employed population of South Africa are employed in small businesses with less than 10 employees. Cash management is an dominant consideration in understanding small businesses. Too often, businesses fail before they have a chance to succeed because they run out of cash. Research statistical analysis indicates that the most crucial cause of business failure is due to the lack of planning. The second leading cause next to poor planning is the lack of cash management practices (McMahon 2006:15).

Cash management helps to ensure that adequate levels of capital are available to business foe short time needs such as inventory purchases. A good cash management program can significantly influence the efficiency of operations, which can also reduce overall costs.

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

In Burundi, the increase in the financial services access has incited growth of the financial sector in the past time. Available statistics from the Central Bank, the Bank of the Republic of Burundi (BRB) indicates that the value of the financial services sector has grown from BIF6.4 billion in 2006 to BIF 11.7 billion in 2014 (BRB, Annual Supervision Report, 2014). The introduction of other players like KCB Bank, Ecobank, Diamond Trust Bank Burundi, Interbank Burundi and Finbank in the industry has also led to the increase in the financial facility. However, banks face challenges in their cash management practices, which if not well handled, may affect their profitability levels (Robinson, 2012). Corporate governance weaknesses, strategic risk concerns especially with new product development and weaknesses in operational risk management pose cash management challenges to banks.

State ownership in the banking sector is low, representing only 6.6 percent of total capital of commercial banks. However, the government still has substantial influence in the banking sector through its public entities that own up to 31.6 percent of the capital of all banks combined. The government is also a majority shareholder in these two out of the three most important banks. Hence, the government is still able to influence the management of banks through the nomination of its representatives to the board of directors. The government's presence also has implications in the allocation of credit, directly through borrowing by state entities and indirectly through political pressure on bank management (BRB, Annual Supervision Report, 2014).

1.2 Problem Statement

There is low level of profitability among most commercial banks in Burundi (Burundi Economic Outlook, 2019). This was attributed to the fact that most commercial banks have been making losses in their return on assets and return on equity. For instance in 2017, Banque de Credit de Bujumbura (BCB) dropped in its net profit earnings by 2% because of \$20,000 loses in return on assets and return on equity (BCB annual report, 2018). Subsequently in 2018, Banque Commerciale du Burundi (BANCOBU) made a 1.8% lose in its earning because of non-performing loans amounting to \$45,000 (National Bank Report, 2019). However, the ministry of finance and the National Bank of Burundi has since 2010 initiated flexible measures such as low interest rates when borrowing from the National Bank, and flexible monetary policies such as discounted exchange rate so as to allow commercial banks perform in the Burundian market, however, most of the commercial banks under this study have been slowing down in their profits earnings (Uwimana, 2017).

Therefore, one wonders why after all the flexible monetary policies and banking environment, commercial banks would continue to struggle in earning profits. This study therefore investigated to establish whether poor cash management could be a contributory factor to the low profit earning among selected commercial banks in Burundi.

1.3 Purpose of the Study

The purpose of this study was to establish the effect of cash management on profitability in selected commercial banks in Bujumbura, Burundi.

1.4 Objectives of the study

This study has two principle objectives; they were:

i. To examine the effect of Cash Control on profitability in selected commercial banks in Bujumbura, Burundi.
ii. To analyze the effect of Cash Budgeting on profitability in selected commercial banks in Bujumbura, Burundi.
iii. To establish the relationship between cash management and profitability in selected commercial banks in Bujumbura, Burundi.

1.5 Research Questions

i. What is the effect of Cash Control on profitability in selected commercial banks in Bujumbura, Burundi?
ii. What is the effect of Cash Budgeting on profitability in selected commercial banks in Bujumbura, Burundi?
iii. What is the relationship between cash management and profitability in selected commercial banks in Bujumbura, Burundi?

1.6 Hypotheses

i. Ho1: Cash Control has no significant effect on profitability in selected commercial banks in Bujumbura, Burundi.
ii. Ho2: Cash budgeting has no significant effect on profitability in selected commercial banks in Bujumbura, Burundi.
iii. Ho3: Cash Management has no relationship with profitability in selected commercial banks in Bujumbura, Burundi.

1.7 Scope of the study

1.7.1 Geographical Scope

The study area for this research is Bujumbura city at the Banque de Credit de Bujumbura (BCB) and the Banque Commerciale du Burundi (BANCOBU). These banks were selected because are the leading banks in the country with the highest market share in the banking industry.

1.7.2 Content scope

The study investigated the various cash management practices, specifically, Cash Control and Cash Budgeting; and how they affect profitability in selected commercial banks in Bujumbura, Burundi. Cash management is the independent variable whereas profitability is the dependent variable.

1.7.3 Time Scope

The study concentrated on the activities within Banque de Credit de Bujumbura (BCB), and the Banque Commerciale du Burundi (BANCOBU) over the past five years from 2014 to 2018. This reference period helped in establishing the effect of cash management on the profitability of the bank.

1.8 Significance of the study

The study will be useful in understanding the current framework for cash management in commercial banks in Burundi and how it affects profitability in those banks.

The study will also be instrumental in exposing and evaluating the various cash management challenges faced by commercial banks in their operations and the various mechanisms put in place to moderate them.

The study will also assess the linkages between the various government institutional framework regulations on financial management and the ability of commercial banks in operating profitably.

The study will help the author to acquire practical research skills, as well as help her to partially fulfill the requirements for the award of a Master of Finance and Banking of Kampala International University.

1.9 Operational Definition of Key Terms

Cash management: Is the corporate process of collecting and managing cash, as well as using it for (short-term) investing. It is a key component of ensuring a company's financial stability and solvency.

Profitability: Is the ability of a company to use its resources to generate revenues in excess of its expenses. In other words, this is a company’s capability of generating profits from its operations.

CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

This is a review of the theories which are relevant to this study, and the existing literature about the effect of cash management on profitability. It will explore the findings of the various previous researchers who have studied the same or related topics to analyze the applicability of their findings.

2.1 Theoretical review

2.1.1 Dynamic Theory of Profit

Clark (2009) propounded the dynamic theory of profit, which is the difference between the price and the cost of production of the commodity. Profit is the result of dynamic change. In a dynamic state, five generic changes are going on, every one of which reacts on structure of society. They are; population is increasing, capital is increasing, methods of production are improving, the forms of industrial establishment are changing, the less efficient shops are passing from the field and the most efficient are passing, the wants of consumers are multiplying. In a dynamic society an entrepreneur is always confronted with continuous unpredictable changes in demand for his product. The variation in demand may take place due to change in fashions, standard of living, distribution of income, population, new inventions, international repercussion and technological advances etc. A prudent entrepreneur will always keep an eye on future demand for his products. If he succeeds in increasing his sale by lowering the cost of production or by adoption of an innovation, then he can secure profits.

Schumpeter (2007) attributes profit to dynamic changes resulting from an innovation. A capitalist closed economy which is in a stationary equilibrium characterized by a 'circular flow' which continues to repeat itself for ever. In such a static state, there is perfectly competitive equilibrium. The price of each product just equals its cost of production and there is no profit. Exogenous factors like weather conditions can cause changes in the circular flow position. In the circular flow position goods are being produced at a constant rate. This routine work is being performed by the salaried managers. It is the entrepreneur who disturbs the channels of this circular flow by the introduction of an innovation. The role of an innovator is allocated not to the capitalist but to the entrepreneur.

2.1.2 Free Cash flow Theory

Jensen (2006) posits that firms generating cash in excess of that required to fund positive Net Present Value (NPV) projects face greater agency problems as the free cash flow exacerbates the conflict of interest between shareholders and managers. One implication from Jensen's free cash flow theory is that firms with high levels of free cash flow are more likely to initiate takeovers that are value-decreasing. Free cash flow is cash flow in excess of that required to fund all of a firm's projects that have positive net present values when discounted at the relevant cost of capital. Such free cash flow must be paid out to shareholders if the firm is to be efficient and to maximize value for shareholders. Payment of cash to shareholders reduces the resources under managers' control, thereby reducing managers' power and potentially subjecting them to the monitoring by the capital markets that occurs when a firm must obtain new capital. Financing projects internally avoids this monitoring and the possibility that funds will be unavailable or available only at high explicit prices.

Managers have incentives to expand their firms beyond the size that maximizes shareholder wealth. Growth increases managers' power by increasing the resources under their control. In addition, changes in management compensation are positively related to growth. The tendency of firms to reward middle managers through promotion rather than year-to-year bonuses also creates an organizational bias toward growth to supply the new positions that such promotion-based reward systems require (Baker, 2006). The tendency for managers to over invest resources is limited by competition in the product and factor markets that tend to drive prices toward minimum average cost in an activity. Managers must therefore motivate their organizations to be more efficient in order to improve the probability of survival.

2.1.3. Residual Theory of Risk

Hawley (2007) regarded risk taking as the main function of the entrepreneur. Profit is the residual income which the entrepreneur receives for the reason that he assumes risks. The entrepreneur exposes his business to risk and receives in turn a reward in the form of profit since the task of risk taking is infuriating. Profit is an excess of payment above the actuarial value of risk. No entrepreneur will be willing to undertake risks if he gets only the normal return. Hence the reward for risk taking must be higher than the actual value of risk. Hawley stated that profit was composed of two parts: one part represents compensation for average loss incidental to the various causes of risk and the other part represents an inducement to suffer the consequences of being exposed to the risk. Hawley believed that profits arose from factor ownership as long as the ownership included risk. If the entrepreneur avoided risk by insuring against it, he ceased to be an entrepreneur and should not receive profits. According to Hawley profit arose out of uninsured risk. The uncertainty ends with sale of the entrepreneur's product. Profit thus is a residue.

Knight (2011) regards profit as the reward of bearing non insurable risks and uncertainties. He distinguishes amidst insurable and non-insurable risks. Certain risks are measurable in as much as the probability of their occurrence can be statistically calculated. The risk of fire theft of merchandise and of death by accident is insurable. Such risks are borne by the insurance company. There are certain unique risks which are incalculable. The probability of their occurrence cannot be statistically computed for the reason of the presence of uncertainty in them. Such unforeseen risks relate to changes in prices, demand and supply etc. No insurance company can calculate the loss expected from such risks and hence they are non-insurable. Profit according to Knight is the reward of bearing non-insurable risks and uncertainties. It is a deviation arising from uncertainty between earning ex post and ex ante. The uncertainty bearing is looked upon as a separate factor of production due to its importance. Like other factors, it has the supply price. The entrepreneur bears the uncertainty in the expectation earning profit. However the uncertainty bearing is not the sole function of entrepreneur. Hence, the profit he earns is also the reward for other services such as initiating, coordinating, managing, bargaining skill and so on. So, uncertainty bearing is not the sole determinant of profit.

2.2 Conceptual Framework

The conceptual framework in this study was to examine the interconnection between the variables in the study.

Independent Variable: **Dependent variable:**

Cash management

- Cash Control
- Cash Budgeting and Forecasting

Profitability

- Performance ratio

Source: Adopted with variation, from: Mills (2014).

Figure 2.1: Conceptual frame

Cash Control is an important part of business as it is required for proper cash management, monitoring and recording of cash flow and analyzing cash balance. Cash control is normally constituted with Cash payment which is a form of liquid given by a consumer to a provider of goods and services as compensation for receiving those products; it will typically be made in the currency of the country or in paper currency.

We have also Cash Collection which is a method of calculating the amount of money a company has received during a particular month, in which the amount of money from customers who paid immediately during that month is added to the amount of money still to be received by customers who bought something the previous month and agreed to pay later; and we have Cash Safeguard which are the measures that are taken to prevent someone or something from undesirable outcome; internal controls are rules and regulations that are put into place to guard assets owned by a person or a company. Cash Budget is used as a method to predict future cash flow because it deals with the estimation of cash flows (i.e., cash inflows and cash outflows) at different stages and offers the management an advance notice to take appropriate and timely action. The cash budget is an important tool for the flow of cash in any firm over a future period of time. In other words, it is a statement showing the estimated cash inflows and cash outflows over a planning period. It identifies the surplus or deficit cash of a firm as it moves from one period to another period. The surplus of deficit data helps the financial manager to determine the future cash needs of the firm, plan for the financing of those needs and exercise control over the cash and liquidity of the firm. The cash budget is also known as short-term cash forecasting.

How often cash flow forecasts need to be run will depend on the financial security of the business. If it is struggling, it might be necessary to forecast the cash position on a daily basis to ensure there is enough cash to compensate staff and suppliers. If the business is stable, cash flow forecasting every week or month may be viewed as sufficient. However, there are considerable benefits from automating the process and running it daily. We have some measures of performance on profitability such as: Gross Profit Ratio, Return on Equity, Return on Assets, Net Profit Margin, etc.

The Profitability Index (PI) measures the ratio between the present value of future cash flows and the initial investment. The index is a useful tool for ranking investment projects and showing the value created per unit of investment.

2.3 Review of Related concepts

2.3.1 Cash Management

Cash management involves managing the monies of the firm in order to maximize cash availability. It includes policies and procedures adopted by the management of an entity to assist in achieving the management policies, laws and regulations of cash, the prevention and detection of fraud and error, promoting orderly, efficient operations (Pawlina and Renneboog, 2015). According to Gilchrist & Himmelberg (2015) cash is the money that a firm can disburse without any restriction. The term cash includes coins, currency and cheques held by the firm and balances on its bank accounts. Sometimes near cash items such as marketable securities or bank time deposits are also included in cash.

According to Baker (2006) cash planning is a technique used to plan and control the use of cash. It involves preparation of forecasts of cash receipts and payments so as to give out an idea of the future financial requirements. Therefore the management of the school needs to determine the schedules of monthly disbursements and collection schedules of creditors. with efficient cash planning system, the financial needs of the school will be met, with reduced possibility of the cash balances which lowers the school's profitability and cash deficits which can lead to school's failure. He further notes that a cash budget is the most significant device used to plan for and control cash receipts and payments. A cash budget is a summary statement of the firm projected time period. This information helps the financial manager to determine the future cash needs of the firm, plan for the financing of these needs and exercise control over cash and liquidity of the organization (Pawlina & Renneboog, 2015). The researcher is wondering whether Tara primary school actually budgets for inflows and outflows of cash.

2.3.1.1 Cash Control

Cash control is the overall attitude and actions of management regarding control system of cash in the entity. A strong control is one with tight budgetary control over cash received, cash banked, cash cheques, and effective control cash balances, cash brought down. According to Sharma and Iselin (2010) an obvious aim of a business is to control and manage its cash affairs in such a way as to keep cash balance at a minimum level and invest surplus cash in investment opportunities. Examples of procedures illustrating good cash control system: Control over cash received. This is where the business safeguards against possible interceptions between receipt and opening of the post for example using a looked mail box and restricting access to the keys. Control over petty cash expenses should be budgeted for, that is to say petty cash should be reconciled by an independent person and the level and location of cash floats should be laid down formally and based on the needs of the organization (Ndirangu, 2017).

Sources of cash should clearly be highlighted and cash should be allocated accordingly, for example cash paid in line with supply of essential requirements used in the school should be used to acquire such requirements or materials (Yamoah, 2016). One of a company's most important accounts is their cash account. It is also the most vulnerable to fraudulent activity. Because of this, companies need to make sure that they have adequate cash controls in place. Before we can talk about cash control methods, we need to first understand what it is that makes up the cash account. Actually, that's not the case. The cash account is made up of cash and cash equivalents. Cash is essentially defined as money or anything else, such as coins, money orders or bank notes, that a bank will accept as a deposit to a business' account. Also included in the category of cash are things called cash equivalents. Cash equivalents are liquid assets that can be turned into cash within a short period of time and that are not affected by changing interest rates. The higher the liquidity value of a cash equivalent, the quicker it can be turned into cash. The term liquidity refers to how quickly something can be turned into cash (Ayebazibwe, 2017).

The cash account is the one account that can easily fall target to fraudulent activity. It is very important that a company put into place guidelines for managing the cash account. There are a few common aspects of internal control that can and should be used by all companies (Margaretha & Adriani, 2019). To begin with, there needs to be a separation of duties. Cash Control is an important part of business as it is required for proper cash management, monitoring and recording of cash flow and analyzing cash balance. Cash is the most important liquid asset of the business. A business concern cannot prosper and survive without proper control over cash.

According to Bhutto et al., (2015), in accounting, cash includes coins; currency; deposited negotiable instruments such as cheques, bank drafts, and money orders; amounts in chequing and savings accounts and demand certificates of deposit. A certificate of deposit (CD) is an interest-bearing deposit that can be withdrawn from a bank at will (demand CD) or at a fixed maturity date (time CD). Cash only includes demand CDs that may be withdrawn at any time without prior notice. Cash does not include postage stamps, IOUs, time CDs or notes receivable.

According to Ahmad et al., (2018), any unit collecting or maintaining cash needs to ensure that collections are sufficiently safeguarded. "Cash" for purposes of controls discussion includes currency, coins, checks, money orders, and gift certificates/cards. Types of cash typically on hand include cash receipts, petty cash accounts, and change funds. The following principles of good cash handling will be discussed in greater detail: Segregation of duties, Security, Reconciliation, Management Review, Documentation.

2.3.1.1.1 Segregation of Duties

Cash handling duties can be divided into four stages: receiving, depositing, recording, and reconciling. Akatwijuka (2018) posit that ideally, all four stages would be performed by different individuals. The purpose of this segregation of duties is to minimize the opportunity for an employee to misappropriate funds and avoid detection. In a smaller department, it may not be feasible to fully segregate all of the cash-related duties. In these circumstances, the department may rely on compensating controls to mitigate the risk that cash is misappropriated (e.g., increased monitoring).

2.3.1.1.2 Security

Keep all cash in a safe until it is deposited. For areas with regular cash receipts, a drop safe is recommended to limit access to the contents of the safe. Akatwijuka (2018) opine that regardless of the type of safe used, limit access to supervisory and authorized personnel only. Locate the safe where it is continually visible by departmental employees but out of public sight. Change the combination of the safe on a regular basis (e.g. annually) and when an employee who knows the combination to the safe leaves the unit. If cash boxes are used ensure that they can be locked, are fire resistant, are not easily movable or concealable, and access is limited to the person collecting the cash. Cash boxes cannot be shared amongst employees as accountability for the cash will be diminished and management will not be able to readily assign responsibility for shortages to the appropriate employee. If large sums of money are being collected and/or cash is collected in a high traffic area, consider installing a camera and alarm system.

2.3.1.1.3 Reconciliation and Documentation

Cash collections must be reconciled on a daily basis to the cash register/point of sale system to ensure the completeness of receipts. According to Muthama (2016), on a monthly basis, an employee who does not collect funds must reconcile deposit tickets to general ledger accounts to ensure that all amounts were properly deposited and reconcile general ledger balances to bank records to ensure that deposits were appropriately credited by the bank. See below for additional information on documenting reconciliations.

Geteri (2017) explains that record keeping requirements exist throughout the cash collections process. A record of cash collected must be maintained by the employee responsible for accepting the cash. This could be in the form of a cash register tape, a revenue log, a pre-numbered receipts book, etc. This record will be compared to the actual cash on hand during the daily balancing of the register or cash box. Records of deposits made must be documented and retained to assist in the performance of reconciliations. Reconciliations between book and bank balances must be performed on a monthly basis and documentation that the reconciliation was performed, that reconciling items were investigated and resolved must be retained.

2.3.1.2 Cash Budget

A cash budget is an estimate of cash flows for a period that is used to manage cash and avoid liquidity problems. This involves estimates of revenue, costs and financing activities as they occur at points in time (Pimpong & Laryea, 2016). Cash budgeting is a process of predicting cash inflows and allocating cash outflows for a specific time period. For this reason, cash budgeting relies heavily on accurate cash flow forecasts. It also requires effectively managing activities such as customer billing and collections, short-term investing and accounts payable disbursements. The goal is to strike a cash reserve balance that is neither too much nor too little but still allows the business to pay its daily operating expenses. Strategies for achieving this goal include accelerating cash inflows and delaying cash payments until they come due, investing excess cash reserves to earn an acceptable rate of return and, when necessary, borrowing cash at good credit terms (Muli & Rotich, 2016).

According to Wainaina et al., (2016), cash flow forecasts aim to predict future financial liquidity over a specific period of time. A new small-business owner or one just getting started with creating cash flow forecasts may want to consider starting with short-term forecasts. Short-term cash flow forecasting is based on actual cash receipt and disbursement data, while long-term cash flow forecasts are projections based on data from the income statement and balance sheet. Not only are long-term forecasts more difficult to complete, but because long-term forecasts are based on estimated projections, the longer the forecast time frame the greater chances are for inaccurate projections. In addition, if the business is or will soon be undergoing a period of rapid growth, long-term cash flow forecasts can become even more inaccurate (Magani, 2018).

Cheruiyot (2018) argues that a short-term cash flow forecast spanning a period of 12 months or less starts and ends each month with the beginning and ending cash balances for the month. Organize spreadsheet sections to include cash on hand, cash receipts, cash payments and cash position at month end. Gather revenue and expense data for the previous six-month period. Then, base the first six months of the cash flow forecast on the data for this six-month period and the next six months on cash flow projections. Cash receipts include money flowing into the business from sales revenues, loan proceeds, capital asset sales and any money the business owner invests in the business. Cash disbursements include operational expenses, short-term debt or credit card payments and any money the business owner withdraws from the business (Kipkemoi & Gacuiri, 2018).

2.3.2 Profitability

Profit is a financial benefit that is realized when the amount of revenue gained from a business activity exceeds the expenses, costs and taxes needed to sustain the activity. Any profit that is gained goes to the business's owners, who may or may not decide to spend it on the business (Mills, 2014). Profitability is the profit making ability of an enterprise. It is the ability of a given instrument to earn a return from its use. It indicates how well management of an enterprise generates earnings by using the resources at its disposal. Profitability is a measure of evaluating the overall efficiency of the business. The best possible course for evaluation of business efficiency may be input-output analysis. Profitability can be measured by relating output as a proportion of input or matching it with the results of other firms of the same industry or results attained in the different periods of operations.

Profitability of a firm can be evaluated by comparing the amount of capital employed i.e. the input with income earned i.e. the output. This is known as return on investment or return on capital employed. Business is conducted primarily to earn profits. The amount of profit earned measures the efficiency of a business. The greater the volume of profit, the higher is the efficiency of the concern. The profit of a business may be measured and analyzed by studying the profitability of investments attained by the business. Thus, profitability may be regarded as a relative term measurable in terms of profit and its relation with other elements that can directly influence the profit (Barad 2010).

Financial performance of a commercial bank can be measured by profitability. Based on Codjia (2010), financial performance will look at the statement of an accounting summary that details a business organization's revenues, expenses and net income. A corporation may prepare a statement of financial performance on a monthly, quarterly or annual basis (Codjia, 2010). Bank profitability and bank interest margins can be seen as indicators of the (in) efficiency of the banking system, as they drive a wedge between the interest rate received by savers on their deposits and the interest paid by lenders on their loans (Kunt et al., 2001). This measure of profitability is the most important for stockholders of a bank since it reflects what the bank is earning on their investments (Rasiah, 2010).

The profitability performance can be measured using ROA. The higher the ROA ratio, the better bank profits (Rasiah, 2010). As stated by Berger and Humphrey (1997), studies of frontier efficiency rely on accounting measures of costs, outputs, inputs, revenues, profits, etc. to impute efficiency relative to the best practice within the available sample. In this research paper, the profitability performance will be measured using the Return on Asset (ROA). Besides that, there are many ways to measure the profitability performance. According to Rushdi and Tennant (2003), profitability can be measured in a number of ways including return on assets, return on equity (ROE) or profit margins.

Other than that, getting on top of the financial measures of the bank performance is an important part of running a growing business, especially in the current economic climate. In addition, ROA and Return on Asset (ROE) are the indicators of measuring managerial efficiency (Hassan, 1999; Samad, 1998). In ROA, the bank will know the efficiency and capability to convert the assets into net income. ROA is the ratio of operating profit to average total assets (Rushdi et al., 2003). In principle, ROA reflects the ability of a bank's management to generate profits from the bank's assets though it may be biased due to off-balance sheet activities (Athanasoglou et al., 2005). ROA and ROE can be used to view the bank's performance in terms of profitability. In analyzing how well any given bank is performing, it is often useful to contemplate on the return on assets (ROA) and the return on equity (ROE) (Rasiah, 2010).

We have chosen ROA as the key proxy for bank profitability instead of the alternative return on equity (ROE) because an analysis of ROE disregards financial leverage and the risks associated with it (Flamini, McDonald & Schumacher, 2009). Moreover, according to Landajo, Andrés and Lorca (2008) company performance is usually measured by profitability, which may itself be proxies by using the return-on-assets (ROA) ratio. In addition, according to the author, ROA also can be defined as the quotient of net profit after taxes to total assets.

The advantage of using profitability ratios is that they are inflation invariant; that is they are not affected by changes in price levels (Rasiah, 2010). Besides that, the ROA is a helpful measurement when comparing the profitability of one company to another, either for those within the same industry or those from a different industry. Therefore, the ROA is a valuable measure when comparing the profitability of one bank with another or with the commercial banking system as a whole (Rasiah, 2010).

2.3.3 Cash Management and Profitability

For a business to be successful an ideal situation is to have adequate cash balances as well as healthy profit figures, i.e., it should strive to be profitable and cash generative. There is often a great deal of confusion over these two terms as many think that these are similar terminologies used interchangeably. However, what needs to be learnt is that 'profit is not the same as cash.' There are multiples reasons as to why the profit shown in the income statement may not be same as the amount available in the company's bank account to spend. The profit may be a positive figure but cash balance may be a negative figure.

Cash is more like an organization's engine on which the company runs. If cash management is not up to the standard required, then the company is likely to go bankrupt. Moreover, high profits do not in any way mean that the business enterprise is liquid. Cash management analysis gives an insight into the core business activities and management decisions on which the company's profitability and sustainability linger. For companies, often profit is the overriding objective but if cash is not sufficient, the company's growth will slump and there may be a threat to its survival. Hence, cash flow is absolutely critical for the existence and survival of an organization and a company generating healthy cash balances will invariably have high profitability. To put in another way, cash is a need whereas profit is a want.

Over delaying to pay staff salaries and wages may result in to resentment of work, low morale, low productivity, and low productivity, high labor turn over, strikes, frauds and theft which increase operating costs that reduce profitability. To Pandey (2008) cash management should ensure that firm's illiquidity should sound as profitability grows. Pandey noted that there is no advantage in paying sooner than greed. By delaying payments as much as possible, the school makes it as a source of fund which is interest free but earning the school some income. . Thus delaying payments enables the school to realize extra profits from retained funds.

According to Kakuru (2011) if cash management concentrates on boosting the liquidity, high balances of cash will be maintained. However the higher these balances are, the more profitability will be fore gone. This is risky especially to people who expect profitable ventures. On the other hand if cash management seeks to boost profitability, investments are highly risky but profitable and the business is threatened as there will be no cost to meet the operating obligations as they fall due. If care is not taken profitability will be short lived as the school will be forced to close due to illiquidity. 2.3 Relationship between cash management and profitability

A cash management system incorporates traditional benefits of a safe, such as robbery prevention and time delay change funds, but also employs bill and coin handling technology, as well as its own operating system. Today's cash management systems connect to corporate networks to facilitate data exchange and remote management of the system to improve performance and profitability (Proimos, 2009).

The cost of a cash management system is very quickly recovered through the recurring savings garnered by the system itself. What initially may appear to be a "cost" quickly becomes a "profit generator" that produces annualized cash and non-cash savings. Typical cash management systems pay for themselves within 6-9 months yet continue to produce savings indefinitely (Ross, 2003).

According to Westerfield (2003), retailers have found recurring cash savings in many areas. Specifically, internal theft is dramatically reduced (cash received but not deposited into the safe); detection and rejection of counterfeit currency; and reduced armored car requirements. The latest and most exciting area of cash savings is now being gained through the retailer receiving "provisional credit" for funds in the cash management systems and not yet deposited in the bank. Non-cash savings include a drastic reduction of management time previously required to reconcile the transaction log with cash and preparation of bank deposits, as well as instant accounting and deposit preparation.

Deploying a cash management system involves support and coordination among multiple departments including Finance, Operations, IT, Security and Loss Prevention to improve profitability in a company (Raheman, 2007). Picking the right cash management provider who can coordinate the physical and technological installation of the system can significantly expedite and smooth the process of ensuring profit maximisation. Each department should carefully consider features and functionality that will be required for a successful deployment and utilization of cash management which also increases profitability.

It is possible to discuss finance management under three main threads as capital budgeting, capital structure and working capital management. The first two of them are mostly related with financing and managing long-term investments. However, financial decisions about working capital are mostly related with financing and managing short-term investments and undertake both current assets and current liabilities simultaneously. So, most of the time, it is reasonable to term short-term financial management as working capital management because both contribute to profitability in a company (Ross, 2003).

Efficiency in cash management is so vital for especially production- firms whose assets are mostly composed of current assets (Horne and Wachowitz, 1998) as it directly affects liquidity and profitability of any firm (Raheman and Nasr, 2007). According to(Kargar and Bluementhal 1994) bankruptcy may also be likely for firms that put inaccurate working cash management procedures into practice, even though their profitability is constantly positive. Hence, it must be avoided to recede from optimal working capital level by bringing the aim of profit maximization in the foreground, or just in direct contradiction, to focus only on liquidity and consequently pass over profitability.

Working capital is also a major external source of capital for especially small and medium sized and high-growth firms. These firms have relatively limited access to capital markets and tend to overcome this complication by short-term borrowing. Working capital position of such firms is not only an internal firm-specific matter, but also an important indicator of risk for creditors (Moyer et al., 1992). Higher amount of working capital enables a firm to meet its short-term obligations easier. This result increase in borrowing capability and decrease in default risk because it involve strict cash management policies to reduce losses. So, it is possible to state that efficiency in cash management affects not only short-term financial performance (profitability), but also long-term financial performance (firm value maximization).

Closely related with operating cycle, cash conversion cycle is, in brief, the part of operating cycle financed by the firm itself to increase profits (McLaney, 1997) and is simply calculated by adding inventory period to accounts receivables period and then subtracting accounts payables period from it. It focuses on the length of time between the acquisition of raw materials and other inputs and the inflow of cash from the sale of goods (Arnold, 1998).

Traditional approach to interaction between cash conversion cycle and profitability posits that relatively long cash conversion periods tend to decrease profitability. Trade activities of a firm can be considered as a process in circulation where cash is converted into assets and assets into cash (Raheman, and Nasr, 2007). Cash available for trade activities of the firm has an important multiplier effect due to its turnover ratio. Higher cash turnover ratios enable managers to minimize short-term investments whose rates of return are relatively lower compared to long-term investments and consequently increase profitability.
Studies regarding cash management by Nasr (2007) revealed that cash management policies are mostly related with improving models to determine optimal liquidity and cash balance, rather than analyzing underlying reasons of relationships between liquidity, working capital management practices and profitability.

In a study by Myers (2003), about working capital management practices in retailing firms, it has been concluded that there is a reverse relationship between cash management cycle and profitability. However, Soenen (1993) contradicts the same idea as he noted that in case of overlooking industrial differences, there does not exist any statistically constant relationship between cash conversion cycle and profitability. However, in case of considering industrial differences, the relationship between the mentioned variables has shown dissimilarities across industries as positive in some industries and negative in others. In another study of Shin (1998), a sample consisting of American manufacturing firms was analysed and a statistically negative relationship between cash management cycle and profitability has been confirmed.

Deloof (2003), also disclosed relationships between cash management and profitability by dividing cash conversion cycle into its components (inventory, accounts receivables and accounts payables periods). Results of the study have concluded that increases in all of these periods affect profitability negatively. Findings by (Lazaridis and Tryfonidis 2006) also noted that there existed a relationship between cash management and profitability.

Cash mismanagement affects profitability negatively. According to the findings of another study from a different perspective, it has been concluded that the effect of cash conversion cycle on profitability is stronger than the effect of current ratio on it (Eljelly, 2004). Empirical results show that, for the mentioned sample and period, accounts receivables period, inventory period and leverage significantly and negatively affect profitability of Turkish manufacturing firms, while firm growth (in sales) significantly and positively. However, it is also concluded that cash conversion cycle, size and fixed financial assets have no statistically significant effects on firm profitability.

Results suggest that firm profitability can be increased by shortening accounts receivables and inventory periods through proper cash management. The negative relationship between accounts receivable period and profitability may be due to that customers want more time to assess quality of products they buy from firms with declining profitability (Deloof, 2003).

Myers (2003) noted that cash management techniques employed by a given company will influence the level of profitability in that particular company. In case of that firm may gain some advantages like monopoly or bargaining power due to growth as a reflection of economies of scale (Külter and Demirgüneş, 2007), a positive relationship between growth and profitability is expected.

2.4 Review of Empirical Studies

Recent studies try to gain a better understanding of these empirical findings by focusing on the causes of cash management sensitivity. According to Nandom, Mubarik and Abdul-Aziz (2017), cash management is one of the most critical constituents of financial management is working capital management which has a direct impact on the financial performance of an organization. Iqbal, Khan, Shah and Raza (2016), highlight the importance of investment in current assets as essential to ensure timely delivery of goods and services to firms' customers and underscores the fact that effective cash management will result in favorable effect on profitability. According to Rehman et al. (2016) cash management is an important element for a business enterprise, and research has revealed that it has a positive association with the firm profitability.

Another research by Agha (2017) on the impact of cash management on profitability in a listed pharmaceutical company in Karachi Stock Exchange, Pakistan for the period 1996-2011 revealed that there was significant effect of cash management on the profitability of the company, measured by return on assets. The independent variables consisted of accounts receivable turnover, creditors' turnover, inventory turnover and current ratio. A study on the relationship between cash management on profitability among 50 retail stores in Kenya by Odhiambo (2017) revealed a positive relationship between inventory turnover and profitability (return on assets); a negative association between average collection period and return on assets; a significant positive relationship between average payment period and return on assets and a positive relationship between debt ratio and profitability. An investigation by Azeez (2016) on relationship between cash management and profitability among the listed Nigerian manufacturing firms indicated that profit was significantly affected by inventory conversion period, but negatively and significantly influenced by cash conversion cycle.

Another investigation by Temtime (2016) on the relationship between cash management policies and profitability of 176 publically traded small U.S. manufacturing companies was carried out for the period 2004-2013. The overall conclusion from the study was that accounts receivable period, accounts payable period, working capital investment policy, working capital finance policy, are significant predictors of firm profitability. Rehman et al. (2016) examined the impact of cash management on profitability of firms in the Chemical Sector in Pakistan and reported that inventory turnover showed a significant impact on profitability. Mahato, and Jagannathan (2016) compared profitability with cash management components, debt and current ratios among eight listed telecom industry in India and the results revealed a negative relationship between profitability and inventory conversion period, average collection period, cash conversion cycle and current ratio, and a positive relationship of return on assets to average payment period, debt ratio and firm size.

In investigating the investment cash flow sensitivity of UK listed firms, (Pawlina and Renneboog, 2015) confirm that investment is strongly cash flow sensitive. They find that the observed cash flow sensitivity result mainly from the agency cost of free cash flow. Jensen. M. (2006) free cash flow hypothesis implies a positive relationship between cash flow and investment.

High growth opportunities combined with higher investment-cash management sensitivity is believed to be a symptom of under investment (Audretsch and Elston, 2012; Bond *et al.*, 2013), while a decrease in cash flow sensitivity should point to problems of free cash flow (Deloof, 2008; Gugler, 2013). Del Brio et al. (2013) show for example on Spanish data that the level of free cash flow as well as the investment opportunities influences the market reaction to investment announcements. Degryse and de Jong, (2006) find a combination of effect. Mong'o (2010) analyzed the impact of cash flow on profitability among commercial banks in Kenya over a period of five years from 2005-2009. It was specifically conducted to explain the influence that various components of cash flows have on profitability. The objective of the study was to establish the causality that exists between the profitability and cash flow. This was prompted by the need to unravel the mystery on whether profits are driven by cash flow or the vice versa. The study was carried out by analyzing the various banks profit measured by the profit after tax the dependent variable and the cash flow components (operating, financing and investing) as the independent variables.

The findings for the study indicated that profits among commercial banks improved tremendously during the last five years. Cash management from operating activities experienced the same trend which was occasioned by the improved performance which translated to financing and investing cash flow which have shown consistent increase over the five years. Cash management from the financing and the investing activities were found to have a great influence (positive) of the banks profit while operating cash flow have a negative effect. This suggests that increase in financing cash flows by way of borrowing positively contributes to the bank's profitability. Consequently, the more they borrow the more they boost profitability. It also means that banks with high loan portfolios will definitely experience higher profitability as compared to banks with rigorous lending practices. In order to increase profitability it is important that banks focus on boosting the financing and investing cash flow as they have a significant and a positive impact on profitability.

Banks should invest in activities such as branch network expansions, Installing ATM machines as well as borrowing and increasing loan portfolios. The central bank therefore need to provide the right conditions to facilitate lending by commercial banks by adopting sound monetary policies such as reduced lending rates as well as liquidity ratios among the commercial banks to enhance the lending potential by the banks. Banks should also supplement their incomes through borrowing either from other banks or by floating bonds as this will boost their profitability.

Udell (2008) in consistency with the evidence in Korajczyk and Levy (2013) suggest that, as owners observe that the debt carrying capacity of their firm improves, they may also prefer more debt financing in high growth periods. When information- related financial market imperfections diminish, opportunities to continuously attract external financing at lower costs improve, both in debt and equity markets, while internal and external financing become better substitutes. As a result, cash flow sensitivity due to capital constraints should be limited. Furthermore, although there is ample evidence that long time listed firms also time the acquisition of external financing due to the substitutability of external and internal resources, the impact of an increased use of external resources on measured cash flow sensitivity should be limited for these firms (Korajczyk and Levy, 2013; Pastor and Veronesi, 2015).

This occurs for example when, in periods of high growth, the benefits from investment opportunities overcome the costs of external financing and/or external financing costs are smaller compared to low growth periods. The timing of the acquisition of external financing is likely to significantly distort measured investment-cash flow sensitivities for firms suffering from important information asymmetries. When information asymmetry is limited, the cost gap between internal and external financing is relatively small and the availability of external financing is therefore less likely to influence investment behavior, Hoshi et al, (2011). Bond et al, (2013) studying banking relationships and institutional factors find important differences in cash flow sensitivity, suggesting that firm characteristics like group membership or country specific institutional characteristics may have an impact on a firm's investment/financing behavior.

Lenz (2011) provided an interdisciplinary review and evaluation of empirical studies on the performance of whole enterprises. Lenz summarizes and comments on identifying factors that influence organizational performance and also reviews environmental factors affecting firm profitability. Importantly, organizational factors are influenced entirely by human decision making which varies substantially. Also most substantial environmental changes for example consumer demand, inflation will not likely have a uniform impact across companies. Levy (2007) conducted an investment experiment, in which a real monetary profit or loss can occur, to test the Capital Asset Pricing Model (CAPM). He found that risk and return are strongly associated. While in most cases the Generalized CAPM (alternative risk return model developed by Levy (2008), Merton (2007) and Markowitz (2010)) beta provides the best results, the CAPM beta reveals a strong positive association with mean returns. Levy's results along with the risk-return equilibrium model provide grounds enough to incorporate beta as a variable associated with company profitability.

Brush, Bromiley, and Hendrickx (2009) find that both corporation and industry influence business unit profitability but corporation has the larger influence. The authors use a continuous variable model, which estimates the coefficients of corporation and industry effects on business segment returns while explicitly removing the simultaneous effects that might cause inconsistent estimates. In the end, they find a sizable corporate effect on business segment performance, one which appears to be greater than the industry effect. Brush and Bromiley’s findings contradict Rumelt's (2011) widely cited paper, in which Rumelt finds that corporations explain almost none of the variability in business unit profitability. Riley (2012) explains the relationship between cash management and profitability of firms by postulating that firms grow in order to achieve their objectives, including increasing sales, cash flow and maximizing profits or increasing market share.

2.5 Research Gaps

In a conclusive remark, past literature in relation to firm profitability is extensive and over the course of time has addressed several missing components as well as crucial flaws and holes in previous models and methodology. Still today economists acknowledge that there is plenty of room for further research in this area. For instance, a more in depth look at the organizational factors referred to Lenz’s (2011) study is still needed as there is no precise way to account for a company’s management, core business practices, or strategic outlook within the world of modeling. Schiantarelli and Sembenelli, (2010), find important differences in cash management sensitivity from studies undertaken by others, suggesting that firm may have an impact on a firm’s investment/financing behavior.

As demonstrated by Mang’o (2010), cash management from operating and financing activities experienced the same trend of growth occasioned by the improved performance which translated to financing and investing cash flow which have shown consistent increase over the years. Cash management has a great influence on profit of firms. This implies that increase in financing cash flows by way of either borrowing or floating equity to the market positively contributes to the profitability as the company is able to meet its liquidity needs which is essential for day to day operation and overall growth of a firm. From the literature above, it’s clear that there is plenty of studies that have been conducted about cash management and profitability in the financial sector, particularly in commercial banks and other financial institutions. However, none of these studies were conducted in Burundi, and given the fact that every country has a different set of financial condition in which its financial institutions operate, this is a knowledge gap that this study intends to fill.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The chapter presents the research design, research population the sample size, sampling procedures, the research instrument, validity and reliability, data gathering procedures, data analysis, ethical consideration and limitation of the study.

3.1 Research Design

This study adopted descriptive cross-sectional survey design, because it aims at studying a particular phenomenon (or phenomena) at a particular time. Cross-sectional studies often employ the survey strategy (Mugenda & Mugenda, 2008). The researcher sought to describe the incidence of a phenomenon (for example, cash management and profitability of commercial banks in Burundi). Furthermore, the study employed only quantitative approach because it is predominantly used as a synonym for questionnaire data collection technique so as to generate statistical and numerical data (Creswell, 2011).

3.2 Research Population

The population of the study comprised of General Managers, financial managers, credit analysts, operation managers, internal auditors making a total of 58 officers from Banque de Crédit de Bujumbura (BCB) and Banque Commerciale du Burundi (BANCOBU) (National Bank of Burundi Annual report, 2018).

3.3 Sample size

Since the study population is reasonably small in number, the study took the entire population as participants in the study. Therefore the study included a total of 58 respondents who include the following: general managers, financial managers, credit analysts, operation managers, and internal auditors of the Banque de Crédit de Bujumbura (BCB), Banque Commerciale du Burundi (BANCOBU) have been involved in the study.

3.4 Sampling Procedure

The study employed simple random sampling methods to select all the technical staff of the selected commercial banks. This was to ensure none-biasness in the selection of the participants.

3.5. Data sources

The study employed both primary and secondary sources of data. This helped to come up with the appropriate information to the topic under investigation.

3.5 Research Instruments

3.5.1 Questionnaires

Questionnaires

The questionnaire is one of the largest method of inquires used by a wide range of researchers from private individuals to large organizations and government institutions (Kothari, 2004). A questionnaire, "consists of a number of questions printed or typed in a definite order on a form or set of forms" Kothari (2004:136). Questionnaires can be sent through post, electronic mail or hand delivered for a face to face ministration. Its advantages are: cheap and can cover a wide range of respondents; provides respondents with adequate time to understand the questions asked and provide answers accordingly; a researcher is able to collect data from a wide range of samples from the target population, group or elements under investigation; and questionnaires maximise objectivity since the researcher is dependent on respondent's views/ opinion.

This study employed closed questionnaires and the questionnaires were administered to 58 general managers, financial managers, credit analysts, operation managers, and internal auditors. The questions were confined to a given set of options and the respondents were asked to choose the option that they agree or disagree with. To achieve this, a five Likert scale was used, where 1=strongly disagree; 2=disagree; not sure; 4=agree; and 5=strongly agree. The five Likert scale was preferred by the researcher because it captures all the ideas, views and opinions of the respondents.

3.5.2 Documentary Review

The study used secondary data to from the annual financial statements of the two banks. This helped in providing comparative analysis and substantiating primary data.

3.6 Validity and reliability of instruments

In order to test the validity of the instruments, the researcher availed the questionnaire to two experts to check each item for language, clarity, relevance, and comprehensiveness of the content. The items were be rated as follows: 3 – Very relevant, 2 – Quite relevant, and 1 – Somewhat relevant. The researcher then put the items in 2 groups, with category 1 in one group and the other 2 and 3 in the other group. The researcher then computed the score using the Cronbach's Alpha and Content Validity Index.

Cronbach alpha (Cronbach, 1951) reliability coefficient of 0.6 points and above is used to measure the internal consistency to measure its reliability. The higher the score, the more reliable the generated scale is. For instance, Nunnally (1978) argues that a 0.7 alpha coefficient is an acceptable reliability coefficient.

The Content Validity Index is computed and all items had to score above 0.7. The instrument has been also checked for accuracy, reliability, consistency and completeness using the alpha cronbach test (cronbach, 1951). The acceptable reliability results have been those of 0.6 points and above. The formula for computing CVI is as follows:

$$CVI = \frac{Items\ rate\ as\ relevant\ by\ experts}{total\ number\ of\ items}$$

$CVI = \frac{14}{17}$ =0.82

The result 0.82 shows that the instrument was valid.

Table 3.1: Reliability of the instrument

Variables tested	Number of items	Cronbach' s Alpha
Cash management	8	.861
Profitability	9	.890

Source of data: Primary data

3.7 Data Gathering Procedure

3.7.1 Before data gathering

In this stage the researcher obtained a reference letter from the College of Economics and Management, Kampala International University, which he presented to the authorities in the field. She then made preparations based on the conditions in the field of study. The researcher made an assessment of the weather conditions, physical locations and linguistic characteristics in the study area so as to determine the best methods to use as well as preparing questionnaires.

3.7.2 During data gathering

At this stage the researcher made appointment schedules with all the respondents so as to enable him meet all respondents at the scheduled time. This helped the researcher to keep time and ensure the convenience of respondents.

3.7.3 After data gathering

At this stage, the researcher has organized the data obtained from the field systematically in preparation for presentation, analysis and presentation.

3.8 Data Analysis

The collected data has been analyzed through descriptive analysis that is means and standard deviation to determine the extent to which cash management practices influence the profitability of commercial banks. Regression analysis has been used to establish the effect of cash management practices and the profitability of commercial banks. Cash management practice has been quantified from 1-5 Likert scale questions. Linear Correlation was applied to examine the relationship between the variables. The model treated the profitability of commercial banks as the dependent variable while the independent variables were the cash management practices which include surplus on investment and cost budgeting forecasting. The relationship model was represented in the linear equation below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (i)$$

Where: Y – Profitability of commercial banks

α – Constant Term

β_1 – Cash Control

β_2 – Cash Budget/Forecast

e – Error Term

The hypotheses testing was done by the multiple regression model using the distribution (t-statistic) test, to determine where to accept or reject the hypotheses. The circumstances under which to uphold or reject a null hypothesis is set out in the decision rule. The decision rule for this test depended on 3 factors: the hypothesis, the test statistic and the level of significance. The decision rule was as follows:

Accept H_0 If (Sig. F) > 5%...(ii)

Accept H_1 If (Sig. F) < 5%...(iii)

Table 3.2: Mean range

Scale	**Mean Range**	**Response**	**Interpretation**
5	4.21-5.00	Strongly agree	Very Satisfactory
4	3.41-4.20	Agree	Satisfactory
3	2.61-3.40	Not sure	Fairly satisfactory
2	1.81-2.60	Disagree	Unsatisfactory
1	1.00-1.80	Strongly disagree	Very unsatisfactory

3.9 Ethical Consideration

The study used the guidelines on ethical principles prodived by Creswell (2012) and Saunders et al., 2009) as summarised below:

Ensuring participants have given informed consent: A fundamental ethical principle of social research is: Never coerce anyone into participating; participation must be voluntary at all times (Saunders et al. 2009). Permission alone is not enough; people need to know what they are being asked to participate in so that they can make an informed decision. In this study, participants were verbally made aware of their rights and what they were getting involved into. They were told that they were free to withdraw their participation at any time. However, none of the participants withdrew their participation during the field data collection sessions.

Ensuring no harm to participants: the researcher ensured that no participants were put in a situation where they could be harmed as a result of their participation; be it physical or psychological (Saunders et al., 2009). The questionnaires were conducted in well furnished rooms with good lighting, furniture and flooring.

Ensuring participant's privacy, confidentiality, and anonymity: Adhering strictly to all the ethical guidelines serves as standards about the honesty and trustworthiness of the data collected and the accompanying data analysis (Creswell, 2012). The researcher ensured that the confidentiality and anonymity of the participants was maintained through the removal of any identifying characteristics before widespread dissemination of information. The researcher made it clear that the participants' names were not used for any other purposes, nor shared information that revealed the identity of the participants.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter gives the presentation, analysis and interpretation of the results of the study on the impact of cash management on profitability in commercial banks in Bujumbura, Burundi. The findings were presented in line with the objectives of the study, but for a more systematic presentation, the first section deals with the demographic characteristics of the respondents who participated in the study.

4.2 Demographic Characteristics of Respondents

This section presents the background information about the respondents, including age, gender, marital status, education levels, position and years in service.

Table 4.1: Demographic characteristics of the respondents

Gender	**Frequency**	**Percent (%)**
Male	20	65.5
Female	38	34.5
Total	58	100.0
Age		
18-25	12	20.7
26-35	36	62.1
36-45	4	6.9
46 and above	6	10.3
Total	58	100,0
Marital status		
Single	16	27.6
Married	23	39.7
Widow	19	32.7
Total	58	100.0
Education Level		
Master	34	58.6
Bachelor	20	34.5
Diploma	4	6.9
Certificate	0	00.0
Total	58	100.0
Position Held		
General Managers	10	17.2
Financial Managers	19	32.8
Credit Analyst	23	39.7
Internal Auditor	6	10.3
Total	58	100.0
Work experience		
1-3 years	22	37.9
3-5 years	22	37.9
5-10 years	7	12.1
10 and above	7	12.1
Total	58	100.0

Source: primary data, 2018

The results in table 4.1 indicate that on the gender of respondents, 65.5% of the respondents were male while 34.5% were female. This implies that both genders were adequately represented in the study. Documenting the gender differences of the respondents was important in determining the gender distribution of roles and responsibilities in the various selected commercial banks in Bujumbura, Burundi.

Regarding the age categories of respondents, the results indicate that 20.7% of the respondents were aged 18 - 25 years old, 62.1% of the respondents were aged 26 - 35 years old, 6.9% of the respondents were aged 36 - 45 years old, and 10.3% of the respondents were aged 46 years old and above. This implies that respondents were sourced from various categories of people working within the various selected commercial banks in Bujumbura, Burundi.

The information regarding the respondents' marital status indicates that 27.6% of the respondents were single (unmarried), 39.7% of the respondents were married, and 32.7% of them were widowed. The information on the marital status of respondents was gathered and considered for purposes of determining the level of individual responsibility of the various respondents. And the results show that majority of the respondents were married.

Information on the education levels of respondents indicates that 58.6% of the respondents were Master's degree holders, 34.5% of the respondents were Bachelor's degree holders, 6.9% of the respondents were Diploma holders, and 0.00% of the respondents were Certificate holders. This implied that respondents were from the various educational backgrounds, which helped to expand the pool of information collected, from the least to the most qualified.

Information on the position held by the respondents indicates that 17.2% of the respondents were general managers, 32.8% of the respondents were financial managers, 39.7% of the respondents were credit analysts, and 10.3% of the respondents were internal auditors. This implied that respondents were from the various positions within the various selected commercial banks in Bujumbura, Burundi.

The information about the length of stay in the position of employment indicates that 39.7% of the respondents had been in their positions for 1 – 3 years, 39.7% of the respondents had been in their positions for 3 – 5 years, and 12.1% of the respondents had been in their positions for 5 – 10 years, and also12.1% of them had been in their positions for over 10 years. This implies that the majority of the respondents had spent an average of 4 years working in the various selected commercial banks in Bujumbura, Burundi.

4.3 Descriptive Statistics of the Main Variables

The main variables of this study include cash management and profitability. Mean and standard deviation were used to descriptive the central tendency and measure of dispersion of the main constructs of the study. Tables 4.2 and 4.3 give the summary of the findings.

Table 4.2: Cash Management

Statement	Mean	Standard deviation	Interpretation
Cash control			
A business concern cannot prosper and survive without proper control over cash.	3.94	1.069	Satisfactory
A positive net cash balance indicates that money is present and available in the account, while a negative one indicates that the account is overdrawn.	3.88	1.093	Satisfactory
Cash inflows are used to gauge the overall financial health of a business, and a company with a large and stable cash inflow can be considered to be in a good financial position.	3.76	1.122	Satisfactory
Cash Payment with interest is a determinant of profitability level	3.73	1.190	Satisfactory
Average mean	**3.83**	**1.119**	**Satisfactory**
Cash budget			
Accurate forecasts/predicts short-term determines profit levels	4.09	.904	Satisfactory
Effective forecasting/budgeting for cash/ expenses is essential for-profit estimations	3.68	1.203	Satisfactory
The main aim of preparing cash budget is to predict the cash flows over a given period of time and to determine whether at any point of time there is likely to be surplus or deficit of cash	3.66	1.093	Satisfactory
Accurate cash outflow planning for variable costs/expenses determines profit levels	3.42	1.270	Satisfactory
Average mean	**3.71**	**1.118**	**Satisfactory**
Overall average mean	**3.77**	**1.119**	**Satisfactory**

Source: primary data 2018

The results in table 4.2 revealed that overall, cash management was assessed by the respondents as satisfactory (overall average mean=3.77, Std=1.119). This is because cash management ensures that the firm has sufficient cash during peak times for purchase and for other purposes. It also helps to meet obligatory cash out flows when they fall due. This implies that proper cash management in terms cash control and cash budget has the potential to improve the profitability of commercial banks in Bujumbura, Burundi.

In regard to cash control, respondents assessed this variable as satisfactory (average mean=3.83, Std=1.119). This was attributed to the fact that majority of the respondents agreed that a business concern cannot prosper and survive without proper control over cash (mean=3.94, Std=1.069). In addition, respondents agreed that a positive net cash balance indicates that money is present and available in the account, while a negative one indicates that the account is overdrawn (mean=3.88, Std=1.093). Similarly, respondents agreed that cash inflows are used to gauge the overall financial health of a business, and a company with a large and stable cash inflow can be considered to be in a good financial position (mean=3.76, Std=1.122). Likewise, respondents agreed that cash payment with interest is a determinant of profitability level (mean=3.73, Std=1.190).

Furthermore, in regard to cash budget, respondents assessed this variable as satisfactory (average mean=3.71, Std=1.118). This was attributed to the fact that majority of the respondents agreed that accurate forecasts/predicts short-term determines profit levels (mean=4.09, Std=0.904). Additionally, respondents agreed that effective forecasting/budgeting for cash/ expenses is essential for-profit estimations (mean=3.68, Std=1.203). Also, respondents agreed that the main aim of preparing cash budget is to predict the cash flows over a given period of time and to determine whether at any point of time there is likely to be surplus or deficit of cash (mean=3.66, Std=1.093). Lastly, respondents agreed that accurate cash outflow planning for variable costs/expenses determines profit levels (mean=3.42, Std=1.270). This implied that majority of the respondents agreed that cash budgeting has an effect on profitability in commercial banks in Bujumbura, Burundi. This implied that the respondents appreciated the importance of having well-functioning cash budgeting in place to help guide the procedures for cash budgeting issued to borrowers, and how it affects profitability in the selected commercial banks in Bujumbura, Burundi.

Table 4.3: Profitability

Performance ratio	Mean	Std. Deviation	Interpretation
Performance ratio			
A business with excellent performance ratios can generate a high level of sales with relatively few resources, and generates a high level of cash inflows.	3.94	1.069	Satisfactory
The measure of the performance is the most important for stockholders of a bank since it reflects what a bank is earning on their investments.	3.88	1.093	Satisfactory
A high ratio indicates that a business is creating a large volume of sales with very few employees.	3.73	1.190	Satisfactory
A high ratio indicates that a business is generating a large amount of sales from a relatively small fixed asset base.	3.03	1.335	Fairly satisfactory
Average mean	**3.67**	**1.162**	**Satisfactory**

Source: primary data, 2018

Table 4.3 revealed that profitability was assessed by the respondents as satisfactory (average mean=3.67, Std=1.162). This was attributed to the fact that majority of the respondents agreed that a business with excellent performance ratios can generate a high level of sales with relatively few resources, and generates a high level of cash inflows (mean=3.94, Std=1.069). Similarly respondents agreed that the measure of the performance is the most important for stockholders of a bank since it reflects what a bank is earning on their investments (mean=3.88, Std=1.093). Furthermore, respondents agreed that a high ratio indicates that a business is creating a large volume of sales with very few employees (mean=3.73, Std=1.190). Lastl, respondents agreed that a high ratio indicates that a business is generating a large amount of sales from a relatively small fixed asset base (mean=3.03, Std=1.335).

According to the financial statements of Banque Commerciale du Burundi (BANCOBU) as of 2017, the profitability of the equity was at 31.8%, profitability of assets at 3.3%, operating ratio at 33.4%, net profit at 33.4%. However, the financial statements of Banque de Crédit de Bujumbura (BCB) as of 2017 indicated that the profitability of the equity was at 30.1%, profitability of assets at 2.9%, operating ratio at 31.7%, net profit at 32.8%.

4.4 The Effect of Cash Control on Profitability in Selected Commercial Banks in Bujumbura, Burundi

The first objective of this study was to examine the effect of Cash Control on profitability in selected commercial banks in Bujumbura, Burundi. Table 4.4 gives the summary of the findings.

Table 4.4: The Effect of Cash Control on Profitability in Selected Commercial Banks in Bujumbura, Burundi

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.466[a]	.217	.212	.51406	.217	43.761	1	158	.000

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.564	1	11.564	43.761	.000[b]
	Residual	41.753	158	.264		
	Total	53.317	159			

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.926	.230		8.371	.000
	Cash control	.436	.066	.466	6.615	.000

a. Dependent Variable: profitability

Table 4.4 shows that cash control significantly affects profitability of commercial banks in Burundi. This is attributed to the fact that cash control can explain a total variance of 21.2% in profitability (Adjusted R Square=0.21, p=0.00). This implies that a positive net cash balance, cash inflows, and cash payment are very instrumental in ensuring profitability of commercial banks in Burundi.

Hypothesis I: Cash Control has no significant effect on profitability in selected commercial banks in Bujumbura, Burundi.

The decision rule was that: if $p \leq 0.05$, the null hypothesis would be rejected, and alternative hypothesis accepted.

Therefore, the finding in table 4.4 shows that the null hypothesis that there is no significant effect of cash control on profitability was rejected, and the alternative hypothesis that there is a significant effect of cash control on profitability was upheld.

Furthermore, the study revealed that the regression model was the best fit for predicting the effect of cash control on profitability ($F=43.761$, $p=0.000$). Similarly, the study revealed that every unit change in cash control would significantly predict a variance in profitability by 46.6% (Beta=0.466, $p=0.000$).

4.5 The Effect of Cash Budgeting on Profitability in Selected Commercial Banks in Bujumbura, Burundi

The second objective of this study was to analyze the effect of Cash Budgeting on profitability in selected commercial banks in Bujumbura, Burundi. Table 4.5 gives the summary of the findings.

Table 4.5: The Effect of Cash Budgeting on Profitability in Selected Commercial Banks in Bujumbura, Burundi

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.630[a]	.397	.394	.45091	.397	104.239	1	158	.000

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.193	1	21.193	104.239	.000[b]
	Residual	32.124	158	.203		
	Total	53.317	159			

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.646	.178		9.266	.000
	Cash budgeting	.546	.054	.630	10.210	.000

a. Dependent Variable: Profitability

Table 4.5 shows that cash budgeting significantly affects profitability of commercial banks in Burundi. This is attributed to the fact that cash budgeting can explain a total variance of 39.4% in profitability (Adjusted R Square=0.394, p=0.00). This implies that accurate forecasts, effective forecasting, and accurate cash outflow planning are very contributory in ensuring profitability of commercial banks in Burundi.

Hypothesis II: Cash budgeting has no significant effect on profitability in selected commercial banks in Bujumbura, Burundi.

The decision rule was that: if $p \leq 0.05$, the null hypothesis would be rejected, and alternative hypothesis accepted.

Therefore, the finding in table 4.5 shows that the null hypothesis that there is no significant effect of cash budgeting on profitability was rejected, and the alternative hypothesis that there is a significant effect of cash budget on profitability was upheld.

Furthermore, the study revealed that the regression model was the best fit for predicting the effect of cash budgeting on profitability (F=104.239, p=0.000). Similarly, the study revealed that every unit change in cash budgeting would significantly predict a variance in profitability by 63% (Beta=0.630, p=0.000).

4.6 The Relationship between Cash Management and Profitability among Selected Commercial Banks in Bujumbura, Burundi

The third objective was to establish the relationship between cash management and profitability among selected commercial banks in Bujumbura, Burundi. Table 4.6 gives the summary of the findings.

Table 4.6: The Relationship between Cash Management and Profitability among Selected Commercial Banks in Bujumbura, Burundi

Variables tested		Cash management	profitability
Cash management	Pearson Correlation	1	.708**
	Sig. (2-tailed)		.000
	N	58	58
Profitability	Pearson Correlation	.708**	1
	Sig. (2-tailed)	.000	
	N	58	58

**. Correlation is significant at the 0.01 level (2-tailed).

The results in table 4.6 indicate that there is a positive and significant relationship between cash management and profitability among selected commercial banks in Bujumbura ($r=.708^{**}$, $p=0.00$). This implies that a positive improvement in cash management in terms of cash control and cash budgeting will have significant influence on the profitability of the banking institutions.

Hypothesis III: Cash Management has no relationship with profitability in selected commercial banks in Bujumbura, Burundi.

The decision rule was that: if $p \leq 0.05$, the null hypothesis would be rejected, and alternative hypothesis accepted.

Therefore, the finding in table 4.6 shows that the null hypothesis that there is no significant relationship with profitability in selected commercial banks in Bujumbura, Burundi was rejected, and the alternative hypothesis that there is a significant relationship between cash management and profitability was upheld.

Table 4.7: Multiple Regressions between Cash Management and Profitability of Commercial Bank in Bujumbura

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.696[a]	.484	.477	.41865	.484	73.602	2	157	.000

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.800	2	12.900	73.602	.000[b]
	Residual	27.517	157	.175		
	Total	53.317	159			

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.911	.219		4.171	.000
Cash control	.288	.056	.307	5.127	.000
Cash budgeting	.468	.052	.540	9.012	.000

a. Dependent Variable: profitability

Table 4.7 shows that cash management can significantly explain a total variance of 47.7% of profitability (Adjusted R Square=0.477, p=0.000). This implies that a combination of cash control and cash budgeting significantly affect profitability by up to 47.7%. Furthermore, the study revealed that the regression model was the best fit for predicting the effect of cash management on profitability (F=73.602, p=0.000).

Additionally, table 4.7 shows that cash budgeting is the highest predictor of profitability since it significantly explains the highest variance, that is, 54% (Beta=0.540, p=0.00). On the other hand, cash control predicts only 30.7% variance in profitability (Beta=0.307, p=0.012). This implies that commercial banks in Bujumbura should make more emphasis on cash budgeting in their cash management so as to promote profitability.

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents a summary of the findings of the study, the conclusions reached in the study as well as the recommendations made by the study.

5.1 Summary of major findings

The study revealed cash control significantly affects profitability of commercial banks in Burundi (Adjusted R Square=0.21, p=0.00).

The study revealed that cash budgeting significantly affects profitability of commercial banks in Burundi (Adjusted R Square=0.394, p=0.00).

The study revealed that there is a positive and significant relationship between cash management and profitability among selected commercial banks in Bujumbura ($r=.708^{**}$, p=0.00).

The study further revealed that cash budgeting is the highest predictor of profitability since it significantly explains the highest variance, that is, 54% (Beta=0.540, p=0.00).

5.2 Discussion of findings

5.2.1 The Effect of Cash Control on Profitability in Selected Commercial Banks in Bujumbura, Burundi

The first objective of this study was to examine the effect of Cash Control on profitability in selected commercial banks in Bujumbura, Burundi. The study revealed cash control significantly affects profitability of commercial banks in Burundi. The findings of the study on the effect of cash control on profitability revealed that majority of the respondents believed that cash control was one of the cash management practices in place in their banks and this had a significant effect on the profitability in the selected commercial banks in Bujumbura, Burundi. This implied that the respondents understood and appreciated the importance of having cash management practices in their operations, and the effect that this has on the profitability of the banks.

This study is in line with other studies such as Elijelly (2004) who found that cash control and profitability can be like two forces having differing objectives which all times use pressure to pull the bank apart. Furthermore, Olagunju et al., (2012) found that profitability and cash are very important to the main tax authorities, creditors and shareholders. The business men are interested to become shareholders in the bank. Cash control plays a very important role in every business because banks usually operate with large funds borrowed from depositors in form of demand deposits and time deposits. Olagunju et al., (2012) explained that liquidity means the ability of a bank to meet financial commitments at a reasonable price at all times. Banks having money when they need to satisfy the withdrawal needs of their customers.

5.2.2 The Effect of Cash Budgeting on Profitability in Select Commercial Banks in Bujumbura

The second objective of this study was to analyze the effect of Cash Budgeting on profitability in select commercial banks in Bujumbura. The study revealed that cash budgeting significantly affects profitability of commercial banks in Burundi. This implied that the respondents appreciated the importance of having well-functioning cash budgeting in place to help guide the procedures for cash budgeting issued to borrowers, and how it affects profitability in the selected commercial banks in Bujumbura, Burundi. The information from the above table also revealed that the cash budget has no significant effect on profitability in selected commercial banks in Bujumbura, Burundi.

This study agrees with several other studies such as that of Wainaina et al., (2016), Muli & Rotich (2016), Pimpong and Laryea (2016), Kipkemoi and Gacuiri (2018), Cheruiyot (2018), and Magani (2018).

For example, Pimpong and Laryea (2016) found that cash budgeting requires effectively managing activities such as customer billing and collections, short-term investing and accounts payable disbursements which would later provide a significant improvement in the profitability of the firm. Similarly, Wainaina et al., (2016), cash budgeting in terms of short-term cash flow forecasting is based on actual cash receipt and disbursement data, while long-term cash flow forecasts are projections based on data from the income statement and balance sheet. Other proponents such as Cheruiyot (2018) and Kipkemoi and Gacuiri (2018) also found that a short-term cash flow forecast spanning a period of 12 months is instrumental in accurately predicting the profitability of a banking firm.

5.2.3 The Relationship between Cash Management and Profitability in Selected Commercial Banks in Bujumbura, Burundi

The third objective of this study was to establish the relationship between cash management and profitability in selected commercial banks in Bujumbura, Burundi. The study revealed a positive and significant relationship between cash management and profitability among selected commercial banks in Bujumbura ($r=.708^{**}$, $p=0.00$).

Several other studies are in agreement with the findings of this study, among which include: Mahato and Jagannathan (2016); Rehman et al. (2016); Temtime (2016); Odhiambo (2017); Agha (2017) and Nandom et al., (2017).

For example, Agha (2017) conducted a study on the impact of cash management on profitability in a listed pharmaceutical company in Karachi Stock Exchange, Pakistan for the period 1996-2011. The study revealed that there was significant effect of cash management on the profitability of the company, measured by return on assets. Similarly, Odhiambo (2017) conducted a study on the relationship between cash management on profitability among 50 retail stores in Kenya and found a positive relationship between cash management and profitability (return on assets).

Furthermore, Temtime (2016) conducted a study on the relationship between cash management and profitability of 176 publically traded small U.S. manufacturing companies. The study found that cash management in terms of accounts receivable period, accounts payable period, working capital investment policy, working capital finance policy, were significant predictors of firm profitability. Likewise, Rehman et al. (2016) examined the impact of cash management on profitability of firms in the Chemical Sector in Pakistan and reported that cash management showed a significant impact on profitability.

However, contrary to the above findings, is the finding of Mahato, and Jagannathan (2016), and Azeez (2016). For instance, Mahato, and Jagannathan (2016) compared profitability with cash management components among eight listed telecom industry in India and the results revealed a negative relationship between profitability and cash management. Similarly, Azeez (2016) investigated the relationship between cash management and profitability among the listed Nigerian manufacturing firms and found that cash management negatively affects profitability.

5.3 Conclusion

Objective one: Cash control significantly affects profitability of commercial banks in Burundi. This implies that a positive net cash balance, cash inflows, and cash payment are very instrumental in ensuring profitability of commercial banks in Burundi.

Objective two: Cash budgeting significantly affects profitability of commercial banks in Burundi. This implies that accurate forecasts, effective forecasting, and accurate cash outflow planning are very contributory in ensuring profitability of commercial banks in Burundi.

Objective three: Cash management has a positive relationship with profitability among selected commercial banks in Bujumbura. Given the fact that cash budgeting is the highest predictor of profitability, emphasis on the same will make commercial banks realize profitability in their banking activities.

5.4 Recommendations

Objective one: The management of commercial banks should encourage the use of net cash balance, cash inflows, and cash payment so as to accurately understand the dynamics of their profitability. In other words, it will help the management to properly promote cash management, and to be able to accurately monitor and record cash flow and analyze cash balances to establish the profits earned.

Objective two: The management of commercial banks in Burundi should always emphasize accurate forecasts of both short term and long term cash budgeting plans so as to determine profit level. This will help them to strive to implement and follow up cash budgeting procedures which will ensure minimal cash losses and effectively assist in concrete decision making.

Objective three: The management of commercial banks should emphasize the proper use of cash management since it is essential to every business that desires to meet up with its short term financial obligations. This is because the success of any business venture is predicated on how the management has planned and controlled its cash flows, otherwise, cash shortage will disrupt the firm's operation and can even lead to insolvency.

Furthermore, management should be capable of gaining sustainable competitive advantage by means of effective and efficient utilization of the resources of the organization through careful cash budgeting and cash control. In doing so, the profitability of the firm is expected to increase.

5.5 Contribution to the Knowledge

A number of studies have been conducted on the subject of cash management and profitability but with mixed findings. For example Odhiambo (2017), Agha (2017), and Temtime (2016) found positive relationship between cash management and financial performance, while other studies such as Mahato, and Jagannathan (2016), and Azeez (2016) found that cash management negatively affects the profitability of commercial banks. However, all of the above studies measured cash management using accounts receivable turnover, creditors' turnover, inventory turnover and current ratio, while profitability was measured in terms of return on assets. However, the current study adds to the body of knowledge by measuring cash management using cash control and cash budgeting, and profitability using performance ratio. The study found a positive effect of cash control and cash budgeting on performance ratio. This study therefore closes both the contextual and content gaps of the previous studies in the banking industry in Burundi.

5.6 Limitations of the study

The study was faced by a number of limits relating to the scope. Questionnaires were translated into another language which is different from the language of its initial elaboration. Indeed, the various instruments of gathering data and other relevant information of the study have been translated into French to facilitate reading and comprehension to the respondents in Burundi who are French speakers.

The scores given in response to the statements used for examining microfinance services were mainly based on the respondents' feel and intuition rather than being calculated directly from audited financial statements.

5.7 Areas of further research

1. Further research can be undertaken on the effect of cash control on profitability, the results can be compared with the results of this study.

2. Further research can be undertaken on the effect of cash budget on profitability.

The study recommends that further studies in the same subject be focused on a longer time span. This would clarify whether the observed relationships changes over the years. Furthermore, a comparative study should be done in all the banking sectors so as to verify the effect of cash management on profitability.

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APPENDIX I : QUESTIONNAIRE

Dear Respondent,

My name is IRADUKUNDA Ella Marlene, a student in Masters of Business Administration and Management Studies at Kampala International University. I am conducting a study on "Cash Management and Profitability in Commercial Banks, in Burundi". You have been selected to participate in this study by answering the following questions. Please tick the most appropriate response or elaborate where necessary. The information obtained from you shall be kept confidential and used for academic purposes only. You are also free to withdraw from participating at any time.

Thank you in advance for your participation.

Section A: <u>Respondents' Demographic Information</u>

1. Gender	Male	[ ]
	Female	[ ]

2. Age	18 – 25	[ ]
	26 – 35	[ ]
	36 – 45	[ ]
	46 and above	[ ]

3. Marital status	Single	[ ]
	Married	[ ]
	Widowed	[ ]

4. Education levels	Masters' degree	[ ]
	Bachelor's degree	[ ]
	Diploma	[ ]
	Certificate	[ ]
	Other, please specify…………………………………...	

5. Position General Manager [ ]

Financial manager [ ]

Credit analyst [ ]

Internal auditor [ ]

Other, please specify…………………………………...

6. Duration of stay in this position 1 – 3 years [ ]

3 – 5 years [ ]

5 – 10 years [ ]

Over 10 years [ ]

Section B: <u>Cash Control and profitability</u>

Please tick the most appropriate option in the ranking of the questions; Use the following Likert scale to rate your answers:

Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1	**2**	**3**	**4**	**5**

Alt.	**Statements**	**Rankings**				
		1	**2**	**3**	**4**	**5**
a.	A business concern cannot prosper and survive without proper control over cash.					
b.	A positive net cash balance indicates that money is present and available in the account, while a negative one indicates that the account is overdrawn.					
c.	Cash inflows are used to gauge the overall financial health of a business, and a company with a large and stable cash inflow can be considered to be in a good financial position.					
d.	Cash Payment with interest is a determinant of profitability level					

Section C: <u>Cash Budget/Forecast and profitability</u>

Please tick the most appropriate option in the ranking of the questions; Use the following Likert scale to rate your answers:

Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1	**2**	**3**	**4**	**5**

Alt.	**Statements**	**Rankings**				
		1	**2**	**3**	**4**	**5**
a.	Accurate forecasts/predicts short-term determines profit levels					
b.	Effective forecasting/budgeting for cash/ expenses is essential for profit estimations					
c.	The main aim of preparing cash budget is to predict the cash flows over a given period of time and to determine whether at any point of time there is likely to be surplus or deficit of cash.					
d.	Accurate cash outflow planning for variable costs/expenses determines profit levels					

Section D: Profitability

Please tick the most appropriate option in the ranking of the questions; Use the following Likert scale to rate your answers:

Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1	**2**	**3**	**4**	**5**

Performance ratio	1	2	3	4	5
A high ratio indicates that a business is generating a large amount of sales from a relatively small fixed asset base.					
A high ratio indicates that a business is creating a large volume of sales with very few employees.					
The measure of the performance is the most important for stockholders of a bank since it reflects what a bank is earning on their investments.					
A business with excellent performance ratios can generate a high level of sales with relatively few resources, and generates a high level of cash inflows.					

END

Thank you very much for your time