WORKING CAPITAL MANAGEMENT AND FINANCIAL PERFORMANCE OF DEPOSIT-TAKING MICROFINANCE INSTITUTIONS IN MOMBASA COUNTY, KENYA

BY

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DECLARATION

This document is my original work and has never been presented in any University for an award of degree. No part of this research project can be duplicated without my consent or that of Kenyatta University.

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This is to affirm that the work in this project was done by the student under my supervision as the University Supervisor.

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DEDICATION

The success of this Research Project is honored to the Almighty God.

ACKNOWLEDGEMENTS

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OPERATIONAL DEFINITION OF TERMS

Working Capital:
It consists of the difference between current assets and current liabilities in monetary units of Cash, Accounts Receivable and Accounts Payable.

Working Capital Management:
This is the process of making effective and efficient use of current assets in order to maintain adequate cash flow to achieve short-term obligations and goals.

Management:
It means the process of facilitating seamless accomplishment of set objectives.

Performance:
It the actual accomplishment of the objectives by an Organization.

Deposit taking:
This is the process of accepting time deposits from poor and low-income members of public by DTMIs, investing them in profitable ventures then crediting the former's accounts with interests.

Micro financing:
It includes the entire process of ensuring accessibility of financial benefits to individuals and groups whose daily earnings fall below two United States Dollars and are faced with difficulty in securing credit from other financial institutions.

Cash:	Cash consists of money at hand, money in bank, short- term Securities and assets that can quickly and easily be transformed into liquid cash without any significant loss of value.
Cash Management:	It refers to the manner in which DTMIs monitor their Transactions related to issuance and use of cash and near cash securities.
Accounts Receivable Management:	It entails planning a transaction resulting from credit sales, coordinating and monitoring the outcome.
Accounts Payable Management:	It entails planning a transaction resulting from credit purchases, coordinating and monitoring the outcome.
Financial Performance:	It is a measure of the extent to which an organization generates its revenues and manages the financial interests of its stock- and stakeholders as well as its assets and liabilities.

LIST OF THE ABBREVIATIONS

ARM: Accounts Receivable Management

APT: Accounts Payable Turnover

ART: Accounts Receivable Turnover

APM: Accounts Payable Management

CBK: Central Bank of Kenya

CCC: Cash Conversion Cycle

CM: Cash Management

CMA: Capital Markets Authority

CT: Cash Turnover

DTMI: Deposit Taking Microfinance Institution

FP: Financial Performance

IAS: International Accounting Standards

KNBS: Kenya National Bureau of Statistics

MFI: Microfinance Institution

MSMEs: Micro, Small and Medium Enterprises

ROA: Return on Assets

WC: Working Capital

WCM: Working Capital Management

ABSTRACT

This study dealt with Working Capital Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya. The statement of the problem addressed the recurrent liquidity problems that Deposit Taking Microfinance Institutions experienced in their normal operations; that exposed them to multiple financial risks and poor performance. The general objective was to investigate the relationship between Working Capital Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya. The specific objectives were to investigate the relationship between Cash Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya; to find out the relationship between Accounts Receivable Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya; and to determine the relationship between Accounts Payable Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya. Theoretical framework entailed review of Liquidity Preference, Capital Market Imperfections, Cash Conversion Cycle and Transaction Cost Economics theories. Descriptive research design was adopted by the study in which the researcher studied all the five Deposit Taking Microfinance Institutions in Mombasa County, Kenya. A multiple conceptual model gave a mathematical representation of the relationship between the three independent variables and one dependent variable; all measured as rates and ratios. Mombasa County was the location of the study while the target population comprised of the five Deposit Taking Microfinance Institutions from which a sample size of forty-eight respondents was picked through purposive sampling technique. Primary data was collected from structured questionnaires that were administered to respondents to obtain primary data while secondary data was obtained from audited annual financial reports of Deposit Taking Microfinance Institutions. Analysis procedure categorized data into quantitative and qualitative types. Descriptive statistics was applied in the analysis of qualitative data. It organized data into common topics and themes that were followed with individual explanations. The findings were summarized into tables that showed frequency distributions and percentages. Inferential statistics of Pearson product-moment Correlation, Regression and Chi square were obtained on quantitative data at ninety-five percent degree of confidence. Testing of hypotheses was done using t-test at 95% confidence level. From the findings of the study, the Pearson Correlation test revealed a correlation of 0.516, 0.391 and -0.325 for Cash Turnover, Accounts Receivable Turnover and Accounts Payable Turnover respectively against Return on Assets. The regression model gave R Square=0.504 at a p=0.049<0.05 that resulted from a Pearson Chi-Square test suggesting the existence of a significant relationship between the dependent and the independent variables. The researcher rejected the three null hypotheses of the study. The researcher concluded on a number issues based on findings of the study and made recommendations for policy development, practice as well as suggestions for further studies. The findings of the study, interpretations, discussions, study conclusions and recommendations were summarized into report format and submitted to the Department of Accounting and Finance, School of Business, Kenyatta University.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Working Capital Management (WCM) is indispensable to every organization's Financial Performance (FP). Its aim is to strike a balance Working Capital (WC) items of Cash, Accounts Receivable (AR), Accounts Payable (AP) and Inventories. Rimsha et al. (2018) opined that WCM enables a manager to be efficient and effective in controlling current assets and current liabilities as well as maximizing Return on Assets (ROA) and minimizing costs associated with liabilities. The goal of WCM is to assure an organization of a continuous and seamless performance through enabled ability to sufficiently meet operational expenses and short-term liabilities and debts as and when they fall due. According to Ugas (2017), an organization benefits from efficient and effective WCM through improved, properly maintained operating cycle and improved returns. Effective WCM coincides with a firm's major goal of maximizing shareholders' value (Riri, 2019).

Working Capital Ratio (WCR), Collection Ratio and Inventory Turnover Ratio are some of the most common ratios that entities use in monitoring cash flows, assets and liabilities. Sinhania and Mehta (2017) noted that WCR is fundamental in enabling an organization to meet current debts. An organization whose WCR falls below 1.0 finds difficulties in meeting its short term liabilities while an organization whose WCR rises beyond 2.0 doesn't employ its assets appropriately to boost its revenues. The most desired WCR ranges between 1.2 and 2.0 (Kofi and Asiamah, 2020). Average Collection Period Ratio (also called Collection Ratio) on the other hand, gauges an organization's capacity to manage its Accounts Receivable (AR). Sorin and Nucu

(2021) believed that the lower the Collection Ratio, the most efficient the cash flow of an organization.

1.1.1 Working Capital Management

Cash Management (CM) is one of the main factors considered to be the blood life of WCM and Financial Performance (FP) of Deposit Taking Microfinance Institutions (DTMIs) because cash is the most liquid asset and has direct impact on FP of an entity (Altaf and Shah, 2018; Suwatika and Anand, 2012). A DTMI is illiquid in the event that it lacks cash to settle payment demands as they fall due. CM is multiple-fold as it entails management of cash receipts, cash payments, cash disbursements, among others. The cash flow of a DTMI comprises of the difference between its cash receipts and cash payments over a specified time period (ICPAK, 2019).

Accounts Receivable Management (ARM) concept emanates when an organization engages credit sales. An organization stays afloat and achieves more profitability when it has an effective ARM strategy and policy (Kombo, 2017). The rationale behind a strong ARM strategy and policy is that quicker cash is collected from stringent receipts policy that can be utilized to improve liquidity and invest the remainder in projects with higher Internal Rates of Returns (IRR). Based on data available on Central Bank of Kenya (CBK) portal, most DTMIs prefer Collection Effectiveness Index (CEI) in gauging the strength of their collection policies and processes for periodic re-evaluation (CBK, 2018). CEI makes a comparison of cash collected with balances still owed to DTMIs in a specified time frame.

Finally, Accounts Payable Management (APM) arises from credit purchases made by respective DTMIs. A DTMI that slows down its rate of repaying debts and minimizes its costs of settling emerging debts achieves better liquidity and profitability. Tauringana et al. (2018) argued that a DTMI gets room for making stable its liquidity

position by slowing down its APM. The key aspects of ARM include reducing duplicate payments, minimizing human errors in making payments, encouraging electronic payments and discouraging fraud, among others.

1.1.2 Financial System in Kenya

The Financial System in Kenya (also called the Kenya Financial Market) is an aggregate of the Capital Market and the Money Market. The Capital Market is the market that deals with long-term funds including shares and loans. The Money Market on the other hand, deals with short-term funds that include but not limited to treasury bills, certificates of deposit and commercial papers. Banks and non-bank entities, Insurance companies, Building societies, Co-operative societies, Post Office savings, Hire Purchase firms and Agricultural Finance Corporations are the key players in the Kenya Financial Market (CBK, 2020). These main players are further categorized Deposit Taking Institutions (DTIs) and Non-Deposit Institutions (NDTIs). DTIs include commercial banks, deposit-taking SACCOs, micro-finance banks and mortgage finance firms. NDTIs comprise of Capital Markets Industry, Development Finance Institutions, Pension Industry, Insurance Industry and Financial Markets Infrastructure Providers, among other entities (KFSSR, 2020).

The five main regulators for each segment of the Kenya Financial Market are Central Bank of Kenya (CBK), Insurance Regulatory Authority (IRA), Capital Markets Authority (CMA), Retirement Benefits Authority (RBA) and Sacco Societies Regulatory Authority (SASRA). KNBS (2019) revealed that approximately sixty percent of total deposits in Kenya is handled by commercial banks. Financial security of savings that is, liquidity of savings, is a major concern to commercial banks and non-bank entities in their role of marshalling deposits from their clients (Ngugi, 2018).

1.1.3 Financial Performance of Microfinance Institutions

Majority of entities analyze their FP by accurately measuring in monetary terms, results of their operations and policies (Tingbani et al., 2018). These results are often reflected in their Return on Assets (ROA), Return on Capital Employed (ROCE) and Return on Equity (ROE), Gross Profit Margin (GPM), Return on Investment (ROI), Net Profit Margin (NPM); among other ratios. FP analysis entails detailed scrutiny of WC items, cost base, borrowing and cash flow. Financial analysts in the process calculate liquidity ratios, efficiency ratios, gearing/financial leverage ratios and profitability ratios. The derived ratios are then mirrored with standard/acceptable, predetermined and/or industry ratios to make a sound assessment of an MFI's FP DTMIs measure their FP quarterly, semi-annually and annually (Jakpar et al., 2017; Maniagi, Musiega and Makori, 2013). In this study FP was measured by use of ROA because it enabled making comparison of results with past findings for decision making.

FP of an MFI has direct relationship with its growth and prosperity. In Kenya the MFIs have grown over the years to achieve international recognition and standardization through their role in reducing the unemployment menace and social pressure in cities and towns that resulted from urbanization in search for white color jobs. They encourage their members to build their capital bases through making saving and investment culture a habit (IMF, 2017). The growth of MFIs in Kenya has been gradual from informal formations to community based organizations (CBOs) to final national coverage (CBK, 2021). Some MFIs have grown to become large commercial banks. Equity Bank for instance, was the largest MFI in December 31, 2010 with an undisputed market share of 73.50 percentage, 715, 969 active savers/borrowers and a whooping gross loan portfolio of Ksh. 924,993,804.00. By

September 30, 2014, the aggregate market loan portfolio was Ksh. 376 billion. According to CBK (2018), Equity Banks has attained the status of a tier one commercial bank with several branches across Africa.

1.1.4 Microfinance Institutions and Licensing in Kenya

The Kenya's microfinance sector is a dual composition of the microfinance facilities and microfinance regulations. MFIs existed and operated in the 1990s without documented legislations till 2006. The first legislation governing functions and operations of MFIs was in 2006 but was collectively agreed upon and implemented in 2008 (CBK, 2019). By September 2020, the actual number of DTMIs licensed by the CBK to conduct deposit-taking was thirteen (CBK, 2021). Out of the thirteen DTMIs, only five had active operations in Mombasa County by September 30, 2020.

DTMIs are regulated under the Microfinance Act (2006) by the CBK. Section 3 of this Act categorizes MFIs into DTMIs and Credit Only (Non-DTMIs). DTMIs Act (2008) classified MFIs into Community and Nationwide categories. The CBK licenses Community MFIs to conduct their deposit-taking businesses within the confines of a specified town, city, county, region or other places it approves from time to time. A community DTMI can be approved by the CBK to acquire nationwide status. Nationwide MFIs conduct their deposit-taking businesses across Kenya but cannot reacquire community status. DTMIs face heavy regulation and close monitoring unlike non-DTMIs that only offer credit facilities to their clients. The aim of stringent regulations for DTMIs is to assure investors of adequate protection of their funds against possible enormous losses thus, a gateway to financial stability in Kenya thereby enhancing efficiency, access and competition. DTMIs Act (2008) provides that a DTMI in Kenya must plan and fund its liquidity budget over specific

time periods and must at all times keep a "minimum holding of liquid assets of twenty percent" of its total deposit liabilities, matured and short term liabilities (CBK, 2019). DTMIs face countless financial and non-financial challenges despite the heavy regulations governing their performance. Corruption and money laundering are the major challenges they encounter (KNBS, 2017). The other bottlenecks of DTMIs' proper operations include and extend beyond liquidity nightmares, economic disturbance, increasing credit risks, cybercrime and political instability. According to KFSSR (2019), DTMIs in Kenya had their performance adversely affected by Post-Election Violence and prolonged electioneering periods.

1.1.5 Relationship between Working Capital Management and Financial Performance of Deposit Taking Microfinance Institutions

Kombo (2017), states that incorporation of effective WCM in the overall corporate strategy is very vital to DTMIs that seek to maximize shareholders' value. DTMIs that adequately manage their WC find ease in responding to abrupt economic downswings and have a better footing in gaining competitive edge over their rivals in the industry (Onchangwa, 2019). Arguably, DTMIs that follow aggressive WC policy and perceived little credit risks would opt for keeping minimum cash balances, marketable securities and accounts receivable. A lion share of their cash would be invested in revenue generating activities hence higher profitability. In contrast, DTMIs with conservative WC policy and perceived high credit risks would maintain relatively high cash balances, marketable securities and accounts receivable to boost their liquidity at the cost of forgone profitability. (Riri, 2019; Nyabwanga and Ojera, 2012). Other DTMIs that follow moderate WC policies tend to abide by optimal WC balances so that they realize positive risk-return trade-offs (Sorin and Nucu, 2021).

The level of WC that a DTMI holds at any moment in time also depends on the risk perceptions of its management team. Risk takers usually invest most cash in profitable ventures and maintain minimum cash balances, marketable securities and accounts receivable for responding to liquidity requirements. On the other hand, risk averse managers have the tendency of maintaining high cash balances, marketable securities and accounts receivable for responding to liquidity demands at the expense of profitability. A DTMI seeking a particular liquidity and/or profitability level must therefore closely monitor its WC level (Widyastuti, Oetomo and Riduwan, 2017).

1.2 Statement of the Problem

The very critical role of DTMIs in financial intermediation cannot be compromised (CBK, 2021). First of all, DTMIs act as channels through which resources are transferred from lenders to borrowers. Next, they connect borrowers to lenders hence facilitating price determination through the free interaction of market forces. Thirdly, they enhance capital formation in the economy by being the medium through which new savings are pooled for economic growth. Finally, DTMIs market financial securities by acting as the sale mechanism for remarkable categories of financial assets; among other roles (CBK, 2020).

Despite the gravity of DTMIs in the financial system, they experience frequent liquidity problems that if not keenly addressed, might continue to pull down their profitability and increase their risks that subsequently kill the morale of depositors. Depositors with DTMIs are in many instances, not able to access their savings as and when need arises hence not attending to their money demands in time; signifying the path of cash crunch that DTMIs operate in.

The CBK in response to the unending cycles of WC crises, drafted the Microfinance (Amendment) Bill, 2018 whose intention was to change core capital from the sixty

million shillings threshold that existed to a 'yet-to-be-established-threshold.' The shocking news of closing Chase Bank that owned Rafiki Microfinance Bank, triggered massive withdrawals by clients of the latter in fear of losing their deposits. According to Kenya's Economic Outlook (2017), liquidity shortfalls are adverse since they hamper DTMIs' flexibility to respond to unexpected money demands, tragedies and investment opportunities. Illiquidity of DTMIs is a hindrance to credit creation and investment since borrowers hardly benefit from repayable term loans that arise from a pool of funds obtained from other borrowers and lenders. The overall risk of a portfolio increases with illiquidity (CBK, 2018).

Most past studies reviewed liquidity issue more as a static aspect than a dynamic aspect of financial management. The studies focused on financial ratios obtained from audited financial statements that are historical in nature to make liquidity decisions. In this study, liquidity was regarded as an ongoing issue that required consistent monitoring and control in order to balance risk-return tradeoffs that affected DTMIs. Studies by Kofi and Asiamah (2020); Ngugi, Koori and Wamugo (2019) and Kombo (2017) for example, gave contrasting outcomes on the relationship between WCM and FP of institutions. The present study evaluated Internal Control Processes together with WC and ROA ratios. The contradicting results of past studies motivated the researcher to conduct another study to shed more light on the same. The literature gaps created by past studies concerning the relationships were addressed by this study.

1.3 Objectives of the Study

1.3.1 General Objective

To investigate Working Capital Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya.

1.3.2 Specific Objectives

1. To investigate the relationship between Cash Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya.

2. To examine the relationship between Accounts Receivable Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya.

3. To determine the relationship between Accounts Payable Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya.

1.4 Research Hypotheses

The study intended to test each of the following hypotheses:

Ho_1: Cash Management has no significant effect relationship with Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya.

Ho_2: Accounts Receivable Management has no significant effect relationship with Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya.

Ho_3: Accounts Payable Management has no significant effect relationship with Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya.

1.5 Significance of the Study

The aim of this study was to assess WCM and FP of DTMIs in Mombasa County, Kenya. The actual value of this study was shown by the significance of this study

(Mugenda and Mugenda 2012). Several individuals and institutions benefited from the findings of the study.

The results of the study were helpful to managers of DTMIs in steering their steward responsibilities. The findings and recommendations of the study were vital for the improvement of performance by DTMIs. Through improvement in operations emanating from good corporate governance the DTMIs industry was to be more stable and become more profitable, liquid and realize growth and stability.

Employees of DTMIs were to gain from stability of employment in financially sustainable environment. Higher employment rates in a country meant better involvement of work force thus, reduced chances of engaging in crime, higher incomes and improved standards of living. Some employees also tended to socially identify themselves with their employers and places of work.

Clients of DTMIs were to gain from the efficiency and ease of borrowing money from a liquid market that enjoyed goodwill from both lenders and borrowers. Convenience and ease of borrowing would boost confidence of clients in the market. Consequently, they were capable of meeting their transactions, speculative and precautionary money motives.

The society was to gain immensely from economic growth and development fuelled by increased investments and savings, widened capital base, skydive of per capita income and Gross Domestic Product (GDP). The society was to gain from Corporate Social Responsibility activities of DTMIs. A society with vibrant economic prosperity creates employment to its citizens thus, enhancing their disposable per capita incomes. Higher per capita incomes translate to higher consumption hence, better living standards.

The other projected beneficiary of the study was the academic fraternity. The researcher provided new knowledge by reviewing theoretical and empirical literatures, revisited past studies, identified and addressed knowledge gaps. The findings of this study were to be part and parcel of empirical literature reviews in future studies.

1.6 Scope of the study

The study was restricted to CM, ARM and APM against FP of DTMIs in Mombasa County, Kenya. Data was collected from three tier-one DTMIs (Echo Network Africa formerly KWFT, Faulu and Rafiki) whose aggregate market share exceeded 90 percent; a tier-two DTMI (SMEP); and a tier-three DTMI (Caritas) that together, operate in Mombasa Island whose land mass is 2947km^2. The study covered a period of five years ranging from 2016 to 2020.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Literature review gave the summary of theoretical framework, empirical studies about WC problem variables, summary of various gaps that were to be filled by this research and conceptual framework. Literature review also summarized theoretical framework, empirical studies concerning the relationship between WCM and FP of DTMIs, knowledge gaps and the conceptual framework.

2.2 Theoretical Framework

Several theories guided this study. Theories outlined the present logical activities of the already established issues. The study variables were supported by Liquidity Preference theory (LPT), Capital Market Imperfections theory (CMIT), Cash Conversion Cycle (CCC) theory and Transaction Cost Economics (TCE) theory.

2.2.1 Liquidity Preference Theory

Liquidity Preference Theory (LPT) was developed by Lord Keynes in 1936 and recorded in his book titled "The theory of employment, interest and money." The theory explains that there exists preference for cash and marketable securities by investors to illiquid stock since the former is easier and quicker to convert to cash without any loss of value. LPT also suggests that investors call for higher interest rates on long-term securities than short-term securities because the former is associated with higher risks (Akenga, 2017).

The theory is geared forward by transactions, speculative and precautionary demands for money. Transactions demand for money arises because individuals tend to accumulate as much cash as they can to pay for basic needs since their disposable

income is not always readily available. According to this theory, the higher the time gap between receipt of one income and another the higher the transactions demand for money. Spending behavior of individuals greatly affect transactions motive with spendthrifts requiring more cash to spend than misers (Akenga, 2017; Dimand, 2008).

Precautionary motive explains that liquidity is preferred to illiquidity for responding to emergencies. Precautionary demand for money increases with an increase in an individual's income. Farsighted and pessimistic people would require additional cash to respond to unforeseen emergencies, tragedies and calamities unlike their optimistic counterparts (Tahir and Anuar, 2015).

Speculative demand for money arises because better investment opportunities emerge that require investors to plough in cash and earn more profit (Sitienei and Memba, 2016). Such investors would retain more cash to buy bonds and securities when their prices fall and sell when their prices rise. When they expect market prices to fall, they become more liquid to avoid realizing losses.

Supporters of LPT argue that the theory best explains liquidity and money. However, opponents of the theory argue that investors can at one time hold both bond and risk-free cash, contrary to Keynes (Murray, 2008). LPT has been reviewed by various researchers who studied the relationship between WCM and profitability.

Akenga (2017), was guided by LPT while studying the impact of liquidity on FP of listed firms at Nairobi Securities Exchange (NSE). Njoroge (2015) applied LPT to study the effects of liquidity on FP of Construction and Allied companies listed at the NSE. In this study, the theory derives its relevance because it explains the possible causes of illiquidity as a consequence of demand for money amongst DTMIs, clients of DTMIs and the liquidity trap.

2.2.2 Capital Market Imperfections Theory

Vayanos Dimitri and Wang'Jiang developed this theory in 2010. Illiquidity according to the theory, is a function of transaction costs, participation costs, imperfect competition, funding constraints, asymmetric information and search. All the six market imperfections relate to yardsticks of measuring illiquidity, effects of illiquidity on anticipated returns and the link between market imperfections and illiquidity (Vanguard, 2012).

Promoters of the theory advocate that the theory totally explains illiquidity in both perfect and imperfect markets. DTMIs need to reduce such costs associated with imperfect markets in order to stay afloat and realize more profitability. The theory is relevant to this study to the extent of market participation expenses, cost of information and transaction costs incurred by DTMIs that could plunge them into illiquidity. This theory also sheds some light on possible causes of illiquidity among DTMIs in Mombasa County as a result of market imperfections. This theory guided Kashif et.al (2017) and Okumu (2014), in studying the effects of capital market imperfections on cash flow-investment sensitivity among listed companies on security exchange markets.

2.2.3 Cash Conversion Cycle Theory

Sadia (2018) highlighted that the theory was founded by scholars over two decades ago and later expanded by Jordan in 2003. Cash Conversion Cycle (CCC) can be simplified as "the period between cash disbursement and cash collection." WCM is generally analyzed either as a static measure by thorough scrutiny of quick and current rates derived from balance sheet at one point in time; or as a dynamic measure obtained from company operations from the time raw materials are purchased to the time cash is received from accounts receivable (Sakyi, 2019). CCC measures the

amount of time an investment is tied up in production before it's converted into cash (Attari, 2012; Muthiani, 2011).CCC is an important aspect of DTMIs because it gives the difference between profit and bankruptcy since DTMIs are funded from cash and not profits (Gentry et al., 1996). Cash Conversion Cycle (CCC), also called cash cycle simply, measures the length of time in days, it takes a firm to transform inputs into cash flows (Keown et al., 2003).

Many studies involving WCM used CCC to understand the process of converting inputs into cash flows. Mwangi (2013) reviewed CCC theory while studying the relationship between WCM and FP of the eighteen Manufacturing firms listed in the Nairobi Securities Exchange (NSE). The essence of CCC to this research study was that the length of a DTMI's CCC determined its profitability and risk. Longer CCC could be an indicator of rising sales as a result of lenient credit policies but it could severely impact on its profitability by locking up cash in interest-free items like account receivables. In contrast, the shorter the CCC, the higher the Net Present Value of a DTMI since cash is received quicker and can be reinvested to create more value (Sadia, 2018).

2.2.4 Transaction Cost Economics Theory

The Transaction Cost Economics (TCE) theory was developed by Ronald Coase in 1937 and reviewed by Oliver Williamson in 1975. Transaction costs are expenses incurred to realize economic exchanges (Oliver, 2007). The costs of searching information, bargaining for fair deals, enforcing policies, are examples of transaction costs that DTMIs incur in their day to day undertakings. According to Stickney, Wahlen and Brown (2003), such costs if not controlled to certain levels, might negatively affect their liquidity. DTMIs operate in imperfect markets where transaction costs exist and need to be cut as possible to be liquid; giving TCE theory

its relevance. The researcher reviewed TCE in an attempt to understand whether transaction costs associated with imperfect markets could be the cause of illiquidity among DTMIs.

2.3 Empirical Literature Review

The purpose of empirical literature review was to identify literature gaps that needed to be filled by the study. An accurate and thorough review of literature related to the problem and purpose was done by the researcher while evaluating past studies, discerning facts and opinions, identifying relationships and arriving at informed judgments.

2.3.1 Cash Management and Financial Performance of Deposit Taking Microfinance Institutions

CM is one among other factors that affect FP of institutions. It is the process involving making decisions about how corporate cash can be utilized in the most productive way (Altaf and Shah, 2018). It directly affects a DTMI's liquidity and profitability.

Kofi and Asiamah (2020) examined the effects of WCM on Profitability of Listed Manufacturing Firms in Ghana. The researchers employed quantitative research approach within the causal research design to study twenty listed manufacturing companies in Ghana. The study specifically established the effects of CCC on ROA. The results of the study revealed existence of positive effects of CCC on ROA. The study concluded that WCM is a major managerial issue that needs serious consideration by institutions.

Ngugi, Koori & Wamugo (2019) determined the relationship between WCM and FP of Listed Companies in Kenya. The study adopted descriptive, quantitative and

correlational research designs. Census technique resulted into a sample of twenty listed manufacturing companies in Kenya. Secondary panel data were collected from the audited annual reports of the firms for the period 2010-2017. Data analysis involved descriptive and inferential statistics. The results of the study indicated positive and statistically significant relationship between Cash Flow Ratio and ROA.

Onchangwa (2019) studied effects of WCM on Financial Distress of Non-Financial Firms listed on the Nairobi Securities Exchange Market. The study adopted quantitative research design where time series cross-sectional data were collected. The study involved panel data estimation technique where heterogeneity associated with each firm was catered for, enabling for individual specific variables. Census method was used in which all the forty one firms listed and trading on the Nairobi Securities Exchange were studied for the period 2007 to 2016. Census method was preferred because it eliminated errors associated with various sampling techniques. Cash Management was measured by Cash Conversion Cycle while Z-score measured Financial Distress of the firms. The results of the study were consistent with Yator (2018) and Ugas (2017) as Cash Management exhibited positive and significant influence on financial distress on Non-Financial Firms listed on the Nairobi Securities Exchange Market.

Riri (2019) assessed effects of WCM practices on FP of Hotels in Nyeri County, Kenya. He employed descriptive research design in assessing the influence of Cash Flow Management Practices on FP of Hotels in Nyeri County, Kenya. The study findings revealed that Cash Flow Management Practices had positive and statistically significant effect on FP of Hotels in Nyeri County, Kenya. Majority of the Hotels kept cash for transaction purposes and encouraged banking of some cash before any spending.

Yator (2018) studied WCM Practices and FP of Middle Level Colleges in Eldoret Town, Kenya. The general objective of the study was to determine the effects of WCM Practices on FP of Middle Level Colleges. The study specifically assessed the effects of CM, ARM and APM on FP of such institutions. CM practices positively related with operating margins of Middle Level Colleges. CCC was found to be a major determinant of Operating Margins. Profitability was found to be higher with longer Cash Conversion Cycles. The study recommended that organizations should invest their surplus cash into cash instruments that generate more profit.

Ugas (2017) adopted descriptive research design in surveying nineteen Water Processing Firms in Puntland State of Somalia. The study analyzed the effects of WCM on FP of the firms. Convenient sampling research design resulted in a sample of all the nineteen Water Processing Companies in Gorowe area only. The study objectively assessed the effect of CM on FP of Water Processing Firms in Puntland State of Somalia. The regression output yielded a positive coefficient, meaning that CM exhibited positive effect on FP.

Kombo (2017) studied the effects of WCM on FP of Private Medical Facilities in Mombasa County. The researcher specifically assessed the impact of Cash Conversion Cycle on Financial Performance of Private Medical Facilities in Mombasa County. Results of the study indicated a negative relationship between CCC and FP of Private Medical Facilities in Mombasa County. The study adopted qualitative and quantitative approaches.

Tanveer et al. (2016) undertook a similar study based on the impact of WCM on Firms' FP in Pakistan. The researchers collected secondary data from the official websites of the companies. The results of the study indicated a negative and

significant relationship between CCC and ROA. The hypothesis was tested at ninety five percent degree of confidence.

Attom (2013) conducted a survey concerning knowledge about cash monitoring and control procedures. The study involved CM practices by MSMEs in Kasoa, Ghana. The research problem was the cash deficit for MSMEs. Seventy-seven point seven eight percent (77.78%) of the respondents did not have knowledge about cash control processes, creating room for cash impropriety and financial resource misapplication. The study did not show any relationships between WCM and FP of the MSMEs. The study findings were consistent with those of Taurina and Afrifa (2013). The study concluded that WCM is an issue that was not taken seriously by MSMEs and recommended training MSMEs operators on proper CM practices and capacity building.

Odhiambo (2013) carried out a descriptive survey in investigating the effects of CM on FP of deposit taking SACCOs in Mt. Kenya region. A sample size of ninety-two respondents was drawn through simple random sampling method. Data was collected from structured questionnaires and financial statements. Data analysis involved descriptive and inferential methods. Majority of the SACCOs performed cash-flow forecasting but still experienced alternating cycles of cash deficits and surpluses due to unpredictable members' monthly subscriptions. The researcher realized also that proper WCM practices improved the FP of SACCOs. The study however, failed to specify the nature of relationship between the independent and dependent variables. It was recommended that SACCOs introduce credit management policy and CM controls.

Suwastika and Anand (2012) made a comparative study of various financial problems that MSMEs experienced in the manufacturing sector of Tonga and Fiji. Data that were collected through interviews and questionnaires were analyzed by use of descriptive and inferential statistics. Most entrepreneurs in new markets were not adequately monitoring their cash flows to make proper controls. The study recommended timely debt collections and elimination of excessive stock that would tie capital.

Mauchi et al. (2011) performed a descriptive survey about effectiveness of CM policies at Hunyani flexible products. Data was obtained from thirty respondents through interviews and questionnaires. Data analysis involved both descriptive and inferential statistics. The study findings revealed the deficiency of relevant CM policies. Cash flow exhibited positive relationship with profitability. The researchers made the conclusion that CM relied more on managers' performance than company characteristics. The study recommended shortening of CCC and total cash management.

Studies previously conducted by various scholars gave different outcomes. Past studies by Kofi and Asiamah (2020), Ngugi, Koori and Wamugo (2019), Onchangwa (2019), Riri (2019), Yator (2018) and Ugas (2017) gave a positive relationship between CM and FP of various institutions. In contrast, studies by Kombo (2017), Tanveer (2016), among others, gave a negative relationship between CM and FP on institutions. The causes of dissimilarity in results remained unknown. Nevertheless, the studies used different methodologies, and involved different sectors with different regulators, objects and prevailing circumstances.

2.3.2 Accounts Receivable Management and Financial Performance of Deposit Taking Microfinance Institutions

ARM is among the various factors regarded to be key to FP of DTMIs. ICPAK (2019) opines that the basis of ARM is the actions and activities that are carried out in ensuring that invoices are received in time without hitches. A proper ARM process maximizes the number of times that debts are converted into cash in a given financial period. Various studies were done by many scholars about the topic.

Kofi and Asiamah (2020) assessed the effects of Accounts Receivable on Profitability of twenty listed companies in Ghana. ROA was used to measure Profitability. The study results showed that Accounts Receivable had positive effects on ROA. The results were consistent with those of Riri (2019), Yator (2018), Kombo (2017) and Tanveer (2016). However, the results of this study contrasted those of Ngugi, Koori and Wamugo (2019), Onchangwa (2019), Ugas (2017), among others. The study recommended putting in place adequate collection strategies in attempts to maximize revenues.

Ngugi, Koori & Wamugo (2019) investigated the relationship between ARM and FP of Listed Manufacturing Firms at the Nairobi Securities Exchange Market. Debtors' Collection Period was used to measure ARM while ROA was used to measure Profitability. The results of the study indicated the existence of negative relationship between Debtors' Collection Period and ROA.

A study by Onchangwa (2019) determined the effects of ARM on Financial Distress of Non-Financial Firms listed on the Nairobi Securities Exchange Market. Average Collections Period was used to measure ARM. Data were collected from secondary sources and the analysis involved panel data model. The resulting regression

coefficient for ARM was negative. This means that an increase in Accounts Collection Period led to an increase in financial distress of the firms.

Riri (2019) analyzed the influence of ARM Practices on FP of Hotels in Nyeri County, Kenya. Data were collected from both primary and secondary sources. It was evident from the findings of the study that ARM Practices had positive and statistically insignificant effect on FP of Hotels in Nyeri County, Kenya. Hotels in Nyeri County put in place Accounts Receivable Payment Policy for rare credit sales that they made. Hypotheses were tested at 0.05 level of significance.

Yator (2018) investigated the effect of ARM Practices and FP of Middle Level Colleges in Eldoret Town, Kenya. The results of the study revealed that ARM practices had significant effects on FP of Middle Level Colleges. ARM Practices positively correlated with Profitability. The study found no influence of Average Collection Period on Profitability in the education sector. The study concluded that the overall sustainability of Middle Level Colleges depended of the efficiency of managing revenue streams.

Ugas (2017) established the effects of ARM on FP of Water Processing Firms in Puntland State of Somalia. From the analysis of the results, the regression output coefficient was negative. This means that Accounts Receivable has negative effect on Financial Performance of Water Processing Firms in Puntland State of Somalia. The results of this study contradicted that of Yator (2018) who found the relationship to be positive.

Kombo (2017) evaluated the impact of Accounts Receivable on FP of Private Medical Facilities in Mombasa County. Data were collected from Secondary Sources and analyzed using descriptive and inferential methods. Regression analysis results

showed that Accounts Receivable had a positive relationship with FP of Private Medical Facilities in Mombasa County. The results of the study mirrored Yator's (2018) but contrasted Ugas' (2017).

Tanveer et al. (2016) evaluated the impact of ARM on FP of Firms in Pakistan. Average Collection Period was used to measure ARM while ROA was used to measure Profitability of the firms. The study was conducted at five percent level of significance. The results of the study revealed a positive and significant relationship between ARM and Profitability of the Firms.

Another study was needed to address the inconsistencies in the various studies concerning the relationship between ARM and FP of institutions. ARM depended heavily on prevailing socio-economic and political environments with defaults in loan repayments likely to be higher with higher instability (Yator, 2018). The inconsistencies in findings could as well have resulted from time lapse among the past studies, methodology gaps and nature of operations of studied organizations.

2.3.3 Accounts Payable Management and Financial Performance of Deposit Taking Microfinance Institutions

Another factor that was considered to affect FP of organizations is APM. It entails the procedures, practices and policies that are essential to DTMIs in controlling their trade purchases done on credit terms (IFRS, 2017). Many studies have been done in the past to shed some light on APM and its relevance to FP of institutions.

Kofi and Asiamah (2020) investigated the effects of Accounts Payable on Profitability of twenty manufacturing listed firms in Ghana. Time series data were collected from secondary sources. The results of the study revealed the existence of a positive relationship between Accounts Payable and ROA.

Ngugi, Koori & Wamugo (2019) investigated the relationship between APM and FP of Listed Manufacturing Firms at the Nairobi Securities Exchange Market. Creditors' Payment Period was used to measure APM while ROA was used to measure Profitability. The results of the study indicated the existence of positive and statistically significant relationship between Creditors' Payment Period and ROA. The study recommended proper and effective management of WC.

A past study by Onchangwa (2019) measured APM by Days Payable Period. The study revealed that an increase in Days of Payable led to a decrease in Z score signifying a negative relationship between APM and Financial Distress of Firms. All Non-Financial Firms that traded but were not listed at the Nairobi Securities Exchange did not form part of the study.

Riri (2019) evaluated the effect of APM Practices on FP of Hotels in Nyeri County, Kenya. Descriptive results showed that Hotels made timely payment of goods delivered to them on credit. Half of the goods the Hotels ordered were on credit terms. Results of bivariate regression revealed that APM Practices had positive and statistically insignificant effect on FP of Hotels in Nyeri County, Kenya.

Ugas (2017) conducted a study to determine the effect of APM on FP of Water Processing Firms in Puntland State of Somalia. Data for the study were collected from secondary sources. The resulting coefficient of regression output was negative. APM therefore, had a negative effect on FP of Water Processing Firms in Puntland State of Somalia. The findings of this study were consistent with those of Yator (2018) with regards to the effect of Accounts Payable Management on Financial Performance of Institutions.

Kombo (2017) determined the impact of Accounts Payable on FP of Private Medical Facilities in Mombasa County. The results of the study indicated that Accounts Payable had negative relationship with FP of Private Medical Facilities in Mombasa County. The study recommended that Private Medical Facilities in Mombasa County should properly manage their current assets and current liabilities.

Tanveer et al. (2016) assessed the impact of APM on FP of Firms in Pakistan. Average Payment Period was used to measure APM while ROA was used to measure profitability of the firms. The results of the study indicated that the relationship between Average Payment Period and ROA was negative and significant at ninety five percent degree of confidence.

Okpe and Duru (2015) conducted a study in Nigeria concerning the effects of Accounts Payable Ratio on the FP of Beverages and Food. Data that were collected from audited financial reports were subjected to multiple regression analysis. From the findings of the study, the relationship between Accounts Payable Ratio and Profitability was negative and significant. Further, the relationship between both sales growth rate and debt ratio with FP was positive and non-significant.

Ukaegbu (2014) studied the relationship between WCM and Profitability of Manufacturing Companies in Egypt, Kenya, Nigeria and South Africa. The study revealed a negative relationship between Number of Days' Accounts Payable and Profitability in South Africa, Nigeria and Kenya. In Egypt the relationship between the Number of Days' Accounts Payable and Profitability was positive. The conflict in the findings possibly arose from the difference in levels of economic development of the countries under study. United Nations Industrial Performance classified Egypt as

'Forerunners' and South Africa as 'Achievers' while Kenya and Nigeria were grouped as 'Falling-Behind.'

Owino (2014) studied the effects of WCM on Profitability of Manufacturing Entities in Kenya. The study was specific to the effects of Payable Days, Receivable Days, CCC, Inventory Days, Entity Size and Financial Leverage on Profitability. Data were collected through structured questionnaires and analyzed by use of Pooled OLS and Generalized Least Squares. The study revealed a positive and significant relationship between size and profitability of manufacturing entities. The relationship between other components of WCM that formed part of the study and profitability was less significant. The nature of relationship between WCM and profitability was inconclusive. The study recommended that companies seeking to boost profitability via increased sales need to be efficient and effective in WCM.

Another study by Mwangi (2013) concerned the relationship between WCM and FP of manufacturing firms listed at the NSE. Questionnaires were used to collect data that were analyzed through multiple regression procedures. The relationship between both Net Payment Periods and CCC, with Return on Equity was negative and significant. A comparative study by Rehn (2012) revealed a strong positive relationship between CCC and profitability.

2.4 Summary of the Literature Gaps

A number of past studies revealed the nature and direction of relationships that existed between WCM and profitability of institutions. Some studies in contrast, revealed the absence or non-existence of such relationships while other studies were inconclusive about the subject. Majority of the previous studies recognized the

importance of factoring efficiency and effectiveness in managing WC components.

The literature gaps are summarized in table 2.1 as follows.

Table 2.1 Summary of the Literature Gaps

Author(s), Year, Countr(ies)	Objective of the Study	Methodology	Findings	Research Gap(s)
Kofi and Asiamah (2020), Ghana	To examine the effects of WCM on Profitability of Listed Manufacturing Firms in Ghana.	Quantitative Approach (Causal Research Design) was employed.	Positive relationship between CCC and ROA. Positive relationship between ARM and Profitability. Positive relationship between APM and ROA.	The study involved well established firms that were listed at a stock exchange market while this study involves DTMIs that are not well developed.
Ngugi, Koori and Wamugo (2019), Kenya	To determine the relationship between WCM and FP of Listed Companies in Kenya.	Descriptive, Quantitative and Correlational Research Designs	Positive relationship between Cash Flow Ratio and ROA. Negative relationship between Debtors' Collection Period and ROA. Positive and Statistically Significant relationship between Creditors' Payment Period and ROA.	The study entirely used ratios which are historical in nature to determine the relationship between independent and dependent variables.

Onchangwa (2019), Kenya	To investigate effects of WCM on Financial Distress of Non-Financial Firms listed on the NSE Market.	Quantitative Research Design was used. Data was collected from secondary sources.	Positive relationship between CCC and Financial Distress. Negative relationship between Average Collection Period and Financial Distress. Negative relationship between Accounts Payable and Financial Distress.	The study focused on the relationship between components of WCM and Financial Distress and ignored aspects of FP like Profitability.
Riri (2019), Kenya	To assess effects of WCM practices on FP of Hotels in Nyeri County, Kenya.	The study adopted Descriptive Research Design.	Positive relationship between Cash Flow Management and Profitability. Positive and Statistically Insignificant relationship between ARM and Profitability. Positive and Statistically Significant relationship between APM and Profitability.	This study and the present study involve organizations with totally different objects and modes of operations. Hotels do not engage in deposit taking unlike DTMIs.
Yator (2018), Kenya	To determine the effects of WCM Practices on	Qualitative and quantitative techniques were used.	Positive relationship between CM and Profitability. Positive relationship between ARM and	The study involved academic institutions whose functions

			Profitability.	are not overseen
			Negative relationship between APM and Profitability.	by the five major financial sector regulators.
Ugas (2017), Somalia	To analyze the effects of WCM on FP of Water Processing Companies.	Descriptive Research Design was employed.	Positive relationship between CM and Profitability. Negative relationship between ARM and Profitability. Negative relationship between APM and Profitability.	Water Processing Companies keep inventories unlike DTMIs. The outcomes of the studies may not be comparable.
Kombo (2017), Kenya	To investigate effects of WCM on FP of Private Medical Facilities in Mombasa County.	Quantitative and Qualitative approaches were employed.	Negative relationship between CCC and FP. Positive relationship between ARM and FP. Negative relationship between APM and FP.	The study was conducted in an election year in a possibly politically polarized environment. A repeat on a similar study could be necessary.
Tanveer et al. (2016), Pakistan	To investigate the impact of WCM on Firms' FP in Pakistan.	Qualitative and Quantitative approaches were used.	Negative relationship between CCC and FP. Positive and Significant relationship between Average Collection Period and ROA. Negative relationship	The study did not reveal much needed information on the significance of the relationships

			between Average Payment Period and ROA.	between variables.
Sitienei and Memba (2016), South Africa	To establish effect of WCM on firms' profitability	Panel-data methodology was used. Analysis of data involved Ordinary Least Squares (OLS) regression model.	There existed a negative relationship between WCM and profitability.	Effects of positive or negative WCM components on profitability was not revealed.
Okpe and Duru (2015), Nigeria	To investigate the effects of APR on the FP of Beverages and Food Manufacturing.	Data were extracted from audited reports of companies. Data were analyzed through Multiple Regression.	The relationship between Accounts Payable Ratio and profitability was negative and significant.	The study did not reveal the nature and direction of relationship between CCC and Accounts Receivable Ratio with profitability.
Tahir and Anuar (2015), Pakistan	To study WCM's determinants and firms' FP in Pakistan's textile sector.	Dynamic-panel-generalized-method-of-moments was used to analyze data.	The relationship between Accounts Receivable days profitability was negative. The relationship between both CCC and Accounts Payable days with profitability was positive.	The study involved well established firms in the textile sector unlike the present study dealing with DTMIs in the financial sector.

Wangari et al., (2014), Kenya	To investigate he impact of bad and doubtful loans on FP of Kenyan Banks.	Data were collected by use of questionnaires. Data were analyzed through Multiple Linear Regression tool.	The study established that non-performing loans had negative impacts on the FP of banks. The study did not yield result on the relationship between WCM components and profitability.	The study in similarity with Richard (2015), Wangechi (2012), Sindani (2012); among others, failed to show any relationships between WCM and profitability— giving way for further studies.
Owino (2014), Kenya	To study the effects of WCM on profitability of manufacturing firms in Kenya.	Questionnaires were used in collecting data. Analysis of data involved Pooled OLS and Generalized Least Squares.	The relationship between company size and its profitability was positive. The relationship between WCM and profitability was less significant.	The study failed to give the direction and nature of relationships between WCM and profitability of firms.
Ukaegbu (2014), Africa (Egypt, South Africa, Nigeria, Kenya)	To find out the relationship between WCM and manufacturing firms' profitability.	Data analysis involved panel data. Breusch-Pagan autocorrelation was employed in testing panel data's heteroskedasticity.	The relationship between Accounts Payable days and profitability was strong and negative in Kenya, South Africa and Nigeria but positive in Egypt. There was a strong negative relationship	The study involved manufacturing firms in three different countries but failed to give insights on significance of relationships.

		Wooldridge method was applied in testing serial correlation. Feasible-Generalized-Least-Square (FGLS) approach was used in estimating the regression model.	between both CCC and Accounts Receivable days with profitability across the four countries.	The present study involves the financial sector and targets much information about the nature of relationships.
Makori and Jagongo (2013), Kenya	To study WCM and Company Profitability.	Data was obtained from CMA, NSE handbooks and financial reports. E-views, Pearson Correlation and Regression analyses were done on quantitative data.	CCC and ROA gave negative, significant relationship. Accounts Receivable days and ROA gave negative, significant relationship. Accounts Receivable days and ROA gave positive, significant relationship.	The study involved listed construction and manufacturing companies in Kenya unlike the present study dealing with DTMIs in the financial sector.
Mwangi (2013), Kenya	To establish the relationship between WCM and FP of manufacturi	Data were collected by use of Questionnaires Data were analyzed through Multiple	The relationship between both CCC and Net Payment Period and ROE was significant and negative.	The relationship between Net Receivable days and ROE was not established by the study.

	ng firms listed at the NSE.	Regression.		
Abuzayed (2012), Jordan	To investigate WCM and firms' performance in emerging markets: The case of Jordan	The researcher collected cross sectional data covering 2000-2008. Methodology included empirical and conceptual analyses.	The relationship between both CCC and Accounts Receivable days with Profitability was significant and positive. Accounts Payable period and Profitability showed negative and significant relationship.	The outcome of the study could be rendered 'outdated' since nearly a decade has lapsed after the study. -
Rehn (2012), Nigeria	To establish the effects of WCM on a firm's profitability.	Descriptive Research design was employed for this study. Stratified random sampling was done to obtain a representative sample. Data was collected using structured questionnaires. Data was	The relationship between CCC and profitability was found to be negative. The relationship between inventory leanness and profitability was positive but insignificant.	The study did not establish the relationship between ARM and APM with profitability of a firm.

		analyzed using Multiple Linear Regression model.		
Alipour (2011), Iran	To investigate WCM and Company Profitability :	Estimation of research models involved the use of Pooled OLS. Hypotheses of study were tested by conducting regression analysis. Tests for collinearity of the regression model was done through Variable Inflation Factor (VIF).	The relationship between both CCC and Average Collection Period with profitability was negative and significant. The relationship between Average Payment Period and profitability of a company was positive and significant.	This study used Gross Operation Profit (GOP) to measure profitability of a firm thereby ignoring implications of other costs on Net Operating Income.
Sharma & Kumar (2010)	To investigate the effects of WCM on a company's profitability.	Data collected through questionnaires was analyzed by use of OLS Multiple Regression.	Profitability increased with increase in CCC. Profitability increased with number of days accounts receivable Profitability decreased with number of day's accounts payable.	Time lapse between the present study and this study gives the former its necessity.

Source: Author's Own (2020)

Another research study was meaningful for filling the gaps in literature that were created by contracting findings of previous studies. Fresh findings of this study were to add new knowledge to current knowledge and make requisite suggestions for

further studies. This study, unlike earlier conducted studies, investigated CM planning, credit risk preparedness and response strategies to cash crunch, ARM and APM strategies and tactics and decisions for DTMIs.

2.5 Conceptual framework

Conceptual framework is a tool of analysis that was used in this study to diagrammatically represent the association between the independent variables and the dependent variable that were part of the study. Figure 2.1 gives the conceptual framework.

Independent Variable(s)   **Dependent Variable**
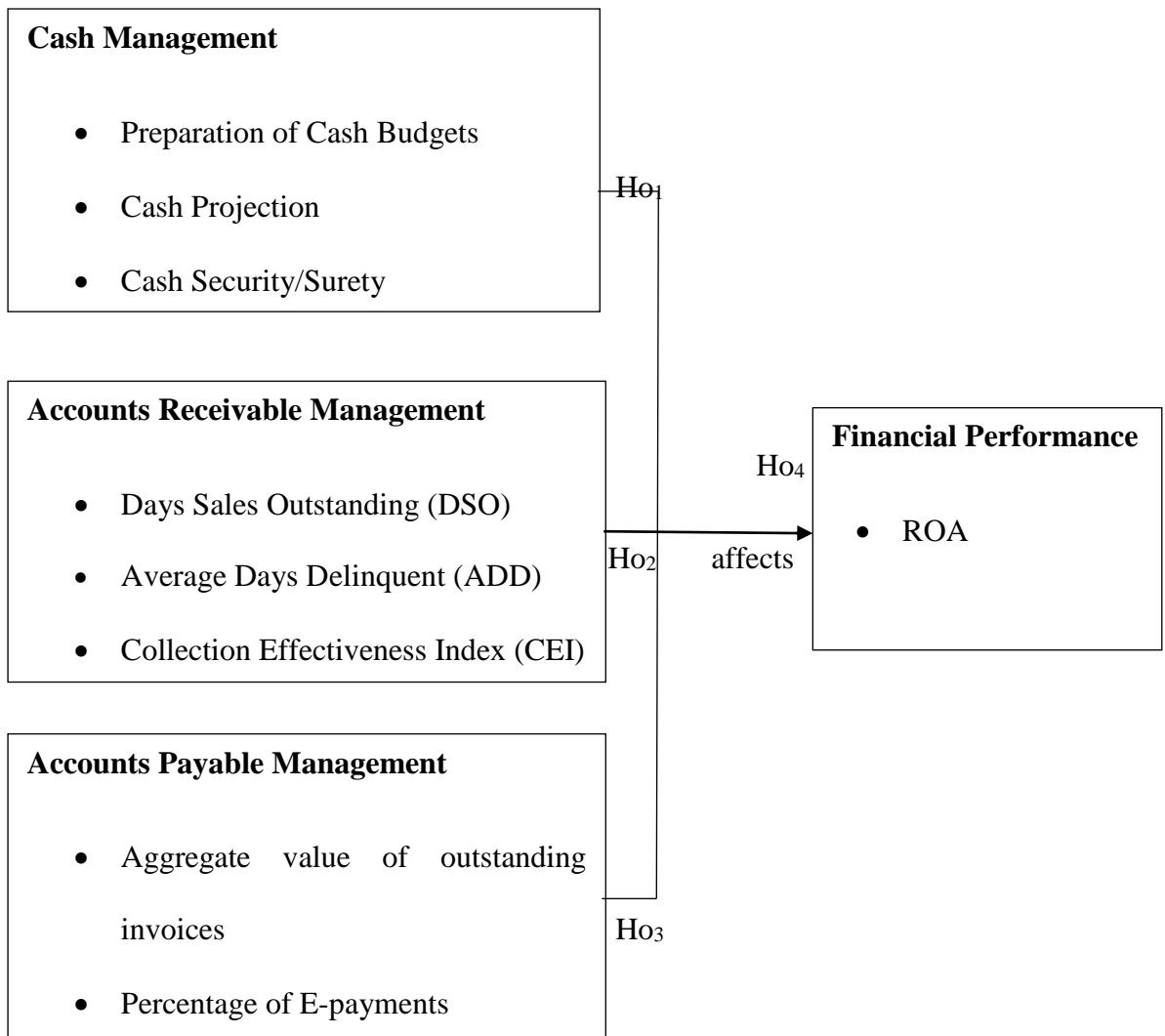
Fig. 2.1: Conceptual framework

Source: (Author's Own, 2020)

CHAPTER THREE

RESEARCH METHOLOGY

3.1 Introduction

Research methodology elaborately explains the approaches, procedures and methods that the researcher used in conducting the study (Mugenda and Mugenda (2012). The contents of this chapter include the Research Design, Analytical Model, Operationalization and Measurement of Study Variables, Location of the Study, Target Population, Sampling Approach and Size, Data Collection Tools and Procedure, Data Analysis and Ethical Standards observed by the study.

3.2 Research Design

The study used descriptive research design. This research design involved having an observation and description of a subject's behavior without influencing it in any way (Kothari and Garg, 2014). Descriptive research design is a state-of-the-art tool that is useful to researchers in fusing qualitative and quantitative data while reconstructing the 'what if' of a subject (Ugas, 2017). The research design was ideal for this study because of its simplicity to use. It also resulted in a large pool of collected data. Secondly, observation of subjects was done in an unaltered and natural environment. Thirdly, descriptive research method allowed a composite approach to data collection and analysis since in-depth data was collected for analysis. Finally, through the method, the researcher was able to identify the variables that were subjected to tests hence, a pre-cursor to further research studies (Mugenda and Mugenda, 2012).

3.3 Target Population and Location of the Study

Target population means the aggregate group of persons, events or objects sharing characteristics that conform to particular specifications (Mugenda and Mugenda,

2012). The target population for this study consisted of the five DTMIs that were licensed by the CBK to operate in Mombasa County. The County was carefully selected for study because it emerged as a modern market for DTMIs. The five DTMIs that were studied were fully operational in Mombasa County.

Based on data from CBK (2019), Kenya had a total of thirteen licensed DTMIs out of which five were operational in Mombasa County. Nationally, the five DTMIs had control of approximately 96.6 percent market share of MFBs (Appendix IV).

3.4 Sampling Design and Sample Size

Purposive sampling method was used to obtain a sample for the study. The intention of the researcher was to get three respondents from every DTMI station. The five DTMIs resulted in a total of sixteen stations as given in appendix IX. Purposive sampling method yielded a sample size of forty-eight respondents. The rationale behind the selection of three respondents from each station was to get a representative sample, encourage convergent and divergent views of respondents and to provide a way setting aside doubtful responses. The sampled respondents were privy to the functions and operations of respective DTMIs including CM, ARM, APM and FP. The appropriateness of Purposive Sampling technique to the study was due to its judgmental capacity in the selection of a targeted sample hence enhancing the researcher's ability get an answer to the research question (Kothari and Garg, 2014). Sampling process under this technique began by listing every item of every studied group from which a targeted sample was picked in accordance with homogeneity of features of individuals in each group.

3.5 Data Collection Instruments

The study entailed collection of both primary and secondary data. Primary data refers to data obtained from an original source firsthand and is expressly customized to the information requirements of the researcher (Surbhi, 2016). Primary data was necessary for the study because it was specially attached to the statement of the problem, data obtained was credible and it was possible to collect a larger pool of data from respondents (Yahaya, 2016). Sources of primary data include but not limited to experiments, interviews, surveys, measurements and focus groups (Altaf and Shah, 2017).

The main tool for data collection in this study was questionnaires due to its practicality in data collection, capacity to collect enormous data with the least deviations from validity and reliability standards and ease and objectivity of coding and scientifically analyzing data by use of SPSS (Mugenda and Mugenda, 2012). Respondents who were not interested in filling questionnaires were interviewed as it was possible to accurately screen their views and keep them focused to completion of data collection. Interviews enabled accurate screening of interviewees, capturing non-verbal and verbal cues as well as behaviors and emotions, (Kothari and Garg, 2014; Dawson, 2002). The questionnaires and the interview guide that were used in data collection are attached as Appendices I and II respectively.

Secondary data is data obtained by an individual who is not the user, that is, the use of data previously collected through primary sources (Surbhi, 2016). Publications, magazines, periodicals, journals, student papers and newspapers are some of the secondary sources of data. Secondary data was necessary for the study because its collection was cost effective and the data collected followed as uniform framework of financial reporting as set by the CBK.

3.6 Pilot Study

The researcher performed an internal pilot survey before proceeding to the main survey. The process involved administering questionnaires to seven respondents with the aim of capturing their reactions and obtaining their suggestions. The researcher made corrections on the minor errors and omissions that were reported and proceeded to conduct a second pilot survey. No errors and omissions were highlighted from the second and final reconnaissance study.

3.6.1 Instrument Validity

A research instrument is valid if it is exact in measuring what was intended (Mugenda and Mugenda, 2012).The researcher sought opinion of colleagues in upholding the appropriateness of data collection instruments. The questionnaire and interview guide that were designed by the researcher were subjected to intensive scrutiny by another researcher to possibly identify omissions, redundancies and errors. The researcher who performed the scrutiny declared the instruments valid and accurate in construct and content having found no anomalies in them.

3.6.2 Instrument Reliability

Reliability of a research instrument refers to the level to which a scale results in consistent outcomes from replicate measurements (Mugenda and Mugenda, 2012). Test-retest technique was used to test the reliability of the instruments for this study. It entailed presenting the same questionnaire twice to a large sample of similar respondents at dissimilar times with the intention of identifying identity of scores. The research instrument was considered reliable after obtaining a confirmation that the respondents' position in the scores distribution was similar for both the test and re-test activities. The reliability coefficient of the instrument was 0.9 against the lowest threshold of reliability coefficient of instrument of 0.7. This means that the instrument

was consistent in that it gave out nine consistent results out of ten counts. Thus, the researcher declared the instrument as very reliable.

3.7 Data Collection Procedures

Data collection process commenced by making an application to Kenyatta University for an Authorization to undertake research certificate; a document which was useful to the researcher in applying for the permit to carry out an academic research from National Commission of Science, Technology and Innovation (NACOSTI) domiciled at the Ministry of Education, Science and Technology (MOEST). Questionnaires and interview guide were then drafted and subjected to tests for validity by getting expert opinion and reliability by pilot testing that involved test-retest method. The researcher in assistance with two properly trained and closely monitored enumerators then, administered the data collection instruments to the respondents. Next, cross-checking for completeness, relevance and reliability was done to data that was collected, followed by coding in SPSS, analyses, interpretations and inferences.

3.8 Analytical Model

The study adopted a Multiple Linear Regression Model of analysis whereby the dependent variable was FP of DTMIs in Mombasa County, Kenya while the independent variables consisted of CM, ARM and APM for a time series data.The projected relationship between the dependent variable and independent variables was as follows:

$Y_{i,t} = a_0 + b_1 X_{1i,t} + b_2 X_{2i,t} + b_3 X_{3i,t} + \varepsilon$

Where: $Y_{i,t}$ = FP of DTMI i measured by ROA at time t;

a_0 = Constant Term or Intercept (assured ROA irrespective of proper WCM);

b$_1$, b$_2$, b$_3$=Coefficients of independent variables (measures the extent to which the outcome variable changes due to per unit changes in the predictor variables);

$X_{1i,t}$= CM measured by CT of DTMI *i* at time *t*;

$X_{2i,t}$= ARM measured by Accounts ART of DTMI *i* at time *t*;

$X_{3i,t}$= APM measured by APT of DTMI   *i* at time *t*;

ε= Error Term.

3.9 Operationalization and Measurement of Study Variables

Table 3.1 gives the variables, their groupings, measurement criteria and hypothesized direction.

Table 3.1 Operationalization and Measurement of Study Variables

Variable	Type of Variable	Category of Measurement	Measurement	Hypothesized Direction
FP	Response	Ratio	Rate	None
CM	Predictor	Ratio	Rate	None
ARM	Predictor	Ratio	Rate	None
APM	Predictor	Ratio	Rate	None

Source: Author's Own (2020)

3.10 Data Analysis

Data analysis is the process of scanning the whole information then examining relevant information that is useful in decision making (Silvia and Skilling, 2006).The process begins after data collection and ends with interpretation and inference of data (Cooper and Schindler, 2003). SPSS Version 20 software was used in this study for data analysis. Data analysis involved qualitative and quantitative data. Quantitative data was analyzed by inferential statistics of regression, and Chi square value were computed on quantitative data at ninety-five percent degree of confidence. Regression values were obtained from an F-Test on multiple variables (X_1, X_2, and X_3). The

relationship between WCM and FP of DTMIs was the product of a multiple linear regression process. Descriptive statistics was applied in analyzing qualitative data. Descriptive statistics grouped data into identical themes and topics that were then given individual explanations (Mugenda and Mugenda, 2012). The researcher obtained and compared the measures of central tendency, dispersion and distribution. Qualitative data were summarized in tables that showed frequencies and percentages.

3.11 Research Ethics

Strict compliance with the existing codes of conduct and ethical standards is a legal requirement of academic research. In response, the researcher upheld honesty, social responsibility, confidentiality, non-discrimination and objectivity in every undertaking. Secondly, human rights issue played a crucial role in this study. Human rights and zero tolerance to plagiarism is another key concern of academic research. The researcher adhered by seeking consent and willing participation of respondents. The issue of copyright guidelines and plagiarism was considered by documenting all citations to every work and ideas that were borrowed from past authors. The researcher obtained two letters and a letter from the graduate school and NACOSTI respectively prior to his study that authorized him to proceed with research study. Finally, all findings, ideas, conclusions and recommendations were scientifically based on high standards of accuracy and verifiability of facts.

CHAPTER FOUR

RESEARCH FINDINGS

4.1 Introduction

The chapter aims at clearly presenting, interpreting and explaining the data as was collected by the researcher. The specific contents of this chapter are the Response Rate Analysis, Descriptive and Inferential Statistics. This study was undertaken for a five-year period between 2014-2019 about WCM and FP of DTMIs in Mombasa County, Kenya. Tables showing frequencies and percentages were used to summarize the data that was analyzed. Interpretations and elaborate discussions followed thereafter.

4.2 Analysis of Response Rate

Analysis of Response Rate deals with comparison of actual against anticipated number of respondents. This process was necessary for the researcher because the response rate was linked to keeping in check, the reliability of the study. Analysis of response rate is given in table 4.1 showing frequencies against percentages of anticipated and actual respondents.

Table 4.1: Analysis of response rate of participants

DTMI	ANTICIPATED RESPONDENT(S)	ACTUAL RESPONDENT(S)	RESPONSE RATE (%)
KWFT	15	15	100%
Faulu	12	0	0%
Rafiki	12	12	100%
SMEP	6	6	100%
Caritas	3	3	100%
TOT.	48	34	70.83%

Source: Research Survey (2020)

The response rate was N=34 representing 70.83% out of the anticipated N=48. A DTMI with 12 respondents failed to participate in the study in honor of their human resources policy forbidding such a move. Table 4.1 gives the summary of the response rate of respondents. The researcher went ahead to analyze the demographic distribution of participants as follows.

4.3 Demographic Distribution of Respondents

Respondents were analyzed for demographic distribution on the basis of sex grouping, level of education and number of years' experience at the work. Responses were optional about demographic distribution of respondents. It was impossible to get data concerning the cadre of respondents as most participants ignored that response. Information regarding cadre was very sensitive and considered personal and confidential possibly because salary scale is a subject of cadre.

4.3.1 Gender Grouping of Respondents

The study sought information related to gender grouping of participants in order to get an understanding of the distribution of employees in various DTMIs by gender. A third grouping of gender as 'other' was created dissimilar to past studies that categorized gender as either males or females. This study was not interested in sexual orientation that normally groups participants as homosexuals, heterosexuals and bisexuals. Data regarding gender of respondents was crucial for inclusivity reasons because organizations are widely hiring employees without looking down upon hermaphrodites.

The number of male participants in the study were N=27 representing 56.2% of all respondents while the rest (N=7) were females representing 20.6% of all respondents. The third sex group named 'other' had N=0 respondents representing 0.0% of total respondents. The findings suggest that mainstream banking is to-date dominated by

males as opposed to females and the third sex group. The findings further reveal that most organizations still employ males and females alone without reserving employment slots to hermaphrodites. The third implication could be that a number respondents misled the researcher about their sex information in fear of stigmatization attached to identity with third sex grouping. The researcher was not able categorize non-respondents in any group but as invalid.

4.3.2 Level of Education of Participants

Level of training is an important aspect of effective WCM. Reasoning ability of employees normally improves with advancement in education levels. Higher levels of training is a recipe for better organizational productivity and stability because training enables employees to gain additional skills to carry out basic and complex tasks enabling them to be flexible and more self-reliable at work. The researcher requested respondents to indicate their levels of education and the results are given in table 4.3.

Table 4.2: Level of Education of Participants

		Frequency	Percent	Valid Percent	Cumulative Percent
	University	30	88.2	90.9	90.9
Valid	College	3	8.8	9.1	100.0
	Total	33	97.1	100.0	
Missing	System	1	2.9		
Total		34	100.0		

Source: Research Survey (2020)

Based on table 4.2, N=30 participants accounting for 90.9% were University graduates while N=3 respondents accounting for 9.1% were College graduates. One respondent representing 2.9% failed to respond about their level of education. This depicts that DTMIs engage more University graduates than lower level qualifications.

This further implies on joblessness in mainstream banking forcing University graduates to pick on any employer.

4.3.1: Work Experience of Participants

The study also sought to investigate the work experience of respondents. A longer serving employee would have a better comprehension of WCM than a recently recruited employee. Table 4.3 gives the results of the investigation.

Table 4.3: Work Experience of Respondents' results

	Frequency	Percent	Valid Percent	Cumulative Percent
1-2yrs	5	14.7	14.7	14.7
3-4yrs	5	14.7	14.7	29.4
Over4yrs	24	70.6	70.6	100.0
Total	34	100.0	100.0	

Source: Research Survey (2020)

Based on the study findings presented in table 4.3, most participants (N=24 representing 70.6% of respondents) had served the banking sector for over four years. A total of N=5 respondents representing 14.7% of total respondents had worked in the banking sector for a period of 3-4 years. An equal number of participants (N=5 representing 14.7% of respondents) had offered their services to the banking sector for a period of 1-2 years. The researcher was satisfied with the demographic distribution of participants by work experience because the most experienced employees were at apex management level and DTMIs had proper succession plans.

4.4 Descriptive Statistics Results of the Study

Descriptive statistics is a way of making data meaningful for simpler interpretation by various users. It deals with analysis of data in terms of measures of central tendency such as mean, median and mode; measures of dispersion including variance, absolute deviation and standard deviation; and measures of distribution including kurtosis and skewness. A group of data can either be summarized in descriptive statistics by way of tabulation in which tables are drawn; or graphical description in which graphs and charts are produced; or by way of statistical commentary in which the researcher discusses all findings (Mugenda and Mugenda, 2003).The results of this study were tabulated and discussed thereof. Table 4.4 gives the descriptive statistics data of the study.

Table 4.4: Descriptive Statistics Data Results

		ROA	CT	ART	APT
N	Valid	22	22	22	22
	Missing	0	0	0	0
Mean		.01	1.04	.32	.06
Median		.00	1.00	.31	.06
Mode		0	0[a]	0[a]	0[a]
Std. Deviation		.008	.493	.106	.024
Variance		.000	.243	.011	.001
Skewness		1.693	.664	1.090	.901
Std. Error of Skewness		.491	.491	.491	.491
Kurtosis		1.799	.509	3.270	.607
Std. Error of Kurtosis		.953	.953	.953	.953

a. Multiple modes exist. The smallest value is shown

Source: Research Survey (2020)

As shown by table 4.4, ROA had a mean of 0.01with a mode of 0 and median of 0.00 implying that the distribution was positively skewed (right skewed) since the mean was more than the mode and median. The standard deviation for ROA was high at 0.008, signifying that the values of ROA were spread out over a wide range. The explanation behind high standard deviation of 0.08 could be due a study that involved different tier DTMIs with outright varied FP. The skewness and kurtosis of ROA was 1.693>1 and 1.799<3 respectively implying a platykurtic distribution. Skewness measured the degree of distortion from a symmetrical bell curve while kurtosis described the extreme values that appeared in one tail against the other tail (Brown, 1997).

CT gave a mean of 1.04, a mode of 0 and median of 1.00; an indication that the distribution right-skewed (positively skewed) since the mean was greater than the mode and median. The standard deviation for CT was 0.493 representing the amount of dispersion of values from the mean. The skewness and kurtosis of CT was 0.664<1 and 0.509<3 respectively implying a platykurtic, fairly-positively skewed distribution

ART gave a mean of 0.32, mode of 0 and median of 0.31 showing that the distribution was right skewed (positively skewed) as the mean was greater than the median and mode. ART had a standard deviation of 0.106, a kurtosis of 3.270>3 and a skewness of 1.090>1. This implies a leptokurtic, highly positively skewed distribution.

The mean, mode and median of APT were 0.06, 0 and 006 respectively. Similarity of mean and median symbolized a symmetrical distribution. The standard deviation of APT was 0.024 implying that the observations were scattered around the mean by 0.024. The skewness and kurtosis of APT was 0.901<1 and 0.607<3 resulting in a conclusion that the data set showed symmetrical, platykurtic distribution.

Descriptive statistics results showed that CT gave the highest standard deviation of 0.493 while ROA gave the lowest standard deviation of 0.008.The skewness of ROA was highest at 1.693 while CT had the lowest at 0.664. Cash Turnover had the lowest kurtosis of 0.509 while ART had the highest kurtosis of 3.270.

The researcher conducted a Shapiro-Wilk test of normality and the results of the test are shown in table 4.5 below.

Table 4.5: Tests of Normality

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
CM vs FP	.421	34	.000	.647	34	.000
ARM vs FP	.313	34	.000	.779	34	.000
APM vs FP	.323	34	.000	.786	34	.000

a. Lilliefors Significance Correction

Source: Research Survey (2020)

As shown in table 4.5, the Shapiro-Wilk test gave a p=.000<0.05 meaning that the data deviated from a normal distribution. In a normal distribution of data, the resulting p-value from a Shapiro-Wilk test of normality should be greater than 0.05. Shapiro-Wilk test is more appropriate for a sample size of less than fifty respondents as was the case in this study.

4.5 Inferential Statistics Results of the study

The other way of giving data meaning to for simpler interpretation by various users is through inferential analysis. Inferential statistics tests the association, direction and, strength of relationship of independent and dependent variables. The analyses that were done in this study include Chi-Square, Pearson Correlation and Regression.

4.5.1 Chi Square Analysis Results

Chi square analysis is very vital in testing the independence of variables in instances where null hypotheses are used (Riri, 2019). The researcher tested of independence between the predictor variables and the response (outcome) variable hence enabling him to evaluate the existence of association of variables. By calculating the Chi-Square statistic and comparing the resulting value with the critical value given on a Chi-Square distribution, the researcher assessed the chances of existence of

statistically significant differences between observed and hypothesized cell counts given that the researcher hypothesized zero relationship between the variables. A p-value of less than 0.05 implies that the studied variables were related. The study findings were as given in table 4.6.

Table 4.6:Chi-Square Analysis Results

	Value	D.f	Asympt. Sig. (2-sided)
Pearson Chi-Square	198.000[a]	189	.049
Likelihood Ratio	87.825	189	1.000
Linear-by-Linear Association	5.595	1	.018
No. of Valid Cases	22		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 94.41.

Source: Research Survey (2020)

From the findings of the study, the value of Pearson Chi-Square statistics was 198.000 and the p-value (asymptotic significance) was 0.049<0.05. It means the existence of a significant relationship between the variables. The researcher proceeded and test the strength of such relationships by performing a correlation analysis.

4.5.2 Correlation Analysis Results

It was quite necessary perform an evaluation of the strength and direction of relationships that existed between ROA and CT, ROA and ART and ROA and APT. The three ways of commonly ranking correlation coefficients are Kendall, Pearson and Spearman (Samithamby, 2019). Pearson correlation results were obtained for the study. A correlation coefficient value of +1 implies a perfect positive relationship between the dependent and independent variables while a correlation coefficient value of -1 implies perfect negative relationship between the response and predictor variables. If a bivariate analysis yields a correlation coefficient of 0 then, the two

variables exhibit no association. In this study, Pearson correlation coefficient values were separately obtained as shown in tables 4.7, 4.8 and 4.9.

Table 4.7: Correlations results for Return on Assets versus Cash Turnover

		ROA	CT
ROA	Pearson Correlation	1	.516[*]
	Sig. (2-tailed,)		.014
	N	22	22
CT	Pearson Correlation	.516[*]	1
	Sig. (2-tailed,)	.014	
	N	22	22

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Research Survey (2020)

As presented in table 4.7, the Pearson correlation coefficient of ROA and CT was 0.516. The p-value of the relationship between CT and ROA was 0.014<0.05. This implies a positive and significant relationship. An increase in CT led to a significant increase in ROA while a decrease in the former led to a significant decrease in the latter. The Pearson correlation test was two-tailed at 95 percent confidence level and 0.05 level of significance. The results of this study were consistent with the studies by Kofi and Asiamah (2020), Ngugi, Koori and Wamugo (2019), Onchangwa (2019), Riri (2019), Yator (2018), Ugas (2017), Tahir and Anuar (2015), Abuzayed (2012) and Sharma and Kumar (2010) who noted a positive and significant association between CCC and profitability. Table 4.7 gives the results of another test for the relationship between ROA and ART. The results of this study were however dissimilar to those of Kombo (2017) and Tanveer (2016), possibly due to time lapse and methodologies used in the studies.

Table 4.8: Correlations results for Return on Assets versus Accounts Receivable Turnover

		ROA	ART
ROA	Pearson Correlation	1	.391
	Sig. (2-tailed)		.042
	N	22	22
ART	Pearson Correlation	.391	1
	Sig. (2-tailed)	.042	
	N	22	22

Source: Research Survey (2020)

As shown by table 4.8, the Pearson correlation coefficient of ROA and ART was 0.391. The p-value of ART was 0.042<0.05. This implies that the relationship between ROA and ART was positive and significant. An increase in ART led to an insignificant increase in ROA while a decrease in ART led to an insignificant decrease in ROA. The two-tailed Pearson correlation test was done at 95 percent confidence level and 0.05 level of significance. The study results were synonymous with those by Kofi and Asiamah (2020), Riri (2019), Yator (2018), Kombo (2017), Tanveer (2016), Sharma and Kumar (2010), among others who found a positive correlation but contrasted Ngugi, Koori and Wamugo (2019), Onchangwa (2019) and Tahir and Anuar (2015) who observed a negative correlation between ARM and FP of institutions. Table 4.9 gives the results of a similar test for the relationship between ROA and APT.

Table 4.9: Correlations results for Return on Assets versus Accounts Payable Turnover

		ROA	APT
ROA	Pearson Correlation	1	-.325
	Sig. (2-tailed)		.031
	N	22	22
Accounts Pay. Turnover	Pearson Correlation	-.325	1
	Sig. (2-tailed)	.031	
	N	22	22

Source: Research Survey (2020)

Based on table 4.9, the Pearson correlation coefficient of ROA and APT was -0.325. The p-value of APT was 0.031<0.05. This implies that the relationship between ROA and APT was negative and significant. An increase in APT led to significant decrease in ROA while a decrease in APT led to a significant increase in ROA. The two-tailed Pearson correlation test was done at 95 percent confidence level and 0.05 level of significance. The study results were a mirror replica of those of Onchangwa (2019), Yator (2018), Ugas (2017), Kombo (2017), Tanveer (2016), Okpe and Duru (2015), Ukaegbu (2014) and Mwangi (2013) who found APM and Profitability had negative correlation. Kofi and Asiamah (2020), Ngugi, Koori and Wamugo (2019), Riri (2019) and Tahir and Anuar (2015) in contrast, found a negative relationship between average payment period and profitability. The researcher proceeded with regression analysis of the study findings.

4.5.3 Regression Analysis Results

Regression analysis refers to statistical procedures performed with the purpose of estimating relationships between an outcome variable and each of the predictor variables. This analysis was necessary because it enhanced the prediction, forecasting

and inferring about the causal association between ROA and CT, ART and APT. The outcome of the regression analysis that involved SPSS version 20, included model summary, ANOVA and coefficients as shown by tables 4.10, 4.11 and 4.12, respectively.

4.5.4 Model Summary Results

A model summary table gives the number of models used, value of R, value of R Square (R^2), value of Adjusted R Square and the Standard error of the estimate (Research-gate, 2020). R^2 is the portion of the total variance that the regression equation explained and is calculated and is calculated as a quotient of the explained variance and the entire variance of the outcome variable. A smaller and unbiased the differences between the observed and predicted values of a model results in a fitter model for the collected data. An R^2 of 0 percent implies that the model explains nil variability of response data around its mean while an R^2 of 100 percent implies that all deviations of response data around its mean is explained by the model.

Table 4.10: Model Summary Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.710[a]	.504	.422	.006

a. Predictors: (Constant), APT, CT, ART
Source: Research Survey (2020)

Based on model summary results in table 4.10, R^2 =0.504 against the resulting standard error of estimate of 0.006<0.05. This gives an implication that CM, ARM and APM explained 50.40 percent variance (R^2) in FP of DTMIs in Mombasa County. Unidentified factors outside this study contributed to 49.60 percent of the variance in FP of DTMIs in Mombasa County. There is need for a further study to identify these factors. The coefficient of determination (Adjusted R^2=0.422) gives the disparities in the ROA that resulted from changes in the CT, ART and APT.

The study in comparison with other studies regressed CT, ART and APT against ROA. Makori and Jagongo (2013), Nazir and Afza (2009), Martinez-Solano (2007), Deloof (2003); among others, used these ratios to measure WCM and profitability rendering the ratios the most commonly used. However, Makori and Jagongo (2013) regressed CCC against ROA independently due to existence of high multicollinearity and found R^2 =33.3% at F-value of 10.874 meaning high level of significance at p<0.01.The value of R^2 obtained by Makori and Jagongo (2013) upon regressing other variables apart from CCC against ROA was 54.7% at F-value of 18.045 meaning high level of significance at p<0.01.

4.5.5 ANOVA Results

Analysis of Variance (ANOVA) is a major analytical tool for testing whether, two or more population means are identical. ANOVA follows the law of total variance; that is, ANOVA deals with the explained and unexplained elements of variance. The researcher used ANOVA to test the results of the study for significance. The results from ANOVA is expressed in table 4.11.

Table 4.11: ANOVA[a] Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	.001	3	.000	6.104	.005[b]
1	Residual	.001	18	.000		
	Total	.001	21			

a. Dependent Variable: ROA

b. Predictors: (Constant), APT, CT, ART

Source: Research Survey (2020)

On the basis of ANOVA statistics above, the population parameters showed a significance level of 0.5% (p-value=0.005<0.05). The 0.5% significance level (p-

value) which was much lower than the standard p-value of 5 percent, made the data findings very useful in making conclusions about population parameters. Having obtained the coefficient of correlation and the ANOVA statistic, the researcher went ahead to estimate the regression equation as is defined by the coefficients presented in table 4.12.

4.5.6 Coefficients Results of Regression Analysis

Regression analysis is very useful in giving the existing mathematical relationships between predictor and outcome variables through the beta coefficients and the statistical significance of the relationships through the p-values. A beta of zero would portray that there is no association between changes in predictor variables and the corresponding shifts in outcome variable. The standardized coefficients define the beta weights emanating from a regression analysis whereby the variances of independent and dependent variables are normalized to a unit. On the contrary, unstandardized coefficients define the beta weights emanating from a regression analysis in which the variances of predictor and outcome variables are not normalized to one. Unstandardized coefficients are raw coefficients of an original regression analysis representing resulting beta coefficients of a shift in outcome variable due to a change in predictor variable by one unit. Table 4.11 summarizes the coefficients and corresponding p-values obtained from regression analysis.

Table 4.12: Coefficients[a] Results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.001	.005		.118	.908
	CT	.008	.003	.486	2.522	.021
	ART	.018	.014	.253	1.308	.046
	APT	-.153	.055	-.477	-2.788	.012

a. Dependent Variable: ROA

Source: Research Survey (2020)

The relationship between outcome and predictor variables was predefined by the below equation.

$Y_{i,t} = a_0 + b_1X_{1i,t} + b_2X_{2i,t} + b_3X_{3i,t} + \varepsilon$ where: a_0 is a constant; b_1, b_2, and b_3, are unstandardized beta coefficients of the relationship between outcome variable and predictor variables; $X_{1i,t}$, $X_{2i,t}$, and $X_{3i,t}$ represent CT, ART and APT of DTMI i at time t respectively.

In regards to findings of the study analysis expressed in table 4.12, the resulting regression equation was as below.

$Y = 0 + 0.486X_1 + 0.253X_2 - 0.477X_3$

The value of Y was 0 irrespective of other factors. A one digit change in X_1 led to a change in Y by 0.486 in the same direction. A one digit change in X_2 led to a change in Y by 0.253 in the similar direction. A one unit change in X_3 led to a change in Y by 0.477 in the opposite direction. Y, X_1, X_2 and X_3 represented ROA, CT, ART and APT, respectively.

The standardized beta coefficients results for the constant was 0. A zero value denoted the amount of ROA irrespective of the predictor variables of the study. The zero constant connoted that FP of DTMIs in Mombasa County depended entirely on WCM.

Ho1: There is no significant effect relationship between Cash Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya

The initial objective of this study was to find out the relationship between CM and FP of DTMIs in Mombasa County, Kenya. The researcher hypothesized that CM had no

significant relationship with FP of DTMIs. The results of the tests of hypothesis are shown by table 4.11.

CT gave a beta coefficient of 0.486. The figure depicts that a change in CT by one unit led to a change in ROA by 0.486. A positive beta coefficient suggests that a change in CT led to a change in ROA in the same direction. The researcher used t-test to test this hypothesis at 95% confidence level to determine its rejection or acceptance. CM was measured by CT while profitability was measured by ROA. The p-value that resulted from analysis of the relationship between CT and ROA was $p=0.021<0.05$; making the researcher to reject the null hypothesis. The researcher made the concluded that there is a statistically significant relationship between CM and FP of DTMIs in Mombasa County, Kenya.

Kofi and Asiamah (2020), Ngugi, Koori and Wamugo (2019), Onchangwa (2019), Riri (2019), Yator (2018), Ugas (2017), Tahir and Anuar (2015), Abuzayed (2012), Odhiambo (2013), Mauchi et al. (2013), Abuzayed (2012) and Sharma and Kumar (2010) found a positive relationship between CM and FP of institutions. Rehn (2012) found the existence of a strong relationship between CCC and profitability. However, the findings of the present study on the relationship between profitability of DTMIs and CM contrasted the findings of Kombo (2017), Tanveer (2016), Sitienei and Memba (2016); Ukaegbu (2014); Mwangi (2013); Rehn (2012); Alipour (2011); among others who revealed that CCC and profitability exhibited negative relationship. The dissimilarity in conclusions could be explained by difference in scope and methodology of the studies. The study by Ukaegbu (2014) for instance, was specific to evaluating the relationship between WC efficiency and FP across different bilateral firms. The present study in contrast, involved all other aspects of WCM and was very specific to DTMIs.

This study like Tahir and Anuar (2015), Ukaegbu (2014), Okpe and Duru (2012); among others, concluded that CCC is key to profitability of firms and creation of shareholders' value. Based on these studies it was notable that DTMIs with longer CCC experienced negative effects on their profitability. Studies by Richard (2015), Sindani (2012), and Wangechi (2012) did not provide insights on the relationship that existed between WCM items and profitability making this study very crucial.

Ho2: There is no significant effect relationship between Accounts Receivable Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya

The second objective of this study was to examine the relationship between ARM and FP of DTMIs in Mombasa County. The corresponding hypothesis stated that ARM had no significant relationship with FP of DTMIs in Mombasa County. The hypothesis test results were as outlined in table 4.11.

ART gave a beta coefficient of 0.253. The figure depicts that a digit change in ART changed ROA by 0.253. A positive beta coefficient suggests that a change in ART resulted in a similar direction change in ROA. The hypothesis was tested for rejection or acceptance using t-test at 95% confidence level. ARM was measured by ART while profitability was measured by ROA. The p-value obtained from analysis of the relationship between ART and ROA was p=0.046<0.05; compelling the researcher to reject the null hypothesis. The findings of this study were in agreement with those of Asiamah (2020), Riri (2019), Yator (2018), Kombo (2017), Tanveer (2016), Odhiambo (2013) and Mauchi et al. (2013). Sharma and Kumar (2010); among others who also concluded that the relationship between ARM and FP was positive. Based on the results of tests of hypothesis, the researcher made the conclusion that there is a

statistically significant relationship between ARM and FP of DTMIs in Mombasa County, Kenya.

However, the findings of this study disagreed with those of Ngugi, Koori and Wamugo (2019), Onchangwa (2019), Tahir and Anuar (2015), Sitienei and Memba (2016), Mwangi (2013), Jagongo and Makori (2013), Alipour (2011); among others, who found a negative relationship between ARM and profitability of firms. The difference could be procedural or due to time lapses among the studies. Alternatively, the difference in findings could have emanated from various approaches and sampling techniques employed by various researchers. Despite the consistencies and contrasts of the study findings by the scholars, there came out a unified conclusion that WCM is very important to DTMIs and that DTMIs should strive to reduce account receivable days to improve their FP and create more value to investors.

Ho₃: There is no significant effect relationship between Accounts Payable Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya

The other objective of this study was to investigate the relationship between APM and FP of DTMIs in Mombasa County, Kenya. The researcher hypothesized that APM had no significant relationship with the financial performance of DTMIs in Mombasa County. The results of the tests of hypothesis are summarized in table 4.11.

The beta coefficient of APT was -0.477; suggesting that a digit change in APT led to a change in ROA by 0.477 in a different direction. The researcher tested the hypothesis using t-test at 95% confidence level to determine its rejection or

acceptance. APM was measured by APT while FP was measured by ROA. The resulting significance level (p-value) from analysis of the relationship between APT and ROA was p=0.012< 0.05; compelling the researcher to reject the null hypothesis and conclude that there is a statistically significant relationship between APM and FP of DTMIs in Mombasa County, Kenya. Makori and Jagongo (2013) and Abuzayed (2012) both concluded similar to this study that, DTMIs can create more value by lengthening their accounts payable days provided that they strain their goodwill with their creditors.

The results of this study were mirrored with those of previous studies. The results of the current study were similar to Onchangwa (2019), Yator (2018), Ugas (2017), Kombo (2017), Tanveer (2016), Sitienei and Memba (2016); Okpe and Duru (2015); Ukaegbu (2014); Mwangi (2013); and Alipour (2011). The findings were however inconsistent with study findings by Kofi and Asiamah (2020), Ngugi, Koori and Wamugo (2019), Riri (2019), Tahir and Anuar (2015) Owino (2014) and Wangari et al., (2014). The difference could have resulted from circumstances under which the studies were done. The latter studies were all conducted 2014 in Kenya when the country was faced with drought, hunger, reduced saving abilities, terrorism among other vices.

The purpose of this study was to investigate the overall relationship between WCM and FP of DTMIs in Mombasa County, Kenya. The researcher hypothesized that WCM had no significant effect relationship with the FP of DTMIs in Mombasa County. The overall effect of all variables on FP of DTMIs is summarized in table 4.10. The regression model gave R=0.504 at p=0.006<0.05 meaning that there existed a significant effect relationship between WCM and FP of DTMIs in Mombasa County, Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the summary of the purpose of the study, problem of the study, specific objectives of the study, null hypotheses that were tested, methodology used and major findings of the study. In this chapter, the study objectives are compared with subsequent findings in order to determine the extent to which the objectives were met, if any. The chapter also provides the conclusions reached thereafter and recommendations suggested by the researcher for policy, practice and further studies. Moreover, the researcher highlighted handful limitations of the study in this chapter.

5.2 Summary of the Study

The basis of the study was the urge for DTMIs to attain the status of financial stability for improved FP. The purpose of the study was to investigate WCM and FP of DTMIs in Mombasa County. The problem of the study was the liquidity shortfalls facing DTMIs that was manifested on the inability of their clients to reach their deposits with DTMIs in time to respond to various demands for cash money. The specified objectives were to find out the relationship between CM and FP of DTMIs in Mombasa County, Kenya; to determine the relationship between ARM and FP of DTMIs in Mombasa County, Kenya; and, to investigate the relationship between APM and FP of DTMIs in Mombasa County, Kenya. Data that were collected by use of questionnaires and interview guide were analyzed by use of quantitative and qualitative techniques. Data from interview method were useful in making conclusions and recommendations as they could not be coded for analysis.

The first hypothesis stated that there was no effect relationship between CM and FP of DTMIs in Mombasa County, Kenya. The second hypothesis stated that there was no effect relationship between ARM and FP of DTMIs in Mombasa County, Kenya. The final hypothesis was that there was no effect relationship between APM and FP of DTMIs in Mombasa County, Kenya.

The first major finding of the study was that a positive relationship existed between CM and FP of DTMIs in Mombasa County, Kenya. The relationship between ROA and CT was positive resulting in a p-value=0.021<0.05; making the researcher to reject the first null hypothesis. The second finding was the existence of a positive relationship between ARM and FP of DTMIs in Mombasa County, Kenya. The p-value of ART was p=0.046<0.05 that compelled the researcher to reject the second null hypothesis. The p-value of APT was p=0.012<0.05 and the relationship between APT and ROA was negative. The third null hypothesis was as well rejected by the researcher. A change in CM by one unit led to a change in ROA by 0.486 in the same direction. A change in ARM by one unit led to a change in ROA by 0.253 in the same direction. However, a change in APM by one unit led to a change in ROA by 0.477 in a different direction.

The researcher ran F-test to know whether CM, ARM and APM were jointly significant. The p-value and F-value as shown in the ANOVA table (table 4.11) were both statistically significant since F-value at 3 degrees of freedom—regression and 18 degrees of freedom—residual was 6.104 at p=0.005<0.05. The researcher rejected all the null hypotheses.

5.3 Conclusion of the Study

The conclusion of the study is based on the study objectives, hypotheses and findings. The researcher made conclusions in consideration of the extent to which the objectives of the study were met. Acceptance or rejection of the hypotheses was decided upon by making reference to the study findings. Conclusions were also made depending on regression and correlation analyses results.

The relationship between CM and FP of DTMIs was positive and fairly strong as supported by a correlation coefficient of 0.516. The relationship between ARM and FP of DTMIs was positive and weak as supported by a correlation coefficient of 0.391. The relationship between APM and FP of DTMIs was negative and weak as supported by a correlation coefficient of -0.325. The variability in FP of DTMIs was largely contributed by CM, ARM and APM at $R^2 = 0.504$; $\alpha = 0.006$. The hypothesis that stated zero effect relationship between CM and FP of DTMIs in Mombasa County, Kenya was rejected at p-value= $0.021 < 0.05$. The hypothesis which stated that there was zero effect relationship between ARM and FP of DTMIs in Mombasa County, Kenya was rejected at p-value= $0.046 < 0.05$. The hypothesis that stated presence of no effect relationship between APM and FP of DTMIs in Mombasa County, Kenya was rejected at p-value= $0.012 < 0.05$. The results of F-test were statistically significant at F=6.104, enabling the researcher to reject the null hypotheses at p-value=$0.005 < 0.05$.

5.4 Recommendations of the Study

Recommendations of this study determine its usefulness to various stakeholders. First, recommendations were made for policy development, improvement and enforcement. Second, the study made recommendations tailored for practice. Last, recommendations were made for further studies.

5.4.1 Recommendations for Policy Development

Liquidity risk management planning is very vital to all financial institutions. The CBK should therefore strictly enforce Part V 22(d) that obliges DTMIs to put in place proper internal controls for liquidity management. The regulator should also relax administrative sanctions that befall DTMIs that fail to meet statutory liquidity minimums due to unavoidable calamities and be part of the solution including but not limited to offering short-term low priced credit to affected DTMIs under intensified inspection and guidance.

5.4.2 Recommendations for Practice

DTMIs should scale down their borrowing because heavy borrowing plunged them into heavy liabilities that were not commensurate with their total assets. DTMIs should be more creative in all undertakings and consider adopting innovative WCM practices such as aggressive deposit mobilization. Next, they should intensify Credit Information Sharing (CIS) between themselves and other financial intermediaries including commercial banks, especially on the ever changing digital platforms. This would help in mitigating credit risks emanating from information asymmetry that tend to intensify loan defaults in addition to enabling them (DTMIs) receive real time information about their clients. Consequently, DTMIs should respond to tightening market liquidity by cost cutting some of their operations including but not limited to adopting online and agency banking.

5.4.3 Limitations of the Study and Recommendations for Further Studies

The study was pulled back by corporate policies that discouraged full disclosure of financial information to members of the public except the audited financial statements. However, the researcher made a declaration of the purpose of the study to the station/regional managers and assured them of privacy of shared information

before, during and after the research exercise was concluded. A tier one DTMI did not authorize its employees to participate in any academic research. The researcher therefore ignored that DTMI in his study. A few respondents attempted to give arbitrary figures in attempts to mend their financial statements to look 'better' than the actual. The researcher, reacted by including adequate exclusion criteria to assure consistency, relevance and reliability of data obtained by excluding doubtful responses. The researcher excluded data that could not be found from individual DTMIs and the CBK.

Some recommendations were drawn from the findings of the study despite such limitations. All studies related to DTMIs should emphasize on tier groupings of DTMIs into large (controls more than 5% of market share), medium (controls 1-5% of market share) and small (controls less than 1% of market share) categories. Each tier grouping should be separately studied for the results get more meaning. Each category of DTMI was faced with unique opportunities, hardships and competitiveness. As an example, large DTMIs were making marginal profits while small and medium DTMIs were mainly realizing losses during the period under study. Further studies should have uniformity of data collection from secondary sources because DTMIs follow uniform reporting structure that is closely monitored by the CBK.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

This Questionnaire is purposely for academic awards only. Every data collected through this tool will strictly be held confidential in compliance to regulatory requirements and ethical standards. You are requested to **tick one or more boxes as appropriate**, but not obliged to reply to any question. Kindly fill this Questionnaire as accurately as possible. Thank you in advance.

Sex: ☐ Male ☐ Female **Working experience:** ☐ 0-2yrs ☐ 2-5yrs ☐ Over 5yrs

Cadre_____ **Level of Education:** University/College/Secondary

SECTION A: GENERAL INFORMATION

1. What is your level of understanding of Working Capital Management (WCM)?

☐ Outstanding ☐ Excellent ☐ Very good ☐ Good ☐ Average

2. How do you gauge the overall relationship between WCM with Financial Performance of your organization?

☐ Very strong ☐ Strong ☐ Somewhat strong ☐ Weak ☐ Very ☐ weak

3. How do you comment on the strength of relationship between each of the WCM items and financial performance of your organization?

	Very Strong	Strong	Somewhat Strong	Weak	Very Weak	**Financial Performance**
Cash Management						
A/c. Receivable Mgt.						
Accounts Payable Mgt.						

SECTION B: CASH MANAGEMENT

1. When does your organization conduct cash budgeting?

☐ Always ☐ Occasionally ☐ No cash budgeting ☐ Any other

_____

2. How does your organization benefit from cash budgets above?

☐ Very significantly ☐ Significantly ☐ To some extent ☐ No cash

budgets

3. When does your organization prepare a Cash Management Plan (CMP)?

☐ Monthly ☐ Quarterly ☐ No CMP ☐ Any other

_____

4. Which factors contribute to deficit cash balances in your organization?

☐ Delay in cash receipts ☐ Cash flow expenditures ☐ Any other

_____

5. What strategies do you have in place to cope up with such deficits (if any)?

☐ Delaying cash payments ☐ Cash borrowing ☐ Any other

_____

6. What mechanisms do you have in place to mitigate cash losses arising from fraudulent activities of staff in your organization?

☐ Availing lockable cash boxes   ☐ Limiting accessibility to cash room

☐ Cash counting

☐ Limiting amount of cash in hand   ☐ Proper remuneration of staff

Any other _____

7. What is the extent of your belief in the notion that cash flow management thrives on the ingredients of people, key performance indicators, tools and techniques and support network?

☐ Strongly agree   ☐ Agree   ☐ Disagree   ☐ Strongly disagree

Cannot tell   ☐

8. What are the values of cash conversion cycle as at June 30th of each of the listed years below?

Year	2014	2015	2016	2017	2018
Cash Turnover					

SECTION C: ACCOUNTS RECEIVABLE MANAGEMENT

1. How do you perceive your accounts receivable policy?

☐ Lenient   ☐ Stringent   ☐ No policy

2. How do you mitigate against credit risks?

☐ Setting up credit limits   ☐ Credit insurance   ☐ Credit notation

Any other _____

3. How do you improve debt recovery?

☐ Loan restructuring ☐ Waiver of default penalties ☐ Collateral claims

Any other _____

4. What degree of importance do you attach to accelerating accounts receivable as a tactic to temporarily improve financial performance of your organization?

☐ Very critical ☐ Critical ☐ Somewhat critical ☐ Not critical

☐ Not applicable

5. How often do you follow up on slow paying customers?

☐ Daily ☐ Weekly ☐ Monthly ☐ Quartely

Any other _____

6. What is your credit limit to customers to as a percentage of sales made on credit?

☐ 0%-20% ☐ 21%-40% ☐ 41%-60% ☐ 61%-80%

☐ 81%-100%

7. What are the values as at 30th June of the items of working capital provided in the table below?

Year	2014	2015	2016	2017	2018
A/c. Receivable Turnover					

SECTION D: ACCOUNTS PAYABLE MANAGEMENT

1. When do you settle your accounts payable?

☐

Before they fall due ☐ On due date ☐ After they fall due ☐ As cash

is received

2. Why do you prefer the repayment of debts pattern identified above?

☐ To enjoy trade discount ☐ To honour credit terms ☐ To comply with

debt policy

☐ To commit ready cash ☐ To avoid legal suit

Any other _____

3. What is the average annual number of duplicate payments by your organization?

_____

4. What degree of importance do you attach to delaying accounts payable as a tactic

to temporarily improve financial performance of your organization?

☐ Very critical ☐ Critical ☐ Somewhat critical ☐ Not critical

☐ Not applicable

5. How do you minimize errors attributed to human beings in making payments?

☐ Engaging competent staff ☐ Making electronic payments

Any other _____

6. What are the values as at 30th June of the items of working capital provided in the

table below?

Year	2014	2015	2016	2017	2018
A/c. Payable Turnover					
Return on Assets (ROA)					

(Kindly attach copies of audited financial statements for the period 2013-2018.

INTRODUCTION NOTE (5 minutes)

The interview starts with an elaborate introduction between the interviewer and interviewee(s). The interviewer proceeds to inform the interviewee(s) about the objectives and purpose of the study, the users of the information and the implications of the study. The interviewer then makes an assurance to the interviewee(s), of upholding strict legal and ethical considerations during and after the study. The interviewer requests for total support and accuracy of responses.

GENERAL INFORMATION (3 minutes)

1. What do you believe in a scale of 1 (Average) to 5(Outstanding) as your level of understanding of WCM?

2. What in your view, is the overall strength of the relationship between WCM and Financial Performance of your organization?

3. How do you gauge the individual strength of WCM items with Financial Performance of your organization?

CASH MANAGEMENT (7 minutes)

1. What is the frequency of Cash Budgeting (if any) in your organization?

2. How significant is Cash Budgeting to your organization?

3. Which factors contribute to deficit cash balances (if any) in your organization?

4. Which steps do your organization follow to cope up with periods of such cash deficits?

5. How do your organization mitigate potential fraud in handling cash?

6. What was your annual cash turnover based on your audited financial reports between 2014-2018 financial years?

ACCOUNTS RECEIVABLE TURNOVER (5 minutes)

1. How flexible is your Accounts Receivable policy?

2. What measures do you have in place for mitigating credit risks?

3. How do you improve debt recovery?

4. What was your annual accounts receivable turnover based on your audited financial reports between 2014-2018 financial years?

ACCOUNTS PAYABLE MANAGEMENT (5 minutes)

1. What is your time policy of settling your liabilities?

2. Why do you prefer such a time policy of settling liabilities?

3. How do you minimize potential errors that arise while making cash payments in your organization?

4. What was your annual accounts payable turnover based on your audited financial reports between 2014-2018 financial years?

RETURN ON ASSETS (3 minutes)

1. What was your annual return on assets based on your audited financial reports between 2014-2018 financial years?

The interviewer concludes data collection by applauding the interviewee(s) for cooperation during the study.

APPENDIX III: SAMPLING FRAME

List of licensed DTMIs in Mombasa

Rafiki Bank (Tier One)

1. Rafiki Microfinance Bank, Mombasa Branch—Pan Africa House, Next To Eco Bank, Opposite Telecom Orange House, Moi Avenue.

2. Rafiki Microfinance Bank—1st Floor, Kengeleni, Nyali Road.

3. Rafiki Microfinance Bank-Likoni—Likoni Ukunda Road, Rafiki building.

SMEP Bank (Tier Two)

1. *SMEP* (Small and Micro Enterprise Programme), Nkrumah Road Branch-*Mombasa* Central, *Mombasa*.

2. *SMEP-Changamwe*

KWFT now Echo Network Africa (Tier One)

1. KWFT-After Catholic Church, Mikindani Road

2. KWFT-Umoja Arcade, Next To ACK Guest House, Off Likoni - Ukunda Road, Mombasa

3. KWFT-Along Mombasa Road, Mazeras

4. KWFT-Nyali Road, Mombasa

5. KWFT-Mombasa

Faulu Bank (Tier One)

1. Faulu Bank –Mombasa—Kenyatta Avenue, Mombasa Pentecostal Church.

2. Faulu Bank—Umoja Arcade, Next To ACK Guest House, Off Likoni-Ukunda Road.

3. Faulu Bank – Kengeleni—1st Floor, Kengeleni Centre, Next To Kongowea Market, Nyali Road.

4. Faulu Kenya-Likoni Marketing Office—Likoni-Ukunda Road

5. Faulu Kenya-Kongowea—Kengeleni Road.

Caritas Bank (Tier Three)

1. Caritas—Oriental Building, Ground Floor, Mombasa-Old Town, Mwenye Aboud Road, Mombasa.

Source: CBK (2019).

APPENDIX IV: RESEARCH AUTHORIZATION FROM GRADUATE

SCHOOL KENYATTA UNIVERSITY

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA

Website: www.ku.ac.ke

Tel. 8710901 Ext. 57530

Our Ref: D53/OL/MSA/32524/2015

DATE: 19th November, 2019

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

**RE: RESEARCH AUTHORIZATION FOR OGOLA OMONDI VICTOR – REG. NO.
D53/OL/MSA/32524/2015.**

I write to introduce Ogola Omondi Victor who is a Postgraduate Student of this University. The
student is registered for M.B.A degree programme in the Department of Accounting and Finance.

Ogola intends to conduct research for a M.B.A Project Proposal entitled, **"Working Capital
Management and Financial Performance of Deposit Taking Microfinance Institutions in
Mombasa County, Kenya".**

Any assistance given will be highly appreciated.

Yours faithfully,

PROF. ELISHIBA KIMANI
AG. DEAN, GRADUATE SCHOOL

AM/lnn

APPENDIX V: APPROVAL OF RESEARCH PROJECT

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 19th November, 2019

TO: Ogola Omondi Victor
        C/o Accounting and Finance Dept.

REF: D53/OL/MSA/32524/2015

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 6th November, 2019 approved your Research Project Proposal for the M.B.A Degree Entitled, **"Working Capital Management and Financial Performance of Deposit Taking Microfinance Institutions in Mombasa County, Kenya"**.

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

ANNBELL MWANIKI
FOR: DEAN, GRADUATE SCHOOL

c.c.   Chairman, Accounting and Finance.

        Supervisors:

                1. Dr. Fredrick Ndede
                   C/o Department of Accounting and Finance
                   Kenyatta University

AM/lnn

APPENDIX VI: NACOSTI PERMIT

REPUBLIC OF KENYA

**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Ref No: **131046**

Date of Issue: **03/February/2020**

RESEARCH LICENSE

This is to Certify that Mr.. Victor Ogola of Kenyatta University, has been licensed to conduct research in Mombasa on the topic: **WORKING CAPITAL MANAGEMENT AND DEPOSIT TAKING MICRO FINANCE INSTITUTIONS IN MOMBASA COUNTY, KENYA for the period ending : 03/February/2021.**

License No: **NACOSTI/P/20/3640**

131046

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION

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