COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ACCOUNTING AND FINANCE

GRADUATE STUDIES

Effect of working capital management on profitability of small and medium scale enterprises (SMEs) in Addis Ababa (the case of Arada sub cities)

By: Yared Hussen

A Thesis Submitted to College of Business and Economics Department of Accounting and Finance in Partial Fulfillment of the Requirements for the Masters of Science (Msc) in Accounting and Finance

Advisor: Alem Hagos (Phd)

August, 2024

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Approval sheet

The following is to approve that Yared Hussen's thesis, "The impact of working capital management on profitability of small and medium scale enterprises (SMEs) in Addis Ababa: the case of Arada sub cities," which was presented in partial fulfillment of the requirements for the Degree of Masters of Science in Accounting and Finance, complies with the University's regulations and fulfills the generally accepted requirements of originality and quality.

Signature of Board of Examiner`s:

Alem Hagos		14-11-2024
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Certificate

This is to approve that the thesis titled "The impact of working capital management on profitability of small and medium-sized enterprises (SMEs) in Addis Ababa: the case of Arada sub-city" was submitted to Addis Ababa University for the award of the Degree of Master of Science (MSC) in Accounting and Finance, and is a record of Bonafede research work conducted by Mr. Yared Hussen under our supervision and guidance. As a result, we affirm that no part of this thesis has been submitted to another university or institution for the granting of a degree or diploma.

Main Adviser's Name	Date	Signature
Alem Hagos	14-11-2024	

Declaration

I therefore declare that I have completed my thesis, "The impact of working capital management on profitability of small and medium-sized enterprises (SMEs) in Addis Ababa: the case of Arada sub-city," under the guidance and supervision of Alem Hagos (Dr).

The thesis is unique and has not been submitted to any university or institution for the award of a degree or diploma.

Researcher's Name	Date	Signature
Yared Hussen	14/11/2024	

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Acronyms

ANOVA: Analysis of variance

CSA: Central Statistical Authority

EC: European commission

FDRE: Federal Democratic Republic of Ethiopia

FeMSEDA: Federal Micro and Small Enterprise Development Agency

GTZ: German Technical Cooperation

ILO: International Labor Organization

MOFED: Ministry of Finance and Economic Development

MSMEs: Micro small and medium enterprises

MTI: Ministry of Trade and Industry

ReMSEDA: Regional Micro and Small Enterprise Development Agency

SME's: Small and medium Enterprise's

SPSS: Statistical package for social science

WCM: Working capital management

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Abstract

The rapid creation and growth of small and medium-sized businesses has emerged as a crucial element of the development objectives of rising nations, Ethiopia included. Despite the increasing prevalence of these organizations, there is a scarcity of study on their working capital management. The objective of this research is to investigate the characteristics that influence the performance of small and medium-sized enterprises in Arada sub-city. It was conducted through a combination of qualitative and quantitative methods. The data collected from the various enterprises were then analyzed to come up with recommendations for improving the working capital management of these firms. Questionnaires were used to collect primary data, and the financial records of the businesses were used to obtain secondary data. 217 SMEs are the target population, and simple random sampling is the sample method used. 155 SMEs in Addis Ababa's Arada Sub Cites provided the data that was gathered. It was utilized to gather data for an experimental impact measurement after 149 valid surveys were returned. Descriptive statistics and quantitative techniques (regression and correlation) were used in the data analysis. The net operating profitability as an independent variable, along with the average collection time, average payment period, cash conversion period, current ratio, debt ratio, and company size as dependent factors, are used to illustrate the differences among working capital management and profitability. The study's conclusions imply that the length of time businesses need to receive their debts, settle their invoices, and gather cash has a detrimental impact on working capital. In addition, the likelihood of sufficient working capital requirements is influenced by the size, current ratio, and financial leverage of the SMEs that are the subject of the study. The study's findings suggest that businesses could need to give their clients longer credit periods, lengthen their cash conversion cycle, and need a longer repayment time. All extensions and cycles must be used to the fullest degree possible to achieve an ideal level of working capital and, if possible, to put into practice a cautious working capital management strategy. Therefore, it is wise to take this study's findings into consideration. When choosing how best to handle their time and cash in order to enhance their job performance.

***K*ey words: net operating profitability, small and medium enterprises, working capital management**

CHAPTER ONE

INTRODUCTION

1.1. Chapter Introduction

This research paper investigates the effect of working capital management on the profitability of Addis Ababa's small and medium-sized enterprises (SMEs), with a focus on the Arada sub-city. This chapter, which is divided into seven different parts, provides background information for the study. The first section discusses the study's background, followed by a statement of the problem. The third as well as the fourth sections contain the study's research questions and objectives, respectively. The fifth section discusses the study's significance, and the last section discusses the study's scope.

1.2. Background of the Study

Working capital management is a significant component of financial management since it has a direct impact on the business's financial health and liquidity. It focuses on current assets and liabilities. Improper utilization of existing assets can quickly lead to a poor return on investment for a business. Firms with insufficient current assets, on the other hand, may encounter shortages and operational issues. (2014), Wachowicz and Horne. Effective working capital management comprises planning and controlling current assets and current liabilities in such a way that the risk of being incapable to satisfy due short-term obligations is avoided on the other hand while unnecessary spending on these assets is avoided on the contrary. Eljelly, (2014)

According to Nguyen and collaborators (2020) Working capital management (WCM) represents a few of the difficulties that firms face. It can offer organizations with a practical and appropriate level of liquidity to satisfy their immediate financial responsibilities resulting from funding their operations, allowing them to ensure the sustainability of their company and improve their financial performance. WCM refers to a company's current assets and current liabilities, which are essential components of its overall assets. Maintaining high levels of current assets causes the corporation to earn unprofitable profits on its entire investments for the short term. A small number of current assets, on the other hand, may expose the company to challenges and difficulties, potentially leading to a rapid failure to manage the company's activities, reducing its

ability to satisfy its short-term monetary obligations and increasing the firm's exposure to liquidity risk. As a result, implementing an appropriate working capital policy will enable firms to increase profitability while also adding value to investors. Nguyen and collaborators (2020). As a result, WCM plays a key and substantial role in the operational performance of the company's managed resources, liquidity, profitability, and, as a result, the company's overall worth. Companies try to attain the appropriate level of working capital investment by balancing the risks and returns associated with investing in current assets Tsagem et al., (2015).

According to Joshi (2014), working capital management is a touchy subject in the realm of financial management. It entails choosing what kind and quantity of current assets to hold as well as financing them. Any assets that, in the regular course of business, convert to cash quickly—usually within a year—as well as any investments made for a limited time that can be quickly converted to cash when needed are considered current assets.

Profitability is defined as the ability to generate a financial profit or gain. It is the primary goal of all commercial endeavors. The business is going to fail in the long run if it is not profitable. It is critical to assess current and past profitability as well as forecast future profitability. Income and expenses are used to calculate profitability. Income is money generated by the firm's operations. Money coming into the firm from activities such as borrowings, on the other hand, does not generate income. This is simply a cash transaction between the firm and the lender to generate funds for business operations. Accounting profits provide insight into a company's survival. The ability to create a financial profit or benefit is characterized as profitability. It is the ultimate goal of all commercial ventures. If the company is not profitable, it will collapse in the long run. It is vital to evaluate present and past profitability and estimate future profitability. Profitability is calculated using income and expenses. The money created by the firm's operations is referred to as income. Borrowings, on the other hand, lack income. This refers to basically a monetary transaction among the company and the creditor in order to create funding for firms' activities. Accounting earnings reveal information on a company's survival. While one year of losses may not irreversibly harm the business, repeated years of losses or net income inadequate to cover expenditures may jeopardize its continued existence Edwards, (2004).

Small enterprises are thought to be critical to a functioning and prosperous economy. They are viewed as critical to nurturing an entrepreneurial culture and creating jobs throughout the

economy. Small and medium-sized businesses, or SMEs, are widely considered to play a critical role in promoting economic development in developing economies. SMEs are also important in Ethiopia's economy. Based to the National Bank of Ethiopia (NBE) annual report published this month (March 2022), as a result of this, approximately 984,000 jobs in SMEs have been lost. On individuals. NBE, (2022).In comparison to the 7.67 billion Birr loans received by small and medium companies (SMEs) in 2019/20, the amount of credit accessed by SMEs has decreased by 2.65 billion Birr. At the moment, just over 1.8 million SMEs can employ just 2.2 million workers. NBE, (2022)

Working Capital Management has an impact on a company's profitability. Profit maximization is the ultimate goal of any firm. According to Smith (2013), sustaining the firm's liquidity is also a crucial priority. The difficulty is that increasing earnings at the expense of liquidity might cause major issues for the company. As a result, there must be agreement between the two purposes of the firms. Because they are both vital, one aim should not be emphasized over the other. We cannot survive for an extended period of time unless we are concerned with profit. However, if we do not prioritize liquidity, we may face insolvency or bankruptcy. On the contrary side, if liquidity is not prioritized, we may risk insolvency or bankruptcy. Working capital management should be given careful consideration for these issues because it will ultimately affect the firm's profitability.

1.3. Statement of the Problem

A high number of enterprise bankruptcies have been ascribed to company managers' incapacity to adequately plan and oversee their organizations' current assets and current obligations. Working capital management is essential to the profitability of any business. Olomi, (2018). Historically, the primary focus of the corporate finance literature has been the examination of long-term financial decisions, particularly those involving investments, capital structure, dividends, or firm valuation. However, liabilities and short-term assets are substantial components of total assets and should be thoroughly analyzed. Because working capital management has a substantial impact on a company's profitability, risk, and value, it is important to examine the management of these short-term assets and liabilities in depth. Smith(2013). Working capital management is critical to the overall business strategy for creating value for shareholders. Short-term assets and liabilities are now included in the traditional perspective of

prioritizing long-term decisions regarding finances. Deloof (2013), Howorth and Westhead (2015), and Afza and Nazir (2017) have published recent articles that claim that small businesses strive to maintain a working capital level that optimizes their worth.

Working capital management is crucial for small businesses in particular. These businesses frequently rely on owner funding, trade financing, and short-term loans from banks to fund their necessary investments in cash, accounts receivable, and inventory because they have limited access to long-term capital markets. Small firms, on the other hand, fail far more frequently than large corporations. According to research undertaken in the United States and the United Kingdom, one of the primary reasons small businesses fails is inadequate financial management, notably insufficient long-term finance and poor working capital management Dunn and Cheatham, (2019).

Internal and external factors are the two groups of success variables or obstacles that influence either success or failure. The following factors fall under the category of external factors: government regulations, technology, economic conditions, competition, financing (e.g., attractive financing available), and external factors. Internal elements, on the other hand, include workers, accounting systems, financial management methods, and managerial talents. Working capital management techniques of major and small enterprises in the United States, Belgium, the United Kingdom, and India have been studied. Some of these research Burns and Walker, (2011; Peel and Wilson, (2016) employed survey-based methods to assess what motivates organizations to implement effective working capital procedures, while econometric analysis was used to examine the relationship between working capital management and profitability. Shin and Soenen (2018); Deloof (2013).

There has been insufficient research on the impact of working capital management on the profitability of small manufacturing enterprises, notably in Ethiopia. Small business finance management in underdeveloped nations, particularly Ethiopia, is mostly unstudied. Kiplimo (2020) investigated the relationship between working capital and profitability in Kenyan state-owned businesses. The results of a sample of 23 firms from 2015 to 2019 revealed that firms with shorter cash conversion cycles reported greater profits. Because they maintained unused assets at optimal levels, firms with lower current to total asset ratios earned relatively better returns. Firms with aggressive working capital management methods outperformed others. The

impact of working capital management on profitability in major Kenyan enterprises was investigated in these studies. There has been no empirical research to determine whether the findings are applicable to small and medium-sized organizations.

Mathuva (2019) performed a survey of Kenyan listed enterprises on the components of working capital management and corporate profitability. There was an adverse correlation between the time enterprises took to gather cash from their clients and their profitability, according to the findings of a sample of 30 Nairobi Stock Exchange-listed firms. Profitable businesses were those who received cash from their consumers fast. Additionally, a high association was found between the profitability of the business and the inventory conversion period. It was shown that profitable businesses also took longer to pay their creditors.

With this in mind, and in light of the increased acknowledgment of the prospective contribution of the SME sector to developing-country economies, this study is an insignificant attempt to quantify and assess the trajectory of working capital allocation and its impact on SMEs. As a result, the goal of this study is to evaluate the influence of working capital management on the profitability of a sample of small and medium-sized enterprises, and the findings are anticipated to add to the current literature on working capital and SMEs.

Several studies have been undertaken in various countries on the impact of working capital management on the profitability of merchandise businesses, particularly in the wholesale and retail trade industries. Kinuthia (2015) investigated the link between working capital management and profitability in Kenyan retail enterprises. Working capital management has a major impact on retail firm profitability, according to the study. Working capital management has a major impact on retail firm profitability, according to Louw (2014). Inadequate working capital management, he believes, has a huge negative influence on profitability. Working capital management components had a considerable impact on goods firm profitability, according to Hassan and Ibrahim Ali (2016). Chuansim (2016) discovered that the effectiveness of a firm's working capital management has a substantial impact on wholesale profitability. There is no empirical information on the impact of working capital management on the profitability of the Ethiopian wholesale industry, to the best of the researcher's knowledge.

In Ethiopia, few empirical researches on the influence of working capital management on SMEs' profitability had been undertaken. Thus, this study filled in the knowledge gap and provided total

backing for a deeper comprehension of the impact of working capital management on firm profitability in a sample of small and medium-sized enterprises (SMEs) in Addis Ababa, Ethiopia. The majority of the research covers locations outside than Arada sub-city, it's because some SMEs in Arada sub-city continue to struggle with profitability as a result of managing their financial resources.

The majority of previous research on small firm working capital management has concentrated on developed countries. Larger firms that apply professionals to manage the trade have been studied. In contrast to managers of small and medium enterprises, business managers in both cases have sufficient understanding of working capital management. There was a need to address the relationship between working capital management and profitability in Ethiopian SMEs, particularly in Addis Ababa, in order to boost the growth of this sector in Ethiopia. The researcher discovers a gap in that some SMEs managers lack a basic understanding of the effect of working capital management on profitability in Arada Sub-city, and very little study has been conducted in Arada Sub-city.This study attempted to fill the gap by investigating the relationship between working capital management and profitability in SMEs in Addis Ababa, Ethiopia. The objective of this research was to answer the following question: What was the connection between working capital management and SMEs' profitability?

The purpose of this study was to find out what the relationship was between working capital management and the profitability of SMEs.

1.4. Research questions

- ✓ What is the effect Working Capital Management on Profitability in SMEs operating in Addis Ababa's Arada sub- city over a five-year period?
- ✓ What is the effect of accounts receivable days, accounts payable days, and the cash conversion cycle on net operating profitability in SMEs operating in Addis Ababa's Arada sub- city?
- ✓ What is the effect of liquidity on profitability in SMEs operating in Addis Ababa's Arada sub- city?
- ✓ What is the effect of profitability on debt ratio of SMEs operating in Addis Ababa's Arada sub- city?

1.5. Objectives of the Study

1.5.1 General Objective

Working capital management and its effects on profitability is the subject of this study for a sample of Ethiopian SMEs case of Arada sub-city.

1.5.2 Specific objective

- To investigate the effect Working Capital Management on Profitability in SMEs operating in Addis Ababa's Arada sub- city over a five-year period.
- To investigate the effect of accounts receivable days, accounts payable days, and the cash conversion cycle on net operating profitability in SMEs operating in Addis Ababa's Arada sub-city
- To identify the effect of liquidity on profitability in SMEs operating in Addis Ababa's Arada sub- city.
- To find out the effect of profitability on debt ratio of SMEs operating in Addis Ababa's Arada sub- city.

1.6. Hypothesis

Based on the research's purpose, the following alternative hypotheses were developed:

- H1. There is inverse relationship between Working Capital Management and Profitability over a period of five years of small and medium enterprises found in Addis Ababa, Arada sub city.
- H2. There is inverse relationship between WCM represented impact of accounts receivables days, accounts payable days and cash conversion cycle on net operating profitability of small and medium enterprises found in Addis Ababa, Arada sub city.
- H3. There is inverse relationship between the two objectives of liquidity and profitability of small and medium enterprises found in Addis Ababa, Arada sub city.
- H4. There is negative relationship between profitability with financial leverage and debt ratio of firms of small and medium enterprises found in Addis Ababa, Arada sub city.

1.7. Significance of the study

1.7.1. Practical Significance

One of the issues that firms confront is working capital management (WCM). It can provide organizations with a convenient and adequate level of liquidity to pay their short-term financial commitments coming from funding their operations, allowing them to preserve their business's sustainability and maximize their profitability. The research findings are also useful for companies to understand their areas of strength and weakness in terms of profitability and how it affects working capital management. Furthermore, the research benefits other researchers or organizations interested in conducting additional research in this area.

1.7.2. Empirical Significance

The research data collect is reliable and dependable. So, investigation results will be used to fill out the gaps in the organization.

1.8. Scope and limitations of the study

The scope of the study concentrates on two major areas. This comprises of the contextual and geographical scope of the study.

1.8.1. Geographical

The study acknowledged its extent as well as its limits. The geographical scope of the study is limited to SMEs in the Arada sub-city. Because there are few other strong development hubs in the country, the location was chosen because it is a primate city and a center of agglomeration of business operations. As a result, many people from all over the country migrate in search of work or to start a business. Businesses in the banking and finance industry, insurance, leasing, business services, renting, and other services sectors were not included in the sample due to the nature of their operations. Because of this, the paper's results are specific to the mentioned enterprises, albeit they may still be relevant to all SMEs in Ethiopia.

1.8.2. Contextual

This study focused on the impact of working capital management on the profitability of a few small and medium enterprises in Addis Ababa's Arada Sub city. The study is limited because it is limited to a small number of businesses, and it is difficult to generalize findings from selected SMEs to represent all SMEs in Ethiopia. The study's target population is 155 SMEs from the total sample, which is only limited to SMEs in Ethiopia.

1.8.3. Time

The current study requires a substantial amount of time and money to examine and draw important conclusions on the impact of working capital management on the profitability of SMEs in Ethiopia.

1.9. Organization of the paper

There are five sections to this study. The first chapter provides an overview of the study's background, the problem statement, the research objectives and hypothesis, the significance of the study, the scope of the study, and the paper's organization. The second chapter covers a literature review, as well as the conceptual framework, on theoretical and empirical evidence on working capital management and profitability. The third chapter discusses the population, sampling strategy, research design and data source, collection procedures, and model and data analysis techniques. The fourth chapter provides the data analysis, results, and interpretation of the study. Finally, in the fifth chapter, the researcher's conclusions, recommendations, future direction, and study limitations are discussed.

CHAPTER TWO

LITERATURE REVIEW

2.1. Chapter Introduction

This chapter includes the study's theoretical and empirical reviews. The conceptual framework includes: an overview of SMEs and SMEs in Ethiopia, the role of SMEs, challenges and constraints faced by SMEs, common characteristics of SMEs, a policy framework for encouraging the growth of SMEs, an introduction to working capital, working capital management, success and failure factors of SMEs, and working capital management dimensions. It additionally includes an empirical and literature review of the study from various researchers from various countries.

2.2. Theoretical review

2.2.1. An Over Introduction view of SMEs

The term "SME" encompasses an extensive variety of definitions and metrics that vary by nation and SME data source. The number of staff members, total net assets, sales volume, and investment level are examples of common needs. However, employment is the most widely used definitional basis, and the upper and lower bounds of a SME's size are determined by a range. Asli, Meghana, and Thorsten (2003). Financing agencies evaluate SMEs based on fixed assets, labor economists on employee numbers, traders on sales volume, and manufacturing on energy use.

The Bolton committee made the first attempt in 2011, as mentioned by Kayanula and Quartey (2020), to address the challenge of defining SMEs. The committee defined a little organization as one that satisfies one of three criteria: it is not a part of a bigger firm, it has a minor market share, and it is governed by owners in a tailored management structure. The word SME encompasses numerous meanings and measurements that differ across countries and SME statistical sources. Some frequent factors include the number of employees, overall debt, sales, and capital levels. Nevertheless, performance is an especially widely utilized foundation of definition, and upper and lower limitations are defined differently for SMEs. Meghana, Thorsten, and

Asli(2003).Financial institutions evaluate small and medium-sized enterprises based on fixed assets; business economists measure business figures; traders will want to sell, and businesses will want to consider electricity. As mentioned by Kayanula and Quartey (2020), the Bolton Commission made an early attempt to resolve the problem of SME definition in 2011. A company is deemed tiny because of the commission if it meets three requirements: it must be a small business, be run by an owner through a self-management style, and not be a part of a bigger organization.

UNIDO, USAID, and the World Bank all offer different definitions. The World Bank (1976) states that fixed assets (apart from land) owned by small firms are worth less than $250,000. Whereas UNIDO classifies businesses with between 10 and 49 employees and a registered capital of more than $42,300 as small enterprises and 50 to 249 employees and a registered capital of more than $42,300 as medium enterprises, USAID classifies businesses with more than fifty employees as small. Rana Farah Tukan (2017).

Peel and Wilson (2016) stressed the need of effective working capital management in light of these distinguishing characteristics. Similarly, Berry et al. (2013) observe that SMEs have not considerably enhanced their financial management practices, and they argue that owner-managers should be made more conscious of the importance and benefits of improving financial management practices.

According to Narasimhan and Murty (2011), many sectors need to enhance their return on capital employed (ROCE) by focusing on important areas such as cost conservation, reduced investment in working capital, and increased working capital efficiency. Shin and Soenen (2018) found a highly significant association between WCM metrics and corporate profitability, as did Deloof (2013) in a recent study. Their results suggest that managers might increase profits by minimizing the number of days of accounts receivable and inventories. This is especially critical for small and developing firms that need to fund a rising number of debtors.

A study by Eljelly (2014), efficient liquidity management comprises managing and controlling current assets and liabilities in such a way that the danger of failing to meet short-term obligations is reduced while avoiding excessive investment in these assets.

In accordance with Deloof (2013), most organizations invest a large amount of money in working capital. As a result, it is reasonable to anticipate that the method in which working capital is handled will have a substantial impact on those organizations' profitability. Using correlation and regression tests, he established a substantial negative link between gross operating income and the number of days accounts receivable, inventory, and accounts payable for Belgian enterprises. Based on these findings, he advocated those managers create value for their shareholders by keeping accounts receivable and inventories to an acceptable level. The negative link between accounts payable and profitability supports the idea that less prosperous businesses pay their invoices later.

2.2.1.1. Population and stage of a country's economic development

In the developed world, the term "small and medium enterprise" is defined differently than in the developing world. Major firms in Africa may be classified as SMEs (defined by the number of employees and turnover), given the sheer quantity of businesses in the USA and Europe. SMEs are defined as organizations with less than 250 employees by Fay (2020), Clarck (2020), the European Commission, and the Organization for Economic Cooperation and Development. Conversely, Ethiopia defines SMEs as businesses that employ less than ten people (CSA).

The second most often used metric to describe SMEs is annual turnover. Additionally, allowable figures differ between nations. For instance, according to Weaver (2019), "a company with an average yearly total sale for the three years prior to the present not to above $15 million, and a very small business with average annual gross revenues for the three years prior to the present not to exceed $3 million" is considered a small business in the United States. In Ethiopia, small businesses are defined by paid-up capital exceeding Birr 20,000 ($2,500) but falling short of Birr 500,000 ($62,500).

2.2.1.2. Industry within which the SME is competing

Small businesses were categorized by Duncombe and Heeks (2011) as survivalists, trundles, or fliers according to the sector within which they operate.

Businesses that lack another source of income and are therefore forced to engage in revenue-generating activities are known as survivalists. The primary goal of the company is to sustain the business owner. The provided income may be at or below the federal poverty line. They think

that the great majority of "entrepreneurs" in developing nations fall into this group. Businesses classified as trollers have a low desire or ability for growth and a comparatively stable turnover rate. There will be enough money to cover necessities. They also assert that in the least developed nations, these businesses are the second largest group of small business owners.

Flyers are real business owners who launched their ventures because they saw room for growth. If income levels are high enough to cover more than the bare needs, businesses may expand into the medium-sized category. This describes only a small fraction of small company entrepreneurs in low-income nations.

The Ministry of Trade and Industry and the Central Statistical Authority (CSA) have provided a working definition of SMEs for the purposes of this paper. This definition is based on the number of employees and paid-up capital. Standard definitions of SMEs are lacking, and the implications differ by country depending on the size of the economy, the rate of growth, culture, and population size to take into account.The following official definition of small and medium-sized enterprises has been applied by Ethiopia's Ministry of Trade and Industry: Except for high-tech consultancy firms and other high-tech organizations, as well as service sectors with paid-up capital (fixed assets) of $50,000–500,000, small businesses in the Ethiopian economy have paid-up capital (fixed assets) of $100,000–1,500,000. Medium Enterprises are businesses with paid-up capital ranging from 1,500,000 to 20,000,000 for industries and 500,000-7,500,000 for services, but do not include high-tech consulting companies or other high-tech establishments. Zewde& Associates (2021), MTI (2017).

2.2.1.3. The role of Micro Small and Medium enterprises MSMEs in the development progress of a country

It is generally well accepted that SMEs are crucial to the economic growth processes of emerging nations, and it has been suggested that an economy in transition may succeed or fail largely depending on the success of its entrepreneurs McMillan & Woodruff, (2012).

These SMEs' owners generate income not just for their own households as well as their families but also for their apprentices and employees, leading to a crisis that causes hardship for both the owners and the workers. Vandenberg and Sievers (2017). Compared to major businesses, small and medium-sized firms (SMEs) employ a higher number of workers per unit of capital,

requiring a greater amount of labor Kayanula and Quartey, (2020). MSMEs reduce poverty by generating wealth and providing aid. It has also been highlighted how important SMEs are to achieving the Millennium Development Goals (MDGs) of the UN. Because of their modest size and perceived flexibility, MSMEs are thought to be able to withstand difficult economic times and survive, while many major firms would fail. Ahene and Aryeetey (2014). When it comes to promptly meeting client expectations, the structure's flexibility is very helpful Kayanula and Quartey (2020). Formalizing unofficial commercial operations is also believed to assist the government raise tax income, which will eventually enable it to spend money on things like education and health care.

It is believed that small enterprises are essential to a healthy economy. Companies are seen to be essential for developing a corporate culture and boosting employment in the economy as a whole. Bolton Report (2011). The significance of small and medium-sized enterprises (SMEs) is increasingly acknowledged, as they are thought to be a major contributor to the economic prosperity of developing nations.

2.2.2. Challenges and constraints generally faced by MSMEs in developing countries

The success of MSMEs' businesses is determined by a multitude of interrelated and frequently interacting elements.

2.2.2.1. Business characteristics of SMEs in developing countries

The majority of business activities in developing countries are extremely tiny, frequently including only one individual. Because most enterprises are one-person operations, working proprietors Mead &Liedholm (2018) account for the majority of employment. In many cases, unpaid family members help the company. In many countries, notably in West Africa, trainees and apprentices make up a sizable portion of the labor force.

The majority of MSMEs are based in rural areas, which is another characteristic they have in common. The vast majority of these rural businesses produce clothing and textiles, food and beverages, and wood and forest products. Research indicates that there is a correlation between an organization's growth potential and its geographic location: businesses in rural areas are less likely than those in metropolitan areas to expand their operations. Due to their restricted access

and proximity to rapidly increasing urban markets, rural businesses face more challenges in their attempts to survive and grow. Lidholm and Mead (2018).

2.2.2.2. Challenges and constraints

To be successful, SMEs must overcome a number of obstacles that have a negative impact on business performance. Entrepreneurs must be able to obtain financing in order to establish a new business. Small and medium-sized enterprises (SMEs) sometimes face challenges in obtaining formal financing choices, which forces them to depend on alternative funding sources such personal savings, friends and family, or savings and credit clubs (which impose high interest rates). Financing is crucial throughout the entire life cycle, limiting the ability of existing small and medium-sized businesses to develop and generate jobs Arthur, (2013).

Small and medium-sized enterprises (SMEs) typically start out small and end up staying small, growing neither in terms of output nor employment. Ahene and Aryeetey (2014). MSMEs are not allowed access to the technologies that would enable them to improve and become more profitable UNIDO, (2022). According to UNIDO (2022), appropriate technology must be simple, effective, readily available, versatile, long-lasting, efficient, and cost effective.

An additional obstacle that MSMEs confront is market access. MSMEs frequently encounter considerable obstacles in obtaining suppliers of the necessary supplies and customers for their products Liedholm& Mead, (2018). One of the primary causes is a lack of understanding of market prospects, standards, and laws Liedholm and Mead, (2018); Sievers and Vandenberg, (2017).Lack of operating capital and demand are major reasons why MSMEs fail, so it's important to identify them as barriers Mead &Liedholm, (2018).

2.2.2.3. Institutions

There are now organizations in place to support small and medium-sized businesses (SMEs). The previous handcraft and small-scale industries development agency aggressively supported a variety of industrial operations during the Derg administration, including the production of carpet, clothing, and furniture as well as metal fabrication.

Federal and regional micro and small enterprise agencies were founded to address organizational issues. Their mandate was to effectively and qualitatively encourage the growth of their participants through training, model production demonstrations, and designing engineering and

consulting services. According to the Micro and Small Enterprises Development Strategy MIT (2017), the major agencies involved in carrying out the strategy are the Ministry of Trade and Industry, regional trade and industry bureaus, Federal MSE Development Agency, Regional MSE development agencies, or the designated organs, NGOs, and private sector organizations. Furthermore, Zewde and associates (2021) note that the growth and expansion of Ethiopian small companies is influenced by bilateral and donor-supported initiatives like the ILO and GTZ-MSE development projects.

2.2.3. Working Capital and Working Capital Management

2.2.3.1. Working capital

Consequently, the definition of working capital is as follows: "capital spent in current assets." According to Penma (2013), current assets are those that can be quickly converted into cash and are then reinvested with the cash received.

It is therefore continuously collecting or recirculating. Working capital is hence frequently referred to as floating or circulation capital. Fabozzio and Pamela (2013) define working capital as the total of financial accounts, inventory, and short-term receivables. Working capital, or short-term funding, is the capital needed by a business to maintain operations. Because of this, working capital's characteristics—such as capital invested in inventories, for example—are limited in their ability to produce interest.

Working capital is the money a business needs to run its operations; it's also known as short-term funding. Because of this, working capital has sufficient characteristics to prevent it from earning interest (such as capital tie-up in inventory). Because of this, it is imperative that businesses effectively manage their working capital levels in order to ensure that they generate a sufficient profit (to cover the cost of capital). According to Penma (2013), working capital, also referred to as net working capital, is the entire amount of current assets less current liabilities. Decisions about working capital are made to assist with the daily tasks of the company. The collection of resources required for a business's ongoing operations as well as long-term investments is known as working capital.

According to Fabozzio and Pamela (2003), working capital is money that managers can use immediately to recoup their capital investment expenses. Current capital or circulating capital are

other terms for working capital. It is necessary to weigh the benefits and drawbacks of each component when making decisions on working capital. A company invests in both short- and long-term assets. Short-term assets are also known as working capital since they are utilized to create sales, which in turn provide cash flow and profit. Working capital is divided into two categories: temporary and permanent.

Therefore, in order to generate a sufficient profit to cover their cost of capital, businesses need to carefully control the amount of working capital they have on hand. Working capital is defined by Penma (2013) as the entire amount of current assets less current liabilities, also referred to as net working capital (NWC). WCM is an umbrella term that encompasses all efforts made to regulate a business's working capital levels; it is not associated with any particular management structure or model.

Working capital management tackles short-term financial concerns in contrast to long-term financial decisions. Given their impact on liquidity and profitability, these short-term finance decisions are critical to the long-term viability of a company. Ramanathan and Aravindan (2013).

2.2.3.2. Nature and Importance of working capital

Every industry activity will require two different types of funding. Purchases of permanent assets, such as buildings, property, equipment, furniture, cars, and other items necessary to launch the business, require long-term funding. The second type of funds is short-term funds. Until the sale gains are realized, these must pay for ongoing expenditures related to manufacturing saleable commodities, including raw materials, stores, electricity and fuel, salaries, wages, administrative expenses, interest, sales and distribution fees, and other costs Horrigan (2015). Money invested in current assets is known as working capital. It acts as the "controlling nerve" and "life stream" for the unit. Working capital is sometimes referred to as net or gross working capital. Current assets make up gross working capital, while current assets less current liabilities makes up net working capital. Working capital is a financial metric used to assess an organization's operating liquidity. It is sometimes referred to as net working capital. Working capital is considered a component of operating capital, alongside fixed assets like as plant and equipment. It is computed by deducting current assets from current liabilities. A working capital shortage occurs when an entity's current assets are less than its current

obligations.

Working capital is used to cover a company's short-term financial requirements. It is a form of trading capital that is not retained in the company for a period of time exceeding twelve months. The capital put in it modifies what is created and materialized in every day of business operations. It is imperative that sufficient cash be secured. Luo (2014). Just as blood circulation is essential for life in the human body, so is the movement of capital for business. If the situation worsens, the company will struggle to develop and survive. Horrigan (2015), A corporation can have assets and income yet lack liquidity if such assets are difficult to convert into cash. For a business to continue operating and to have enough cash on hand to pay off impending operating expenses as well as maturing short-term debt, working capital must be positive.

2.2.3.3. Working capital management

Working capital management is a key component of financial management, and it can have a significant impact on the firm's profitability and liquidity. Shin and Soenen (2018). Firms can choose between the respective benefits of both kinds of net working capital management strategies: lowering working capital investment or implementing working capital policies geared towards boosting sales. Therefore, before deciding on the appropriate amount of current asset investment, a firm's management must weigh the trade-off between predicted profitability and risk. While all businesses are concerned about working capital, small businesses should take it a little more seriously. They cannot afford to remain cash-strapped due to their vulnerability to variations in working capital. In research conducted in many nations, it was discovered that working capital management had a major impact on both profitability and liquidity.

Working capital management encompasses decisions about working capital and short-term borrowing. Managing the link between a company's short-term assets and liabilities is one of them. Horrigan (2015), The goal of working capital management is to ensure that the company's operations continue and that there is adequate cash flow to satisfy both maturing short-term debt and anticipated operational expenses. They are going to be determined by cash flows and/or profitability, instead of capital investment decisions. The cash conversion cycle, or the net number of days between paying for raw materials and receiving money from the customer, is one measure of cash flow. This statistic highlights the interconnectedness between choices about

cash, accounts receivable and payable, and inventories as a management tool. Since the net count effectively represents the amount of time that the company's capital is committed to operations and not available for other purposes, management generally aims for a low net count.

Based on the criteria given above, management will employ a variety of policies and procedures to manage working capital. These policies seek to manage current assets (usually cash and cash equivalents, inventory, and debtors) and short-term financing to generate appropriate cash flows and returns. Nazir and Afza (2017).

- Cash management. Determine the cash balance that permits the organization to cover its day-to-day expenses while reducing cash holding costs.
- Inventory management. Determine the volume of inventory required for continuous production while reducing raw material investment, lowering reordering costs, and increasing cash flow.
- Administrate the debtors. Choose the best credit policy, or credit terms that will draw customers, so that any negative impact on the flow of cash and the process of converting cash is balanced out by more revenue and, consequently, a higher return on capital (or vice versa).
- Short-term funding. Choose the right financing source based on the cash conversion cycle: supplier credit is the best option for funding inventories; overdrafts or bank loans may also be necessary, or "converting debtors to cash" through "factoring" may be necessary.

2.2.3.4. Working capital management and SME success and failure determinants

Every company's ability to maintain financial stability depends on its working capital management. Effective working capital management is crucial to the company's overarching plan to increase shareholder value. Firms aim to keep their working capital at an optimal level in order to maximize their worth. Some examples include Deloof (2013), Howorth and Westhead (2015), and Afza and Nazir (2017). Working capital investments are usually significant in comparison to total assets used, so they must be managed efficiently and productively. Nevertheless, evidence suggests that small enterprises struggle with working capital management. Given that many small enterprises are insufficiently funded, it is critical to

maintain tight control over working capital investment. Although general management facets like operations, marketing, and manufacturing are frequently linked to the success of small businesses, working capital management ought to affect the continued existence and development of the enterprise. Blumenthal and Kargar (2014).

The Chief Financial Officer views working capital management as a straightforward concept that guarantees the company's ability to cover the shortfall between its short-term liabilities and assets. F. Harris (2015). Since it covers all of the company's vendor, customer, and product-related activities, a "Total" approach is selected. Hall (2012). When it comes to execution, working capital management has become one of the most important issues for companies. Finding the primary drivers of working capital and an appropriate level of working capital is a challenge for many finance executives. Lamberson (2015) said. Therefore, businesses can reduce risk and boost overall efficiency by knowing the purpose and motivators of working capital management.

A firm's working capital management policy can be aggressive, with a small amount of current assets as a proportion of total assets, or it can serve as a foundation for financing decisions, with a substantial amount of current liabilities as a percentage of total liabilities. Overkill levels of current assets may reduce the firm's profitability, but a low level of current assets may result in diminished liquidity and stock outs, making it difficult to maintain smooth operations Van Horne and Wachowicz, (2014).

The fundamental objective of working capital management is to maintain an ideal balance among each component of working capital, such as the mean period for collection, average payment period, and cash conversion cycle. The ability of finance executives to properly manage receivables, inventory, and payments is important for business performance. Krueger and Filbeck, (2005). By reducing their investment in current assets, businesses can improve the amount of money available for growth initiatives and/or reduce their borrowing costs. Restoring existing assets and liabilities from unsatisfactory to optimal levels takes up much of the time and energy of financial managers. L. Lamberson (2015). A suitable amount of working capital is one that strikes a good balance between risk and efficiency. In order to preserve proper levels in different elements of working capital, such as cash receivables, inventories, and payables, among others, continuous monitoring is essential.

It is well acknowledged that one of the most crucial elements of a company's total assets is its current assets. By buying or renting equipment, a company can lower its investment in fixed assets; however, this strategy does not apply to working capital components. The opportunity cost of investing in long-term assets may be mitigated by the high proportion of current assets, which also lowers the liquidity risk. Working capital management (WCM) is particularly crucial in small organizations. With limited access of long-term capital markets, these enterprises are more likely to depend upon ownership financing, trade credit, and short-term bank loans to support necessary investments in cash, accounts receivable, and inventory. Chittenden (2018).

Nevertheless, small business failure rates are much higher than those of large businesses. According to research conducted in the United Kingdom and the United States, poor financial management, especially inadequate working capital management and insufficient long-term financing, is a major factor small business failure. Berryman, (2013), and Dunn and Cheatham, (2019). The success elements or roadblocks that lead to achievement or failures are classified as internal and external variables. The following are examples of external aspects to take into account: government regulations, technology, economic conditions, competition, funding (e.g., availability of favorable financing), and environmental constraints. The workforce, financial management procedures, accounting systems, and managerial abilities are examples of internal effects.

In many developed and developing countries, a lack of working capital is widely regarded as a key reason for small business collapse. Rafuse, S. (2016). A company's success is ultimately determined by its ability to generate cash receipts that exceed payments. Insufficient financial oversight, particularly a failure to plan cash requirements, exacerbates many small businesses' cash flow challenges. Jarvis et al, (2016).

Numerous research studies have been carried out on the working capital management practices of small and large businesses in Belgium, the United States, the United Kingdom, and India. These studies have either used econometric analysis to look into the relationship between WCM and profitability or a survey-based approach, as noted by Burns and Walker (2011) and Peel and Wilson (2016), to find out what motivates businesses to adopt good working capital practices. Shin and Soenen (2018); Deloof (2013).

Research on the impact of working capital management on corporate profitability of small manufacturing enterprises is limited, notably in Ethiopia. The financial management of small firms in developing nations, particularly Ethiopia, is mostly unknown. As a result, the purpose of the study is to evaluate the impact of Working capital management on the profitability of a sample of small manufacturing businesses. The Arada sub-city of Addis Ababa, and its findings are anticipated to contribute to existing studies on working capital management and SMEs.

2.2.4. Relationship between profitability and liquidity

Every working capital management decision will eventually have an effect on either profitability or liquidity. While choosing options in any area of corporate finance, all financial managers must weigh profitability against liquidity. Eljelly (2014). Profitability relates to a company's ability to enhance projected returns and maximize shareholder wealth, whereas liquidity refers to a company's ability to meet its day-to-day commitments, such as having enough cash to pay its debts and the ability to meet unforeseen financial requirements. The two primary goals of any financial management are profitability and liquidity, which are diametrically opposed. When a firm's profitability raises, its liquidity decreases; when profitability declines, liquidity increases. Padachi (2006).

The contrast between short-term and long-term investments frequently perplexes financial managers. Long-term assets have a greater present value of future cash flows, therefore investing in them boosts a company's profitability. Nonetheless, the company's risk rises since long-term assets are non-liquid and require longer converting into cash. On the contrary, if a company invests in short-term assets, such as current assets, the liquidity issue will be resolved. The more a company spends in short-term assets, the better it is able to meet its every day demands, but it also reduces profitability. Niresh, N (2012).

Walker (2018) notes that when a corporation accumulates a significant number of current assets, it can satisfy its liquidity objectives; nevertheless, current assets have a lower return on investment. If a corporation has a significant amount of current assets on hand, such as cash, stocks, and receivables, it will face fewer risks but will earn a lesser return. Having a significant amount of current assets on hand has an opportunity cost if those funds are invested in other assets, keeping a large inventory incurs expensive storage expenses, and offering huge credit

sales results in avoidable bad debt expense. Holding fewer current assets, on the other hand, increases profitability but reduces liquidity. In general, any financial manager making decisions on working capital management should avoid the two extreme stances and strive to make optimal decisions by balancing the two opposing objectives, because the firm will not be able to function unless the two objectives are achieved. Arnold. (2018). As a result, one needs the other.

2.2.4.1. Evaluate operating performance

When we analyze a company's operational performance, we seek to determine if its assets are being used efficiently and profitably. Operating performance evaluates outcomes in relation to the assets used to achieve those outcomes. Deloof (2013) stated that Operating Performance is determined by the extent to which assets are converted into earnings and how efficiently resources are used to generate revenue. A company with outstanding performance ratios can generate a high level of sales with few resources while also generating a high level of cash inflows. Because of the substantial differences in assets and sales across industries, contrasting with companies in the same industry, as with all financial analysis, is critical. Financial ratios can be used to assess five aspects of a company's financial condition:

2.2.4.1.1. Return on investment

Return on investment (ROI) is a performance indicator used to evaluate an investment's efficiency or profitability, or to compare the efficiency of several investments (Niresh, N., 2012). ROI attempts to precisely measure the amount of return on a specific investment in relation to the investment cost.

2.2.4.1.2. Liquidity

Liquidity assesses a company's ability to satisfy immediate obligations with assets that can be transformed into cash the quickest. The ability of a corporation to pay down its short-term liabilities is measured by liquidity ratios. Niresh, N. (2012). Liquidity ratios find the speed at which a company can convert assets and use them to pay off debts. The higher the ratio, the easier it is to clear debts and avoid payment defaults.

2.2.4.1.3. Profitability

Profitability is absolutely dependent on the business's capacity to use finances effectively and efficiently. Profitability ratios are a type of financial indicator that compares an organization's

capacity to create earnings to its sales, operating costs, balance sheet assets, or shareholders' equity over time, using data from a single point in time. Niresh, N (2012). They are among the most popular indicators in financial analysis. Profitability ratios can reveal information about a company's financial performance and health. Ratios are more effective as comparison aids than as solo metrics.

2.2.4.1.4. Activity ratio

According to Sabri (2012), turnover ratios may be employed to examine the advantages created by individual assets, like inventory or accounts receivable, or to measure the advantages produced by the firm's entire asset base. Activity ratios are financial metrics that are used to assess the efficiency of a company's operations. The term can refer to a number of ratios that measure how effectively a company uses its capital or assets.

2.2.5. Dimension of Working Capital Management

Maintaining high levels of affective organizational management commitment, according to Dwyer et al. (2017), is critical for organizational profitability and well-being. The variables listed below are used to calculate profitability.

2.2.5.1. Average payment period (APP)

An APP determines how many days it takes a corporation to pay its vendors. Payable Management and Profitability Deloof (2013) claimed in his study that the average payables period has a negative correlation with profitability. In their investigations of Belgian enterprises, Sabri (2012) and Padachi (2016) revealed a negative link between profitability and average payables period. This negative conclusion, however, contradicts theory, which advocates increasing average payables in days to store cash for an extended period of time before employing it to fund the company's operations. According to Deloof (2013), the negative association between average payables time and profitability stems from less profitable businesses paying their invoices later. According to Deloof (2013), profitability influences the average payables period rather than the other direction around. He stated that the failure of distressed businesses to raise adequate cash to meet their obligations resulted in the extension of payment days.

As stated by Moodley (2014), this was a forced reaction rather than an administrative decision, which had an impact on the link between payables and Return on Investment .Deloof (2013) offered an alternative explanation, which Sabri (2012) agreed with: accelerating increasing payments to vendors could enhance profitability while Belgian enterprises often receive a considerable discount for early payment. As a result, businesses prefer to pay sooner instead of keeping their cash in the company's bank account. As a consequence, they do not implement a policy to increase owing balances.

"This conclusion is extremely significant and doesn't make financial perception," the paper's authors wrote in 2016, "because the longer a firm postpones its payment, the higher the working capital levels it reserves and uses to increase profitability." As a result, this ratio provides a significant source of revenue for operational activities. The average payable time serves as a substitute for payment policy, indicating how long it takes the firm to payback for inventory purchases.

The APP ratio was calculated using the following formulas: -

Average payable period (APP) = Account payable/costofGoodssoldx365days

2.2.5.2. Account Receivable Period (ARP/ACP)

Accounts receivable ratios consist of two components: the turnover ratio and the average collection period. The accounts receivable turnover ratio measures the rate at which accounts receivable are collected during the period of time. It is determined by subtracting net credit sales (or total sales if none are available) by average accounts receivable. Overall, greater accounts receivable turnover benefits the business by allowing it to receive money from customers more quickly and invest it. The collection period is the number of days required to collect on receivables. Jae and Joel. 2007.

Account Receivable Period (ARP/ACP) =Accounts Receivables/Sales)X365days

2.2.5.3. Cash conversion cycle (CCC)

The time necessary to purchase, manufacture, and stock raw materials, then sell the stock and collect the resultant cash, or convert debtors' debts to cash, depends on the nature of the job and the type of product. Houston and Brigham (2019). Several studies have looked into the relationship between WCM and profitability and established a negative relationship between the cash conversion cycle and profitability, implying that lowering the company's CCC will result in

an increase in profitability. Bieniasz and Goas (2011); Enow and Brijlal (2014); Enqvist et al. (2014); Muhammad Usman and Khan (2017); and Arnaldi et al. (2021).

Others, however, discovered a positive correlation between CCC and profitability. Amponsah-Kwatiah and Asiamah (2020); Alvarez et al. In contrast to Jakpar et al. (2017), Rey-Ares et al. (2021), and Osazevbaru et al. (2021), no statistically significant association was found between the cash conversion cycle and profitability.

2.2.5.4. Current Ratio (CR)

The current ratio is a ratio of liquidity which assesses the capacity of an organization to cover loans that will be due in less than a year. The current ratio is a widely used business indicator that measures the liquidity of a business in relation to its existing resources and outstanding liabilities. Simply expressed, it assesses an organization's capacity to generate sufficient income to repay its loans when they become due. It is extensively used around the world to assess a company's overall financial performance. To calculate the current ratio, divide current assets by current liabilities. According to David K (2013), financial ratios are one of the most important instruments for assessing the financial well-being and success of a business.

2.2.5.5. Debt ratio

The term "debt ratio" refers to a financial ratio that quantifies a company's leverage. The debt ratio is calculated as the decimal or percentage ratio of total debt to total assets. It refers to the percentage of a company's assets that are financed by debt. A ratio greater than one implies that debt is funding a major amount of a company's assets, meaning that the organization has more obligations than assets. A high ratio indicates that if interest rates rise unexpectedly, a company may default on its loans. Meta (2022) A ratio smaller than one shows that equity finances a greater percentage of a company's assets. A company's debt ratio reflects its financial leverage. This ratio varies greatly between industries. Utilities and pipelines, for example, have much higher debt ratios compared to different industries, such as the technology sector. The debt ratio of a company is calculated using the following formula:

Debt ratio=Total assets/Total debt

2.3. Empirical review

Despite the importance of working capital regulations for profitability, a limited number of empirical investigations have been done to explore this relationship. Working capital management is crucial since it affects the firm's profitability, risk, and value. Smith. (2013). The greater the investment in current assets, the lesser the risk, but the smaller the profit. Carpenter and Johnson (2013), on the other hand, offered empirical evidence that there is not a linear connection between the level of current assets and revenue systematic risk of US firms; nevertheless, a few indications of a possible nonlinear relationship have been identified, which were not considered statistically significant at all.

Soenen (2018) examined the relationship between the net business cycle and return on investment for US enterprises. The chi-square test results showed a negative association between the length of the net trade cycle and the return on assets. Furthermore, it was observed that this inverse link varies by industry. Because there was a significant association for nearly half of the industries analyzed, the results could vary per industry.

Lamberson (2015) investigated how small businesses respond to modifications in economic activity by adjusting their working capital requirements and current assets and liabilities, which is another part of working capital management. Working capital was measured using the current ratio, current assets to total assets ratio, and inventory to total assets ratio, and economic activity was quantified using an indicator of yearly average coincident economic indicators. The study showed, contrary to predictions, a relatively minor link between changes in economic conditions and changes in working capital. To validate Soenen's (2018) findings using a larger sample and a longer time span.

Jose et al. (2016) investigated the association between proactive working capital management and company profitability in the United States. They used the Cash Conversion Cycle (CCC) as an indicator of working capital management, with a shorter CCC indicating more aggressive management. The data demonstrated a substantial inverse link between CCC and profitability, showing that proactive working capital management leads to increased profitability. According to Shin and Soenen (2018), decreasing the number of current assets to an adequate extent boosts a company's profits. Likewise, Deloof (2013) investigated a sample of big Belgian

enterprises from 2009 to 2013, and discovered that Belgian firms can increase profitability through lowering the number of days accounts receivable are outstanding and inventory levels. a study by Teruel and Solano (2015), managers can add value by lowering their companies' days accounts receivable and inventories. Similarly, lowering the CCC boosts the firm's profits.

Uyar (2019) performed an empirical study in Turkey and discovered a significant negative link between CCC and profitability, in addition to CCC and firm size, using ANOVA and correlation analysis. According to Lazaridis and Tryfonidis (2016), there is a statistically significant link between profitability as assessed by gross operating profit and the Cash Conversion Cycle. In addition, executives can make profit by effectively managing the various components of working capital. Padachi (2016) investigated working capital management patterns and their impact on firm performance in 58 Mauritian small manufacturing enterprises between 2011 and 2016. He stated that organized and executed working capital management is likely to positively contribute to business value generation. The study discovered that excessive investment in inventories and receivables is related with low profitability, and that the short-term component of working capital financing is increasing.

The majority of empirical research confirm the traditional working capital and profitability notion that reducing working capital investment will boost company profitability (aggressive policy) by decreasing the percentage of current assets in total assets. Working capital management has been shown to have a significant impact on firm profitability and to boost profitability by reducing the number of days' accounts receivable and inventories (Deloof, 2013; Wang, 2012). The results of the study from China, which looked at a sample of Chinese enterprises, indicate that working capital management plays a major role in determining the major characteristics that separate high-growth small and medium-sized firms from those that fail. Better company performance is connected with a shorter Cash Conversion Cycle and net trade cycle. Furthermore, effective working capital management is crucial for generating value for shareholders.

An additional investigation conducted by Afza and Nazir (2017) examined the relationship between aggressive and conservative working capital policies in Pakistan and discovered a negative relationship between firm profitability measures and the level of aggressiveness of working capital investment and financing policies. According to Raheman and Nasr (2017),

working capital management measures have a detrimental impact on profitability. Shah and Sana (2016) used a very small sample of 7 oil and gas sector enterprises to study this link between 2010 and 2015. According to the findings, managers can increase shareholder returns by successfully managing working capital.

Efrem Woldu (2011) examined the effect of working capital management on the profitability of small and medium-sized firms in Addis Ababa, Ethiopia. Many developing countries, including Ethiopia, rely heavily on small and medium-sized firms (SMEs) to advance their development goals. Ethiopia's SME population is steadily growing. However, their current situation, stage, and rate of development are significantly more important than their quantity. Considering an enormous rise in the number of SMEs, there has been little research into the working capital management of small and medium-sized firms (SMEs) in developing countries, particularly Ethiopia. The study's purpose is to examine the influence of working capital management on the performance of SMEs in the sub cities of Nifas silk and Kirkos, and to give recommendations based on the findings. In doing so, both primary and secondary data were collected from 30 SMEs in Addis Ababa's sub-city. The primary data was gathered using surveys, while the secondary data was gathered from the enterprises' financial accounts. The study's population consists of all SMEs operating within the organization for women in self-employment (WISE). Data were evaluated using both descriptive statistics and quantitative approaches (correlation and regression). The results of this study imply that the time required by enterprises to receive debts, pay invoices, and recover cash has a negative impact on working capital. Aside from that, the financial leverage, size, and current ratio of the SMEs under examination all influence their availability of sufficient working capital.

Shin and Soenen (2018) emphasized the importance of effective Working Capital Management (WCM) evidence from Chinese publicly traded companies in achieving shareholder value. Working capital management influenced both profitability and liquidity significantly. Correlation and regression analysis were performed to look at the relationship between the length of the Net Trading Cycle, company profitability, and risk adjusted stock returns by industry and capital intensity. They identified a substantial inverse link between the firm's net operating Cycle length and profitability. Furthermore, lower net trade cycles were associated with higher risk-adjusted stock returns.

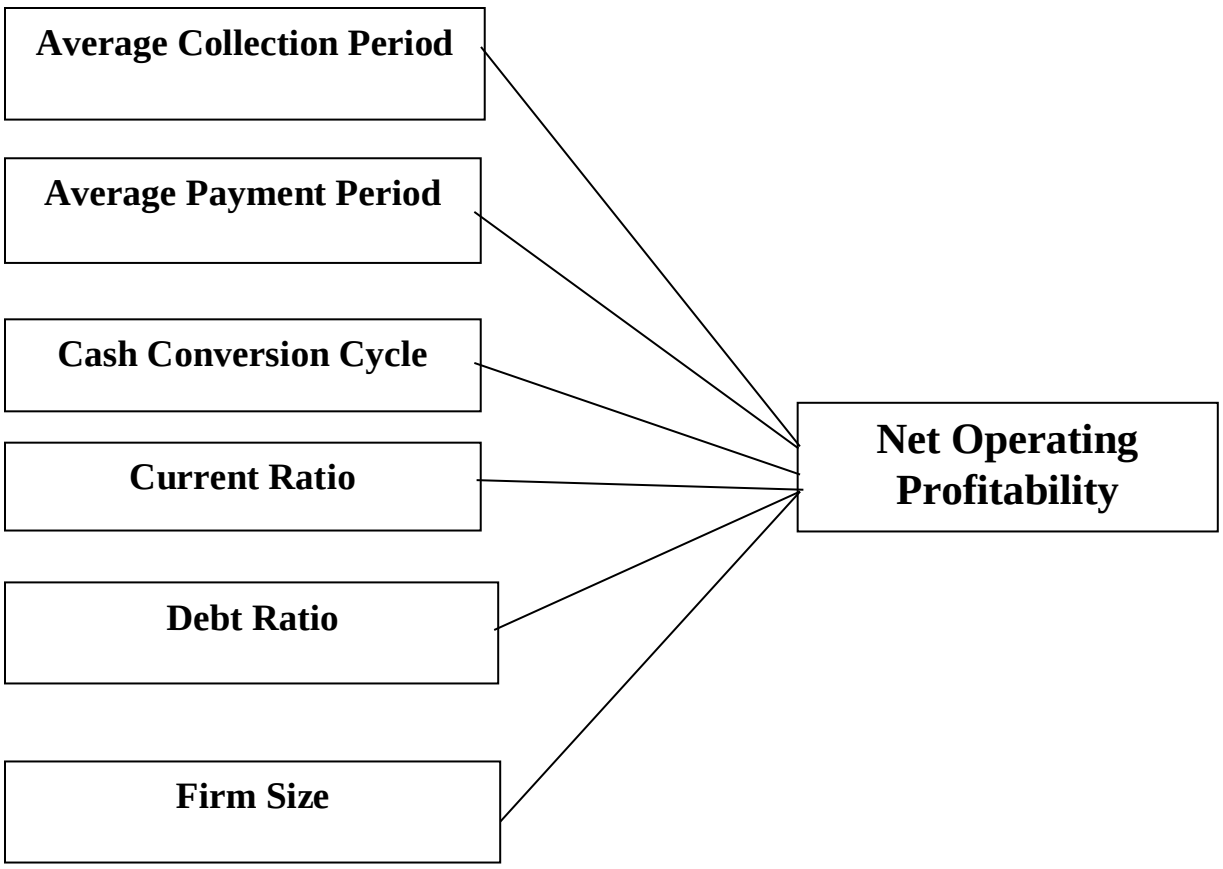
Smith (2013) examined the association between working capital and return on investment." South Africans noted that individuals who promoted working capital theory shared the view that the primary aims of working capital management were profitability and liquidity. The problem developed because maximizing the firm's returns could imperil its liquidity, and chasing liquidity could dilute returns. This study investigated the association between traditional and alternative working capital indicators and return on investment (ROI) in industrial enterprises listed on the Johannesburg Stock Exchange (JSE). The inquiry was whether most recently established alternative working capital ideas had a stronger association with return on investment than classic working capital ratios. In terms of the independent variables, the findings revealed no significant differences across the years. Their progressive regression results indicated that total current liabilities divided by funds flow accounted for the vast majority of the variability in Return on Investment (ROI). Based to the quantitative findings from the test, the traditional working capital leverage ratio (current liabilities divided by funds flow) had the strongest correlation with return on investment. Commonly used liquidity ideas, such as the current and quick ratios, demonstrated minor connections with return on investment, whereas only one of the newest working capital concepts, the total liquidity index, demonstrated substantial associations.

The absence of empirical evidence on working capital management and its impact on business profitability in Ethiopian SMEs is the primary motivator for further research into the subject. Existing study on the comparison of different working capital indicators by sector in Ethiopia lacks empirical evidence. As a result, the current study aims to fill this gap by quantifying the link between working capital management and business profitability.

All of the previous research lay a solid basis and provide insight into working capital management and its various components. They also show the findings and conclusions of earlier studies on the same topic conducted in various countries and contexts and from various perspectives. The methodology for the study was developed based on these studies conducted in various countries.

2.4. Conceptual framework

Figure 1 Conceptual framework



Source: Efrem Woldu (2011) and Own Survey, 2023

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.1. Chapter Introduction

The data analysis analytical framework, which explains the firms and variables included in the study, data distribution patterns, and statistical approaches used to analyze the relationship between working capital management and profitability, is the emphasis of this chapter of the research.

3.2. Research Methodology

The study was carried out on SMEs in the Arada sub-city. The goal of this study was to better understand the dynamics of the variables. It was primarily intended to investigate the influence of WCM on the profitability of SMEs. A quantitative research approach was employed to meet the research objectives. The goal of using quantitative research was to identify characteristics, count them, and build statistical models to try to explain what was seen. The data was in the arrangement of numbers. The researcher then uses statistics to analyze the data and present the results in the form of statistical tables, numbers and diagrams.

3.3. Research Design

For the purpose of to attain the research aims, the researcher employed a combination of descriptive and explanatory research designs in the study. The study is descriptive in that it seeks to describe in detail the state of WCM and Profitability in Arada sub city, thus it gives an in depth understanding of the reality. According to Creswell (2014), descriptive method enables researchers to focus and show the different facts, information, and factors regarding the standing or position of the issue or problem as it current happen during the time of the study. On the other hand, an explanatory study approach was used to try to identify the association between WCM and Profitability.

To achieve the study's goal and solve to the research question, descriptive and inferential statistics were used. WCM and Profitability were assessed using descriptive statistics such as frequency, percentage, mean, and standard deviation. Correlation and regression statistics were also used to determine the association between employee motivation and customer satisfaction.

3.4. Research Method

3.4.1. Data Type and Collection method

Primary and secondary sources of data were used in this investigation. Kothari (2014) defines primary data as information that is obtained for the first time and so has a distinct nature. As far as data collection tools are concerned, the conduction of the research involved the use of a structuredquestionnaire.Questionsonthequestionnairewasbasedontheresearchquestions mentioned before and were adapted from Apostolos Giovanis (2015), Joana (2016), Samuel Addis (2017), Elin and Linn (2012).

The questionnaire allows the researcher to find out the relationship between WCM and Profitability. The questionnaire contains closed-ended questions, which are best, suited to the research questions and objectives because they provide an efficient method of collecting responses from a large population prior to quantitative analysis. The central premise of using a closed-ended questionnaire, according to Zikmund et al. (2019), is that it should be statistically analyzed and easier and quicker for respondents to answer. This supports the researcher in collecting opinions about the research variables in a very efficient and reliable way. These closed-ended surveys were delivered to all SMEs in the Arada sub-city. The questionnaire is designed to elicit information on several aspects of the sample firms' working capital management procedures, such as cash management and receivable and payable management.

Moreover, because the research relies on financial data, secondary data is mentioned. From 2018 to 2022, the key sources of data are financial statements such as income statements and balance sheets of publicly traded corporations. The variables included in the study, dependent and independent, were all calculated and derived from the financial statements of the firms. The reason for limiting the time span to five years was the availability data.

3.4.2. Population and Sampling technique

Addis Ababa is the largest as well as the dominant political, economic, cultural, and historical city of Ethiopia established in 1887 by emperor Menilik II. It is the capital of federal government, and it is a chartered city, where the Africa Union, UNECA, UNDP Africa Regional Office, and other continental and international organizations reside. The city is divided in to ten sub-city, which are the second administrative units next to city administration. Bole is the largest

sub-city followed by Akaki- Kality and Yeka. Addis ketema is the smallest followed by Lideta and Arada Sub-city. The sub-city are also divided into weredas, which are the smallest administrative unit in the city. There are 116 weredas in the city administration according to Addis Ababa BOFED 2022 Socio Economic report. The number of weredas varies based on their size of the Sub city. Here is the map of Addis Ababa sub-city. The research was focused on Arada sub-city; this geographical area has been chosen as there was no study done and represents the largest number of SMEs in Addis Ababa. Arada sub-city is located on the northern part of Addis Ababa administration. In Arada sub-city there are 217 small and medium manufacturing industries engaged on textile, agro-processing, soap and detergent and leather by product in Arada Sub cities of the capital city; Addis Ababa. Among these, the number of small industries is 99 and medium industries are 118. According to FSMMEs 2022, the small and medium manufacturing industry has created a job opportunity for 2,704 male, 1,265 female and total of 3,969 workers.

Arada sub-city industries medium industries accounts 54.38% which is greater than small industries 45.62% this can imply to the preference of the entrepreneurs to be engaged in better enterprises which can make them more profitable. In addition to that the small industries are growing to medium industries by extending their capacity with deferent aspects.

The procedure of simple random sampling was employed to obtain the sample for the research under discussion. This is due to the fact that each unit of the population has an equal chance of being selected for the sample. This aided the researcher in obtaining the appropriate number of population representatives. Simple random sample is used because all SMEs in the Arada sub-city are included.

The sample size was been calculated using the Yamane’s formula. In addition to Cochran's formula, Yamane (1967) proposed another simpler method for calculating sample size from a population. According to him, for a 95% confidence level and p = 0 5, size of the sample should be

$$n = \frac{N}{(1 + (N * e^2)}$$

Where N is the size of the population and e denotes the level of accuracy. n = number of samples

N = population

e = margin of error

By using the Yamane's formula and error level of 4.33 % (level of significance), the number of samples of this study was calculated as follows:

$$n = \frac{217}{(1 + (117 * 0.043^2)} = \underline{154.86 \approx 155}$$

The above shows that the number of samples for this research consists of 155SMEs in Arada sub city.

3.5. Analysis and Evaluation of Data

Once the data was considered appropriate, electronic tabulation was performed using the SPSS version 20 data entry and analysis software application. Data analysis was performed to establish significant correlations between variables in the research. To attain this purpose, a combination of descriptive statistics and inferential analysis was applied.

3.5.1. Descriptive Analysis

The initial step in the research process is descriptive analysis, which will assist in describing significant components of the cash conversion cycle phenomena and providing particular data about each significant variable. The questionnaire responses were examined first, followed by a descriptive analysis of the study's variables. Studies in this area of study have already been undertaken in several countries, and vital information about techniques of analysis is already available. SPSS software was employed to analyze the various variables in this study.

3.5.2. Quantitative Analysis

In quantitative analysis, two methods are used: To begin, the researcher used correlation models, specifically Pearson correlation, to determine the degree of relationship amongst the variables in question. Second, regression analysis was utilized to determine the causal links between profitability, liquidity, and other relevant factors.

The researcher employed Ordinary Least Squares methodology for analysis. A pooled regression was implemented to combine and forecast time-series and cross-sectional

observations. As a result, many cross-sectional units were observed throughout time in a panel data environment. For this reason, the STATA software was utilized to examine financial data, specifically pooled data.

3.5.3. Model Specification

The impact of working capital management on the performance of SMEs was investigated using panel data methods. What is the definition of panel data methodology? Panel data analysis is a technique for examining a single issue across several sites during a specific time period. Panel data analysis gives regression analysis a spatial and temporal dimension. A collection of cross-sectional observational units is related with the spatial dimension. Countries, states, counties, businesses, commodities, people groupings, or even individuals may be included. The temporal dimension is concerned with periodic measurements of a set of variables that characterize these cross-sectional units over time. For the purposes of this investigation, the latter was used.

Panel data approach has various advantages, including the presumption that enterprises are inconsistent, higher variability, less co-linearity across variables, more meaningful data, a higher degree of independence, and higher effectiveness. M. Baltagi (2011).

Pooled regression panel data analysis was used in this investigation. The pooled regression model, additionally referred to as the equilibrium coefficients model, is one in where both intercepts and slopes are constant and cross section and time series data are combined in a single column, assuming no major cross section or chronological effects. The standard forms of the models are as follows:

$$NOPit = \beta 0 + \Sigma \beta Xit + \varepsilon \quad \textbf{(Eq.3.1)}$$

Where:

NOPit: Net Operating Profitability of firm I attimet; I= 1,2,… 155firms. β0: The intercept of equation

βi: Coefficients of Xits variables

*X*it: The different independent variables for working capital Management of firm I attim e*t(*Time)=1,2……,5years.

ε: The error term

The three regression models were constructed, one for each variable and one for each sample company. When the above general model was transformed to the variables of this study, the following regression equations were performed to determine the impact of working capital management on manufacturing business performance.

I) Model Specification (I) regressedforaccountsreceivableperiod

Model1:NOP it=β_0+β1(ARP it)+β2(CR it) +β3(DR it) +β4(LOS it) +ε----------**(Eq.3.2)**

II) Model Specification (II) regressed for accounts payable period

Model2:NOP it=β_0+β1(APP it) +β2(CR it)+β3(DR it) +β5(LOS it) +ε---------**(Eq.3.3)**

III) Model Specification (III) regressed for cash conversion cycle

Model3:NOP=β_0+β1(CCC it) +β2(CR it)+β4(DR it) +β5(FS it) +ε----------**(Eq.3.4)**

Where:

NOP: Net Operating Profitability

ACP: Average Collection Period

APP: Average Payment Period

CCC: Cash Conversion Cycle

CR: Current Ratio

DR: Debt Ratio

LOS: Natural logarithm of Sales

ε:Theerror term.

3.6. Validity

The extent to which an empirical adequately reflects the true meaning of the concept under consideration is referred to as validity. It also means the accuracy with which a statistical instrument measures what it is designed to assess. It emphasizes the precision of a measuring instrument. Saunders and colleagues (2019).

CHAPTER FOUR

RESULTSANDDESCUSSIONS

4.1. Chapter introduction

The major goal of this study was to examine the impact of working capital management on the profitability of small and medium-sized firms (SMEs) in Addis Ababa, Ethiopia. The primary data was gathered from finance managers through questioning, and the secondary data came from financial reports.

This chapter presents analysis, interpretation and finding of information collected through close-ended questionnaire from 155 SMEs the analysis expected to be based on the information from the respondents. out of 155questionnaires distributedtoSMEs149(96.13%)questionnaire were collected back and valid to be included in the analysis. data collected from the sample respondents were analyzed on the basis of both descriptive and inferential statistics. All the calculation was carried out with SPSS (version20.0) and STATA.

Parts of the data were gathered through a questionnaire completed by finance managers. The questions were designed to extract information on working capital management issues. Financial statistics for five years (2018-2022) are gathered from the sampled cooperatives' financial statements. This study measures profitability using Net Operating Profitability, which is defined as profit before interest and taxes divided by total assets. This is because SMEs have a poor non-current asset base and relies primarily on accounts payable to sustain their gross working capital (Padachi, 2016). As a result, a comprehensive measure of profitability is best described by calculating the Return on Total Assets, which is equivalent to the firm's total liabilities, which are primarily made up of equity capital and current liabilities (Padachi, 2016).

4.2. Demographic Characteristics of the enterprises

Descriptive statistics (frequency statistics) are used to analyze the overall characteristics of respondents. The next sections examine legal forms, business types, initial capital investment in Ethiopian birr, and the number of employees.

Table4.1DescriptiveCharacteristicsofSMEs Legal forms

Variables	**Frequency**	**Valid percent**
Sole proprietors	72.48%	108
Partnership	14.77%	22
Limited Company	8.05%	12
Others	4.7%	7
Total	**100%**	**149**

Source:-Researcher Survey Result (2023)

As table 4.1 depicts all respondents are including when legal form status of respondents is assessed from the total number of respondents 72.48% are Sole proprietors which owned by individuals, 14.77%are Partnership which owned by two or more individuals, 8.05% and 4.7% are Limited Company and others respectively. As a result, more SMEs sole a proprietor which shows that all SMEs managed and controlled by their owners.

Table 4.2. Descriptive Characteristics of SMEs type of business

Variables	**Frequency**	**Valid percent**
Trading	112	75.17%
Manufacturing	20	13.42%
Service rendering	17	11.41%
Total	**100%**	**149**

Source:-Researcher Survey Result (2023)

As table 4.2 depicts all respondents are including when type of business status of respondents is assessed from the total number of respondents 75.17% are trading which operate in selling of goods, 13.42% are Manufacturing which operates on producing products, and 11.41% are Service rendering. As a result, more SMEs are trading which shows that all SMEs operates in merchandising business which purchase items for resale's purpose.

Table 4.3. Descriptive Characteristics of SMEs Initial Capital Investment in Ethiopian birr

Variables	**Frequency**	**Valid percent**
50,000-500,000	84	56.38%
500,000-1,500,000	25	16.78%
1,500,000– 7,500,000	31	20.81%
>7,500,000	9	6.04%
Total	**100%**	**149**

Source:-Researcher Survey Result (2023)

As table 4.3 depicts all respondents are including when Initial Capital Investment in Ethiopian birr status of respondents is assessed from the total number of respondents 56.38% are between 50,000-500,000, 16.78% are between 500,000-1,500,000, 20.81% and 6.04% are between 1,500,000– 7,500,000 and above 7,500,000. As a result, the higher initial capital regarding to the respondents is between 50,000-500,000.

Table 4.4. Descriptive Characteristics of SMEs Number of members

Variables	**Frequency**	**Valid percent**
6-25	63	42.28%
25-50	42	28.19%
50-75	28	18.79%
75-100	12	8.05%
>100	4	2.68
Total	**149**	**100%**

Source:-Researcher Survey Result (2023)

As table 4.4 depicts all respondents are including when Number of members status of respondents is assessed from the total number of respondents 42.28% are between 6-25, 28.19% are between 25-50, 18.79% are between 8.05% and 2.68% are between 50-75 and between more than 100 members. As a result, the higher number of members regarding to the respondents is between 6-25.

4.3. Descriptive analysis of the results Obtained from the Questionnaires General Perceptions

4.3.1.1. Inferential Analysis

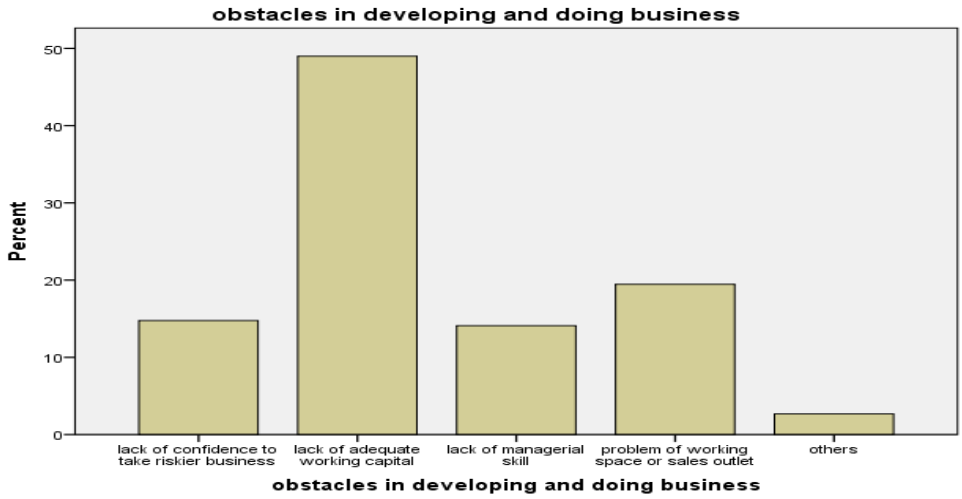
Pearson correlation coefficients were used to assess the influence of working capital management on profitability growth. Pearson's coefficient runs from 0 to 1, with a positive sign denoting a positive relationship and a negative sign suggesting an inverse link. Cooper and Schindler. (2003). the surveys were used to gather information that could not be found in financial statements. The following is an example of a descriptive analysis based on percentages used to examine questionnaire results.

43.8% of small businesses define success as increased turnover, while only 25% seek to maximize profit. 50% of businesses indicated their financial health is ordinary, while 62.5% said their turnover will rise in 2022. 56.3% of the companies surveyed do not have a growth strategy, however 43.8% prefer new markets as a growth strategy, thus they should be instructed on how to build market niches for their products.

Surprisingly, credit is the most widely used technique of funding growth. According to the findings, small firms investigated view credit to be more flexible than any other form of finance, despite the reality that this type of funding is typically available but rarely sufficient to enable quick expansion. The findings support Shayo and Temu's (2012, 2017) discovery that expansion of small enterprises to a big scale in Tanzania is uncommon, with the majority of startup firms employing only a half-dozen workers after more than a decade of operation.

In terms of business problems, nearly 49% of respondents stated that their major problems are related to obtaining sufficient financing to operate, whereas the remainder stated that their significant problems are related to working space/sales outlet (19.5%), inadequate confidence to take riskier business, and absence of managerial skill (14.8% and 14.1%, respectively). The graph below displays the key challenges that firms confront when carrying out their activities.

Graph 4.1: major obstacles faced by the SME's



Source: Own Survey, 2023

4.3.2. Cash management practices

In terms of cash budgeting, 63.1% of respondents stated they consistently had them prepared, while 39.9% stated they never did. Furthermore, the findings suggest that the majority of those who create cash budgets utilize the once-a-year period as their starting point. While some, around 19.5% merely need one month to set their cash budget.

The statistics also suggest that the majority of small enterprises make their target cash balance decisions based on their owners' experiences. The percentage of small enterprises using cash management theories to estimate their goal cash balance is quite low. Only 6.3% set their desired cash balance based on hypotheses. This suggests that cash management theories are not extensively used in practice, and that owner managers' experience is more essential than theoretical implications for cash management. Furthermore, the findings revealed that a sizable proportion of businesses had never included the desired cash balance in their cash budgets.

Table 4.5: the effectiveness of the cash management practice

	Frequency	Percent	Valid Percent	Cumulative Percent
Very effective	72	48.3	48.3	48.3
Moderately effective	27	18.1	18.1	66.4
Less effective	15	10.1	10.1	76.5
Very less effective	14	9.4	9.4	85.9
Not effective	21	14.1	14.1	100.0
Total	149	100.0	100.0	

Source: Own Survey, 2023

Whenever asked concerning the efficiency of their enterprise's cash management practice, the majority, approximately 48.3%, responded that it is effective, while the remainder responded that it is moderately, less, and very less effective (37.6%), and not effective (14.1%).

Table 4.6: cash shortage experience

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes, always	46	30.9	30.9	30.9
Yes, usually	69	46.3	46.3	77.2
Yes, rarely	18	12.1	12.1	89.3
No never	16	10.7	10.7	100.0
Total	149	100.0	100.0	

Source: Own Survey, 2023

In regard to cash shortage experience, just 22.8% of small firms had never or rarely been short on cash, whereas 77.2% of respondent small businesses had inadequate funds for spending frequently or always. The majority of enterprises, around 39.7%, aim to handle cash shortages

through long-term financing, whilst approximately 61.3% predominantly employ short-term credit to fund liquidity shortages.

Table 4.7: cash surplus experience

Have you ever experienced cash surplus before?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes, always	14	9.4	9.4	9.4
Yes, usually	34	22.8	22.8	32.2
Yes, rarely	36	24.2	24.2	56.4
No never	65	43.6	43.6	100.0
Total	149	100.0	100.0	

Source: Own Survey, 2023

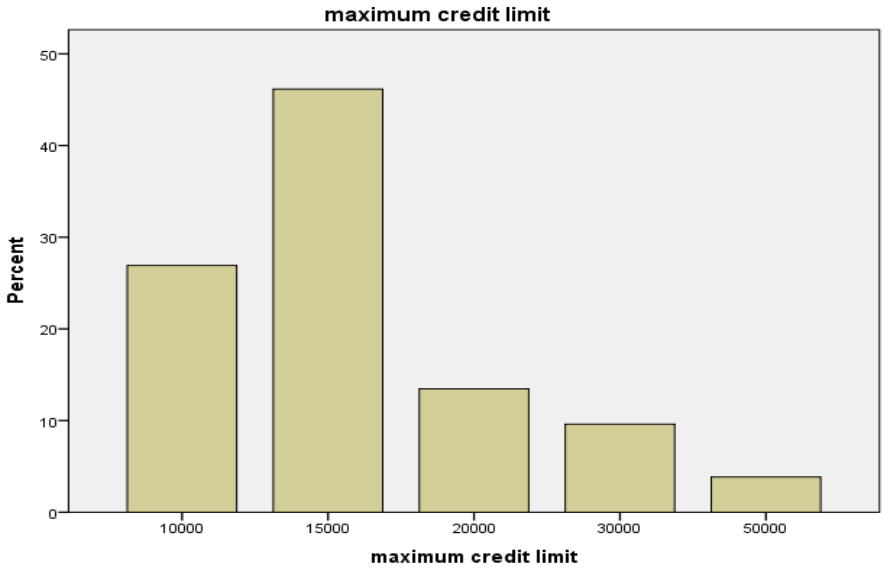
In the context of cash surplus experience, only 67.8% of small firms had never or rarely been short on cash, but 32.2% of responding small businesses had insufficient funds for expenditure usually or always. In terms of cash surpluses, only around 19.3% of enterprises reported having excess cash on occasion, which they primarily chose to deposit in bank accounts for interest, and essentially no firms used cash surpluses to acquire short-term financial products. Obviously, some management of these SMEs continued to spend excess cash in the form of purchasing shares in the names of their companies, but little alarm was expressed. This is explained by Ethiopia's underdeveloped money market, which prevents enterprises from using cash surpluses to buy short-term investment instruments for lucrative purposes. Another cause could be SMEs' lack of knowledge about accessible money market tools and their utility.

4.3.3. Receivable management practices

According to the findings, 65.1% of businesses do not sell on credit, while 34.9% sell on credit regularly or frequently set up a credit policy for their customers. Most 46.15% firms set up a credit limit of 15,000 br. for their customers. This is the maximum credit limit for approximately 29.5% of people. 26.92% said they are willing to grant a loan for customers up to br. 10,000, 13.46% said they will agree to a loan for customers up to br. 20,000, 9.62% said they will

approve a loan for customers up to br. 30,000, and the remaining 3.85% said they have the capacity to lend up to br. 50,000.Chart 3.2 depicts the results of the highest credit limit issued by the enterprises.

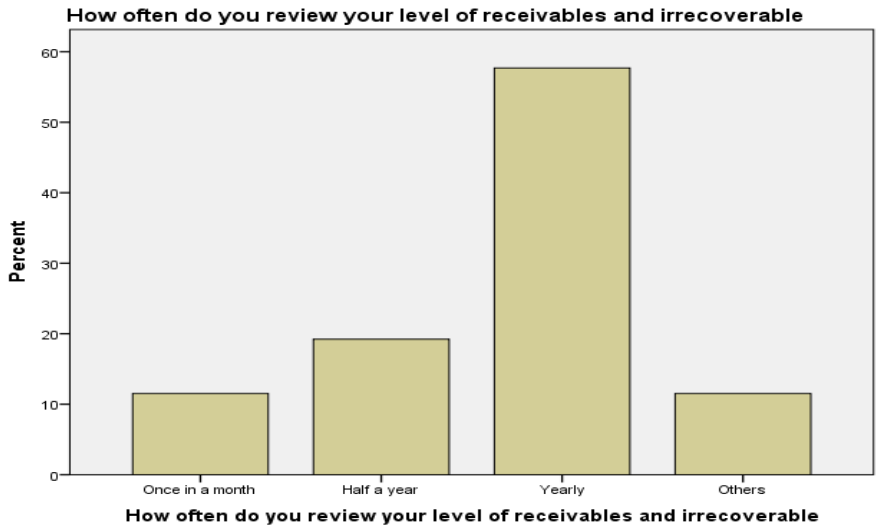
Graph 4.2: maximum credit granted by SME's



Source: Own Survey, 2023

On Customers have up to two years to return the money borrowed from the firms. 81.3% return their loan in less than two years, while 18.8% receive up to five years. The key indicators of debtor capability are firm size and trade references. Most businesses evaluate their credit policies once a year, with only a few doing so periodically. Even in such cases, clients might be unable to repay the funds borrowed from the businesses. In this instance, the company usually writes off the sum as non-collectible. So far, the lowest and highest amounts written off as uncollectible are br. 4729.86 and br. 27639.25, respectively. Between 2018 and 2022, the enterprises wrote off about br. 14327.09 on average.

Graph 4.3: The level of receivable levels and irrecoverable debts



Source: Own Survey, 2023

A surprisingly significant number of small businesses, roughly 57.69% in the sample, examine their receivable levels and irrecoverable debts on a yearly basis, 19.23% on a semi-annual basis, and 11.54% on a monthly basis. As a result, small firms continue to use yearly periods, along with cash management procedures, to examine receivable levels and unrecoverable debts.

4.4. Analysis and Discussions of financial data

In this research, two types of analyses are used: descriptive and quantitative. This section discusses the findings from these two types of analyses.

Descriptive analysis displays the mean and standard deviation of the study's variables of interest. It also displays the variables' lowest and highest values, making it easier to visualize the highest and least values that a variable can achieve.

Table 4.8 presents descriptive statistics for 149 Ethiopian SME firms over a five-year period from 2018 to 2022, with a total of 745 firm year observations.

Table 4.8: Descriptive Analysis of the variables

Descriptive Statistics					
	N	**Minimum**	**Maximum**	**Mean**	**Std. Dev.**
ACP	745	3.64	20.63	12.7085	4.56179
APP	745	.16	82.22	7.0639	15.18590
CCC	745	-62.16	18.40	5.6427	14.60413
CR	745	.10	1.07	.9933	.16222
DR	745	.94	10.13	1.2570	1.59304
LOS	745	3.22	5.49	4.3092	.60856
NOP	745	-.18	.05	-.0091	.04390

Source: STATA output from financial statement of sample firms 2018-2022

Net operating profitability averages -0.91% of total assets, with a standard deviation of 4.39%. This suggests that profitability can vary by 4.39% on either side of the mean. A company's net operating profitability might be as high as 5% or as low as -18% in a given year.

The average cash conversion cycle, used as a proxy to analyze the efficiency of working capital management, is 564 days, with a standard deviation of 1460. Firms receive payment for sales after an average of 1270 days, with a standard deviation of 456 days. A company's lowest time to recover cash from receivables is one day, and its maximum period is 654 days. Firms wait an average of 60 days for their purchases to be paid, with a 99-day standard deviation. In this situation, a company's minimum time is 0.25 days, which is rare, while its maximum time is 900 days.

The natural logarithm of sales is employed as a control variable to investigate the firm's size and relationship with profitability. The average value of the log of sales is 4.30, with a standard deviation of 0.60. The maximum value of a company's sales log in a year is 5.49, while the least value is 3.22. A classic measure of liquidity (current ratio) is often used to assess the liquidity of organizations. The average current ratio among Ethiopian SMEs is 0.99, with a standard

deviation of 0.16. A company's maximum current ratio in a given year is 1.07 times, and its lowest ratio is 0.10.

The debt ratio (calculated by dividing the company's total debt by its total assets) is used as a control variable to investigate debt financing and its impact on profitability. According to descriptive statistics, the sample SMEs' average debt ratio is 1.25, with a standard deviation of 1.59. A company's maximum debt financing is 10.13, which is uncommon however may be possible if the company's equity is negative. The debt ratio must be at least.94.

4.4.1. Quantitative Analysis

There are two ways for quantitative analysis. Correlation is originally used to determine the strength of relationship between the variables under examination. Because the problem is influenced by various variables, the researcher has selected the most important working capital management aspects. Pearson and Spearman correlations have been calculated for each study variable.

4.4.1.1. Pearson’s Correlation Coefficient Analysis

Pearson's Correlation analysis is used using data to identify the relationship between variables such as working capital management and profitability. If good working capital management boosts profitability, there should be a negative correlation among working capital management metrics and the profitability variable. Gross profitability is negatively correlated with working capital management metrics. This is consistent with the concept that the time lag between spending on raw materials and receiving sales of completed goods might be excessive, and that minimizing this time lag promotes profitability.

Table 4.9 Correlations between variables

	Pearson's Correlation Coefficients							
		ACP	**APP**	**CCC**	**CR**	**DR**	**LOS**	**NOP**
ACP	Pearson Correlation Sig.(2-tailed)	1	.275 .121	.026 .885	-.281 .113	.258 .148	-.002 .993	-.410(*) .018
APP	Pearson Correlation Sig.(2-tailed)		1	-.954(**) .000	.103 .568	-.059 .743	-.271 .128	-.298 .092(*)
CCC	Pearson Correlation Sig.(2-tailed)			1	-.195 .277	.142 .430	.281 .113	-.438(*) .011
CR	Pearson Correlation Sig.(2-tailed)				1	-.991(**) .000	.155 .388	.724(**) .000
DR	Pearson Correlation Sig.(2-tailed)					1	-.167 .354	-.702(**) .000
LOS	Pearson Correlation Sig.(2-tailed)						1	.086 .633
NOP	Pearson Correlation Sig.(2-tailed)							1

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

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

Source: STATA output from financial statement of sample firms2018-2022

The researcher has started to examine the outcomes of the association between average collection period and net operational profit. Correlation analysis produces a negative correlation - 0.410, with a p-value of 0.018. It implies that the finding is extremely significant at. = 5%, and that increasing the average collecting period will have a negative influence on profitability, causing it to fall.

The correlation results between payable turnover in days or average payment period and net operating profitability are substantial, with a p-value of (0.092). Again, at a significance level of 10%, the coefficient is negative and highly significant. This means that less lucrative enterprises must pay their obligations later.

The cash conversion cycle, a comprehensive measure of working capital management, has a negative coefficient of 0.439 and a p-value of (0.011). However, it is significant at p = 5%. It means that if the company can shorten the time it takes to collect cash, also known as the cash conversion cycle, it can boost its profitability.

According to the results, it is feasible to conclude that if a corporation is able to shorten these time periods, it is efficient in managing working capital. This efficiency will lead to higher profitability. The current ratio is a conventional indicator of a company's liquidity. This study found a substantial positive association between the current ratio and profitability (as defined by net operational profitability). The coefficient is 0.724, with a p-value of 0.000. The finding is statistically significant at p = 1%. It shows a strong positive association between the two objectives of liquidity and profitability.

The table obviously reveals a significant negative association between the firm's debt ratio and profitability, with a coefficient of -0.702 and a p-value of (.000). The finding is significant at p = 1%, implying that increasing a company's debt ratio reduces its profitability. It is critical to recognize the positive association between NOP and LOS (size measurements). As a result, size appears to be a favorable predictor of profitability. However, with a coefficient of 0.086 and a p-value of (.633), such a link is not significant. It indicates that as the firm's size increases, so does its profitability, albeit not much.

A negative association between the number of days accounts payable (average payment term) and profitability supports the idea that less profitable businesses pay their debts later. This link is statistically significant at 10%, with a coefficient of -0.298 and a p-value of (.092). In this circumstance, profitability has an impact on accounts payable policy, and vice versa. Accelerating payment to suppliers may boost profitability because companies usually obtain a considerable discount for timely repayment.

Pearson's correlation also reveals a significant negative association between the average payment

time and the cash conversion cycle (correlation coefficient = -0.954, p-value =.000). The value of that ratio is particularly important at. = 1%, implying that if a corporation takes longer to pay its debts, it's operating or cash conversion cycle will lengthen.

4.5. Heteroskedasticity test

The homoscedastic error term is one of the classical liner regression models (CLRM) assumptions that must be met for the OLS estimator to function efficiently. The homoscedastic assumption was met when the variance of the disturbance term was constant and consistent across all observations. If the disturbance factors do not have a constant variance across all observations, the homoscedasticity condition is violated. The breach of this premise is referred to as heteroscedasticity. If heteroscedasticity exists in the model, the least squares estimators remain unbiased (consistent), but the Gauss-Markov theorem is violated, resulting in an unnecessary bigger confidence range. As a consequence, both the t-test and f-test yield incorrect findings because of overestimation of variance the t-test will be smaller and statistically insignificant, leading to the wrong conclusion. Gujarati (2004). There are various tests available to detect violations of this premise. This study used the Breusch-pagan test to determine the presence of heteroscedasticity in the model.

H0: There is homoscedasticity (no heteroskedasticity problem)

H1: There is heteroskedasticity

Table4.10Heteroskedasticitytest

Breusch-Pagan/Cook-Weisberg test for heteroskedasticity
Ho:Constant variance

Variables:fitted values of NOP
chi2(1) = 2.66
Prob>chi2 = 0.1030

Source:STATAoutputfromfinancialstatementofsamplefirms2018-2022

As shown in table 4.3, the outcome of the heteroscedasticity test is a p-value of 0.1030, which exceeds 0.05. As a result, the null hypothesis of homoscedasticity fails to reject at the

5% level of significance. This means that there is no identified indication of heteroscedasticity in the model.

4.6. Regression Analysis

The researcher used regression analysis to determine which variables influenced the dependent variable. Panel data (pooled) regression mixes and estimates both time series and cross-sectional data. In other words, in a panel data collection, many cross-sectional units are observed across time. Panel data is useful for analyzing alteration patterns because it can identify and quantify affects that are not evident in pure cross-sections or time series data. Furthermore, many factors can be quantified more precisely at the micro level, removing biases produced by grouping of enterprises or individuals. The study used regression analysis to evaluate how working capital management affects profitability. Profitability determinants are determined using the pooling least squares method.

Regression Model

For all 745 firm-year observations, the factors that determine of net operating profitability are examined. For each independent variable, a number of different regression coefficients are estimated. The regressions are computed without weights using the ordinary least squares method.

In the first regression the model that is applied is as follows:

Table 4.11. Regression result

NOP it =β0 + β1 (ACP it) + 2 β (LOS it) + 3 β (CR it) + 4 β (DR it) + ε (Eq. 4.1)

R2 = 0.903; S.E.E. = 0.021; F = 65.16 Regression Equation (A): Net Operating Profit = -0.091 –3.7E-005ACP + 0.01 LOS + 0.1 CR - 0.51 DR + 0.021					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.091	.203		-.451	.656
ACP	-3.72E-005	.000	-.263	-4.227	.000
CR	.103	.176	.260	.588	.561
DR	-.051	.018	-1.251	-2.848	.008
LOS	.010	.006	.097	1.618	.017

Dependent Variable: net operating profitability Independent Variables: ACP, LOS, CR and DR

S.E.E. = Standard Error of the Estimate

Source: STATA output from financial statement of sample firms 2018-2022

The results of this regression show that the average collection period coefficient is negative and highly significant at = 1% and a p-value of (.000). It suggests that a company's profitability is greatly impacted by changes in the duration of time it takes to collect payment. This negative relationship can be extended to state that as the number of days required to recover cash from credit consumers increases, the firm's profitability will suffer.

The researcher employed the current ratio as a proxy for leverage; it has a significant positive relationship with the dependent variable, meaning that as the firm's leverage increases, so does its profitability. The coefficient of this variable indicates that for every one percent increase in the current ratio, there is a 0.103 percent gain in profitability at a highly significant level of one percent.

The Debt ratio was used as a proxy for leverage; it has a substantial negative connection with the dependent variable, meaning that as the firm's leverage increases, its profitability falls. The coefficient of this variable suggests that for every one percent increase in the debt ratio,

profitability may fall by 0.051 percent at an exceptionally significant level of 1%.

Furthermore, using the log of sales as a proxy for firm size results in a significant positive link with a coefficient of 0.01 and a p-value of 0.017 at the 5% significance level. This means that for every unit rise in the log of sales, the firm earns $0.01. This shows that larger enterprises are more profitable than smaller firms.

The adjusted R2, also known as the coefficient of multiple determinations, is 90.3%. It is the proportion of the dependent's variance explained by the independent variables, either alone or in combination. This shows that the independent variables ACP, CR, DR, and LOS can explain 90.3% of the variance in net operational profitability.

The constant C is the point at which the regression line crosses the y axis and reflects how much the dependent y will be if all of the independent variables are zero. C is -0.091 in this situation, suggesting a substantial coefficient. The F statistic is used to assess R's significance. In general, the model is significant, as indicated by an F-statistic of 65.16 and a p-value of 0.000.

The second regression is done with the average payment period as an independent variable instead of the average collection period. The other variables are identical as in the first regression. The equation for the model is given as follows:

Table 4.12. Regression result

$$NOP\ it = \beta 0 + \beta 1\ (APP\ it) + 2\ \beta\ (LOS\ it) + 3\ \beta\ (CR\ it) + 4\ \beta\ (DR\ it) + \varepsilon \qquad \text{(Eq. 4.2)}$$

R2 = 0.85; S.E.E. = 0.026; F = 41.25 Regression Equation (B): Net Operating Profit = -0.4 – 5.5E - 006APP + 0.006 LOS + 0.074 DR + 0.36 CR + 0.026					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.402	.250		-1.604	.120
APP	-5.45E-006	.000	-.130	-2.633	.074
CR	.362	.223	.909	1.629	.115
DR	.074	.023	1.812	3.258	.003
LOS	.006	.008	.055	2.718	.079

Dependent Variable: net operating profitability Independent Variables: APP, LOS, CR and DR

S.E.E. = Standard Error of the Estimate

Source: STATA output from financial statement of sample firms 2018-2022

The result shows that the coefficient of average payment period is negative and significant at.= 10%, implying that an increase or decrease in the average payment period has a significant negative impact on the firm's profitability. The opposite correlation between average payment period and profitability indicates that less profitable firms pay their financial obligations later.

The firm's size has a 10% favorable impact on profitability, as does the typical payment period. However, unlike the average payment time, the size of a firm has a positive impact because it is obvious that firm size leads to enterprise growth. Furthermore, it is apparent that when small enterprises become more efficient, they will grow into medium-sized businesses. This variable has a beta coefficient of 0.006.

The debt ratio has a p-value of 0.003 and coefficient of 0.074. This suggests that a change in the firms' financial leverage has a large negative impact on their profitability, whereas the current ratio has an insignificant positive impact on profitability (p-value = 0.114, coefficient = 0.36). Despite having a lower coefficient than the current ratio, the debt ratio adds extra to the models due to its higher absolute standardized coefficient of 1.812.

R2 adjusted: 85.5%. The model explains 85.5% of the variance in net operational profitability.

The F-statistic is 41.25, with a model significance level of (.000). It also reflects the model's relevance.

In the third regression, the cash conversion cycle is employed as an independent variable rather than the average collection and payment periods. It is a thorough evaluation of working capital oversight effectiveness. The other variables remain unchanged from the first two regressions. The model that was utilized is given below:

Table 4.13. Regression result

NOP it =β0 + β1 (CCC it) + 2 β (LOS it) + 3 β (CR it) + 4 β (DR it) + ε ---------- (Eq. 4.3)

R2 =0.843; S.E.E. = 0.027; F = 37.6 Regression Equation (C): Net Operating Profit = -0.35 – 2.2E-006CCC + 0.008 LOS - 0.068 DR + 0.3 CR + 0.027					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.350	.269		-1.301	.204
CCC	-2.24E-006	.000	-.272	-2.032	.052
CR	.303	.239	.761	1.268	.215
DR	-.068	-.024	1.669	-2.810	.009
LOS	.008	.009	.075	2.933	.035

Dependent Variable: net operating profitability Independent Variables: CCC, LOS, CR and DR

S.E.E. = Standard Error of the Estimate

Source: STATA output from financial statement of sample firms 2018-2022

Using the cash conversion cycle as an independent variable, the results show that the coefficient of the cash conversion cycle is negative and significant at = 10%, meaning that changes in the cash conversion period have a significant impact on the company's profitability. The longer a company's cash conversion period, the less profitable it becomes. The t-statistic also shows that it is less than -2, implying that it is significant.

Increased sales improve profitability. It has a p-value of 0.035 and affects business profitability by 0.008 at a time, making it statistically significant at 5%. The other control variable, the debt ratio, has a major negative impact on the firm's profitability. With a p-value of 0.009 and a t-stat of less than -2, this variable has the potential to reduce earnings by 0.068 for each unit change.

The variables account for 84.3% of the variance in the model (the adjusted R2 is 84.3%). The F-statistic value of 37.6 indicates the model's high significance. The independent variables are regressed independently using the pooling least squares method. Individual regression for each variable demonstrated a statistically significant impact on profitability. In general, the pooled least squares results support the same conclusion, namely that working capital management influences business profitability. If a corporation manages its working capital effectively, it can increase its profitability.

It is also conceivable to assume that liquidity and profitability follow opposite trends. And there is a need to maintain a balance between the firm's two goals. It is also acknowledged that expanding a company's debt financing will reduce profitability with regard of financial costs. The firm's size has a direct positive correlation with its profitability. As the firm's size (measured in terms of log of sales) increases, so does its profitability.

CHAPTER FIVE

CONCLUSIONANDRECOMMENDATIONS

5.1. Chapter introduction

In general, this chapter concludes with a section on the title of the research, additional discoveries, recommendations for the research findings, and limitations of the research findings. It also focuses on the main findings of the research summary.

5.2. Summary and Conclusion

Working capital management focuses on a company's risk and profitability. Inadequate working capital management leads to too much investment in working capital, lowering the firm's profitability and putting it at danger. In light of these facts, the current study aimed to provide empirical evidence on the impact of working capital management on a sample of small and medium-sized businesses' profitability.

To achieve this, a panel data analysis for SMEs was conducted using a sample of Addis Ababa-based enterprises. From 2018 to 2022, data on 149 SME cooperatives in the Arada sub-city were collected and analyzed descriptively and statistically.

The optimum amount of working capital, which strikes a balance between risk and profitability, is determined by both internal organizational traits and external influences.

Working capital management is especially important for small and medium-sized organizations. Current assets account for the vast majority of these companies' assets. Furthermore, current liabilities are one of their main sources of external financing.

As demonstrated by the correlation and regression studies, attractive working capital administration methods can boost small business profitability, therefore owner managers are advised to adopt adequate working capital management tools.

- ✓ Inadequate working capital will cause cash flow concerns, failure to pay vendors on time, and the inability to claim discounts for prompt repayment. Conversely, if an excessive amount of resources dedicated to working capital will result in a lower than anticipated rate of return on investment.

- ✓ The findings indicate that for the whole SME sector, Working Capital Management has a major impact on company profitability and plays an important role in value creation, since a longer Cash Conversion Cycle and average collection duration reduce a business's Net Operating Profitability.
- ✓ Working capital management performs a crucial role in generating value for small and medium-sized organizations. The findings are similar with earlier research on large enterprises (Jose et al., 2016; Shin and Soenen, 2018; Wang, 2012; Deloof, 2013) and small firms (Lazaridis and Tryfonidis, 2001; Garcia and Solano, 2013; Mathuva, 2018).
- ✓ The Cash Conversion Cycle and average collection period are simple and effective tools for assessing working capital efficiency in management. To be profitable, businesses have to attempt to keep the number of days account receivable and the number of days required to transform operations to cash to a lowest point.
- ✓ The amount of days accounts payable and SME profitability are significantly correlated negatively. Suggesting that businesses become less profitable the longer it takes them to pay down their debts.
- ✓ It is anticipated that there will be a negative correlation between firm profitability and liquidity measurements like the current ratio. However, this research found a significant correlation between net operational profitability and current ratio, suggesting that small businesses with higher liquidity ratios do better than those with lower ratios. Additionally, empirical studies have discovered both a positive and negative correlation between profitability and the current ratio.
- ✓ The study discovered a positive, albeit non-statistically significant, correlation between the size of the company (represented by the sales logarithm) and net operating profit.

The sample size and time constraints of the investigation could have influenced the results. In the future, Ethiopia will have significant challenges in terms of working capital. The researcher proposes conducting additional research on the same topic with different companies and extending the sample years. More research may be undertaken on the management of working capital components such as cash, marketable securities, receivables, and inventory.

5.3. Recommendations

According to the results and their conclusions, the researcher recommends that the managers and employees of these small firms, as well as the government, undertake the following basic functions.

- Improve business performance by keeping the number of days in account receivable and the Cash Conversion Cycle to a reasonable limit. As a result, effective working capital finance and management (current assets and liabilities) can help SMEs increase their operating profitability. To be lucrative, firms must slow down their payments. In order to manage cash, finance managers ought to anticipate cash inflows and outflows. Maximize the benefits of excess income that isn't needed right immediately, while minimizing losses caused by money transmission delays.
- The researcher recommends that firm's managers establish effective receivables management practices and regulate their receivable and uncollectable balances as soon as feasible to improve working capital management.

According to the study's findings, working capital management has an impact on SMEs' performance but is not applied properly. Working capital management must be prioritized to boost SMEs' performance.

Moreover, it has been established that each SME cooperative should hire qualified finance personnel for expert supervision in order to manage working capital efficiently.

The results of this research also demonstrated that traditional working capital management techniques have minimal application among Ethiopian SMEs, which often rely on the experience of their owner managers. Owner managers of small enterprises have the persistent difficulty of low financial management skills, which the government can address by encouraging owners to educate themselves. The Arada sub-city can strengthen the capacity of institutions that offer small business training.

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Appendix

Dear respondents

This questionnaire was created by a prospective postgraduate accounting and finance student at Addis Ababa University in Ethiopia. This study examines the impact of working capital management on the profitability of small and medium-sized businesses in Addis Ababa's Arada sub-city, as required for the master's degree in accounting.

I would greatly appreciate your genuine responses to the given questions. Similarly, I would want to pledge in advance that I would only use your information (your response) for the intended purpose. I respectfully want your assistance in filling out the questionnaire. I assure you that any information gathered will be kept confidential.

N.B. Please mark (x) the box or type your feedback in the space provided.

Part I: Enterprise Level Basic Information

1.1. Name of the enterprise _____

1.2. Address: Woreda _____Kebele _____House No. _____Telephone_____

1.3. When did this business start?(Year)_____

1.4. Education level of respondents.

12complete ☐ Preparatory complete ☐ College diploma ☐

Degree ☐ Above degree ☐ Other _____

1.5. Position/area of responsibility

Cashier ☐ owner ☐

Internal auditor ☐ Finance head ☐ other, specify_

1.6. For how long you have served in your current position/experience in this areas of ar.

Below 1 year ☐ 7-10 years ☐

1-3years ☐ 4-6years ☐ above ten years ☐

1.7. What industry is your company in?

Trade ☐ Manufacturing ☐

Services ☐ other (specify)_____

1.8. Form of ownership

Individual proprietorship ☐ Partnership ☐ Share Company ☐

Private Limited Company ☐ other (specify) _____

1.9. How many employees are there?

Type of employment	***Female***	***Male***
Fulltime		
Part time		
Paid family members		
Unpaid family members		

PART II: Information on Entrepreneurial Capacity, Resources for startup.

2.1. What was your main source of start-up funding?

Personal saving ☐ household ☐

Micro-finance institutions ☐ Assistant from NGO‟s ☐

Equb ☐ Inheritance ☐

Borrowed from Bank Borrowed from relatives or friends ☐

Others (specify) _____ ☐

2.2. What equipment or other assets did you have (have access to) when starting/creating the enterprise?

_____

_____

2.5 What were the three main challenges you encountered when starting or running your business?

1. lack of confidence to take riskier business ☐
2. lack of adequate working capital ☐
3. Lack of managerial skill (record keeping, marketing, project idea generation etc.) ☐
4. problem of working space or sales outlet ☐

5. others (Specify) _____

2.6 Has there been any temporary closure of your business in the last two years?

Yes ☐ No ☐

2.7 IfYestoQ.2.6why?

_____

_____

_____

_____

PARTIII: Questions related with Cash management practices

3.1. Do you keep your business and personal funds apart?

Yes ☐ No ☐

3.2. Do you have a growth strategy?

Yes ☐ No ☐

3.3. Do you incorporate cash budget in the growth strategy?

Yes ☐ No ☐

3.4. If yes on 3.3, what basis do you prepare cash budget? Monthly Quarterly

Semiannually ☐ Annually ☐

For two years ☐ Other, specify_____

3.5. How do you rate the effectiveness of cash planning (budget) practice in your company? Very effective ☐ Moderately effective ☐

Less effective ☐ Very less effective ☐ Not effective ☐

3.6. If your answertotheabovequestionis"lesseffective"or"verylesseffective"would you please explain the reason why?

_____

_____

_____

3.7. If your answer the above question is "effective" or "very effective" would you please explain the how?

_____

_____

3.8. How do you determine your target cash balance?

1. Using theories ☐
2. Through owner managers experience ☐

3.9. If your answer to question no. 3.8 is 1. Which theories of cash management did your business use?

_____

_____

_____

3.10. Have you ever experienced cash shortages before?

Yes, always ☐ Yes, usually ☐

Yes, rarely ☐ Non ever ☐

3.11. If yes, would you please explain how your company handles cash shortages whenever they occur?

_____

3.12. Have you ever experienced cash surplus before?

Yes, always ☐ Yes, usually ☐

Yes, rarely ☐ Non ever ☐

3.13. If yes, how do you invest this surplus amount of Cash?

Deposit in the bank for interest ☐

Expand the business ☐

Buy money market instruments/short term investment instruments ☐

Others specify_____

3.14. Areallcashpaymenttransactionsbeingcheckedandapprovedbytherightpersonbefore effected?

Yes ☐ No ☐

3.15. If yes, how do you rate the approval process?

Very strong ☐ moderately strong ☐

Strong ☐ Weak ☐ Very weak ☐

3.16. Are all cash payment transactions promptly recorded?

Yes ☐ No ☐

3.17. How does your company effect cash payment?

By check ☐ By cash ☐ others specify_____

3.18. Is the cash payment system used by the company appropriate?

Yes ☐ No ☐

3.19. If no what is the problem?

_____

_____

_____

_____

3.20. Are all cash receipt transactions being checked and approved by the right person before effected?

Yes ☐ No ☐

3.21. If yes, how do you rate the approval process?

Very strong ☐ moderately strong ☐

Strong ☐ Weak ☐ Very weak ☐

3.22. Are all cash receipt transactions promptly **recorded?**

Yes ☐ **No** ☐

PART IV: Questions related with Receivable management practices

4.1. Did you sell on credit?

Yes ☐ No ☐

4.2. IfyestoQ.4.1, do you Establish credit limit for each customer? Yes ☐ No ☐

4.3. IfyestoQ.4.1, what is the maximum credit limit for a customer?

Specify, _____

4.4. If yes to Q.4.1 how often you review these limits?

Specify, _____

4.5. What procedures do you use for handling late payments?

Specify,_____

_____

_____

4.6. If yes, what credit policy do you have to assess the credit performance of your customers?

Credit agency checks	☐	Firm size	☐
Trade references	☐	Achievement of cash collection targets	☐
No policy	☐	others, specify_____	

4.7. How often do you review your level of receivables and irrecoverable debts?

Once in a month	☐	Half a year	☐
Yearly	☐	Others, specify_____	

4.8. Howdoyouratetheadequacyofreceivablescollectioneffortofyourcompany? Very adequate ☐ Less adequate ☐

Somehow adequate ☐ Very less adequate ☐

Not adequate ☐

4.9. Are all credit sales of your company being checked and approved by the right person (authority) before being effective?

Yes ☐ No ☐

4.10. If yes, how do you rate the strength of the approval procedure?

Very strong	☐	Moderately strong	☐
Weak	☐	Very weak	☐