ADDIS ABABA UNIVERSITY
SCHOOL OF BUSINESS AND PUBLIC ADMINISTRATION
DEPARTMENT OF ACCOUNTING AND FINANCE
GRADUATE STUDIES

IMPACT OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY OF SMALL AND MEDIUM SCALE ENTERPRISES (SMES) IN ADDIS ABABA

(The Case of Nifas-Silk-Lafto and Kirkos Sub Cities)

BY
EPHREM WOLDU

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A THESIS SUBMITTED TO SCHOOL OF BUSINESS AND PUBLIC ADMINISTRATION OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE MASTERS OF SCIENCE (MSC) IN ACCOUNTING AND FINANCE

Advisor: Venkati Ponnala (Dr.)

June, 2011
Addis Ababa University

ADDIS ABABA UNIVERSITY

SCHOOL OF BUSINESS AND PUBLIC ADMINISTRATION

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By

Ephrem Woldu

Department of Accounting and Finance

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Declaration

I, the undersigned, declare that this study titled "Impact of working capital management on profitability of Small and Medium Scale Enterprises (SMEs) in Addis Ababa" is my original work and has not been presented for a degree in any other university, and that all sources of materials used for the study have been accordingly acknowledged.

Declared by:

Name Ephrem Woldu

Sign

Date June 23, 2011

Confirmed by Advisor:

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Date 23/06/2011

CERTIFICATION

I certify that the thesis work entitled "Impact of working capital management on profitability of small and medium scale enterprises (SMES) in Addis Ababa" is genuine work of Mr. Ephrem who carried out the research under my guidance. Certified further, that to the best of my knowledge the work reported here in doesn't form part of any other project report or dissertation on the bases of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Place: *Addis Ababa*

Signature: 

Date: June 2011

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Abbreviations

ADLI: Agricultural Development Led. Industrialization

ANOVA: Analysis of variance

APEC: Asia-Pacific Economic Cooperation

CSA: Central Statistical Authority

EC: European commission

FDRE: Federal Democratic Republic Of Ethiopia

FeMSEDA: Federal Micro and Small Enterprise Development Agency

GVP: Gross value production

GDP: Gross Domestic Product

GTZ: German Technical Cooperation

IFC: International Finance Corporation

ILO: International Labor Organization

MIGA: Multilateral Investment Guarantee Agency

MOFED: Ministry of Finance and Economic Development

MSMEs: Micro small and medium enterprises

MTI: Ministry of Trade and Industry

NGO: Non-Governmental Organizations

ReMSEDA: Regional Micro and Small Enterprise Development Agency

SACCOs: savings and credit cooperatives

SME's: Small and medium Enterprise's

SPSS: statistical package for social science

UNIDO: United Nations International Development Organization

USAID: United States Agency for International Development

WCM: Working capital management

WISE: organization for women in self employment.

ABSTRACT

Small and medium enterprises occupy a prominent position in the development agenda of many developing countries like Ethiopia. The number of SMEs in Ethiopia is steadily growing. But, much more important than their number is their current status, stage and pace of development. Despite the tremendous increase in number of SMEs, little research exists that examines working capital management of small and medium enterprises (SMEs) in developing countries, especially in Ethiopia.

The purpose of the study is to identify the impact of working capital management on the performance of the SMEs in Nifas silk and Kirkos sub cities and to give recommendations based on the problems. In doing so both Primary and secondary data was collected from 30 SMEs in those Sub cities of the capital city; Addis Ababa. The primary data was collected through the use of questionnaires and secondary data was gathered from the financial statements of the enterprises. The population of the study includes all SME's operating within organization for women in self employment (WISE). Data analysis was done using descriptive statistics and quantitative methods (correlation and regression).

The findings of the paper suggest that working capital is negatively affected by the time period required by the enterprises to receive their debts, pay their bills and collect cash. Beside that the financial leverage, size and current ratio of those SME's under study have impact on the availability of adequate working capital requirements.

Key words: net operating profitability, small and medium enterprises, working capital management

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

Working capital management is a very important component of corporate finance because it directly affects the liquidity and profitability of the company. It deals with current assets and current liabilities. Excessive levels of current assets can easily result in a firm's realizing a substandard return on investment. However firms with too few current assets may incur shortages and difficulties in maintaining smooth operations (Horne and Wachowicz, 2000). Efficient working capital management involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet due short term obligations on the one hand and avoid excessive investment in these assets on the other hand (Eljelly, 2004).

Working Capital Management is a very sensitive area in the field of financial management also (Joshi, 1994). It involves the decision of the amount and composition of current assets and the financing of these assets. Current assets include all those assets that in the normal course of business return to the form of cash within a short period of time, ordinarily within a year and such temporary investment as may be readily converted into cash upon need.

Small businesses are viewed as an essential element of a healthy and vibrant economy. They are seen as vital to the promotion of an enterprise culture and to the creation of jobs within the economy. Small and Medium-Sized Enterprises (SMEs) are believed to

provide an impetus to the economic progress of developing countries and its importance is gaining widespread recognition. Equally in Ethiopia the SMEs occupy a central place in the economy. Currently, the existing 1.8 million SMEs are able to create jobs for only 2.2 million people.

Storey (1994) notes that small firms, however, they are defined, constitute the bulk of enterprises in all economies in the world. However, given their reliance on short-term funds, it has long been recognized that the efficient management of working capital is crucial for the survival and growth of small firms (Grablowsky, 1984; Pike and Pass, 1987). A large number of business failures have been attributed to inability of financial managers to plan and control properly the current assets and current liabilities of their respective firms (Smith, 1973).

The Working Capital Management of a firm in part affects its profitability. The ultimate objective of any firm is to maximize the profit. But, preserving liquidity of the firm is an important objective too. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm. Therefore, there must be a tradeoff between these two objectives of the firms. One objective should not be at cost of the other because both have their importance. If we do not care about profit, we cannot survive for a longer period. On the other hand, if we do not care about liquidity, we may face the problem of insolvency or bankruptcy. For these reasons working capital management should be given proper consideration and will ultimately affect the profitability of the firm.

1.2. Purpose of the study

The corporate finance literature has traditionally focused on the study of long-term financial decisions, particularly investments, capital structure, dividends or company valuation decisions. However, short-term assets and liabilities are important components of total assets and need to be carefully analyzed. Management of these short-term assets and liabilities warrants a careful investigation since the working capital management plays an important role in a firm's profitability and risk as well as its value (Smith, 1980). Efficient management of working capital is a fundamental part of the overall corporate strategy in creating the shareholders' value. This traditional view of focusing more on long term financial decisions recently also incorporate short-term assets and liabilities. Recent works of Deloof, 2003; Howorth and Westhead, 2003 and Afza and Nazir, 2007, state that small firms try to keep an optimal level of working capital that maximizes their value.

Working capital management is of particular importance to the small business. With limited access to the long-term capital markets, these firms tend to rely more heavily on owner financing, trade credit and short-term bank loans to finance their needed investment in cash, accounts receivable and inventory. However, the failure rate among small businesses is very high compared to that of large businesses. Studies in the UK and the US have shown that weak financial management - particularly poor working capital management and inadequate long-term financing - is a primary cause of failure among small businesses (Dunn and Cheatham, 1993).

The success factors or impediments that contribute to success or failure are categorized as internal and external factors. The factors categorized as external include financing (such as the availability of attractive financing), economic conditions, competition, government regulations, technology and environmental factors. While the internal factors are managerial skills, workforce, accounting systems and financial management practices. Some research studies have been undertaken on the working capital management practices of both large and small firms in India, UK, US and Belgium using either a survey based approach (Burns and Walker, 1991; Peel and Wilson, 1996) to identify the push factors for firms to adopt good working capital practices or econometric analysis to investigate the association between WCM and profitability (Shin and Soenen, 1998; Deloof, 2003).

Specific research studies exclusively on the impact of working capital management on corporate profitability of the small manufacturing companies are insufficient, especially for the case of Ethiopia. The financial management of small firms in developing countries, and in particular Ethiopia, is altogether an ignored area of research.

Keeping this in view and the wider recognition of the potential contribution of the SME sector to the economy of developing countries, this study is a modest attempt to measure and analyze the trend of working capital investment and its impact on SME's. This study, therefore, attempts to assess the impact of WCM on profitability of a sample of small and medium enterprises and its results are expected to contribute to the existing literature on working capital and SMEs.

The purpose of this research is, therefore, to contribute towards a very important aspect of financial management known as working capital management with reference to small and medium enterprises (SME's) of Ethiopia.

1.3. Objectives of the study

The discussion of the importance of working capital management, its different components and its effects on profitability leads to the problem statement which will be analyzed. The problem statement to be analyzed in this study is:

"Does Working Capital Management affect Profitability of small and medium enterprises in Ethiopia and particularly in Addis Ababa?"

To analyze this problem statement, the following objectives are developed. It is almost untouched in Ethiopia or very little research has been done in this area.

1.3.1. General objective

This research is focusing on working capital management and its effects on profitability for a sample of Ethiopian SME's.

1.3.2. Specific objectives:

- To establish a relationship between Working Capital Management and Profitability over a period of five years for 30 unions of small and medium enterprises found in Addis Ababa.
- To examine the impact of accounts receivables days, accounts payable days and cash conversion cycle on net operating profitability
- To establish a relationship between the two objectives of liquidity and profitability.

- To find out the relationship between profitability and size of the firms.
- To find out the relationship between profitability with financial leverage and debt ratio of firms.
- To draw conclusion about relationship of working capital management and profitability of the firms.

1.4. Scope and Limitations of the study

The study recognized its scope as well as the limitation. This study will mainly focus on the impact of working capital management on profitability of the selected small and medium enterprises which are found in Addis Ababa. In doing so, sample of 30 SME associations where selected from the two sub cities of Addis Ababa namely Nifas-Silk-Lafto and Kirkos and analysis is done for five years. Therefore the study is limited to the small enterprises, specifically to the SMEs in Addis Ababa. The location is chosen because it is a center of agglomeration of business activities as a primate city due to paucity of other competitive growth centers within the country. Hence, many people from different parts of the nation migrate in search of employment opportunities or to start a business.

Because of the specific nature of their activities, firms in financial sector, banking and finance, insurance, leasing, business services, renting and other services are excluded from the sample. The result of the paper, therefore, is limited to those mentioned above enterprises in particular and could be generalized to all SME's in Ethiopia.

The topic under question needs much time and money to conduct and come up with important conclusions in detail about the impact of working capital management on profitability of SME's in Ethiopia.

1.5. Methodology

The primary aim of this paper is to investigate the impact of WCM on firm's profitability in the case of Ethiopian small and medium enterprises. In order to achieve this, similar empirical framework first used by Shin and Soenen (1998) and the subsequent work of Deloof (2003) is used as a methodology.

In their work Shin and Soenen examined the relationship between working capital management and profitability by using *correlation* and *regression analysis*. Using a sample of 58,985 firm years covering the period 1975-1994, they found a strong negative relationship between the length of the firm's cash conversion cycle and its profitability. To test the relationship between working capital management and corporate profitability, Deloof [5, p. 573] used a sample of 1,009 large Belgian small firms for a period of 1992-1996. By using *correlation and regression tests*, he found significant negative relationship between gross operating income and the number of days accounts receivable, inventories, and accounts payable of Belgian firms.

The recent work of Mathuva, a study conducted in the neighboring Kenya, used *Pearson and Spearman's correlations along with the pooled ordinary least square (OLS)*, and the

fixed effects regression models to conduct data analysis of a sample of 30 firms listed on the Nairobi Stock Exchange (NSE) for the periods 1993 to 2008.

Data Set & Sample

In this research both primary and secondary data are used as a method of collection of relevant information. The primary data is obtained through the use of questionnaires distributed to finance managers of each SME cooperatives. While secondary data is gathered mainly from the financial statements of the selected enterprises and from different source documents held in those business organizations. The enterprises in question are selected randomly and the sample is based on financial statements of these randomly selected 35 SME's. Finally, the firms with data of the number of day's accounts receivable, number of days accounts payable, cash conversion cycle and net operating income are included in the sample.

Variables

This study undertakes the issue of identifying key variables that influence working capital management of Ethiopian small and medium enterprises. Choice of the variables is influenced by the previous studies on working capital management. All the variables stated below are used including dependent, independent and some control variables:

- ✓ Net Operating Profitability (NOP): which is a measure of Profitability of the firm is used as dependant variable. It is defined as Operating Income plus depreciation, and divided by total assets minus financial assets.

- ✓ Average Collection Period (ACP): used a proxy for the Collection Policy is an independent variable. It is calculated by dividing account receivable by sales and multiplying the result by 365 (number of days in a year).
- ✓ Average Payment Period (APP): used as proxy for the Payment Policy is also an independent variable. It is calculated by dividing accounts payable by purchases and multiplying the result by 365.
- ✓ The Cash Conversion Cycle (CCC): used as a comprehensive measure of working capital management is another independent variable, and is measured by adding Average Collection Period with Inventory Turnover in Days and deducting Average Payment Period.
- ✓ Current Ratio (CR): which is a traditional measure of liquidity is calculated by dividing current assets by current liabilities

In order to account for firm's size and the other variables that may influence profits, the gearing ratio (financial debt/total assets), and the ratio of current assets to total assets are included as control variables in the regressions. The return on assets is a better measure since it relates the profitability of the business to the asset base. There are many ways of managing return on assets but, in principle, key levers are, of course, profit increase and assets reduction. The latter has become more important to many businesses as the former becomes more obscure.

All the above variables have relationships that ultimately affect working capital management. It is expected that there is a negative relationship between Net operating profitability on the one hand and the measures of Working Capital Management (number

of days' accounts receivable, accounts payable and cash conversion cycle) on the other hand. This is consistent with the view that the time lag between expenditure for the purchases of raw materials and the collection of sales of finished goods can be too long, and that decreasing this time lag increases profitability.

Analysis used in the Study

In this research two types of data analysis; descriptive and quantitative, are used.

Descriptive Analysis

Descriptive analysis is the first step in the analysis; it helps in describing relevant aspects of phenomena of cash conversion cycle and provides detailed information about each relevant variable. Research has already been conducted in this area of study and a lot of information is already on hand, and SPSS software is used for analysis of the different variables in this study.

Quantitative Analysis

In quantitative analysis two methods are applied:

First: the correlation models, specifically Pearson correlation to measure the degree of association between different variables under consideration.

Second: a Regression analysis to estimate the causal relationships between profitability variable, liquidity and other chosen variables.

Pooled Ordinary Least Squares is used for further analysis. The researcher used panel data in a pooled regression, where time-series and cross-sectional observations were combined and estimated. In other words, several cross-sectional units were observed over

a period of time in a panel data setting. For this purpose of analysis the E - views software is best to analyze financial data and especially in case of pooled data.

1.6. Organization of the paper

The paper is organized under five chapters. The first chapter deals with the problem and its approach, which includes background to the study, statement of the problem, research objectives, scope and limitations of the study, significance of the study and organization of the research report. The second chapter is exclusively devoted to the review of related literature on impact of working capital management from different countries perspective. Chapter three deals with the methods used to collect and analyze the data. Analysis and presentation of the findings of the study is described in chapter four. The last chapter, chapter five, presents the conclusions drawn from the findings, the recommendations made to address the problems uncovered, and the implications of the findings for future research, practitioners, government and other support agencies. All the reference materials used in the study are listed under bibliography.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. An Overview of SMEs

Definition and Scope

The term SME covers a wide range of definitions and measures, varying from country to country and between the sources reporting SME statistics. Some of the commonly used criteria are the number of employees, total net assets, sales and investment level. However, the most common definitional basis used is employment, and here again, there is variation in defining the upper and lower size limit of an SME (Meghana, Thorsten and Asli 2003). Financing agencies measure SMEs in terms of fixed assets; labor economists take the number of people engaged; traders might consider the volume of sale and manufacturers prefer to consider the energy use.

The first attempt to overcome problem of defining SMEs was given by the Bolton committee (1971 cited in Kayanula and Quartey 2000). According to the committee, a firm is regarded as small if it meets the following three criteria, such as, it has relatively small share of the market place, it is managed by owners in a personalized way management structure, it doesn't form part of a large enterprise.

The World Bank, USAID, and UNIDO also give alternative definitions. According to the World Bank (1976) firms with fixed assets (excluding) less than US 250,000 in value are small enterprises. According to USAID, firms with less than 50 employees are small while for UNIDO firms with 10 to 49 workers and have a registered capital of more than

$42,300 could be grouped in the category of small enterprises whereas Medium enterprises employ between 50 to 249 employees and have a registered capital of more than $42,300 (Rana and Farah Tukan 2007).

The MIGA and the IFC define small enterprises as those that meet two of the following three conditions: Less than 50 employees, less than $3 million total assets and less than $3 million total annual sales. Unlike the EC definition, the MIGA and IFC definition does not consider the staff headcount threshold mandatory for an enterprise to qualify as an SME.

The most common criterion used within the economies of APEC is the number of employed personnel within the business itself, therefore, APEC defines SMEs as enterprises with less than 100 people, whereby, a medium sized enterprise employs between 20 and 99 people, a small firm employs between 5 and 19, and a micro firm employs less than 5 employees which includes self employed managers. According to this definition, 75% of enterprises in APEC were micro, 21% were small, and 4% were medium during the period between 1990 and 2000.

In recent times, there has been some degree of convergence in SMEs definitions particularly in Europe. The European Commission defines SMEs using a combination of employee numbers, annual turnover or balance sheet total and ownership as those enterprises that employ fewer than 250 people and have annual sales not exceeding $67 million and/or total assets not exceeding $56 million (Hillary, 2000). However, the above convergence does not in any way suggest a common agreement of the specific numbers

in terms of these variables. To this end, different governments and writers in SMEs differ considerably. This difference is influenced largely by two factors.

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

A definition of SME in the developed world would differ from how SMEs is defined in the third world. Given the number of businesses in the United States of America (USA) and Europe, SMEs (if defined according to the number of employees and turnover) would be a definition adopted for large enterprise in Africa. For example, Fay (2000), Clarck (2000), the European Commission and the Organization for Economic Cooperation and Development (whose membership includes European and Asian countries like Japan) define SMEs as having below 250 employees. On the other hand, Ethiopia defines SMEs as having employees not exceeding 10 (CSA).

The second factor commonly used in defining SMEs is annual turnover. Again, the acceptable figures differ from country to country. For example, In the USA, the accepted definition of a small business is "an entity with average annual gross revenues for the preceding three years not to exceed $15 million, and very small business as an entity with average annual gross revenues for the preceding three years not to exceed $3 million" (Weaver, 1999). In Ethiopia, small enterprises defined in their paid up capital which is more than Birr 20,000 ($2,500) but not more than Birr 500,000 ($62,500).

b. Industry within which the SME is competing

Duncombe and Heeks (2001) categorized small enterprises into survivalist, trundlers and flyer classifications based on the industry with in which they are competing.

Survivalists are defined as those enterprises, ***which have no choice,*** but to take up the income-generating activity because they have no other source of livelihood. The enterprise is mainly meant to keep the business owner alive. Income provided may be poverty line or even sub-poverty-line. They argue that most of 'entrepreneurs' in less developed countries are of this type.

Trundlers are defined as those enterprises whose turnover is roughly static and who show no great desire or no great capacity to expand. Income provided will be enough to meet basic needs. They also argue that such enterprises form the second-largest group of small entrepreneurs in Less Developed Counties.

Flyers are defined as those true entrepreneurs who have taken up enterprise because they see opportunities for growth. Income levels may meet more than basic needs, and enterprises may graduate to the medium-scale category. Only a very small proportion of Less Developed Countries small entrepreneurs fall into this category.

The Ethiopian situation

The Central Statistical Authority of Ethiopia (2003) based its definition of SMEs on the size of employment and extent of automation for small scale enterprises and used a combination of these criteria for defining such enterprises. It defines small scale enterprises as "establishments engaging less than 10 persons and power driven machines" (CSA 2003:2). According to Andualem (1997), small scale enterprises are defined as business activities that are independently owned which are managed by the owner employing 6-49 persons.

Recognizing that there are no standard definitions of SMEs and that their definitions vary from country to country depending largely on the size of the economy, the levels of development, culture and population size of a country involved, a working definition for the purposes of this paper is one given by the Ministry of Trade and Industry and Central Statistical Authority (CSA) which defines enterprises according to the number of employees and paid up capital. Ministry of Trade and Industry adopted official definition of Micro and a Small enterprise in Ethiopia is as follow: Micro enterprises are business enterprises found in all sectors of the Ethiopian economy with a paid-up capital (fixed assets) of not more than Birr 20,000, but excluding high-tech consultancy firms and other high-tech establishments. Small Enterprises are business enterprises with a paid-up capital of more than Birr 20,000 ($2,500) but not more than Birr 500,000 ($62,500) but excluding high-tech consultancy firms and other high-tech establishments (MTI 1997, Zewde and Associates 2002).

2.2. The role of MSMEs in the development progress of a country

Nowadays, it has been recognized that SMEs play an important role in the economic growth process of developing countries and it is believed that the success or failure of a transition economy can be traced in large part to the performance of its entrepreneurs (McMillan & Woodruff, 2002).

The entrepreneurs of these SMEs do not only create income for their households and families, but they generate income and employment for their apprentices and workers leading to bottom-up transition out of poverty for entrepreneurs and workers (Sievers &

Vandenberg 2007). Compared to large enterprises, SMEs are more labour intensive employing more labor per unit of capital than large enterprises (Kayanula & Quartey 2000). In addition to poverty alleviation, MSMEs contribute to the growth of a country by contributing welfare and generating wealth (higher incomes). The role of SMEs has also been emphasized in the context of achieving the United Nations Millennium Development Goals (MDG). Due to their small and perceived flexible nature MSMEs are expected to be able to withstand adverse economic conditions and survive where many large businesses would collapse (Aryeetey & Ahene, 2004). The flexible structure is also an advantage when it comes to adapting quickly to customers demands (Kayanula & Quartey 2000). It is further believed, that the formalization of informal business activities can contribute to increasing tax-incomes for the government and enable the government in the long run to invest the money, for instance, in health care and education systems.

Small businesses are viewed as an essential element of a healthy and vibrant economy. They are seen as vital to the promotion of an enterprise culture and to the creation of jobs within the economy (Bolton Report, 1971). Small Medium-Sized Enterprises (SMEs) are believed to provide an impetus to the economic progress of developing countries and its importance is gaining widespread recognition.

Equally in Ethiopia the SMEs occupy a central place in the economy contributing birr 2.79 billion to the Gross value of production (GVP) and adding a value of 1.14 billion birr to the gross domestic product (GDP) of the country in the fiscal year 2001(CSA 2010).

Challenges and constraints generally faced by MSMEs in developing countries

There are a number of variables influencing the performance and business success of MSMEs. The variables are interdependent and very often relate to each other.

Theoretical Framework

Business characteristics of MSMEs in developing countries

In developing countries, most business activities are very small, consisting very often of only one person. Since most enterprises are operating as one-person undertakings, the .largest employment category is working proprietors (Mead & Liedholm 1998). Unpaid family members support in many cases the businesses. Trainees and apprentices add a significant share of workers in some location, particularly in West Africa.

Another common characteristic among MSMEs is the fact that the majority of them operate in rural areas. Most of these rural enterprises are involved in manufacturing activities such as textiles and wearing apparel, food and beverages and wood and forest products. It has been observed, that there is a relationship between the possibility of expanding an enterprise and the location of the business: In contrast to their .urban counterparts, rural enterprises are less likely to expand. The limited access and proximity to growing urban markets is the reason why rural enterprises encounter greater difficulties in terms of expanding and surviving (Mead & Liedholm 1998).

Challenges and constraints

In order to operate successfully, SMEs have to overcome a number of obstacles which influence negatively the business performance. To set up a start-up enterprise, the entrepreneurs need to be able to get access to finance. The access to formal financial

schemes is very often a constraint to SMEs and thus entrepreneurs are dependent on informal sources of finance such as own sources, family and friends or savings and credit associations (which charge high interest rates). Finance plays a critical role in all stages of the business life cycle and limits the ability of existing SMEs to expand and create jobs (Arthur, 2003).

SMEs very often begin small and eventually die small, without ever having seen any expansion in terms of employment numbers and output (Aryeetey & Ahene, 2004). MSMEs lack of the access to appropriate technology which they need to increase their profits and undertake upgrading (UNIDO, 2002). Appropriate technology means that it needs to be simple, effective, available, flexible, durable, efficient and cost effective (UNIDO, 2002).

Another problem, MSMEs encounter is the access to markets. Very often MSMEs face serious difficulties when it comes to finding suppliers for the needed inputs and buyers for their products (Liedholm & Mead, 1998). The lack of information about market opportunities and standards and regulations is one of the underlying factors (cp. Liedholm & Mead, 1998; Sievers & Vandenberg, 2007).

There are a high number of MSMEs closures due to a lack of demand and a shortage of working capital and this is why it is important to take these as constraining factors into account (Mead & Liedholm, 1998).

2.3. Common characteristics of SMES:

- Born out of individual initiatives & skills
- Greater operational flexibility: Decision making such as changes in price mix or product mix in response to market conditions is faster.
- Low cost of production: SMEs have lower overheads. This translates to lower cost of production, at least up to limited volumes.
- High propensity to adopt technology: Traditionally SMEs have shown a propensity of being able to adopt and internalize the technology being used by them.
- High capacity to innovate export: SMEs skill in innovation, improvisation and reverse engineering are legendary. By being able to meet niche requirements, they are also able to capture export markets where volumes are not huge.
- High employment orientation: SMEs are usually the prime drives of jobs, in some cases creating up to 80%. Jobs SMEs tend to be labor intensive par se and are able to generate more jobs for every unit of investment, compared to their bigger counterparts.
- Utilization of locally available human & material resources: SMEs provide jobs locally and hence utilise manpower available locally.
- Reduction of regional imbalances: Unlike large industries where divisibility of operations is more difficult, SMEs enjoy the flexibility of location. The spread of SMEs is a fact which enhances their attraction from a national or regional policy.

2.4. Policy Framework for the Promotion of SMEs in Ethiopia

Policy Framework

The *Derg* (1974-1991*)* regime in its proclamation relating to commercial activities undertaken by the private sector (Proclamation No.76 /1975), limited the type and extent of private capital in the economy. In this legislation, restrictive measures such as the fixing of a ceiling on industrial capital (Br 200,000 for retail establishments, Br 300,000 for wholesale establishments, and 1 million for industry) were exercised. A one- man - one –license principle, provision of foreign, and bank loans, which favor state and parasatal organizations, and the biased practice against the private sector in extending loans were practiced (Adugna 1997 and Gebrehiot 1997).

Following the over through of the *Derg* regime policies were enacted by the Government of Ethiopia to transform the previously command economy to a free market based economy and by so doing enhance the development of the private sector. Accordingly, the FDRE government has enacted a proclamation to provide encouragement, expansion and coordination of investment, because of this investment code those restrictive measures of the previous regime, have been removed to encourage foreign and domestic investment in the productive sectors of the economy (Gebrehiot 1997, Adugna 1997 and Fantu 2001). In line with this, measures taken were the devaluation of the local currency, the privatization process, deregulation of prices, and mobilization of foreign currency and trade liberalization with the adoption of structural adjustment policy packages. Recently the Federal Democratic Republic of Ethiopia has launched an industrial development strategy, which is the current blueprint of a long-term industrial development (FDRE

2002). The overriding objective of the strategy is to promote development oriented private investment and industrialization in the country. There are major features that distinguish the strategy. Firstly, the emphasis on private investment as a promoter of industrial development is given due attention. Secondly, agriculture will take the leading role in the industrialization process. Thirdly, emphasis is given to labor intensive industries instead of those that are capital intensive. Fourthly, attention is given for facilitation of private investment through active involvement of both domestic and foreign investors. .Fifthly, the government will play strong economic governance as a strategy and lastly, promotion of active participation of the community in development is taken in to account. Most important in this initiative is the increased attention to selected types of industries in accordance with Agricultural Development Led Industrialization (ADLI) strategy. These industries include (i) textile and garment industries, (ii) beef and leather manufacturing industries, (iii) agro processing industries and (iv) construction industries.

To address the issue of the micro and small scale enterprise sector under the overall development strategy of ADLI the Federal Government of Ethiopia has launched a micro and Small Enterprises Development Strategy in 1997. The primary objective of this national strategy framework is to create an enabling legal, institutional, and other supportive environment for the growth and development of MSEs. The specific objectives of the strategy include among others facilitation of economic growth , bringing equitable development, creating jobs, strengthening cooperation between MSEs, setting the basis for medium and large scale enterprises ,promoting of export, balancing

preferential treatment between MSEs and bigger enterprises. To achieve the objectives, it was assumed that supporting environment will be facilitated in areas of legal framework , regulatory conditions ,access to finance in the formal banking system and other micro and small enterprises focused financing institutions ,access to information, training ,skills and management , appropriate technology, market as well as the physical infrastructure (MIT 1997). The role and significance of small manufacturing industries is also recognized and given due attention in the industrial development strategy (FDRE 2002).

Some researchers have indicated that through liberalization of trade, the local market is flooded with imported products. This created a very stiff competition and as a result, some enterprises had to close down. Besides, it was some authors contended that the devaluation of birr has pushed cost of production and prices of imported goods high and thus MSEs could not afford to buy raw materials, spare parts at exorbitant prices (Andualem 1997, Assefa 1997 and Fantu 2001).

Institutions

Institutions have been operating to promote the growth and development of SMEs. During the *Derg* regime, the former handicrafts and small scale industries development agency was active in the promotion of various industrial operations including carpet, garment manufacturing, furniture and metal fabrication.

Currently, to address the institutional support issues, the federal and regional micro and small enterprise agencies have been established, the responsibility being to efficiently and qualitatively promote the development of its beneficiaries by way of training, demonstrating prototype production activities and providing engineering design and

consultancy services. According to the Micro and Small Enterprises Development Strategy ,the major organs to be involved in the implementation of the strategy are Ministry of Trade and Industry, regional trade and industry bureaus, Federal MSE Development Agency (FeMSEDA),Regional MSE development agencies (ReMSEDA), or the designated organs ,NGOs and private sector organizations (MTI 1997) .In addition, bilateral and donor assisted Programmes like the ILO and GTZ-MSE development programme are active stakeholders in the growth and expansion of the small enterprises in Ethiopia (Zewde and associates 2002).

2.5. Working capital: an introduction

Nature and Importance of working capital

Any industrial establishment requires broadly two kinds of funds. The first one is long-term funds which are required for the purchase of fixed assets such as land, building, machineries, purchase of furniture, purchase of vehicles and other items to bring the establishment into operation. The second kind is short-term funds. These are required to meet the needs of day-to-day expenses such as raw-materials, stores, power and fuel, salaries, wages, administrative expenses, interest, sales and distribution expenses and other expenses to produce the saleable goods, up to the realization of the sale proceeds.

Funds employed in current assets constitute working capital. It is in fact the 'life-blood' and 'controlling-nerve' of the unit. The concept used for working capital may be gross working capital or net working capital. Gross working capital constitutes current assets, whereas net working capital means current asset minus current liabilities. Working

capital, also known as net working capital, is a financial metric which represents operating liquidity available to a business. Along with fixed assets such as plant and equipment, working capital is considered a part of operating capital. It is calculated as current assets minus current liabilities. If current assets are less than current liabilities, an entity has a working capital deficiency, also called a working capital deficit.

The working capital meets the short-term financial requirements of a business enterprise. It is a trading capital, not retained in the business in a particular form for longer than a year. The money invested in it changes form and substance during the normal course of business operations. The need for maintaining an adequate working capital can hardly be questioned (Luo 1984). Just as circulation of blood is very necessary in the human body to maintain life, the flow of funds is very necessary to maintain business. If it becomes weak, the business can hardly prosper and survive (Horrigan 1965).

A company can be endowed with assets and profitability but short of liquidity if its assets cannot readily be converted into cash. Positive working capital is required to ensure that a firm is able to continue its operations and that it has sufficient funds to satisfy both maturing short-term debt and upcoming operational expenses.

Many newly started units become sick or run into fatal problems due to defective financial plan. The plan adopted may fail to provide adequate capital to meet the needs of both fixed and working capital, particularly the later. There are instances where units have been able to obtain sufficient funds to buy a plant but failed to equip the same and conduct production operations successfully because of faulty assessment of working capital needs.

Amount of working capital required by the concerned unit may vary from time to time, depending upon various factors such as cost of raw material, utilization capacity, marketing arrangements etc. It is on account of this fact that entrepreneurs usually spend most of their time to manage working capital requirements.

Working capital management

Decisions relating to working capital and short term financing are referred to as working capital management. These involve managing the relationship between a firm's short-term assets and its short-term liabilities. The goal of working capital management is to ensure that the firm is able to continue its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses. Same basis as Capital Investment Decisions rather they will be based on cash flows and / or profitability. One measure of cash flow is provided by the cash conversion cycle - the net number of days from the outlay of cash for raw material to receiving payment from the customer. As a management tool, this metric makes explicit the inter-relatedness of decisions relating to inventories, accounts receivable and payable, and cash. Because this number effectively corresponds to the time that the firm's cash is tied up in operations and unavailable for other activities, management generally aims at a low net count.

Guided by the above criteria, management will use a combination of policies and techniques for the management of working capital. These policies aim at managing the current assets (generally cash and cash equivalents, inventories and debtors) and the short term financing, such that cash flows and returns are acceptable.

- Cash management. Identify the cash balance which allows for the business to meet day to day expenses, but reduces cash holding costs.
- Inventory management. Identify the level of inventory which allows for uninterrupted production but reduces the investment in raw materials - and minimizes reordering costs - and hence increases cash flow.
- Debtor's management. Identify the appropriate credit policy, i.e. credit terms which will attract customers, such that any impact on cash flows and the cash conversion cycle will be offset by increased revenue and hence Return on Capital (or vice versa).
- Short term financing. Identify the appropriate source of financing, given the cash conversion cycle: the inventory is ideally financed by credit granted by the supplier; however, it may be necessary to utilize a bankloan (or overdraft), or to "convert debtors to cash" through "factoring".

2.6. *The Management of Working Capital and* Success and failure factors of SME'S

The management of working capital is important to the financial health of businesses of all sizes. Efficient management of working capital is a fundamental part of the overall corporate strategy in creating the shareholders' value. Firms try to keep an optimal level of working capital that maximizes their value (Deloof, 2003; Howorth and Westhead, 2003 and Afza and Nazir, 2007).

The amounts invested in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used in an efficient and effective way. However, there is evidence that small businesses are not very good at managing their working capital. Given that many small businesses suffer from under capitalization, the importance of exerting tight control over working capital investment is difficult to overstate. While the performance levels of small businesses have traditionally been attributed to general managerial factors such as manufacturing, marketing and operations, working capital management may have a consequent impact on small business survival and growth (Kargar and Blumenthal, 1994).

From the perspective of Chief Financial Officer (CFO), working capital management is a simple and straightforward concept of ensuring the ability of the organization to fund the difference between the short-term assets and short-term liabilities (Harris, 2005). However, a 'Total' approach is desired as it can cover all the company's activities relating to vendor, customer and product (Hall, 2002). In practice, working capital management has become one of the most important issues in the organizations where many financial executives are struggling to identify the basic working capital drivers and an appropriate level of working capital (Lamberson, 1995). Consequently, companies can minimize risk and improve the overall performance by understanding the role and drivers of working capital management.

A firm may adopt an aggressive working capital management policy with a low level of current assets as a percentage of total assets, or it may also be used for the financing decisions of the firm in the form of high level of current liabilities as a percentage of total

liabilities. Excessive levels of current assets may have a negative effect on the firm's profitability, whereas a low level of current assets may lead to a lower level of liquidity and stockouts, resulting in difficulties in maintaining smooth operations (Van Horne and Wachowicz, 2004).

The main objective of working capital management is to maintain an optimal balance between each of the working capital components like average collection period, anerage payment period and cash conversion cycle. Business success heavily depends on the financial executives' ability to effectively manage receivables, inventory, and payables (Filbeck and Krueger, 2005). Firms can reduce their financing costs and/or increase the funds available for expansion projects by minimizing the amount of investment tied up in current assets. Most of the financial managers' time and efforts are allocated towards bringing non-optimal levels of current assets and liabilities back to optimal levels (Lamberson, 1995). An optimal level of working capital would be the one in which a balance is achieved between risk and efficiency. It requires continuous monitoring to maintain proper level in various components of working capital, i.e., cash receivables, inventory and payables, etc.

In general, current assets are considered as one of the important components of total assets of a firm. A firm may be able to reduce the investment in fixed assets by renting or leasing plant and machinery, whereas the same policy cannot be followed for the components of working capital. The high level of current assets may reduce the risk of liquidity associated with the opportunity cost of funds that may have been invested in long-term assets.

Working capital management (WCM) is of particular importance to the small business. With limited access to the long-term capital markets, these firms tend to rely more heavily on owner financing, trade credit and short-term bank loans to finance their needed investment in cash, accounts receivable and inventory (Saccurato, 1994; Chittenden 1998).

However, the failure rate among small businesses is very high compared to that of large businesses. Studies in the UK and the US have shown that weak financial management - particularly poor working capital management and inadequate long-term financing - is a primary cause of failure among small businesses (Berryman, 1983; Dunn and Cheatham, 1993). The success factors or impediments that contribute to success or failure are categorized as internal and external factors.

The factors categorized as external include financing (such as the availability of attractive financing), economic conditions, competition, government regulations, technology and environmental factors. While the internal factors are managerial skills, workforce, accounting systems and financial management practices.

Working capital starvation is generally credited as a major cause of small business failure in many developed and developing countries (Rafuse, 1996). The success of a firm depends ultimately, on its ability to generate cash receipts in excess of disbursements.

The cash flow problems of many small businesses are exacerbated by poor financial management and in particular the lack of planning cash requirements (Jarvis et al, 1996).

Some research studies have been undertaken on the working capital management practices of both large and small firms in India, UK, US and Belgium using either a

survey based approach (Burns and Walker, 1991; Peel and Wilson, 1996) to identify the push factors for firms to adopt good working capital practices or econometric analysis to investigate the association between WCM and profitability (Shin and Soenen, 1998; Deloof, 2003).

Specific research studies exclusively on the impact of working capital management on corporate profitability of the small manufacturing companies are scanty, especially for the case of Ethiopia. The financial management of small firms in developing countries and in particular, Ethiopia, is altogether an ignored area of research.

This study, therefore, attempts to assess the impact of WCM on profitability of a sample of small manufacturing companies In Addis Ababa and its results are expected to contribute to the existing literature on working capital and SMEs.

2.7. Review of previous studies

Working capital management is a significant area of financial management, and the administration of working capital may have an important impact on the profitability and liquidity of the firm (Shin and Soenen, 1998). Firms can choose between the relative benefits of two basic types of strategies for net working capital management: they can minimize working capital investment or they can adopt working capital policies designed to increase sales. Thus, the management of a firm has to evaluate the trade-off between expected profitability and risk before deciding the optimal level of investment in current assets.

Although working capital is the concern of all firms, it is the small firms that should address this issue more seriously. Given their vulnerability to a fluctuation in the level of working capital, they cannot afford to starve of cash.

Management of working capital management was found to have a significant impact on both profitability and liquidity in studies in different countries.

The study undertaken by (Peel *et al.*, 2000) revealed that small firms tend to have a relatively high proportion of current assets, less liquidity, exhibit volatile cash flows, and a high reliance on short-term debt. The work of Howorth and Westhead (2003), suggest that small companies tend to focus on some areas of working capital management where they can expect to improve marginal returns.

For small and growing businesses, an efficient working capital management is a vital component of success and survival; i.e. both profitability and liquidity (Peel and Wilson, 1996). They further assert that smaller firms should adopt formal working capital management routines in order to reduce the probability of business closure, as well as to enhance business performance. The study of Grablowsky (1976) and others have showed a significant relationship between various success measures and the employment of formal working capital policies and procedures. Managing cash flow and cash conversion cycle is a critical component of overall financial management for all firms, especially those who are capital constrained and more reliant on short-term sources of finance (Walker and Petty, 1978; Deakins et al, 2001).

Given these peculiarities, Peel and Wilson (1996) have stressed the efficient management of working capital. Along the same line, Berry et al (2002) finds that SMEs have not

developed their financial management practices to any great extent and they conclude that owner-managers should be made aware of the importance and benefits that can accrue from improved financial management practices.

Narasimhan and Murty (2001) stress on the need for many industries to improve their return on capital employed (ROCE) by focusing on some critical areas such as cost containment, reducing investment in working capital and improving working capital efficiency. The work of Shin and Soenen (1998) and the recent study of Deloof (2003) have found a strong significant relationship between the measures of WCM and corporate profitability. Their findings suggest that managers can increase profitability by reducing the number of day's accounts receivable and inventories. This is particularly important for small growing firms who need to finance increasing amounts of debtors.

(Eljelly, 2004) revealed that efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk of inability to meet due short-term obligations and avoids excessive investment in these assets.

(Deloof, 2003) discussed that most firms had a large amount of cash invested in working capital. It can therefore be expected that the way in which working capital is managed will have a significant impact on profitability of those firms. Using correlation and regression tests he found a significant negative relationship between gross operating income and the number of days accounts receivable, inventories and accounts payable of Belgian firms. On basis of these results he suggested that managers could create value for their shareholders by reducing the number of days' accounts receivable and inventories to

a reasonable minimum. The negative relationship between accounts payable and profitability is consistent with the view that less profitable firms wait longer to pay their bills.

(Shin and Soenen, 1998) highlighted that efficient Working Capital Management (WCM) is very important for creating value for the shareholders. The way working capital is managed had a significant impact on both profitability and liquidity. The relationship between the length of Net Trading Cycle, corporate profitability and risk adjusted stock return was examined using correlation and regression analysis, by industry and capital intensity. They found a strong negative relationship between lengths of the firm's net trading Cycle and its profitability. In addition, shorter net trade cycles were associated with higher risk adjusted stock returns. (Smith and Begemann 1997) emphasized that those who promoted working capital theory shared that profitability and liquidity comprised the salient goals of working capital management. The problem arose because the maximization of the firm's returns could seriously threaten its liquidity, and the pursuit of liquidity had a tendency to dilute returns. This article evaluated the association between traditional and alternative working capital measures and return on investment (ROI), specifically in industrial firms listed on the Johannesburg Stock Exchange (JSE). The problem under investigation was to establish whether the more recently developed alternative working capital concepts showed improved association with return on investment to that of traditional working capital ratios or not. Results indicated that there were no significant differences amongst the years with respect to the independent variables. The results of their stepwise regression corroborated that total current liabilities

divided by funds flow accounted for most of the variability in Return on Investment (ROI). The statistical test results showed that a traditional working capital leverage ratio, current liabilities divided by funds flow, displayed the greatest associations with return on investment. Well known liquidity concepts such as the current and quick ratios registered insignificant associations whilst only one of the newer working capital concepts, the comprehensive liquidity index, indicated significant associations with return on investment.

All the above studies provide a solid base and give an idea regarding working capital management and its components. They also give the results and conclusions of those researches already conducted on the same area for different countries and environment from different aspects. On basis of these researches done in different countries, the methodology for the research was developed.

Empirical studies on the impact of WCM on profitability of firms

Though the impact of working capital policies on profitability is highly important, only a few empirical studies have been carried out to examine this relationship. Working capital management is important because of its effects on the firms' profitability and risk, and consequently its value (Smith, 1980). The greater the investment in current assets, the lower the risk, but also the lower the profitability obtained. Contrary to this, Carpenter and Johnson (1983) provided empirical evidence that there is no linear relationship between the level of current assets and revenue systematic risk of the US firms; however, some indications of a possible nonlinear relationship were found, which were not highly statistically significant.

Soenen (1993) investigated the relationship between the net trade cycle as a measure of working capital and return on investment in the US firms. The results of chi-square test indicated a negative relationship between the length of net trade cycle and return on assets. Furthermore, this inverse relationship was found different across industries depending on the type of industry. A significant relationship for about half of the industries studied indicated that results might vary from industry to industry.

Another aspect of working capital management has been analyzed by Lamberson (1995) who studied how small firms respond to changes in economic activities by changing their working capital requirements and level of current assets and liabilities. Current ratio, current assets to total assets ratio and inventory to total assets ratio were used as a measure of working capital requirement, while the index of annual average coincident economic indicator was used as a measure of economic activity. Contrary to the expectations, the study found that there is a very small relationship between changes in economic conditions and changes in working capital. In order to validate the results of Soenen (1993) on a large sample and with a longer time period, Jose *et al.* (1996) examined the relationship between aggressive working capital management and profitability of the US firms using Cash Conversion Cycle (CCC) as a measure of working capital management, where a shorter CCC represents the aggressiveness of working capital management. The results indicated a significant negative relationship between the CCC and profitability, indicating that more aggressive working capital management is associated with higher profitability. Shin and Soenen (1998) concluded that reducing the level of current assets to a reasonable extent increases a firm's

profitability. Similarly, Deloof (2003) analyzed a sample of large Belgian firms for the period 1992-1996 and the results confirmed that Belgian firms can improve their profitability by reducing the number of days accounts receivable are outstanding and reducing inventories. Teruel and Solano (2005) suggested that managers can create value by reducing their firms' number of days' accounts receivable and inventories. Similarly, shortening the CCC also improves the firms' profitability.

Uyar (2009) using ANOVA and correlation analysis found significant negative correlation between CCC and profitability as well as between CCC and firm size. Lazaridis and Tryfonidis (2006) investigated that there is statistically significant relationship between profitability measured by gross operating profit and the Cash Conversion Cycle. Furthermore, Managers can create profit by correctly handling the individual components of working capital to an optimal level. Padachi (2006) has examined the trends in working capital management and its impact on firm's performance for 58 Mauritian small manufacturing firms during 1998 to 2003. He explained that a well designed and implemented working capital management is expected to contribute positively to the creation of firm's value. The results indicated that high investment in inventories and receivables is associated with low profitability and also showed an increasing trend in the short term component of working capital financing.

Most of the empirical studies support the traditional belief about working capital and profitability that reducing working capital investment would positively affect the profitability of firm (aggressive policy) by reducing proportion of current assets in total assets. Deloof (2003) analyzed a sample of Belgian firms, and Wang (2002) analyzed a

sample of Japanese and Taiwanese firms, emphasized that the way the working capital is managed has a significant impact on the profitability of firms and increase in profitability by reducing number of day's accounts receivable and reducing inventories. A shorter Cash Conversion Cycle and net trade cycle is related to better performance of the firms. Furthermore, efficient working capital management is very important to create value for the shareholders.

Another study by Afza and Nazir (2007) investigated the relationship between aggressive and conservative working capital policies and found a negative relationship between the profitability measures of firms and degree of aggressiveness of working capital investment and financing policies. Raheman and Nasr (2007) suggested that there exist a negative relation between working capital management measures and profitability. Shah and Sana (2006) used a very small sample of 7 oil and gas sector firms to investigate this relationship for period 2001-2005. The results suggested that managers can generate positive return for the shareholders by effectively managing working capital.

Lack of empirical evidence on the working capital management and its impact on the firm performance in case of SME'S in Ethiopia is main motivating force to study the subject in more detail. Existing literature with reference to Ethiopia on the comparison of different working capital measures on sectoral basis lacks the empirical evidence. Therefore, the present study is an attempt to fill this gap and estimates the relationship between working capital management and firm performance.

CHAPTER THREE

RESEARCH METHODOLOGY

The purpose of this research is to contribute to a very important aspect of financial management known as working capital management with reference to Ethiopia. The study shows the impact of working capital management on firms' profitability. Here the relationship between working capital management practices and its effects on profitability of sample Ethiopian SME unions which are selected from organization for women in self employment (WISE) for a period of five years from 1998 – 2002 is seen.

This chapter of the research deals with the analytical framework of data analysis, which describes the firms and variables included in the study, the distribution patterns of data, and applied statistical techniques in investigating the relationship between working capital management and profitability.

3.1. Sampling Procedure

The population of the study consists of all SME's operating under the organization for women in self employment (WISE). The Organization for Women in Self Employment (WISE) was established in September, 1997 and commenced full programme operation in January, 1998. The major focus areas have been the economic and social empowerment of women and thus, the improvement of their position and condition in society. Currently, WISE focuses its programme attention on 41 Woredas within six of ten sub-cities of Addis Ababa namely; Kirkos, Nefas-Silk-Lafto, Akaki-Kaliti, Addis Ketema, Gulele and

kolfe-keraniyo. Since its commencement of operation in 1998, WISE has recorded remarkable achievements in the development of women micro-enterprise operators. Over 18,000 girls and women have been reached through 46 savings and credit cooperatives. The main reasons for choosing the savings and credit cooperatives (SACCOs) approach for the micro-finance services is that the approach provides for women's leadership development and it gives them ownership of the institutions.

Working capital /loan/ is channeled to members on revolving fund bases through cooperatives and saving facilities are provided. Furthermore, under this component members are assisted to secure healthy working and living conditions through the provision of secure access to necessary items such as marketing tools, shelters and other essential services like environmental sanitation on cost sharing arrangements. Loans available include: micro-business, small-business, education, advance payment for condominium units, renovation for housing

This study used annual financial data of 30 SME unions for the period 1998-2002. The panel data set is developed for five years and for the 30 sampled firms which produced 150 year-end observations. The required financial data for the purpose of the study is obtained from the respective unions annual reports.

The sampling procedure employed in this study is probability sampling technique. Clearly, there can be an inherent bias in non probability methods. Therefore, according to Weisberg, Krosnick, and Bowen (1989), it is not surprising that most survey researchers prefer probability sampling methods. To this end the technique of sampling applied in

this study is a probability sampling method which is known as stratified sampling. With stratified sampling, the population is divided into groups, based on the geographic location. Therefore in this study the sub cities are used as strata. The strata are selected using simple random sampling method. Having unions in each sub cities makes it easy for the researcher hence each associations of SME's are used as an individual group. Stratified sampling is "according to Lee, Forthofer, and Lorimer (1989)" considered a more practical approach to surveys because it samples by groups or strata of elements rather than by individual elements".

Therefore the study took a sample of 30 SME cooperatives from two sub cities, used as strata in the study, namely: Kirkos and Nefas-Silk-Lafto out of the total 49 SME unions from 6 sub cities. In order to be included in the sample, a firm must be in business for the whole study period. Also, firms should neither have been delisted by WISE nor merged with any other firm during the whole window period. Furthermore, firms must have complete financial data for the period 1998-2002.

3.2. Data Collection

The research used the survey method as it concerned with addressing the particular characteristics of a population at a particular fixed point of time (Gill and Johnson, 1997). To this end both open ended and closed ended questionnaires are distributed to each finance mangers of the cooperatives. The questionnaire is designed to focus on various aspects of working capital management practices of the sample enterprises; the cash management practices, receivable and payable management practices.

Open-ended questions can generate large amounts of data that can take a long time to process and analyze. This problem was overcome by limiting the space available to respondents so their responses are concise. To reduce the problem of non response arising from non willingness to answer the questions, respondents are told why the information is being collected and how the results will be beneficial to their organizations. They are also asked to reply honestly and told that if their response is negative this is just as useful as a more positive opinion. And the questionnaire were anonymous i.e. respondents are clearly informed not to fill their names on.

The reason to use questionnaires are, if collected in such standardized form, questionnaires are more objective, certainly more so than interviews and generally it is relatively quick to collect information using a questionnaire. However in some situations they can take a long time not only to design but also to apply and analyze. Potentially information can be collected from a large portion of a group. This potential is not often realized, as returns from questionnaires are usually low. However return rates can be dramatically improved if the questionnaire is delivered properly. Respondents fill and responded thirty among the total thirty five questionnaires.

A common problem in all survey research is non-response, and this research is no exception. Thus, one of the obstacles is simply obtaining the cooperation of the subjects. Reliable firm level data were disgracefully difficult to obtain. The problem is exacerbated when the data collection requires quantitative information on the financial history of the enterprise. Data, which may be regarded as confidential, were hard to get frankly and honestly. Because of such reasons some 5 firm finance managers responses could not be

included in the study though they were included in the list of samples, which involved initially 35 SME's. Therefore, 30 cooperatives out of the 35 list of samples were included in this study.

Furthermore, since the study is based on financial data, the main sources of data are financial statements, such as income statements and balance sheets of listed companies for the period from 1998 to 2002. The variables used in the study, dependent, independent and control variables, all are calculated and drawn from these financial statements of the enterprises. The reason for restricting the time period to five years was that the latest data for the study was available for these years.

3.3. Description of Variables

This study undertakes the issue of identifying key variables that influence working capital management of Ethiopian firms. Most of the variables identified in the investigation have been taken from the existing literature on working capital management. The study takes into account of all the variables discussed below. Variables, which include dependent, independent, and control variables, used to investigate the test hypothesis are described as follows:

- ✓ *Net Operating Profitability (NOP)* which is a measure of Profitability of the firm is used as dependant variable. It is defined as *Earnings before Interest and Tax divided by Total Assets.*

- ✓ *Average Collection Period (ACP)* used as proxy for the Collection Policy is an independent variable. It is calculated by dividing account receivable by sales and multiplying the result by 365 (number of days in a year).
- ✓ *Average Payment Period (APP)* used as proxy for the Payment Policy is also an independent variable. It is calculated by dividing accounts payable by expenses and multiplying the result by 365.
- ✓ *The Cash Conversion Cycle (CCC)* used as a comprehensive measure of working capital management is another independent variable, and is measured by deducting Average Payment Period from Average Collection Period.

In working capital literature, various studies have used the control variables along with the main variables of working capital in order to have an opposite analysis of working capital management on the profitability of firms (Deelof, 2003; Eljelly, 2004; Teruel and Solano, 2005 and Lazaridis and Tryfonidis, 2006). On the same lines, along with working capital variables, the present study has taken into consideration some control variables relating to firms such as the size of the firm, the current ratio and its financial leverage. The size of the firm has been measured by the logarithm of its total assets, as the original large value of total assets may disturb the analysis. Moreover, the financial leverage was taken as the debt to equity ratio of each firm for the whole sample period. Some studies, like Deloof (2003) in his study of large Belgian firms, also considered the ratio of fixed financial assets to total assets as a control variable; however, this variable cannot be included in the present study because of unavailability of data, as most of the firms do not disclose full information in their financial statements. Therefore *Current Ratio (CR)*

which is a traditional measure of liquidity is calculated by dividing current assets by current liabilities is used as a control variable along with Size (Natural logarithm of Sales (LOS) and Debt Ratio (DR) used as proxy for Leverage and is calculated by dividing Total Debt by Total Assets.

All the above variables have relationships that ultimately affect working capital management. It is expected that there is a negative relationship between net operating profitability on the one hand and the measures of Working Capital Management (number of days' accounts receivable, accounts payable and cash conversion cycle) on the other hand. This is consistent with the view that the time lag between expenditure for the purchases of raw materials and the collection of sales of finished goods can be too long, and that decreasing this time lag increases profitability.

3.4. Analysis Used in the Study

Once data were found acceptable, electronical tabulation using the SPSS 14.0 software programme for data entry and analysis is made. Analysis of data was undertaken to show important relationships of variables in the study. To this end, a mix of both descriptive statistical and regression analysis is used.

Descriptive Analysis

Descriptive analysis is the first step in the analysis; it will help to describe relevant aspects of phenomena of cash conversion cycle and provide detailed information about each relevant variable. The results of the questionnaires are analyzed first followed by a descriptive analysis of the variables used in the study. Research has already been

conducted in this area of study in different countries and important information regarding methods of analysis is already on hand, and SPSS software has been used for analysis of the different variables in this study.

Quantitative Analysis

In quantitative analysis two methods are applied: First: The researcher used correlation models, specifically Pearson correlation to measure the degree of association between different variables under consideration. Second: Regression analysis is used to estimate the causal relationships between profitability variable, liquidity and other chosen variables.

Researcher has used Pooled Ordinary Least Squares methods for analysis. Panel data is used in a pooled regression, where time-series and cross-sectional observations are combined and estimated. In other words, several cross-sectional units were observed over a period of time in a panel data setting. For this purpose of analysis the E - views software was used to analyze financial data and especially in case of pooled data.

3.5. Model Specification

The impact of working capital management on the performance of SME's is tested by panel data methodology. What is panel data methodology? Panel data analysis is a method of studying a particular subject within multiple sites, periodically observed over a defined time frame. Panel data analysis endows regression analysis with both a spatial and temporal dimension. The spatial dimension pertains to a set of cross-sectional units of observation. These could be countries, states, counties, firms, commodities, groups of

people, or even individuals. The temporal dimension pertains to periodic observations of a set of variables characterizing these cross-sectional units over a particular time span. For the purpose of this study the latter is used.

The panel data methodology used has certain benefits like using the assumption that firms are heterogeneous, more variability, less co-linearity between variables, more informative data, more degree of freedom and more efficiency (Baltagi, 2001).

Pooled regression type of panel data analysis is used in this study. The pooled regression, which is also called the constant coefficients model, is one in which both intercepts and slopes are constant, where the cross section from a data and time series data are pooled together in a single column, assuming that there are no significant cross section or temporal effects. The general forms of the models are:

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

Where:

NOPit: Net Operating Profitability of firm i at time t; i = 1, 2, …, 30 firms.

β0: The intercept of equation

βi: Coefficients of X it variables

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

ε: The error term

Specifically, the above general least squares model is converted into specified variables it becomes:

$$NOP\ it = \beta 0 + \beta 1\ (ACP\ it) + \beta 2\ (APP\ it) + \beta 3\ (CCC\ it) + \beta 4\ (CR\ it) + \beta 5\ (DR\ it) + \beta 6\ (LOS\ it) + \varepsilon \quad \textbf{(Eq. 3.2)}$$

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: The error term.

List and measurement of variables

In the present study, there include 30 SME cooperatives all selected from the two sub cities of Addis Ababa, namely Kirkos and Nifassilk. The firms included in the study qualify the criteria that they performed operations during the time period (1998-2002) and submitted annual financial reports. Data are extracted from the annual reports of these firms. The formula and abbreviations used for measurement of all the variables are presented in the following table.

Variable	Measurement	Abbreviation
Net Operating Profitability	*(Earnings before Interest and Tax) / Total Assets*	NOP
Average Collection Period	*Accounts Receivable / Net Sales*365*	ACP
Average Payment Period	*Accounts Payable / Purchases*365*	APP
Cash Conversion Cycle	*ACP – APP*	CCC
Size of firm	*using Log/Natural Logarithm of Sales*	LOS
Current Ratio	*Current Assets / Current Liabilities*	CR
Debt Ratio	*Total liability/ total assets*	DR

Table 3.1: Measurement of Variables and Abbreviation.

CHAPTER FOUR

RESULTS AND DESCUSSIONS

4.1. Characteristics of the enterprises

Thirty five SME unions engaging between 100-500 members or with capital investment from br. 1000 to br 10000 were selected from different sectors basing on their readiness to provide the required information. The researcher managed to get financial statements of the thirty three among them and thirty businesses returned the filled questionnaires.

The table below Presents the characteristics of the firms studied which, to a large extent, fits the definition of SMEs used in this study.

Legal Form		Type of Business		Initial Capital Investment Ethiopian br.		Number of members	
Sole proprietors	81.3%	Trading	80%	1000-2500	40%	100-250	33.3%
Partnership	13.33%	Manufacturing	13.33%	2500-5000	33.33%	250-350	33.3%
Limited Company	-	Service rendering	6.3%	5000– 7500	13.33%	350-450	26.6%
Others	3.1%	Others	-	>7500	13.33%	450-550	6.67%
Total	100%		100%		100%		100%

Table 4.1: Characteristics of the Firms Studied

Most (81.3%) of the selected firms were established as sole proprietorships, while the remaining were registered as partnerships (13.33%) and other forms of enterprises. 80%

are trading concern and 13.33% are manufacturing concern while the remaining SME's which accounted for 6.3% of the total are engaged in rendering services. Approximately 33.3% of the cooperative SME's have only 100-250 number of members and around 6.67% have more than 400 members. As depicted from the responses of the questionnaires, each union's financial activities are organized and operated by very few employees. Thus it is difficult for such unions to have adequate personnel resources which are important to fully analyze working capital budgeting alternatives. 40% invested not more than 2500 br. and the remaining invested up to 10000 br. The data were collected in May 2011.

Parts of data were collected by using a questionnaire where the finance managers filled the questionnaire. Questions were asked to inquire issues concerning working capital management. Financial data of five years covering the accounting period of 2009/2010 are collected from the financial statements of the sampled cooperatives. For the purpose of this study profitability is measured by Net Operating Profitability (NOP) which is defined as profit before interest and tax divided by total assets. This is because SMEs are characterized by low Non Current Assets base and relied to a large extent on accounts payable to fund its gross working capital (Padachi, 2006). Thus a comprehensive measure of profitability is best captured by computing the Return on total assets, which is equal to the total liabilities of the firm made up mainly of equity capital and current liabilities (Padachi, 2006).

Pearson correlation coefficients for variables were used to analyze the impact of working capital management on profitability growth. Pearson measures the linear relationship

from 0 to 1 and also carries a positive sign for a positive relationship or negative for an inverse relationship (Schindler and Cooper, 2003). The information which could not be obtained from financial statements was obtained from the questionnaires. A descriptive analysis based on the percentage used to analyse the results obtained from the questionnaires is described as follows.

4.2. Descriptive analysis of the results Obtained from the Questionnaires

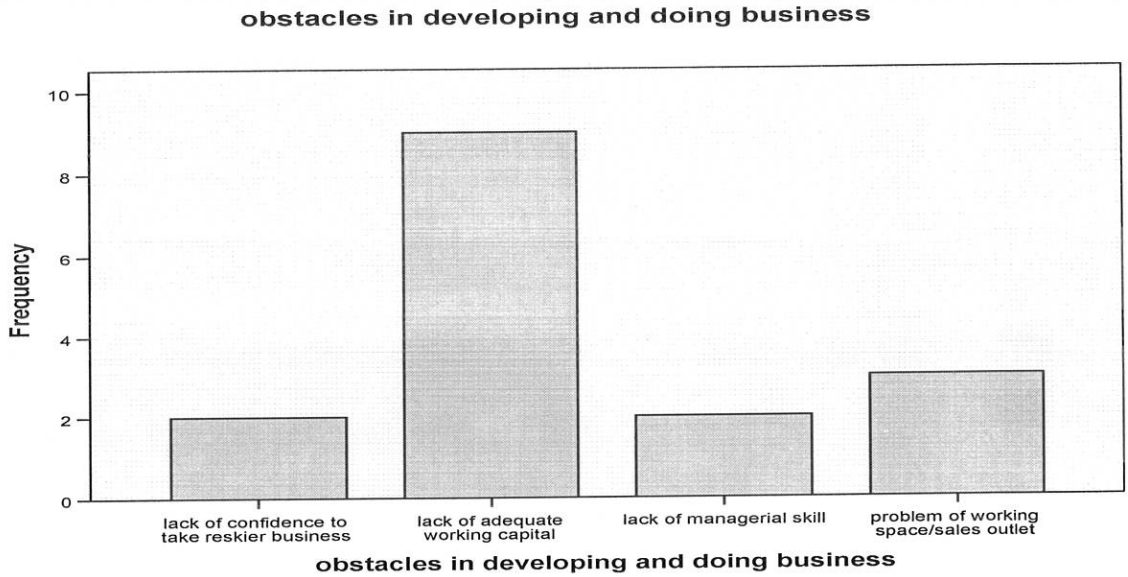
General Perceptions

Turnover growth is the meaning of success for 43.8% small business and only 25% aimed at maximizing profit. 50% of companies claimed the financial health of their businesses is average, and 62.5% predicted their turnover will increase in 2010. 56.3% of the sampled businesses do not have growth strategy, but 43.8% prefer new market as a growth strategy, so they better be trained on how to form market niche for their businesses.

Interestingly, private capital is the most popular way to fund the growth. The results show that small businesses studied perceive private capital as being more flexible than any other form of finance, Whilst this type of funding is usually limited and is rarely adequate to support rapid growth.

The results justifies the findings of Shayo, Temu (2002, 2005) when she found that growth of small firms to a large scale in Tanzania is a rarity as most start up firms end up with only capacity to employ half a dozen people after a decade of operation.

As far as problems in doing business are concerned almost about 56.3% of the respondents replied that their major problems are related with problems of getting adequate working capital while the remaining indicated as major problems like lack of confidence to take riskier business, lack of managerial skill, problem of working space/sales outlet, etc. The graph that follows shows major obstacles faced by enterprises in doing their businesses.



Graph 4.1: major obstacles faced by the SME's.

Source: results of survey data (questionnaires).

Cash management practices

For cash budget preparation, 81.3% of respondents indicated that they always had cash budgets prepared, where as only 18.8% never prepare cash budgets. In addition the results reveal that most of those who prepare cash budgets; the once a year period is frequently used as the preparation basis. While some, around 31.5% only require a month to prepare their cash budget.

The results also indicate that most of small businesses have the decision on target cash balance based on the owners' experience. Percentage of small businesses which apply theories of cash management in determining the target cash balance is very small. Only 6.3% use theories to determine their target cash balance. This suggests that theories of cash management have not been popularly implemented in practices, and owner manager's experience remains more important than theoretical implication on cash management. And the result also revealed that there are significant numbers of enterprises who had never incorporated their target cash balance in their cash budget.

As they were asked about the effectiveness of the cash management practice of their enterprise, most, about 68.8%, responded that it is effective, and the remaining ended up by responding as it is moderately effective(12.5%) and not effective (18.8%).

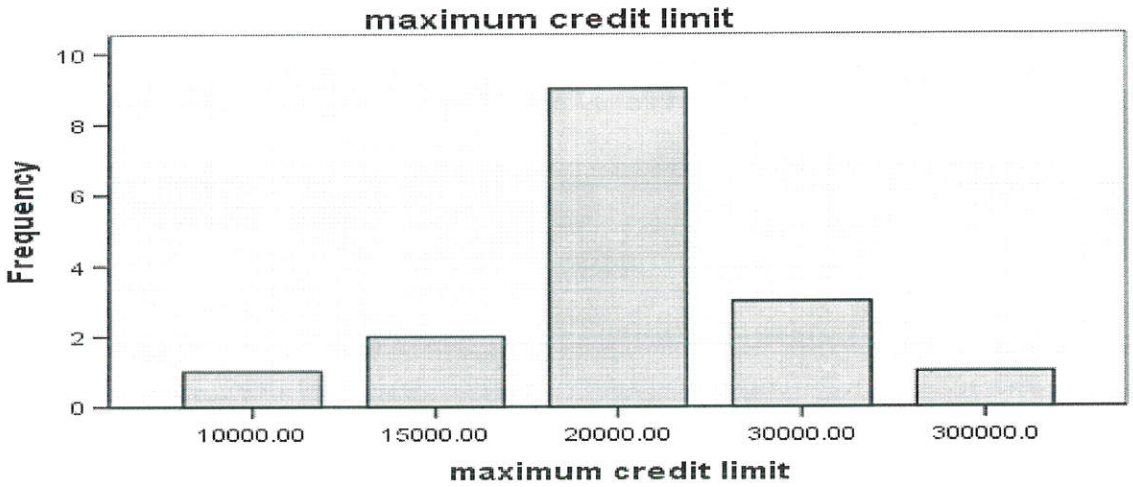
In terms of cash shortage experience, only 12.5% of small businesses had never or rarely been short of cash and 87.5% of responding small businesses often or always had insufficient cash for expenditure. Most, about 62.5% of those firms facing the problem of

cash shortage, try to manage this short of cash thorough the use of long term financing and about 31.3% use mainly short term finance as a mechanism to fund the short of cash.

Regarding cash surplus, only about 31.3% of the firms stated that they sometimes have surplus amount of cash which they use mostly as a deposit in bank accounts for interest, and almost no firms used cash surpluses to buy short term finance instruments. Of course some managers of these SME's insisted that they invest the surplus amount of cash in a form of buying shares in the name of the enterprises, but much concern is not given. This is explained as a result of the underdeveloped money market in Ethiopia, therefore firms cannot use cash surplus to purchase short-term investment instruments for profitable objectives. The other reason could be lack of knowledge of the available money market instruments and their usefulness among the SMEs.

Receivable management practices

The results indicate that almost all the enterprises always sell on credit and they always or often set up a credit policy for the customers. 20000 br. is the maximum credit limit that most business set up for their customers. About 56.3% use this amount as a maximum credit limit. 6.3% replied that they will accept a loan for customers for a maximum of br. 10000 and the remaining has the capacity of lending for as far as br. 30000. Chart 3.2 depicts the results for maximum credit limit granted by the enterprises.



Graph 4.2: maximum credit granted by SME's under study

Source: results of survey data (questionnaires)

On Average customers are given up to two years to return the money they borrowed from the firms. 81.3% return their debt with in or less than 2 years and around 18.8% will be give up to five years. The firm size and trade references are the major measures taken to assess debtor capability. Most Firms review their credit policies annually, but there are few which apply monthly review periods. Even under such state of affairs customers may sometimes fail to return the money they borrowed from the enterprises. In this case the firms mostly write off the amount as uncollectable. The minimum and maximum amounts which are written off as uncollectable thus far are br. 4729.86 and br. 27639.25 respectively. On average the firms had written off around br. 14327.09 during their operation from 1998-2002.

In reviewing receivable levels and irrecoverable debts, a relatively high percentage of small businesses about 56.3% in the sample review their receivable levels and irrecoverable debts based on annual period. As such like cash management practices, yearly periods are still popularly used by small businesses in reviewing receivable levels and irrecoverable debts.

4.3. Analysis and Discussions of financial data

In this study, two types of analysis, descriptive and quantitative, are used. The results of these two types of analysis are discussed in this section.

Descriptive Analysis of the variables

Descriptive analysis shows the average, and standard deviation of the different variables of interest in the study. It also presents the minimum and maximum values of the variables which help in getting a picture about the maximum and minimum values a variable can achieve.

Table 4.2 presents descriptive statistics for 30 Ethiopian SME firms for a period of five years from 1998 to 2002 inclusive and for a total of 150 firm's year observations.

Descriptive Statistics: 30 Ethiopian SME unions, 1998-2002, 150 firm's – year observations					
	N	Minimum	Maximum	Mean	Std. Dev.
ACP	150	3.64	20.63	12.7085	4.56179
APP	150	.16	82.22	7.0639	15.18590
CCC	150	-62.16	18.40	5.6427	14.60413
LOS	150	3.22	5.49	4.3092	.60856
CR	150	.10	1.07	.9933	.16222
DR	150	.94	10.13	1.2570	1.59304
LOS	150	3.22	5.49	4.3092	.60856
NOP	150	-.18	.05	-.0091	.04390

Table 4.2: Descriptive Analysis of the variables

Source: Calculations Based on Annual reports of firms from 1998-2002.

The mean value of net operating profitability is -0.91% of total assets, and standard deviation is 4.39%. It means that value of the profitability can deviate from mean to both sides by 4.39%. The maximum value for the net operating profitability is 5% for a company in a year while the minimum is -18%.

The cash conversion cycle used as a proxy to check the efficiency in managing working capital is on average 564 days and standard deviation is 1460 days. Firms receive payment against sales after an average of 1270 days nd standard deviation is 456 days. Minimum time taken by a company to collect cash om receivables is 1 day while the maximum time for this purpose is 654 days. Firms wait an average 60 days to pay their

purchases with standard deviation of 99 days. Here, minimum time taken by a company is 0.25 days which is unusual, and maximum time taken for this purpose is 900 days.

To check the size of the firm and its relationship with profitability, natural logarithm of sales is used as a control variable. The mean value of log of sales is 4.30 while the standard deviation is 0.60. The maximum value of log of sales for a company in a year is 5.49 and the minimum is 3.22.

In the same way to check the liquidity of the companies, a traditional measure of liquidity (current ratio) is used. The average current ratio for Ethiopian SME's is 0.99 with a standard deviation of 0.16. The highest current ratio for a company in a particular year is 1.07 times and in the same way the minimum ratio for a company in a year is 0.10.

To check the debt financing and its relationship with the profitability the debt ratio (obtained by dividing the total debt of the company by the total assets) is used as a control variable. The results of descriptive statistics show that the average debt ratio for the sample SME's is 1.25 with a standard deviation of 1.59. The maximum debt financing used by a company is 10.13 which is unusual but may be possible if the equity of the company is in negative. The minimum level of the debt ratio is .94.

Quantitative Analysis

For quantitative analysis two methods are used. At first, correlation is used to measure the degree of association between different variables under consideration. As multiple variables are influencing the problem, the researcher has identified the crucial factors associated with working capital management. Pearson and Spearman correlations are calculated for all variables used in the study.

Pearson's Correlation Coefficient Analysis

Pearson's Correlation analysis is used for data to see the relationship between variables such as those between working capital management and profitability. If efficient working capital management increases profitability, one should expect a negative relationship between the measures of working capital management and profitability variable. There is a negative relationship between gross profitability on the one hand and the measures of working capital management on the other hand. This is consistent with the view that the time lag between expenditure for purchases of raw material and the collection of sales of finished goods can be too long, and that decreasing this time lag increases profitability.

	Pearson's Correlation Coefficients 30 SME unions, 1998-2002, 150 year observations							
		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).

Table 4.3 Correlations between variables

Source: results of survey data (financial statements)

The researcher has started the analysis of correlation results between the average collection period and net operating profitability. The result of correlation analysis shows a negative coefficient – 0.410, with *p*-value of (0.018). It indicates that the result is highly significant at ά. = 5%, and that if the average collection period increases it will have a negative impact on the profitability and it will decrease.

Correlation results among the payable turnover in days or average payment period with net operating profitability shows that there is significant correlation between these variables with *p* value of (0.092). Here again, the coefficient is negative and highly significant at a significance level of 10%. It means that the less profitable firms wait longer to pay their bills.

The cash conversion cycle which is a comprehensive measure of working capital management has a negative coefficient – 0.439 and the *p* value is (0.011). But it is significant at ά. = 5%. It means that if the firm is able to decrease this time period to collect cash, known as cash conversion cycle, it can increase its profitability.

By analyzing the results it can be concluded that if a firm is able to reduce these time periods, then the firm is efficient in managing working capital. This efficiency will lead to increasing its profitability.

Current ratio is a traditional measure of checking liquidity of the firm. In this analysis the current ratio has a significant positive relationship with profitability (measured by net

operating profitability). The coefficient is 0.724 and *p*-value of (.000). The result is significant at ά. = 1%. It indicates that the two objectives of liquidity and profitability have a significant positive relationship.

The significant negative correlation between the firm's debt ratio and their profitability is clearly shown in the table with a coefficient of -0.702 and *p*-value of (.000). The result is significant at ά. = 1% showing that increase in debt ratio of firms will have an impact of decreasing their profitability.

One should not overlook the positive association that exists between NOP and LOS (the measures of size). This in turn indicates a positive relationship between size and profitability. But such relationship is found to be non significant with a coefficient of 0.086; and *p*-value of (.633). It shows that as size of the firm increases, it will increase its profitability but not significantly.

A negative relationship between number of days accounts payable (average payment period) and profitability is consistent with the view that less profitable firms wait longer to pay their bills. This relationship is significant at ά. = 10% with a coefficient showing a value of -0.298 and a significance p-value of (.092). In that case, profitability affects the account payables policy and vice versa. Speeding up payments to suppliers might increase profitability because firms often receive a substantial discount for prompt payment.

Pearson's correlation also displays a significant strong negative relationship between the average payment period and cash conversion cycle; the correlation coefficient is -0.954 and the *p*-value is (.000). That ratio is highly significant at ά. = 1% , which means that if

a firm takes longer time to pay its debts it will increase its operating or cash conversion cycle.

Regression Analysis

For the purpose of identifying the important variables influencing the dependent variable the researcher has used the regression analysis. In panel data (pooled) regression, time – series and cross-sectional observations are combined and estimated. In other words, several cross-sectional units are observed over a period of time in a panel data setting. Panel data is more useful in studying the dynamics of adjustment, and is better able to identify and measure effects that are simply not detectable in pure cross-sections or pure time - series data. Moreover, many variables can be more accurately measured at the micro level and biases resulting from aggregation over firms or individuals are eliminated.

The study used regression analysis to investigate the impact of working capital management on corporate profitability. The determinants of corporate profitability are estimated using pooled least squares estimation.

Regression Model: Pooled Least Squares Estimation

The determinants of net operating profitability are investigated for all 150 firm-year observations. A number of different regression coefficients are estimated for selected independent variables. The regressions are estimated using the pooled least squares method with no weights.

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

$$NOP\ it = \beta 0 + \beta 1\ (\text{ACP it}) + 2\ \beta\ (\text{LOS it}) + 3\ \beta\ (\text{CR it}) + 4\ \beta\ (\text{DR it}) + \varepsilon \qquad \textbf{(Eq. 4.1)}$$

$R^2 = 0.903$; 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: E-Views regression results of variables (calculations based on financial statements)

The results of this regression indicate that the coefficient of average collection period is negative and is highly significant at ά. = 1% with a p-value of (.000). It implies that the increase or decrease in the number of days taken by firms to collect cash will significantly affect profitability of the firm. This negative relationship can be elaborated as the number of days to collect cash from credit customers becomes too long, it will adversely affect profitability of the firms.

The researcher used the Debt ratio as a proxy for leverage; it shows a significant negative relationship with the dependent variable, which means that, when leverage of the firm increases, it will adversely affect its profitability. The coefficient of this variable shows that per one percent increase in the debt ratio there is a possibility that profitability will decrease by 0.051 percent at a highly significant level of 1%.

Similarly log of sales used as proxy for size of a company shows a significant positive relationship with a coefficient of 0.01 and p-value of 0.017 at a significance level of 5%. This implies that per one unit increase in log of sales the firms earn 0.01 as extra return. This means that bigger size firms have more profitability compared to firms of smaller size.

The adjusted R^2, also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables and is 90.3%. This means that 90.3% of the variance in net operating profitability can be predicted by the combination of the independent variables i.e. ACP, CR, DR and LOS.

The C is the constant, where the regression line intercepts the y axis, representing the amount the dependent y will be when all the independent variables are 0. Here C is -0.091; the probability of the coefficient is significant. The F statistic is used to test the significance of R. Overall; the model is significant as F-statistics is 65.16 with significance value of (.000).

Second regression is run using the average payment period as an independent variable as a substitute of average collection period. The other variables are same as they have been in first regression. The equation of the model is given below:

NOP it =β0 + β1 (APP it) + 2 β (LOS it) + 3 β (CR it) + 4 β (DR it) + ε (Eq. 4.2)

R^2 = 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: E-Views regression results of variables (calculations based on financial statements)

The result indicates that the coefficient of average payment period is negative and it is significant at ά. = 10%, and implies that the increase or decrease in the average payment period, significantly affects profitability of the firm in the opposite direction. The negative relationship between the average payment period and profitability indicates that the less profitable firms wait longer time to pay their bills.

The size of the firm has a positive impact on profitability which is significant at 10% like average payment period. But unlike APP, size of a firm have a positive impact as one can clearly predict the size of firms contribute to the growth of enterprises. In fact it is really

seen that as small firms operate effectively, they will be transformed to the next level medium enterprises. The beta coefficient of this variable indicates a value of 0.006.

The debt ratio has a coefficient of 0.074 and a p-value of 0.003. This implies that any change in financial leverage of the firms have a high effect on the profitability the firms in a negative way and the current ratio has an insignificant positive impact on profitability with p-value of 0.114 and with a coefficient of 0.36. Even though debt ratio has a small coefficient compared to current ratio, debt ratio actually contributes more to the model because it has a larger absolute standardized coefficient which is 1.812.

The adjusted R^2 is 85.5%. It shows that 85.5% of the variation in net operating profitability is explained by the model. The F-statistic has a value of 41.25 with model significance of (.000). It also reflects the high significance of the model.

In the third regression, cash conversion cycle is used as an independent variable instead of average collection period and average payment period. It is the comprehensive measure of checking efficiency of working capital management. The other variables are kept the same as they were in the first two regressions. The model used is shown herewith:

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

R^2 =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: E-Views regression results of variables (calculations based on financial statements)

Taking the cash conversion cycle as an independent variable, the result indicates that the coefficient of cash conversion cycle is negative and is significant at ά. = 10% and implies that the increase or decrease, in the cash conversion period, significantly affects profitability of the firm. The longer the cash conversion cycle of firms, the less profitable they will be. The t- stat also shows that it is below -2, which is the required level, makes it significant.

The increase in sales has a positive impact on profitability. It affects profitability of firms by 0.008 at a time and it has a p-value of 0.035 which makes it significant at ά = 5%. While the other control variable, debt ratio, have a significant negative effect on

profitability of the firm. With a p- value of 0.009 and t-stat below -2, this variable has the ability to decrease profit by 0.068 per one unit change.

The model is well explained by the variables at a percentage of 84.3% (The adjusted $R2$ is 84.3%). The value of F-statistic is 37.6, and it also reflects the high significance of the model.

Under the pooled least squares method, independent variables are regressed individually. The individual regression for each variable showed the significant effect on profitability. In general, the results of pooled least squares are indicating the same interpretation that working capital management affects profitability of the firm. If a firm can effectively manage its working capital, it can lead to increase in profitability.

It can also be interpreted that the liquidity and profitability moves in opposite direction. And, there is a need to maintain a trade-off between these two objectives of the firm. It is further interpreted that if a firm increases its debt financing, it will lead to decreasing profitability of the firm in terms of financial cost. The size of the firm has a direct positive relationship with profitability of the firm. If the size (measured in terms of log of sales) increases, it will lead to increasing profitability of the firm.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1. Summary and Conclusion

Working capital management deals with profitability and the risk of a company. Inefficient working capital management results in over investment in working capital, reduces the profitability of the firm and results in financial difficulty putting the company at risk. In this context, the objective of the current research has been to provide empirical evidence about the effects of working capital management on the profitability of a sample of small and medium-sized firms.

To this end, a sample of Addis Ababa firms was used to conduct a study with panel data for SMEs. Data on a panel of 30 SME cooperatives was collected, covering the period from 1998 to 2002 from two subcities namely Nifas-silk-Lafto and Kirkos and was analyzed and interpreted descriptively and quantitatively.

- The optimal level of working capital, which is a tradeoff between risk and profitability, can be affected by both internal organizational characteristics and various outside factors.
- Working capital management is particularly important in the case of small and medium-sized companies. Most of these companies' assets are in the form of current assets. Also, current liabilities are one of their main sources of external finance.
- As it was seen on the correlation and regression analyses, the good working capital management practices can boost the profitability of small businesses, so owner

managers are advised to ensure that they utilise adequate working capital management tools.

- Too little of working capital will result in cash flows problems, failing to pay suppliers on time and being unable to claim discounts for prompt payment. On the other hand too much resources tied up in working capital will earn a lower than expected rate of return on capital employed.
- The results shows that for overall SME's sector, Working Capital Management has a significant impact on profitability of the firms and plays a key role in value creation as longer Cash Conversion Cycle and average collection period have negative impact on Net Operating Profitability of a firm.
- The analyses carried out confirm the important role of working capital management in value generation in small and medium-sized firms. The results are similar to those found in previous studies that focused on large firms (Jose et al., 1996; Shin and Soenen, 1998; Wang, 2002; Deloof, 2003) and also small firms (Lazaridis and Tryfonidis, 2005; Garcia and Solano, 2003; Mathuva, 2008).

  - The Cash Conversion Cycle and average collection period offer easy and useful way to check working capital management efficiency. To be profitable, firms must try to keep these numbers of days account receivable and number of days required by firms to convert their operations in to cash, to minimum level.

- There is also a significant negative relation between SME's profitability and the number of day's accounts payable. Showing that the longer it takes firms to pay their obligations the less profitable they will be.
- Theoretically, it is found that there exist a negative relationship between liquidity and profitability of the firms; therefore, the measures of liquidity, Current Ratio should have negative association with the profitability. However, in this research it is proven to be a positive relationship between current ratio and net operating profitability which indicates that small firms with high liquidity ratio are better-off than those with lower current ratio. Empirical researches have also found both positive and negative association between current ratio and profitability.
- As far as size is concerned the study found that there is a positive but not significant relationship between sizes of firms (measured by logarithm of sales) and net operating profitability.

The analysis is constrained by the sample size and the short of time which could have well affected the results. There is much to be done about working capital in Ethiopia in the future. The researcher suggests that further research be conducted on the same topic with different companies and extending the years of the sample. The scope of further research may be extended to the working capital components management including cash, marketable securities, receivables and inventory management.

5.2. Recommendations

Based on the results found and the conclusions drawn, the researcher recommends to the managers and employees of these small businesses and to the government to carry out the following fundamental functions.

- Better to Enhance performance of the firms by reducing the number of days in account receivable and Cash Conversion Cycle to a reasonable minimum. Accordingly efficient Management and financing of working capital (current assets and current liabilities) can increase the operating profitability of SME firms. Firms also need to slowdown their payments to operate profitably.

- In cash management, the finance managers are recommended to forecast cash inflows and cash outflows. Maximize the benefits earned by spare cashes not required immediately and reduce any losses caused by delays in the transmission of funds.

- Management of receivables is another important factor in working capital management and to this end the researcher suggests to the mangers of the firms to apply suitable receivable procedures and control their receivable and uncollectable before long.

- The results of this study show that working capital management impact on the performance of SMEs and it is not well practiced. Emphasis on working capital management is necessary in order to enhance the performance of SMEs.

- Furthermore, for efficient working capital management, it is found significant to hire specialized persons in the fields of finance for expert advice in each SME cooperatives.

- The results of this study have also shown that there is little applicability of the conventional concepts of working capital management by the Ethiopian SMEs and they normally depend on the experience of the owner managers. The limited knowledge of financial management is the chronic problem facing owner managers of small businesses so the government can reduce this by promoting education to the owners. The government can enhance the capacity of institutions providing business training to small businesses.

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Appendix 1: questionnaire used in the study- both the English and the Amharic version

Questioner to be filled by finance managers of SME unions in WISE (ORGANAZATION FOR WOMENS IN SELF EMPLOYMENT), Addis Ababa, Nifas-Silk-Lafto sub city.

Dear respondents

This questionnaire is prepared by prospective post graduate student of accounting and finance in Addis Ababa University. The topic of this study is the impact of working capital management on small and medium enterprises profitability in the case of WISE, which is a requirement of the masters in accounting.

I would very much appreciate your genuine answers to the given questions. Similarly, I would like to promise in advance to use your information (your response) only for the intended purpose. I kindly request your cooperation in filling out the questionnaire. I confirm you that all the data gathered will be held confidential.

N.B. please put a tick mark(x) in the box or write you comment 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.

12 complete ☐ preparatory complete ☐

college diploma ☐ Degree ☐

above degree ☐ other _____

1.5. Position / area of responsibility

Cashier ☐ loan officer ☐

Internal auditor ☐ Finance head ☐

other, specify_____

1.6. For how long you have served in your current position / experience in this area so far.

Below 1 year ☐ 7-10 years ☐

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

1.7. What sector is your business in?

Trade ☐ Production ☐

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*
Full time		
Part time		
Paid family members		
Unpaid family members		

PART II: Information on Entrepreneurial Capacity, Resources for start up.

2.1. How much did it cost you to set up the business? (ETB Birr) _____

2.2. 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) _____

2.3. What support did you get to start this business?

Government Policies ☐ Easy access to credit ☐

None ☐ If Others, specify, _____

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

_____

_____

2.5. What were the three biggest obstacles you face in developing/doing 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. If Yes to Q. 2.6 why?

_____

_____

_____

PART III: Questions related with Cash management practices

3.1. Do you keep your enterprise money separate from your personal money?

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 what basis do you prepare cash budget?

Monthly ☐ Quarterly ☐

Semi annually ☐ 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 answer to the above question is "less effective" or "very less effective" would you please explain the reason why?

_____

_____

3.7. If your answer to 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 □ No never □

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 □ No never □

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. Are all cash payment transactions being checked and approved by the right person before 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 prosess?

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. If yes to Q. 4.1, do you Establish credit limits for each customer?

Yes ☐ No ☐

4.3. If yes to Q. 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. How do you rate the adequacy of receivables collection effort of your company?

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 ☐

PART V: Inventory Management Practices

5.1. Do you prepare inventory budgets?

Yes ☐ No ☐

5.2. If yes how do you determine the level of inventory in preparing inventory budget?

Using methods of inventory management ☐

Through owner managers experience ☐

5.3. What theories do you use?

Supply Chain Management or SCM, ☐ Economic Order Quantity (EOQ), ☐

JIT or Just in Time Method, ☐ Economic Production Quantity (EPQ) ☐

Others, specify_____

አዲስ አበባ ዩኒቨርሲቲ

የቢዝነስ እና ኢኮኖሚክስ ፋኩልቲ

አካውንቲንግና ፋይናንስ ትምህርት ክፍል

ውድ ተጠያቂዎች

ይህ ጥያቄ የተዘጋጀው በቅርቡ በአካውንቲንግ እና ፋይናንስ የማስተርስ ዲግሪ ተመራቂ በሚሆን የአዲስ አበባ ዩኒቨርስቲ ተማሪ ነው፡፡ ይህ መጠይቅ ለመመረቂያ ጥናት እንደ ግብአት የሚያገለግለው ሲሆን የጥናቱ ርእስም በራሴድ (በራስ አገዝ የሴቶች ልማት ድርጅት) ስር ያሉ አነስተኛ እና መካከለኛ ተቋማት የተንቀሳቃሽ ካፒታል አስተዳደር ላይ ያተኮረ ነው፡፡

የእናንተ ትክክለኛ ምላሽ ለሚዘጋጀው የጥናት ጽሁፍ ጥራት ጉልህ የሆነ ተጽእኖ እንደሚኖረው ስለሚታመን ቀጥሎ ለተዘረዘሩት ጥያቄዎች በትኩረት ምላሽ እንድትሰጡ በአክብሮት እጠይቃለሁ፡፡ ከዚህ በተጨማሪም ማንኛውም እዚህ መጠይቅ ላይ የምትሞሉት መረጃ ለተጠቀሰው ምክንያት ብቻ እንደሚውል ከወዲሁ ላረጋግጥላችሁ እወዳለሁ፡፡

- መልሶቻችሁን በሳጥኑ ውስጥ የ X ምልክት ወይም በተጠቀሰው ክፍት ቦታ ላይ አስታየታችሁን በመጻፍ አስቀምጡ፡፡
- በመጠይቆች ላይ ስማችሁን መጻፍ አስፈላጊ አይደለም፡፡
- ምላሾቻችሁ በሚስጥር የሚጠበቁ ይሆናሉ፡፡

በቅድሚያ ስለቀና ትብብሮ እናመሰግናለን፡፡

I. ማህበሩን የተመለከቱ ጥያቄዎች

1.1 የማህበሩስም፡ _____

1.2 አድራሻ: ወረዳ _____ ክ/ከተማ _____ ስልክ _____

1.3 ማህበሩ መቼ ስራ ጀመረ? _____ ዓ.ም

1.4 ማህበሩ ስንት አባላት አሉት _____

1.5 አባሉቱ በአመዛኙ ምን አይነት እንቅስቃሴ ላይ ናቸው?

ንግድ ምን ያህሉ_____

ምርት " " _____

አገልግሎት ሰጪ " " _____

ሌላ ካለ " " _____

1.6. አባላቱ የተሰማሩበት የሥራ አይነት?

በግለሰብ የሚተዳደሩ ብዛት _____

በሽርክና የሚተዳደሩ ብዛት_____

አክሲዮን ማህበራት ብዛት_____

ሌላ ካለ ግለፅ _____ ብዛት_____

1.7 ማህበሩ በውስጡ ምን ያህል ሰራተኞች አቅፏል?

የሥራው አይነት	ሴት	ወንድ
ቋሚ		
የትርፍ ሰዓት		
የሚከፈላቸው የቤተሰብ አባላት		
የማይከፈላቸው የቤተሰብ አባላት		

II. የማህበሩ አመሰራረት እና ብቃት ላይ ያተኮሩ ጥያቄዎች

2.1. ማህበሩ ሲመሰረት ምን ያህል አባላት ነበሩት? _____

2.2. መነሻ ካፒታልስ ነበረው? _____ ቢቻል የአባላቱን አማካይ መነሻ ካፒታል _____

2.3 የአባላቱ መነሻ ካፒታል ምንጭ ምንድን ነው ?

ቁጠባ ☐ ከዘመድ /ከጓደኛ/ ወይም ከአበዳሪ የተገኘ ☐

ከጥቃቅን እና አነስተኛ ብድር እና ተቋማት ☐

መንግስታዊ ካለሆኑ የልማት ድርጅቶች (NGO'S) የበተገኘ እርዳታ ☐

አቁብ☐ ውርስ ☐

ከባንክ በተገኘ ብድር☐ ሌላ ካለ ግለፅ (ጨ) _____

2.4 ማህበሩ ሲመሰረት የተገኘ እርዳታ ካለ

ከመንግስት ፓሊሲወች ጋር በተያያዘ ☐

ብድር በቀላሉ ከማግኘት ጋር የተያየዘ ☐

የለም ☐ ሌላ ካለ ግለፅ (ጨ)_____

2.5. ሲመሰረት ወይም በስራ ላይ አባላቱ ካገጠሟቸው ችግሮች መሃል 3ቱን ጥቀስ/ሽ

ወደ ቢዝነሱ ለመግባት በአባላቱ ላይ የራስ መተማመራ አለመኖር ☐

በቂ የሆነ የመንቀሳቀሻ ካፒታል (Working capital) እጥረት ☐

የአስተዳደር ብቃት እንከን (ለምሳሌ የሂሳብ አመዘጋገብ ላይ፣ ገበያ ማፈላለግ ላይ) ☐

በቂ ያልሆነ የካፒታል አቅርቦት ☐

ሌላ _____

2.6. ባለፉት ሁለት አመታት ውስጥ ቢዝነሱን ያቋረጠ አባል አለ?

አዎ ☐ የለም ☐

2.7. ካለ በምን ምክንያት?

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III. የጥሬ ገንዘብ (Cash) አስተዳደር ላይ የተኮረ ጥያቄዎች

3.1. ማህበሩ የአባላቱን ወጪዎች ይመዘግባል?

አዎ ☐ አይመዘግብም ☐

3.2. ማህበሩ የእድገት እቅድ ያዘጋጃል?

አዎ ☐ አያዘጋጅም ☐

3.3. የጥያቄ ቁጥር 3.2. መልሱ አዎ ከሆነ በስትራቴጂው ውስጥ የጥሬ ገንዘብ በጀት ይጠቃለላል?

አዎ ☐ አይጠቃለልም ☐

3.4. የጥያቄ ቁጥር 3.3. መልሱ አዎ ከሆነ በምን ያህል ጊዜ ውስጥ ይዘጋጃል?

በየወሩ ☐ በአመት ሁለት ጊዜ ☐

በየአመቱ ☐ ሌላ ካለ _____

3.5. የአባላቱ የግል ገንዘብ ከተቋሙ ገንዘብ ጋር ይገናኛል?

አዎ☐ አይገናኝም ☐

3.6. የወደፊት የጥሬ ገንዘብ (cash) በጀት እንዴት ይወሰናል?

1. የገንዘብ አስተዳደር ንድፈ ሃሳቦችን በመጠቀም ☐

2. የማህበሩ አስተዳደር ልምድን በመጠቀም ☐ 3. አይወሰንም ☐

3.7. የጥያቄ ቁጥር 3.6. መልስ 1. ከሆነ የትኛውን የገንዘብ አስተዳደር ንድፈ ሃሳብ ትጠቀማላችሁ?

3.8. በማህበሩ የሚዘጋጀው የጥሬ ገንዘብ በጀት ውጤታማነት ምን ይመስላል

በጣም ውጤታ☐ ውጤታማ ☐

መካከለኛ☐ ዝቅተኛ ☐

በጣም ዝቅተ☐ ውጤታማ ያልሆነ ☐

3.9. ከዚህ በፊት የገንዘብ እጥረት አጋጥሟችሁ ያውቃል?

አዎ ሁልጊዜ ☐ አዎ ጥቂት ጊዜ ☐

አዎ አብዛኛውን ጊዜ ☐ አጋጥሞኝ አያውቅም ☐

3.10. ካጋጠማችሁ እንዴት ችግሩን ፈታችሁ?

1. በአጭር ጊዜ ብድር ☐

2. በረጅም ጊዜ ብድር ☐

3. ሌላ _____

3.11. የአጭር ጊዜ ብድር በዋናነት ከየት ታገኛላችሁ?

_____ _____ _____ _____

_____ _____ _____ _____

3.12. ከዚህ በፊት ለሥራ የማይውል ትርፍ ገንዘብ አጋጥሟች ያውቃል?

አዎ ሁልጊዜ ☐ አዎ ጥቂት ጊዜ ☐

አዎ አብዛኛውን ጊዜ ☐ አጋጥሞኝ አያውቅም ☐

3.13. ይህን ትርፍ ገንዘብ ምን ላይ ታውሉታላችሁ?

ወደ ባንክ እንደ ተቀማጭ ☐ ቢዝነሱን ለማስፋፋት ☐

ለአጭር ጊዜ የኢንቨስትመንት አማራጮች ላይ ☐

ሌላ ካለ ጥቀሱ _____

IV. የአጭር ጊዜ ብድር ላይ ያተኮሩ ጥያቄዎች

4.1. በብድር ትሸጣላችሁ

አዎ ☐ አንሸጥም ☐

4.2. ከሸጣጭሁ ለደንበኛችሁ የብድር ገደብ ታስቀምጣላችሁ

አዎ☐ አናስቀምጥም☐

4.3. ለጥያቄ 4.2 መልሱ አዎ ከሆነ፤ ትልቁ የብድር ገደብ ምን ያህል ነው?

_____

4.4. በአማካይ ለምን የህል ጊዜ ነው የምታበድሩት?

_____

4.5. ከብድሩ ጊዜ ውጪ ለሚከፍል ደንበኛ ምን አይነት ስርዓት ትከተላላችሁ?

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4.6. የተበዳሪውን የብድር አቅም ለማጥናት ምን አይነት የብድር ፖሊሲ ትከተላላችሁ?

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4.7. ከዚህ በፊት አበድራችሁ ያልተመለሰላችሁ ገንዘብ አለ

አዎ ☐ የለም ☐

4.8. ካለ ምን ያህል ይሆናል? _____ በስንት ዓ.ም _____

4.9. የብድር መጠን እና ሁኔታ ምን ያህል ጊዜ ትከልሳላችሁ?

በወር አንዴ ☐ በአመት ሁለቴ ☐

በየአመቱ ☐ ሌላ _____

V. *የጥሬ እቃ አስተዳደርን የተመለከቱ ጥያቄዎች*

5.1. ማህበሩ የጥሬ እቃ በጀት ያዘጋጃል;

አዎ ☐ አያዘጋጅም ☐

5.2. ለጥያቄ 5.1. መልሱ አዎ ከሆነ የጥሬ እቃ መጠን እንዴት ይሰላል;

1. የጥሬ እቃ አስተዳደር ንሰ ሀሳቦችን በመጠቀም
2. የአስተዳደራዊ ልምድን በመጠቀም