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COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ACCOUNTING AND FINANCE
(GRADUATE PROGRAM)

**FINANCIAL LITERACY LEVEL OF OWNERS/MANAGERS OF
MICRO AND SMALL ENTERPRISES IN ADDIS ABABA CITY AND
ITS DETERMINANTS**

**Thesis Submitted to Department of Accounting and Finance, Addis
Ababa University in Partial Fulfillment of Master of Science Degree in
Accounting and Finance**

By:
Habtemariam Geta

June, 2018
Addis Ababa, Ethiopia

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habtegeta23@gmail.com

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Declaration

Statement of Declaration

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Abebe Yitayew (PHD). All resources used in this thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

Name: Habtemariam Geta

Signature_____

Date_____

Place and date of submission: Addis Ababa University, June, 2018

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DEPARTMENT OF ACCOUNTING AND FINANCE

Certification

This is to certify that the thesis prepared by Habtemariam Geta, entitled: “Financial Literacy Level of Owners/Managers of Micro and Small Enterprises in Addis Ababa City and Its Determinants” and submitted in partial fulfillment of the requirements for the degree of Master of Science in Accounting and Finance complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Approved by:

External Examiner: Mehari Mekonnen (PHD) Signature _____ Date _____

Internal Examiner: Abebaw Kassie (PHD) Signature _____ Date _____

Advisor: Abebe Yitayew (PHD) Signature _____ Date _____

Chair of Department or Graduate Program Coordinator

Abstract

Financial literacy is becoming a key life skill, for it helps individuals cope up with the very fast paced, digitalized and globalized financial landscape. This study aims at measuring how well the owners/managers of MSEs in Addis Ababa city are financially literate enough; and explaining their financial literacy level through demographic and socio-economic variables. Financial literacy level was measured through three indicator dimensions such as financial knowledge, behavior and attitude. Data was collected from a sample of 384 MSE owners/managers using self-administered questionnaire. Multi-stage random sampling was employed to select samples. The data was then analyzed using univariate, bivariate and multivariate analysis techniques. Cluster analysis was performed to classify respondents in to higher and lower financial literacy level groups, and generate dichotomous financial literacy data. Majority of the respondents (68%) were classified as having lower financial literacy level. In addition, the descriptive analysis discovered that most respondents lack the required level of financial knowledge, behavior and attitude. The binary logistic regression results revealed that financial literacy level of MSE owners/managers in Addis Ababa city can significantly be explained by their gender, level of education, business experience and cultural attitude. Educational level and business experience have significant positive effect, while cultural attitude has significant negative effect on the probability of joining the higher financial literacy level group for an MSE owner/manager. Men MSE owners/managers are found to have higher financial literacy level than women ones. The findings suggested that remedial measures need to be taken to enhance the financial literacy of MSE owner/managers. Financial education and training programs need to be facilitated in various ways.

Keywords: Financial literacy, financial knowledge, financial behavior, financial attitude, MSEs

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List of Abbreviations and Acronyms

AACA MSED	Addis Ababa City Administration Micro and Small Enterprises Development Agency
AACA TIDA	Addis Ababa City Administration Trade and Industry development Agency
CSA	Central Statistical Agency
FeMSEDA	Federal Micro and Small Enterprises Development Agency
GFLEC	Global Financial Literacy Excellence Center
MSEs	Micro and Small Enterprises
MUDH	Ministry of Urban development and Housing
NBE	National Bank of Ethiopia
NGO	Non-Governmental Organizations
OECD	Organization for Economic and Co-operative Development

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Financial literacy has been a hot issue in recent years around the world. Many countries like USA, England, Australia, Canada, Japan, Indonesia, India, and international NGOs like OECD, GFLEC and World Bank recognized the importance of financial literacy in modern times and are putting an effort towards improving the financial literacy level of their citizens. Those countries established a national financial literacy and education agency/commission targeting to undertake national financial literacy surveys; devise different financial education programs and trainings so as to enhance the financial literacy of their people. The international NGOs too conduct international financial literacy surveys; provide guidance and manuals for measuring financial literacy and how to conduct the survey (Kempson, Perotti, & Scott, 2013), (OECD, 2017).

These all efforts indicate how much important it is making the people (who are the ultimate consumers of the fast paced, highly digitalized and globalized financial system) financially literate. Today's financial market and system requires adequate level of financial literacy; that is being familiar with basic personal finance concepts, maintaining financially savvy behavior and positive attitude towards money and future plan. OECD's Secretary General said "*financial literacy is a foundation stone for well-being, for entrepreneurship, for social mobility, for inclusive growth*" (OECD, 2017).

The term financial literacy has been defined by different scholars differently. While making substantive review of literatures, the definition given by OECD is getting popularity as it is being applied in most current literatures and it embodies wider dimensions. This study adopts the definition of OECD that financial literacy is the "*combination of knowledge, behavior, and attitude necessary to make sound financial decisions and ultimately achieve individual financial wellbeing*" (OECD, 2011).

Plenty of financial literacy surveys and researches conducted around the world show that financial literacy is at low level in developed and developing countries Buche, etal., (2016), but sever in developing ones (Xu & Zia, 2012) & (Zvaríková & Majerová, 2014) . Studies which

focus particularly on micro, small and medium enterprises owners and entrepreneurs also show the financial literacy level among those business communities is at lower level Fatoki, (2014) & Plakalović, (2015). According to Das, (2016) financial literacy an important life skill is not only at below average or very low level in developing countries but also it is less recognized. Recently, in Ethiopia one of the developing countries, financial illiteracy or lack of financial capability is determined as one of the barriers of financial inclusion (NBE, 2017). Therefore, this is evident that indicate the prevalence of financial illiteracy and the urgent necessity of efforts to enhance the financial literacy level of Ethiopian financial consumers.

Moreover, lack of financial literacy is a barrier more than just for financial inclusion. Not only it makes individuals to be financially excluded but also it can have negative impact on financial wellbeing of individual consumers, financial system and the economy (Lusardi & Mitchell, 2014). So, financial literacy should be recognized as a life skill for every individual and efforts should be made to enhance it. However, to best of the researcher's knowledge no effort has been made to enhance financial literacy level among Ethiopians except the effort currently underway by National Bank of Ethiopia.

Before designing programs to enhance financial literacy, current financial literacy level of consumers should be measured. In addition, enhancing financial literacy level among consumers should precede the implementation of the national financial inclusion strategy. Studying the current financial literacy level of consumers is essential to determine the financial literacy gaps and needs so that appropriate remedial measures and programs can then be designed. By measuring the financial literacy level of Micro and Small Enterprise (MSE's) owners located in Addis Ababa city along with its socio-economic and demographic factors, this study can be useful to achieve such objective.

1.2 Statement of the Problem

In this very dynamic modern time, the financial system is getting fast paced; digitalized, globalized and creating complexity among its ultimate consumers i.e. the people in making finance related decisions (Lusardi & Mitchell, 2014). The financial products and services are plenty and changing through time. The consumers face challenges in choosing the products and services suitable and worthwhile to them unless they accumulate adequate level of financial knowledge and capability (Cunliffe, 2017). As the people are financially illiterate, they become unable to make the right choice and use of the variety of services and products offered by the financial system.

Financial illiteracy can cause lack of/poor retirement plan, poor decision making and poor financial wellbeing (Lusardi & Mitchell, 2011, 2014). As per Lusardi & Mitchell, (2011) retirement planning is strongly correlated with level of financial literacy among consumers. Financially illiterate people are less likely to plan for their retirement and poor position themselves during retirement. And the problem will be even worse as people are having longer life spans now than before Lusardi, (2017a & 2017b) unless they are financially literate enough to accumulate adequate resources during their working ages.

In addition, consumers face confusion while making decisions and can make wrong choices unless they are aware of basic finance concepts critical for decision making. If consumers lack knowledge of interest rate and interest compounding, inflation, exchange rate, risk and return and risk diversification, it is difficult to make key finance related decisions such as saving, borrowing, investing and lending. For instance, in Ethiopia the general annual inflation rate in recent years has been higher than annual saving interest rate and rate of return for short term investments like treasury bills (less than 3%) (NBE, 2017). Inflation changes from time to time while minimum deposit rate is relatively fixed once set. The minimum saving interest rate is 7%, much lower than the varying general rate of inflation (NBE, 2017). For example the annual inflation rate for the year of 2017 as measured by consumer price index averaged 9.81% (CSA, 2018). The consumer price index for the month of March (2018) is high of 15.2%, while the annual deposit rate is 7% fixed and the Treasury bond's yield rate is less than 3% (NBE, 2018). In such circumstances, saving money in banks and buying short term investments to make income may not be the right choice since it results in negative return if measured in real terms.

As inflation keeps rising higher than rate of interest and return, the loss in purchasing power of money can't even be compensated by the return from saving and investing. So peoples need to be financially literate to exercise the necessary caution while choosing different saving and investment instruments and cope up with the constantly changing financial system.

Moreover the prevalence of financial illiteracy could be bottleneck for inclusive financial and economic growth (Lusardi & Mitchell, 2014). Financially illiterate consumers are high likely to be financially excluded as they are not aware of which, when and how to use of the various financial products and services. In addition, though consumers having access to various financial products and services, they are usually disadvantaged from poor decisions they can make like high debt loads, inadequate insurance, lack of investment diversification, insufficient use of tax-favored investments, inadequate of emergency funds, lack of clearly defined personal and financial goals (Abel, 2015). According to Abel, (2015) "*Financial illiteracy prohibits individuals from becoming productive members of the economy and society much like the inability to read or write disadvantages generations*". Therefore, any financial system and economy can't achieve the level of growth what it purports to while there are excluded societies and can't grow with it.

Bearing on these problems financial illiteracy creates several researches and surveys on financial literacy have been conducted around the world. Most of the results show that greater number of the financial consumers are financially illiterate (Atkinson & Messy, 2012), (Robson, 2012), (Kempson, Perotti, & Scott, 2013), (Zait & Berteau, 2014), (Bajo, Barbi, & Sandri, 2015), (OECD, 2017). The consumers lack basic knowledge of financial concepts such as interest compounding, inflation, and risk diversification (Lusardi, 2016, 2017a, 2017b), and (Atkinson & Messy, 2012).

Despite the negative consequence of financial illiteracy has on the financial wellbeing of individuals and the economy as a whole, to the best of the researcher's knowledge little attempt has been made to measure the financial literacy level of Ethiopian people. Though, Matewos, Dhaliwal, & Kaur, (2017) conducted a study to measure the financial literacy level of urban dwellers in Addis Ababa. And yet, their study focused on measuring the financial literacy level of peoples residing in Addis Ababa alone. However, peoples running business in general, MSEs owners/managers in particular didn't get attention concerning the issue. Perhaps, currently the

issue of financial illiteracy has been identified as one of the major barriers for financial inclusion, while drafting the national financial inclusion strategy (NBE, 2017). To Joshi, (2011) financial inclusion and deepening is only possible when consumers are financially literate. That is they should be financially literate to make informed choices about how they save, borrow and invest and aware of what they can demand. Therefore, measuring the current level of financial literacy among the Ethiopian financial consumers can reassure the effort underway by NBE to bring financial inclusion. Because to design appropriate strategy and financial education program to enhance level of financial literacy among consumers, measuring and identifying financial literacy gaps and needs is essential.

The MSE's sector in Ethiopia has got a due attention by the government for its role in job creation, reduce poverty, enhance innovation and ensure sustainable economic growth (Berihu, Abebaw, & Biruk, 2014). The government has devised development strategies and policies to enhance the establishment and growth of the MSE's sector (MUDH, 2016). In the right circumstances MSE's can reduce unemployment, reduce poverty, boost the country's economic growth and create wonderful business environment. More over MSE's can be active participant in the capital market to be established in near future (currently underway). Since MSE's particularly operating in Addis Ababa city are plenty in number, their participation in the capital market and in the financial system can make efficient, effective and growing fast not only themselves but also the infant capital market, financial system and the overall economy. However, how well the owner's/managers of those MSE's are financially literate to serve this purpose? To what extent they do know basic financial concepts which are critical to make informed decision? Do they have financially savvy behavior? Do they have positive attitude towards money and future plan?

Regardless of the importance of MSE's to the economy no attention the government, financial institutions and the academic community has given to measure and enhance the financial literacy levels among this business community. So this study fills this gap by assessing the levels of financial literacy among MSEs owners/managers in Addis Ababa city and correlates it with demographic and socio-economic variables.

1.3 The research objectives

The general objective of this study is to measure the financial literacy level of MSE's owners/managers located in Addis Ababa city administration and determining demographic and socio-economic factors that can affect their financial literacy level.

1.3.1 Specific objectives

Specifically this study aspires to achieve the following research objectives.

- To measure the financial literacy level of MSE's owners/managers in Addis Ababa city.
- To examine whether there is gender difference in financial literacy level among MSE's owners /managers in Addis Ababa city.
- To determine the effect of age on the financial literacy level among MSE's owners /managers in Addis Ababa city.
- To test effect of the level of formal education on the financial literacy level financial literacy level among MSE's owners /managers in Addis Ababa city.
- To check weather financial literacy level of MSE owners/managers in Addis Ababa city can be determined by their business experience.
- To determine the effect of cultural attitude on financial literacy level among MSE's owners /managers in Addis Ababa city.

1.4 Hypotheses

Based on review of empirical literatures, the relationship between the dependent variable and the independent variables is hypothesized as follows. The relationship between financial literacy and the independent variables cultural attitude is estimated by the researcher since no previous studies involved it.

H01: There is no significant difference in financial literacy level between Men MSEs owners/managers and Women MSE's owners/managers.

H11: Men MSE owners/managers have higher financial literacy level than women ones.

H02: Age has no significant effect on level of financial literacy level among MSEs owners/managers.

H12: Younger and elderly MSE owners/managers are less likely to join the higher financial literacy level group than middle-aged ones.

H03: MSE's owners/managers educational level cannot significantly affect their level of financial literacy.

H13: MSE owners/managers with higher education level are more likely to join the higher financial literacy level group than those with lower educational levels.

H04: Number of years in business cannot significantly affect MSEs owners/managers level of financial literacy.

H14: MSE owners/managers with higher business experiences have higher financial literacy level than those with lower business experiences.

H05: Cultural attitude cannot significantly affect financial literacy level of MSE's owners/managers.

H15: cultural attitude significantly and negatively affects the financial literacy level of MSE owners/managers.

1.5 Significance of the study

After successful completion, this study will have the following significances:

- This study will reassure the effort underway by National Bank of Ethiopia (NBE) to bring financial inclusion. While drafting national financial inclusion strategy, NBE identified financial illiteracy as one of the major barriers of financial inclusion. Therefore, by measuring the current level of financial literacy and identifying financial literacy gaps and needs among SMEs owners/managers in Addis Ababa city; this study will be an input to design appropriate strategies, financial literacy education and training programs so as to enhance financial literacy level among owners of MSEs.
- The SMEs sector in Ethiopia has received due attention from the government for its role in employment generation, poverty reduction, promoting economic growth and create competitive business environment. The government has been designing various development strategies and initiatives to enhance the growth in this sector. On the other hand, since the importance of financial literacy is lately recognized nationally through NBE, no effort has been made on enhancing financial literacy among this business community. To better promote the growth of MSEs sector, development strategies and policy initiatives should also focus on enhancing financial literacy level of

owners/managers of those business communities. Therefore, this study will remind the concerned bodies of the importance of financial literacy and financial literacy gaps and needs among MSEs owners/managers.

- For further similar studies it can be used as a reference or guide. Even though financial literacy has been hot issue and many researches have been done among many countries in recent years, this study is the first in Ethiopia's MSE sector context. Therefore, it paves the way to deal further and more on the issue of financial literacy.

1.6 Scope of the Study

This study targets on measuring the financial literacy level of MSE owners/managers in Addis Ababa city. Even though financial literacy survey/study shall better embody the whole population in a country or a specific place, due to economic and time constraints this study targets the MSE's sector operating in Addis Ababa city. In addition, this study focuses on measuring the MSE owners/managers literacy of finance aspect rather than accounting/reporting aspect.

1.7 Limitation of the Study

The financial literacy level of persons in an area of residence or engagement can be better measured by making comparing across peoples in the other area. So far there is no standard financial literacy measures customized to Ethiopian context to capture specific cases that appear in Ethiopia. Hence the financial literacy level of sample MSE owners/managers in Addis Ababa city was measured without making comparisons across the financial literacy scores in the other areas.

1.8 Organization of the Study

The report is organized in to five chapters. The first chapter deals with the study's introduction part which constitutes background information on the study, the problem statement, objectives of the study, research hypotheses, significance of the study, scope and limitation of the study. The reviewed literature; theoretical, empirical and summary of the literature reviewed is presented in the second chapter. In the third chapter the research approach, methods, data collection and analysis techniques, which had been applied in the study are dealt with. The last chapter contains conclusion and recommendation.

CHAPTER TWO

REVIEW OF LITERATURES

2.1 Introduction

The concept of personal financial literacy is rapidly being recognized and emerged as a key priority for many countries around the world, as countries ascertain its importance in modern times with the increasingly complex financial landscape (Atkinson & Messy, 2012, Lusardi, 2015, 2017a, 2017b). Countries mostly the developed ones like USA, Canada, UK, Australia, Germany etc. have been establishing national financial literacy agencies with the mission of enhancing the financial literacy level of their people. In addition international organizations like OECD, GFLEC, and World Bank, have also put their attention for financial literacy and doing a lot to enhance the financial literacy level among the society of their member and non-member countries.

Even though financial literacy is relatively new concept, it has been researched by different scholars and many international and national surveys have been made around the world. But the definition and proxies used across different financial literacy studies and surveys is not consistent. However, regardless of these inconsistencies, most of the studies revealed that the financial literacy level of the consumers is low.

2.2 Definitions and Measurement of Financial Literacy

Different scholars, strategists and organizations defined financial literacy in different ways. Some defined it in terms of knowledge and awareness of financial concepts (cognitive aspect); some in terms of the knowledge and skills to apply the knowledge (both cognitive and application); and others in terms of the knowledge, behavior and attitude. The cognitive aspect or financial knowledge is the most common component of many financial literacy conceptual definitions.

Definitions involving knowledge alone seems too specific and leaves other issues out of sight. As per Remund, (2010), financial literacy is more than simply a measure of knowledge. *“Literacy reflects one’s ability to perform a host of tasks related to money, including but not limited to earning, protecting and spending that money”*. This definition implies financial

knowledge that should help in making important financial decisions. The Ontario Working Group on Financial Literacy, (2010) defined financial literacy; in terms of possessing the knowledge and skills in order to make responsible financial decisions competently and confidently.

Kimiyaghalam & Safari, (2015) made a review of literatures on the concept of financial literacy and its measurements. Based on their review, they have grouped conceptual definitions of Financial literacy in to four categories such as, knowledge of financial concepts, ability in managing personal finances, skill in making financial decisions and confidence in future financial planning. They found that some of authors in the literatures they reviewed, used the combination of those categories to define financial literacy.

OECD defined financial literacy as the combination of knowledge, behavior and attitude needed to make sound financial decisions and achieve individual financial well-being (OECD, 2011, Atkinson & Messy, 2012). The definition formulated by OECD and used by many like (Bhabha et al., 2014, Potrich, Vieira, & Kirch, 2015, Firli, 2017, JIN & Chen, 2017) is a wider and clearer definition embodying fundamental components. According to this definition financial literacy is beyond acquiring knowledge of basic financial concepts. The financial knowledge should help to shape behavior and attitude about financial matters so as to achieve the desired financial wellbeing.

The measurement of financial literacy is mostly associated with its definition. As there is no single definition, there is no defined and consistent measurement for financial literacy. Different scholars measure financial literacy differently in-line with the respective definition they forwarded or adopted. In most literatures that adopt the definition forwarded by OECD, the measurement of financial literacy is more or less consistent. Atkinson & Messy, 2012, Bhabha et al., 2014, Potrich, Vieira, & Kirch, 2015, Firli, 2017, JIN & Chen, 2017) used similar proxies to capture financial literacy. They broke down financial literacy in to three components such as financial knowledge, behavior and attitude.

The knowledge component as per OECD, (2011) incorporates awareness of basic financial concepts and issues such as numeracy, interest (simple and compound), time value of money, risk and return, risk management (diversifications and insurance), inflation, different financial products and services, financial institutions. Financial knowledge is important in undertaking

activities such as following news about the economy and financial landscape, comparing financial products and services and thereby making informed financial decisions (OECD, 2017).

According to Koenen, et al. , (2016) and Lusardi, (2016, 2017) who defined financial literacy in terms of knowledge, financial knowledge can be measured through three concepts such as interest compounding, inflation and risk diversification. As per Lusardi, (2016, 2017) these concepts are critical in every financial decision making.

The other components making up measures of financial literacy such as behavior and attitude are mostly used in researches which adopt the OECD's definition and measurement of financial literacy. The financial behavior includes budgeting, making considered purchase, paying bills on time, keeping watch of financial affairs, saving, long term financial goal setting, choosing products, investing and borrowing to make ends meet (OECD, 2017). The other financial literacy component, financial attitude includes attitude towards money, saving, and planning for the future (OECD, 2011, 2017).

2.3 Driving forces for increased the Importance of financial literacy

Financial literacy is increasingly becoming the key strategic priority among many countries (Lusardi A. , 2017). There are number of forces that contributed for the rising importance of financial literacy throughout the world. According to OECD PISA, (2012), Lusardi, (2017) and Zucchi, (2017) changes in the financial landscape including changes in labor markets, the changes in demographics, changes in financial markets, increase in number of financial service providers and changes and increase in number of financial products and services.

Changes in labor market and Individuals are shouldering more responsibility

Employees are mobile as wages are divergence so that they have to carry their pensions with them (Lusardi A. , 2017). As per Lusardy, (2017) individuals need to be skillful to win in the labor market and they have to invest in education to acquire the required skills. Thus individuals are shouldering more responsibility not only take care of their retirement but they have to made critical decisions about investing on their education.

Changes in the Financial Landscape

The fast changing financial system, the increase in diverse financial products and services, the increase in number of different financial service providers is offering a numbers of opportunities

and choices and creating confusion among its ultimate consumers in making financial decisions (OECD PISA, 2012, Lusardi, 2017, Zucchi, 2017).

Changes in Demographics

Now a day's life expectancy is higher meaning people are living longer (Zucchi, 2017). This means people need more retirement savings in their working ages and they need to be financially literate enough to do so.

Changes in the Environment and Technologies

Financial markets are global; there are many more participants in the market and many more factors that can influence it (Zucchi, 2017). Moreover, to Zucchi, (2017), the constantly change in technology such as electronic trading make the financial markets even swifter and more volatile.

According to the literature for instance Xu & Zia, (2012), LaBorde, Mottner, & Whalley, (2013), Plakalović, (2015), Lusardi, (2017) besides the many changes in the financial matters we are experiencing, the financial literacy level of consumers is very low and not enough or inappropriate to cope up with the changed circumstances. This issue forced financial literacy to be recognized as life skill (Lusardi, 2015, 2016, 2017) and a lot is being done to enhance it among many countries (Lusardi & Mitchel, 2014, Lusardi, 2017).

2.4 Variables affecting the Financial Literacy

There are a number of variables that could affect the individual's level of financial literacy. In most of the empirical literatures reviewed, financial literacy can be affected by demographic and socio-economic factors for example, Potrich, Vieira, & Kirch, (2015), Firli, (2017). Demographic variables such as gender and age can affect the financial level of individuals as most empirical evidences showing females have lower financial literacy level than males (Lusardi, 2011), (Firli, 2017) and (Lusardi A. , 2017). On the other hand, there are few exceptions that found there is not significant gender difference on individual's financial literacy level (Ramasawmy et al, 2013). According to the literature, the financial literacy level with respect to age follows an inverted U-shape for instance (Lusardi, 2011), (Xu & Zia, 2012), and (Atkinson & Messy, 2012). This indicates financial literacy is lower among young and older population and relatively higher among adults.

Most empirical literatures like Lusardi, (2011), Bhushan & Medury , (2013), Bhushan & Medury, (2013) and Das, (2016) confirmed that individuals with higher level of education, higher employment experience, higher income tends to have relatively higher financial literacy level.

2.5 Financial Literacy & Micro, Small and Medium Enterprises

Financial literacy is recognized as one important life skill for every individual. It can be more important for those running business. Financial literacy researches focusing on small business owners/managers are not adequate (Campo & Barnes, 2017). Some of them emphasize on measuring the financial accounting and record keeping aspect rather than financial aspect. Most of empirical evidences around the world show that financial literacy level of small and medium business owners is low for instance (Guliman, 2015).

Fatoki, (2014), assessed financial literacy level of the owners of new micro-enterprises in South Africa using descriptive method of data analysis. The study found micro-enterprise owners' level of financial literacy is low in areas such as, financial planning, analysis and control, book-keeping, understanding of funding sources, business terminology, finance and information skills, use of technology and risk-management to measure the financial literacy of entrepreneurs.

In additions, a study in the Republic of Srpska by Plakalović, (2015), indicated that though SMEs owners are expected to be financially literate to properly manage their financial matters, their level of financial literacy is very low. Particularly the study founds out that the SMEs owners are not aware of the intangible values of their companies, not aware of financial analysis, and manage their liquidity spontaneously which will lead to illiquidity.

Sucuahi, (2013), measured the financial literacy of 100 selected entrepreneurs in Davo city, Philippines and determined the factors that affect their financial literacy level. They measured financial literacy in terms of record keeping, budgeting, personal finance and savings. The result showed the financial literacy level of selected individuals is moderate. Educational attainment significantly affects financial literacy level of micro-entrepreneurs significantly but gender is not a significant factor. Micro-entrepreneurs with higher level of education have relatively higher financial literacy level.

Small and Medium Enterprise owners with higher business experience/years in operation and higher level of education are characterized by having relatively higher financial literacy level. In addition, financial training program can affect level of financial literacy positively i.e those who took financial literacy program (Siekci, Wagoki, & Kalio, 2013) and (Bayrakdarođlua & Őan, 2014).

2.6 Summary of Reviewed Literatures

Various forces have driven financial literacy to receive serious attention from global society and be prior policy objectives among many countries. For instance the changes in pension systems, changes in the financial landscape, the changes in demographics, changes in financial markets, increase in number of financial service providers and changes and increase in number of financial products and services are creating complexity among the ultimate financial consumers (Lusardi, 2017) and (Zucchi, 2017). However, according to the literatures reviewed, the financial literacy level of is low across countries that can't enable consumers to cope with all these changes.

Factors that can affect individual's financial literacy level include demographic variables such as gender and age and socio-economic variables such as level of education, employment experience, level of income (Lusardi, 2011) (Atkinson & Messy, 2012), (Das, 2017) and (Stolper & Walter, 2017) . Men are relatively financially literate than women. Financial literacy is higher among adults than young and older consumers. Consumers with higher educational level, higher employment experience and higher level of income are relatively financially literate.

Financial literacy can be more important for those running business than individual consumers, because the ultimate financial matter of the business lies in the hands and responsibilities of its owners beyond their personal financial context. Therefore, small business owners are expected to be financially literate to achieve success through excelling in financial matters and making wise and informed decisions and making the right choices and use of financial products and services. Despite the very importance of personal financial literacy for small and medium business owners, financial literacy survey and research focusing on SMEs owners around the world is not adequate. Most of the studies conducted on entrepreneurs, small and medium business owners revealed that financial literacy is low among those business owners/managers (Fatoki, 2014) and (Plakalović, 2015).

2.7 Research gap

Done empirical literatures, national and international surveys indicated that the financial literacy level of individuals is low and not enough to capture the changing circumstances in the financial landscape. Even though financial literacy is low in developed and developing countries, financial illiteracy is relatively higher and severe in developing ones. Despite the fact, little researches have been conducted and few efforts have been put to combat financial illiteracy among developing countries. Ethiopia, one of the developing countries can't be the exception of this rather the problem will be severe, due to the importance of the so called issue financial literacy is lately recognized at national level (NBE, 2017). This shows little effort has been made before to improve financial literacy of financial consumers. Moreover, to the best of the researcher's knowledge, no prior researches have been done to measure the level of financial literacy of MSE owners/managers in Ethiopia. This research is devoted to fill this gap by measuring the financial literacy level, particularly of small business owners in Addis Ababa city administration.

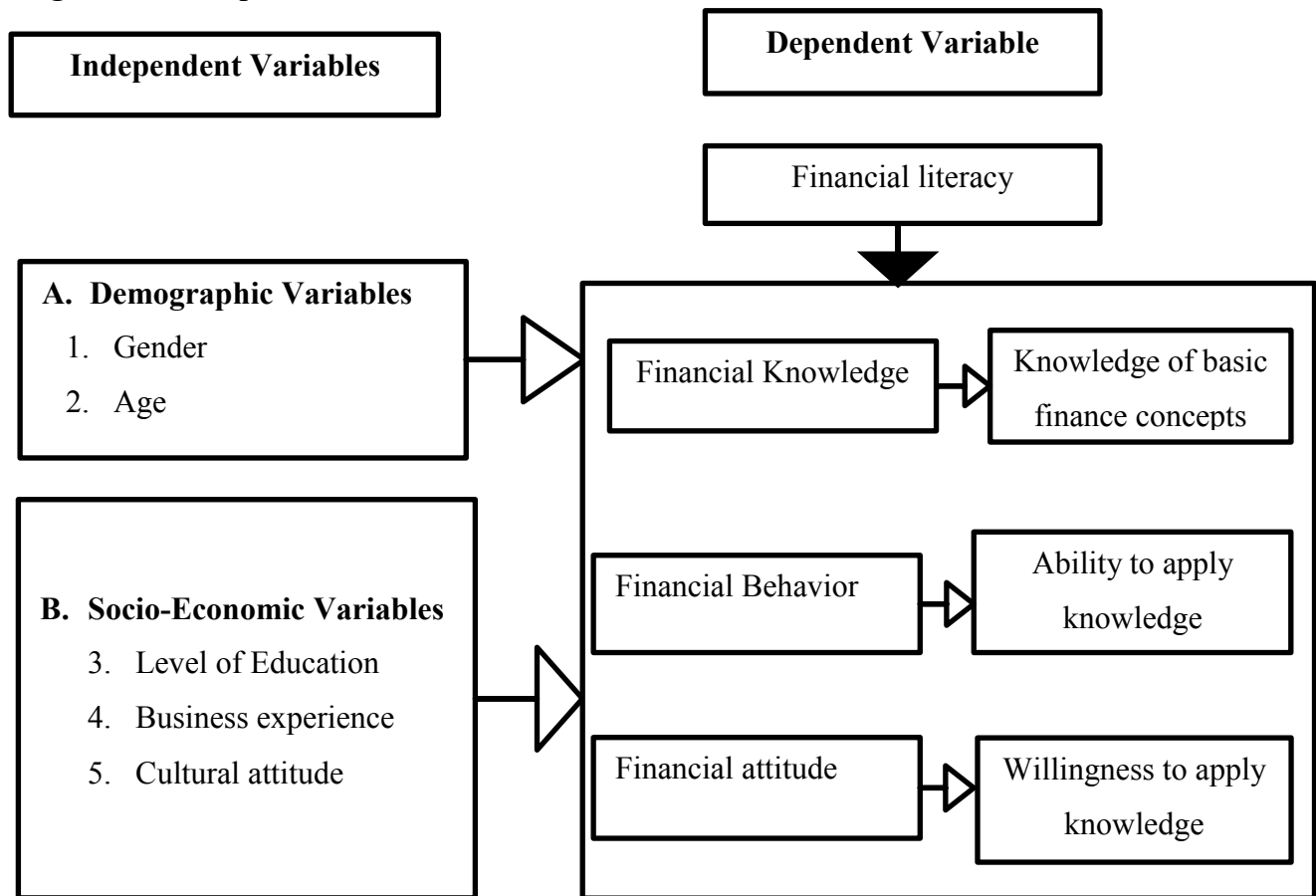
As per the empirical literatures reviewed, demographic and socio-economic variables such as gender, age, level of education, income, employment/business experience, family income and marriage status can more or less determine the financial literacy level of individuals. However, culture is rarely correlated with level of financial literacy. It particularly can affect the financial behavior and attitude dimensions of financial literacy.

Principally, in Ethiopia the culture of social life invites much spending rather than saving and give care for the future. Ethiopian peoples have the culture of collectivism and hospitality i.e sharing together the joy and angry moments which require much spending. Planned and budgeted way of spending is less accustomed in Ethiopia. However, peoples may have different views and stands on such culture. Therefore, this study will test whether cultural attitude can determine level of financial literacy among MSE owners/managers I Addis Ababa city.

2.8 Conceptual Framework

The conceptual framework is developed from the literatures reviewed, principally from Potrich, et al., (2015) and researcher's own conceptualization. The independent variables include demographic variables such as gender and age and socio-economic variables such as level of education, business experience and cultural attitude. The dependent variable, financial literacy is measured using three dimensions: knowledge, behavior, and attitude.

Figure 1: Conceptual Model



Source: Potrich, et al., (2015) & Researcher's own conceptualization

CHAPTER THREE

RESEACH METHODS AND DESIGN

In this chapter, how the study is designed, how samples are drawn, how data was collected and analyzed are dealt with.

3.1 Research Design

The study is designed to be survey research, for data have been collected from primary sources (respondents) through close-ended questionnaire. The study is explanatory type as it aimed at explaining financial literacy level of respondents per demographic and socio-economic variables. The study follows quantitative approach. Data collected from respondents was coded numerically and analyzed using quantitative techniques.

3.2 Target Population of the Study

The study focuses on measuring financial literacy level of MSE's owners/managers currently operating in Addis Ababa City. Every individual in modern time need to be financially literate enough to cope with the very dynamic modern financial landscape, so financial literacy survey/study shall better embody the whole population in a country or a specific place. However, due to economic and time constraints this study targets the MSE's sector operating in Addis Ababa city. MSE's can play a prominent role in ensuring sound economic and financial environment. Under the right circumstances, MSEs can reduce unemployment and poverty, create competitive business environment, encourage innovation and be active participant in the financial market, so that they received prioritized attention from the government. To better stimulate MSE's growth and benefited from them, their owners/managers should be financially literate enough to excel in financial matters and achieve better financial wellbeing by making sound and informed decisions. Minding the role of MSEs, this study put an effort to measure MSE's owners/managers level of financial literacy along with their demographic and socio-economic variables; and identifying financial literacy gaps and needs. Thereby, appropriate measures and financial literacy enhancement programs can be designed.

Micro, small and medium enterprises are usually defined differently in different countries. In Ethiopian context, Federal Micro and Small Enterprises Development Agency (FeMSEDA), (2011) defined micro and small enterprises (MSEs) from support provision perspective which

contempt Medium enterprises (Amare, 2017). According to FeMSEDA, (2011), MSEs are defined in terms of their number of permanent employees and total asset and depending on the sector of their business (service or industry). The following table shows how MSEs are defined in Ethiopian context.

Table 1: Definition of Micro and Small Enterprises

Level of enterprise	Sector	Number of employees	Total asset (ETB)
Micro enterprises	Industry	≤ 5	≤ 100,000
	Service	≤5	≤50,000
Small enterprises	Industry	6- 30	100,000-1,5000,000
	Service	6-30	50,0001-500,000

Source: FeMSEDA, 2011

Based on the data obtained from Addis Ababa City Administration Trade and Industry Development Agency (AACA TIDA), as of October 11, 2017, there are a total of 188,799 MSEs operating in Addis Ababa city until that date.

3.3 Samples and Selection method Employed

3.3.1 Sample size determination

The size of the sample is determined following Yamman's, (1967) formula.

The formula used to determine the sample size is:

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

Where, n refers to the sample size, N is the population size, and e is the level of precision. 5% level of significance/precision is chosen. Inserting the chosen level of precision (5%) and the population data in above formula, the resulted size is 400.

3.3.2 Sampling Technique

Multi-stage random sampling is applied to select a representative sample. First among a cluster of ten sub-cities of Addis Ababa city administration, four sub-cities (Adis Ketema, Gulele, Arada, and Kirkos Sub-cities) were selected randomly. Each selected clusters contain a total of MSEs 13819, 30084, 14097 and 19748 respectively. Cluster sampling is used for each sub-city and Wereda contain diverse sectors of MSEs so that selected clusters are supposed to represent

the whole MSEs in Addis Ababa. Each sub-city contains ten Woredas except Kirkos Subcity which contain eleven Woredas.

Secondly among the clusters of Woredas, randomly selected were four Woredas from each sub-city (a total of 16 Woredas). Woredas 03, 06, 09 & 10 from Arada Subcity, 02, 04, 07 & 08 from Addis Ketema sub-city, 01, 03, 04 & 07 from Gulele sub-city and 02, 03, 06 & 08 from Kirkos sub-city were selected. Sample size in each cluster of sub-cities and thereby Woredas was assigned proportional of their respective population size.

Table 2: Distribution of Sample MSEs by sub-city and Wereda

		Selected Sub-cities			
		Arada	Addis Ketema	Gulele	Kirkos
	Total population	13,819	30,084	14,097	19,748
	Sample	71	155	73	102
Cluster Sample 1		Wereda 03	Wereda 02	Wereda 01	Wereda 02
	Total population	725	1124	1619	2564
	Sample	14	11	22	34
Cluster Sample 2		Wereda 06	Wereda 04	Wereda 03	Wereda 03
	Total population	1220	2396	1167	1382
	Sample	24	25	16	18
Cluster Sample 3		Wereda 09	Wereda 07	Wereda 04	Wereda 06
	Total population	577	1659	546	1371
	Sample	11	17	8	18
Cluster Sample 4		Wereda 10	Wereda 08	Wereda 07	Wereda 08
	Total population	1161	9491	1926	2517
	Sample	22	102	27	32

Source: AACA TIDA, 2017

Finally from each cluster of Woredas, samples were selected randomly using lottery method. An exhaustive list of MSEs along with their credentials such as location/Wereda, house number, contact address, business name, year of establishment, current capital was obtained from AACA TIDA on October 11, 2017. By arranging them alphabetically from the first to the end, their order number (1-end) was used as their code in a separate piece of paper and mixed in a box per each selected cluster of Woredas. From the box in each cluster the required number of piece of papers containing the codes were picked up. Then referring the selected code numbers to the list of enterprises, samples along with their credentials were selected, then each respondent was contacted using the address given.

3.4 Data collection Instruments

Self-administered questionnaire containing set of questions constructed in two parts has been used. The first part contains set of questions on demographic and socio-economic variables and the second part contains set of questions on three dimensions of financial literacy such as financial knowledge, financial behavior and financial attitude. The questionnaire constructed is composed of questions developed by Atkinson & Messy, (2012), OECD, (2011 & 2015) and Potrich et al., (2015). In addition, questions which are specific and matter most in Ethiopian context were also added. Bearing on the fact that not all MSEs owners/managers may not have accent of English language, the questionnaire was handed to each selected respondent after translating the questions in to Amharic.

The financial knowledge questions are intended to measure the respondents' knowledge and awareness of different finance concepts which are critical for financial decision making. They are exam type questions for which respondents are said to be financially literate can they get the correct answer. The financial behavior questions are intended to capture the respondents day to day, regular or long-term finance related actions, choices and practices. The financial behavior questions are composed of likert scale questions. Financial attitude questions are intended to capture the attitude of respondents towards money, spending and planning for the future. These are composed of likert scale item questions.

Some questions were negatively worded so as to prevent respondents from answering randomly and crosscheck later if any. Then they were reverse coded latter in the data entry.

3.4.1 Reliability Test of the Data collection instrument

The data collection instrument is supposed to be valid, since the questionnaire is composed of standard financial literacy questions adopted mainly from Atinson & Messy, (2012), OECD, (2011 & 2015) and Potrich et al., (2015). Financial literacy questions to capture the financial landscape that matter most in Ethiopian context were also added. In addition, the reliability of the measurement instrument was tested using Cronbach's alpha; particularly for variables measured using likert scale questions. The result of the Cronbach's alpha suggested that the measurement instrument is reliable. The result of the Cronbach's alpha is discussed with detail in chapter four.

3.5 Variables of the Study, Their Measurement and Coding Procedure to Prepare for Analysis

3.5.1 Independent variables

The explanatory variables are demographic variables (gender and age) and socio-economic variables such as level of education, business experience (number of years in business) and cultural attitude.

- 1. Gender:** used to capture gender characteristics of respondents. It is coded as dummy variable; “1” if male “0” if not.
- 2. Age:** used to capture age characteristics of respondents. It is collected as a continuous data, but recoded as ordinal to simplify the analysis. Accordingly the age of respondents was coded (categorized) as ‘1’ (<30), ‘2’ (30-39) and ‘3’ (40-49), ‘4’ (50-59) and ‘5’ (60+).
- 3. Level of Education:** it measures the educational attainment of respondents in formal schools. It is ordinal data coded as ‘1 if respondents do not go in to formal school, ‘2’ if respondents attain primary education (grade 1-8), ‘3’, if respondents attain secondary and preparatory education (9-10), ‘4’ if respondents attain tertiary level education (Diploma and Bachelor’s degree), and ‘5’, if respondents attain masters or above educational levels.
- 4. Business experience:** captures the experience of respondents in conducting businesses with in their enterprise through number of years in business. It is collected as a continuous data and recoded as an ordinal data to make the analysis simpler. Respondents are grouped in to five categories based on the number of years they have been in business such as <5 years, 5-9 years, 10-14 years, 15-20 years and 20+ years. These categories were coded as 1, 2, 3, 4 and 5 respectively.
- 5. Cultural attitude:** measures the respondents’ perception towards social life/collectivism and hospitality, and their way of life which particularly influence financial matters of individuals. It is a likert scale item ranging from strongly disagree (“1”) indicating cultural attitude likely to positively affect financial literacy to strongly agree (“5”) indicating cultural attitude highly likely to negatively affect financial literacy.

3.5.2 Dependent Variable

The dependent variable is financial literacy which is composed of three dimensions such as knowledge, behavior and attitude.

1. **Financial knowledge:** measures the respondents' knowledge of basic financial concepts such as interest (simple and compound), inflation, risk and return, risk management (insurance and risk diversification). It contains exam type questions coded as binary outcomes "1" if respondents answered correctly and "0" if not.
2. **Financial Behavior:** measures the respondents' financial actions and behaviors including budgeting, saving and investing (bearing the effect of inflation), considered purchase, choosing financial products, planning ahead and borrowing. It contains likert scale type questions ranging from "1" strongly disagree to "5" strongly agree in the questionnaire. On the other hand, negatively worded questions are reverse coded.
3. **Financial Attitude:** measures the respondents' perception towards money, spending and planning for their future. It contains likert scale items ranging from strongly disagree "1" to strongly agree "5", and negatively worded questions are reverse coded.
4. **Financial Literacy Level:** measures the combined/overall financial literacy level of respondents. The overall financially literacy level data is obtained by using cluster analysis as discussed in chapter four in detail. Respondents were clustered in to two groups such as, higher financial literacy level group and the lower financial literacy level group. Respondents who are in the higher financial literacy level group are coded as '1', while those who are members of the lower financial literacy level group are coded as '0'.

3.6 Method of Data Presentation and Analysis

Quantitative data analyses methods including both descriptive and inferential data analysis have been employed. Tables and figures have also been used to present the data. The numerical computation part of the analysis is done using the software IBM SPSS version 21.

3.6.1 Descriptive Data analysis

To describe the financial literacy level of respondents, quantitative techniques have been employed. Analysis was made for each of financial literacy components financial knowledge, behavior and attitude separately and jointly for overall financial literacy. The measures of central tendency such as mode, median and mean, measures of dispersion including standard deviation and range were used. In addition, frequencies and percentages were used to describe the data.

Cross tabulation analysis was also used to describe the financial literacy level of the respondents across the different categories of the categorical independent variables. The dummy coded combined financial literacy level of respondents is cross-tabulated against their gender, age, level

of education and business experience. The cross-tabulation analysis is used to see the association between the predictor variables and the financial literacy level. Pearson chi-square test is used to test whether the association between the predictor variables and the financial literacy level is statistically significant.

3.6.2 Inferential analysis

Test of hypothesis was performed to see the significance of the association between the dependent variable, financial literacy and independent variables (demographic and socio-economic variables). Test of hypothesis is done through binary logistic regression output from SPSS version 23 looking at the resulted p-values.

3.6.3 Model Specification

To econometrically analyze the effect of independent variables (demographic and socio-economic variables) on the dependent variable (financial literacy), binary logistic regression has been employed. Binary financial literacy level data has been constructed using the so called cluster analysis by using the 27 financial literacy indicators. Using cluster analysis, respondents were classified in to ‘Higher financial literacy level group’ coded as ‘1’ and ‘lower financial literacy level group’ coded as ‘0’. Respondents with higher scores on financial literacy indicator questions (financial knowledge, behavior and attitude) join the ‘higher financial literacy level group’. And those with lower scores join the ‘lower financial literacy level group’. Logistic regression which is preferable method for binary outcome dependent variable has been employed.

The following logit model, adopted from Potrich, et al., (2015), was estimated assuming the residue has standard logistic distribution. The model is customized to include variables which matter most particularly of business sectors and Ethiopian context. Accordingly business experience and cultural attitude variables have been included in the explanatories list.

Model: Financial Literacy Level

$$Pro(Y = 1 | Xs) = F(B0 + B1 \cdot Age + B2 \cdot Dum Gender + B3 \cdot Level of Education + B4 \cdot Business Experience + B5 \cdot Cultural Attitude + \epsilon)$$

Where, Y is the dependent variable (Overall financial literacy), Xs are the independent variables, F is the functional form assumed to have standard logistic cumulative distribution, Dum is dummy variable and ϵ --the error term. The reference group for dummy variable ‘gender’ is female (0).

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

In this chapter the data collected from respondents is analyzed using univariate, bivariate and multivariate analysis techniques. The results are presented and discussed as per to answer the pre-established research objectives and address the hypothesized relationship between independent variables and the dependent variable. In order to determine the financial literacy level of MSE owners/managers in Addis Ababa city, primary data was collected from selected sample respondents through self-administered questionnaire.

4.1 Data Cleaning and Editing

Before analysis, data collected from selected respondents was edited, coded and entered in to Excel. A total of 400 questionnaires containing four pages each have been distributed to the selected respondents. A maximum effort has been placed so as to collect all the distributed questionnaires and reduce the non-response rate. The respondents were handed the questionnaire and requested to fill the questionnaire immediately in front of the data collector. The presence of the data collector also helps in briefing the questions and putting answers in proper way in case of misunderstanding. Before handing them the questionnaire, respondents were kindly requested if they have some time to fill the questionnaire responsibly. However, some respondents refused to fill the questionnaire immediately for they had no time. Accordingly, a minimum of 4% non-response rate has been achieved.

In general, 16 (4%) questionnaires were not returned properly. 9 (2.25%) respondents failed to return the questionnaire. Whereas, the rest 7 (1.75%) questionnaires were not filled properly; some with incomplete and missing values; some selecting multiple answers among the given alternatives.

Table 3: Questionnaire Response Rate

Distributed Questionnaires	400
Completed and Returned Questionnaires	384
Response rate	96%

Further mores, the ‘Financial Training’ variable and the first financial knowledge question i.e. ‘Numeracy/division’ question were dropped from the analysis for there is no variance among respondents regarding those variables. Financial training, one of the predictor variables was dropped, for none of the respondents have taken any kind of finance related training. Numeracy/division, one of the financial knowledge questions, was also excluded from the analysis; due to all the respondents correctly answered it. Since there is no variance in those two dropped variables, there is no interest to include them in the analysis.

4.2 Reliability Test

Majority of the questions used to measure the respondent’s level of financial literacy are adopted from OECD’s (2011 & 2015) standard measures of financial literacy, Atkinson & Messy (2012) and Potrich et al., (2015). However, there are also questions which are intended to capture issues specific and matter most in Ethiopian context. The questionnaire used to collect the data is said to be valid, since it is composed of questions used in most previous studies.

Moreover, high quality tests are crucial to evaluate the reliability of data used in research (Tavakol & Dennick, 2011). In this study, the reliability of the measurement instrument is verified. Particularly variables such as cultural attitude, financial behavior and financial attitude are measured through likert scale questions. The questions making up the scale construct of each of those variables should be able to measure the same concept they are intended to do so. Reliability of the measurement instrument can be measured using Cronbach’s alpha (Tavakol & Dennick, 2011). Chronbach’s alpha is used to test how well the items used in the scale construct measure the same concept. Presented in the table as follows is the result of the Cronbach’s alpha computed using SPSS.

Table 4: Cronbach's Alpha

Scale	Cronbach’s alpha	Number of items making up the scale
Cultural Attitude	.849	5
Financial Behavior	.867	13
Financial Attitude	.870	5

Source: Questionnaire Survey, 2018

According to Tavakol & Dennick, (2011) the acceptable level of Cronbach’s alpha may range from 0.70 to 0.95 given the differences among different reports. Lower alpha values (below 0.70) can indicate poor interrelatedness between items in the construct. While too high alpha values (above 0.95) may indicate redundancy of items. As presented in Table 4 above, the Cronbach’s alpha values of the three variables are in between the recommended values. Therefore, questionnaire and the data collected is said to be reliable.

4.3 Descriptive Data analysis

4.3.1 Respondents Demographic Socio-Economic Characteristics

Table 5: Demographic and Socio-economic Characteristics of Respondents

Variables	Attributes	Frequency	Cumulative frequency	Percentage frequency	Cumulative Percentage
Gender	Female	141	141	36.7	36.7
	Male	243	384	63.3	100
Age	< 30	19	19	4.9	4.9
	30 – 39	109	128	28.4	33.3
	40 – 49	186	314	48.4	81.8
	50 – 59	64	178	16.7	98.4
	60+	6	384	1.6	100.0
Level of Education	Primary education (1-8)	129	129	33.6	33.6
	Secondary or preparatory (9-12)	143	272	37.2	70.8
	Tertiary (Bachelor degree or Diploma)	92	364	24.0	94.8
	Masters and above	20	384	5.2	100.0
Business Experience (number of years in business)	< 5	12	12	3.1	3.1
	5 – 9	57	69	14.8	18.0
	10 – 14	151	220	39.3	57.3
	15 – 19	120	340	31.3	88.5
	20+	44	384	11.5	100.0

Source: Questionnaire Survey, 2018

As indicated in the table above, sample male respondents constitute 63.3%, whereas the rest 36.7% of the respondents were females. Age of the respondents was classified in to five age groups as indicated in the above table. Most of the respondents about 76.8% are aged between 30– 49 years’ old fallen in two age groups such as 30-39 and 40-49. These age categories constitute 109 (28.4%) and 186 (48.4%) respondents respectively. Whereas the rest of

respondents 19 (4.9%), 64 (16.7%), 6 (1.6%), lie in the age groups 30-39, 50 – 59 and >60 years respectively.

The respondents maximum level of education they attained is grouped in to four categories including primary education (grade 1-8), secondary or preparatory (grade 9-12), tertiary (Diploma or Bachelor) and Masters and above. Of the total respondents 143 (37.2%), had attained education up to secondary or preparatory (9-12) and 129 (33.6%) attained primary education (1-8). While the rest of respondents 92 (24.0%) and 20 (5.2%) have Tertiary (Bachelor degree or Diploma) and Masters and above level of education respectively.

Respondents are also grouped in to five categories based on their business experience (the number of years they have been in business). As presented in the table above, majority of the respondents 151 (39.3%) and 120 (31.3%) are characterized by doing business for about 10-14 and 15-19 years respectively. While the respondents constituting of 14.5%, 11.5% and 3.1% have 5-9 years, 20 and above and less than 5 years of business experience respectively.

4.3.2 Respondent's Attitude towards Culture and Hospitality

Ethiopia is known for its collectivism culture (Hofstede Insights, 2018) and its hospitality (Meron, 2012), which invites highly spending behavior. According to Africa-Expert, (2018), Ethiopians are known by having a culture of hospitable and accommodating approach towards others. Ethiopians consider inviting people and entertain their friends and guests as honor and dignity (Africa-Expert, 2018). This implies cultural attitude will affect financial literacy level of individuals particularly the financial behavior and financial attitude dimensions. However, peoples may have different views and stands on such culture. Considering this fact respondents attitude and stand towards culture and hospitability is included in this study to explain the financial literacy level of the respondents. While measuring financial literacy level particularly in Ethiopian case, it would be important to assess the tendency of respondents towards hospitality and culture.

The respondent's attitude towards culture and hospitality was measured through five likert scale questions. Respondents then rate their opinion on each statement as either strongly agree, agree, neutral, disagree or strongly disagree. The responses were then coded as 5, 4, 3, 2, and 1 respectively. The higher the respondents' score, the firmer would be their attitude/tendency

towards culture and hospitality and vice-versa. Respondents with higher scores are supposed to be more conservative of collectivism and hospitality cultures, while those with lower scores are said to be less conservative of the so called cultures.

The cultural attitude scale was constructed by summing up the responses and dividing it by 5 for each individual respondent. This averaged cultural attitude, a scale data is used as an indicator of the respondent’s overall attitude towards culture and hospitality. Therefore, the overall cultural attitude of respondents score may range from 1 (lowest score) to 5 (highest score). Since the cultural attitude scale is a continuous data, mean and standard deviations were employed as measures of central tendency and dispersion. Whereas, median and mode as a measure of central tendency and range as measure of dispersion were employed for each individual question/item analysis.

Statistical summaries of responses of cultural attitude questions on item basis, as well as scale basis are presented in the following table.

Table 6: Cultural Attitude of Respondents; Item and scale statistics

Items	Statistics				
	Measures of central location			Measures of dispersion	
	Mean	Median	Mode	Std. Deviation	Range
Combined Cultural Attitude scale	3.19	-	-	0.81	-
Culture of Collectivism	-	4.00	5	-	4
Culture of enjoying collectively	-	4.00	4	-	4
Culture of hospitality Median	-	3.00	2	-	4
Cultural attitude towards saving	-	2.00	2	-	4
Culture of Sharing moments	-	2.00	2	-	4

Source: Survey questionnaire, 2018

As the table above shows, the most frequent answer for the first question (liking culture of collectivism) is ‘strongly agree’ (5) while its median is ‘agree’ (4). The culture of enjoying collectively question has a median and modal response of ‘agree’ (4). The table shows that the first and second cultural attitude questions have higher rated response than the other questions. This implies that respondents love Ethiopian culture of collectivism and enjoying collectively. The culture of hospitality question has a median and modal response of ‘neutral’ (3) and ‘disagree’ (2) respectively. While the last two questions have a median and modal response of

‘disagree’ (2). Every cultural attitude questions have responses of minimum and maximum rates of 1 and 5 respectively and the range is 4.

The combined cultural attitude scale is a continuous data obtained by averaging the item scores of the five cultural attitude questions for each individual respondent. The mean score of the cultural attitude scale is 3.19 with a standard deviation of 0.81. The mean score indicates the number of agrees or strongly agrees are higher than that of neutrals or disagrees or strongly disagrees on the five cultural attitude indicator statements. Hence, respondents on average tend to like and have strong stance on culture of collectivism and hospitality.

4.3.3 Financial Literacy

Financial literacy level of the respondents was measured through three dimensions such as financial knowledge, financial behavior and financial attitude. The financial knowledge component is used to measure the respondents’ cognitive skill and awareness on basic finance concepts. The financial behavior component is used to measure to what extent do respondents have financially savvy behavior; how well they apply financial knowledge to their day to day finance related decisions. The other component financial attitude is used to measure the respondent’s attitude and perception towards money and related decisions. Hence financial literacy level of respondents is the combinations of those three dimensions.

4.3.3.1 Financial Knowledge

The financial knowledge of the respondents was constructed through ten questions on different basic finance concepts. These questions are deemed to address the financial concepts which are critical for day to day finance related decisions. In general, numeracy (division), time value of money, simple interest, compound interest, inflation, return, risk and risk management (diversification and insurance) were the key finance concepts that make up the financial knowledge component.

Numeracy (division) skill is excluded from the analysis since it was correctly answered by all of the respondents. Since there is no variance among respondents in numeracy skill as per the responses, there is no interest in including it in the analysis. This indicates those selected micro and small business owners/managers are perfect in numeracy/division. It is not surprising that all

of the respondents are efficient in numeracy, for that they are well experienced in this issue throughout their day to day business operations.

The financial knowledge questions were constructed in multiple choice forms requiring respondents to select the answer which they thought is correct. Each question has a “Do not know” option to prevent respondents from guessing as recommended by OECD, (2011). So each question has only one correct answer, that the respondent choosing the correct answer will get 1 point in the score. On the other hand, the respondent choosing any option out of the correct answer including the “Do not know” option will get 0 in the score. Each question is given an equal weight of 1 for correct answers and 0 for incorrect ones. Therefore, the financial knowledge score for a respondent may range from 0 (no correct answer in all questions) to 9 (answering all questions correctly).

Descriptive analysis on financial knowledge of respondents is done via two sections. Firstly item analysis was made, i.e. each individual financial knowledge questions has been analyzed separately. Then total financial knowledge score of individual respondents is constructed by aggregating their score from a total of nine financial knowledge questions.

Analysis of individual questions enables to identify on which finance concepts respondents have poor and better knowledge. Identifying the basic finance concepts which respondents are little aware of can help to design remedial educations and training interventions accordingly. On the other hand, aggregate financial knowledge score analysis can help to know statistics of respondents’ score on basic finance concepts. Do majority of the respondents are characterized by having relatively either poor or good knowledge of basic finance concepts? How financial knowledge vary across respondents? Such questions can be answered from analysis of aggregate financial knowledge score of respondents.

The following consecutive tables (**Table 7 & Table 8**) show the descriptive statistics of the responses for each individual financial knowledge questions and total financial knowledge score respectively.

As the table above indicates, the most frequently correctly answered question is risk management through insurance answered by 223 (58.1%) out of a total of 384 respondents. Most of the respondents have good knowledge of the importance of insurance to manage risk.

Table 7: Frequency distribution of individual financial knowledge responses

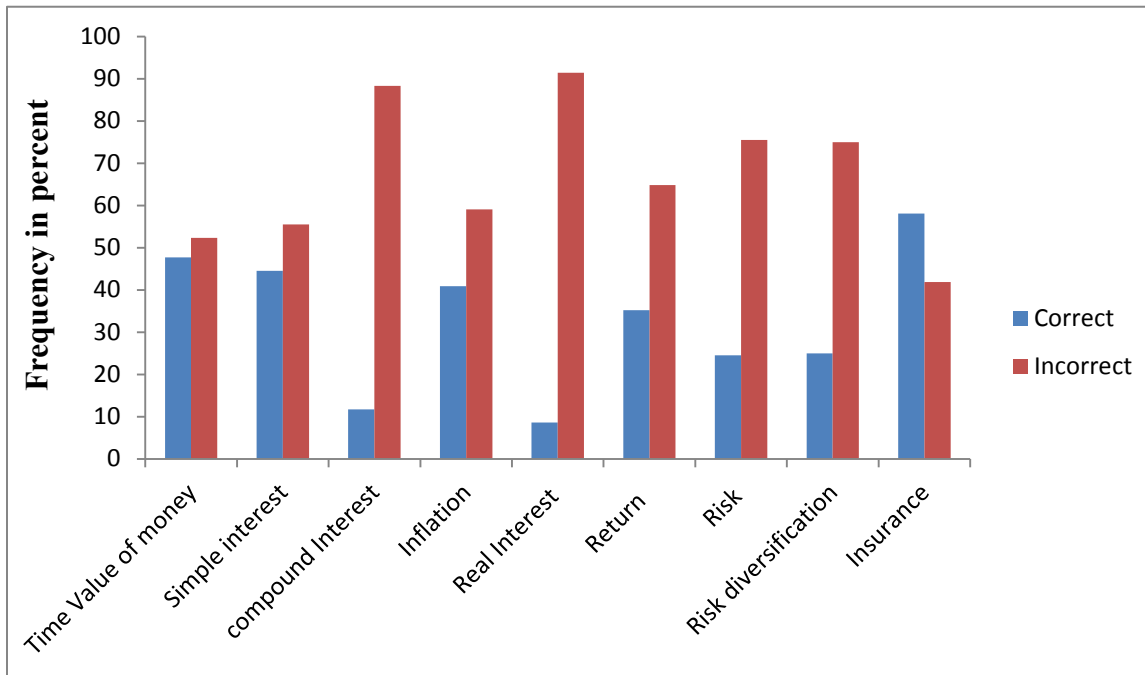
Financial knowledge indicators	Correct Responses		Incorrect Responses	
	Frequency	Percentage	Frequency	Percentage
Time value of money	183	47.7%	201	52.3%
Simple interest	171	44.5%	213	55.5%
Compound interest	45	11.7%	339	88.3%
Inflation	157	40.9%	227	59.1%
Real interest	33	8.6%	351	91.4%
Return	135	35.2%	249	64.8%
Risk	94	24.5%	290	75.5%
Risk Management 1 (Diversification)	96	25%	288	75%
Risk Management 2 (Insurance)	223	58.1%	161	41.9%

Source: Questionnaire Survey, 2018

On the other hand the least frequently correctly answered questions were real interest and compound interest. Only 33 (8.6%) and 45 (11.7%) of the total respondents correctly answered those questions respectively. Therefore, most of the respondents have poor knowledge of interest compounding and the effect of inflation on decreasing purchasing power of money (real interest). In addition, about 25% of respondents correctly answered questions of risk and risk diversification. Whereas, questions such as time value of money, simple interest, and inflation were correctly answered by 47.7%, 44.5% and 40.9% of the total respondents respectively.

In addition the percentage frequency of correct and incorrect responses for each of financial knowledge questions is displayed in the figure as follows.

Figure 2: Percentage of correct and incorrect responses per each financial knowledge questions



Source: Survey Questionnaire, 2018

Figure 3 portrays that, percentage of correct responses are lower than incorrect responses in all financial knowledge questions except insurance. Moreover, percentages of correct response are extremely lower in financial knowledge questions including compound interest, real interest, risk and risk diversification. The percentage of correct responses (58.1%) is higher than incorrect ones for insurance question alone.

In general, majority of the respondents are characterized by poor knowledge on real interest, interest compounding, risk, risk diversification, return, inflation, simple interest and time value of money. More than half of the total respondents failed to correctly answer in each of financial knowledge questions except insurance. The result shows that greater number of MSEs owners/managers participated in the study have poor knowledge on basic finance concepts, implying the need to financial education or training intervention.

The following table shows the frequency distribution of total financial knowledge scores of respondents.

Table 8: Frequency distribution of total financial knowledge score

TFK score out of 9	Frequency	Percent	Cumulative Percent
0	50	13%	13.0%
1	58	15.1%	28.1%
2	87	22.7%	50.8%
3	51	13.3%	64.1%
4	34	8.9%	72.9%
5	41	10.7%	83.6%
6	37	9.6%	93.2%
7	19	4.9%	98.2%
8	7	1.8%	100%
Total	384	100%	
<hr/>			
<i>Mean</i>	<i>2.9609</i>		
<i>Median</i>	<i>2.0000</i>		
<i>Mode</i>	<i>2.00</i>		
<i>Std. Deviation</i>	<i>2.15485</i>		
<i>Minimum</i>	<i>.00</i>		
<i>Maximum</i>	<i>8.00</i>		

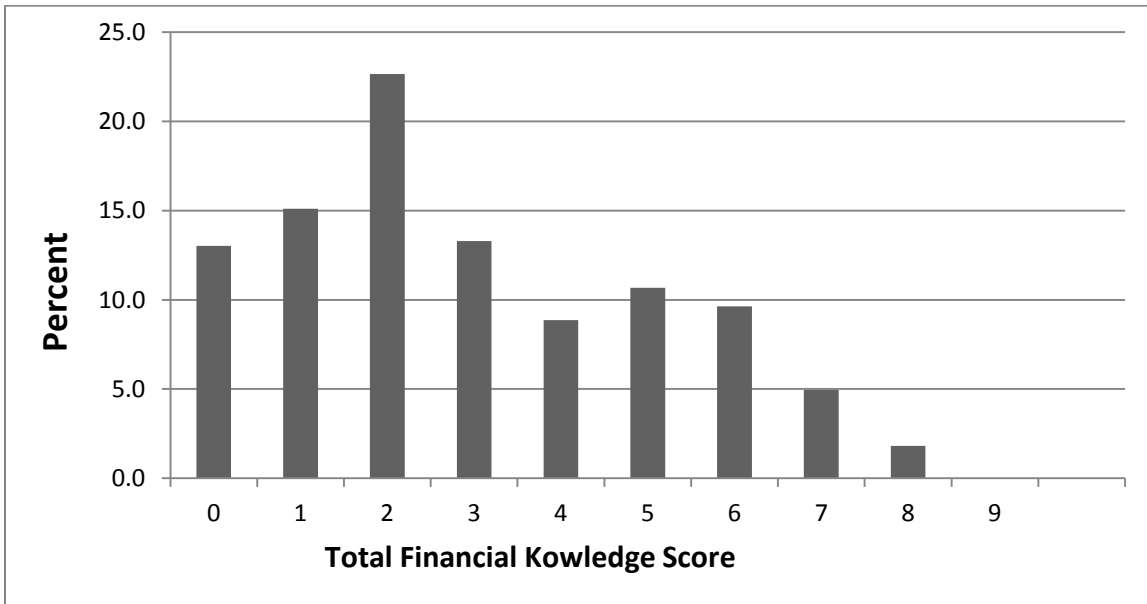
Source: Questionnaire Survey, 2018

Table 8 presents the frequency and percentage distributions of total financial knowledge scores of respondents. The table shows relatively smaller number of respondents only 104 (27%) out of the total respondents scored 5 and higher points in the aggregate financial knowledge score. Only 27% of respondents correctly answered at least 5 of the 9 financial knowledge questions. A very small number of respondents only 7 out of 384 scored the maximum of 8 out of 9 points. On the other hand, 85 (22.2%) of the respondents scored 3- 4, while the rest 195 (50.8%) respondents scored 2 and lower points out of the total financial knowledge points.

Furthermore, summarized statistics is also shown in last rows of **Table 8**. The actual observed minimum and maximum scores range from 0 to 8 out of 9 in the respondent's financial knowledge score sheet. The mean financial knowledge score of respondents is 2.96 with standard deviation of 2.15. This indicates that respondents on average scored about 3 points with standard deviation of 2.15 out of 9 aggregate financial knowledge points. The mode and median scores is

2, implying majority of the respondents have lower financial knowledge. The aggregate financial knowledge scores of respondents are also displayed in the figure as follows.

Figure 3: Frequency Distribution of Total Financial Knowledge Score



Source: Source: Questionnaire Survey, 2018

As **Figure 3** visibly portrays, the frequency percentages are higher for lower aggregate financial knowledge scores than higher financial knowledge scores. This indicates grander number of the respondents have poor knowledge of basic finance concepts. The highest frequency percentage is (22.7%) for a score of 2, indicating the aggregate financial score for a majority of the respondents is 2 points out of 9. Furthermore, on the lowest extreme about 13% of respondents scored zero out of 9 points. Whereas, on the highest extreme, only 1.8% of respondents could score 8 points out of 9. In general, according to the statistics a greater number of respondents have no adequate level of awareness on basic finance concepts.

4.3.3.2 Financial Behavior

Another dimension of financial literacy, financial behavior, is the most essential element of financial literacy (Atkinson & Messi, 2012). It ultimately shapes people’s financial wellbeing, hence it is essential to assess financial behavior in a survey of financial literacy (OECD, 2017). This dimension of financial literacy is used to capture to what extent MSE’s owners/managers in

Addis Ababa city can make financial decisions wisely. It is used to measure how well their financial actions, decisions and behaviors are financially savvy.

Financial behavior of the respondents is measured through thirteen likert scale questions. Respondents' rate their opinions on each statement that may range from strongly agree to strongly disagree. The stronger the respondents agree, the better will be their financial behavior and the reverse is true for negatively worded questions. In general, the respondent's financial behavior is measured on different issues such as considered purchase, saving and investment, planning ahead, borrowing, budgeting, close watch of financial affairs and insurance.

Considered Purchase

Considered purchase implies whether the respondents buy items by taking their capacity into consideration. During shopping, how well they look the price differences around and try to make use of it. The respondents' behavior of making considered purchase is measured using two questions. The first question is intended to capture the respondent's behavior of making purchases by taking their capacity in to account. The second question is used to capture the respondents' behavior of visiting different shops for price differences, before making the purchase. The stronger the respondents agree in each statement the higher will be their financial behavior score and the better is their behavior. The following table shows the descriptive statistics of those questions.

Table 9: Descriptive statistics of Considered purchase statements

	Behavior Statements			
	FBQ 11. Before I buy something I carefully consider whether I can afford it.		FBQ 12. I compare prices when making a purchase	
Statistics	Frequency	Percentage	Frequency	Percentage
Strongly Disagree	4	1.0%	28	7.3%
Disagree	70	18.2%	133	34.6%
Indifferent	50	13.0%	72	18.8%
Agree	212	55.2%	139	36.2%
Strongly Agree	48	12.5%	12	3.1%
Median	4.00		3.00	
Mode	4		4	
Range	4		4	
Minimum	1		1	
Maximum	5		5	

Source: Source: Questionnaire Survey, 2018

As presented in **Table 9** above, majority of the respondents agree in both financial behavior indicator statements. The median and modal response for the first statement is 4 (agree). This implies most of the respondents agree that they make any kind of purchases considering their financial condition. The second statement has median of 3 (indifferent) and mode of 4 (agree). Most of the respondents agree that they compare prices around during shopping. In general, major portion of the respondents take good care during purchase.

Saving and Investment

Saving and investing are important financial activities for every individual's financial wellbeing. The saving and investing behaviors of respondents is captured using three statements such as FBQ13, FBQ14 and FBQ15. The stronger the respondents agree the higher will be their financial behavior score and the better is their saving and investing behavior. FBQ13 measures the respondent's culture of saving for future need. FBQ14 measures to what extent do respondents increase their saving when they earn higher incomes.

The other statement FBQ15 measures how well the respondents are aware of the effect of inflation and take care of it while putting their money in to savings and investment. This statement is intended to particularly reflect how well the respondents react towards the high inflationary circumstance. In Ethiopian context, the inflation rate keeps rising above the minimum deposit rate and yield/return rates of Treasury bonds. For instance according to Central statistical agency of Ethiopia (2018), the rate of inflation (consumer price index) for the year 2017 averaged 9.81% and for the month of March is high of 15.2%, while the deposit rate is 7% fixed and the Treasury bond's yield rate is less than 3% (NBE, 2018). In case of high inflationary periods, individuals particularly those who run business need to exercise critical care while putting their excess cash in to savings and investments. If the inflation rate is higher than saving and return rates, those who put their money on savings and investments are rather losing money if measured in real terms. In such circumstances, the money along with the interest/return will not even be able to buy what the principal (money before invested) could buy. As the inflation goes up, the purchasing power of money is diminishing. The following table presents the descriptive statistics from the three statements measuring the respondent's saving and investing behavior.

Table 10: Descriptive statistics of saving and investing behavior of respondents

No.	Statement	SA (%)	A (%)	IND. (%)	D (%)	SD (%)		Median	Mode	Min.	Max.	Range
FBQ13	I save some money from my income each month for a future need.	6.5	51.6	12.2	24.7	4.9		4	4	1	5	4
FBQ14	I save more when my income is high.	2.3	29.9	17.7	32	18		2.5	2	1	5	4
FBQ15	I always consider inflation while putting my excess cash in banks and other investment avenues to earn income.	-	1.3	9.9	43.2	45.6		2	1	1	4	3

Source: Questionnaire Survey, 2018

As **Table 10** above presents, more than 50% of the respondents agree on the first statement, indicates most of the respondents save part of their income for future need. The median and modal responses confirms also confirms majority of the respondents have good behavior of saving for future need.

While only 32.2 % of the respondents agree or strongly agree on the second statement. This implies majority of the respondents have relatively poor behavior of increase savings when they earn higher incomes. The median (2.5) and mode (2) indicates that higher number of respondents disagree on rise saving during higher incomes. The actual responses for the FBQ13 and FBQ14 vary from strongly disagree (1) on the lowest extreme to strongly agree (5) on the highest extreme.

On the other hand, only 1.3% of the total respondents agree on the third statement. Almost all of the respondents do not consider the effect of inflationary changes while putting their excess cash in to savings and investments to generate income. The median and modal responses are 2 (disagree) and 1(strongly disagree). Significant numbers of respondents have no awareness real interest/return, so that they are being disadvantaged by the high inflation shocks. In Ethiopian context, the inflation rate is higher than the saving rates and short term Treasury bond yield rates. According to CSA, (2018) in addition to being higher, the rate of inflation varies from time to time while the saving rate is relatively fixed at 7%. Thus, individuals particularly those who are running business couldn't be able to take advantages of high inflations rather they will be disadvantaged of it.

Planning Ahead and Retirement Planning

Planning is the key for success, and as well it is the key for financial success i.e. achieving excellent financial wellbeing. Individuals need to have financial plans and goals and strive to achieve them. Good financial plans and goals help to achieve good financial wellbeing during our life and retirement. FBQ16 is intended to capture whether the respondents set financial plans and try to achieve them. FBQ17 captures to what extent the respondents are taking care of their retirement. The stronger the respondents agree on each statement, the higher will be their financial behavior score and the better is their financial behavior. The following table presents the descriptive statistics of those behavior statements.

Table 11: Descriptive Statistics of Planning Ahead and Retirement Plan

No.	Statement	SA (%)	A (%)	IND. (%)	D (%)	SD (%)	Median	Mode	Min.	Max.	Range
FBQ16	I set long term financial goals and strive to achieve them.	2.6	35.4	16.9	27.6	17.4	3	4	1	5	4
FBQ17	I have financial plans which will enable me to have sufficient money for my retirement.	-	1.8	17.2	48.7	32.3	2	2	1	4	3

Source: Questionnaire Survey, 2018

The statistics in **Table 11** indicated that some of the respondents set long term financial goals but failed to take care of their retirement. About 38% of respondents agree or strongly agree that they set long term financial goals and put effort towards achieving them. On the other hand about 45% of the respondents disagree or strongly disagree, while the rest 17% remain neutral to neither agree nor disagree of setting financial plans. Majority of the respondents do not set financial plans and strive to achieve them. The median is 3 and the mode is agree (4), which implies most of the respondents plan their future.

Moreover, almost all of the respondents either disagree or strongly disagree to plan for their retirement. Only 1.8% of respondents agreed that they have financial plans to help their retirement. However, about 81% of respondents either disagreed or strongly disagreed of developing financial plans for safe retirement, while the rest 17.2% are indifferent between agree and disagree. The median and modal responses for retirement plan is disagree (2), which confirms large portion of respondents are careless of their retirement.

Borrowing

Borrowing is an important element in the financial context of individual's and organization's life. Particularly for businesses, borrowing is a means of acquiring funds and can make them better profitable if taken properly. On the other hand, improper borrowing including credit purchase and borrowing too much will result in highly indebtedness and insolvency.

Borrowing can be in the form of credit purchase or direct cash receipt. Those who borrow or buy goods on credit need be aware of the benefits and costs of doing so. Buying and selling goods and services on credit is common among businesses. Therefore, business owners need to be able to do cost-benefit analysis while making credit purchase. The respondent's borrowing behavior is captured using two statements FBQ18 and FBQ19. The first statement measures whether the respondents can identify the benefits and costs of buying credit purchase. The higher the respondents agree on the first statement, the higher their financial behavior score and the better is their behavior. Whereas the second statement is intended to capture to what extent the respondents are highly debt currently. Since the second statement is negatively worded, the score need to be reversed. Hence, the stronger the respondents agree on it, the lower will be their financial behavior score and the higher will be their indebtedness. The descriptive statistics of the respective responses of those behavior statements is presented in the table as follows.

Table 12: Descriptive Statistics of Borrowing Behavior

No.	Statement	SA (%)	A (%)	IND. (%)	D (%)	SD (%)		Median	Mode	Min.	Max.	Range
FBQ18	I am able to identify the costs I pay and benefits I get to buy a product on credit.	1	22.1	18.5	39.8	18.5		2	2	1	5	4
FBQ19	I have too much personal debt right now.	18.5	34.1	13.5	30.2	3.6		2	2	1	5	4

Source: Questionnaire Survey, 2018

As **Table 12** displays, the percentages of respondents who agree or strongly agree are much lower than those who disagree or strongly disagree that they are able to distinguish the benefits and costs of making credit purchase. About 23% of respondents put themselves on agree or strongly agree opinions, whereas about 58% put themselves on either disagree or disagree of the first statement. The rest 18.5% are indifferent to neither agree nor disagree on it. The median and

modal responses for the statement is disagree (2), which implies greater portion of respondents are not capable of doing cost-benefit analysis to make credit purchase.

In the last row of **Table 12**, the percentage of respondents who either agree or strongly agree is higher than those who either disagree or strongly disagree on the statement of being indebted highly. About 52.2% of respondents agree or strongly agree that they have high debt at the moment. This indicates that majority of the respondents claimed that they are highly indebted. On the other hand, 33.8% of respondents either disagree or strongly agree that they are indebted highly. That means 33.8% of respondents feel they are not highly indebted currently. While the rest 13.5% of respondents are indifferent to neither agree nor disagree that they have high debt.

Budgeting

Budgeting is the most important way of managing expenses and achieving the desired goals efficiently. Considering this fact, how good the respondent’s behavior of budgeting is measured in this study. The question, FBQ20 is intended to capture whether the respondent’s carefully budget their expenditures. The stronger the respondents agree the higher will be their financial behavior score and the better is their behavior. Presented in the table below is the descriptive statistics of the responses of this statement.

Table 13: Descriptive Statistics of Budgeting Behavior

No.	Statement	SA (%)	A (%)	IND. (%)	D (%)	SD (%)		Median	Mode	Min.	Max.	Range
FBQ20	I carefully prepare a spending/budget plan for my business and family separately.	1.3	20.3	18.8	44.5	15.1		2	2	1	5	4

Source: Questionnaire Survey, 2018

Table 13 above portrays majority of the respondents about 59.6% disagree or strongly disagree that they didn’t carefully prepare spending budget for their family and business independently. on the other hand, 21.6% of the respondents agree or strongly agree that they prepare spending budget to manage their expenditure for their business and family separately. Whereas, 18.8% neither agree nor disagree on carefully prepare spending budget.

Close Watch of Financial Affairs

How well the respondents put close watch of their financial matters. To what extent do the respondents control their personal spending separately from their business by making notes? How good are they in keeping organized financial records and documents? Two statements FBQ21 and FBQ22 are used to capture the respondents claim on their behavior of watching their financial matters closely. The first statement is intended to measure to what extent the respondents make notes of their personal spending separate from their business. Whereas, the second statement captures the respondents behavior of keeping organized documents for latter easy retrieval. The stronger the respondents agree on both statements, the higher will be their financial behavior score and the better will be their behavior. Presented in the table below is the descriptive statistics of the respondent’s responses towards those statements.

Table 14: Descriptive Statistics of Close Watch of Financial Affairs

No.	Statement	SA (%)	A (%)	IND. (%)	D (%)	SD (%)		Media	Mode	Min.	Max.	Range
FBQ21	I put close watch of my financial matters by making notes and control of my personal spending separate from my business.	0.8	14.3	15.4	50.3	19.3		2	2	1	5	4
FBQ22	I keep organized financial records and I can find documents easily.	0.5	12.5	9.4	47.7	29.9		2	2	1	5	4

Source: Questionnaire Survey, 2018

As shown in **Table 14**, large proportion of the respondents either disagree or strongly disagree on both making notes of personal spending and keeping organized financial records and documents. 69.6% of respondents disagree or strongly disagree on the first statement, implying that they have poor behavior of putting close watch of their own financial matters. They don’t maintain notes and records of their spending. The median and modal response is disagree (2) which confirms that greater number of respondents have poor behavior of watching their financial matters closely. Only 14.3% of respondents have agreed or strongly agreed that they make notes of their spending and put close watch of their financial affairs. The rest 15.4% of the respondents are in between agreeing and disagreeing on the statement.

As presented in **Table 14**, majority of the respondents have poor culture of keeping organized financial records and documents. 77.6% percent of the respondents disagree or strongly disagree

on keeping organized financial records. Only 13% of respondents agree or strongly agree that they keep organized documents and can retrieve them latter easily. The remaining 9.4% of the respondents are in between agreeing and disagreeing to the statement. The median and modal response is disagree (2), which indicates higher number of respondents not good in keeping organized financial records. As a result they will face challenges in finding relevant financial documents when necessary.

Insurance

Human beings and business organizations are full of risks and uncertainties throughout their life. Obviously insurance helps to feel free from the burden associated with risk and uncertainty. Individuals who bought insurance can concentrate on their work, without the burden and fear of risk and uncertainties. The respondent’s behavior in relation with insuring themselves is captured using the question FBQ23. The statement is intended to measure how well the respondent’s prefer to enter in to insurance to get rid of the fear and burden associated with risks and uncertainties. Since the statement is negatively worded it is scored reversely. The stronger the respondents agree on the statement, the lower will be their financial behavior score and the worse is their behavior. Presented in the table as follows is the descriptive statistics of the responses for the statement.

Table 15: Descriptive Statistics of Insurance

No.	Statement	SA (%)	A (%)	IND. (%)	D (%)	SD (%)		Median	Mode	Min.	Max.	Range
FBQ20	I don't prefer to buy insurance policy unless mandated by law because I do not see its importance than cost.	26.8	25.8	16.1	21.7	9.7		2	1	1	5	4

Source: Questionnaire Survey, 2018

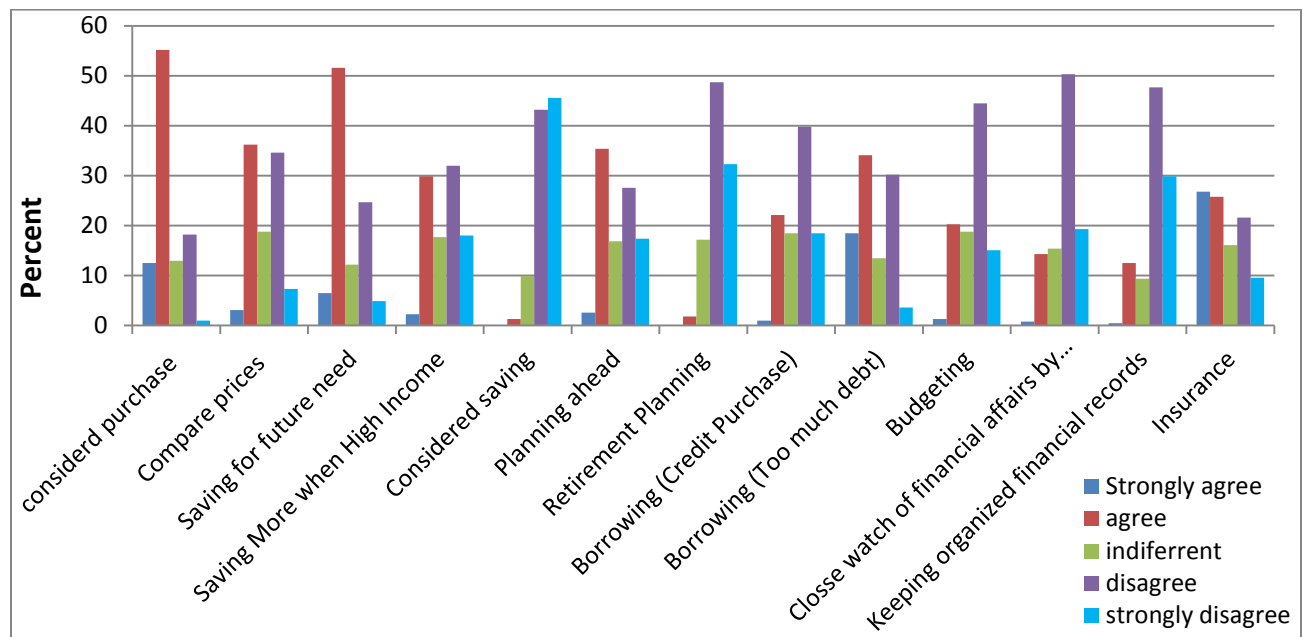
As **Table 15** shows, more than half of the respondents put themselves on either agree or strongly agree opinions for the statement. About 26.8% of respondents strongly agreed and 25.8% agreed that they do not prefer to buy insurance. On the other hand, 31.7% of the respondents disagree or strongly disagree on the statement, while the other 16.1% remain indifferent between agreeing and disagreeing. Those who either disagree or disagree strongly, claim that the benefit of buying insurance is higher than its cost, so that they prefer to buy insurance. The median response is 2

(agree) and the modal response is 1 (strongly disagree), which indicate majority of the respondents have negative behavior towards purchasing insurance.

Overall Financial Behavior of Respondents

The overall financial behavior of respondents is clearly displayed in the following figure.

Figure 4: Percentage Frequency Distribution of Financial Behavior of Respondents



Source: Questionnaire Survey, 2018

As the clearly shown in **Figure 4**, the percentages of respondents with agrees are higher in the issues including considered purchase, comparing prices, saving for future need, planning ahead, borrowing (too much debt) and insurance. This indicates most of the respondents have relatively savvy financial behavior on the issues such as considering capacity and comparing prices before making purchases, saving for future need and planning ahead. On the other hand, greater number of agrees on Borrowing (too much debt) and insurance statements indicate that majority of respondents have no financially savvy behavior on those issue.

The figure also visibly depicts that higher percentages of respondents disagree on issues such as increase saving when earning higher, real interest (considered saving and investment), retirement planning, borrowing (credit purchase), budgeting, close watch of financial affairs and keeping financial organized documents. Major numbers of respondents have no financially savvy behavior on these financial issues.

4.3.3.3 Financial Attitude

This dimension of financial literacy is used to capture the respondents' attitude towards long-term planning. Attitude and preferences towards short term or long term financial plans is an important element of financial literacy and should be incorporated in financial literacy surveys (Atkinson and Messi, 2012), (OECD, 2011 and 2017). The statements are intended to indicate do the respondents' prefer towards shorter term lives or long term financial stability. Those who prefer short term lives are considered as not financially literate enough, while those who prefer long term financial stability are considered financially literate.

The financial attitudes and preferences of respondents is measured using five likert scale questions such as FAQ24, FAQ25, FAQ26, FAQ27 and FAQ28. These questions are intended to capture the respondent's attitude towards planning ahead, managing money, maintaining spending plan, saving and money respectively. Of which the last two statements including FAQ27 and FAQ28 are negatively worded and need to be reverse scored. For the first three statements, the stronger the respondents agree, the higher will be their financial attitude score and the better are their attitudes. On the other hand for the last two statements, the stronger the respondents agree, the lower will be their financial attitude score and the worse is their attitude towards long term lives.

Higher financial attitude scores indicate respondents have long term financial ambitions. Whereas, lower financial attitude scores indicate respondents prefer shorter term lives and have negative attitude towards long term financial ambitions. The following table presents the descriptive statistics of the responses for those financial attitude statements.

Table 16: Descriptive Statistics of Financial Attitude Scores

No.	Statement	SA (%)	A (%)	IND. (%)	D (%)	SD (%)		Median	Mode	Min.	Max.	Range
FAQ24	It is important to establish financial targets for the future.	26	57.6	11.7	4.4	0.3		4	4	1	5	4
FAQ25	The way I manage my money today will affect my future.	8.6	49.2	21.1	19.5	1.6		4	4	1	5	4
FAQ26	It is important to have and follow a monthly expense plan.	5.5	42.2	23.7	25.3	3.4		4	4	1	5	4

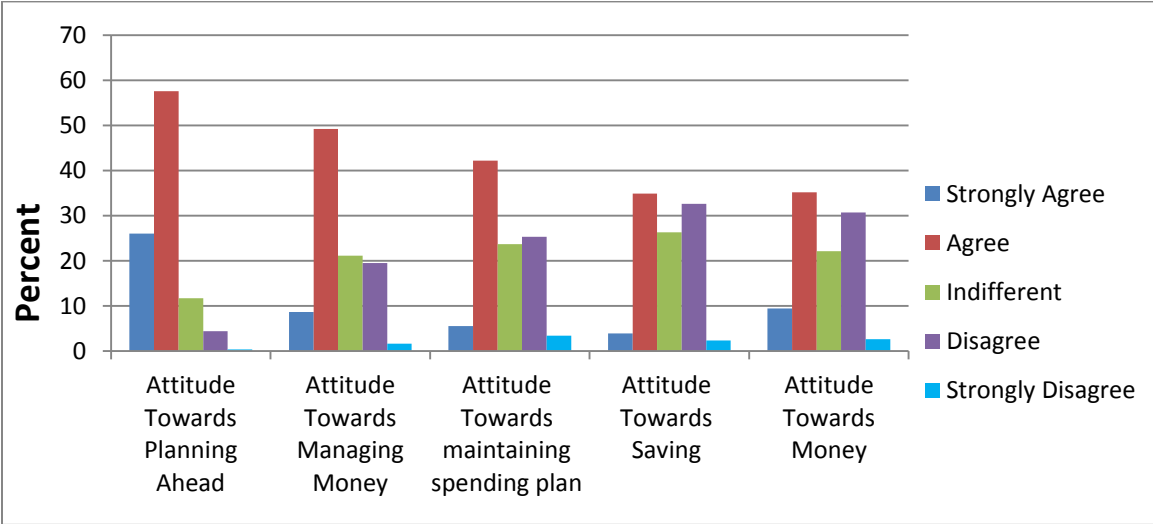
FAQ27	I find it more satisfying to spend money than to save it for the long term	3.9	34.9	26.3	32.6	2.3		3	2	1	5	4
FAQ28	I tend to live for today and let tomorrow take care of itself.	9.4	35.2	22.1	30.7	2.6		3	2	1	5	4

Source: Questionnaire Survey, 2018

As **Table 16** presents, larger percentages of the respondents put themselves on either agree or strongly agree opinions on the first three statements. The median and modal responses for these statements is agree (4), which indicates greater number of respondents have positive attitude towards planning ahead, managing money and maintaining spending plan.

Concerning the last two financial attitude statements, the percentages of respondents who either agree or strongly agree are slightly higher than those who either disagree or strongly disagree and those who are indifferent. This indicates higher proportions of respondents have no positive attitude towards saving and their future. The modal responses for both of the statements is agree (2), which implies higher percentages of respondents prefer and focus for short term lives rather than worrying for long term. The percentage frequency distribution of responses for each of the five financial attitude statements is displayed in the figure as follows.

Figure 5: Percentage Frequency Distribution of Financial Attitude Statements



Source: Questionnaire Survey, 2018

As it can be seen in **Figure 5** above, the percentage of respondents with agrees are substantially higher for the first three statements. Therefore, grander numbers of respondents have financially

viable and long term focused attitude on issues including planning ahead, managing money and maintaining spending plan. In respect of the last two statements, the figure displays that a percentage of respondents with 'agree' slightly outweigh those with 'disagree'. This can demonstrate that some of the respondents have preferences for long term financial safety, while some prefer short term living.

4.4 Construction and Description of Combined Financial Literacy Level

4.4.1 Construction of Combined Financial literacy Level Data

Combined financial literacy level of respondents, in line with OECD's, (2011) definition, is the combination of three dimensions such as financial knowledge, behavior and attitude. Over all financial literacy score of respondents is therefore computed by combining their score on each of the three dimensions. The combination of the respondent's score on each of the three dimensions will make up their overall financial literacy score.

However, the difference in the measurement of these financial literacy dimensions and the categorical nature of the resulting data makes the combination tough. A study conducted by Potrich et al., (2015), provided way of generating categorical (binary) overall/combined financial literacy data using cluster analysis. Through cluster analysis they created two groups of respondents, one group characterized by higher financial literacy level and the other characterized by lower financial literacy level. This study follows similar procedures to generate binary combined financial literacy data. The procedures followed to generate a binary combined financial literacy data is discussed as follows.

4.4.2 Cluster Analysis

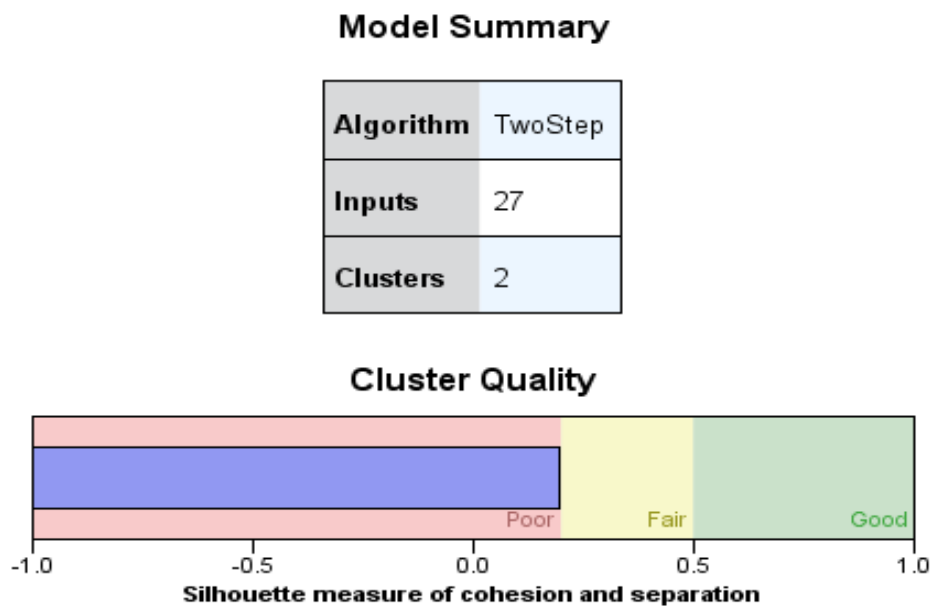
SPSS provides three options for clustering cases based on their characteristics. Such as K-means, hierarchical and two step clustering methods. Hierarchical cluster analysis can handle data with nominal, ordinal or scale level of measurements, but not recommended to use it for variables with different levels of measurement simultaneously (Statistical solutions, 2018). Two step cluster analysis can handle nominal, ordinal and scale data simultaneously (Caccam & Refran, ND).

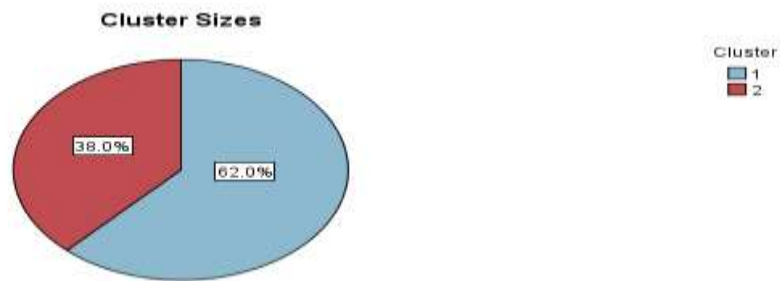
The two step clustering procedure has several distinct desirable features. It is capable of generating clusters based on different variables with different measurements simultaneously. In

addition, it automatically selects the number of clusters, and able to analyze large data files efficiently (Caccam & Refran, ND).

The responses to all of the financial literacy level indicators such as financial knowledge, behavior and attitude questions taken simultaneously were the bases of clustering respondents. The inputs used as bases of clustering were the 9 financial knowledge questions, 13 financial behavior questions and 5 financial attitude questions with different level of measurements. The responses for financial knowledge questions are nominal (binary) data, whereas responses for financial behavior and financial attitude questions are ordinal (likert scale) data. Accordingly the appropriate clustering technique to cluster respondents based on these variables simultaneously would be the ‘two step’ clustering technique. The result of the two step cluster analysis is presented in the figure as follows.

Figure 6: Results of Cluster analysis: Two step cluster





Size of Smallest Cluster	146 (38%)
Size of Largest Cluster	238 (62%)
Ratio of Sizes: Largest Cluster to Smallest Cluster	1.63

Source: Questionnaire Survey, 2018

Employing the two step cluster analysis automatically produced two clusters of respondents based on 27 inputs (financial literacy level indicators). One cluster comprises 146 respondents characterized by higher scores on the different financial literacy level indicators. The other cluster contains 238 respondents characterized by lower scores on the different financial literacy level indicators. Accordingly, the cluster containing respondents with higher scores is named as ‘higher financial literacy level group’; while the other cluster containing respondents with lower scores is named as ‘lower financial literacy level group’. Member respondents of higher financial literacy level group are coded as 1 and member respondents of lower financial literacy level group as 0.

The Silhouette Measure of Cohesion and Separation label confirms that the overall quality of the clustering model is fair. In addition, the resulting number of clusters are in line with the number of clusters produced in prior similar studies like Potrich et al., (2015). Therefore, the produced clusters are supposed to be valid.

4.4.3 Description of Combined Financial Literacy Level

Combined financial literacy level of respondents is a binary data generated using cluster analysis. Accordingly, the respondents are categorized in to two clusters namely ‘higher financial literacy

level’ and ‘lower financial literacy level’ groups. The following table presents the frequency distribution of the respondents based on their group membership.

Table 17: Combined financial literacy level of respondents

	Frequency	Percent	Cumulative Percent
Lower Financial Literacy Level	238	62.0	62.0
Higher Financial Literacy Level	146	38.0	100.0
Total	384	100.0	

Source: Questionnaire survey, 2018

As **Table 17** above present’s majority of respondents are members of the lower financial literacy level group. Out of a total of 384 respondents 238 (62%) of respondents are members of the lower financial literacy level group, while the rest 146 (38%) of respondents are members of the higher financial literacy level group. This implies that majority of the respondents are characterized by having lower financial literacy level. In addition, the frequency distribution of respondents joining each groups of financial literacy level is displayed in a pie chart as follows.

Figure 7: Combined Financial Literacy Level of Respondents



Source: Questionnaire Survey, 2018

Figure 7 portrays that greater percentage of respondents joined the lower financial literacy level group. In the chart, area shaded for lower financial literacy level group is larger than the area shaded for higher financial literacy level group.

The descriptive statistics show, majority of the respondents are characterized by lower scores on different financial literacy indicators.

4.5 Financial Literacy Level and Explanatory variables

Cross tabulation is performed, to explore the level of financial literacy across the different categories of each of the categorical explanatory variables. How financial literacy level differs with respect to gender, age, level of education and business experience? This question is answered by cross-tabulating the financial literacy level of respondents against their

demographic and socio-economic attributes. In addition, the Chi-Square test is used to test whether the association between financial literacy level and each of the demographic and socio-economic variables is statistically significant.

4.5.1 Financial Literacy Level and Gender

The following table presents the level of financial literacy cross-tabulated by gender.

Table 18: Financial Literacy Level and Gender Cross-tabulation

			Financial Literacy Level		Total
			Lower Financial Literacy Level	Higher Financial Literacy Level	
Gender	Female	Count	127	14	141
		% within Gender	90.1%	9.9%	100.0%
	Male	Count	111	132	243
		% within Gender	45.7%	54.3%	100.0%
Total		Count	238	146	384
		% within Gender	62.0%	38.0%	100.0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	74.616 ^a	1	.000		
Continuity Correction ^b	72.745	1	.000		
Likelihood Ratio	83.794	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	74.422	1	.000		
N of Valid Cases	384				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 53.61.

b. Computed only for a 2x2 table

Source: Questionnaire Survey, 2018

Table 18 presents the financial literacy level of respondents per their respective gender and its Chi-Square test. The table shows that out of a total of 141 female respondents, 127 (90.1%) are grouped under lower financial literacy level group, while the rest 14 (9.9%) are members of higher financial literacy level group. On the other hand, out of a total of 243 male respondents, 111 (45.7%) are members of the lower financial literacy level group, whereas the remaining 132 (54.3%) are members of the higher financial literacy level group.

The table indicates that majority of female respondents are members of the lower financial literacy level group, whereas majority of male respondents are members of the higher financial literacy level group. The percentage of male respondents grouped under the higher financial literacy level group is greater than that of the percentages of female respondents grouped under the higher financial literacy level group.

According to **Table 18**, financial literacy level is associated with gender among MSEs owners/managers, that male respondents have relatively higher financial literacy level than the female ones. The Pearson Chi-Square statistics of 74.616 and a p-value of 0.000 confirm that there is a statistically significant association between gender and financial literacy level among MSEs owners/managers.

4.5.2 Financial Literacy Level and Age

The financial literacy level across the different age groups is cross-tabulated in the table as follows.

Table 19: Financial Literacy Level and Age Cross-tabulation

			Financial Literacy Level		Total	
			Lower Financial Literacy Level	Higher Financial Literacy Level		
Number of years (Binned)	< 30	Count	19	0	19	
		% within Number of years (Binned)	100.0%	0.0%	100.0%	
	30 – 39	Count	81	28	109	
		% within Number of years (Binned)	74.3%	25.7%	100.0%	
	40 – 49	Count	75	111	186	
		% within Number of years (Binned)	40.3%	59.7%	100.0%	
	50 – 59	Count	57	7	64	
		% within Number of years (Binned)	89.1%	10.9%	100.0%	
	60+	Count	6	0	6	
		% within Number of years (Binned)	100.0%	0.0%	100.0%	
	Total		Count	238	146	384
			% within Number of years (Binned)	62.0%	38.0%	100.0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	79.312 ^a	4	.000
Likelihood Ratio	90.845	4	.000
Linear-by-Linear Association	.585	1	.444
N of Valid Cases	384		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 2.28.

Source: Questionnaire Survey, 2018

As presented in **Table 19** above, majority of respondents under 40-49 age group have higher financial literacy level. Out of 186 respondents aged between 40 and 49, 111 (59.7%) are members of the higher financial literacy level group. On the other hand, majority of the respondents fallen in the rest of age groups such as <30, 30-39, 50-59 and 60+, are members of the lower financial literacy level. Moreover, all of the respondents in two extreme age categories such as, <30 years in the lowest extreme and 60+ years in the highest extreme are members of the lower financial literacy level group. While out of a total of 109 respondents aged between 30 and 39 years, 81 (74.3%) are members of the lower financial literacy level group. And out of a total of 64 respondents aged between 50 and 59 years, 57 (89.1%) are members of the lower financial literacy level group.

From **Table 19**, it can be concluded that level of financial literacy is lower among younger and older respondents. Adult MSEs owners/managers have relatively higher financial literacy level than younger and older ones. The Pearson Chi-Square statistics of 79.312a and a p-value of 0.000 confirm that there is a statistically significant association between the level of financial literacy and age among MSEs owners/managers.

4.5.3 Financial Literacy Level and Educational Attainment

It is expected that the more individuals get educated, the higher will be their level of financial literacy. Presented in the table as follows is the cross-tabulation of financial literacy with educational attainment, to confirm whether this holds true.

Table 20: Financial Literacy Level and Education Attainment Cross-tabulation

			Financial Literacy Level		Total
			Lower Financial Literacy Level	Higher Financial Literacy Level	
Educational Attainment	Primary education (1-8)	Count	129	0	129
		% within Educational Attainment	100.0%	0.0%	100.0%
	Secondary and preparatory (9-12)	Count	88	55	143
		% within Educational Attainment	61.5%	38.5%	100.0%
	Tertiary (Bachelor degree and Diploma)	Count	21	71	92
		% within Educational Attainment	22.8%	77.2%	100.0%
	Masters and above	Count	0	20	20
		% within Educational Attainment	0.0%	100.0%	100.0%
Total		Count	238	146	384
		% within Educational Attainment	62.0%	38.0%	100.0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	171.597 ^a	3	.000
Likelihood Ratio	220.685	3	.000
Linear-by-Linear Association	169.723	1	.000
N of Valid Cases	384		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.60.

Source: Questionnaire Survey, 2018

Table 20 shows that majority of respondents with lower educational attainment have lower financial literacy level, while respondents with higher educational attainment have higher financial literacy level. All of the 129 respondents who attained to the maximum of primary education (1-8), are members of the lower financial literacy level group. On the other hand, all of the 20 respondents attain up to Masters and above are members of the higher financial literacy level group. From a total of 143 respondents who attained up to secondary or preparatory (9-12), 88 (61.5%) are grouped in the lower financial literacy level group and the rest in the higher. Out of a total of 92 respondents who have either Bachelor or Diploma, 71 (77.2%) are members of the higher financial literacy level group and the remaining are members of the lower financial literacy level group.

Overall, owners/managers of MSEs with higher educational attainment have higher financial literacy level than those with lower educational attainment. The Pearson Chi-Square statistics of 171.597 and a p-value of 0.000 confirm that there is a statistically significant relation between level of financial literacy and level of education among MSE owners/managers.

4.5.4 Financial Literacy Level and Business Experience

It can be imagined that the more individuals engage themselves in doing business, the more they will be financially literate. To testify whether this is true among MSE owners/managers in Addis Ababa City, presented below is the cross-tabulation of financial literacy level and business experience in number of years.

Table 21: Financial Literacy Level and Business Experience Cross-tabulation

			Financial Literacy Level		Total	
			Lower Financial Literacy Level	Higher Financial Literacy Level		
Number of years in Business (Binned)	< 5	Count	12	0	12	
		% within Number of years in Business (Binned)	100.0%	0.0%	100.0%	
	5 – 9	Count	57	0	57	
		% within Number of years in Business (Binned)	100.0%	0.0%	100.0%	
	10 – 14	Count	134	17	151	
		% within Number of years in Business (Binned)	88.7%	11.3%	100.0%	
	15 – 19	Count	35	85	120	
		% within Number of years in Business (Binned)	29.2%	70.8%	100.0%	
	20+	Count	0	44	44	
		% within Number of years in Business (Binned)	0.0%	100.0%	100.0%	
	Total		Count	238	146	384
			% within Number of years in Business (Binned)	62.0%	38.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	214.775 ^a	4	.000
Likelihood Ratio	258.938	4	.000
Linear-by-Linear Association	183.373	1	.000
N of Valid Cases	384		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.56.

Source: Questionnaire Survey, 2018

As shown in **Table 21**, majority of respondents with higher business experience have higher financial literacy level, while majority of respondents with lower business experience have lower financial literacy level. All of respondents 69 respondents who have been in business for 9 years and less are members of the lower financial literacy level group. Additionally, from a total of 151 respondents who have been in business between 10 and 14 years, 134 (88.7%) are grouped under the lower financial literacy level, while the remaining under the higher financial literacy level. On the other hand, out of a total of 120 respondents who have been doing business between 15 and 19 years, 85 (70.8%) are members of the higher financial literacy level group and the rest are members of the lower financial literacy level group. 44 respondents having business experience of 20 years and more are all grouped under the higher financial literacy level group.

From **Table 21**, it can be concluded that MSEs owners/managers in Addis Ababa city having higher business experience are more financially literate than those having lower business experience. The Pearson Chi-Square statistics of 214.775 and P-value of 0.000 confirm that there is a statistically significant correlation between business experience and level of financial literacy among MSE owners/managers.

4.6 Multicollinearity Tests

Even though logistic regression does not make many of the assumptions unlike linear regression, multi-collinearity if any can still be a problem. Field, (2009) noted that logistic regression result can be biased due to the effect of collinearity among the predictor variables. Hence it is essential to make sure that there is no strong collinearity among the predictor variables. The SPSS does not have option for testing multicollinearity for logistic regression. However, Field, (2009) suggested that it is possible to obtain statistics such as the **tolerance** and **Variance inflation factor (VIF)** by simply running a linear regression analysis using the same outcome and predictors. It is due to the fact that tests of multicollinearity examine only the explanatory variables; hence they are independent of the type of regression model employed. Multicollinearity was diagnosed through such procedure. The tolerance and VIF statistics as presented in the table as follows suggested that multicollinearity can't be a concern in this study.

Table 22: Multi-Collinearity Test

Coefficients ^a			
Model	Collinearity Statistics		
	Tolerance	VIF	
1	Number of years (Binned)	.966	1.035
	Number of years in Business (Binned)	.320	3.121
	ACA	.343	2.911
	Gender	.828	1.207
	Educational Attainment	.379	2.636

a. Dependent Variable: Financial Literacy Level
Source: Questionnaire Survey, 2018

Menard (1995) suggests that a tolerance value less than 0.1 indicates a serious collinearity problem as cited in Field, (2009). VIF value greater than 10 is cause for concern Myers, (1990)

as cited by Field, (2009). As the table above shows the tolerance values for all of the predictor variables are greater than 0.1 indicating there is no multicollinearity problem. Furthermore, the VIF values for all of the predictor variables are much lower than 10, suggesting there is no strong collinearity among the predictor variables. Therefore, the regression results are supposed to be reliable since there is no multicollinearity problem.

4.7 The Binary Logistic Regression Outputs

Binary logistic regression is employed predict the financial literacy level of respondents based on their demographic and socio-economic variables. The binary logistic regression is used to predict the respondent's probability of joining the higher financial literacy level group coded as '1'. The predictor variables were respondent's gender, age, level of education, business experience and cultural attitude.

The regression was run using the 'natural log of odds' as the link function as follows:

$$\begin{aligned} \ln(ODDS) &= \ln\left(\frac{P}{1-P}\right) \\ &= (B0 + B1 \cdot \text{Dum Gender} + B2 \cdot \text{Age} + B3 \cdot \text{Level of Education} + \\ &\quad B4 \cdot \text{Business Experience} + B5 \cdot \text{Cultural Attitude} + \epsilon) \end{aligned}$$

Where, P is the probability of an MSE owner/manager to join the higher financial literacy level group coded as '1', 1-P is the probability of an MSE owner/manager to join the lower financial literacy level group coded as '0'. The reference group for dummy variable gender is female coded as '0'.

Running the binary logistic regression using IBM SPSS provides the outputs presented as follows in two sections. The first section presents tests of the model quality and fitness and the model summary. The second section presents the results of the regression; the estimated marginal effects of each of the explanatory variables along with the respective statistical tests of significance.

4.7.1 Model summary and Model fitness tests

4.7.1.1 Omnibus Tests of Model Coefficients and Model Summary

A comparison test of the full model containing all the predictor variables and the null model containing only the intercept was done. Results from the test of the full model versus a null model are presented as follows.

Table 23: Omnibus Tests of Model Coefficients

	Chi-square	Df	Sig.
Step	310.115	5	.000
Step 1 Block	310.115	5	.000
Model	310.115	5	.000

Source: Questionnaire Survey, 2018

The omnibus test of the model coefficients show that the full model (with predictor variables included) is an improvement over the null model (with only the constant). It shows the drop in the -2loglikelihood (measure of unexplained variation in the dependent variable) from the null model to the full model (199.965). Including the predictor variables in to the model significantly reduced the -2log likelihood by 310.115 (the chi-square) indicating that model captures more of the variation in the dependent variable. All the rows in the table such as Step, Block and Model show similar results, since all the predictor variables were added to the model once; no stepwise regression and blocking of predictor variables is employed. The chi-square value of 310.115 with a p-value of 0.000 in the row labeled Model indicates that the full model (with predictors) is significantly better fit than the null model (with constant only). Therefore, the inclusion of all the predictor variables in the model significantly improves the model fitness.

Table 24: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	199.965 ^a	.554	.754

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Source: Questionnaire Survey, 2018

The Model Summary table provides the -2Log likelihood (-2LL) and pseudo R² values for the full model (with predictor variables included). The -2Log likelihood of the model containing all the explanatory variables is 199.965, which is much lower than the -2log likelihood of the null model (510.08). Thus the full model explains more of the variation in the level of financial literacy among respondents as compared to the null model.

The Nagelkerke R Square 0.754 implies the model can explain about 75.4% of the variation in the financial literacy level of respondents. It shows around 75.4% of variability in level of

financial literacy among MSE owners/managers can be explained by the five variables such as gender, age, level of education, business experience and cultural attitude.

4.7.1.2 Hosmer and Lemeshow Goodness of fit Test

Table 25: Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	4.255	8	.833

Source: Questionnaire Survey, 2018

The **Hosmer and Lemeshow Test**, tests how well the model fits the data. The Chi-square/ $\chi^2(8, N= 384)$ value of 4.255 and p-value of 0.833 implies that the model is a good fit. Higher p-values indicate that the null hypothesis stating ‘the model best fits the data’ shouldn’t be rejected. Hence, it is possible to conclude that the model fits the data well, since the p-value of the **Hosmer and Lemeshow Test** is much higher than 5% level of significance.

4.7.1.3 Classification Table

Table 26: Classification Table

	Observed	Predicted		
		Financial Literacy Level		Percentage Correct
		Lower Financial Literacy Level	Higher Financial Literacy Level	
Step 1	Lower Financial Literacy Level	213	25	89.5
	Higher Financial Literacy Level	21	125	85.6
	Overall Percentage			88.0

a. The cut value is .500

Source: Questionnaire Survey, 2018

The classification table shows that the model is able to correctly classify 89.5% of respondents who are members of the lower financial literacy level group and 85.6% of those who are members of the higher financial literacy level group. Overall, the model correctly classified 88% of respondents.

4.7.2 The Result of the Regression: The Predictor Variables

‘Variables in the Equation’ table summarizes the importance of the explanatory variables individually whilst controlling for the other explanatory variables in explaining the financial literacy level of MSE owners/managers in Addis Ababa city. The table provides the estimated coefficient (B) of the predictor variables and the constant, the associated standard error of the beta coefficients, the Wald statistic (to test the statistical significance), the p-value (labeled sig.) and the Odds Ratio (Exp (B)) for each variable.

In the left most column listed are the predictor variables such as gender, age, level of education, business experience and cultural attitude. Gender is a dummy variable with reference group of female coded as ‘0’. The age, level of education, and business experience are ordinal variables, while cultural attitude is a scale variable. n

The column labeled **B** lists down the estimated beta coefficients of the explanatory variables and the constant. The beta coefficient values show the magnitude of the partial effect of each of the predictor variables on the respondents’ level of financial literacy. The signs of the coefficients indicate the direction of the association between the dependent variable and the predictor variables. Negative signs indicate financial literacy level is lower with increased values of the predictor variables; while positive signs indicate financial literacy level is higher with increased values of the predictor variables.

The column titled S.E. presents the associated standard errors of the estimated beta coefficients. The Wald statistics column presents the test statistics for significance of each of the beta coefficients with 1 degree of freedom for each predictor variable including the constant as presented in the Df column.

Listed down in the Sig. column are the p-values of the coefficients which are used to test the significance of the association between the dependent variable and the independent variable. The p-values indicate that all the predictor variables except age are significant predictors of the financial literacy level of MSEs owners/managers in Addis Ababa city. The p-values for variables such as gender, level of education, business experience and cultural attitude are much lower than 0.01, indicating that the values of their respective coefficients are significantly

different from 0. While the p-value for age variable is much higher than 0.05 indicating it is insignificant.

The column labeled ‘Exp(B) listed down the respective odds ratio for the predictor variables including the constant. They are the exponentiation of the beta coefficients, to simplify the interpretation of the marginal effects of the predictor variables on the dependent variable. The estimated coefficients show the marginal effect of each of the predictor variables on the ‘natural log of the odds’. Therefore, the estimated beta coefficients were exponentiated to see the marginal effect of each of the predictor variables on the odds ratio (odds of joining the higher financial literacy level). The last most columns show the interval estimate of the true odds ratio of the population at 95% confidence level.

Table 27: Variables in the Equation

	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I. for	
							EXP(B)	
							Lower	Upper
Gender	1.583	.418	14.322	1	.000	4.867	2.145	11.047
AgeCat	-.234	.287	.664	1	.415	.791	.451	1.389
LoE	1.000	.330	9.159	1	.002	2.719	1.423	5.195
BECat	1.818	.359	25.699	1	.000	6.161	3.050	12.445
ACA	-1.309	.409	10.235	1	.001	.270	.121	.602
Constant	-6.640	2.426	7.494	1	.006	.001		

a. Variable(s) entered on step 1: Gender, AgeCat, LoE, BECat, ACA.

Source: Questionnaire Survey, 2018

The regression results revealed that gender, level of education, business experience and cultural attitude are significant predictors of the financial literacy level of MSE owners/managers in Addis Ababa city administration. Using the 5% criterion of statistical significance, MSE owner’s/manager’s gender, level of education, business experience and attitude to culture and hospitality has significant partial effect on their level of financial literacy.

The beta coefficient of gender is positive and significant; indicating the odds of joining the higher financial literacy level group is higher for male MSE owners/managers than that of female ones. In other words, the probability of joining the higher financial literacy level group is higher

for male MSE owners/managers than that of female ones. Accordingly, the null hypothesis (H01) stating “there is no significant difference in financial literacy level between Men MSEs owners/managers and Women MSE’s owners/managers” is rejected. The odds ratio for gender indicates that, when holding all other variables constant, a male MSE owner/manager is 4.867 times more likely to join the higher financial literacy level group than is a female MSE owner/manager and it is statistically significant at 5%. The cross tabulation analysis (presented in **Table 18**) also shows that 54.3% of male respondents are members of the higher financial literacy level group. Whereas, only 10% of the female respondents are members of the higher financial literacy level group. A highly significant Pearson Chi-square test in **Table 18** indicates that male MSE owners/managers have higher financial literacy level as compared to female MSE owners/managers.

Several previous studies around the world found that there is gender difference in the level of financial literacy for instance, Atkinson & Messy (2012), Bhushan & Medury, (2013), Buche, et al., (2016) and Stolper & Walter, (2017). In most of the cases, women are characterized by having lower financial literacy level than men. Indeed there are also some findings contradicting this, like Mbarire & Ali, (2014), which finds out that women are more financially literate than are men among Employees of Kenya Ports Authority in Kenya. Sucuahi, (2013) also finds that gender can’t significantly affect the financial literacy level among MSE owners/managers in Davo City, Philippines.

Moreover, findings from a study by Matewos, et al., (2017) show that there is significant difference in level of financial literacy across gender among urban dwellers in Addis Ababa city. This study confirms the case also holds true among MSE owners/managers in Addis Ababa city. In general, consistent with majority of previous studies, female MSE owners/managers have lower financial literacy level than male MSE owners/managers.

The beta coefficient for age is negative indicating the odds of joining the higher financial literacy level are lower for older MSE owners/managers, while holding other variables constant. But it falls short of statistical significance. Therefore, the null hypothesis (H02) stating “age has no significant effect on level of financial literacy among MSEs owners/managers” shouldn’t be rejected. A study by Mbarire & Ali, (2014) found that there is significant negative association

between financial literacy level and age. On the other hand, findings from many previous studies indicate that financial literacy level follows an inverted U-shaped pattern with respect to age. For instance, Lusardi & Mitchell, (2011), Atkinson & Messy, (2012), Murugiah, (2016), noted that financial literacy level is lower among younger and older persons than adults. The cross tabulation analysis (as shown in **Table 19**) confirmed this fact that younger and older MSE owners/managers have lower financial literacy level than adult ones. From **Table 19**, it can be noted that the percentages of the adult respondents that are in the higher financial literacy level group are relatively higher than that of the percentages of younger and older respondents that are members of the higher financial literacy level group. The highly significant chi-square test in the cross-tabulation (**Table 19**) implies that adult MSE owners/managers have relatively higher financial literacy level when compared to younger and older MSE owners/managers. Whereas the regression results indicate that age can't significantly predict the level of financial literacy among MSE owners/managers in Addis Ababa City.

The beta coefficient for level of education is positive and significant implying that the odds of joining the higher financial literacy level group are higher for MSE owners/managers with higher educational attainment, while holding other variables constant. Then, the null hypothesis (H03) stating "MSE's owners/managers educational level cannot significantly affect their level of financial literacy" is rejected. Financial literacy level is higher among MSE owners/managers with higher levels of educational attainments. The cross tabulation results (as presented in **Table 20**) also supports the regression result, that financial literacy level of MSE owners/managers is positively associated with their level of formal educational attainment. **Table 20** shows that most of MSE owners/managers who attained Tertiary and more levels of education are in the higher financial literacy group. On the other hand, majority of MSE owners/managers who have attained preparatory or lower levels of education are in the lower financial literacy level group. The result supports the findings of studies by Sucuahi, (2013) and Guliman, (2015), which noted that level of formal education has a significant positive effect on financial literacy level of MSEs owners/managers. The findings are also in line with Mbarire & Ali, (2014) who found that financial literacy level is higher for those who have higher educational attainments. Therefore, MSE owner's/manager's level of financial literacy is higher among those who have attained higher levels of educations than those who don't.

The beta coefficient for business experience is positive and significant which indicate that, while holding other variables constant, the odds of joining the higher financial literacy level group are higher for MSE owners/managers with higher business experience in years. In other words, the probability of joining the higher financial literacy level group is higher for MSE owners/managers with increased number of years in business. Accordingly the null hypothesis (H04) stating that “number of years in business cannot significantly affect MSEs owners/managers level of financial literacy” is rejected. Financial literacy level of MSE owners/managers can be enhanced through acquiring experiences in running business. The cross tabulation results (as portrayed in **Table 21**) are in line with the regression results, that financial literacy level of MSE owners/managers is significantly positively associated with their business experience. As **Table 21** revealed majority of MSE owners who have been in business for 15 years or more are members of the higher financial literacy level group. Whereas, majority of MSE owners/managers who have been in business for less than 15 years are members of the lower financial literacy level group. Therefore, the longer they stay in running business operations, the more MSE owners/managers learn and get financially literate. The results contradict with the findings of Guliman, (2015) who noted financial literacy level of MSE owners in Illegan city, Phillipines, is negatively associated with number of years in business.

The coefficient for cultural attitude (ACA) is negative and significant implying that, keeping holding other variables constant, the odds of joining the higher financial literacy level is lower for MSE owners/managers with higher scores in the cultural attitude scale. MSE owners/managers who have stricter attitudes towards culture and hospitality have lower probability of joining the higher financial literacy level group. Therefore, it can be noted that attitude towards culture and hospitality significantly and negatively affects the financial literacy level among the MSE owners/managers in Addis Ababa city.

MSE owners/managers who have stronger stance/attitude towards culture of collectivism and hospitality are more likely to have lower financial literacy level. This could be due to the fact that extreme affection for collectivism and hospitality cultures invites unplanned spending and improper use of money. Those cultures are manifested by hospitable and accommodating approach towards others. Hence, individuals who like this culture will be more satisfied by enjoying others at their expense than worrying much for their future. To make others

(friends, guests or relatives) happy, they can be exposed for unplanned spending. This can affect how individuals use and manage money and their intention towards their future financial wellbeing. Therefore, attitude/tendency towards liking this culture can negatively affect the financial behavior and attitude dimensions of the financial literacy.

Therefore, the final fitted regression model can be:

$$\ln(ODDS) = \ln\left(\frac{P}{1-P}\right) = (-6.64 + 1.583\text{male} - 0.234\text{Age} + \text{Level of Education} + 1.818\text{Business Experience} - 1.309\text{Cultural Attitude} + \varepsilon)$$

Where, P is the probability of an MSE owner/manager to join the higher financial literacy level group, 1-p is the probability of an MSE owner/manager to join the lower financial literacy level group.

The coefficients indicate that the partial effect of each of the predictor variables on the natural log of the ODDs. The sign of the coefficients indicates the direction of association between the financial literacy level and each of the predictor variables.

Exponentiating both sides of the above equation, transforms the ln(ODDS) into ODDs ratio $\left(\frac{P}{1-P}\right)$ by exponentiating the expression on the right side of the equation.

$$ODDS \text{ Ratio} = \left(\frac{P}{1-P}\right) = (0.01 + 4.867\text{male} + 0.791\text{Age} + 2.719\text{Level of Education} + 6.161\text{Business Experience} + 0.27\text{Cultural Attitude} + \varepsilon)$$

Where, $\left(\frac{P}{1-P}\right)$ represents the odds or likelihood of an MSE owner/manager to join the higher financial literacy level group.

Here the coefficients indicate the partial effect of each of the predictor variable on the odds ratio (ratio of odds of joining higher financial literacy level group to odds of joining the lower financial literacy level group). The predictor variables with coefficient value of less than **1.00** such as age and cultural attitude have negative effect on the financial literacy level of MSE owners/managers in Addis Ababa city. On the other hand, predictor variables with coefficient value of higher than **1.00** have a positive effect on the financial literacy level of MSE owners/managers in Addis Ababa city. In general, the financial literacy level of MSE owners/managers in Addis Ababa city can significantly be predicted by their gender, level of formal education, business experience in years and attitude towards culture and hospitality.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

This study had two major purposes. The first is measuring the financial literacy level of MSE owners/managers in Addis Ababa city. To do so, data was collected from selected sample MSE owners/managers using self-administered questionnaire. The data was then analyzed using descriptive and cross-tabulation analysis techniques. The second purpose was to determine the effect of demographic and socio-economic variables on the financial literacy level of MSE owners/managers in Addis Ababa city. Adopted from world widely accepted standard measure by OECD, (2011 & 2015), financial literacy level of respondents was measured through three dimensions such as financial knowledge, behavior and attitude. Cluster analysis technique has been employed to generate binary data of the combined financial literacy level. By using the so called cluster analysis, respondents were grouped in to two clusters; one group characterized by higher financial literacy level and the other characterized by lower financial literacy level. Binary logistic regression has been employed to see the effect of the demographic and socio-economic variables on the financial literacy level of MSE owners/managers in Addis Ababa city.

The first dimension of financial literacy, financial knowledge of respondents on different finance concepts was gauged through 9 test type questions. Knowledge of basic finance issues is critical to make wise and responsible financial decisions. The descriptive analyses however, revealed that majority of the respondents have lower financial knowledge score. Therefore, larger share of MSE owners/managers participated in the study do not have sufficient knowledge of basic finance issues. Most of the respondents lack knowledge of simple interest, time value of money, inflation, return, risk, risk diversification (to manage risk), interest compounding and real interest. Moreover, extremely large numbers of the respondents have poor knowledge of compound interest, real interest, risk and risk diversification. Hence, majority of the MSE owners/managers particularly those participated in this study will be suffering from their lack of awareness on different finance concepts. They couldn't make use of better opportunities and resist threats associated with changed circumstance in financial context of their life. Unless they are cognizant of different financial issues, MSE owners/managers will not be capable of

maximizing their profit and profit while minimizing the associated risk. On the other hand, more than half of the respondents have good awareness of the importance of insurance to manage risk.

The second financial literacy dimension, financial behavior of the respondents on different issues was assessed using 13 likert scale items. Financial behavior of individuals is the actions and decisions they make which ultimately shapes their financial wellbeing. Individuals should make use of their finance knowledge in their day to day and long term financial decisions so as to achieve satisfactory financial position. Higher share of the respondents have financially savvy behavior on issue such as making considered purchase, comparing prices before making purchase, saving for future need and planning ahead.

On the other hand, majority of the respondents do not have financially savvy behavior on borrowing, insurance, increased saving during higher incomes, make savings or investments considering the effect of inflation, retirement planning, budgeting, and putting close watch of financial affairs. Hence, it can be noted that majority of the respondents are not making wise and responsible decisions on key issues that could help them maintain better financial excellence and wellbeing. Most of MSE owners/managers participated in the study fail to carefully budget their spending, plan their retirement, increase saving proportional of income and watch their financial affairs closely. Furthermore, since inflation is very high and dynamic in Ethiopian context, MSE owners could have been able to take inflation in to account while putting their excess cash in to saving or investment avenues. Therefore, majority of the respondents have better saving and planning ahead behaviors but failed to consider the effect of inflation in doing so. Purchasing insurance policy to get rid of the fear and burden associated with risk is less accustomed among MSE owners who took part in this study.

The other dimension of financial literacy, financial attitude was also measured through five likert scale items. The financial attitude measures the respondent's attitude and preferences towards short term and long term financial life. Those who prefer longer term financial ambitions are supposed to view their future brightly and hence they manage their current spending and build positive attitude towards planning and saving. Most respondents have acknowledged the importance of planning ahead, managing money and budgeting their current spending on reaching bright future. However, most of them do like short term life and don't want to worry much of their future.

Consistent with majority of the existing literature like Buche, et al., (2016) and Stolper & Walter, (2017), there is gender difference in level of financial literacy among MSE owners/managers in Addis Ababa city. Men MSE owners/managers are found to have higher financial literacy level when compared with women MSE owners/managers.

Though the regression result revealed that the association between age and financial literacy level is insignificant, it can be noted from the cross-tabulation analysis that financial literacy level follows an inverted U-shaped pattern with respect to age among MSE owners/managers in Addis Ababa city. Adult MSE owners/managers are characterized by having relatively higher financial literacy level than younger and older MSE owners/managers.

Formal educational level of MSE owners/managers in Addis Ababa city significantly determines their level of financial literacy. Supporting the previous findings like Sucuahi, (2013) and Guliman, (2015) financial literacy level is higher among MSE owners/managers with attainment of higher formal educational levels when compared to those with attainment of lower educational levels.

Financial literacy level among MSE owners/managers residing in Addis Ababa city can be enhanced with increased business experience. MSE owners/managers who have been conducting business for longer periods of times are found to have higher level of financial literacy. The more they engage in business the better will they be experienced and the higher will be their level of financial literacy. Therefore, MSE owners/managers are learning finance by doing business.

Collectivism and hospitality are common cultures of the Ethiopian peoples, which invites highly spending behavior. Ethiopians consider inviting people and entertain their friends and guests as honor and dignity (Africa-Expert, 2018). However, peoples may have different views and stands on such culture. The attitude towards culture of collectivism and hospitality was found to be a significant predictor of financial literacy level among MSE owners/managers in Addis Ababa city. MSE owners/managers who are more conservative of collectivism and hospitality culture tend to have lower financial literacy level than those who are less conservative ones. The regression result revealed that financial literacy level of MSE owners/managers can be negatively affected by their attitude/outlook towards culture of collectivism and hospitality.

Therefore, it can be noted that too much hospitality can negatively affect the financial literacy level of MSE owners/managers in Addis Ababa city and thereby their financial wellbeing.

5.2 Recommendation

Financial literacy nowadays is becoming a fundamental life skill for any individual. In order to cope up with the very dynamic, digitalized and globalized financial landscape, every individual need to be financially literate enough. Particularly, the owners or managers of the MSEs need to have the required level of financial literacy, to achieve the desired objective and stimulate growth of their business in addition to their personal life. Depending on the findings reached, forwarded as follows are the suggestions that can help enhance the financial literacy level of MSE owners/managers particularly in Addis Ababa city.

- To enhance the level of financial literacy among consumers in general and MSE owners/managers in particular, the government, micro and small enterprises development agencies, national bank of Ethiopia and other concerned bodies need to put efforts in designing financial education strategies, different workshops, trainings and education programs. In addition, it is appreciated to conduct financial literacy surveys to get feedback and evaluate the effectiveness of those programs. It helps to make the necessary modifications to the financial literacy enhancement programs and ensure the efforts efficiently achieve the desired change.
- It is better to include financial literacy course as an independent subject in the curriculum to all educational levels (from grade one up to Tertiary level institutions). This helps children to grow equipped with the required financial skills, behaviors and attitudes. It enables them make wise and responsible financial decisions and achieve better financial wellbeing in their latter ages being engaged in any socio-economic activity including running their own business.
- Making use of social Medias and internet in promoting financial educations, advices and workshops can be of a good way to consider. It can enable the government, MSE development agencies, the national bank of Ethiopia and other concerned bodies to enhance financial literacy level of MSE owners/managers with in a shorter period of time and at least cost.

- The government particularly the NBE need to develop standard financial literacy measures which embody the financial landscape customized to Ethiopian context. In addition, considering the financial landscape in Ethiopian context, it is better to set a standard score to bench mark individuals as financially literate enough or not to help them excel in financial matters.
- The findings revealed that women MSE owners are found to have lower financial literacy level than that of men MSE owners. According to (Buche, etal., 2016), women have longer lifespans than men and are exposed to spend time in widowhood. Moreover, improving the financial literacy level of women particularly those running business helps in stimulating all inclusive and sustainable economic growth. Buche, etal., (2016) also marked that women’s financial literacy level should be enhanced so as to enable them maintain secured and safer retirement. Therefore, the government, MSEs development agencies and other concerned bodies need to pay greater attention in enhancing financial literacy level of females in general MSE owners/manager in particular. Financial literacy level among women can be improved by designing financial education programs, different workshops, trainings with particular focus on female MSE owners/managers.

5.3 Direction for Further Research

- Future financial literacy surveys shall better be conducted at national level. Then, the average can then be taken as a standard for cross comparisons.
- In addition, financial literacy level better be measured by making cross comparisons with average scores of other countries.
- It will be appreciated to include the ‘News literacy’ or ‘staying informed of financial news and changes’, while conducting financial literacy studies. Information search and the ability to understand financial indicators (ratios and news) is critical for every financial decision making process. So, following of the news and ability to understand their potential effect on the financial and economic environment is worthwhile to consider it as key skill. It can help consumers take the opportunities and minimize the threats associated with the news. Hence, it would be better that future studies include such skill in measuring financial literacy level.

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Appendix I: Questionnaire

Addis Ababa
University
(Since 1950)



COLLEGE OF BUSINESS AND ECONOMICS DEPARTMENT OF ACCOUNTING AND FINANCE QUESTIONNAIRE

Dear respondents,

I Habtemariam Geta is currently undertaking a thesis entitled “*Financial Literacy level of Owner’s/Managers of Micro and Small Enterprises in Addis Ababa City and its Determinants*” for partial fulfillment of MSC program in Accounting and Finance at Addis Ababa University. The aim of the study is to measure the current financial literacy level of MSE owners/managers and identify financial literacy gaps and needs in those business communities along with the demographic and socio-economic variables. The findings of this study will assist the government and the MSEs development agencies to better understand the financial literacy needs and gaps so as to design appropriate measures

First of all I would like to say thank you for you are willing to sacrifice your precious time and fill the questionnaire. . The successful completion of this study is highly dependent on your participation. I kindly request you to take time and carefully address all the questions in your own opinion. I want make you sure that your responses will not be used for other purposes other than for research and it will remain confidential.

GENERAL INSTRUCTIONS

- No need of writing your name.
- Write your answer in case of open questions.
- Encircle the letter of your choice in case of choice questions.
- Put “✓” under the column of your opinion in case of scale question.

Part I: Demographic and Socio-Economic Questions

A. Background Information

1. Gender
 - A. Male
 - B. Female
2. Age_____
3. Level of education
 - A. Do not go to school,
 - B. Primary education (grade 1-8)
 - C. Secondary and preparatory education (9-12)
 - D. Tertiary level education (diploma and bachelor’s degree)
 - E. Masters and above
4. For how many years you have been engaging in this business?_____
5. Have you ever taken/attended finance related training sessions in any occasions?
 - A. Yes
 - B. No

B. Cultural Attitude Questions

No.	Statement	Strongly agree	Agree	Indifferent	Disagree	Strongly disagree
1.	I like Ethiopian traditional culture of collectivism.					
2.	I always like to enjoy with my friends after work without limit.					
3.	I always like to invite friends and relatives when I met them suddenly					
4.	Peoples who worry more to save are considered greed.					
5.	I find it more pleasing to make my friends and relatives get together and enjoy at my expense.					

Part II: Financial Literacy Questions

A. Financial Knowledge Questions

1. Imagine that five brothers are given a gift of Br 1000. If the brothers have to share the money equally how much does each one get? (Open question).
2. Now imagine that the brothers have to wait for one year to get their share of the x . In one year's time will they be able to buy:
 - A. More than they could buy today.
 - B. The same amount that they could buy today.
 - C. Less than they could buy today.
 - D. Do not know
3. Suppose you put Br 100 in the savings account and the interest rate is 7% a year. You don't make any further payments into this account and you don't withdraw any money. After a year, how much money will you have in this account?
 - A. 100
 - B. More than 100
 - C. Less than 100
 - D. Don't know
4. And how much money will you have in this account in 5 years if you make neither withdrawal nor deposit to this account? The interest will be earned at the end of each year and will be added to the principal. Would it be:
 - A. More than Br 140
 - B. Exactly Br 140
 - C. Less than Br 140
 - D. I cannot estimate it even roughly
5. High inflation means that the cost of living is increasing rapidly.
 - A. True
 - B. False
 - C. Don't know
6. Imagine the interest rate applied to your savings account is 7% a year and the inflation rate is 10% a year. After one year, how much will you be able to buy with the money from this account?
 - A. More than today
 - B. Exactly the same
 - C. Less than today
 - D. Do not know
7. Over the longer period of time (say 10 years), which asset normally gives the highest return?
 - A. Bonds
 - B. Savings accounts
 - C. Shares
 - D. Do not know
8. An investment with a high return is likely to be high risk.
 - A. True
 - B. False
 - C. Do not know
9. It is less likely that you will lose all of your money if you save it in more than one different places.
 - A. True
 - B. False
 - C. Do not know
10. From which of the following financial institutions you may to get risk protection service?
 - A. Banks
 - B. Microfinance institutions
 - C. Insurance companies
 - D. From none
 - E. From all
 - F. Do not know

B. Financial Behavior Questions

No.	Statement	Strongly agree	Agree	Indifferent	Disagree	Strongly disagree
1.	Before I buy something I carefully consider whether I can afford it.					
2.	I compare prices when making a purchase.					
3.	I save some money from my income each month for a future need.					
4.	I save more when my income is high.					
5.	I always consider inflation while putting my excess cash in banks and other investment avenues to earn income.					
6.	I set long term financial goals and strive to achieve them.					
7.	I have financial plans which will enable me to have sufficient money for my retirement.					
8.	I am able to identify the costs I pay and benefits I get to buy a product on credit.					
9.	I have too much personal debt right now.					
10.	I carefully prepare a spending/budget plan for my business and family separately.					
11.	I put close watch of my financial matters by making notes and control of my personal spending separate from my business.					
12.	I keep organized financial records and I can find documents easily.					
13.	I don't prefer to buy insurance policy unless mandated by law because I do not see its importance than cost.					

C. Financial Attitude Questions

No.	Statement	Strongly agree	Agree	Indifferent	Disagree	Strongly disagree
14.	It is important to establish financial targets for the future.					
15.	The way I manage my money today will affect my future.					
16.	It is important to have and follow a monthly expense plan.					
17.	I find it more satisfying to spend money than to save it for the long term					
18.	I tend to live for today and let tomorrow take care of itself.					