# FINANCIAL LITERACY AMONG SMALL AND MEDIUM ENTERPRISES IN ZIMBABWE

BY

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# DECLARATION

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Last my heartfelt appreciation goes to my children, Tendai, Nothando, Andile, and Thandeka and Unathi. You were deprived motherly love during the course of my study but you endured. I love you all.

# DEDICATION

This thesis is dedicated to my beloved sister and my best friend, **Beauty Mutengezanwa Kembo**.

# ACRONYMS

| | |
|---|---|
| ACCA | Associated Certified Chartered Accountants |
| ANOVA | Analysis of variance |
| ANZ | Australia and New Zealand Banking Group |
| CBA | Canadian Bankers Association |
| CBD | Central Business District |
| GDP | Gross Domestic Product |
| CZI | Confederation of Zimbabwe Industries |
| GoZ | Government of Zimbabwe |
| HRS | Health and Retirement Study |
| ICT | Information and Communication Technology |
| INFE | International Network on Financial Education |
| MSMED | Ministry of Small and Medium Enterprises and Development Corporation |
| NGO | Non-Governmental Organisation |
| OECD | Organisation for Economic Co-operation and Development |
| PBC | Perceived behavioural control |
| PISA | Programme for International Student Assessment |
| RBT | Resource based theory |
| RBZ | Reserve Bank of Zimbabwe |
| RMR | Roy Morgan Research |
| SDG | Sustainable Development Goals |

| | |
|---|---|
| SEAF | Small Enterprise Assistant Fund |
| SEDCO | Small Enterprise Development Cooperation |
| SME | Small and Medium Enterprises |
| SMEDCO | Small and Medium Enterprise Development Corporation |
| SPSS | Statistical Package for Social Sciences |
| UK | United Kingdom |
| UNDP | United Nations Development Programme |
| US | United States |
| USAID | United States Agency for International Development |
| ZEPARU | Zimbabwe Economic Policy Analysis Research Unit |
| ZIMASSET | Zimbabwe Agenda for Sustainable Socio-economic Transformation |
| ZNCC | Zimbabwe National Chamber of Commerce |

# ABSTRACT

Global concerns about financial literacy have heightened following the 2007/8 global financial crisis where it became apparent that lack of financial literacy was one of factors that contributed to the detrimental financial decisions taken. There is global recognition that poor financial decisions have a harmful overspill impact on financial and economic stability.  In light of the importance of financial literacy in all economies, this study was conducted to ascertain the level of financial literacy among Small and Medium Enterprises (SMEs) in Zimbabwe that are key contributors to economic growth. The study was motivated by the need to develop a comprehensive financial literacy strategy which, if implemented, would enable business players to operate in the current financial landscape characterised by an influx of complex financial products. This research sought to relate financial literacy to financial product awareness and utilization and describe the financial behaviour of SMEs and their patterns of debt management. While governments across the world have expressed concern about the financial literacy levels of different population cohorts and have launched financial education programmes, Zimbabwe is lagging behind. Despite numerous initiatives by the government to support SMEs, business growth remains subdued, the sector remains financially excluded and many businesses fail within the first five years of operation. Research indicates that business failure is a result of poor financial management, hence it became necessary to establish the level of financial literacy of SMEs so that a comprehensive financial literacy strategy could be developed to address the phenomenon.  A quantitative cross sectional research design was employed, with data collected by means of a questionnaire administered to a sample of 384 SMEs in Harare and Bindura district. The study's findings revealed that financial knowledge was low, notably among the young and aged, those who are single, separated or divorced and, surprisingly, those with more business experience. Significant differences were noted across age groups, business sectors and years of experience in business.  Although SMES exhibited positive and somewhat positive financial behaviour, a correlation analysis between financial literacy and financial behaviour revealed a weak positive relationship, calling for the need to seek strategies to address financial literacy. The study also established that SMEs are not aware of many financial products, nor do they utilize them. An association between financial knowledge and financial product awareness was noted, with those with high financial knowledge being aware of many financial products. However, no association was noted between financial knowledge levels and financial product

utilization. Regarding debt behaviour, the research established that SMEs were not comfortable with their debt positions but because they were aware of the consequences of default, they made sure they met their financial obligations on time. In times of financial distress, friends and relatives were the main sources of funding and loans were beginning to gain popularity due to the increase in the number of micro finance institutions. On the whole, the research concluded that there is low financial literacy and low utilization of financial products among SMEs, but positive debt behaviour. The study recommended the introduction of financial education for SMEs and the development of the curriculum thereof, the increase in awareness campaigns, and an increase in access to information on financial products and services by the SMEs.

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# CHAPTER 1

# INTRODUCTION

## 1.1 Introduction

The argument that many people make financial decisions that are not in their best interest cannot be disputed. Today's financial world is characterized by a wide array of complex financial products which call for the need of high financial competence in order to participate within such a financial landscape. Clearly poor financial decisions will result in detrimental financial mistakes whose effects may be difficult to reverse in the short term. The damage is more severe for SMEs who have to make sound financial decisions on a day to day basis for the survival of their enterprises. It is however surprising to note that many individuals are ignorant of the need to evaluate alternative financial products and services and choose among competing service providers to enhance their financial well-being. For Small and Medium Enterprises (SMEs) the need to make sound financial decisions is not an option, and yet their ignorance is evident in their consistent business closures in their infancy owing to financial mismanagement. This is against the background that this sector is fundamental for the development of many economies across the globe.

The chapter introduces the thesis by providing a background to the study and highlighting the problem statement that motivated it. The study's objectives are spelt out providing a justification for the study and highlighting how several stakeholders will benefit from the results. The scope of the study is highlighted and the chapter ends with an outline of the rest of the thesis.

## 1.2 Background to the study

The fundamental economic role of SMEs is not open to debate as research has pointed to their major contribution to employment and poverty reduction and consequently economic growth (Navaretti, Calzokin & Ponzolo, 2015; Beck, Demirguc-Kunt & Peria, 2008; Beck, Demirguc-Kunt & Maksimovic, 2008). SMEs have been identified as drivers of economic growth and development in both the developed and developing world and most vibrant economies have

SME-driven industries. Researchers and practitioners agree that this sector is responsible for many innovations and contributes immensely to economic growth through employment creation and poverty eradication (SEAF, 2007; Rajaman & O'Neill 2009; Finmark, 2013). Research in Organisation for Economic Co-operation and Development (OECD) countries has established that approximately 95% of businesses are SMEs and that they account for 60% of employment in support of regional development and cohesion (OECD, 2005). Navaretti, Calzokin & Ponzolo (2015) found that 99% of firms in the European Union are SMEs and that the proportion is similar across other countries. They add that governments, policy makers and individuals are concerned about SMEs because of their significant contribution to growth and the realization that they will grow to become bigger companies (Navaretti, Calzokin & Ponzolo, 2015). Bouri, Breij, Diop, Kempner, Kilnger and Stevenson, (2011) suggest that a vibrant SME sector enables an economy to survive cyclical effects brought about by international private capital flows.

As in other countries, SMEs are the key drivers of economic growth in Zimbabwe and they make a significant contribution to social stability through employment creation and ultimately improved standards of living. In 2013, Zimbabwe crafted a new plan for economic recovery known as the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET) with the aim of accelerating economic development and wealth creation. Through ZIMASSET, economic growth would be achieved by focusing on indigenization, empowerment and employment creation. The SME sector was identified as one of the key economic sectors that have the capacity to ensure that ZIMASSET's objectives are achieved (Government of Zimbabwe, 2013).

Researchers note that SMEs are effective tools to enhance economic growth and the achievement of the Sustainable Development Goals (SDGs), especially in developing countries (Nunoo & Andoh, 2012; Bouri et al, 2011; ) However, the prevailing economic environment in Zimbabwe has raised serious concerns about the financial security of citizens, and more so SMEs. This is mainly because SMEs are now called upon to be more accountable for major financial decisions in business, especially as they make investment decisions to become successful business players. There is also increased awareness of the effects of taking critical financial decisions without adequate skills (Hung, Parker & Young, 2009, Nanoo & Andoh, 2012). Recent liquidity challenges in Zimbabwe's banking system have intensified the need to equip businesses with the

necessary financial literacy tools. The less financial literate SMEs make financial errors and engage in undesirable financial behaviour, exposing them to the risk of being unable to cope with sudden economic shocks (Nunoo & Andoh, 2012). This is a matter for concern given that upgrading the role of the SMEs sector in the Zimbabwean economy to improve economic growth through enhanced competition, employment creation and income redistribution has been the focus of new development policies in the country (GOZ, 2015).

Whilst SMEs are the drivers of economic growth, various researchers have established that a high percentage fail in their first five years of trading, often as a result of overtrading and financial strain (Kotze & Smit 2008; Fatoki 2014; Nanoo & Andoh 2012). A survey conducted in Zimbabwe by Finmark (2013) established that only 28% of SMEs operate for more than five years. This has been attributed mainly to a lack of adequate financial knowledge and financial skills which is evident in the poor financial decisions they take. A significant deterrent to the growth of SMEs is a lack of training to manage and control their business finances in a professional and transparent manner. On the one hand, poor planning and inadequate accounting result in significant losses for SMEs, whilst on the other risk-averse lenders require solid financial statements in order to make lending and investment decisions. Return on investment (ROI) is a consideration in any investment and SMEs' business successes depend on an appreciation of such financial concepts. The Zimbabwean government has made significant efforts to promote the growth and sustainability of SMEs through various policies and support institutions as well as a fully-fledged Ministry to address the plight of these business players. However, the impact of these initiatives is questionable given continued closure of many SMEs. It is therefore clear that financial literacy, among a number of complementary factors, is critical for the success of SMEs, hence the focus of this study.

According to Finmark (2013), Zimbabwe's informal sector is a source of employment for approximately six million people and contributes US$7.4 billion to the economy. However, among other anomalies, there is no evidence that the money contributed is accounted for in the formal banking system. The Finscope survey revealed that a total of 5.7 million jobs were created within the SME sector, 66% in rural areas and 34% in urban areas. Such statistics are a clear demonstration that Zimbabweans have the power to create wealth. The study therefore examined the level of financial literacy can explain the high level of financial exclusion of SMEs

and hence their failure to sustain their business beyond five years. Zimbabwe has not yet reached the stage of fully realizing the tremendous potential of SMEs despite the government's focus on this sector in almost all its policy documents. It is against this background that the study was undertaken to identify the components of a comprehensive financial literacy framework so as to improve financial literacy levels among SMEs.

## 1.3 Statement of the problem

The problem to be addressed in this study emanates from observations made by various stakeholders which show a lack of financial literacy among SMEs. According to Remund (2010) and Huston (2010) financial literacy focuses on the ability of an individual to confidently make effective financial decisions. The behaviours associated with a financially literate individual include budgeting, saving, borrowing and investing. Studies conducted in Zimbabwe show that most SMEs (85%) are informal and are financially excluded (FinScope, 2012; Maseko & Manyani, 2011), they do not keep records of business transactions (Okpara, 2011; Mandizvidza & Mapepeta, 2017) and where they do, these are incomplete. In his study, Mabhanda, (2015) found lack of financial literacy among SMEs being apparent as most did not keep proper accounting records. These behaviours have made it difficult for SMEs to access funds from the established financial institutions as they lack the ability to write convincing business proposals (RBZ, 2016), which stifles growth and often leads to business failure. Mabhanda (2015) and Sanderson (2016) suggest that the problem of financial literacy requires immediate attention if business entities are to survive.

Further to this, there is a notable observation that SMEs in Zimbabwe are failing within the first five years of operation mainly because of their inability to manage their business finances in a transparent and professional manner. Since SMEs are drivers of economic growth, it might be assumed that they are successful, but the rate at which SMEs are failing is cause for concern (Nyamwanza, 2014). Despite numerous government initiatives to support SMEs, the growth of the sector remains subdued and it remains financially excluded, with many players closing shop after less than five years of trading. There is evidence of business failure reported in the country's print and electronic media, the Zimbabwe Government (2014) budgetary statement, and different financial sector reports (Confederation of Zimbabwe Industry Reports for December 2013, Jan-March 2014). Whilst business failure can be explained by several economic

and social factors, financial illiteracy is evident, hence the attention of the Central bank to an inclusive financial sector where financial literacy is emphasized. SMEs' contribution to the national economy has failed to meet expectations despite the preferential treatment given to the sector and the faith that policy makers have placed in it (Nyamwanza, 2014). A study conducted by Chivasa (2014) revealed that SMEs lack an entrepreneurial culture as shown by their poor financial management where business financial matters are handled by the owner manager irrespective of his or her financial competence. Lee (2010) raises a pertinent question where he queries the possibility of business survival and growth without considering the effect of quality financial decision making. In light of that, he suggests that initiatives to improve the quality of financial decisions are justified and therefore called upon. Bonga & Mlambo (2016) point out that there is global concern about financial literacy and Zimbabwe should not be an exception. They suggest the need for a national financial literacy strategy which is the main focus on the current study. Indeed, the Zimbabwe National Financial Inclusion strategy (RBZ, 2016) identifies financial literacy as a major stumbling block to the achievement of an inclusive economy and points to the need to provide financial education for entrepreneurs among others.

Past research documents several inappropriate decisions that have been made to the detriment of individuals, societies, economies and some leading to World financial crisis (Lee, 2010). Consumer ignorance of financial matters is evident across the continent, yet financial products have grown in complexity and the range of products has increased. This has been fuelled by an accelerated growth in technology and globalisation which has also intensified competition among financial service providers. This increase in service providers coupled by an increase in the range of financial products has resulted in more confusion exposing individuals to taking wrong financial decisions, risks which can be avoided if financial literacy levels are addressed. Indeed, policy makers and regulators acknowledge that financial literacy is a cause for concern in the financial services arena and requires urgent attention (Lee, 2010).

The study therefore seeks to develop a financial literacy strategy for SMEs by first measuring their level of financial literacy, determining their financial behaviour, assessing their financial awareness and utilization of financial products such as savings, insurance, loans, ecocash, investments, shares and term deposits, and, finally, their debt management patterns.

## 1.4 Objectives of the study

The main objective of the study was to formulate a financial literacy enhancement strategy for SMEs in Zimbabwe.

The specific objectives were to:

1. determine the level of financial literacy of SMEs;
2. describe the financial behaviour of SMEs;
3. determine the level of financial awareness among SMEs and the existence of an association with financial literacy
4. determine the level of financial utilization and the existence of an association with financial literacy
5. establish patterns in SME debt management

## 1.5 Research Questions

This research asks what the components of a comprehensive financial literacy strategy for SMEs are that can lead to an inclusive financial sector and an improvement in their financial knowledge, skills, attitude and behaviour for continued existence in business.

The following research questions were formulated for the study:

1. What is the level of financial literacy of SMEs in Zimbabwe?
2. What is the financial behaviour of SMEs in Zimbabwe?
3. What is the level of awareness of financial products and services among SMEs in Zimbabwe and is there an association with financial literacy?
4. What is the level of utilization of financial products and services among SMEs in Zimbabwe and is there an association with financial literacy?
5. What are the patterns of debt management among SMEs in Zimbabwe?

## 1.6 Contribution of the study

This research is timely and important for a number of reasons. The study is conducted during a period where Zimbabwe is pursuing a new plan for economic recovery, ZIMASSET, whose main objective is to accelerate economic development and wealth creation, and the SMEs sector has been identified as having the capacity to help achieve these objectives. Indeed, a vibrant SME sector is critical for the economic and social development of any country. Specifically, financial literacy addresses three clusters, namely, Food Security and Nutrition, Social services and Poverty eradication, and Value Addition and beneficiation and the sub-cluster of Monetary and Financial reform measures, making the current study relevant.

The study is also undertaken during a period where Zimbabwe is embracing financial inclusion as critical for economic growth and thus has joined other countries (Alliance for Financial Inclusion) in pursuit of an inclusive financial sector where again the SME sector is highlighted as a special population group in the national financial inclusion strategy framework. Additionally, financial literacy is documented as an important pillar for the achievement of an inclusive economy:

Firstly, the study will help in the identification of components of a comprehensive financial literacy strategy for the SME sector which can be considered for adoption. This will ensure that the SME sector in financially included to foster socio-economic development. It will ensure that the SMEs are equipped with adequate financial knowledge, skills, attitudes and behaviours that enhance their financial capability. The framework will ensure that SMEs are aware of the importance of financial literacy

Secondly, the study will be useful for policy guidance on how to enhance financial literacy as one of the pillars for achieving a financially inclusive economy. The study is topical given that the Reserve Bank of Zimbabwe (RBZ) has taken centre stage in achieving a financially inclusive economy where they point out financial literacy as one of the key pillars.

Thirdly, the study will establish important relationships between financial literacy and several explanatory variables for the crafting of a comprehensive financial literacy strategy framework. The study will identify key components of financial literacy in order to develop appropriate financial competencies amongst SMEs.

Fourthly, through the identification of various characteristics of a financially literate business owner, clear policy recommendations can be made and a guided curriculum can be developed. SMEs are pointed as one of the special population groups targeted for financial improvement and thus the current study addresses gaps identified in the aforementioned group.

Finally the study will add to the existing body of literature on financial literacy which is scarce in developing economies. The World Bank Group (2015) points out that Zimbabwe does not have a coordinated financial literacy strategy and no assessment of the financial capabilities has been made. They then recommend an extensive quantitative study of the status of financial literacy for Zimbabwe. The current study will provide a baseline study and a basis for future research to be conducted in the same field.

## 1.7 Assumptions of the study

The study is based on the resource based theory of the firm which assumes that the capability of an entrepreneur to exploit opportunities and achieve growth is influenced by access to firm resources such as human capital and the social network (Aldrich, 1999; Alvarez and Busenitz, 2001). There are three theories that emanate from the resource based view which are the financial capital theory, the social network theory and the human capital theory. The research is aligned to the human capital theory that places emphasis on the importance of the entrepreneur's education and experience as key resources for opportunity identification and exploitation leading to business growth and success.

## 1.8 Delimitation of the study

Whilst several factors explain the nature of the quality of financial decisions made, this research focuses on one such factor, financial literacy. The study focused on SMEs in Zimbabwe with the sample drawn from two provinces, namely Harare Province to represent the urban population, and Mashonaland Central Province to represent the rural population group. Data were collected in the major cities in these provinces amongst SME owners who are in operation. They were chosen as they are home to a large number of SMEs and were also identified as the major economic hubs in the country. Data were collected among SMEs in various business sectors. The study does not consider the formalization status of the SMEs.

## 1.9 Limitations of the study

The research instrument was a self-administered questionnaire. Whilst they are plausible for the collection of large amounts of data of a personal nature, questionnaires have several limitations which had an impact on the current study.

## 1.10 Structure of the thesis

The remainder of the thesis is divided into eight chapters. Chapter two presents a detailed literature review on the theories of entrepreneurship and financial behaviour. Chapter three is a discussion of the role of SMEs since these are the study population. Chapter four provides an outline of the important role of financial literacy where a review of literature reveals that financial literacy is important for the individual, the SME sector, the financial sector and ultimately the economy. Chapter five provides empirical literature review where a focus is on an analysis of the findings of other studies conducted elsewhere on financial literacy. Chapter six discusses the methodology employed to conduct the study. It highlights the research design, sampling procedures, and data collection techniques and how the data were analyzed to achieve each research objective as outlined in the first chapter. Justifications for the choices are also provided. This is followed by chapter seven where presents the data, analyses the findings and interprets the results for financial literacy measurement and financial behaviour. Chapter eight focuses on the presentation of results for financial awareness and utilization among SMEs. The final chapter nine concludes the thesis with a summary of findings and recommendations.

## 1.11 Chapter Summary

The chapter presented the background of the research problem by highlighting the importance of SMEs as a cornerstone of economic growth in Zimbabwe. It also gave an overview of the state of financial inclusion of SMEs as provided by the Finscope Survey of 2012 where there is notably low financial participation by SMEs. The research problem was presented to be based on the high failure rate of SMEs and their inability to realize their full potential despite the numerous incentives provided by the Government of Zimbabwe (GoZ). Furthermore, many SMEs are financial excluded which is detrimental to their personal financial being and consequently that of the business. The study was motivated by the need to develop a financial literacy strategy for SMEs by determining their financial capability and describing their financial behaviour, level of financial awareness and level of financial product utilization. The study aims to contribute to the

achievement of the SDGs and specifically ZIMASSET which identifies SMEs as the major sector in achieving national development goals. Specifically the study addresses three clusters which are the Food Security and Nutrition, Social services and Poverty eradication and Value addition and Beneficiation and the sub-cluster of Monetary and Financial reform measures. The study seeks to recommend a comprehensive financial literacy strategy to improve financial participation by SMEs and their ability to make well informed financial business decisions. The chapter concluded with an outline of the thesis. The following chapter two reviews the literature relevant to the study.

# CHAPTER 2

# THEORIES OF ENTREPRENUERSHIP AND FINANCIAL BEHAVIOUR

## 2.0 Introduction

An understanding of the theories of entrepreneurship and financial behaviour is crucial to this study as they lay a foundation on which critical variables for a financial literacy strategy can be determined. The chapter provides a discussion of two set of theories, those focusing on entrepreneurship, and those that focus on the financial behaviour of the entrepreneur. Entrepreneurship theory is a body of knowledge which consists of several views from various academic disciplines including economics, psychology, anthropology, sociology and management. Academics from these disciplines have debated the role of entrepreneurship, hence giving rise to several schools of thought (Rosa, 2013; Simpeh, 2011) which are the foci of this chapter. The theories emphasize three key features of the entrepreneurial phenomenon, namely the nature of entrepreneurial opportunities, the nature of entrepreneurial individuals and the context in which they make decisions (Sabana, 2014; Alvarez, 2010). Theories of financial behaviour on the other hand focus on explaining what determines the financial behaviour of an individual. The theories provide a basis on which to determine the savings, borrowing and consumption behaviours of individuals.

## 2.1 Economic theories of Entrepreneurship

Literature documents three economic theories of entrepreneurship, namely, the Neoclassical perspective, the Austrian perspective, and the Schumpeterian perspective. These are discussed below.

### 2.1.1. The Neoclassical perspective

The neoclassical perspective is an attempt by several economists to define what an entrepreneur is and to identify his or her actions. The neoclassical view can be traced back to the time of Richard Cantillion (1680-1734) who described an entrepreneur as the undertaker who is willing

to take risks presented by uncertain business environments (Grebel, 2004; Lowe and Marriot, 2006). Fransis Quesnay (1674-1774) described an entrepreneur as an independent owner of a business, whilst Nicholas Bacleau (1730-1792) proposed that an entrepreneur's main focus is on cost minimization and profit maximization. Jean Baptiste Say (1767-1832) saw an entrepreneur as an independent economic agent who combines and coordinates productive factors.

According to the neoclassical view, entrepreneurs are a homogeneous group of individuals who, in addition to being a factor of production, show expertise in efficiently and effectively allocating scarce economic resources with the aim of maximizing profits in unpredictable business environments (Endres & Woods, 2010). Kirkby (2003) agrees with the neoclassical perspective by stating that entrepreneurs are risk takers whose decisions are not based on past historical events, but rather who believe in a free or mixed market economy where market forces will eventually establish equilibrium in the economy. They suggest that the rewards for the factors of production are realized in the form of wages and a positive return for risk bearing. Thus, according to the neoclassical perspective, entrepreneurs are individuals who are risk takers as they operate in uncertain business environments with a profit maximization objective.

### 2.1.2 The Austrian perspective
An alternative perspective on entrepreneurship is given by the Austrian school of thought which is associated with economists such as Frederich van Wieser (1851-1926), Mises (1949), Hayek (1937, 1940, 1948) and Kirzner (1997). This perspective recognizes that the entrepreneur is an economic agent who is responsible for bringing economic change by being alert and quick to identify unnoticed opportunities for profit making (Muponda, 2012; Andreas and Woods, 2010; Dopfer, 2008; Grebel, 2004; Kirzner, 1999). Grebel (2004) contributes to the Austrian view by suggesting that entrepreneurs take advantage of opportunities by attempting to correct errors made by previous entrepreneurs, and in so doing profit becomes the end result. This proposition of an action man as described by the Austrian economists can be traced back to the time of Carl Menger (1810-1921) who portrayed the entrepreneur as an action man responsible for economic change (Menger, 1921; Mises, 1996, Muponda 2012). The Austrian perspective holds that an entrepreneur is responsible for recognizing opportunities, exploiting them and creating new ones (Muponda, 2012; Dopfer, 2008).

However, Grebel (2004) and later Ebeling (2007) note that although the Austrian entrepreneur is an active and alert man, there is need to take cognisance of differences in cognitive ability and intellectual capability amongst entrepreneurs. This noted heterogeneity implies that different people will react differently to economic changes as well as economic opportunities. Lowe and Marriott, (2006) also acknowledge that markets are imperfect and hence knowledge is not evenly distributed, thus creating opportunities to take advantage of the knowledge differential to make profit.

### 2.1.3 The Schumpeterian perspectives

According to the Schumpeterian perspective, entrepreneurs do not seek pleasure or satisfaction, but are motivated by challenging tasks which they carry out in uncertain economic environments. According to Saxena (2005) and Endres & Woods (2010), there are four aspects that surround Schumpeter's theory of entrepreneurship. Firstly an entrepreneur is driven by the desire and willingness to establish a business entity, secondly the need for power and self-autonomy, thirdly the desire to engage in competition to prove outstanding performance, and finally the satisfaction that comes with accomplishment. The Schumpeterian entrepreneur is driven by the need to introduce new markets, new methods of production, new suppliers and new organizations or industries (Saxena, 2005). Dopfer (2008) also suggests that the Schumpeterian entrepreneur is one who is driven by a desire to be innovative but these ideas are easily copied by some competitors.

## 2.2 The Psychological theories of entrepreneurship

The psychological theories of entrepreneurship focus on an individual's characteristics that define an entrepreneur. They are based on the notion that not every individual can become an entrepreneur but it takes personality characteristics to distinguish entrepreneurs from non-entrepreneurs. The psychological theories include the personality traits theory, the internal locus of control theory, and the need for achievement theory.

### 2.2.1 The personality trait approach

This theory emphasizes the inborn characteristics of an entrepreneur and proposes that entrepreneurs are born and hence are by nature entrepreneurs. The characteristics of an entrepreneur are identified as being driven by opportunity, being creative and innovative, possessing competent management skills and business knowhow, being energetic and optimistic,

and sharing a high level of commitment and endurance. Entrepreneurs are hard workers who do not fear competition and hence have a vision which is optimistic (Simpeh, 2014).

### 2.2.2 The locus of control theory

The locus of control theory was first introduced by Julian Rotter, who defined it as the extent to which an individual's actions affect outcomes (Rotter, 1966). The theory suggests that the success of an entrepreneur is a result of an individual's ability, which is termed the internal locus of control, and support, which is the external locus of control (Kirby, 2003). Indeed researchers have established that there is a direct relationship between internal locus of control and the enthusiasm to be an entrepreneur (Bonnett & Furnham, 1991; Rauch and Frese, 2000).

### 2.2.3 The need for achievement theory

This theory is associated with David McClelland (1961) who proposed that entrepreneurs are moved by the need to excel in their business endeavours and hence have a high need for achievement which motivates them to take up challenging tasks thereby assuming more responsibilities. According to McClelland, entrepreneurs are driven by situations where they take personal responsibility to solve problems, set objectives that enable calculated risk tolerance, and they require feedback on performance (Saxena, 2005; Johnson, 1990).

## 2.3 The Sociological Entrepreneurship theory

This theory focuses on the role of the society in influencing entrepreneurial behaviour. It argues for a strong social network of entrepreneurs whose prime responsibility is the provision of strong social ties that are vital for the recognition and exploitation of entrepreneurial opportunities (Shane & Eckhardt, 2003; Aldrich and Zimmers, 1986). Reynolds (1991) points to four social aspects that relate to entrepreneurship behaviour. Firstly, there are social networks which are described as the social relationships which should be built upon trust and not the desire to exploit the other members of the society. Secondly there is the life course stage which emphasizes the experience and exposure an individual has had which is thought to inspire entrepreneurial behaviour. Thirdly, Reynolds (1991) suggests that ethnic identification is crucial in influencing entrepreneurship in that the social background of an individual can provide sufficient motivation for one to become a business owner. For example, disadvantaged societal groups may be pushed into entrepreneurship by the desire to break the curse of poverty. Lastly, population ecology is a sociological aspect that is believed to inspire entrepreneurship. This recognizes the existence of

different stakeholders who can inspire the opening up of new businesses such as the government through their legislation and policies, customers as they express demand for various products and services, and competitors as they help in opportunity identification. It is argued that individuals may be able to identify a business opportunity but if they lack the social ties for support they may fail to exploit those opportunities (Shane and Eckhardt, 2003).

## 2.4 Anthropological entrepreneurship theory

This is a theory which is centered on the influence of an individual's origins, development, customs and beliefs of the community they come from. A successful business venture is shaped by the societal and cultural values of the community. Culture has an influence on an individual's attitude and behaviour and hence explains differences in entrepreneurial behaviour (North, 1990; Shane, 1994).

## 2.5 The Resource-based theory

The resource based theory (RBT) is the dominant theory in strategic management which has influenced other managerial disciplines (Foss, 2011). The theory originates from the work of Penrose (1959) who attempted to explain the growth of firms, and was further developed by various authors such as Lippman and Rumelt (1982), Wernerfelt (1984), Rumelt (1984), Barney (1986; 1991;1996), Grant (1991), and Peteraf (1993). The theory is presented as the theory of the firm (Baumane-vitolina, 2013; Foss, 2011), which seeks to explain why firms exist, why they are organized as they are and why they act, perform and grow the way they do. Penrose (1959) suggested that a firm has endowments of tangible and intangible assets and capabilities which are combined differently to create productive services. These different resource combinations result in firm diversification hence explaining how firms grow (Barney, 2001; Wernerfelt, 1984; Foss, 2011). According to the RBT, a firm's resources are a vital source of competitive advantage hence a significant drive for entrepreneurship (Alvarez & Busenitz, 2001; Wernerfelt, 1984; Barney, 1995). The theory places emphasis on the heterogeneity of resources such as financial, social and human aspects and proposes that access to such resources enables the identification of new opportunities and new venture growth (Davidson & Honing, 2003).

Hoffer & Schendel (1978) as well as Wernerfelt (1984) suggest that the resources of a firm are a key determinant of its performance and may be a significant source of competitive advantage.

The resource-based theory seeks to bring to the fore the fact that entrepreneurial actions result in heterogeneous resource combinations that will bring about a firm's competitive advantage (Barney, 1991; Alvarez & Busenitz, 2001; Tokuda, 2005). Barney (1991) as well as Ferreira, Azevedo, & Ortiz (2011) posited that a firm's competitive advantage is spelt out by its unique combinations of resources that are valuable and rare, making them costly to imitate and even substitute. The RBT centres on the ability of the firm to identify resources and capabilities which, when combined, result in a bundle of resources that will enable the firm to realize its full economic value (Barney, 1995; Foss, 2011).

## 2.6 Theories of financial behaviour

This section provides a discussion of theories of financial behaviour which are grouped into two categories, namely, theories of savings and consumption and theories of consumer behaviour. These theories have been proposed by various economists to explain consumers' consumption and savings behaviour.

### 2.6.1 Theories of Savings and Consumption

Theories of savings and consumption can be categorised into the following:

i.   The Relative Income hypothesis by Duesenberry (1949);
ii.  The life cycle theory of consumption and spending by Modigliani & Brumberg (1954), Modigliani & Ando (1957), and Ando & Modigliani (1963);
iii. The Permanent Income hypothesis by Friedman (1957); and
iv.  The two-period model of savings and consumption by Delavante, Rohwedder & Willis (2008).

These theories are discussed in more detail below.

### *2.6.1.1 The Relative Income Hypothesis*

This theory is attributed to the work of Duesenberry (1949) who proposed that an individual's utility from consumption is determined by his or her income in relation to that of the society rather than its absolute level. It posited that savings are not dependent on income levels, but rather an individual's propensity to save is determined by his or her percentile position in income distribution. This is based on psychologists' and sociologists' observations that individuals care about status (Kuperman, n.d). According to the theory, individuals derive satisfaction from

leisure, bequests and relative income and thus consumption is a function of one's income in comparison with the income of others in society. This theory was supported by Easterlin (1974) and Oswald (1997) who found that an individual's well-being is dependent on his or her relative income rather than absolute income.

Whilst Duesenberry's theory is an improvement on earlier theories such as those of Keynes, it is criticized for a number of reasons. The theory suggests a positive relationship between consumption and income where the two change proportionately. However, empirical evidence shows that this does not hold. Rather, exceptionally large and unexpected increases in income are accompanied by less than proportionate increases in consumption. Dwivedi (1991) notes that there have been times when consumption rose while income decreased. While the theory of relative income states that consumption standards are irreversible, it is argued that consumers cannot continue to dissave in the long run and consumer behaviour is reversible (Dwivedi, 1991).

### 2.6.1.2 The Life Cycle Theory Hypothesis

This hypothesis was first developed by Franco Modigliani and his student Richard Brumberg in 1954. They observed an imperfect match between consumption and income during the life cycle of an individual, with spending patterns determined by available resources over one's lifetime. The theory is based on the assumption that, over time, individuals derive satisfaction from consumption or savings by striving for a balance between earnings and expenditure during their lifetime (Crown, 2002). Modigliani & Brumberg (1954) proposed that individuals try to even out consumption during their lifetime. During the initial stages of their working life when people are young, they focus on asset accumulation; thus their expenditure can exceed income. Consumers will borrow based on expected wealth and income to finance expenditure such as home building, education, and starting a family, among other things; hence they do not save. The motive to borrow based on one's future income is dependent upon one's personal assessment of one's ability to service the debt. According to this theory, as individuals approach middle age earnings begin to take an upward trend, enabling individuals to pay off debts and begin to accumulate savings for future expenditure. Upon retirement both income and expenditure decline, individuals reduce consumption and dissave and begin to live on previously accumulated savings (Crown, 2002). According to Nanoo & Andoh (2012), decisions on the amount to borrow and how much to save over an individual's lifetime require extensive

knowledge of interest rates and understanding of credit market information. Whilst this theory is based on individual behaviour, it has implications for the economy at large in that it relates savings in an economy to the rate of growth of national income, and wealth to the length of the retirement span.

The theory has been criticized on the basis of the assumptions made which do not hold in reality. It assumes that each individual has a definite and conscious vision:

- of the future level of their income
- the entire profile of their income
- availability of present and future credit as well as the terms and conditions
- future emergencies, opportunities and social pressure
- the amount and form of consumption and saving or dissaving in the future

The theory has also been criticised for assuming that consumers have a vision of spending which is sufficiently certain; this is unrealistic. Furthermore, it assumes that each household makes rational, conscious and complete calculations and plans its present and future consumption and savings to be repeated every year. In addition, the theory obscures the relationship between current income and current consumption. The relationship is such that a change in current income that is not accompanied by a change in expected future income would cause relatively small changes in current consumption.

Crown (2002) noted that several studies have established that older persons continue to save even after retirement, which is contrary to the life cycle theory. Furthermore, research has shown that the savings and dissaving behaviour of the older population does not support this theory. King (1985) notes that the aged do save in old age; this can be explained by favourable pension funds whose effect is to reduce the necessity to save for the future and dissaving upon retirement. This has been noted in countries like France, Germany, and Italy that have favourable pension schemes. Another explanation for the lack of dissaving in retirement is that poor health causes individuals to be unable to consume at levels higher than their pension income. In addition, Williams (1999) notes that pension wealth is not liquid and individuals may not consume more than the annuity payments they receive. The life cycle theory has been criticized for its overemphasis on savings patterns and disregard of consumption patterns. Crown (2002) argues

that consumption patterns should also be taken into account, as they offer a clear picture on the relevance of the life cycle hypothesis.

### 2.6.1.3 The Permanent Income Hypothesis

The permanent income hypothesis was developed by Friedman (1957) who suggested a direct relationship between consumption and income. He argued that individuals vary consumption in relation to their income at a given point in time. Changes in income are considered temporary and hence have no effect on consumption. Despite the uneven distribution of income over an individual's lifetime, people try to maintain a constant standard of living, hence fluctuations in income have no effect on consumption. Instead people adjust their financial behaviour by saving when their income level is high and spending when it is low. This hypothesis emphasizes that permanent changes in income trigger changes in consumer spending patterns; thus, an individual will save if they anticipate that their long term income will be less than their current income.

Whilst this theory has been empirically verified and yielded satisfactory results, critics have pointed to a number of flaws. Firstly, Dwivedi (1991) points out that whilst the theory suggests that households' average propensity to consume (APC) is the same at all levels of income. This conflicts with observations of consumption behaviour where the rich and the poor cannot consume the same proportion of their income. Secondly, the hypothesis assumes that transitory positive and negative income is not correlated, meaning that income variations in the short run do not affect consumption; this does not hold.

### 2.6.1.4 Two-period model of savings and consumption

A more recent theory proposed by Delavante, Rohwedder & Willis (2008) presents a two-period model of savings and investment in bonds and risky stocks. They argue that individuals will invest in financial knowledge to enable them to maximize returns on investments from the acquired ability to identify better performing options and also engage financial advisers to help them to achieve optimal returns. Jappelli and Padulo (2013) propose a multi-period model based on their observation of a strong association between wealth and financial literacy over an individual's life cycle. They also noted that the drive to save for retirement was low in countries with liberal social security schemes and consequently low financial literacy.

## 2.7 Theories of Financial Behaviour

In order to promote desirable traits, it is critical to understand consumer financial behaviour (Xiao, 2015). Fishbein (1975) states that human behaviour is guided by different subjective probabilities which include what an individual believes will be the consequences of a certain behaviour, what one believes to be the expectations of other people in society and beliefs about the existence of factors that influence the performance of a certain behaviour. Sommer (2011) suggests that behavioural beliefs trigger attitudes towards a certain behaviour, with normative beliefs producing subjective norms while control beliefs result in perceived behavioural control. The literature documents several theories that help explain consumer financial behaviour, including:

i.    The Theory of Planned Behaviour (Ajzen, 1991); and
ii.   The trans-theoretical model of behaviour change (Prochaska, 1979).

### 2.7.1 The Theory of Planned Behaviour

The Theory of Planned Behaviour is associated with the work of Fishbein (1967) who sought to understand why attitudes failed to predict human behaviour. This theory was developed as a result of the inherent weaknesses in the theory of reasoned action proposed by Fishbein (1967) which suggested that individuals make conscious and deliberate decisions using available information (Hannes, Meuleman & Manigart, 2008). It assumes that an individual controls his or her behaviour and as such that behaviour can be forecast by understanding the individual's intention to perform (Ajzen & Fishbein, 1980). Intentions are a person's drive, readiness to apply effort, and enthusiasm to try hard to enact the behaviour (Ajzen, 1991). Trandis (1980: 203) defines behavioural intention as "instructions that people give to themselves to behave in certain ways". When individuals have intentions based on their attitudes that are later translated into action, they are involved in planned behaviour (Hannes, Meuleman & Manigart, 2008). The Theory of Planned Behaviour is shown in Fig 2.1.
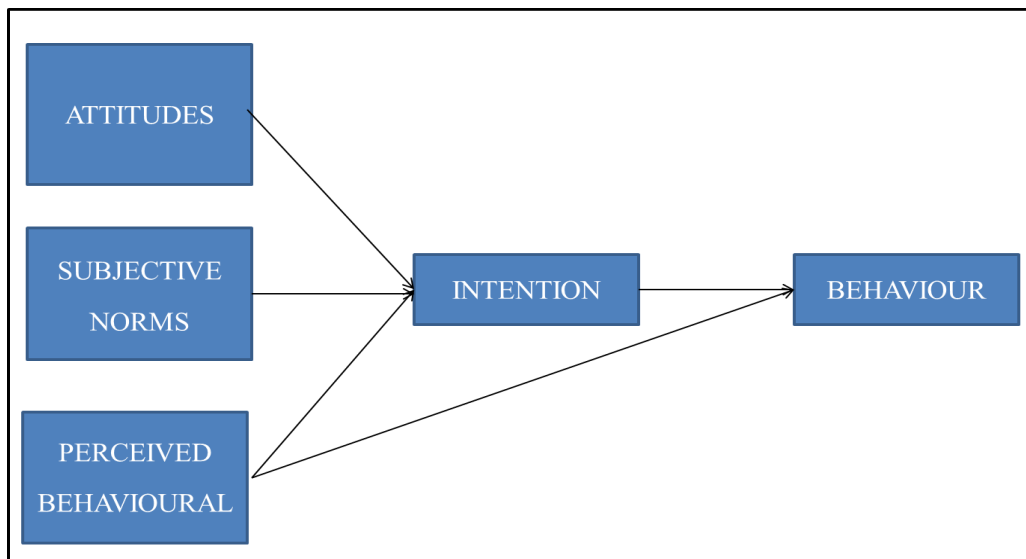
**Figure 2.1 Theory of Planned Behaviour**

*Source: Ajzen (1991:182)*

The theory of reasoned action assumes that a behaviour is enacted if the attitude towards its performance is positive and social norms support such (Ajzen & Fishbein, 1980). While social norms and attitude were found to be key determinants of behaviour, the theory of reasoned action remained unsatisfactory as research pointed to two problems. First, it was noted that it was important to differentiate behaviours from intentions and this could be problematic because a variety of other factors influence how the behaviour is executed. Secondly, the model makes no provision for considering whether the likelihood of failing to perform is due to one's behaviour or one's intentions. These shortcomings led to Ajzen's (1991) development of the theory of planned behaviour. Ajzen extended the theory of reasoned action by introducing another behavioural component, Perceived Behavioural Control (PBC), which refers to an individual's perception of the "…presence or absence of requisite resources and opportunities" (Ajzen & Madden 1986:457) to perform the specific behaviour.

According to the theory of planned behaviour the following three factors impact behavioural intentions:

- *attitude about the target behaviour*

According to Ajzen (2007) and Xiao (2015), an attitude to a behaviour is derived from an individual's positive or negative evaluation of the behaviour. This comprises of their salient beliefs regarding the end result of performing that particular behaviour.

- *subjective norms*

This refers to a person's discernment of whether significant referents approve or disapprove of certain behaviour. Ajzen (2007) stated that social norms are the supposed social pressure to perform or not to perform a behaviour and it is related to the expectations of important referents.

- *perceived behavioural controls*

This construct reflects the level of perceived difficulty in performing a certain behaviour and is determined by past experience as well as anticipated barriers (Xiao, 2015). It is people's assessment of their capability to undertake a given behaviour (Hannes, Meuleman & Manigart, 2008). PBC is important because it influences both intentions and the likelihood that a certain behaviour will occur (Conner & Armitage, 2000).

Xiao (2015) suggests that in general, the more favourable the attitude toward execution of a behaviour, the more it is approved by society. In such circumstances, performance of the behaviour becomes easier and the behavioural intention becomes apparent.

The Theory of Planned Behaviour has been more widely accepted than the Theory of Reasoned Action. Studies that compared the two theories confirmed that the Theory of Planned Behaviour is more useful and has greater explanatory power (Sommer, 2011). Armitage & Conner (2001) conducted a meta-analysis to evaluate the relevance of the Theory of Planned Behaviour. The research involved a review of 185 independent studies published since 1997 and facilitated direct comparison of the two theories. They found that the theory of planned behaviour which includes perceived behavioural control as one of the determinants of behaviour was generally valid as it explained the variance in behaviour by a further 11% compared to the Theory of Reasoned Action. The Theory of Planned Behaviour has been effectively used in various situations to

predict the performance of behaviour and intentions. In all cases, it was found that it has better predictive power of behaviour than the theory of reasoned action. Thus, there is general agreement on the relevance of the theory. However critics have identified several issues in its application. These include:

i.  A study conducted by Armitage & Conner (2001) revealed that self-reports were an unreliable source of information, hence objective as well as observed measures should be used to measure behaviour.

ii. Perceived control differs from self-efficacy and as such self-efficacy is a better measure of behaviour. It is argued that Ajzen's measures of PBC are more ambiguous and there is a general agreement that individuals have perceived inner control over behaviour and beliefs about their ability to deal with external impediments (Lucas & Cooper, n.d). Studies conducted by Armitage & Connor (1999, 2001) revealed that self-efficacy and external pressures and constraints are separate concepts. Ajzen (2002) cites five separate studies that show that there is a difference between self-efficacy and controllability.

iii. Desire and self-prediction can be used to describe intention in which case they become better determinants of behaviour.

iv. In comparison to attitude and perceived control, subjective norm does not comprehensively predict, therefore moral and descriptive norms can be used as alternatives.

Hannes, Meuleman & Manigart (2008) argue that the Theory of Planned Behaviour is more relevant where the behaviour in question is unusual, hard to observe or involves random time lags. In such situations current behaviour is unlikely to be influenced by past experience, hence intentions become key in explaining behaviour. Xiao (2015) points to several studies that show evidence of the applicability of the theory to the current study. Research on financial behaviour has focused on savings, borrowing, spending and investment, to name but a few. The relevance of the theory is shown in studies on mortgage use, credit counselling and investment decisions (Xiao, 2015). East (1993) investigated how individuals make investment decisions and found that they were strongly influenced by society represented by family members, friends, relatives and easy access to funds. Bansal & Taylor (2002) observed customer behaviour using a sample of mortgage clients and found that behaviour was influenced by a combination of perceived

control and either intention or attitude, and subjective norms and attitude. Xiao & Wu (2008) examined the factors that influence consumer behaviour as they craft a plan to manage debt. The results showed that attitude and perceived control were key determinants. Similar results were obtained by Guo, Xiao & Tang (2009). Shim, Xiao, Barber & Lyons (2009) and Xiao, Tang, Serido & Shim (2011) investigated college students' financial behaviour with regard to cash, credit and savings management. They confirmed the validity of the Theory of Planned Behaviour as it was found that social norms, perceived behavioural control and attitudes influenced behavioural intentions.

### 2.7.2 The Trans-theoretical Model of Behaviour Change

The trans-theoretical model of behaviour change follows the work of Prochaska (1979) and is a proposal on how people can change undesirable behaviour. The theory identifies five stages to achieve change:

i.   Precontemplation, the stage where people are not willing to change within six months.
ii.  Contemplation, a stage where people are willing to change within six months
iii. Preparation, where people are willing to change within 30 days
iv.  The action stage where people who have started to change within six months and the maintenance stage where people have been changing for more than six months but less than one-a-and-half years.
v.   If an individual has already changed behaviour for more than 18 months, that person has already changed.

The model also identifies ten processes of change which are presented in Table 2.1 overleaf.

This model has received significant support because amongst other psychological theories, it suggests more effective behavioural interventions in the form of a number of stages to achieve changes which are matched to different intervention strategies, hence making it more effective. The model is also highly supported for its emphasis on self-control (Prochaska et al., 1996). The theory has been used in different scenarios such as financial counseling (Kerkman, 1998; Xiao et al., 2004), behaviour change (Bristow, 1997), and financial education programs (Shokey & Seiling, 2004) and to provide advice for women on becoming better investors (Loibl & Hira, 2007).

**Table 2.1 Ten strategies of change**

| Change Stage | Change strategy | Definition |
|---|---|---|
| Precontemplation | Consciousness raising | Embracing new ways to reinforce behavioural change. |
| | Dramatic relief | Undergoing the ill feelings that are associated with negative behaviors. |
| | Environmental re-evaluation | Acknowledging the effects of both positive and negative behaviors on one's social and physical environments. |
| Contemplation | Self-reevaluation | Acknowledging the impact of behavioral change on one's status. |
| Preparation | Self-liberation | Making a firm commitment to change. |
| Action/Maintenance | Reinforcement management | Awarding more prizes for positive behavior change and reducing the prizes for negative behaviors. |
| | Helping relationships | Reinforcing positive behavior change by looking for social support. |
| | Counterconditioning | Replacing positive behaviors with negative ones. |
| | Stimulus control | Eliminating notifications for negative behavior and substituting with notifications for positive behaviors. |
| All stages | Social liberation | Acknowledging that societal values are aligning towards positive behavioral changes. |

*Source: Xiao (2015:53)*

Whilst the trans-theoretical theory has received the most recognition amongst a number of multistage theories, it is criticised for not specifying what happens psychologically at each stage, whether people go through each stage successively as they adjust their behaviour, and whether the stages differ significantly in terms of factors influencing behaviour change (Armitage & Conner, 2000).

In conclusion, the economic models discussed above assume that individuals save and adjust their consumption patterns during their lifetime. Such consumer behaviour requires a comprehensive set of analytical tools to undertake complex financial calculations and expertise

to navigate the financial world, all of which are necessary for decision making (Lusardi & Mitchell, 2014). Changing consumption patterns requires a level of financial literacy to take effective financial decisions for one's financial well-being and that of the economy. It should be noted that it is difficult to apply a single theory to explain financial knowledge and behaviour due to the complexity of this phenomenon.

## 2.8 Chapter summary

The chapter focused on a discussion of theories that surround the study identified in two broad categories, namely, theories of entrepreneurship and theories of financial behaviour. Factors influencing entrepreneurial behaviour are explained either economically, psychologically, sociologically or are determined by the availability of resources. On the other hand, theories of financial behaviour assume that individuals save and adjust their consumption patterns during their lifetime. Such consumer behaviour requires a comprehensive set of analytical tools to undertake complex financial calculations and expertise to navigate the financial world, all of which are necessary for decision making (Lusardi & Mitchell, 2014). Changing consumption patterns requires a level of financial literacy to take effective financial decisions for one's financial well-being and that of the economy. The study is based on the resource based theory of the firm where financial literacy is considered a key resource in the performance of a successful entrepreneurial entity.

# CHAPTER 3

# THE ROLE OF SMES

## 3.0 Introduction

This chapter provides the various definitions of SMEs and a discussion of their role in the economy. The study population of this research is the SMEs in Zimbabwe, hence it is crucial to have an appreciation of their importance in the Zimbabwean economy. This section further highlights the various efforts by the government to support the sector, but begins by providing a definition of an SME.

## 3.1 Defining Small and Medium Enterprises

It is important to provide a working definition of SMEs in Zimbabwe. Once again, there is no single definition of this term (Chingwaru, 2014; Maseko & Manyani, 2011). The literature shows that every country has SMEs operating in different sectors and that their definition differs from country to country depending on the economic system (Zindiye, 2008) and variables included (Chingwaru, 2014). SMEs have been defined quantitatively, involving measures such as assets employed, number of employees, asset value or sales turnover. Other definitions are qualitative in nature including variables such as ease of access to consumers, legal structure and degree of formalization. Whilst the differences are noted, there are also similarities.

### 3.1.1 Zimbabwean definition of SMEs

Whilst the Bankers Association of South Africa (2014) defines a SME as an entity with an annual turnover of between R500 000 and R20 million, the GoZ (2000) has defined a small enterprise as a registered entity with 50 personnel and assets not exceeding Z$30 million. A medium enterprise has 75 to 100 employees with a capital base of between Z$7 million and Z$12 million. The Small Enterprise Development Corporation (SEDCO, 2010) defines an SME as an enterprise with a maximum of 100 employees and annual sales of US$830 000 whilst the Ministry of Small and Medium Enterprises Development (MSMED), which was set up in 2002

by the GoZ, classified SMEs according to the number of employees, total assets and legal structure. A SME is defined as a legal business entity defined by the number of permanent workers, capitalization excluding fixed assets, turnover and sector. This is in line with local economic developments and international standards and is derived from the SME Act (Chapter 24:12). These definitions show that Zimbabwe places emphasis on the number of employees and turnover in its definition of a SME.

### 3.1.2 International definitions of SMEs

The different international definitions of SMEs are summarized in Table 3.1.

**Table 3.1 Definitions of SMEs**

| COUNTRY | REFERENCE | DEFINITION |
|---|---|---|
| World Bank | Ayyagarii, Beck & Dermirguc-Kunt (2003:4-5) | SMEs are entities that employ 0-250 people. |
| South Africa | Cronje et al, (2001:495) | A SME is an enterprise employing less than 200 employees, with sales of less than R5 million, and assets of less than R2 million. |
| United States of America | Small Business Administration (2004) | A SME is institution that is independently owned and managed by the owner of the business. |
| European Community | European Union (2004) | A firm is considered small if it employs less than 50 people and is considered to be a medium enterprise if it employs less than 25 workers. |
| Hong Kong | Hong Kong Institute of Certified Public Accountants (2005) | A SME is an entity that does not exceed any two of the three criteria pegged as total annual revenue of HK$50 million, total assets of HK$50million, at the reporting date, and 50 employees. |
| International Accounting Standards | International Accounting Standards Committee Foundation (2007) | A SME is an enterprise that is not legally obliged to publicise its financial affairs; hence financial records are for use in the business only. |

*Adopted from Zindiye (2008) and Maseko and Manyani (2011)*

Table 3.1 shows that worldwide there is no universal definition of an SME, but rather the definitions vary from one country to the other.

### 3.1.3 Comparison of the economic and statistical definitions of SMEs

UNDP (2008) provides a comparative analysis of definitions of SMEs. On one hand, economically, a firm is considered small if it has a small market share, is owner-managed, and operates in an informal and personalized way and there is no formalized management structure, and it is independent of large enterprises. On the other hand, the "statistical" definition relates to three main issues which are defining the size of the business and how it contributes to employment, exports and Gross Domestic Product (GDP), a trend analysis of the firm's contribution to the economy and a global comparison of the sector's contribution to the economy.

It is evident from the above definitions there is no uniformity and that they are country specific. However, the South Africa Institute of Chartered Accountants (SAICA) (2010) notes that in every jurisdiction approximately 99% of companies employ less than 50 people. For the purpose of this study, a micro enterprise is one that employs a maximum of five full time workers, a small enterprise employs a maximum of 40 full time workers, and a medium enterprise employs a maximum of 75 full time workers as defined by the Ministry of SMEDCO.

SMEs have been defined according to the number of employees since other variables were rendered useless following the hyperinflation and undervaluation of assets experienced during the dollarization of the Zimbabwean economy (Nyamwanza, 2014). Whilst definitions of SMEs vary according to geographic location, sector and even the researcher, these variables have been ignored due to these challenges.

## 3.2 An overview of the Small and Medium Enterprises Sector in Zimbabwe

It is important to contextualize the SME sector in Zimbabwe in order to gain an understanding of issues relating to their financial competence. A survey conducted by Finmark Trust (2012) provides a comprehensive summary of the state of the SME sector in Zimbabwe. According to the survey report there are 2.8 million SME owners in Zimbabwe and these own 3.5 million MSMEs employing 2.9 million people with an estimated turnover of 7.4 billion. A majority of the SMEs are in Harare, Manicaland and Masvingo and the least are found in Bulawayo, Matebeleeand North and Matebeleland South.  Of the total number of SMEs, 53% are owned by women and a majority of SMEs (66%) reside in rural areas. However a notable concern is that about three quarters of these businesses (71%) are a one-person enterprise, with only 29%

employing people in their business. Further to that, 24% are micro businesses employing between 1to 5 people, 4% are small enterprises employing 6 to 30 or 40 employees and only 1% are medium enterprises employing between 30 and 40 to 75 people. Most of the micro businesses are found in Masvingo, a majority of the small businesses are found in Mashonaland West Province whilst a majority of the medium enterprises are found in Bulawayo. Most of the SMEs (66%) are household heads who have been driven to start businesses as a way of cushioning themselves from the ill effects of poverty through enhanced employment creation and consequently a source of income. Most of the SMEs are young, 71% have been in operation for less than 5 years, with 40% still in the start-up phase (0-2 years) and 31% being in the growth stage (2-5 years). Such statistics are a clear indication that Zimbabwe has not reached its full potential that can be realized from the SMEs sector as a key contributor to economic development.

Having noted the landscape of the Zimbabwean SMEs sector it has become apparent that the sector is vital and hence indispensable in the economy. To this end, the government and policy makers in Zimbabwe shifted their attention to SMEs (Zindiye, Chiliya & Masocha, 2012) due to the realization that they are the drivers of the economy and can assist in achieving the objectives of the economic blue-print, ZIMASSET. SMEs are regarded as vital components of a thriving economy (Nyamwanza, 2014). In Zimbabwe this sector gained increased attention due to the intensity of the economic challenges faced by the economy since the year 2000. Current unemployment in the country stands at approximately 80% (Robertson, 2013) and this figure is increasing due to a shrinking formal sector where most companies are being forced to downsize or even wind up operations (Zindiye, 2008). The economic meltdown experienced since 2000 has resulted in low investment levels, leading to in a decline in economic growth of 50%. It is estimated that 60% of companies have closed and there has been a near 100% decline in foreign currency reserves (Zindiye, Chiliya & Masocha, 2012). Investment levels are low and hence inadequate to create a vibrant economy that is able to generate enough jobs for the thousands of graduates produced each year. Retrenchments are taking an upward trend whilst the number of universities has increased, producing even more graduates. The job market is flooded, yet formal sources of employment are limited (Zindiye, Chiliya & Masocha, 2012). This has forced many people to turn to informal trading as a means of survival, hence the proliferation of vendors in many cities in Zimbabwe, especially in the capital city of Harare. The solution to high

unemployment rates has been to shift focus to the SME sector in the hope that creativity and innovation will create sufficient jobs. The SME sector in Zimbabwe therefore plays a key role in economic development, poverty alleviation and improved standards of living. According to Zimstats' survey results of 2012, 84% of the employed population were located in the informal sector, 11% were formally employed and 5% were in employment that was not classified. The survey found that the majority (52%) of people were employed in the wholesale and retail sector, with 14% in the services sector and 14% in the manufacturing sector.

Nyoni (2002) highlighted several benefits that accrue from a thriving SME sector. The author suggested that SMEs promote entrepreneurial development resulting in a self-sustaining economy through sectoral linkages. In addition, SMEs encourage wealth creation by encouraging full utilization of human capital leading to economic growth. She also suggested that the sector enables indigenization which is one of the objectives of ZIMASSET.

### 3.2.1Government Support strategies for SMEs

In 2011, the then Minister of Finance presented a Mid-Term Plan that ranked entrepreneurial development fourth amongst the national development priorities. The GoZ identified the SME sector as the main vehicle to achieve its economic development goals and the sector has received priority in all policy documents. For example, the Industrial Development (ID) Policy (2011-2015) pronounced the SME sector as the main engine for employment creation and economic development and the GoZ pledged to promote the Ministry of SMEs through infrastructural development, technology advancement and the provision of finance, amongst other targeted government support to the sector.

The GOZ crafted the SMEs Policy which was approved by the cabinet in 2002. The policy provides guidelines on how SMEs can address the challenges they face. It seeks to provide a shared vision for all stakeholders to advance the cause of small business and provide an enabling environment for them to realise their full potential. It also maps out strategies to deal with the barriers facing SMEs. These range from a hostile regulatory environment, to limited access to finance, and inadequate management and entrepreneurial skills. The main objectives of the SMEs policy are to reduce unemployment and consequently poverty, fuel economic development and increase foreign capital inflows. The policy also outlines strategies for the government, the

private sector and other stakeholders to create a conducive environment for the growth of the sector (Nyoni, 2002).

Government support for SMEs is also pronounced in other policy documents such as the Framework for Economic Reform, the Zimbabwe Programme for Economic and Social Transformation (ZIMPREST) and the current Zimbabwe Agenda for Sustainable Socio-economic Transformation (ZIMASSET). The government has also designed policies that specifically address the plight of SMEs as existing policies focused on larger enterprises and might not be applicable to the SME sector (Nyamwanza, 2014).

### 3.2.2 Institutions that support the SME sector

There are several support institutions in place to focus on the addressing the needs of the SME sector. Research conducted by Finmark Trust (2012) has established that whilst a majority of the Zimbabwean population are SMEs and have high literacy levels, business skills have been informally acquired through social networks, family, friends and business counterparts. Business growth and survival is being hampered by challenges such as poor managerial skills, financial exclusion, poor infrastructure, lack of information and markets among many others (Finmark Trust, 2012; RBZ, 2016). As such, several institutions are in place to address the plight of the SME sector and a summary of these institutions is provided in Table 3.2 overleaf.

Table 3.2 shows that there are significant efforts made to ensure that the SME sector thrives for the achievement of economic goals. The number of Zimbabwean policies and institutions that aim to support the operational efficiency of SMEs demonstrates how vital SMEs are for the country.

## 3.3 The role of SMEs in other countries

The focus on SMEs is not unique to Zimbabwe; Rogerson (2008) found that across Africa, SMEs' activities are of vital importance for the promotion of economic growth, job creation and poverty alleviation. Researchers have noted that the sector is the center of original ideas and inventions with major contributions to employment creation, poverty reduction and consequently improved standards of living in both developed and emerging economies (SEAF, 2007; Rajaman & O'Neill,2009; Nanoo & Andoh, 2012; Finmark, 2013). Furthermore, a strong SME sector facilitates the diversification of the domestic economy, reducing its susceptibility to sector-

specific shocks and fluctuations in international private capital flows (Bouri et al., 2011). Tomic & Secerov (2008) point out that SMEs dictate the pace and quality of economic recovery, making them key drivers of economic growth.

**Table 3.2 SMEs Support Institutions in Zimbabwe**

| Name | Service provided | Nature of Institution |
|---|---|---|
| Ministry of SME and Cooperative Development (MSMEDCO) | Policy formulation, SMEs skills and management training | Public |
| Small Enterprise Development Cooperation | Skills and management training, credit, market information | Public |
| Confederation of Zimbabwe Industry (CZI) | Financial support, market information, advocacy | Association |
| Zimtrade | Trade promotion and development, Training | Public |
| Indigenous business women's organisation | Financial support, Market Information | NGO |
| Zimbabwe National Chamber of Commerce (ZNCC) | Market Information, Training | Association |
| Zimbabwe Youth Council | Skills and Management training Information | Association |
| Empretec | Training | Private |
| Zimbabwe Economic Policy Analysis Unit (Zeparu) | Research | NGO |
| National Chamber of SMEs | Representing SMEs | Public |
| SMEs Association of Zimbabwe | Market Access information, Training, representing SMEs | Association |
| Netherlands Development Organisation (SNV) | Research | NGO |
| Zimbabwe Association of Micro Finance Institutions | Advocacy, Research | Association. |

*Source: (Finmark Trust, 2012)*

Bouri et al. (2011) pointed to a direct relationship between SME growth and GDP growth resulting from an increase in output, value adoption and profits. Indirectly, SMEs contribute to economic growth through enhanced origination and macro-economic flexibility of the economy. They also suggested that SMEs help to boost government income from taxation. Fig 3.1 overleaf shows SMEs' contribution to employment. Bouri et al. (2011) note that the highest contribution to employment is experienced in low income countries where 78% of employment is provided by such businesses.
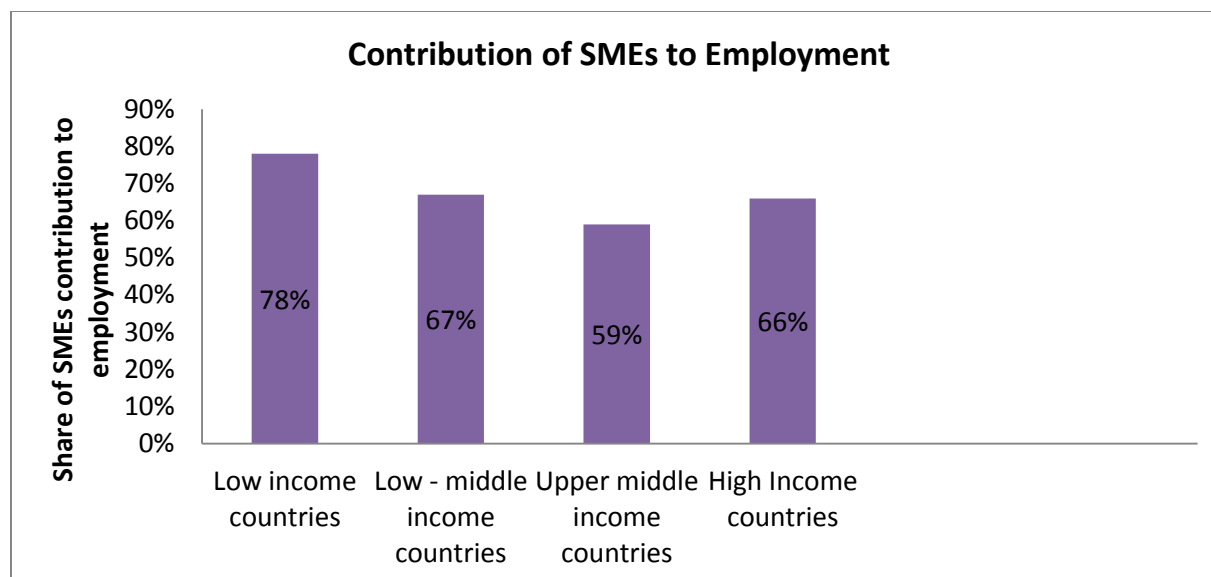
**Figure 3.1 The Contribution of SMEs to Employment**

*Source: Bouri et al. (2011:8)*

Besides significantly contributing to employment, Bouri et al. (2011) argue that SMEs are a vital source of revenue for the government since they also contribute to taxes directly and indirectly.

In terms of social advantages, Tomic & Secerov (2008) noted that SMEs have an entrepreneurial spirit and create better relationships with partners, thus contributing to the development of the local community. Gidd (1996) as well as Kirby (2003) highlighted the role of entrepreneurship as that of bringing innovation and change, creation of new business ventures which culminates into employment creation and consequently economic growth. The literature thus points to the positive role played by SMEs in any given economy.

Leadholm & Mead (2013:7-8) identify five major contributions that SMEs make to development of an economy. Firstly, SMEs make a significant contribution towards an individual's income and prosperity. SMEs are an important source of income for households, enabling them to acquire assets and develop themselves intellectually. The employment opportunities they create enable households to enhance their welfare through poverty eradication and pave the way for better economic opportunities through experience. Secondly, SMEs enable an individual to be to be empowered and hence develop self-confidence. SMEs are the vehicle through which an individual gains dignity and achieves liberation and the ability to be self-sustaining. Change is

made possible through a thriving SME sector. Thirdly Leadholm and Mead (2013) suggest that the sector facilitates social change, political stability and democracy. This is achieved through the formation of social groups that meet society's needs and objectives. Participation in such groups boosts community members' confidence and the development of ethically responsible citizens. Fourthly SMEs facilitates the achievement of distributional or developmental objectives of an economy. They open up new opportunities for marginalized and vulnerable groups such as the poor, women, and those who live in rural areas or in isolated parts of the country. Finally the contribution of the SME sector in the economy is evident in that where demographic changes are desirable, SMEs help to suppress a growing population by reducing birth rates and rural-urban migration.

## 3.4 Chapter Summary

This chapter focused on defining SMEs and revealed that there is no universal definition of the sector but rather that it differs from one country to another. The role of SMEs in Zimbabwe as well as in other countries was also discussed, showing that they contribute significantly to various aspect of the economy, hence the focus by many national governments on this sector.

# CHAPTER 4

# THE IMPORTANCE OF FINANCIAL LITERACY

## 4.0 Introduction

This chapter focuses on the importance of financial literacy to the economy and individual consumers and the financial sector in particular and the factors that have motivated research on financial literacy. Several scholars have noted that financial literacy plays an important role in the economy (Orton, 2007), leading to its recognition in many countries (Cole & Fernando, 2008; Lusardi & Mitchell, 2013; Calderon, 2014). Several governments have launched initiatives to improve citizens' financial capability (Cole & Fernando, 2008). The chapter begins with a review of the various definitions of financial literacy, then focuses on the importance of financial literacy, and concludes by highlighting the factors that have triggered extensive research on financial literacy.

## 4.1 Financial Literacy Defined

There is no standard definition of financial literacy (Moore 2003; Huston 2010; Remund 2010; Cude, 2010; Knoll & Houts 2012; Scheimeiser & Seligman, 2013), nor it is there consensus on how to measure it (Remund, 2010), as the term means different things to different people (Widdowson & Hailwood, 2005). To this end, various authors have attempted to define financial literacy in the context of their research.

According to Schagen and Lines (1996) and Bealand Delpachitra (2003), a financially literate individual is one who understands money management, knows how financial institutions operate, is analytical and displays financial behaviour and an attitude that facilitates effective financial management. On the other hand, the Australia and New Zealand Banking Group (ANZ, 2003), identified behaviours they considered to be indicators of financial literacy as keeping a good track record of one's personal finances, the ability to plan finances in advance, a well-informed choice of financial products, being financially informed, and the ability to keep one's finances under control. The same definition was adopted by the Commonwealth Bank Foundation and the

National Foundation for Educational Research. Roy Morgan Research (ANZ Banking Group, 2003:1) states that financial literacy is about

*"enabling people to make informed and confident decisions regarding all aspects of budgeting, spending and saving and their use of financial products and services, from everyday banking through to borrowing, investing and planning for the future."*

Remund (2010) reviewed more than a hundred sources that sought to define financial literacy starting from the year 2000. He concluded that financial literacy is:

*"...a measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate, short term decision making and sound, long range financial planning, while mindful of life events and changing economic conditions".* (p. 284)

A financially literate individual should be able to plan confidently for future financial needs and make sound financial decisions (Remund, 2010). Both Huston (2010) and Remund (2010) argue for a definition of financial literacy that incorporates budgeting, savings, borrowing and investing.

USAID (2009) notes that a SME should be able to identify the most suitable form of finance for its business conditions. The business owner should be knowledgeable about where to find appropriate products and services and how to link up with suppliers. He or she is also expected to be well acquainted with the legal and regulatory framework applicable to the business. USAID (2009) therefore identified SMEs' educational needs as those relating to types and sources of funding and credit products, requirements set by financial institutions to access products and services, types of financial products, risk management and the formalization of businesses.

More recently, and in the context of a small business, the Bankers Association of South Africa (2014) defined a financially literate SME as one that has competent entrepreneurial skills and understands financial management aspects, understands the working capital cycle of an SME and is aware of sources of finance and how to access them, appreciates the financial risks associated with the business and seeks advice on how to manage such risks, is knowledgeable about the

laws and regulations governing business operations, and is aware of consumer rights and knows how to seek redress in times of disputes.

In terms of measurement, the level of financial capability corresponds with the knowledge, skills, attitude and behaviour individuals demonstrate when making decisions about their finances.

The common thread in these definitions is knowledge, with some merely requiring understanding of the term. Other definitions, such as those provided by Mandel (2008) and Lusardi & Tufano (2009), stress the judgment and decision-making aspect of financial literacy. Lusardi & Tufano (2009) also focus on debt literacy as a form of financial literacy whilst Moore (2003) offers a definition of financial literacy which incorporates the need for practical experience, arguing that it is the basis for knowledge and other features of financial literacy.

A consistent theme in the various definitions of financial literacy is knowledge acquisition to make sound financial decisions and awareness of the financial implications of such decisions. According to Widdowson and Hailwood (2005), financial literacy encompasses numerical ability, appreciation of the costs and benefits of particular financial decisions, understanding basic financial concepts and knowing where to seek financial advice and how to use it.

## 4.2 The importance of financial literacy

A review of literature reveals that financial literacy is important to individuals, SMEs, the financial sector and to the economy at large. A realisation of the importance of financial literacy has triggered research in the area and hence is the focus of many national governments.

### 4.2.1 The importance of financial literacy to individuals

Individuals make financial decisions on a daily basis relating to their budgets, savings, investments, spending, debt and financial risk management, among others (Widdowson & Hailwood, 2005). These are recurrent decisions involving various levels of complexity, all of which require a certain degree of financial literacy. Kezar and Yang (2010) and Lusardi and Mitchell (2013) point out that financial literacy is a crucial skill and intellectual property for every individual in the economy.

### 4.2.1.1 Budgeting

Hall (2008) argues that financial literacy matters because it ensures a healthy family balance sheet, enabling consumers to manage their money wisely and live within their means. Financial literacy enables individuals to know about a budget and be able to manage budget deficits and surpluses if need arises. A financially capable individual is able to know the risks related to their finances and spend income based on the budget. Wachira and Kihiu (2012) note that it enables a household to manage its finances properly and to have greater control of the financial future, hence reducing poverty. Financial literacy enables the younger generation to budget and save for future consumption, constantly monitoring their expenses and debt.

According to Cole and Fernando (2008), a financially literate generation is able to manage critical life events such as education, illness, job loss and retirement. The literature suggests that financial literacy is directly related to financial efficiency because the financially literate do not engage in costly financial commitments. They do not subscribe to financial products they do not understand, nor do they commit themselves to high risk products.

Capuano and Ramsay (2011) note that financial literacy enables better understanding of financial products and services and thus allows citizens to participate in the financial sector by taking up financial products and to actively plan and save. Calderon (2014) observes that improved financial literacy results in increased access to financial services and will thus increase the range of services provided to households and enterprises. He further highlights that the use of bank accounts is beneficial in that they offer private management of personal funds, reduce theft and are a reliable way to facilitate savings. Cole and Fernando (2008) suggest that financial literacy is more important in the insurance sector because individuals taking out insurance for the first time need to be able to calculate the probability of the risk occurring as well as the payouts. Capuano and Ramsay (2011) note that financial literacy enables better understanding of financial products and services and thus allows citizens to participate in the financial sector by taking up financial products and actively planning and saving. Calderon (2014) observes that improved financial literacy results in increased access to financial services and will thus increase the range of services provided to households and enterprises. He further highlights that the use of bank accounts is beneficial in that they offer private management of personal funds, reduce theft, and are a reliable way to facilitate savings. Cole and Fernando (2008) suggest that financial literacy

is more important in the insurance sector because individuals taking out insurance for the first time need to be able to calculate the probability of the risk occurring as well as the payouts.

### 4.2.1.2 Making product comparison

Capuano and Ramsay (2011), Wachira and Kihiu (2012), and Mitchell and Lusardi (2013) agree that financial literacy ensures that individuals have the necessary knowledge and skills to assess the suitability of various financial products and services. According to Calderon (2014), financial literacy helps individuals to avoid potential financial risks, and in emerging economies it increases financial access.

### 4.2.1.3 Portfolio diversification and risk management

Research in the developed world suggests that the financially literate exhibit an exceptional ability to manage their financial resources. They are active participants in the stock market as evidenced by their diversified portfolio of assets (Hilgert et al., 2003; Hastings & Tejeda-Ashton, 2008; Lusardi & Mitchell, 2008; Lusardi & Mitchell, 2011). They are also cautious of debt as they avoid paying high interest and taking costly mortgages (Wachira & Kihiu, 2012; Moore, 2003; Lusardi & Tufano, 2009, Gerardi et al., 2010; Calderon, 2014). Enhanced financial knowledge enables individuals to behave rationally, avoiding highly priced financial products and risky credit facilities (Capuano & Ramsay, 2011).

### 4.2.1.4 Savings and long term planning

Studies conducted by Lusardi (2009) and Cole, Sampson and Zia (2010) found that individuals that receive financial education are more likely to display positive financial behaviour such as saving and planning for retirement, suggesting a causal link between financial education and financial behaviour. Hall (2008) suggests that the financially educated appreciate the importance of saving for retirement more than the uneducated.

### 4.2.1.5 Wealth creation

Lusardi and Mitchell, (2011) and Japelli and Padulo (2011) reported a direct association between financial literacy and wealth. Those that are financially knowledgeable are able to accumulate more wealth (Hastings & Mitchell, 2011; Behrman et al., 2012) and, according to Hall (2008), the financially literate have a better chance of achieving their financial objectives.

Financial literacy means that families are able to save for their own wealth such as homes and education for their children.

Japelli and Padulo (2012) showed that financial literacy and wealth move in the same direction over the lifecycle of an individual. They argue that improved financial literacy results in optimal investment choices, ensuring positive returns on individual savings. Thus, the authors consider financial literacy as a form of human wealth accumulation. A sound financial decision boosts an individual's sense of financial security and raises the standard of living. Indeed, there is a convincing body of literature to suggest that a financially literate individual is better placed than those that lack knowledge to manage their financial affairs. A financially literate individual is able to budget economically, invest wisely and manage debt in a more viable manner (Widdowson & Hailwood, 2005).

### 4.2.2 The importance of financial literacy to the financial system

Financial literacy promotes the efficient operation of the financial system (Widdowson & Hailwood, 2005). Whilst it enables individuals to make better decisions, it also plays a role in ensuring financial stability and the efficiency of an economy.

### *4.2.2.1 Enhancing the efficiency of the financial sector*

According to Widdowson and Hailwood (2005), financial literacy enhances the soundness and efficiency of the financial sector in a number of ways. Firstly, financial literacy paves way for effective management of household balance sheets, thereby reducing risk for providers of credit.

Secondly, financial literacy improves an individual's ability to compare financial product offerings, thus encouraging innovativeness amongst financial providers. It is important that SMEs know the information sources for getting all the necessary information about financial products and services. Thereafter they should compare financial products and services before making a decision. This calls for them to value official and professional sources of information and pay for it if necessary.

Thirdly, financial literacy encourages competition amongst financial service providers. Through enhanced awareness of the risk return profiles of various financial institutions consumers enforce stronger market discipline, thus encouraging aggressive risk management strategies and improving the efficiency of delivery of financial services. PISA (2012) acknowledged that

financially literate consumers make sound and effective financial decisions and prioritize quality service. This promotes competition and innovation in the market, resulting in economic growth. According to Hall (2008), financial literacy ensures that consumers are able to estimate risk and guard against its effects; they thus cushion the financial sector from bankruptcies and insolvencies which may result from underinsurance.

Fourthly, sound financial decisions promote efficient allocation of productive resources which will culminate in high growth rates, stable economies and enhanced financial stability.

### 4.2.2.2 Fostering market discipline

Finally financial literacy fosters market discipline which is important for the regulation of financial markets. Enhanced market discipline facilitates a less intensive approach to regulation and supervision of the financial sector, hence reducing compliance risk and regulatory distortions that can arise when this is more intense. Hence a strong positive relationship is noted between financial literacy and market discipline, and, consequently, the soundness and efficiency of the financial sector. Hall (2008) and Wachira and Kihiu (2012) are of the view that financial literacy fosters market discipline through upholding transparency in the way financial institutions operate. Consumers are able to evaluate financial institutions and distinguish the badly run ones from the efficient operations. This enables them to switch service providers (Capuano & Ramsay 2011; Wachira & Kihiu, 2012) and influences financial institutions' behaviour, leading to a safer and sounder financial system. According to Capuano and Ramsay (2011), as consumers become more knowledgeable about their rights and contracts, they are more competent in product evaluation and hence demand better quality from service providers.

### 4.2.2.3 Efficient allocation of resources

Hall (2008) points out that financial literacy promotes a healthy financial system and hence more efficient allocation of financial resources. It stimulates competition and encourages innovation in financial markets as consumers demand quality service provision (PISA, 2012). Financially literate consumers will seek cheaper, better financial products and services and this will drive efficiency in the financial sector (Capuano & Ramsay, 2011; Wachira & Kihiu (2012). Consumer reaction to market changes is often predictable. They make reasonable complaints and take appropriate steps to redress risk exposure, leading to a more efficient financial sector. If consumers are not able to seek out and compare financial products and services, efficiency is

compromised. Consumers will fail to understand the risks associated with various financial products and may engage in inappropriate financial behaviour such as buying too much of a product, or too little, or even failing to buy those that are beneficial (Widdowson & Hailwood, 2005).

### 4.2.2.4 Enhancing positive financial behaviours among consumers

A number of scholars have noted a direct association between financial literacy and financial behaviour (Mandel, 1998; PISA, 2012). Lusardi and Mitchell (2013) state that a number of theoretical models associate financial literacy with consumer behaviour such as savings and consumption. They suggest that, in order for individuals to formulate and implement savings and investment plans, they need to be knowledgeable about financial markets and have the ability to undertake complex financial decisions. Hall (2008) notes that when the economy is stable financial institutions tend to be liberal with debt provision, exposing over-leveraged customers to higher default rates and resulting in high credit risk exposure. However, if the society is financially educated, individuals will not necessarily increase their exposure by taking on more debt simply due to easy access. This will keep debt levels under control and achieve financial stability in the sector.

### 4.2.3 The importance of financial literacy to the economy

Financial literacy also impacts the wider economy (Widdowson & Hailwood, 2005) because the microeconomic benefits of financial literacy at household level have a multiplier effect that enhances the macro economy. Financial literacy influences resource allocation in an economy. Several studies suggest that if individuals are encouraged to save, these savings are channelled to productive investments which translate into economic development. Increased savings result in increased investment activities and economic growth (OECD, 2005). Promoting responsible use of credit facilities benefits not only individuals but the economy as a whole. The use of credit facilities allows individuals to own homes and acquire intellectual property. Loans provided to SMEs promote economic growth (Hall, 2008).

Investment choices affect resource allocation in an economy and have significant effects on long term economic growth and the robustness of the economy (Widdowson & Hailwood, 2005). An efficient economy is characterized by individuals that hold portfolios with the best risk-return profiles. If investors are financially literate, they will choose investments that maximize the risk

return trade-off, channelling resources to where they are most productive and leading to longer term economic growth and stability (Widdowson & Hailwood, 2005). Whilst it is argued that economic growth is a function of various factors, financial literacy is one such factor.

### *4.2.3.1 Reduced retirement burden*

Capuano and Ramsay (2011) are of the opinion that a financially literate society will help the government successfully shift the burden of pension and health care services after retirement. Individuals are able to plan for retirement and save for future consumption during their working lives, thus reducing the burden on the state.

### *4.2.3.2 Rights protection*

Financially literate consumers know their rights and are able to detect and report misconduct by financial market players, resulting in a more efficient market (OECD, 2005). Financially literate consumers know that official authorities deal with consumer complaints and that they value their personal rights protection in a formal way and trust the official authorities. Rights protection is necessitated by the ever-increasing complexity and diversity of financial products that pave way for the possibility of fraud, abuse and misconduct. Consumer protection therefore ensures that individuals are informed of their rights and are educated on how to seek redress whenever the need arises. Indeed USAID (2009) considers financial education as one of the key pillars of consumer protection.

### *4.2.3.3 Financial inclusion*

Financial literacy facilitates financial inclusion as those that were excluded are afforded the opportunity to use financial products and services (Capuano & Ramsay, 2011). This ensures the existence of an inclusive financial sector that broadens access to and use of financial services by all, with the view to engaging social and economic development (RBZ, 2016)

### 4.2.4 The importance of financial literacy to the SME sector

Financial literacy is also important in the business world, particularly among SMEs. Most studies have concluded on a relationship between financial literacy and financial business outcomes (Adomako and Danso, 2014).

### 4.2.4.1 Enhancing business success

Several studies have concluded that business success and survival hinge on adequate financial literacy levels (Oseifuah, 2010; Wise, 2013). Adomako and Danso (2014) and Bruhn and Zia (2011) found that financial literacy significantly impacts financial and business outcomes. Research has established that incompetent financial management results in low levels of entrepreneurial activity. Timmons and Spinelli (2007) suggest that financial management is a critical managerial issue in new business start-ups and lack thereof is responsible for the high failure rate amongst SMEs. They note that management avoids financial management, yet it is a key success factor in business. Kotze and Smit (2008) point out that entrepreneurs need to be confident in managing their personal and business financial resources in order to succeed. According to Kotze and Smit (2008), financial illiteracy results in adverse financial behaviours such as spending more than one's income, failing to keep up to date business records, inadequate planning and inconsistent investment strategies. Oseifuah (2010) notes that decisions made by entrepreneurs have financial consequences, hence entrepreneurs must be financially literate.

### 4.2.4.2 Encourages financial market participation

According to Nanoo and Andoh (2012), financial literacy encourages continued participation in financial markets which will enhance SMEs' access to finance. Interactions between SMEs and financial institutions will build customer relationships and promote a healthy SME sector. Dupas and Robinson's (2012) study revealed that most entrepreneurs have no access to basic financial services, yet they need to save their daily takings.

Oseifuah (2010) noted that financial literacy is beneficial to SMEs in that it reduces social exclusion, and increases purchasing power, innovation and competitiveness as well as responsible financial behaviour. Cole and Fernando (2008) suggest an association between financial literacy, sound financial decisions and business survival. Researchers have established that financial literacy facilitates easy access to finance by new ventures (Wise, 2013), reduces loan defaults (Kotze & Smit, 2008), and helps to boost sales, which enhances business performance (Bruhn & Zia, 2011).

## 4.3 Consequences of Low Levels of Financial Literacy

Financial illiteracy has negative implications for individuals as well as the national and global economy (Van-Rooij et al., 2011; Fraczec & Klimontowicz, 2015). The literature highlights that

financial illiteracy is associated with unfavourable economic outcomes such as low levels of savings and the inability to plan for the future, among others (Xiao, 2015). The challenges of financial illiteracy were exposed by the global financial crisis which was a result of consumers making decisions without adequate knowledge of mortgage loans (Marcolin & Abraham, 2006). The subprime mortgage crisis indicated that poor financial decision making could be widespread and that the consequences go unnoticed until they culminate in a crisis.

Hall (2008), the Assistant Governor of the Reserve Bank of Australia, stated that those with low levels of financial literacy make financial mistakes because they have easy access to credit that translates to lower standards of living than would have been otherwise achieved. Marcolin & Abraham (2006) also observe that poor savings and investment decisions can lead to low standards of living. Research has established that financially illiterate individuals do not make optimal financial decisions, with adverse impacts on household financial well-being and on the economy as a whole, and this is cause for concern among many governments. Financial illiteracy leads to individuals unknowingly making serious financial errors and they are not able to cope with economic shocks. Easy access to credit leads to heavy debt problems which are often difficult to solve. Cole and Fernando (2008) note that several surveys have shown that those who lack financial knowledge also fail to plan for retirement, incur costly debt and hold few assets in their portfolios. According to Lusardi and Tufano (2009), debt illiteracy results in high-cost financial choices, whilst debt literacy enables individuals to avoid costly debt commitments. Cole and Fernando (2008) point out that financially illiterate individuals might borrow too much, exposing themselves to high levels of default, and consequently incurring substantial penalties.

Oseifuah (2010) further elaborated on the consequences of financial illiteracy by stating that financially illiterate individuals will be unable to budget to meet future expenditure, and will be unable to identify suitable financial products to meet their personal financial needs. Such an individual will lack knowledge of where and how to get financial advice and will thus make financial mistakes that are detrimental to personal financial well-being.

Cole and Fernando (2008) argued that low utilization of financial services is a further consequence of financial illiteracy. If individuals are not knowledgeable about the operations of a bank, they may not open bank accounts and will use informal financial services such as keeping their savings at home, borrowing from friends and relatives, or making investments that

do not offer adequate returns. Research has established a positive relationship between financial literacy and financial inclusion (Mishi et al., 2012; USAID, 2009; Miller et al., 2009; Cole, Sampson & Zia, 2009). Miller et al. (2009) suggest that financial illiteracy leads to lack to access to financial services and, where individuals have access, they may not use such services effectively. Beck et al. (2007) highlighted that financially illiterate individuals are not confident with financial products and hence cannot access them.

In developed economies, financial illiteracy is evident in ever-increasing personal debt (Beal & Delpachitra, 2003; Huston, 2010; Lusardi et al., 2010,  Klapper, Lusardi, & Panos, 2012; ACCA, 2012), extensive misuse of credit cards (Lusardi, 2009; Lusardi et al., 2010), taking  personal loans for consumption, thereby increasing loan obligations (Worthington, 2006), and high expenditure on consumption and engaging in high risk investments, leading to increased household bankruptcy. This has triggered extensive research into financial literacy which has also become a primary concern for many governments (Orton, 2007). However, this issue has not received sufficient attention in emerging and developing economies. The current study seeks to fill the research gap by focusing on financial literacy in Zimbabwe.

In conclusion, financially literate individuals will have more savings, borrow prudently and manage debt effectively. They will be financially confident and actively participate in financial markets. Finally, they will understand their consumer rights. In possessing such competencies, financially literate individuals will benefit the financial system and the economy as a whole.

## 4.4 Factors triggering Financial Literacy Research

Financial literacy is recognized internationally as an important attribute that impacts both financial stability and economic growth (Lusardi & Mitchell, 2013). The global financial crisis further highlighted the need for financial literacy (Calderon, 2014; Wachira & Kihiu, 2012); several studies have confirmed its positive correlation with household financial wellbeing (Calderon, 2014). Significant changes in the global financial landscape require people to be more capable of making informed financial decisions. Scholars have shown increasing interest in documenting the financial literacy levels of populations in both developed and developing economies (Cole, Sampson & Zia, 2010; Wachira and Kihiu, 2012; Calderon, 2014)  Financial literacy has also moved to the top of the agenda of many governments (Orton, 2007). The number of studies on financial literacy has increased due to the convincing body of evidence on a

connection between financial literacy and household wellbeing (Cole, Sampson & Zia, 2010; Lusardi & Mitchell, 2014). The literature shows that research on financial literacy has been stimulated by several factors including changes in global financial markets, demographic and economic changes and policy changes in different economies (OECD, 2005; Orton, 2007; PISA, 2012). These issues are discussed in greater detail below.

### 4.4.1 Changing demographic trends

Research on financial literacy in developed economies has been motivated by a number of factors. There has been a shift in demographic profiles (Orton, 2007; PISA, 2012; Lusardi & Mitchell, 2014) with an increase in the aging population (baby boomers). Baby boomers have few if any children; this means that fewer workers support many retirees. Furthermore, pension schemes have changed from plans where employees did not make any contributions to schemes where they now have to contribute a certain percentage towards their pension (Lusardi & Mitchell, 2011). This has exposed individuals to more risk as they assume increased responsibility for their financial security beyond their jobs (Beal & Delpachitra, 2003; OECD, 2005; ACCA, 2014). There has also been an increase in life expectancy, meaning that the baby boomer generation will spend longer in retirement and hence require support for an extended period of time. This calls for more savings to cover the baby boomers' needs, with financial literacy becoming a key competence.

### 4.4.2 Changes in government policies and employment conditions

Governments and employers have reduced pension and health support services, shifting responsibility for saving for the future to the worker who has to cover personal and family health care needs, further emphasizing the need for a financially literate generation (OECD, 2013; Lusardi & Mitchell, 2013). Orton (2007) notes that, in developing economies, the conditions of employment have changed with a majority of the population in temporary, contract and part-time employment, all of which lack retirement benefits. If individuals do not participate actively in saving schemes and become involved in the financial system, they may experience a pension shortfall. Changes in employment conditions result in a shrinking resource base to cushion households from the severe impact of poor financial decisions (Orton, 2007). The new financial landscape imposes a heavy financial burden on workers, making it imperative that they are financially literate (Lusardi & Mitchell, 2011). However, studies have shown that most workers

are not aware of the level of risk they are exposed to as a result of these changes in government policy. To make matters worse, they do not have the requisite knowledge to manage their resultant risk exposure (OECD, 2008). Cole & Fernando (2008) note that financial literacy is also important in political lobbying for health care and pension reform.

### 4.4.3 Increasing educational costs

Developed economies are now facing increasing educational costs which require parents to be aware of the financial products available to close the financial gap (PISA, 2012). Student loans and credit cards are being used increasingly to cover educational expenses, both of which require a certain level of financial aptitude. Consumers need to be aware of the consequences of the financial contracts they enter into, hence financial literacy becomes a key skill. Research has shown that emerging economies face the same predicament.

### 4.4.4 The complexity of financial markets

Research on financial literacy has been triggered by the complexity of financial markets characterized by an influx of numerous complicated financial products (Cole & Fernando, 2008; Fraczec & Klimontowicz, 2015). Indeed, the literature suggests that the global financial crisis was a result of financial illiteracy which resulted in individuals making ill-informed financial decisions with negative contagion effects (OECD, 2013). The sophistication of financial markets has been exacerbated by the deregulation of the financial sector which ushered in stiff competition, technological advancement and a wide range of complex financial products and services from which the consumer has to choose (Beal & Delpachitra, 2003; Marcolin & Abraham, 2006; Worthington, 2006; Hall 2008; Jappelli, 2010; ACCA, 2014). This has increased the complexity of decision making (Hall, 2008), requiring individual consumers to be financially equipped. To make matters worse, decisions on some financial products are difficult to make because the products are not frequently used (OECD, 2005) and there is no previous record to consult. The complications associated with daily financial transactions, coupled with financial illiteracy, have an impact on households' and firms' financial behaviour (Nanoo & Andoh, 2012).

Hall (2008) notes that a significant number of investors have lost their lifetime savings through investing in high return assets without calculating the high risk involved adequately. Faced with such an environment, consumers need to have the financial aptitude to enable them to choose the

best service providers and delivery channels and compare financial products on the basis of fees charged, interest received and paid, contractual agreements and risk exposure, among others (PISA, 2012). Financial literacy equips consumers with financial skills to deal with the complexity of financial products and benefit from financial innovation and the wide range of products (Hall, 2008). Lusardi and Mitchell (2007) noted that financial decisions are not easy to make and hence require a comprehensive analytical toolkit to avoid making mistakes. Cole and Fernando (2008) point out that in developing countries the rapid growth of microfinance institutions, micro insurance and savings products has provided consumers with an overwhelming range of complex products from which to choose. Given such a complicated financial landscape, the need for financial literacy cannot be overemphasized.

### 4.4.5 Technological Advancements

Research on financial literacy has also been prompted by developments in Information Technology (IT) that has enhanced global connectedness. People can now conduct financial transactions on a global scale. Consumers, including those in unsophisticated financial markets, can now buy financial products from anywhere in the world (Nicolini, Cude & Chatterjee, 2013). The global economy is becoming increasingly complex. Technology has changed the way financial transactions are conducted dramatically and has also ushered in many complicated financial products and services. This has made it more critical for individuals to be financially competent to transact in the global market place (Marcolin & Abraham, 2006). Notable developments in the financial landscape, such as the introduction of mobile and internet banking, require consumers to be knowledgeable about their use and the associated problems. The internet has made information about investments and credit readily available and has also increased access to financial products (Orton, 2007). Orton (2007) notes that Information and Communication Technology (ICT) has made it possible to tailor make products to the markets' specifications. The increase in the number and complexity of financial products including debt instruments and increased investment opportunities has made it difficult for consumers to conduct a thorough product assessment and make an informed choice thus calling for competence in financial literacy (Marcolin & Abraham, 2006, Widdowson and Hailwood, n.d).

## 4.4.6 Aggressive marketing strategies

The literature also notes that the marketing of financial services has become more aggressive. Consumers need to be financially literate in order to avoid being persuaded to purchase financial products that do not suit their needs. Financial deregulation has resulted in tremendous growth not only in financial products but in financial market players (Orton, 2007). Marcolin & Abraham (2006) noted that the increase in financial service providers matched with aggressive marketing strategies has triggered the interest in financial literacy.

## 4.4.7 Financial Exclusion

The World Bank's 2014 Global Financial Development report noted that financial education was the primary solution to the problem of household and business financial exclusion (ACCA, 2012). Indeed several studies have concluded that there is a direct association between financial literacy and financial inclusion (Wachira & Kihiu, 2012). In emerging economies high levels of financial exclusion and limited access to finance by SMEs have prompted research on financial literacy (ACCA, 2012; Xu & Zia, 2012). Finscope's studies in various developing countries point to financial literacy as the main cause of high levels of financial exclusion. Nanoo & Andoh (2012) found that financial illiteracy is the main cause of low utilization of financial services by households. Research around the world has established that financial illiteracy is widespread with most households unable to perform very simple calculations (Hilgert & Hogarth, 2003; Moore, 2003; OECD, 2005; Lusardi & Mitchell, 2009). Researchers note a positive relationship between financial literacy and financial inclusion as an increasing number of consumers will take up financial products if they are financially literate (Hohohan & King, 2009, Bruhn & Reddy, 2014). Mishi et al. (2012) examined the impact of financial literacy programmes on financial inclusion in a rural population. The study found that financial inclusion improves with financial literacy. The respondents indicated that they were not utilizing bank services because they were not aware of the implications. The study recommended that awareness could be increased through financial literacy programmes. USAID (2009) also noted that financial literacy increases access to and usage of financial products and services; hence the need to determine SMEs' financial literacy levels and identify their financial education needs. In the developing world interest in financial literacy has been triggered by persistent levels of financial exclusion and high levels of self-employment (ACCA, 2012).

### 4.4.8 The Global financial crisis

Several researchers point to the global financial crisis as one of the factors that led to increased interest in financial literacy research (ACCA, 2012). The extensive literature on this subject suggests that the financial crisis was prompted by individuals that accessed financial products whose characteristics they did not understand (Calderon, 2014). Gathergood and Disney's (2011) study was motivated by notable debt accumulation following the world financial crisis. Fraczek & Klimontowicz (2015) suggest that unstable economic environments and the global financial crisis have stimulated research on the determinants of customer financial decisions and behaviour.

## 4.5 Chapter Summary

This chapter revealed that financial literacy is defined in many ways and hence no uniformity can be applied in the use of the term. Financial literacy plays an important role in the economic welfare of individuals and SMEs, and is crucial for financial sector development and the economy at large. Research on financial literacy has taken center stage in many economies and it is being triggered by factors such as changing demographic trends, changes in government policies and employment conditions, increasing educational costs, the complexity of financial markets, technological advancements, aggressive marketing strategies, financial exclusion and finally the global financial crisis.

# CHAPTER 5

# EMPIRICAL LITERATURE REVIEW ON FINANCIAL LITERACY

## 5.0 Introduction

This chapter reviews studies conducted by other researchers in the field of financial literacy. It begins with a review of literature on how financial literacy was measured and then focuses on research done on the impact of financial literacy on awareness and utilization of financial products and services. The chapter concludes with a review of financial literacy studies conducted in other countries.

## 5.1 Measuring Financial Literacy

While research on financial literacy is fairly new there is increased interest among governments and researchers in this issue. Such research begins with the quest to ascertain the financial literacy of an identified population group.  However, a challenge lies in the different ways financial literacy is defined which has resulted in differences in the way it is measured (Huston, 2010; Remund, 2010). Researchers have not reached consensus on how to measure financial literacy (Moore, 2003; Cole & Fernando, 2008) and the literature has identified several methods (OECD, 2005; Carpena, 2011; Cole, Shapiro & Zia, 2011).

The first approach measures financial literacy using an objective test which assesses the extent to which respondents understand financial terminology and its applicability in real life situations. Lusardi and Mitchell propose three questions to assess numerical ability, understanding of interest rates, inflation and diversification (Lusardi, Mitchell & Curto, 2012). These questions were first used in the 2004 Health and Retirement Study (HRS) in the US with a sample of 1 200 respondents aged 50 years and above (Lusardi & Mitchell, 2011). They were then used in Wave 11 of the National Longitudinal Survey of youth (NLSY) in 2007-08 using respondents aged 23-28 (Lusardi, Mitchell, & Curto, 2010) and again in the American Life Panel in 2008 (Lusardi & Mitchell, 2009). The questions have also been included in many national surveys in other

countries such as Mexico, Chile (Hastings & Tejeda Aston, 2008; Behrman et al., 2010; Hastings & Mitchell, 2011), Indonesia (Cole, Sampson & Zia, 2010) and Sri Lanka.

Another approach focuses on the respondent's self-assessment of their financial competence (Carpena et al., 2011). This requires respondents to evaluate their financial literacy levels personally and provide information about their financial attitudes, knowledge and information. In the US financial literacy is determined using several behavioural attributes such as management of personal resources, financial decision making, and the skills employed to make such decisions. Researchers argue that financial literacy should be measured using several indicators. Lusardi (2011) reports on the findings of a study conducted to measure Americans' financial literacy using four measures, the ability to spend within means, budgeting, choice and management of financial products and self-assessment of financial literacy. Other studies have used general national benchmarks (Jumpstart Coalition for Personal Finance, 1998; Roy Morgan Research, 2003; OECD, 2005) as well as comparison of financial literacy levels before and after a training programme (Mendel, 2008; Bruhn & Zia, 2012).

Whilst financial literacy is measured differently, there is a degree of uniformity (Nicolini, Cude, & Chatterjee, 2013). Researchers generally agree on the use of a set of questions that test financial knowledge which is then used to construct an index. Financial literacy is thus measured by the total number of correct responses to a given set of financial knowledge questions. The OECD (2005) and the Jumpstart Coalition for personal financial literacy (2008) developed a set of questionnaires as a standard measure of financial literacy. The OECD (2005) recommended the use of the same questions in all member countries to facilitate comparison.

### 5.1.1 Measuring the Financial Literacy of SMEs

Various approaches have been proposed to examine the levels of financial literacy among SMEs, including objective tests and self-assessment. Oseifuah (2010) examined the level of financial literacy among young entrepreneurs in the Vhembe district of South Africa. The study utilized desk research, questionnaires and interviews to collect data from a sample of 39 young entrepreneurs. Of the sample, 61.5% had tertiary education, and 30.8% secondary education and 7.7% were postgraduates. The questionnaire followed that of RMR (2003) and the Media Research Consultancy (2005) where financial literacy was measured based on numerical ability

and computer literacy, financial attitudes, financial knowledge and the financial behaviour of young entrepreneurs.

The study revealed that the majority of the youth had above average computer literacy (61%) and mathematical literacy (51%). However, only 31% were very confident about financial management, whilst 46.1 % were either not too confident or not confident at all. A large proportion of the respondents (72%) was knowledgeable about interest rates, 51% were familiar with the Credit Act, 54% knew about insolvency, 75% were aware of value added tax and only a third knew about the stock exchange. The respondents demonstrated positive financial behaviour; 64.8% had savings; 85.3% kept financial records and 66.7% kept budgets and monitored expenditure. The respondents indicated that they read to increase their financial knowledge and that they had savings accounts which they used to compare receipts and statements on a monthly basis. Whilst other studies have found low levels of financial literacy among SMEs, these findings are similar to those of Stefanitsis, Fafaliou and Hassid (2013) that found financial literacy to be above average.

Barte (2012) measured financial literacy among fish vendors in Philippines using financial record keeping and analysis of financial statements. A randomly selected sample of 123 fish vendors responded to a survey questionnaire and some interview questions. Consistent with other research findings, this study noted poor record keeping among the respondents as no income statements were prepared. Amongst the few who did keep records, notebooks, pads and loose leaves were used rather than proper accounting books, whilst others kept records on the palm of their hands. It was also noted that credit was given to customers without adequate analysis of their creditworthiness, resulting in high default rates. The results also showed that the vendors ran out of cash more than three times a year and did not separate cash used for business and that used for personal needs. Finally, the respondents indicated that they obtained loans from friends, relatives and banks, but at high interest rates. The study concluded that financial literacy was low among the fish vendors.

Maseko and Manyani (2012) investigated the record keeping practices of SMEs in Bindura, Zimbabwe. The study sought to identify the types of accounting records kept by SMEs and their completeness. It also investigated the extent to which accounting records were used to measure performance. The research established that most SMEs kept receipt books (62%), order books

(58%) payroll books (45%) and expenditure (bills books) and asset registers (40%). However, only 27% of the respondents prepared financial statements for performance measurement. The majority stated that they did not keep records for reasons of security and control. Most SMEs (62%) lacked accounting skills which are necessary for the preparation of financial records as such records were usually incomplete. The study found that financial reports were mainly prepared by owner-managers who, despite their financial illiteracy, did not outsource to professional accountants due to cost considerations. It suggested that record keeping should be made compulsory for SMEs.

Wise (2013) investigated the influence of financial literacy on the survival of new business ventures. The study examined the impact of financial literacy on loan repayment and business survival. The use of financial statements and ratios was examined in relation to increased production of financial statements and hence the probability of repaying loans and reduced likelihood of business failure. Data were collected from 509 young entrepreneurs that had received loans to start businesses. Questions on the respondents' financial knowledge were posed, whether they used financial reports and how frequently they produced these reports. The research results revealed that those respondents that were more financially knowledgeable produced financial reports more frequently and were more likely to be able to repay their loan. It was also established that entrepreneurs who produced financial statements more frequently tended to default on their loans less and were less likely to close their business ventures involuntarily.

Sucuahi (2013) investigated the level of financial literacy among micro entrepreneurs in Davao City, Philippines. Similar to earlier research by Stefanitsis, Fafaliou and Hassid (2013) and Wise (2013), the study measured financial literacy using record keeping, budgeting, personal finance and savings. Data were collected from 100 randomly selected micro entrepreneurs who responded to a survey questionnaire. The research established that although they were kept separate from personal records, business financial records were not formally kept, instead business transactions were recorded on pieces of paper. Unlike Wise's (2013) findings, the respondents indicated that they did not save for the future or to meet unexpected expenditure, nor did they deposit money in their bank accounts or make any kind of investments. However, they revealed a notable ability to pay loans on time as they were aware of the consequences of loan

defaults. They borrowed mainly from the Indian national lender rather than from formal financial institutions and budgeting was not done regularly. As in other studies, it was found that women were less financially literate than men and that there was a direct relationship between financial literacy and the level of education.

In contrast, Eresia-Eke and Raath (2013) studied whether financial literacy had an impact on business growth. They argued that business success is dependent upon financially literate owners who have the competence to make sound financial decisions. The study used snowball and judgment sampling techniques to gather data from 105 respondents in Gauteng, South Africa. Financial literacy was measured using record keeping and perceptions of personal financial literacy, while business growth was determined using financial, structural and strategic growth. Most of the respondents reported that they kept financial records and were up to date. The records were either kept as source documents, journals, ledgers, financial statements or payroll. 50% of the respondents indicated that they were financially literate with only 6 % indicating that they were financially illiterate and had received some form of training or education on financial literacy. A relationship was established between SMEs' perceptions of their own financial literacy and exposure to some form of financial training or education. The results revealed that business growth was achieved by the majority of the respondents, but no statistically significant relationship was established between the owner's perceived financial literacy and business growth.

A study by Fatoki (2014) sought to determine the financial literacy of micro entrepreneurs in South Africa. The study was conducted in Johannesburg using self-administered questionnaires. Snowball and convenience sampling techniques were employed to identify a sample of 76 respondents. Financial literacy was measured by establishing whether the respondents kept financial records, their knowledge of sources of funds and business terminology and whether they used technology in their operations. The results established that most of the micro entrepreneurs did not do financial planning, budgeting and control, they only used sales and expense books using manual methods. The respondents indicated that they had personal rather than business bank accounts and hence did not bank their daily sales, nor did they engage in any investment activities. They were aware of basic business terminology but more sophisticated terms were not understood by the majority of the respondents and they displayed weak finance

and information related skills. The study also pointed to limited use of technology as the respondents did not have email addresses, web pages or internet access. The majority had no insurance to protect the business from various risk exposures. The respondents were aware of commercial banks as a source of finance but did not know of other alternative sources and the requirements to obtain a loan. This study concluded that there is a low level of financial literacy among SMEs.

Oco (2014) examined financial literacy among 146 women entrepreneurs in Philippines. Financial literacy was measured using a single construct, record keeping. It was concluded that the women entrepreneurs had low levels of financial literacy as they only kept records of expenses using notebooks.

While some studies have shown a positive relationship between financial literacy and business success, Dahmen and Rodriguez (2014) produced different results in their study on small businesses in Florida. Financial literacy was assessed by determining the entrepreneurs' ability to analyze financial statements for business decision making. In-depth interviews were conducted with 14 small firms with a track record of business success. The respondents were also requested to submit their company tax returns and financial statements for the past three years. The study found that about 50% of the respondents were facing financial challenges due to loss of revenue, cash-flow problems and huge debts. Financial analysis was not carried out because the respondents did not have the knowhow, indicating low financial literacy.

Stefanitsis, Fafaliou  and Hassid (2013) investigated whether financial literacy influences decision making and financial behaviour among SMEs. Perceived levels of financial literacy among SMEs were measured by considering the factors that influence their behaviour and knowledge.  Data were collected using a structured questionnaire that was administered online to a conveniently selected sample of 352 SMEs in Greece. Financial behaviour and knowledge were measured using five thematic areas, namely, cash-flow, savings and costing, investments, loans, general financial knowledge and financial behaviour. Scores on financial knowledge and financial behaviour in each thematic area as well as aggregate scores were classified as low, medium and high. Most of the companies surveyed had between 0 and 5 employees (57%) and were personally-owned (36%) by highly educated people. Unlike in other studies, these SMEs reported increasing profits and sales. Although the respondents indicated that they had the

resources to seek professional advice, only few had done so as they were confident about their financial matters. A large proportion of the respondents sought advice from accountants (57%) whilst 29% were assisted by friends, family and colleagues, 18% by business advisors and 24% by bank managers. Only 11% had attended a seminar in the past five years on business financial management. Sources of information included the internet (75%), newspapers (51%), TV and radio (28%) and professional associations (19%).

Similar to Fatoki's (2014) results, this study established that SMEs had fairly good levels of financial awareness and performance and low levels of financial knowledge and behaviour. Demographic factors impacted on financial literacy, with men and the educated being more financially literate. With regard to financial behaviour as measured by cash-flow management, most (40%) of the respondents were in the low level category, indicating poor financial behaviour. However for saving and costing behaviour most were in the medium level category (48%) and the high level category (41%). The respondents showed low financial investment literacy (only 30% had investments). The majority (67%) had loans but delayed payments (82%). Half of the respondents indicated that they prepared budgets as a way of planning for future expenditure but did not use any software package. Contrary to the findings of other researchers such as Hilgert et al. (2003), the study found a weak association between investment knowledge and investment behaviour as well as between general financial knowledge and loan financial behaviour.

## 5.2 Awareness and Utilization of Financial Services

There is a general agreement that increased financial access and usage of financial services promotes savings and investments and increases the level of loanable funds (RBZ, 2016). It is argued that financial awareness and utilization will benefit individuals by alleviating poverty and inequality, enhancing economic growth and maintaining financial stability (RBZ, 2016). This section reviews empirical evidence on the impact of financial literacy on awareness and utilization of financial services but first highlights the benefits of access to financial services and the barriers to formal account ownership.

**5.2.1 Benefits of access to finance**

According to RBZ (2016), financial inclusion offers a number of benefits. Firstly, it broadens access to a variety of financial products and services by SMEs and low income households. Furthermore, financial inclusion:

- Reduces the cost of capital by facilitating efficient allocation of resources;
- Ensures access to credit from formal sources thereby reducing the exploitative impact of usury;
- Facilitates the provision of financial products and services at low cost, thereby including low income groups in the economy; and
- Facilitates savings and investment which are key drivers of economic growth and stability.

The literature identifies a number of benefits associated with increased access to finance. For example, Bruhn & Love (2014) found that opening new branches resulted in a 7.6% increase in the number of informal businesses since increased availability of financial services stimulated business. An increase in the number of branches also resulted in a 7% increase in income over a period of two years due to a 1.4% reduction in unemployment. The previously unemployed were able to secure jobs in the new branches and self-employment also increased due to the increase in the number of informal businesses. Similarly Mckenzie & Woodruff (2008) found that microenterprises have high rates of return and hence benefit from improved access to finance. Karlan & Zinman (2010) noted that increased access to credit facilities led to increased employment and income. Aggarwal & Klapper's (2013) results show that the use of formal accounts facilitates ease of transactions such as funds transfers, payment of salaries, and remittances to government, among others. Furthermore, access to formal savings channels enables individuals and companies to increase investment and smooth consumption.

**5.2.2 Barriers to formal account ownership**

Whilst access to financial services has positive effects, a number of barriers impede account penetration in a number of countries. Demirgüç-kunt & Klapper (2012) and Demirguc-kunt, Klapper, Singer, & Oidheusden (2015) summarized financial inclusion in Africa using the Global Findex database. They found that less than a quarter of adults in Africa had bank accounts and many are reported to be using informal methods of saving and borrowing.

Furthermore, the majority of SMEs were unbanked due to the unavailability of financial service providers and this was cited as a major impediment to business growth. The researchers found that, across the continent, 80% of the respondents did not have formal bank accounts because they did not have enough money to warrant one. About 18% of the respondents indicated that insufficient documentation was the main reason why they were not actively involved in the formal financial system. Distance from the bank was also found to be a significant barrier to account ownership as bank branches were not within easy reach of many especially the rural population. Dupas, Karlan, Robinson, & Ubfal (2016) and Dupas, Keats, & Robinson (2012) also cited this as a significant barrier. Moreover, the respondents identified fixed fees and the high costs of opening and maintaining bank accounts as major impediments to the use of formal bank accounts. Dupas et al.'s (2012) study revealed that poor infrastructure and telecommunication systems and heavy branch regulation constrained the opening of bank branches in rural areas. They also reported that some respondents did not have a bank account because of lack of trust. Thirteen per cent of the respondents in Demirgüç-kunt & Klapper's (2012) study stated that they were not formally banked because they did not trust the financial institutions providing the service.

Demirgüç-kunt & Klapper (2012) also found that the majority of adults with a formal account in sub-Saharan Africa make deposits or withdrawals only once or twice a month, with ATMs the main mode of withdrawal. Mobile money was also found to have gained importance due to the high penetration rate of mobile networks. This was used by the majority of the respondents without formal bank accounts. It was noted the mobile money had partly addressed the challenge of financial exclusion as it enables financial transactions to be conducted at low cost and offers ease of use, security and reliability.

Finally, the study found that men were more likely than women to bank formally, although the gap was small and that adults with tertiary education and those aged between 25 and 64 were likely to be formally banked.

**5.2.3 The impact of financial literacy on awareness and utilization of financial services**
The impact of financial literacy on financial awareness and usage of financial products and services has been documented in several studies. Researchers have noted that experience gained through the usage of financial products is directly associated with financial knowledge (Nicolini

et al., 2013; Agarwal et al., 2013). Cole, Sampson & Zia (2011) point out that most emerging economies have a sizeable informal sector which, if drawn into the formal sector, would foster financial development. They add that low demand for financial services could be due to the high fixed costs involved; indeed, informal savings, credit and insurance are evident in most emerging markets.

Financial literacy has also been identified as one of the factors that explains the low demand for financial services as individuals will not demand products with which they are not familiar (Cole, Sampson, & Zia, 2011). It is argued that the high cost of financial services and low levels of financial literacy have important implications for financial development and thus deserve further scrutiny by governments, policy makers, financial institutions and international organizations that aim to increase utilization of financial services. The 2014 World Bank Global financial Report notes that financial illiteracy is the reason for the low levels of use of financial products among the poor (Calderon, 2014). Pipreka (2009) argues that increasing financial literacy levels has a positive influence on access to credit by SMEs. Improving financial literacy among SMEs stimulates financial services usage and improved access to finance (Pipreka, 2009).

Several studies have been conducted to determine the level of awareness and utilization of financial services by economic agents. Nunoo and Andoh (2012) found that financial markets in Ghana had a number of financial products but the level of financial utilization was low. The study measured the level of financial literacy among SMEs in the country, identified the factors that influence it and investigated the association between financial product utilization and financial literacy. Data were collected from 556 registered SMEs selected randomly from four districts in the Greater Accra Region of Ghana. Financial service utilization was measured using three financial products, namely, savings accounts, microcredit and insurance. A scoring technique was used to measure financial literacy. Respondents answered questions that tested their knowledge of interest rates, inflation, savings and insurance. The scores were used to construct an index to measure financial literacy. The results of the Ordinary Least Squares revealed a modest level of financial literacy among small and medium entrepreneurs in Ghana and that more financially literate entrepreneurs were more likely to utilize financial services. Women were found to be less financially literate than men. The study established a direct association between financial education and the utilization of financial services and concluded

that financial literacy is important in explaining utilization of financial services. It recommended the introduction of education programmes for SMEs targeting those in rural areas where the utilization of financial services is notably low.

Gupta and Kaur (2014) measured the financial literacy of 100 micro entrepreneurs in Kangra District of India using a questionnaire. The study sought to establish the level of awareness of financial institutions and usage was determined by having a bank savings account. The results showed that most of the respondents were aware of financial institutions and had bank savings accounts. Information used for financial decision making was obtained from newspapers, television and radio, and from the various bank branches. The majority (65%) kept records of their business using the services of a professional accountant. Although they operated bank accounts, the majority of the respondents did not have any specific plans to save and only 54% had loans with banks. The study concluded that there were low financial literacy levels among micro entrepreneurs based on poor record keeping, cash management and savings habits and a lack of awareness of different financial products and instruments.

Cole et al.'s (2011) study in India and Indonesia examined households' financial literacy and their demand for financial services. Financial literacy was measured using Lusardi and Mitchell's (2006) three financial questions discussed earlier in this chapter. The study identified all unbanked households and conducted a field experiment in which financial education was provided to half the sample and individuals were randomly given small subsidies to open bank accounts. Education was found to be positively related to utilization of financial services such as having a bank account and formal credit. Higher cognitive ability was found to be associated with the use of insurance. Financial literacy was found to strongly influence demand for financial services. In Indonesia the financially literate used formal bank accounts whilst in India, they made use of insurance products.

The study observed no relationship between financial literacy and the possibility of opening bank accounts. However, it noted an increase in bank savings accounts amongst those who had received subsidies. This suggests that incentives would motivate people to use financial services even without receiving training. The education programme stimulated demand for bank accounts amongst those with low educational qualifications and less financially literate households.

However, the provision of subsidies resulted in more households opening bank accounts than the provision of financial education.

Wachira and Kihiu (2012) found that financial literacy explained the high level of financial inclusion (at 90% confidence interval) in Kenya. A study by Honohan & King (2009) established an association between financial literacy and financial service utilization in Africa. Guiso and Jappelli (2005) investigated awareness and stock market participation and found that 35% of potential investors were not aware of stocks, 50% were not aware of mutual funds, 70% did not know about investment accounts and most participants knew about less than two-thirds of the assets.

## 5.3 Financial Literacy and Financial Advice

The literature notes that the use of professional advisors to enhance financial decision making is an important component of consumers' financial competence (Gerrans & Hershey, 2016). Researchers have noted a relationship between financial literacy and consumers' advice seeking behaviour. Financial advice can either be a substitute for or complement financial literacy (Disney, Gathergood, & Weber, 2015; Gerrans & Hershey, 2016). While it is not clear whether or not experts provide a valuable service to their clients (Collins, 2012; Kramer, 2016), it is assumed that if consumers seek professional advice from an expert, the impact of poor financial decisions may be reduced (Disney et al., 2015; Kramer, 2016). Some studies have established that advisors have a negative impact (Mullanaithan et al., 2012; Hackethal et al., 2012), while others noted positive effects (Kramer, 2016; Hung & Yoong 2010). Those who are financially literate might still find it difficult to gather and process information, hence the need for an advisor (Hackethal et al., 2012; Hung and Young, 2010).

Hackethal et al. (2012) and Bucher-Koenen and Koenen (2012) demonstrate that financial literacy and investment advice complement each other. Collins (2012) and Calgagno and Monticone (2015) found that investors with low levels of financial literacy do not seek investment advice, thus financial literacy and financial advice complement each other rather than being substitutes. Bernheim's (1995) study revealed that many employees do not appreciate that they are not financially literate and hence may feel the need for financial advice. Similarly, Kruger and Dunning (1999) found that the financially illiterate are not able to recognize their illiteracy and thus the need to consult an advisor. Kramer (2016) noted a negative relationship

between financial literacy and the propensity to seek professional advice, making the two factors substitutes for each other. Self-confident consumers were found not to actively seek advice. On the other hand, Collins (2012) found that financial literacy and financial advice complement each other: the financially literate were more likely to use investment advice, insurance and related services. Moulton et al.'s (2013) study showed that, in the mortgage market, a lack of financial knowledge prompted homebuyers to seek financial advice.

Disney et al. (2015) examined whether financial literacy and financial advice were substitutes or complements, and the impact of financial literacy on demand for financial advice. They concluded that credit counselling was a substitute for financial literacy and provided a cushion for poor financial literacy. Han and Benson (2010) studied the probability of using support and advice by SMEs in the UK and the usefulness of such support. They found that established businesses, females, and users of external funds used support services, and that they were also perceived to be important by smaller businesses and the less educated.

Finke (2015) measured the value of financial advice and found that significant benefits were associated with the use of a financial advisor as households were able to make better decisions. However, he noted that consumers were faced with the challenge of being unable to identify the best advisors due to conflicts of interest and the lack of financial regulations to monitor the relationship. Babera and Haso (2013) studied the relationship between the use of an external accountant and family firm sales growth and reported a positive relationship as sales growth improved with the use of an external accountant.

The literature documents a positive association between education and accessing advice from a professional (Collins, 2012; Charterjee & Zahirovic-Herbert, 2010). However Hung and Yoong (2010) noted no significant relationship and Guiso and Jappelli (2006) found a negative relationship between education and advice seeking behaviour.

Females have been found to be more active in seeking advice than their male counterparts (Collins, 2012; Charterjee & Zahirovic-Herbert, 2010; Guiso & Japelli, 2006; Hackethal et al., 2011). Hung and Yoong (2010) found no significant relationship across gender. Simms's (2014) results revealed that 27% of the women respondents sought investment advice despite several studies that have shown that women are less financially literate than men.

A positive relationship between age and advice seeking has also been noted by several researchers (Charterjee & Zahirovic-Herbert, 2010; Hackethal et al., 2011) but Collins (2012) as well as Hung and Yoong (2010) found no significant relationship.

Hung and Yoong (2010) found that only marital status was significantly positively related to financial advice seeking and no differences were noted across gender, age, income, education or financial literacy. Hackethal et al. (2011) noted significant relationships between advice seeking and gender, age and marital status.

Chalmers and Reuter (2010) studied the impact of financial advisors on retirement portfolio choices among public university employees in a US state. They found that younger people, the less educated and those with lower income were more likely to choose to invest through financial advisors. They also established that people who used advisors pursue higher returns and higher risk investments.

### 5.3.1 The role of financial advisors

There are mixed results on the importance of financial advisors in enhancing financial decision making. Collins (2012) suggested that financial advisors have a major role to play through the provision of necessary information, dealing with prejudices that result in unnecessary errors, facilitating cognition, overcoming problems, and mediating joint decision making. Several studies support the idea that advice improves cognition and addresses low financial capability. Haslem (2008) found that financial advisors enhance consumers' feelings of security, and help validate clients' past decisions. A study by Haslem (2010) concluded that advisers help consumers to avoid panicking and selling investments under stress.

Several researchers have established that financial advisors do not play any role in improving the financial situation of their clients especially in situations where they act in their own interests (Calcagno & Monticone, 2011; Masden, Zick & Meyer, 2011). Calcagno & Monticone (2011) investigated the extent to which financial advice can substitute for financial literacy and found that the presence of non-independent financial advisors who sell financial assets and at the same time provide advice does not result in improved financial literacy. Furthermore, financial advisors were not useful to investors who needed them the most as they fail to substitute for self-

learning. Advisors are consulted only by those who are financially literate whilst those who are poorly informed make investments on their own or may delegate.

Calcagno & Monticone (2011) suggest that financial illiteracy does not necessarily result in poor financial decisions because households may seek advice from experts, thereby substituting financial literacy with financial advice. Individuals are motivated to seek advice because they believe that financial advisors are more knowledgeable about financial markets than non-professional investors. However, the availability of financial experts does not necessarily mean quality decisions as they may pursue their own interests (Mullainathan et al., 2010). Conflicts of interest could arise when financial intermediaries play the dual role of advisors as well as providers of financial products in which case they may be tempted to sell a product that does not match the customer's needs (European Commission, 2009).

### 5.3.2 Sources of Financial advice

Formal sources of financial advice tend to be utilized by investors with higher financial literacy levels while those with low financial literacy tend to use informal sources such as friends, relatives, colleagues and neighbours (Lusardi & Mitchell, 2007; Van Rooij, Lusardi, & Alessie, 2011). Calcagno & Monticone (2011) found that the main sources of financial information were banks (62.7%), family and friends (12.4%), newspapers (23.6%), and TV and radio, (26.2%), while the internet has gained importance more recently.

The Fin-scope Survey South Africa (Finmark Trust, 2010) found that, in general, SMEs were not aware of any institutions offering support services, as such, 94% had never accessed any support. In Zimbabwe, the Fin-scope survey (Finmark Trust, 2013) established that only 9% of SMEs used support services, with 13% using banks and 5% the SMEDCO.

## 5.4 Borrowing Behaviour and Debt Management

Research has been conducted to document the debt behaviour of individual households as well as SMEs. Borrowing decisions have become a critical component of financial literacy following the world financial crisis, particularly the subprime mortgage crisis experienced in the US. There is an inverse relationship between debt and savings denoting that the more individuals spend on debt the less their savings. Lusardi and Tufano (2009) suggest that debt literacy is a key component of financial literacy and helps to explain an individual's financial behaviour. Debt

literacy measures the competences associated with debt management (ANZ, 2003; OECD, 2005). The literature suggests that debt literacy encompasses the competences associated with the ability to understand compound interest, borrowing and debt behaviour. Businesses incur debt in their daily operations. A financially literate entrepreneur thus needs to understand the processes involved in debt contracts, how to avoid debt, repayments and how to maintain a good credit rating (Capuano & Ramsay, 2011). A financially literate individual should therefore be able to use debt competently by taking on debt that is justified, being able to make repayments when they fall due, and, above all, being able to reduce debt levels (Lusardi, 2009).

Lusardi and Tufano's (2009) study in the US sought to understand the relationship between debt literacy and financial decision making. The results revealed that debt levels were low among US citizens, especially among specific population groups such as women, the elderly, minorities, divorcees and those who were separated. The elderly (above 65 years) answered 'do not know' to most of the questions on compound interest, whilst women displayed high levels of financial illiteracy. Those with low debt levels also reported that their debt was excessive and were not sure about its adequacy.

Tufano and Lusardi (2009) found that people that do not understand the consequences of debt incur avoidable fees and charges and engage in financial transactions that result in high cost borrowing. They concluded that low debt literacy could be explained by a lack of financial knowledge. It was noted that consumers are responsible for making decisions on how much they can afford to borrow. This requires a certain level of financial competence.

Lu, Mitchell and Utkus (2010) used a sample of 100 000 retirement plan participants who left work before repaying outstanding loans and interest. The research sought to investigate the factors that influence loan defaults amongst individuals who take a plan loan before retirement and then leave work before the loan is fully settled. The study found that 80% of the borrowers defaulted on their loans. High default rates were observed among respondents who had low income, low account balances, had borrowed large amounts of money, or had multiple loans. The respondents cited liquidity constraints after leaving work and self-control as the factors influencing default. The study also found that prevailing economic conditions determine the ability to repay plan loans. In an economic recession many people lose their jobs, rendering them unable to meet their loan obligations.

An earlier study conducted by Moore (2003) in Washington DC revealed that the majority of the respondents were not well versed with the terms and conditions of consumer loans and mortgages, resulting in high levels of loan default. Mortgage borrowers had little knowledge of compound interest, and were not sure about the terms of their mortgages. Hastings and Tejeda Ashton (2008) confirmed that debt illiteracy results in the likelihood of choosing mutual funds with high fees.

Disney & Gathergood (2012) investigated consumers' ability to perform basic calculations to determine the cost of credit. They investigated how consumer credit portfolios relate to financial literacy. A rational credit consumer is expected to have an understanding of the terms and conditions underlying the debt in order to make informed financial decisions. The research utilized data from a representative sample of 3 041 UK households with consumer credit. Only 34% of the respondents answered all questions correctly whilst 12% answered all questions incorrectly. Consumers with credit had multiple products in their credit portfolios. Low financial literacy was associated with the less educated and the unemployed and low levels of home ownership. These respondents were also aware that they had little understanding of finance and were less confident in making borrowing decisions that involved determining the cost of credit. They also did not exhibit behaviour that would improve their appreciation of credit terms and understanding of financial markets. In an earlier study by Disney and Gathergood (2011), participants in consumer credit markets had low levels of financial literacy compared to non-participants. It was therefore concluded that there is no link between credit market participation and financial knowledge.

Klapper et al. (2012) conducted a study in Russia to establish the effect of a high level of financial literacy on financial planning and utilization of financial products. The survey captured data on informal and formal consumer borrowing and spending behaviour. The researchers sought to establish the level of financial literacy in the country given that consumer borrowing was increasing rapidly at the time of a global financial crisis. Furthermore, the Russian financial market is not well-developed and there are few financial education programmes. The study found that financial literacy was low as only 41% of the respondents could answer the question on interest compounding whilst only 46% could correctly answer the question on inflation. Financial literacy was particularly low among women, people in rural areas, the less educated

and low income earners. The research findings revealed a positive correlation between financial literacy and formal banking and borrowing, and a negative relationship between financial literacy and informal borrowing.

Huston (2012) investigated the relationship between financial literacy and the cost of borrowing. The author posited that an individual's knowledge is an important determinant of financial literacy and this influences financial behaviour and ultimately one's current financial situation. The research used a sample of 1 237 households with credit cards and 1 851 with mortgages. The results were consistent with previous studies that established low levels of financial literacy among the majority of the general population. It was also established that the financially literate borrowed at below average interest rates.

Gerardi, Goette, and Meier's (2013) study in USA was conducted at a time when massive subprime mortgage defaults had caused a global financial crisis. The research was triggered by the realization that many borrowers were taking out mortgages that they could not service, resulting in high default rates. Few efforts were made to determine whether borrowers were well equipped with financial knowledge to make effective borrowing decisions and no link had been established between financial literacy and the probability of default. Hence, this research focused on borrowers' numerical ability and the probability of default on their mortgage repayments. In particular, it sought to determine whether default was a result of a poor choice of mortgage contract or if it was caused by an individual's behaviour after entering into a contract. The study noted that cognitive ability had an influence on the type of mortgage selected. Individuals with high levels of financial literacy and cognitive abilities have enhanced understanding of the financial implications of financial products and as such are able to negotiate more favourable mortgage terms. In addition Gerardi et al. (2013) note that they are more likely to make optimal mortgage choices that put them at low risk of default. Previous studies such as those by Lusardi and Mitchell (2009) and Lusardi and Tufano (2009) established that low numerical ability is associated with low savings and wealth, and a lack of budgets and that, such individuals are less likely to plan for retirement. Agarwal & Mazumder (2013) suggest that individuals with low numerical ability engage in suboptimal use of credit cards, and do not participate actively in stock markets (Brown & Graf, 2012; Van Rooij, Lusardi, & Alessie, 2011). The contagion effect is that the same individuals engage in poor financial planning in other areas (Gerardi et al., 2013)

making them more susceptible to financial errors such as borrowing too much, and agreeing to terms whose risk characteristics they do not fully understand, thereby fuelling the probability of mortgage default. The study concluded that the negative correlation between mortgage delinquencies and numerical ability could be explained by individual behaviour after entering into the mortgage contract. It suggested that such behaviour could include poor savings, spending and investment patterns which all have implications for one's ability to honour debt.

A more recent study by Gamble, Boyle, Yu, and Bennett (2015) sought to establish how declining cognitive ability impacts financial decision making among the older population. The research focused on three aspects of financial decision making, financial literacy, confidence and responsibility for making financial decisions. The study used a sample of 575 participants who were mainly reasonably well-educated females over the age of 83. Previous research had established that cognitive ability declines with age, impacting negatively on the ability to make sound financial decisions. The study also found that cognitive ability declines with age as does financial literacy. However, this had little impact on the respondents' self-confidence in making financial decisions. Nonetheless, the respondents reported that they often sought help with their finances, mainly from their spouses. The study concluded that a decline in cognitive ability and financial literacy had implications for the financial well-being of the elderly as they needed to take more responsibility for their retirement security.

Matarirano and Fatoki's (2010) study in Zimbabwe investigated the impact of debt on the profitability of small manufacturing firms based in the second capital city of Bulawayo. The study used return on equity and return on assets as the measure of profitability whilst capital structure was determined by the use of debt ratios. Data were collected from 200 respondents by means of a self-administered questionnaire and were analyzed using ratio analysis and regression analysis. A negative relationship between debt and profitability was evident as long term or short term debt was found to reduce the firm's profitability. The study notes that the use of debt should be undertaken after a thorough evaluation of its costs and benefits. However, another study by Dube (2012) of eight SMEs in Masvingo found that debt financing was positively related to productivity.

Similarly Nyamboga, Nyamwera, Abdi, Njeru and George (2014) studied the relationship between financial literacy and loan repayment. Similar to earlier studies, the research measured

financial literacy using bookkeeping skills, credit management and budgeting. The respondents were a randomly selected sample of 30 SMEs in Nairobi who were beneficiaries of the Equity Group Foundation Training Programme. The study established a relationship between SMEs' performance and bookkeeping, and budgeting and credit management. Financial literacy was indicated by timely payment of bills and proper debt management, thereby improving the creditworthiness of the business.

## 5.5 Global Financial Literacy Surveys

Policy makers in several countries have realized the importance of financial literacy and are channelling resources towards this cause (Xu & Zia, 2012). Moreover, the World Bank and the donor community are funding comprehensive national initiatives on financial literacy. The OECD has conducted several studies in its member countries and has developed best practice guidelines for similar surveys in other countries. In 2006 the theme for the G8 Presidency in Russia was financial literacy. In the US, the Jumpstart Coalition for Personal Financial Literacy conducts biannual surveys of financial literacy among high school students. Personal finance has been incorporated into school curricula (CBA Reports, 2003). In addition, the US Treasury Department has created the Office of Financial Education with the aim of improving financial literacy. Financial institutions and associations have also expressed interest by sponsoring several programmes aimed at enhancing financial capability.

In the UK, recognition of the widening gap between people's long term needs and their savings led to several financial literacy surveys being conducted (Burgess, 2003; Worthington, 2006). The Financial Services Authority is responsible for financial literacy programmes and several other bodies such as the Personal Finance Education Group (2005), Citizens' Advice Bureau (2005) and Steward Ivory Foundation (2005), to name but a few, offer such programmes.

In Canada, the Canadian Bankers' Association offers financial literacy education. The Roy Morgan Research adult financial literacy survey is a financial literacy initiative in Australia (RMR, 2003). The Australian Securities and Investment Commission launched financial literacy education in schools in 2005. Thus, various countries are actively demonstrating concern about citizens' financial literacy. Some of the global financial literacy surveys that have been undertaken are discussed below.

### 5.5.1 OECD (2005) survey

The OECD has conducted several studies amongst its member countries (OECD, 2005). Two approaches were used to measure financial literacy. The first was an objective test that measured knowledge and understanding of financial terms and the respondents' ability to apply financial concepts to financial situations (US, Italy, Korea targeted at high school students), while the second was self-assessment of respondents' financial knowledge and attitudes (UK, Japan, and Australia). Although the surveys were different in terms of respondents, methodology and the approach used to measure financial literacy, there were some similarities in the research findings.

A common finding was a low level of financial literacy amongst the respondents. A relationship was also noted between financial understanding and education and income levels. In Australia, low levels of financial literacy were noted amongst the uneducated, unemployed, low income earners, single people, the youth and the elderly and those with low savings. In the UK low financial literacy was associated with low income earners and the youth as they showed lack of interest and confidence and were least active. In Korea and America, low financial literacy was recorded amongst students whose parents had low levels of education, income and professional expectations. Furthermore, respondents' self-assessment of financial literacy revealed that they thought they knew more about financial matters than was actually the case. In Australia, the US and the UK, the respondents were confident that they knew about financial matters but the test on basic finance showed that they did not understand a number of issues. If consumers do not acknowledge their deficiencies, they will see no need to enhance their knowledge. In the US, students were not able to self-assess their level of financial knowledge and thus may not realize the need to demand financial management courses. In Australia respondents stated that they were financially literate but performed poorly in the test.

Another common finding was that respondents felt that financial information was difficult to obtain and understand. In Japan respondents indicated that they were frustrated with finding information and for those who found it, it was difficult to comprehend. In the UK respondents indicated that they do not seek information where it is obtained it is by chance or luck.

### 5.5.2 OECD/INFE Financial Literacy Survey

Atkinson and Messy (2012) report the findings of financial literacy surveys conducted in 14 OECD member countries. Countries included were Albania, Armenia, Czech Republic, Estonia,

Germany, Hungary, Ireland, Malaysia, Norway, Peru, Poland, South Africa, UK and BVI. The same set of questions was used in all countries to enable international comparison. The results indicated that individuals have basic financial knowledge but lack understanding of financial concepts such as inflation, compound interest and diversification. Some respondents displayed overconfidence as they chose incorrect answers instead of choosing the 'I don't know' option. Of major concern is that women showed lower levels of financial literacy. The study revealed a positive relationship between knowledge and behaviour although more research needs to be conducted to establish causality. A positive relationship between attitude and behaviour was also noted. An analysis of socio-demographic variables revealed that women, the less educated and those with low income had low levels of financial literacy.

### 5.5.3 Financial Literacy around the World

Similar research across the globe has shown that consumers are financially illiterate even in countries with well-developed financial markets. Lusardi and Mitchell's (2011) study on financial literacy covered Sweden, Russia, Italy, Japan, German, The Netherlands, New Zealand and the US. Financial literacy was found to be low across the board, although there were some differences among these countries. High scores in Maths and Science were associated with high numeracy levels in Sweden and The Netherlands. Knowledge about inflation tends to be high in countries that recently experienced inflation such as Italy, but in countries such as Japan with deflation, respondents show a lack of knowledge of inflation. Respondents who were knowledgeable about risk diversification were found in countries that are privatizing pension schemes such as Sweden, whilst those in US, Russia and East Germany knew very little about risk diversification despite their well-developed financial markets.

### 5.5.4 Financial Literacy in Four Countries

Nicolini, Cude and Chatterjee (2013) conducted a study to establish whether financial literacy levels differed in four countries namely Canada, Italy, UK and the US. The study aimed to identify similarities in the factors associated with financial literacy and determine whether these could be generalized to other countries. The data sets included four financial literacy questions that were similar, thereby enabling comparison of the findings. The findings revealed country differences in what households know about financial literacy, which policy makers should take into consideration in developing financial literacy measurement tools. Nicolini et al. (2013)

noted that financial knowledge is less than ideal irrespective of the country or population under consideration.

## 5.5.5 Financial Literacy in the United Kingdom

The UK was one of the first countries to be concerned about financial literacy and the Financial Services Authority (FSA) conducted several financial capability surveys. Respondents provided information about financial products, where they obtained information on financial products, whether they were willing to use different sources of information, their attitudes to financial matters, confidence in dealing with financial matters and their utilization of financial products. Financial capability was measured in terms of behavioural traits, including budgeting, financial management, being informed and choosing financial products (Atkinson et al., 2006). The study found diverse levels of financial capability among the population but the general trend was that consumers were not concerned about money management (Xiao, 2015).

## 5.5.6 The ANZ Survey of Adult Financial Literacy

Roy Morgan Research (2003) conducted a research project commissioned by ANZ to determine Australians' level of financial literacy. The research instrument was a telephone survey administered to 3 548 respondents together with an in-depth survey of 202 respondents in Sydney and Melbourne to further investigate the issues raised in the telephone interviews. The self-administered questionnaire comprised of 28 multiple choice questions and 20 demographic questions and the final in-depth interview consisted of 43 questions. The in-depth interviews focused on the performance of the key low financially literate groups that were identified in the telephone survey.

Roy Morgan Research (2003) defined financial literacy as the possession of adequate skills that enable an individual to make sound financial decisions as they use financial resources. The definition was operationalized through a subset of survey questions that were used to calculate an average financial literacy score (FLS) for each respondent. The total sample was divided into five quintiles with the top 20% placed in quintile 5 (Q5) and the bottom 20% in quintile 1 (Q1). Q5 gained a mean score of 116.5 and Q1 a mean score of 40.5 and the mean score for the total sample was 83.1. The results of the survey revealed that Australians were not financially literate. The subgroups with a financial literacy score below the average of 83.1% consisted of the youth and the aged, the uneducated, women and the socio-economically disadvantaged. Financially

literate people were found to be those that actively looked for information to assist with decision making. Respondents with high literacy levels also did comparison shopping for financial products and services, and exhibited behaviour that emphasized convenience and lower fees.

The ANZ (2003) survey also identified behaviours associated with financial illiteracy. Those with low financial literacy levels were not familiar with business practices and legal obligations, and were not aware of the consequences of defaults on credit card payments and the consequences of failing to make a payment on their credit rating. They also did not appreciate the consequences of not keeping banking details secure. In general this survey concluded that Australians had low financial literacy levels.

### 5.5.7 Financial literacy in the United States of America

Studies on financial literacy in the US are conducted at three levels, the national survey, state by state survey, and military surveys. The aim is to identify the factors that influence financial literacy (Xiao, 2015). Lusardi (2011) reports on the findings of a national survey conducted between May 2009 and July 2009 which measured financial literacy in terms of budgeting, choice of financial products and self-assessed financial literacy. Research has shown that Americans are not financially literate, fail to comprehend basic financial concepts (Hilgert et al., 2003) and do not understand the terms and conditions relating to consumer loans and mortgages (Moore, 2003).

The JumpStart Coalition for Personal financial Literacy (US) conducted a study in the US to measure the financial literacy of high school and college students. In the 1997-1998 school year JumpStart Coalition for Personal Financial Literacy conducted the first survey of financial literacy among 12th grade students. It revealed low levels of financial literacy; only 12% of the students were able to answer 75% of the questions correctly. In 1998 the mean score for all students was 57.3. This declined to 51.9 in the year 2000 and to 50.2 in 2002. There was an increase in the mean score to 52.3 in 2004 a slight improvement in 2006 to 53.4 and, surprisingly, a significant decline in 2008 to 48.3.

In 2008 another survey was undertaken amongst college students with the hope that literacy levels would improve as people get older, further their education and begin to take more responsibility for their finances. Surprisingly, the survey established that high financial literacy

was associated with high debt levels and the use of financial products such as checking accounts, retirement accounts, mutual funds and credit cards. Those who prepared their own tax returns were found to be more financially literate than those whose parents did their taxes.

## 5.5.8 Financial Literacy in Zimbabwe

Whilst studies in the developed world have established the importance of financial literacy, there is a paucity of such research in the developing world (Gaurav & Singh, 2014). As in other countries, the deregulation of the Zimbabwean financial sector has resulted in an increase in the number of financial products with many aimed at promoting financial inclusion. In the past, financial institutions were reluctant to give loans to SMEs as the sector was deemed risky, costly and difficult to serve, and was associated with high loan default rates. However, this attitude has changed following technological advancements, especially in ICT, which have reduced the cost differential of serving customers (United Nations, 2006). Studies have shown that banks have begun to target SMEs as a viable business sector. A survey of 91 banks in 45 developed and developing countries (Bank Financing for SMEs around the World) confirmed that this is the case (Demirguc-Kunt et al., 2008). Micro-finance institutions have opened their doors to the SME sector and have introduced several products and services that are tailor-made to its needs (Nanoo and Andoh, 2012). Entrepreneurs are now able to access financial products and services which are vital for business growth and sustainability. According to Oseifuah (2010), entrepreneurs of all ages have to make routine decisions regarding resource acquisition, allocation and utilization, all of which call for high levels of financial literacy.

Of concern in Zimbabwe is that deregulation of the financial sector and the subsequent introduction of financial products tailor-made for SMEs has not resulted in widespread uptake of such services and the hoped for business continuity. Mobile and internet banking have been introduced but use of these products remains low. Finmark (2013) records low levels of financial inclusion among SMEs in Zimbabwe with 43% of business owners not using any financial products or services in their daily business operations. The literature documents the importance of financial literacy for SMEs and that many countries have shown a keen interest in financial literacy. It was therefore necessary to examine financial literacy among SMEs in Zimbabwe. To the researcher's knowledge, no studies on financial literacy have been conducted in Zimbabwe.

This study therefore adds to the body of existing literature by documenting financial literacy in this country.

## 5.6 Chapter Summary

The literature review revealed a paucity of research on financial knowledge in sub-Saharan Africa. The review demonstrated low levels of financial literacy among different population cohorts. Different studies have used different variables and methods to measure financial knowledge. However, they have not tested for the existence of associations between financial knowledge and other key variables such as financial utilization and awareness.

The following chapter provides a detailed explanation of the methodology used for this study.

# CHAPTER 6

# RESEARCH METHODOLOGY

## 6.0 Introduction

This chapter outlines the methodology that was used to address the study's objectives. The main objective of the study was to determine a comprehensive financial literacy strategy for SMEs in Zimbabwe. The sub-objectives were to determine SMEs' financial knowledge, to describe their financial behaviour, establish whether an association exists between financial literacy and financial product awareness and utilization and finally to describe the debt behaviour of SMEs in Zimbabwe. These variables have a bearing on business performance, economic growth and the financial well-being of the individual entrepreneur. The chapter presents a detailed description of the methodological issues in this research and is divided into various sections. The first section provides a description of the research philosophy that was adopted for the study. This is followed by a description of the research design, a recap of the research questions and a statement of the hypotheses. The research instrument used to collect data is discussed as well as how reliability and validity of the instrument were achieved. Data collection techniques and data processing are also highlighted. The chapter concludes with a brief statement on how the data were analyzed and presented.

## 6.1 Research Philosophy

De Villiers and Fauche (2015) emphasize the importance of choosing the correct research paradigm and methodology as these are the key foundations of a good study. A research paradigm is a set of assumptions held by a researcher that helps in choosing the research methods, the ontology and the epistemology that guides how the study is conducted (Guba & Lincoln, 1994). Kuhn (1970) defines a paradigm as a set framework that makes different assumptions about the social world, about how science should be concluded and what constitutes legitimate problems, solutions and criteria of proof. Ontology is a researcher's view of the world (De Villiers & Fauche, 2015) that is concerned with the nature of reality (Saunders et al., 2009), the assumptions that individuals make about the way in which the world works.

Epistemology on the other hand focuses on how we come to know reality (Trochim, 2000). Walliman (2011) views epistemology as the theory of knowledge focusing mainly on its authenticity (validity) and methods used. Epistemology addresses issues to do with the relationship between what is known and the knower, how we know what we know and what counts as knowledge (Krauss, 2005).

The current research study adopted a positivist approach which assumes that the object under study is independent of the researcher and knowledge is obtained through observation or measurements of phenomena (Krauss, 2005; Mckerchar, 2008). The positivist approach entails deductive reasoning and postulates theories that can be tested. The researcher's thoughts are structured, enabling observation of phenomena from which valid conclusions can be drawn (Mckerchar, 2008; Repko, 2012). According to the positivist approach the aim of knowledge is to describe a phenomenon through observing and measuring it without which gaining knowledge is impossible (Trochim, 2000). Positivists believe that knowledge is gained scientifically and they also believe in empiricism where observation and measurement is core to the scientific endeavour (Krauss, 2005). Deductive reasoning holds that the researcher starts by ascertaining what is known about a phenomenon, then moves to the unknown through hypothesis development (Loceke, 2013) which is tested and conclusions are drawn (Walliman, 2011; Brynard & Hanekom, 2010).

Although a positivist approach is criticised for employing a theoretical perspective and a form of research that supports the status quo, the majority of research articles published in leading journals employ a positivist approach, hence the adoption of this philosophy for the current research study.

## 6.2 Research Design

This research study adopted a quantitative approach and was cross sectional in nature. The study involved a survey of SMEs in two clusters identified as Harare District and Bindura District, Zimbabwe. A survey approach was deemed the most appropriate design because SMEs represent a large population; this approach enabled the gathering of a large amount of data (Saunders et al., 2007). The Finscope Survey (2012) established that 46% of the adult population are involved in SMEs in Zimbabwe, representing about 2,8 million small business operators and thus a large population from which a sample had to be drawn (Finmark Trust, 2013). A survey was also

appropriate given that the target respondents are used to completing questionnaires and they could take the survey and complete it anywhere (Fink, 2009; Creswell, 2014). Harare Province was chosen because, according to Finmark Trust (2013), it is home to 38% of the adult population that are business owners, while Mashonaland Central Province has the second highest number of adults that are business owners (51%). The selection of the two districts was based on the understanding that meaningful economic activities take place in these two cities, hence increasing the chances of providing a national outlook that will allow the findings to be generalized. In addition to their representative numbers of SMEs, these two provinces were easily accessible to the researcher and this promoted rapid turnaround time in data collection. The Fin-Scope MSMEs Survey is the first detailed and representative survey of small businesses in Zimbabwe available to the general public. As such the data are used as a baseline source of information for all research on SMEs.

## 6.3 Research Questions and Hypotheses

This study sought to determine the components of a comprehensive financial literacy strayegy for SMEs. The research began by ascertaining the level of financial literacy among SMEs and determine their behaviour in the financial affairs of their businesses. It aimed to investigate the existence of a relationship between financial literacy and the level of awareness and utilization of financial products by SMEs and also to determine their debt literacy. Different hypotheses were formulated guided by the literature and previous research by scholars in the same discipline.

### 6.3.1 Financial Knowledge Measurement

The literature points to low levels of financial literacy around the world (Xu & Zia, 2012; Nicolini, Cude & Chatterjee, 2013; Lusardi & Mitchel, 2009). The current study therefore sought to test the hypothesis that the level of financial literacy among SMEs is low. Before formulating the other research hypotheses on financial literacy it was deemed important to quantify the financial literacy levels of the population under study. This led to the development of the first hypothesis:

*H1: SMEs are less financially literate.*

The study also sought to determine the existence of any significant differences in the level of financial literacy according to socio-demographic factors such as gender, marital status, level of

education, age of the business and prior business experience. In this regard, the analysis of variance (ANOVA) was used to establish whether there are any significant differences in financial literacy levels as explained by various demographic factors.

### 6.3.2 Financial Behaviour

Previous research suggests that a measure of financial literacy is not complete if it does not capture financial behaviour variables because of their high descriptive power (Nicolini et al., 2013). Furthermore, Atkinson & Messy (2012) point out that financial attitudes and preferences are crucial components of financial literacy. Hilgert et al. (2003) found a strong direct relationship between financial knowledge and financial behaviour whilst Xiao et al. (2015) argue that financial capability is demonstrated by a certain level of financial literacy and performance of appropriate financial behaviour. Hence, it is expected that if financial literacy is low, financial behaviour is negative. The research study sought to demonstrate the financial behaviour of SMEs, leading to the second hypothesis:

*H2: SMEs exhibit negative financial behaviour in their daily business operations.*

Various financial behaviour indicators were identified such as record keeping, use of bank accounts by SMEs, savings behaviour and the use of consultancy services. Chi-square tests were conducted to test the level of association between financial knowledge and the selected behavioural indicators.

### 6.3.3 Financial Awareness

The numerous definitions of financial literacy point to awareness and utilization of financial services as important indicators of financial literacy (Bankers' Association of South Africa, 2014). Nicolini et al. (2013) posit that financial access is an important aspect of financial literacy. The current research study thus sought to ascertain the degree of association between financial literacy and financial product awareness amongst SMEs. Past research assumes that those who are financially literate are also financially aware (Atkinson & Messy, 2013). The hypothesis to be tested is:

*H3: There is an association between financial literacy and financial awareness.*

In order to accept or reject the hypothesis, Chi- square test were conducted in addition to ANOVA.

### 6.3.4 Financial Utilization

Researchers have noted a direct relationship between financial utilization and financial literacy (Wachira & Kihiu, 2012; ACCA, 2012; Xu & Zia, 2012). Indeed financial literacy has been identified as one of the causes of financial exclusion in many economies. Hilgert et al. (2003) found that financial utilization was the principal way individuals learnt about individual money management. Thus, it is expected that consumers who are financially literate will be identified by their increasing use of financial services. This proposition led to the development of the fourth hypothesis:

*H4: There is an association between financial literacy and financial product utilization.*

This hypothesis was tested using ANOVA and Chi-square tests.

### 6.3.5 Debt Behaviour

Lusardi & Tufano (2009) identify debt literacy as a key component of financial literacy. They suggest that a financially literate individual should make decisions concerning debt focusing on the ability to calculate interest. Thus the final hypothesis of this study is:

*H5: There is a pattern that is evident in management of debt amongst SMEs.*

Hypothesis testing was done using ANOVA as well as Chi-square tests.

## 6.4 Population and Sample Size

Due to the absence of a comprehensive data base for SMEs at the Ministry of SMEs and Cooperative development, the approximate population of SMEs was obtained from the results of the Finscope (2012) survey. According to Finscope (2012) survey results, there are 2,8 million SMEs in Zimbabwe of which 13% are in Harare Province and 8% are in Mashonaland Central Province. In light of this, the total population of the study is given as folllows:

The adult population of SMEs in Harare is given by:

*13% × 2 800 000 = 364 000*

The population in Mashonaland Central Province is given by:

*8% × 2 800 000 = 224 000*

*The total population in the two provinces is therefore 224 000+364 000 =588 000*

The sample size was determined using a formula given by Fowler (2009):

*n = N/1 +N (e²) where:*

*n= desired sample size, N = population, e = margin of error*

The margin of error is the figure which shows the accuracy of responses from the sample in relation to responses from the whole population. Thus the desired sample size is given by:

*588 000 / 1 + 588 000 (0.05²) = 399.73*

Hence the sample size for the study was 400 respondents.

The questionnaire was distributed to 248 respondents in Harare Province and 152 respondents in Mashonaland Central Province in proportion of the total population in the two provinces. About 62% of the total respondents were from Harare whilst the remainder was drawn from Bindura District.

## 6.5 Sampling Procedures and Technique

Multi-stage cluster sampling technique was used to select the respondents in the two provinces. This involved the choice of a sample in two stages. The first stage involved identifying the provinces where SMEs are located and choosing sample provinces. This was followed by the selection of respondents in each of the two provinces. The technique was deemed suitable for the study because there was no existing sampling frame. Furthermore, the population of SMEs is large and geographically dispersed; hence it was not possible to compile an exhaustive list of all SMEs in Zimbabwe (Babbie, 2007) and clustering significantly reduced the cost of data collection. No comprehensive list of SMEs could be obtained in either of the two provinces because only the formal SMEs were in the data base and the lists were not conclusive due to the high volatility of SMEs. This sampling technique was also used in a number of studies that involved large population sizes such as OECD/INFE (2013) where data were collected among

adults in several countries. To this effect, the ten provinces were identified as the clusters of which only two, Harare Province and Mashonaland Central Province were chosen. The two provinces house 21% of all SMEs in Zimbabwe, thus the sample size was deemed representative. Due to the large population sizes data were collected in Harare District and Bindura District which are the major towns in the two provinces. Respondents from the two districts were chosen at random giving each respondent an equal chance of being selected for the study. A random sampling technique was used because it reduces selection bias, increasing the probability of making the sample statistic a better estimate of the population parameters.

## 6.6 The Research Instrument

In order to achieve the study's objectives, a self-administered questionnaire was developed based on previous research studies by ANZ Banking Group (2008), Lusardi and Mitchell (2014) and OECD (2013) (see appendix 2). The OECD (2013) survey instrument was developed to measure the financial literacy of people in different countries from different backgrounds and has been used in a pilot study in 14 countries across four continents (Atkinson & Messy, 2012). It measures financial literacy by determining the financial behaviour, attitudes and knowledge of the respondent. The instrument had already been tested for validity and reliability as it had been used in a variety of studies in both developed and developing countries. The OECD (2005) recommends that the questionnaire to be used for financial literacy surveys should contain the core set of questions that also captures demographic characteristics to allow for comparison of findings. Further, it states that it should be an objective test as opposed to self-assessment and capture data on the availability of information. The instrument used in this research study contained some of the core questions although they were changed slightly to suit the target audience and the location of the study.

### 6.6.1 Justification of the use of a Questionnaire

Questionnaires were cheaper to use considering the wide dispersion of the respondents and the fact that data were collected from two clusters in different provinces. Self-administered questionnaires eliminated interviewer bias and respondents could complete the questionnaires at a time convenient to them. It was also easier to get answers to more personal questions due to the absence of the researcher at the time the questionnaires were completed. Data collected from questionnaires are easy to analyze and interpret given time limitations. Questionnaires were also

used because they are flexible and data were collected over wide geographical areas at a lower cost than other data collection methods. The responses were free from bias as the researcher was absent and anonymity was reinforced, thus improving the accuracy of the responses.

## 6.6.2 The Structure of the Questionnaire

The questionnaire contained closed-ended questions that were pre-coded, ensuring simplicity of completion by the respondents and analyzing the responses, saving time and improving the response rate. The questionnaire included both categorical and continuous questions arranged in five sections.

### 6.6.2.1 Section A: Socio-demographic variables

Section A of the questionnaire captured the socio-demographic characteristics of the respondents relating to gender, age, and family size as well their business characteristics such as type of business, experience of the owner, period of operation, number of employees and sales turnover. The inclusion of these characteristics followed recommendations by previous research studies (Chen & Volpe, 1998; Beal & Delpachitra, 2003; Kempson, 2009; Yoong, 2010) where socio-demographic factors were used to explain the level of financial literacy. In addition, studies on SMEs emphasize the need to include firm characteristics such as sector, number of employees and experience. These demographics enabled identification of population clusters and features that are associated with certain levels of financial literacy, awareness and financial product utilization. Correlations could also be established between various business characteristics and the level of financial literacy.

### 6.6.2.2 Section B: Measuring Financial Literacy

The section contained questions that measure the level of financial literacy. It was assumed that individuals with high levels of financial literacy have basic knowledge of key financial concepts (Atkinson & Messy, 2012). Thus the questions in this section assessed the respondents' mathematical ability by testing arithmetic competence such as adding, subtracting, dividing and multiplying. These questions were adopted from the ANZ Banking Group (2008) questionnaire which was used to test the numerical ability of the Australian population. ANZ's research indicated that mathematical ability was an important component of financial literacy. Some questions were adopted from the OECD (2013) toolkit for measuring financial literacy. The section also included Lusardi and Mitchell's (2006, 2008, and 2014) set of questions that were

originally developed for use in the 2004 Health and Retirement Survey. These questions have become 'standard' (Lusardi & Mitchell, 2014) and have been used in numerous surveys across the globe (Lusardi, Mitchell & Curto, 2010). They were developed following intelligence gathered from savings and portfolio selection by Americans and have been used extensively because of their simplicity, relevance, brevity and their capacity to differentiate to enable comparisons across people (Lusardi & Mitchell, 2014).

The questions measure the respondents' understanding of interest rates, inflation and risk diversification which have been identified as important determinants of investment and savings. They have been widely used in many national surveys such as in Mexico and Chile (Hastings & Mitchell, 2011, Hastings and Tejeda-Ashton, 2008), Indonesia (Cole, Sampson & Zia, 2009), Sri-Lanka (de-Mel, Mckenzie & Woodruff, 2009), India (Cole et al., 2010, 2011) and World Bank studies in Romania, Bulgaria, West Bank, Gaza and Bosnia (Xu & Zia, 2012). Nicolini et al. 2013 and Xu & Zia (2012) note, that, although the usefulness of these questions as a measure of financial literacy is debatable, they are a useful basis for comparison of results across the globe. A list of possible answers was provided for each question from which respondents could choose.

Besides the three questions by Lusardi and Mitchell (2014), numerical questions were also included in the questionnaire. Previous research studies clearly demonstrate the effect of numerical ability on financial decision making (Christelis & Jappelli, 2010; Gerardi et al., 2013). Numerical ability is a competence required for the day to day life of a consumer such as the ability to calculate the cost of sales, paying bills, and calculating interest and even discounts. Capuano and Ramsay (2011) consider this skill to be important for every business owner. Other scholars argue that numeracy is the first step in financial literacy. Van Rooij et al. (2011) posit that numeracy is required to identify cost effective financial products and is key in making savings and budget decisions (Gustman et al., 2012), hence the inclusion of four of these questions in the research instrument.

### 6.6.2.3 Section C: Financial Behaviour and Attitudes

This section contained questions that assessed the respondents' financial behaviour and attitudes. It captured data on how the financial affairs of the business are handled in terms of whether the business keeps records of accounts which can be easily interpreted by the owner and who has

responsibility for managing the affairs of the business. It also captured information on whether the business has investments and why these are considered important. Competence in investments and the choice of financial products are considered to be a significant component of financial literacy (Capuano & Ramsay, 2011).

### 6.6.2.4 Section D: Financial Awareness and Utilization

This section captured data on financial awareness and utilization of financial products by SMEs. It included awareness and utilization of financial products such as bank accounts, investments, shares, term deposits, loans, insurance and mobile banking services.

This section of the questionnaire also sought to gather data on the sources of information used by SMEs to make financial decisions. Other questions captured data on the advice seeking behaviour of SMEs and consumer protection aspects such as establishing whether SMEs can confidently lodge a complaint against any financial service provider. According to Atkinson, McKay, Kempson & Collard (2006) a financially literate business person should have knowledge of where to get financial advice and use it effectively. In addition, a financially competent individual should know how to address problems with financial service providers. They should also know their rights and the legal remedies and options available to resolve disputes (Capuano & Ramsay, 2011). The research instrument thus included questions that captured such information.

### 6.6.2.5 Section E: Debt Management

The final section of the questionnaire captured information on borrowing behaviour and debt management by SMEs. Businesses incur debt in their daily operations and thus a financially literate entrepreneur needs an understanding of debt such as the processes involved in debt contracts, how to avoid debt, repayments and maintaining a good credit rating (Capuano & Ramsay, 2011). A financially literate individual should therefore be able to use debt competently by taking debt that is justified, being able to make repayments when they fall due and above all being able to reduce debt levels (Lusardi, 2009). These questions aimed to establish how the business manages cash shortages and whether the source of finance puts them in a position of comfort. They also recorded data on how the business manages debt and whether it appreciates the consequences of loan defaults.

Table 6.1 shows the operationalization of the research variables included in the questionnaire.

**Table 6.1: Operationalization of Research Variables**

| VARIABLE | OPERATIONALIZATION | HYPOTHESIS | QUESTIONS |
|---|---|---|---|
| **Financial Knowledge measurement** | Knowledge of:<br><br>• Interest rates<br>• Inflation<br>• Risk diversification<br>• Arithmetic ability | SMEs have a low level of financial literacy | Question 14<br>Question 15<br>Questions 16,17,18,27<br>Questions 19-22 |
| **Financial behaviour and attitude** | • Person responsible for fees<br>• Record keeping<br>• Types of investments<br>• Importance of risk diversification | SMEs have negative behaviour and attitudes towards the financial affairs of the business | Question 23<br><br>Question 32<br>Questions 24,41<br>Questions 25, 26<br>Questions 27, 35, 43 |
| **Financial Utilization** | • Ownership of bank accounts<br>• Checking bank account transactions<br>• Payment methods used<br>• Keeping of savings<br>• Insurance products used<br>• Use of financial experts | SMEs do not utilize financial products and services | Question 28<br><br>Questions 29-32<br><br>Questions 33, 42<br>Questions 34-36<br>Questions 39-40<br><br>Questions 43, 44 |
| **Financial awareness** | Knowledge of:<br><br>• financial products and services<br>• insurance products<br>• sources of financial information<br>• addressing financial complaints | SMEs are not aware of financial products and services available in financial markets | Questions 37, 38<br><br><br><br><br>Question 45 |
| **Debt management** | • ways of meeting cash shortages<br>• level of comfort with debt<br>• business' ability to meet financial obligations<br>• understanding consequences of debt | SMEs are not able to manage their debts | Question 46<br><br>Questions 47, 52<br><br>Questions 48-50<br><br>Question 51 |

## 6.7 Reliability and Validity

A researcher must ensure that the research instrument measures what it is supposed to measure. If a research study is to be reliable it must demonstrate that if it is conducted with a similar group of respondents in a similar context, similar results should be obtained (Creswell, 2014; Saunders et al., 2009). Tests of reliability and validity were conducted to ensure that the results were consistent and that the measurements were accurate. Reliability refers to the expectation that if the study is repeated the research findings will be the same, thus allowing a general behavioural pattern to be observed (Adams & Lawrence, 2015). Reliability indicates that the approach used by the researcher is consistent even if employed by other researchers in different projects (Gibbs, 2007). There are various ways of measuring reliability including test-retest reliability, alternative forms reliability, split-half reliability, and internal consistency. This research study measured reliability using internal consistency that ensures that there is consistency in the way the participants respond to the multiple items on the scale (Adams & Lawrence, 2015).

On the other hand, validity measures the accuracy of the research findings (Adams & Lawrence, 2015). Fink (2010:116) defines validity as "the degree to which a measure assesses what it purports to measure". Whilst there are a number of ways of determining validity in research such as content validity, construct validity, criterion validity and consequential validity (Adams & Lawrence, 2015) this research study used content validity and construct validity. Content validity was determined by first discussing the items in the instrument with the supervisor that was approved by the Research Board. In addition, the instrument's validity had been tested by previous researchers who had used the instrument such as Lusardi and Mitchell (2014), OECD (2013) and ANZ (2003). A pilot study was conducted with colleagues and some questionnaires were distributed to SMEs who were not part of the study. Necessary amendments were made to the questionnaire before distribution to the final respondents.

## 6.8 Data Collection Techniques

This section outlines how data were collected from the key respondents who were the SME owners. A questionnaire with closed ended question was the data collection instrument used in this study.

### 6.8.1 The targeted respondents

Data were collected from the owners of SMEs who were identified as the most appropriate respondents since they are well informed about the operations of their businesses. Questionnaires were distributed randomly in Harare mainly in the Central Business District (CBD) and surrounding industrial areas including two clusters that house most SMEs in one place. In Bindura questionnaires were also distributed in the CBD and in industrial clusters around the town where most of the SMEs are located.

### 6.8.2 Questionnaire Administration

The questionnaire which was cleared by the Ethical clearance committee (*see appendix 5*) was hand delivered to all respondents and later personally collected as a way of determining who actually completed it, thereby improving the reliability of the data. Following recommendations by several scholars that surveys require some explanation and that the respondents need to be informed about the purpose and objectives of the study (Majumdar, 2011), the questionnaires were distributed together with an introductory letter from the University which introduced the researcher and the purpose of the study and assured the respondents that the data were being collected for academic purposes and that the responses would remain anonymous and confidential. Full details of the researcher, the academic supervisor and the University Research Office were included. Respondents were informed that participation was voluntary, and that those who did not participate would not suffer any adverse consequences. The respondents were also advised that no financial rewards would be provided to those who participated. All respondents had to sign a consent form to show their willingness to participate in the study.

In order to increase the response rate and ensure that the correct person completed the questionnaire, respondents were given approximately 24 hours to complete it unless they requested more time. Pens were provided and these did not have to be returned. In order to increase the response rate research assistants who had personal knowledge of and working relationships with the respondents, such as leaders of the associations or staff from the SMEs offices were used. Leaders of SMEs associations were approached by showing them a letter from the Ministry of SMEDCO granting the researcher permission to collect data in the provinces (see appendix 3). This strategy was used when data were collected at the industrial clusters. Where SMEs were dispersed, the researcher used the letter from the University that identified her.

## 6.9 Data Processing, Analysis and Presentation

The data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 23. The study sought to quantify SMEs' level of financial literacy and determine the existence of an association between financial literacy and financial product awareness and utilization. It also sought to describe the financial behaviour and debt management of SMEs in Zimbabwe.

### 6.9.1 Measuring Financial Knowledge

Researchers agree on the use of a set of responses to financial knowledge questions to construct an index to measure financial literacy (Nicolini et al., 2013). The index is constructed by expressing financial literacy in terms of the percentage correct answers provided to the financial literacy questions. This method has been used by many other scholars including Moore (2003), Worthington (2006), Atkinson et al. (2006), Hung et al. (2006), Borden et al. (2006), RMR (2003), Jumpstart Coalition for Personal Finance (1998), Chen and Volpe (1998), Beal and Delpachitra (2003), and Lusardi and Mitchell (2011, 2014), among others.

In this study the respondents' level of financial knowledge was measured using nine questions that captured their knowledge of interest rates, inflation, diversification and numerical ability (ability to add, subtract, multiply and divide). Financial literacy was measured using the scoring technique where each participant's responses to the nine questions in section A of the research instrument were marked and a score given. The following formula was used to compute the financial knowledge score:

$$Financial\ Knowledge\ Score = \frac{Number\ of\ Correct\ responses}{Total\ Number\ of\ Financial\ Knowledge\ questions} * 100$$

Further analysis was carried out to show how many respondents had answered each question correctly. Informed by Lusardi & Mitchell (2014), the data were analyzed on the three standard financial literacy questions to show the number of respondents who had provided correct responses to only one question, to two questions and to all three questions. Consistent with previous studies by Beal and Delpachitra (2003), Chen and Volpe (1998), Lusardi and Mitchell (2014), and Nicolini et al. (2013), the independent variables were age, gender, marital status, education level, business sector, age of the business and prior business experience. The data were analyzed to show how financial knowledge levels differed according to the socio-demographic

factors identified. We conducted an Analysis of Variance (ANOVA) to determine whether there were any significant differences in the mean scores across the different socio-demographics identified.

Consistent with previous studies (Chen & Volpe, 1998; Volpe; Chen, & Pavlicko, 1996) financial knowledge scores were grouped into three, of those who scored between one and three, four to six, and seven to nine. This resulted in the formation of three financial knowledge levels, those with low financial literacy, medium financial literacy and high financial literacy, respectively. These were used to ascertain whether financial knowledge levels are associated with various dependent variables in the study.

### 6.9.2 The Financial Behaviour of SMEs

The second objective of the research study was to describe the financial behaviour of SMEs. Atkinson and Messy (2012) suggest that a financially literate individual should exhibit certain financial behaviour. The financial behavioural attributes included in the study were record keeping, ownership of bank accounts and monitoring them, savings, borrowing and debt behaviour. Informed by Atkinson and Messy (2012), a respondent was given a score of 1 for every positive response and 0 in all other cases. A financial behaviour score that counted all the positive behaviours was determined, expressed as a percentage. The variables included in the final behaviour score are shown in Table 6.2.

**Table 6.2 Financial Behaviour Score**

| Behaviour | Value Towards Final Score |
|---|---|
| Person responsible for business finance | 1 point for respondents who choose either 1,2 or 3, 0 in other cases |
| Record keeping | 1 point for respondents who choose answer 1, 0 in all other cases |
| Ownership of bank account | 1 point for respondents who choose answer 1, 0 in all other cases |
| Monitoring financial transactions | 1 point for respondents who choose either 1 or 2, 0 in all other cases |
| Minimizing fees & charges | 0 points for respondents who indicate 6,99, 1 point in all other cases |
| Savings | 1 point for respondents who indicate 1, 0 in all other cases |
| Ways of maintaining savings | 1 point for those who indicate 1, 0 in all other cases |
| Importance of savings | 1 point for those who indicate 1 or 2, 0 in all other cases |
| Seeking advice when making decisions | 0 points for respondents who indicate 5, 1 point in all other cases |
| Type of consultancy sought | 0 points for respondents who indicate 6, 1 point in all other cases |
| Confidence to complain | 1 point for respondents who choose 1,2 or 3, 0 in all other cases |
| Meeting cash shortages | 1 point for respondents who indicate 6,7, 0 in all other cases |
| Payment of bills on time | 1 point for those who indicate 1 or 2, 0 in all other cases |
| Timely payment of loans | 1 point for respondents who indicate 1, 0 in all other cases |
| Understanding the consequences of default | 1 point to respondents who indicate 1 or 2, 0 in all other cases |
| Feelings about current financial situation | 1 point for respondents who indicate 4 or 5, 0 in all other cases. |

An aggregate financial behaviour score was calculated taking into account all the behaviour variables. The mean, standard deviation, maximum and minimum scores were also determined. Financial behaviours were also presented by the various socio-demographic variables. An ANOVA test was conducted to determine if there were any significant differences in the behaviour scores of respondents according to age, gender, business sector, age of the business, marital status, level of education and prior business experience. Further analysis was carried out to determine the association between the respondents' financial literacy and financial behaviour. The analysis tested the hypothesis:

*H1: there is an association between the level of financial knowledge and financial behaviour.*

### 6.9.3 Financial Knowledge and Financial Product Awareness

One of the objectives of this research study was to investigate the level of awareness of financial services and products by SMEs and determine the existence of an association between financial literacy and financial product awareness. In order to achieve this objective, descriptive statistics were used. Awareness was measured by the number of products that an individual was aware of. This follows the method used by Atkinson and Messy (2013) where a multiple response survey question collected data on whether respondents had heard of various types of products. In this study, seven products were under consideration. These included knowledge of bank accounts, term deposits, loans, shares, investments, insurance and mobile banking products. Atkinson and Messy (2013) suggest that an indicator of awareness can be awareness of one product used extensively or a count of the total number of products that an individual is aware of. In this study awareness was measured by the total number of products that an individual was aware of. Following recommendations by the OECD (2013), if an individual was aware of at least five products, he or she would be considered financially aware.

Further analysis was conducted to establish the association between financial literacy and awareness. Whilst it can be generally assumed that a positive association exists between financially literacy and financial product awareness (OECD, 2013), this might not necessarily be the case, hence the need to test the hypothesis:

*$H_1$: there is an association between financial knowledge and financial awareness.*

**6.9.4 Financial Knowledge and Financial Product Utilization**

This research study sought to establish the level of utilization of financial services and products and to establish whether there is an association between financial literacy level and financial product utilization. Seven financial products were under consideration and respondents had to indicate which ones they used in their business. Descriptive statistics were used to determine how many respondents used a particular product.

Informed by the work of the OECD (2013), an indicator for product utilization was determined by grouping the seven products into four mutually exclusive categories as indicated in Table 6.3.

**Table 6.3 Product Utilization Indicators**

| Category | Products |
|----------|----------|
| Payments | Bank account, Mobile banking |
| Savings | Savings, Investments, Term deposits |
| Insurance | Insurance |
| Credit | Loan |

*Source: Research Instrument*

The percentage of respondents that use a product in each category was then calculated. An aggregate score of financial product was calculated and further cross tabulation and chi-square was used to test the degree of association between financial product utilization and financial knowledge levels. The hypothesis tested was:

*H1: there is an association between financial knowledge and financial product utilization*

**6.9.5 Debt Management**

Several studies point to the importance of debt management by SMEs as a key component of business success. The variables used to address this objective were the ability of the business to service debt, level of comfort with amounts owed and knowledge of the consequences of loan defaults. Respondents were also asked to indicate whether at any given time they had been unable to meet repayments and the reasons. Descriptive analysis was used to achieve this objective:

*H1: SMES are knowledgeable about debt management*

95

## 6.10 Data Analysis

Data were analyzed using SPSS version 23 and MS Excel and presented using tables and figures. Financial knowledge was measured using the scoring technique where respondents provided answers to a set of financial knowledge questions and these were marked and a score given. Analysis of variance (ANOVA) was conducted to test whether there were any significant differences in financial knowledge levels according to the various socio-demographic factors. The data were analysed to determine the financial behaviour of SMEs employing a score that was constructed using identified financial behavioural traits. The Chi-square was used to test the existence of an association between financial knowledge and financial behaviour. Financial awareness was measured by identifying the number of financial products that each individual was aware of whilst financial utilization was measured by the number of products that an individual used. Chi-square was used to test the existence of an association between financial knowledge and financial awareness, and financial knowledge and financial product utilization. Debt management was analysed using descriptive statistics to identify the number of responses to each fundamental question.

In order to extract the critical components of a financial literacy strategy, a Principal Component Analysis was used to extract a few variables to use to explain the determinants of financial literacy. The analysis determined the items that were answered similarly by the participants. Kaiser-Meyer-Olkin (KMO) and Bartlett test were used to assess the adequacy of the sample by determining the strength of the relationships among variables. KMO measures the suitability of the data set for that analysis. The suitability of each variable in the model and for the complete model was determined. The value for KMO lies between 0 and 1 and the rule of thumb is that for a sample to be suitable for factor analysis the value should be greater than 0.5 (Kaiser, 1974). KMO values less than 0.5 are not adequate and corrective measures should be taken and values closer to zero signify large partial correlations. Bartlett's test on the other hand is a measure which indicates the strength of the relationship among variables. It tests the null hypothesis that the correlation matrix is an identity matrix where all diagonal elements are 1 and all off diagonal elements are zero. Principal Component analysis enabled the extraction of key variables to explain financial literacy.

## 6.11 Chapter Summary

The study adopted a positivist approach which assumes that the researcher and the objects under study are independent. A quantitative research design was adopted and data were collected using a closed, pre-coded questionnaire administered to a sample of 400 SME owners and managers in Harare and Bindura Districts in Zimbabwe. Multi-stage cluster sampling was used to select two provinces from the population of ten and this was followed by random selection of respondents in the two districts in proportion to the size of the population. The resultant sample size was 400 with 248 respondents being drawn from Harare and 152 from Bindura. Five research hypotheses were formulated focusing on financial knowledge and the key variables identified as financial behaviour, financial awareness, financial utilization and debt behaviour. Data were collected using a self-administered questionnaire which was constructed from previous research studies, hence guaranteeing its reliability and validity. Data processing and analysis was conducted using SPSS version 23 and Microsoft Excel. Presentations were done using tables and figures. The following chapter seven focuses on the presentation of research findings, analyzes the findings and interprets the data.

# CHAPTER 7

# RESULTS ON FINANCIAL LITERACY AND FINANCIAL BEHAVIOUR

## 7.0 Introduction

This chapter presents the findings of the study that was conducted to identify the components of a comprehensive financial literacy strategy for SMEs in Zimbabwe. This chapter provides findings for the first two objectives of the study which were to determine the level of financial literacy of SMEs and to describe the financial behaviour of SMEs

In order to answer the research questions posed by the two mentioned objectives the study commenced with a survey of SMEs housed in two districts Harare and Bindura Districts. Data were collected using a questionnaire that was administered to 400 respondents and an overall response rate of 70% was achieved. Table 7.1 shows the response rate from the two districts.

**Table 7.1 Questionnaire Response Rate**

| Questionnaires Distributed | Sample Size | Responses | Response Rate |
|---|---|---|---|
| Harare | 248 | 200 | 81% |
| Bindura | 152 | 78 | 51% |
| **Total** | **400** | **278** | **70%** |

*Source: Analysis of Primary data*

Of the 248 questionnaires distributed in Harare, 200 were returned and were usable, and in Bindura 78 of the 152 questionnaires were returned, giving a response rate of 70%.

## 7.1 Socio-demographic characteristics of respondents

The data were analyzed using SPSS version 23 and descriptive statistics were computed. The data were further analyzed using ANOVA, Chi-square and Principal Component Analysis. The respondents' demographic characteristics are presented in Table 7.2. Most of the respondents

**Table 7.2 Respondents' demographic characteristics**

| VARIABLE | CLASSIFICATION | FREQUENCY | PERCENTAGE |
|---|---|---|---|
| **Age** | 18-19 | 7 | 2.5 |
| | 20-24 | 71 | 25.5 |
| | 25-29 | 38 | 13.7 |
| | 30-34 | 36 | 12.9 |
| | 35-39 | 48 | 17.3 |
| | 40-44 | 34 | 12.2 |
| | 45-49 | 24 | 8.6 |
| | 50-54 | 15 | 5.4 |
| | 55-59 | 4 | 1.4 |
| | 60-69 | 1 | .4 |
| | **Total** | **278** | **100.0** |
| **Marital Status** | Married | 152 | 54.7 |
| | Divorced | 10 | 3.6 |
| | Widowed | 7 | 2.5 |
| | Single | 104 | 37.4 |
| | Separated | 5 | 1.8 |
| | **Total** | **278** | **100.0** |
| **Gender** | Male | 165 | 59.4 |
| | Female | 113 | 40.6 |
| | **Total** | **278** | **100.0** |
| **Educational Level** | Primary | 9 | 3.2 |
| | Secondary | 114 | 41.0 |
| | Technical | 50 | 18.0 |
| | Professional | 19 | 6.8 |
| | University level | 83 | 29.9 |
| | No formal education | 2 | .7 |
| | Other (specify) | 1 | .4 |
| | **Total** | **278** | **100.0** |
| **Business Sector** | Agriculture | 35 | 12.6 |
| | Wholesale and Retail | 91 | 32.7 |
| | Manufacturing | 39 | 14.0 |
| | Transport | 15 | 5.4 |
| | Construction | 17 | 6.1 |
| | Energy and Construction | 4 | 1.4 |
| | Tourism | 5 | 1.8 |
| | Art, Entertainment, Culture, Education and Sport | 26 | 9.4 |
| | Other(specify) | 46 | 16.5 |
| | **Total** | **278** | **100.0** |
| **Age of the business** | less than a year | 60 | 21.6 |
| | 1 to 2 years | 81 | 29.1 |
| | 3 to 5 years | 92 | 33.1 |
| | 6 to 10 years | 35 | 12.6 |
| | more than 10 years | 10 | 3.6 |
| | **Total** | **278** | **100.0** |
| **Prior experience** | less than 1year | 101 | 36.3 |
| | 1 to 2 years | 65 | 23.4 |
| | 3 to 5 years | 75 | 27.0 |
| | 6 to 10 years | 16 | 5.8 |
| | more than 10 years | 7 | 2.5 |
| | **Total** | **278** | **100.0** |

*Source: SPSS analysis of Primary Data*

(72%) were aged between 18 and 40, 20.8 % were 45 to 49 years old and only 7.2% in the old age category between the ages of 50 and 69. Married people constituted a significant proportion (54.7%) of the sample whilst 37.4% were single, and the rest were either divorced (3.6%), widowed (2.5%) or separated (1.5%). Most of the respondents were male, with only 39% being female. A significant proportion of the respondents had attended secondary school (41%) and possessed either a technical or professional qualification (24.8%) whilst about 29.9% were university graduates and only 4.3% had either primary education or no formal education. The wholesale and retail sector dominated, with 32.7% of the respondents, followed by the manufacturing sector (14%), agricultural sector (12.6%), art, culture, education and sport (9.4%) and construction (6.1%), with 16.5% of the respondents in other sectors. About 83.8% of the respondents had been in business for five years or less whilst 12.6% had been running their business for 6 to 10 years and only 3.6% had been in operation for more than 10 years. Most of the SMEs business owners had five or less years' business experience (86.7%) whilst 5.8% had between six and ten years' experience and 5% had no experience at all.

## 7.2 Measuring Financial knowledge

The first objective of the study was to establish the level of financial literacy of SMEs in Zimbabwe in order to assist policy makers to identify knowledge gaps among these businesses and provide a baseline measure for future studies on financial literacy. It was noted that financial literacy is gaining increasing attention from researchers and policy makers due to the changing financial landscape that requires a high level of financial sophistication among consumers of financial products. Although there is no universally agreed upon definition of financial literacy or conclusive criteria to measure it, there is a general consensus amongst researchers on how to ascertain the financial literacy levels of a population. Researchers agree that financial literacy is measured by the total number of questions answered correctly (Lusardi & Mitchell, 2014; Beal & Delpachitra, 2003; Hung, Parker, & Yoong, 2009; Moore, 2003; Nicolini, Cude & Chatterjee, 2013; Worthington, 2006). To this end, financial literacy was measured by aggregating the respondents' scores out of a total of nine questions. The respondents' average financial knowledge score was 69.28% with a standard deviation of 23.9 and a minimum score of zero and maximum score of 100% (See Table 7.3).

## Table 7.3 Overall Financial Knowledge Scores

| Financial Knowledge | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Financial Knowledge Score (%) | 278 | 0.00 | 100.00 | 69.8 | 23.9 |
| Valid cases | 278 | | | | |

*Source: SPSS analysis of Primary Data*

Table 7.3 shows that there was significant variation in the scores as evidenced by a range of 100% and a standard deviation of 23.9, signifying greater differences in financial literacy levels amongst the respondents.

For robustness, data were further analyzed to show the responses to each of the financial literacy questions. The responses are presented in Table 7.4.

## Table 7.4 Responses to Financial knowledge Questions

| Measurement | Correct response (%) | Incorrect response (%) | Do not know (%) |
|---|---|---|---|
| Interest | 74.5 | 18.7 | 6.8 |
| Inflation | 71.6 | 16.2 | 12.2 |
| Diversification | 36 | 44.6 | 19.4 |
| Risk & Return | 71.9 | 18.7 | 9.4 |
| Risk Reduction | 68.7 | 19.8 | 11.5 |
| Subtraction | 74.1 | 21.9 | 4 |
| Multiplication | 73.4 | 23.7 | 2.9 |
| Division | 82.7 | 15.1 | 2.2 |
| Calculation of percentages | 84.9 | 14.7 | 0.4 |

*Source: SPSS analysis of Primary data*

The first question measured the respondents' knowledge of calculating compound interest. Table 7.4 shows that, 74.5% of the respondents were able to calculate compound interest rates and 25.5% were not. The second question measured the respondents' understanding of inflation in the context of financial decision making. The findings revealed that the respondents were knowledgeable about inflation; 71.6% answered the question correctly whilst only 12.2% did not know. The third question tested understanding of the difference between stocks and mutual funds as well as risk diversification. Only 36% of the respondents answered correctly, showing a low level of understanding of the stock market.  This result reveals that SMEs lack a critical financial

skill for decision making, which could possibly explain their low participation in financial markets.

Although most of the respondents did not know the difference between stocks and stock mutual funds, they knew that an investment with a higher return is associated with higher risk. About 71.9% of the respondents answered the question correctly whilst only 9.4% responded 'do not know'. Of the total respondents 68.7% knew that they could reduce risk by diversifying their asset portfolio, whilst 11.5% did not.

Researchers argue that numerical ability is the basis of financial literacy since the ability to perform basic calculations is important for budgeting, saving and understanding financial statements as well as other aspects of being an informed consumer of financial services. To this effect the survey included four numerical questions that tested the respondents' ability to do simple numerical calculations such as subtraction, division and multiplication. It was found that 74.1% were able to answer a simple subtraction question, 73.4% were able to perform a multiplication calculation whilst between 82.7% and 84.9% were able to perform the questions that tested ability to do division. These results confirm a high literacy rate since most of the respondents had high educational qualifications. Of great concern is why this high literacy rate (Nkomazana et al., 2015) does not translate into sustainable SMEs. The level of financial literacy may provide answers to this question.

### 7.2.1 Joint Probabilities of Financial Knowledge Responses

Further analysis was conducted to determine the joint probabilities of answering the first three standard financial literacy questions correctly. The results are presented in Table 7.5.

**Table 7.5 Joint Probabilities of Financial knowledge Responses**

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No correct responses | 26 | 9.4 |
| 1 correct response | 55 | 19.8 |
| 2 correct responses | 142 | 51.1 |
| All 3 correct responses | 55 | 19.8 |
| **Total** | **278** | **100** |

*Source: SPSS analysis of Primary Data*

The results show that only 19.8% of the respondents answered all three questions correctly, 51.1% answered two correctly, 19.8 % answered one question correctly and 9.4% had no correct responses. These results show a lower level of financial literacy among SMEs in Zimbabwe and are similar to Lusardi et al.'s (2010) findings where only 27% of the respondents answered all three questions correctly, and 40% got the first two questions correct, again showing widespread financial illiteracy.

Using the three standard questions of financial literacy the current study the researcher concluded that the financial capability of SMEs in Zimbabwe is low, consistent with the findings of Beal & Delpachitra (2003), Lusardi, Mitchell & Curto (2010, 2014), and Moore (2003). Beal & Delpachitra (2003) measured the financial literacy of high school students and recorded a low level of financial literacy, with 52.9% of the respondents answering the question on compound interest correctly and 58.5% providing the correct answer to the question on risk diversification. Hilgert, Hogarth & Beverly (2003) used 28 questions to measure financial literacy and found that most respondents answered these questions incorrectly. Studies have also shown that older members of the population that might be assumed to have more financial knowledge due to experience have low levels of financial literacy. They also revealed low levels of financial literacy in well-developed, rich nations like Canada, The Netherlands, Switzerland and Sweden and even worse levels in countries such as Romania and Russia (Lusardi & Mitchell, 2014). This evidence of widespread financial illiteracy is cause for concern as there are serious repercussions for such a population. While scholars have used different population cohorts to measure financial literacy, with Beal & Delpachitra (2003), Chen & Volpe (1998), Fatoki & Oni (2014), and Mandell & Klein (2009) using a student population, Lusardi et al. (2010, 2012) targeting the older population and young adults, and ANZ Banking Group (2003, 2008) and Atkinson & Messy (2012) using the general adult population, financial literacy was low in all cases. In most cases less than 50% of the respondents were financially literate, and in some cases average financial literacy scores were as low as 14% (Nicolini et al., 2013). Xu and Zia's (2012) summary of financial literacy surveys in several countries is shown in Table 7.6.

**Table 7.6 A Comparison of Financial Literacy Survey Results across the Globe**

| Country (Year of study) | Compound Interest | Inflation | Risk diversification | Source |
|---|---|---|---|---|
| **High Income** | | | | |
| United States (2009) | 65 | 64 | 52 | Lusardi and Mitchell (2011) |
| Germany (2009) | 82 | 78 | 62 | Bucher-koenen & Lusardi (2011) |
| Netherlands (2010) | 85 | 77 | 52 | Alessie et al. (2011) |
| **Upper middle income** | | | | |
| Russia (2009) | 36 | 51 | 13 | Klapper and Panos (2011) |
| Chile (2006) | 2 | 26 | 46 | Berhman et al. (2010) |
| **Lower-middle income** | | | | |
| Indonesia (2007) | 78 | 61 | 28 | Cole et al. (2010) |
| India (2006) | 59 | 25 | 31 | Cole et al. (2010) |

*Source: Xu and Zia (2012)*

## 7.2 2 ANOVA test of Financial Literacy Responses

A one way ANOVA was employed to investigate whether there were any significant differences in the mean scores of financial literacy across different socio-demographic variables such as gender, age, marital status, business sector and years of prior business experience. The hypotheses tested were:

> $H_0$ = there are no significant differences between the mean scores of the identified socio-demographic groups.
> $H_1$ = there are significant differences in the mean scores of the identified socio-demographic groups.

The results are shown in Table 7.7.

**Table 7.7 Results of ANOVA tests**

| Group | p-value | Conclusion |
|---|---|---|
| Age | 0.05 | Significant |
| Gender | 0.124 | Not significant |
| Marital Status | 0.009 | Significant |
| Level of education | 0.12 | Not significant |
| Business sector | 0.033 | Significant |
| Years of operation | 0.198 | Not significant |
| Prior Experience | 0.011 | Significant |

*95% confidence Interval, 5% level of significance*

*Source: SPSS Analysis of Primary Data*

The findings reveal that there were significant differences in the levels of financial knowledge across age groups with a p-value of 0.05, marital status (p-value 0.009), business sector (p-value 0.033) and prior business experience (p-value 0.011). No significant differences were noted with respect to gender, years of operation and level of education.

### 7.2.3 Financial knowledge scores across age groups

Table 7.8 presents financial knowledge scores by age group.

**Table 7.8 Financial knowledge scores across age groups**

| Age | Mean Score (%) |
|-----|----------------|
| 18-19 | 61.9 |
| 20-24 | 70.7 |
| 25-29 | 78.4 |
| 30-34 | 66.0 |
| 35-39 | 69.4 |
| 40-44 | 74.8 |
| 45-49 | 60.2 |
| 50-54 | 68.1 |
| 55+ | 44.4 |

*Source: SPSS Analysis of Primary Data*

As shown in Table 7.8 financial knowledge scores were lower amongst the older respondents with a mean score of 44.4% as well as the young ones, with a mean score of 61.9%. This finding may suggest that older respondents face challenges in terms of financial capability even though it might be assumed that they should make sound financial decisions post retirement. This could be attributed to reduced cognitive ability associated with the aged which increases their risk aversion and the cost of processing information, hence they may shun financial market participation (Christelis & Jappelli, 2010; Annamaria Lusardi et al., 2010). The differences in mean scores across age groups were found to be significant with a p-value less than 0.05. These results are consistent with those reported by ANZ Banking Group (2008,), Lusardi & Tufano (2009), Gerardi et al. (2010), and Xu & Zia (2012), who concluded that financial literacy was low among the older population. Gamble, Boyle, Yu, & Bennett (2015) and Korniotis & Kumar (2011) suggest that low financial literacy amongst the adult population could be due to a decline in cognitive ability as one ages. Lusardi & Mitchell's (2011) study on financial literacy levels in

eight countries found that age took a U-shaped pattern, with financial literacy levels being low amongst the aged and the young, and peaking among the middle-aged. In contrast, this study established a W-shaped pattern of financial literacy as depicted in fig 7.1.
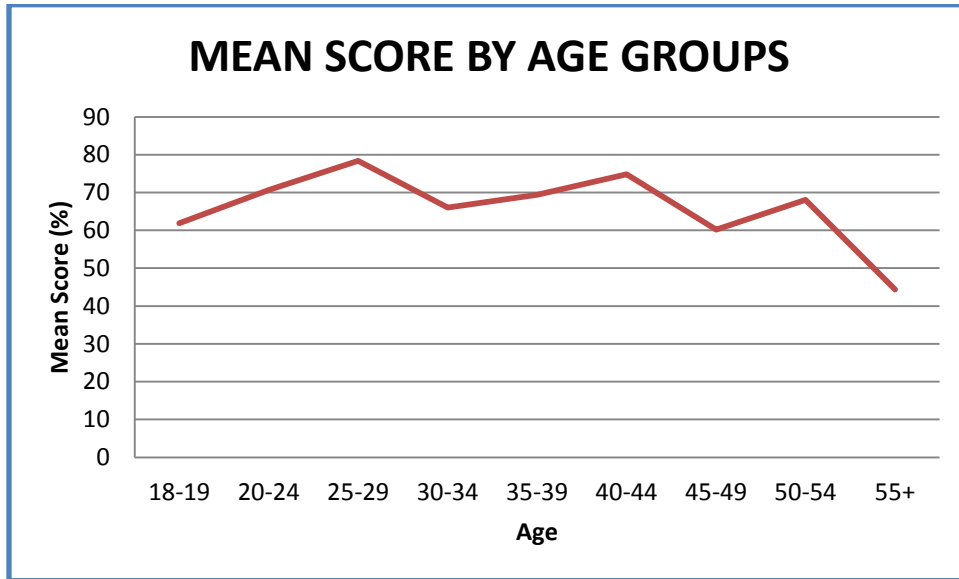


**Figure 7.0.1 Financial knowledge mean scores across age groups**

*Source: SPSS analysis of Primary data*

A Chi-square test of an association between financial knowledge levels and age was conducted. The null hypothesis was stated as follows:

> *H0 = financial knowledge level and age are independent*
> *H1 = There is an association between financial knowledge level and age.*

The Chi-square results are shown in Table 7.9

**Table 7.9 Chi-square test for association between financial knowledge levels and age**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 27.809 | 18 | 0.065 |
| Likelihood Ratio | 27.439 | 18 | 0.071 |
| Linear-by-Linear Association | 2.566 | 1 | 0.109 |
| Number of Valid Cases | 278 | | |

10 cells (33.3%) have expected count less than 5. The minimum expected count is .22.

*Source: SPSS analysis of Primary data*

Testing at 5% level of significance with 18 degrees of freedom, the critical value is 28.869. The decision rule is to reject the null hypothesis if $\chi^2 > 28.869$. In this case $\chi^2 = 27.809$, hence the decision to retain the null hypothesis and conclude that financial knowledge level and age are independent.

## 7.2.4 Financial knowledge scores across Gender

The mean score of financial knowledge for women was 67.1% and their male counterparts had a mean score of 71.6%. Results from the ANOVA tests showed no significant gender differences across gender (p = 0.125). A cross tabulation between gender and financial knowledge levels was also conducted. Of those with low financial knowledge, 51.6% were male whilst 48.4% were female showing a balanced distribution across gender. Of those with moderate financial knowledge, 59.3% were male whilst 40.7% were female. For the high financial knowledge 64.5% were male whilst 35.5% were female. The results are shown in Table 7.10.

**Table 7.10 Cross tabulation between Gender and Level of Knowledge**

| Crosstab | | | Level of Knowledge | | | Total |
|---|---|---|---|---|---|---|
| | | | Low | Moderate | High | |
| Gender | Male | Count | $32_a$ | $73_a$ | $60_a$ | 165 |
| | | % within Level of Knowledge | 51.6% | 59.3% | 64.5% | 59.4% |
| | Female | Count | $30_a$ | $50_a$ | $33_a$ | 113 |
| | | % within Level of Knowledge | 48.4% | 40.7% | 35.5% | 40.6% |
| Total | | Count | 62 | 123 | 93 | 278 |
| | | % within Level of Knowledge | 100.0% | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of Knowledge categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

For robustness, a Chi square test of association between financial knowledge levels and gender was conducted. The hypothesis to be tested was stated as follows:

$H_0$ = *Financial knowledge levels and gender are independent.*

$H_1$ *There is an association between financial knowledge levels and gender.*

Results are shown in Table 7.11:

**Table 7.11 Chi-square test for gender and financial knowledge**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 2.567[a] | 2 | 0.277 |
| Likelihood Ratio | 2.559 | 2 | 0.278 |
| Linear-by-Linear Association | 2.512 | 1 | 0.113 |
| Number of Valid Cases | 278 | | |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 25.20.

*Source: SPSS analysis of Primary data*

Testing at 5% level of significance and 2 degrees of freedom, the critical value is 5.99. The decision therefore is to reject the H0 if $\chi^2 > 5.99$. In this case since the $\chi^2 = 2.567$ the decision is do not reject the null hypothesis and conclude that financial knowledge levels and gender are independent.

Whilst there is a general consensus among researchers that there are large gender differences in financial literacy with women having lower levels of financial literacy than men (Lusardi & Mitchell, 2008;  Lusardi & Mitchell, 2014; Chen & Volpe, 2002; Fonseca, Mullen, Zamarro, & Zissimopoulos, 2012; Xu, & Zia, 2012; Alhenawi & Elkhal, 2013), the results in this case differ. Both men and women have above the average of 69.1% for financial literacy scores. This could be because Zimbabwe has adopted a number of policy initiatives to promote women empowerment with a fully-fledged Ministry of Gender and Economic Empowerment aimed at reducing gender inequalities. Women constitute a significant proportion of business persons, exposing them to situations that require them to be competent decision makers and hence their recognition by the Government of Zimbabwe.

### 7.2.5 Financial knowledge and Marital Status

The relationship between financial knowledge and marital status was determined through the use of cross tabulation, ANOVA and Chi-square tests. Results from the ANOVA tests showed significant differences in financial knowledge levels across marital status ($p = 0.009$. The divorced and widowed have lower financial literacy scores with a mean of 46.7% and 53.9%, respectively whilst their married and single counterparts had higher levels of financial knowledge with a mean score of 71%. Previous studies posit that the divorced and widowed people have lower levels of financial literacy due to their lack of a marriage partner that is key in helping to make financial decisions (Lusardi & Tufano, 2009; Van-Rooij, Lusardi, & Alessie, 2011; Mahdavi & Horton, 2014).

A cross tabulation between financial knowledge levels and marital status was also conducted and the results are presented in Table 7.12.

**Table 7.12 Cross tabulation between marital status and level of financial Knowledge**

| Crosstab | | | Level of Knowledge | | |
|---|---|---|---|---|---|
| | | | Low | Moderate | High |
| Marital status | Married | Count | 32$_a$ | 69$_a$ | 51$_a$ |
| | | % within Level of Knowledge | 51.6% | 56.1% | 54.8% |
| | Divorced | Count | 5$_a$ | 4$_a$ | 1$_a$ |
| | | % within Level of Knowledge | 8.1% | 3.3% | 1.1% |
| | Widowed | Count | 3$_a$ | 3$_a$ | 1$_a$ |
| | | % within Level of Knowledge | 4.8% | 2.4% | 1.1% |
| | Single | Count | 21$_a$ | 44$_a$ | 39$_a$ |
| | | % within Level of Knowledge | 33.9% | 35.8% | 41.9% |
| | Separated | Count | 1$_a$ | 3$_a$ | 1$_a$ |
| | | % within Level of Knowledge | 1.6% | 2.4% | 1.1% |
| Total | | Count | 62 | 123 | 93 |
| | | % within Level of Knowledge | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of Knowledge categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

Of the total respondents with low financial knowledge 51.6% were married whilst 33.9% were single. The rest were either divorced (8.1%), widowed (4.8%) or separated (33.9%). From those with high financial knowledge levels 54.8% were married, 41.9% were single, and the rest were either divorced (1.1%), widowed (1,1%) or separated (1.1%).

A Chi- square test was conducted to test the level of association between financial knowledge level and marital status. The hypothesis tested was given as follows:

$H_0$ = *Financial knowledge levels and marital status are independent.*

$H_1$ = *There is an association between financial knowledge levels and marital status.*

The results of the Chi-square test are presented in Table 7.13

**Table 7.13 Chi-square test for financial knowledge levels and marital status**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 8.743[a] | 8 | 0.364 |
| Likelihood Ratio | 8.406 | 8 | 0.395 |
| Linear-by-Linear Association | .121 | 1 | 0.728 |
| Number of Valid Cases | 278 | | |

     a.   9 cells (60.0%) have expected count less than 5. The minimum expected count is 1.12.

*Source: SPSS analysis of Primary data*

Testing at 5% level of significance with 8 degrees of freedom the critical value is given as 15.507. The decision rule is to reject the null hypothesis if $\chi^2 > 15.507$. In this case the calculated value is 8.743, hence the decision is to retain the null hypothesis and conclude that financial knowledge and marital status are independent.

### 7.2.6 Financial knowledge and Education Levels

Differences in financial knowledge mean scores were noted across levels of education. Those with primary education and no formal education scored very lower with an average of 59.2% and 61.1%, respectively whilst those with higher levels of education scored higher with a mean of 76%. These results are consistent with those of Lusardi, Mitchell, & Curto (2014) who found that knowledge of asset pricing was low (25.5%) among respondents with less than a high school qualification and was high for those with college education (50%). In contrast, Mahdavi & Horton (2014) found that even the most educated women had low levels of financial literacy. However, the differences noted in this population group were not significant (p = 0.12 mainly because the majority of the SME owners are educated with high literacy levels. Furthermore, the Ministry of Small and Medium Enterprises and Development Cooperation conducts training sessions to equip entrepreneurs with the necessary skills to operate their businesses successfully. The Finmark (2013) survey in Zimbabwe also revealed that 73% of business owners were either formally or informally skilled, improving their financial capability.

For a robustness check, a Chi-square test was conducted to test whether financial knowledge levels and education level are independent. The hypothesis was stated as follows:

$H_0$ = Financial knowledge level and educational level are independent.

$H_1$ = there is an association between financial knowledge level and education level.

Results are shown in Table 7. 14.

**Table7.14 Chi-square test for Education level and financial knowledge**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 20.521[a] | 12 | 0.058 |
| Likelihood Ratio | 24.238 | 12 | 0.019 |
| Linear-by-Linear Association | 7.746 | 1 | 0.005 |
| Number of Valid Cases | 278 | | |

a.  10 cells (47.6%) have expected count less than 5. The minimum expected count is .22.

*Source: SPSS analysis of Primary data*

Testing at 5% level of significance and 12 degrees of freedom, the critical value is give as 21.026 and hence the decision rule is to reject the null hypothesis if $\chi^2 > 21.026$. In this case the calculated value is 20.521 hence the decision is to retain the null hypothesis and conclude that financial knowledge levels and education level are independent.

### 7.2.7 Financial knowledge Scores across Business Sectors

Table 7.15 shows that there were notable differences in the level of financial knowledge across the various business sectors. Those in art, entertainment, education and sport as well as those in the agricultural sector scored above average with a mean of 79% (s=19), while the respondents in the manufacturing sector had the lowest level of financial literacy with a mean score of 62% (s=21.2). This could be due to the intensity of daily activities in the entertainment, transport and agricultural sectors which requires that business owners be literate. According to Finmark (2013), most SMEs are found in the agricultural sector where they conduct daily business transactions that prompt them to improve their financial capability.

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**Table 7.15 Financial literacy score by Business Sector**

| Business Sector | Mean |
|---|---|
| Manufacturing | 62 |
| Wholesale and Retail | 67 |
| Tourism | 69 |
| Transport | 74 |
| Energy and Construction | 75 |
| Agriculture | 79 |
| Art, Entertainment, Education & Culture | 79 |

*Source: SPSS Analysis of Primary data*

A cross tabulation between financial knowledge levels and business sector was conducted and results are shown in Table 7.16 overleaf.

Findings reveal that of the total respondents with low financial knowledge (37.1%) were found in the Wholesale and Retail sector, 19.4% were found in the Manufacturing sector 11.3% were found in the Construction sector and 8.1% in the Agricultural sector. Of those with high financial knowledge significant numbers were found in the Wholesale and Retail sector (25.8%), Agricultural sector (19.4%).

**Table 7.16 Cross tabulation between Business Sector and Level of Knowledge**

| Crosstab | | | Level of Knowledge | | | |
|---|---|---|---|---|---|---|
| | | | Low | Moderate | High | Total |
| Business Sector | Agriculture | Count | $5_a$ | $12_a$ | $18_a$ | 35 |
| | | % within Level of Knowledge | 8.1% | 9.8% | 19.4% | 12.6% |
| | Wholesale and Retail | Count | $23_a$ | $44_a$ | $24_a$ | 91 |
| | | % within Level of Knowledge | 37.1% | 35.8% | 25.8% | 32.7% |
| | Manufacturing | Count | $12_a$ | $23_a$ | $4_b$ | 39 |
| | | % within Level of Knowledge | 19.4% | 18.7% | 4.3% | 14.0% |
| | Transport | Count | $4_{a,\,b}$ | $2_b$ | $9_a$ | 15 |
| | | % within Level of Knowledge | 6.5% | 1.6% | 9.7% | 5.4% |
| | Construction | Count | $7_a$ | $5_a$ | $5_a$ | 17 |
| | | % within Level of Knowledge | 11.3% | 4.1% | 5.4% | 6.1% |
| | Energy and Construction | Count | $0_a$ | $3_a$ | $1_a$ | 4 |
| | | % within Level of Knowledge | 0.0% | 2.4% | 1.1% | 1.4% |
| | Tourism | Count | $1_a$ | $3_a$ | $1_a$ | 5 |
| | | % within Level of Knowledge | 1.6% | 2.4% | 1.1% | 1.8% |
| | Art, Entertainment, Culture, Education and Sport | Count | $2_a$ | $10_a$ | $14_a$ | 26 |
| | | % within Level of Knowledge | 3.2% | 8.1% | 15.1% | 9.4% |
| | Other(specify) | Count | $8_a$ | $21_a$ | $17_a$ | 46 |
| | | % within Level of Knowledge | 12.9% | 17.1% | 18.3% | 16.5% |
| Total | | Count | 62 | 123 | 93 | 278 |
| | | % within Level of Knowledge | 100.0% | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of Knowledge categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

Further analysis was conducted using Chi-square to test association between financial knowledge levels and business sector. The hypothesis was stated as:

$H_0$ = *Financial knowledge levels and business sector are independent*

$H_1$ = *There is an association between financial knowledge levels and business sector*

The results of the test are given in Table 7.17

**Table 7.17 Chi-square test for financial knowledge levels and business sector**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 35.854[a] | 16 | 0.003 |
| Likelihood Ratio | 39.062 | 16 | 0.001 |
| Linear-by-Linear Association | 2.319 | 1 | 0.128 |
| Number of Valid Cases | 278 | | |

a. 8 cells (29.6%) have expected count less than 5. The minimum expected count is .89.

*Source: SPSS analysis of Primary data*

Testing at 5% level of significance and 16 degrees of freedom, the decision rule is stated as follows: the critical value for $\chi^2_{(5\%)}$ (16) = 26.296 so the decision rule is to Reject $H_0$ if $\chi^2$ >26.296 and accept $H_1$. It is given that $\chi^2$= 35.854. Since $\chi^2$ > 26.296 the decision is to reject $H_0$ and accept $H_1$ and conclude that there is an association between financial knowledge levels and business sector.

### 7.2.8 Financial knowledge and age of the business

Findings of the study showed that businesses that had been in operation for less than two years had a higher level of financial knowledge with a mean score of 71.7%. Those that had been operating for six to ten years had lower financial literacy scores with a mean of 61.6% and the mean score for those that had been in business for more than ten years was 63%. However these differences were not significant as shown in the ANOVA (p = 0.198). Results are presented in Table 7.18.

**Table 7.18 Mean score by years of operation**

| Years of operation | Mean Score |
|---|---|
| Less than a year | 70.2 |
| 1 to 2 years | 71.7 |
| 3 to 5 years | 71.7 |
| 6 to 10 years | 61.6 |
| More than 10 years | 63.0 |

*Source: SPSS analysis of Primary Data*

These results could be explained by the fact that as people gain business experience, their self-evaluation of financial literacy is highly positive, and yet the reality may not be as such. Several researchers have found out that when respondents are given an opportunity to self-evaluate their financial literacy levels, they give themselves higher scores that what is actually correct. Such evaluation results may be common as businesses grow and owners feel that business experience translates directly to high levels of financial literacy when this is not necessarily the case.

A cross tabulation between financial knowledge and business age was conducted. Results are presented in Table 7.19.

**Table 7.19 Cross tabulation between business sector and level of financial knowledge**

| Crosstab | | | Level of Knowledge | | | |
|---|---|---|---|---|---|---|
| | | | Low | Moderate | High | Total |
| Age of the business | Less than a year | Count | $12_a$ | $26_a$ | $22_a$ | 60 |
| | | % within Level of Knowledge | 19.4% | 21.1% | 23.7% | 21.6% |
| | 1 to 2 years | Count | $14_a$ | $39_a$ | $28_a$ | 81 |
| | | % within Level of Knowledge | 22.6% | 31.7% | 30.1% | 29.1% |
| | 3 to 5 years | Count | $19_a$ | $39_a$ | $34_a$ | 92 |
| | | % within Level of Knowledge | 30.6% | 31.7% | 36.6% | 33.1% |
| | 6 to 10 years | Count | $13_a$ | $16_{a, b}$ | $6_b$ | 35 |
| | | % within Level of Knowledge | 21.0% | 13.0% | 6.5% | 12.6% |
| | More than 10 years | Count | $4_a$ | $3_a$ | $3_a$ | 10 |
| | | % within Level of Knowledge | 6.5% | 2.4% | 3.2% | 3.6% |
| Total | | Count | 62 | 123 | | 93 |
| | | % within Level of Knowledge | 100.0% | 100.0% | | 100.0% |

Each subscript letter denotes a subset of Level of Knowledge categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary Data*

Results from the table show that 36.6% of those with high financial knowledge have businesses aged between 3-5 years and 30.1% have businesses 1 to 2 years. Of those with low financial knowledge 30.6% are aged 3-5 years and 22.6% are aged between 1 to 2 years.

A Chi- square test was conducted to test the association between financial knowledge levels and the age of the business. The hypotheses tested are stated as follows:

$H_1$ = *Financial knowledge levels and business sector are independent*

$H_0$ = *There is an association between financial knowledge levels and business*

The results are presented in Table 7.20.

**Table 7.20 Chi –square test for age of the business and financial knowledge levels**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 10.239[a] | 8 | 0.249 |
| Likelihood Ratio | 10.119 | 8 | 0.257 |
| Linear-by-Linear Association | 4.087 | 1 | 0.043 |
| Number of Valid Cases | 278 | | |

a. 3 cells (20.0%) have expected count less than 5. The minimum expected count is 2.23.

*Source: SPSS analysis of Primary data*

Testing at a 5% level of significance and 8 degrees of freedom, the decision is based on the critical value of $\chi^2_{(5\%)}(8) = 15.507$ so the decision rule is Reject $H_0$ if $\chi^2 > 15.507$. It is given that $\chi^2 = 10.239$. Since $\chi^2 < 15.507$ the $H_0$ is retained. The conclusion is that financial knowledge levels and age of the business are independent.

**7.2.9 Financial knowledge and Prior Business Experience**

A downward trend in the level of financial knowledge across prior business experience was noted. Significant differences were reported with a p-value of 0.011. Business owners who had less than a year experience had a mean score of 69% whilst those who had two years had a mean score of 75%. However, a decline in the mean score is noted as business experience increases with those with six to ten years' experience having a mean financial literacy score of 64% and respondents with more than ten years' experience with the lowest mean score of 62%. Results are presented in Table 7.21.

**Table 7.21 Financial knowledge Scores across Business Experience**

| Years of operation | Mean Score |
|---|---|
| Less than a year | 69 |
| 1 to 2 years | 75 |
| 3 to 5 years | 72 |
| 6 to 10 years | 64 |
| More than 10 years | 62 |

*Source: SPSS Analysis of Primary Data*

These results are surprising and could be explained by ignorance among those with more years of business experience. They may unknowingly feel that they have high levels of knowledge due to their experience, yet they are actually less financially knowledgeable.

A cross tabulation was done between prior business experience and level of financial knowledge. The results are presented in Table 7.22.

**Table 7.22 Cross tabulation between prior business experience and level of knowledge**

| Crosstab | | | Low | Moderate | High | Total |
|---|---|---|---|---|---|---|
| | | | Level of Knowledge | | | |
| Years of prior experience | Less than 1 year | Count | $24_a$ | $42_a$ | $35_a$ | 101 |
| | | % within Level of Knowledge | 38.7% | 34.1% | 37.6% | 36.3% |
| | 1 to 2 years | Count | $8_a$ | $30_a$ | $27_a$ | 65 |
| | | % within Level of Knowledge | 12.9% | 24.4% | 29.0% | 23.4% |
| | 3 to 5 years | Count | $13_a$ | $41_a$ | $21_a$ | 75 |
| | | % within Level of Knowledge | 21.0% | 33.3% | 22.6% | 27.0% |
| | 6 to 10 years | Count | $6_a$ | $2_b$ | $8_a$ | 16 |
| | | % within Level of Knowledge | 9.7% | 1.6% | 8.6% | 5.8% |
| | More than 10 years | Count | $3_a$ | $3_a$ | $1_a$ | 7 |
| | | % within Level of Knowledge | 4.8% | 2.4% | 1.1% | 2.5% |
| | Not applicable | Count | $8_a$ | $5_{a,b}$ | $1_b$ | 14 |
| | | % within Level of Knowledge | 12.9% | 4.1% | 1.1% | 5.0% |
| Total | | Count | 62 | 123 | 93 | 278 |
| | | % within Level of Knowledge | 100.0% | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of Knowledge categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

Results show that of those with low financial knowledge 38.7% were in businesses where the owner had less than a year of business experience, and 21% were in businesses where the owner had 3 to 5 years of prior business experience. Of those with high financial knowledge, 37.6% were in businesses where the owner had less than a year of prior business experience, 29% were in businesses where the owner had 1 to 2 years of prior business experience.

A Chi-square test was conducted to test dependency between financial knowledge levels and prior business experience. The hypotheses are stated as follows:

$H_0$ = *financial knowledge levels and prior business experience are independent.*

$H_1$ = *there is an association between financial knowledge level and prior business experience.*

Results are presented in Table 7.23.

**Table 7.23 Chi-square test for financial knowledge and prior business experience**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 27.331[a] | 10 | 0.002 |
| Likelihood Ratio | 27.793 | 10 | 0.002 |
| Linear-by-Linear Association | 6.499 | 1 | 0.011 |
| Number of Valid Cases | 278 | | |

a. 6 cells (33.3%) have expected count less than 5. The minimum expected count is 1.56.

*Source: SPSS analysis of Primary data*

Testing at 5% level of significance and 10 degrees of freedom, the decision is based on a critical value for $\chi^2_{5\%}$ (10) = 18.307, so reject $H_0$ if $\chi^2 > 18.307$. In this case $\chi^2 = 27.331$, since $\chi^2 > 18.307$ reject $H_0$. and accept $H_1$. Thus the conclusion is that there is an association between financial knowledge levels and prior business experience.

## 7.3 Principal Component Analysis for financial knowledge

Further analysis was done using Principal Component Analysis which was used to extract a few variables to use to explain the determinants of financial literacy. The analysis determined the

items that were answered similarly by the participants. These variables were interest rates, inflation, diversification, risk and return, risk reduction, numerical ability to include the aptitude to solve financial problems involving subtraction, multiplication and division. Kaiser-Meyer-Olkin (KMO) and Bartlett tests were used to assess the adequacy of the sample by determining the strength of the relationships among variables. KMO measures the suitability of the data set for that analysis. The suitability of each variable in the model and for the complete model was determined. The value for KMO lies between 0 and 1 and the rule of thumb is that for a sample to be suitable for factor analysis the value should be greater than 0.5 (Kaiser, 1974). KMO values less than 0.5 are not adequate and corrective measures should be taken and values closer to zero signify large partial correlations. Bartlett's test on the other hand is a measure which indicates the strength of the relationship among variables. It tests the null hypothesis that the correlation matrix is an identity matrix where all diagonal elements are 1 and all off diagonal elements are zero. For the current study KMO and Bartlett test were conducted and results are presented in Table 7.24.

**Table 7.24  Principal Component Analysis for Financial Literacy**

| KMO and Bartlett's Test | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.755 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 515.452 |
| | df | 36 |
| | Sig. | .000 |

Extraction Method: Principal Component Analysis.

*Source: SPSS analysis of Primary data*

As shown in Table 7.24, the KMO is 0.755, hence fulfilling the test of adequacy. The Bartlett's test results are significant (p = 0.000 which is less than 0.005. The two measures meet the minimum requirement to proceed with the analysis, therefore Principal Component analysis was conducted.

The analysis extracted two components that explain the financial literacy of SMEs which were the knowledge of interest rates and inflation. These components have Eigenvalues that are above 1. The two components account for 46.8% of the total variance, with the first component explaining 32.3% of the total variance and the second component accounting for 14.6% of the total variance.

Table 7.25 is the Total Variance Explained table and shows all the factors extractable from the analysis along with their eigenvalues, the percentage of variance attributed to each factor, and the cumulative variance of the factor and the previous factor.

**Table 7.25 Total Variance Explained for Financial Knowledge**

| Total Variance Explained | | | | | |
|---|---|---|---|---|---|
| | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | |
| Component | Total | % of Variance | Cumulative % | Total | % of Variance |
| 1 | 2.905 | 32.274 | 32.274 | 2.905 | 32.274 |
| 2 | 1.312 | 14.576 | 46.850 | 1.312 | 14.576 |
| 3 | 0.983 | 10.923 | 57.773 | | |
| 4 | 0.912 | 10.139 | 67.911 | | |
| 5 | 0.799 | 8.875 | 76.787 | | |
| 6 | 0.687 | 7.637 | 84.424 | | |
| 7 | 0.641 | 7.121 | 91.545 | | |
| 8 | 0.517 | 5.749 | 97.295 | | |
| 9 | 0.243 | 2.705 | 100.000 | | |

Extraction Method: Principal Component Analysis.

*Source: SPSS analysis of Primary data*

A scree plot was also extracted to confirm the results of the total variance explained. The scree plot is a graph of the eigenvalues against all the factors which helps in determining the factors that can be retained. Below is a graphical presentation of the scree plot.
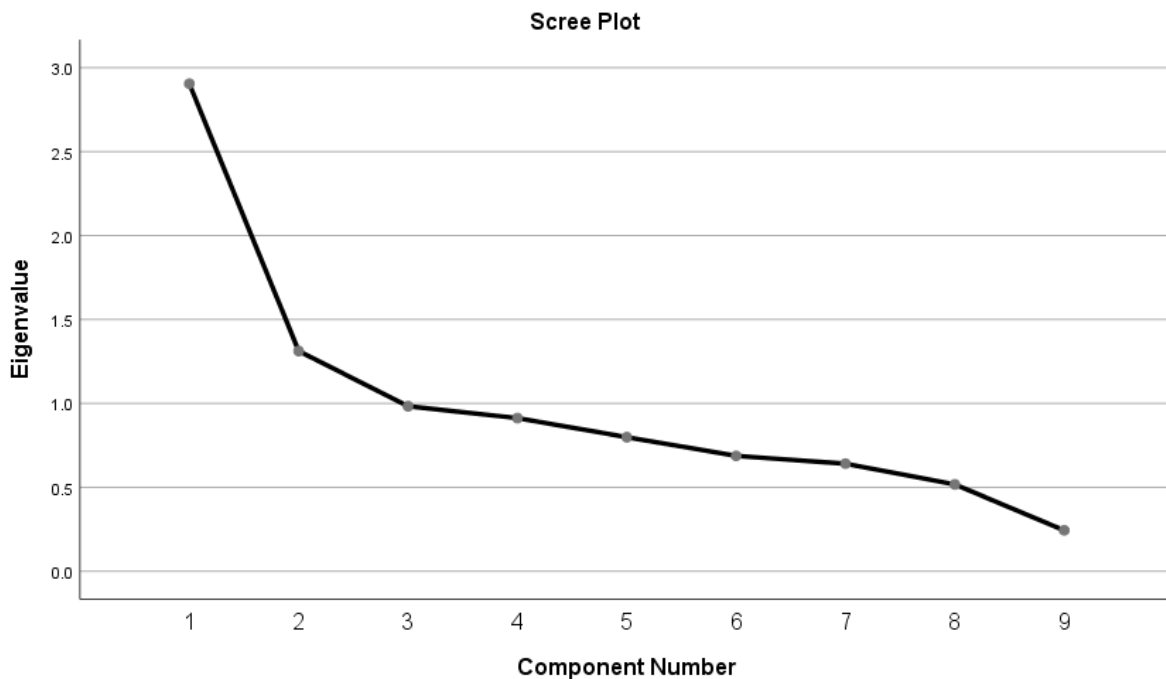


**Figure 7.0.2 Scree Plot for financial knowledge**

*Source: SPSS analysis of Primary Data*

Of importance is the point where the curve begins to flatten out, and as shown in Figure 7.6 at component 2 the curve flattens and the eigenvalues are less than 1 confirming that only two components are key explanatory variables for financial literacy. The scree plot and the eigenvalues support the conclusion that the nine variables can be reduced to two, inflation and interest rates being the major determinants of financial literacy.

Table 7.26 shows the rotated component matrix for financial literacy presenting the factor loadings for all the variables. It can be noted from the table that the first four variables have high factor loadings for component 1 whilst the other four have high factor loadings for component 2 confirming that the variables explaining financial literacy of SMEs are knowledge of interest rates and knowledge of inflation.

**Table 7.26 Rotated Component Matrix for Financial Knowledge**

| Rotated Component Matrix[a] | | |
|---|---|---|
| | Component | |
| | 1 | 2 |
| Q20R | **0.780** | 0.335 |
| Q21R | **0.773** | -0.047 |
| Q19R | **0.746** | 0.375 |
| Q17R | **0.545** | 0.109 |
| Q16R | 0.409 | -0.065 |
| Q15R | 0.051 | **0.690** |
| Q14R | -0.016 | **0.642** |
| Q18R | 0.058 | **0.629** |
| Q22R | 0.290 | **0.586** |

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiesr Normalization [a]

a.    Rotation converged in 3 iterations

*Source: SPSS analysis of Primary data*

## 7.4 The Financial Behaviour of SMEs

Several scholars have argued that financial behaviour is the most important aspect of financial literacy because the way a person behaves has an effect on their financial well-being (ANZ Banking Group, 2008; Atkinson & Messy, 2012). A financially literate individual exhibits positive financial behaviour. Thus, of major interest to this study was to determine the financial behaviour of SMEs which is important for the sustainability of their business ventures. A total of 15 questions were used to determine financial behaviour; these focused on savings behaviour, investment behaviour and borrowing behaviour among other behavioural traits. Respondents were categorized into three groups, those with negative behaviour, somewhat positive behaviour and those with positive behaviour.

Approximately half of the respondents (51,1%) were in the somewhat positive behaviour category, 21.6% of the respondents were in the negative financial behaviour category, and the remainder 27.3% were in the positive behaviour category.

An overall financial behaviour score was determined by giving a score for each positive behaviour indicated. The findings are reported in Table 7.27.

**Table 7.27 Financial Behaviour Score**

| Financial Behaviour | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Behaviour score | 278 | 6.25 | 87.50 | 60.4 | 15.9 |
| Valid N | 278 | | | | |

*Source: SPSS Analysis of Primary Data*

The analysis shows that the minimum financial behaviour score was 6.25% and the maximum score was 87.5% with a standard deviation of 15.9. The average behaviour score for respondents was 60.4%. An analysis of variance was conducted to determine whether there were any significant differences in the mean financial behaviour scores across the various socio-demographic factors. The findings are reported in Table 7.28.

**Table 7.28 Results of ANOVA tests for financial behaviour score**

| Group | P-value | Conclusion |
|---|---|---|
| Gender | 0.144 | Insignificant |
| Marital status | 0.661 | Insignificant |
| Education | 0.940 | Insignificant |
| Sector | 0.361 | Insignificant |
| Years of operation | 0.093 | Insignificant |
| Years of prior experience | 0.448 | Insignificant |

At 0.05 level of significance

*Source: SPSS Analysis of Primary Data*

The results of the ANOVA tests showed no significant differences across all the socio-demographic factors.

### 7.4.1 Financial behaviour and age

A cross tabulation was done between level of behaviour and age and results are reported in Table 7.29.

**Table 7.29 Cross tabulation between financial behaviour and age**

| Crosstab | | | Level of behaviour | | |
|---|---|---|---|---|---|
| | | | Negative | Somewhat positive | Positive |
| Age | 18-19 | Count | $2_a$ | $2_a$ | $3_a$ |
| | | % within Level of behaviour | 3.3% | 1.4% | 3.9% |
| | 20-24 | Count | $9_a$ | $40_a$ | $22_a$ |
| | | % within Level of behaviour | 15.0% | 28.2% | 28.9% |
| | 25-29 | Count | $9_a$ | $16_a$ | $13_a$ |
| | | % within Level of behaviour | 15.0% | 11.3% | 17.1% |
| | 30-34 | Count | $10_a$ | $22_a$ | $4_a$ |
| | | % within Level of behaviour | 16.7% | 15.5% | 5.3% |
| | 35-39 | Count | $15_a$ | $21_a$ | $12_a$ |
| | | % within Level of behaviour | 25.0% | 14.8% | 15.8% |
| | 40-44 | Count | $8_a$ | $17_a$ | $9_a$ |
| | | % within Level of behaviour | 13.3% | 12.0% | 11.8% |
| | 45-49 | Count | $5_a$ | $12_a$ | $7_a$ |
| | | % within Level of behaviour | 8.3% | 8.5% | 9.2% |
| | 50-54 | Count | $2_a$ | $8_a$ | $5_a$ |
| | | % within Level of behaviour | 3.3% | 5.6% | 6.6% |
| | 55-59 | Count | $0_a$ | $3_a$ | $1_a$ |
| | | % within Level of behaviour | 0.0% | 2.1% | 1.3% |
| | 65-69 | Count | $0_a$ | $1_a$ | $0_a$ |
| | | % within Level of behaviour | 0.0% | 0.7% | 0.0% |
| Total | | Count | 60 | 142 | 76 |
| | | % within Level of behaviour | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of behaviour categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

Findings revealed that about half (55.2%) of those with positive behaviour were the youth, aged between 18 and 34 years whilst about 7.9% of those with positive behaviour were the those aged between 50 and 69 years. Again half the population with negative financial behaviour were the youths aged between 18 and 34 years and of those with negative financial behaviour, only 3% were those aged between 50 and 69 years.

Further analysis was done using Chi-square test for association between financial behaviour and age was conducted. The hypothesis was stated as follows:

$H_0$ = *Financial behaviour level and age are independent.*

$H_1$ = *There is an association between financial behaviour level and age.*

Results are presented in Table 7.30.

**Table 7.30 Chi-square test for financial behaviour and age**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 16.719[a] | 18 | 0.543 |
| Likelihood Ratio | 19.107 | 18 | 0.385 |
| Linear-by-Linear Association | .414 | 1 | 0.520 |
| Number of Valid Cases | 278 | | |

a. 11 cells (36.7%) have expected count less than 5. The minimum expected count is .22.

*Source: SPSS Analysis of Primary data*

At 5% level of significance and 18 degrees of freedom, the decision rule is reject $H_0$ if $\chi^2 >$ 28.869. In this case $\chi^2$=16.719 thus the decision is to retain the $H_0$ and conclude that financial behaviour level and age are independent.

## 7.4.2 Gender and level of financial behaviour

The analysis sought to determine the relationship between gender and level of financial behaviour and so a cross tabulation was done. Results are presented in Table 7.31.

**Table 7.31 Cross tabulation between gender and level of financial behaviour**

| Crosstab | | | Level of behaviour | | | Total |
|---|---|---|---|---|---|---|
| | | | Negative | Somewhat positive | Positive | |
| Gender | Male | Count | 35[a] | 85[a] | 45[a] | 165 |
| | | % within Level of behaviour | 58.3% | 59.9% | 59.2% | 59.4% |
| | Female | Count | 25[a] | 57[a] | 31[a] | 113 |
| | | % within Level of behaviour | 41.7% | 40.1% | 40.8% | 40.6% |
| Total | | Count | 60 | 142 | 76 | 278 |
| | | % within Level of behaviour | 100.0% | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of behaviour categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

Findings showed that 58.3% of those with negative financial behaviour were male, whilst 41.7% were female. Of those with positive financial behaviour 59.2% were male whilst 40.8% were female. A Chi-square test was conducted to test for dependence between financial behaviour levels and gender. The hypothesis tested is stated as follows:

$H_0$ = *Financial behaviour level and gender are independent*

$H_1$ = *There is an association between financial behaviour level and gender*

Results are shown in Table 7.32.

**Table 7.32 Chi-square test between financial behaviour level and gender**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | .042[a] | 2 | 0.979 |
| Likelihood Ratio | .042 | 2 | 0.979 |
| Linear-by-Linear Association | .008 | 1 | 0.930 |
| Number of Valid Cases | 278 | | |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 24.39.

*Source: SPSS analysis of Primary data*

The critical value of $\chi^2_{5\%}$ (2) = 5.99 so the decision is to reject $H_0$ if $\chi^2$ >5.99. In this case $\chi^2$ =0.042 and the conclusion is that at 5% level of significance financial knowledge levels and gender are independent.

## 7.4.3 Financial Behaviour Levels and Marital Status

A cross tabulation between marital status and financial knowledge level was conducted. Results showed that 58.3% of those with negative financial behaviour were married whilst 35% were single. The rest were either widowed (1.7%), divorced (1.7%) or separated (3.3%). Approximately half (53.9%) of those with positive behaviour were married, about 39.5% of those in the positive financial behaviour category were single. The results are presented in Table 7.33.

**Table 7.33 Cross Tabulation between Marital Status and Level of Financial Behaviour**

| Crosstab | | | Level of behaviour | | |
|---|---|---|---|---|---|
| | | | Negative | Somewhat positive | Positive |
| Marital status | Married | Count | $35_a$ | $76_a$ | $41_a$ |
| | | % within Level of behaviour | 58.3% | 53.5% | 53.9% |
| | Divorced | Count | $1_a$ | $7_a$ | $2_a$ |
| | | % within Level of behaviour | 1.7% | 4.9% | 2.6% |
| | Widowed | Count | $1_a$ | $4_a$ | $2_a$ |
| | | % within Level of behaviour | 1.7% | 2.8% | 2.6% |
| | Single | Count | $21_a$ | $53_a$ | $30_a$ |
| | | % within Level of behaviour | 35.0% | 37.3% | 39.5% |
| | Separated | Count | $2_a$ | $2_a$ | $1_a$ |
| | | % within Level of behaviour | 3.3% | 1.4% | 1.3% |
| Total | | Count | 60 | 142 | 76 |
| | | % within Level of behaviour | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of behaviour categories whose column proportions do not differ
significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

A Chi- square test was conducted to test for dependency between financial behaviour levels and marital status. The hypothesis tested was as follows:

$H_0$ = *Financial knowledge levels and marital status are independent*

$H_1$ = *There is an association between financial knowledge levels and marital status*

Results are presented in Table 7.34.

**Table 7.34 Chi-square test between Financial Behaviour Level and Marital Status**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | $3.120^a$ | 8 | 0.927 |
| Likelihood Ratio | 3.103 | 8 | 0.928 |
| Linear-by-Linear Association | 0.104 | 1 | 0.747 |
| Number of Valid Cases | 278 | | |

a. 8 cells (53.3%) have expected count less than 5. The minimum expected count is 1.08.

*Source: SPSS analysis of Primary data*

Testing at 5% level of significance and 8 degrees of freedom, the critical value of $\chi^2_{5\%}(8)$ = 15.57 so the decision is to reject $H_0$ if $X^2 > 15.57$. In this case $\chi^2 = 3.120$, hence since $\chi^2 < 15.57$ the decision is to retain the $H_0$ and conclude that at 5% level of significance financial behaviour level and marital status are independent.

### 7.4.4 The level of financial behaviour and level of education

A cross tabulation was conducted between financial behaviour level and level of education. Of the total respondents with negative financial behaviour, 63.3% had secondary education whilst 20% had technical level of education. Of the total respondents who had positive financial behaviour, 35.5% had University level of education, and 28% had secondary education whilst 17% had technical qualifications. Results are presented in Table 7.35.

**Table 7.35 Cross Tabulation between Level of Education and Level of Financial Behaviour**

| Crosstab | | | Level of behaviour | | | |
|---|---|---|---|---|---|---|
| | | | Negative | Somewhat positive | Positive | Total |
| Level of education | Primary | Count | $1_a$ | $4_a$ | $4_a$ | 9 |
| | | % within Level of behaviour | 1.7% | 2.8% | 5.3% | 3.2% |
| | Secondary | Count | $38_a$ | $54_b$ | $22_b$ | 114 |
| | | % within Level of behaviour | 63.3% | 38.0% | 28.9% | 41.0% |
| | Technical | Count | $12_a$ | $25_a$ | $13_a$ | 50 |
| | | % within Level of behaviour | 20.0% | 17.6% | 17.1% | 18.0% |
| | Professional | Count | $2_a$ | $10_a$ | $7_a$ | 19 |
| | | % within Level of behaviour | 3.3% | 7.0% | 9.2% | 6.8% |
| | University level | Count | $7_a$ | $49_b$ | $27_b$ | 83 |
| | | % within Level of behaviour | 11.7% | 34.5% | 35.5% | 29.9% |
| | No formal education | Count | $0_a$ | $0_a$ | $2_a$ | 2 |
| | | % within Level of behaviour | 0.0% | 0.0% | 2.6% | 0.7% |
| | Other (specify) | Count | $0_a$ | $0_a$ | $1_a$ | 1 |
| | | % within Level of behaviour | 0.0% | 0.0% | 1.3% | 0.4% |
| Total | | Count | 60 | 142 | 76 | 278 |
| | | % within Level of behaviour | 100.0% | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of behaviour categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

A Chi square test was conducted to test for dependence between financial behaviour level and the level of education. The hypothesis was stated as follows:

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$H_0$ = *Financial behaviour level and level of education are independent*

$H_1$ = *There is an association between financial knowledge level and level of education.*

Results of the tests are shown in Table 7.36.

**Table7.36 Chi-square Test between Financial Knowledge Level and Level of Education**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 30.156[a] | 12 | 0.003 |
| Likelihood Ratio | 31.295 | 12 | 0.002 |
| Linear-by-Linear Association | 14.834 | 1 | 0.000 |
| Number of Valid Cases | 278 | | |

a. 10 cells (47.6%) have expected count less than 5. The minimum expected count is .22.

*Source: SPSS analysis of Primary data*

Testing at 5% level of significance the decision to accept or reject the null hypothesis is based on a critical value 0f $\chi^2_{5\%}$ (12) = 21.026, thus reject $H_0$ if $\chi^2$ >21.026. In this case, results show that $\chi^2$ =30.156 and hence $\chi^2$ > 21.026. The conclusion is to reject the null hypothesis and accept the $H_1$ and conclude that there is an association between financial behaviour levels and level of education. Those with higher levels of education tend to show positive financial behavior.

## 7.5.5 Financial Behaviour Level and Business sector

A Cross tabulation was done to determine the relationship between financial behaviour levels and business sector. Findings revealed that 28.3% of respondents in the negative behaviour category were from the Manufacturing sector, 23.3% were from the Wholesale and retail sector whilst 11.7% were from the Agricultural sector. Of those with positive behaviour, 36.8% were in the Wholesale and Retail sector 13.2%, were in the Manufacturing sector and Agricultural sector. The results are presented in Table 7.37.

**Table 7.37 Cross Tabulation between Business Sector and Level of Behaviour**

| Crosstab | | | Level of behaviour | | | |
|---|---|---|---|---|---|---|
| | | | Negative | Somewhat positive | Positive | Total |
| Business Sector | Agriculture | Count | $7_a$ | $18_a$ | $10_a$ | 35 |
| | | % within Level of behaviour | 11.7% | 12.7% | 13.2% | 12.6% |
| | Wholesale and Retail | Count | $14_a$ | $49_a$ | $28_a$ | 91 |
| | | % within Level of behaviour | 23.3% | 34.5% | 36.8% | 32.7% |
| | Manufacturing | Count | $17_a$ | $12_b$ | $10_{a, b}$ | 39 |
| | | % within Level of behaviour | 28.3% | 8.5% | 13.2% | 14.0% |
| | Transport | Count | $3_a$ | $10_a$ | $2_a$ | 15 |
| | | % within Level of behaviour | 5.0% | 7.0% | 2.6% | 5.4% |
| | Construction | Count | $7_a$ | $6_a$ | $4_a$ | 17 |
| | | % within Level of behaviour | 11.7% | 4.2% | 5.3% | 6.1% |
| | Energy and Construction | Count | $0_a$ | $3_a$ | $1_a$ | 4 |
| | | % within Level of behaviour | 0.0% | 2.1% | 1.3% | 1.4% |
| | Tourism | Count | $0_a$ | $2_a$ | $3_a$ | 5 |
| | | % within Level of behaviour | 0.0% | 1.4% | 3.9% | 1.8% |
| | Art, Entertainment, Culture, Education and Sport | Count | $5_a$ | $14_a$ | $7_a$ | 26 |
| | | % within Level of behaviour | 8.3% | 9.9% | 9.2% | 9.4% |
| | Other(specify) | Count | $7_a$ | $28_a$ | $11_a$ | 46 |
| | | % within Level of behaviour | 11.7% | 19.7% | 14.5% | 16.5% |
| Total | | Count | 60 | 142 | 76 | 278 |
| | | % within Level of behaviour | 100.0% | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of behaviour categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

Further analysis was conducted using Chi-square to test dependency between financial behaviour levels and business sector. The hypothesis tested was stated as follows;

$H_0$ = *Financial behaviour level and business sector are independent.*

$H_1$ *there is an association between financial behaviour level and business sector.*

Results are presented in Table 7.38.

**Table 7.38 Chi-square Test between Financial Behaviour and Business Sector**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 26.403[a] | 16 | 0.049 |
| Likelihood Ratio | 26.188 | 16 | 0.051 |
| Linear-by-Linear Association | .009 | 1 | 0.924 |
| Number of Valid Cases | 278 | | |

a. 10 cells (37.0%) have expected count less than 5. The minimum expected count is .86.

*Source: SPSS analysis of Primary data*

At 5% level of significance and 16 degrees of freedom the critical value is 26.296. The decision to accept or reject the null hypothesis is based on the fact that if $X^2 > 26.296$ reject the null hypothesis. In this case $\chi^2 = 26.403$ hence $\chi^2 > 26.296$ therefore the decision is to reject the null hypothesis and accept the alternate hypothesis and conclude that at 5% level of significance there is an association between business sector and financial behaviour levels.

### 7.5.7 Financial Behaviour Level and Age of the Business

A cross tabulation was done between financial behaviour level and age of the business. The results are presented in Table 7.39.

**Table 7.39 Cross Tabulation between Age of the Business and Level of Behaviour**

| Crosstab | | | Level of behaviour | | | |
|---|---|---|---|---|---|---|
| | | | Negative | Somewhat positive | Positive | Total |
| Years of operation | less than a year | Count | 8[a] | 34[a] | 18[a] | 60 |
| | | % within Level of behaviour | 13.3% | 23.9% | 23.7% | 21.6% |
| | 1 to 2 years | Count | 24[a] | 35[a] | 22[a] | 81 |
| | | % within Level of behaviour | 40.0% | 24.6% | 28.9% | 29.1% |
| | 3 to 5 years | Count | 20[a] | 49[a] | 23[a] | 92 |
| | | % within Level of behaviour | 33.3% | 34.5% | 30.3% | 33.1% |
| | 6 to 10 years | Count | 5[a] | 19[a] | 11[a] | 35 |
| | | % within Level of behaviour | 8.3% | 13.4% | 14.5% | 12.6% |
| | more than 10 years | Count | 3[a] | 5[a] | 2[a] | 10 |
| | | % within Level of behaviour | 5.0% | 3.5% | 2.6% | 3.6% |
| Total | | Count | 60 | 142 | 76 | 278 |
| | | % within Level of behaviour | 100.0% | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of behaviour categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

Results show that 40% of those with negative financial behaviour have 1 to 2 years of operation, 33.3% have 3 to 5 years of operation whilst only 5% have more than 10 years of operation. Of those with positive financial behaviour 30.3% have 3-5 years of operation, 28.9% have 1 to 2 years of operation and 23.7% have less than a year of operation.

A Chi- square test was conducted to test for association between financial behaviour level and age of the business. The hypothesis tested was stated as follows;

$H_0$ = *Financial behaviour levels and age of the business are independent.*

$H_1$ = *There is an association between financial behaviour level and age of the business.*

Results are presented in Table 7.40.

**Table 7.40 Chi-square Test between Age of the Business and Financial Behaviour Level**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 7.774[a] | 8 | 0.456 |
| Likelihood Ratio | 7.952 | 8 | 0.438 |
| Linear-by-Linear Association | .201 | 1 | 0.654 |
| Number of Valid Cases | 278 | | |

a. 2 cells (13.3%) have expected count less than 5. The minimum expected count is 2.16.

*Source: SPSS analysis of Primary data*

The critical value of $\chi^2_{5\%}$ (8) = 15.507 so the decision is to reject $H_0$ if $\chi^2$ > 15.507. It is given that $\chi^2$ = 7.774. Since $\chi^2$ < 15.507 the decision is to retain $H_0$ and conclude that there is no association between financial behaviour level and years of business operation.

**7.5.8 Financial Knowledge Level and Years of Prior Business Experience**

A cross tabulation was conducted to check for relationship between financial behaviour levels and years of prior business experience. Results are presented in Table 7.41.

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**Table7.41 Cross Tabulation between Years of Prior Experience and Level of Behaviour**

| Crosstab | | | Level of behaviour | | | |
|---|---|---|---|---|---|---|
| | | | Negative | Somewhat positive | Positive | Total |
| Years of prior experience | less than 1 year | Count | 27$_a$ | 48$_a$ | 26$_a$ | 101 |
| | | % within Level of behaviour | 45.0% | 33.8% | 34.2% | 36.3% |
| | 1 to 2 years | Count | 12$_a$ | 35$_a$ | 18$_a$ | 65 |
| | | % within Level of behaviour | 20.0% | 24.6% | 23.7% | 23.4% |
| | 3 to 5 years | Count | 14$_a$ | 36$_a$ | 25$_a$ | 75 |
| | | % within Level of behaviour | 23.3% | 25.4% | 32.9% | 27.0% |
| | 6 to 10 years | Count | 3$_a$ | 10$_a$ | 3$_a$ | 16 |
| | | % within Level of behaviour | 5.0% | 7.0% | 3.9% | 5.8% |
| | more than 10 years | Count | 1$_a$ | 5$_a$ | 1$_a$ | 7 |
| | | % within Level of behaviour | 1.7% | 3.5% | 1.3% | 2.5% |
| | not applicable | Count | 3$_a$ | 8$_a$ | 3$_a$ | 14 |
| | | % within Level of behaviour | 5.0% | 5.6% | 3.9% | 5.0% |
| Total | | Count | 60 | 142 | 76 | 278 |
| | | % within Level of behaviour | 100.0% | 100.0% | 100.0% | 100.0% |

Each subscript letter denotes a subset of Level of behaviour categories whose column proportions do not differ significantly from each other at the .05 level.

*Source: SPSS analysis of Primary data*

A Chi-square test was also conducted to test dependency between financial behaviour levels and years of prior business experience. The hypothesis was stated as follows:

$H_0$ = *Financial behaviour level and years of prior business experience are independent.*

$H_1$ = *There is an association between financial behaviour level and years of prior business experience.*

The results are presented on Table 7.42.

**Table 7.42 Chi-square between Financial Behaviour Level and Prior Business Experience**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 5.755[a] | 10 | 0.835 |
| Likelihood Ratio | 5.734 | 10 | 0.837 |
| Linear-by-Linear Association | .213 | 1 | 0.644 |
| Number of Valid Cases | 278 | | |

a. 7 cells (38.9%) have expected count less than 5. The minimum expected count is 1.51.

*Source: SPSS Analysis of Primary Data*

Testing at 5% level of significance and 10 degrees of freedom, the critical value is 18.307. The decision rule is to reject H0 if $\chi^2 > 18.307$. In this case $\chi^2$ is 5.755 which is less than the critical value. Thus the decision is to retain the null hypothesis and conclude that financial behaviour and prior business experience are independent.

## 7.6 Financial Behaviour Components

The survey collected information pertaining to the following behaviours of SMEs:

- Record keeping and the person responsible for business records
- Ownership of a bank account and whether transactions are monitored regularly
- Ways of minimising bank charges and fees
- Savings, the importance of savings and how they are maintained
- Consultancy services and sources of information when making financial decisions
- Dealing with cash shortages
- Ability to meet financial obligations on time
- Timely payment of loans
- Understanding of the consequences of default
- Confidence to lodge complaints when necessary

### 7.4.5 Record Keeping

Record keeping is important for a business to keep track of transactions and to be able to identify problems on time and take corrective action (Atkinson & Messy, 2012). Indeed, financial records are a source of useful information for various business stakeholders for informed decision making. The respondents were asked whether they kept records of accounts of their businesses and to indicate the person responsible for the financial affairs of the business.

The majority of the respondents (71.6%) always kept records of their business transactions, 19.1% indicated that they did so sometimes and only 9.4% kept no records at all. These results show that SMEs acknowledge the importance of maintaining books of accounts and that the majority are doing so. They confirm the success of various efforts to improve record keeping among SMEs. High levels of record keeping can signify increasing financial and accounting knowledge.

These findings are contrary to those of several previous studies that found evidence of poor record keeping among SMEs (Barte, 2012; Maseko & Manyani, 2011; and Sucuahi, 2013). Barte (2012) reported poor record keeping among fish vendors who had no income statements and kept records informally in notebooks, pads and even on the palms of their hands. Maseko & Manyani (2011) found that although some SMEs kept records of accounts these were incomplete and were done for security and control purposes rather than for performance measurement. They found that 30% of their respondents prepared statements of income, 12% prepared statements of financial position and another 12% prepared statements of cash-flows. Only 18% did not prepare any statements at all.

Similar findings were reported by Eresia-Eke & Raath (2013); 94% of their study respondents kept financial records. In Gupta & Kaur's (2014) study, the majority of respondents (64%) also kept proper records of accounts. Similarly, Oseifuah (2010) found that 85.3% of young entrepreneurs kept records of accounting.

### 7.4.5.1 Financial knowledge and Record Keeping

Further analysis of the data were conducted to establish the degree of association between financial knowledge levels and record keeping. The results of the cross tabulation are reported in Table 7.43.

**Table7.43 Cross Tabulation of Financial Knowledge Levels and Record keeping**

| Crosstab | | | Record Keeping | | | Total |
|---|---|---|---|---|---|---|
| | | | Always | Sometimes | Not at all | |
| Knowledge Levels | Low financial knowledge | Count | 20 | 5 | 8 | 33 |
| | | % within Knowledge Levels | 60.6% | 15.2% | 24.2% | 100.0% |
| | Moderate financial knowledge | Count | 54 | 19 | 13 | 86 |
| | | % within Knowledge Levels | 62.8% | 22.1% | 15.1% | 100.0% |
| | High financial knowledge | Count | 125 | 29 | 5 | 159 |
| | | % within Knowledge Levels | 78.6% | 18.2% | 3.1% | 100.0% |
| Total | | Count | 199 | 53 | 26 | 278 |
| | | % within Knowledge Levels | 71.6% | 19.1% | 9.4% | 100.0% |

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The results of the cross tabulation of financial knowledge levels and record keeping by SMEs show that 60.6% of those with low financial literacy levels always kept records, 62.8% of those with moderate financial literacy knowledge always kept records and 78.6% of those with high financial literacy levels always kept records. There is a notable increase in the number of respondents that always kept records of accounts as financial knowledge levels increased. The tendency to keep financial records increased with an increase in financial knowledge.

Chi-square tests were also conducted to test the association between financial knowledge levels and record keeping behaviour. The hypothesis tested was:

$H_0$ = *Financial knowledge level and record keeping are independent.*

$H_1$ = *there is an association between financial knowledge level and record keeping.*

The results are shown in Table 7.44.

**Table 7.44 Chi square Tests between Financial Knowledge and Record keeping**

| Chi square tests | Value | Df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 20.748[a] | 4 | 0.000 |
| Likelihood Ratio | 20.180 | 4 | 0.000 |
| Linear-by-Linear Association | 15.322 | 1 | 0.000 |
| N of Valid Cases | 278 | | |

a. 1 cells (11.1%) have expected count less than 5. The minimum expected count is 3.09.

*Source: SPSS Analysis of Primary data*

For a Chi-square test with four degrees of freedom to be significant at 5% level of significance, it has to take a value that is 9.488 or more. In this case the calculated value is 20.748 showing that there is an association between financial knowledge levels and record keeping and thus the decision is to reject the null hypothesis and accept the alternate hypothesis and conclude that there is an association between financial knowledge level and record keeping. Those who have high financial knowledge levels tend to always keep records of accounts. Thus there was a positive relationship between financial knowledge and record keeping.

*7.4.5.2* **Responsibility for Record Keeping**

Data were also collected to establish who was responsible for maintaining business records. To a certain extent the accuracy and the authenticity of financial records are dependent on the person responsible for record keeping. Hence the data were analysed to identify the key person keeping accounting records. The results are presented in Table 7.45.

**Table 7.45 Responsibility for Record Keeping**

| Person Responsible | Frequency | Percent |
|---|---|---|
| Business owner | 102 | 36.7 |
| Accountant | 115 | 41.4 |
| Shared responsibility | 57 | 20.5 |
| No one | 1 | 0.4 |
| Don't know | 3 | 1.1 |
| **Total** | **278** | **100** |

*Source: SPSS analysis of Primary data*

The survey established that in 36.7% of the cases, record keeping was the responsibility of the business owner, the accountant was responsible in 41.4% of the cases and 20.5% indicated shared responsibility whilst only 1.4% indicated that no one was responsible or that they were unaware of who kept the records. This shows considerable reliance on financial experts such as accountants to keep financial records. A very insignificant proportion of SMEs indicated that they had no knowledge of who was responsible for maintaining financial records. This shows a significant shift in financial behaviour as most SMEs attach considerable importance to maintaining financial records.

These results confirm the findings of Yahya & Susela (2011) who noted that most SMEs rely on experts to prepare their financial reports following the realisation that they lack the skills required to do so themselves. Abdel's (2010) study revealed that only 30% of the SMEs surveyed were involved in financial planning, though to a lesser extent. 65% of Maseko & Manyani's (2011) respondents reported that business records were prepared by the owner-manager, 15% by a full time accountant and 20% by a consultant. Gupta & Kaur (2014) reported

that 64% of their respondents used the services of professional accountants. The ANZ Banking Group (2008) found that 68% of the adult population surveyed reported that financial management was the responsibility of one person and 27% reported sharing the responsibility. However, single parents who had sole responsibility for financial management had financial literacy scores below the minimum (74.6% for males and 80.9% for females, against a mean score of 83.1).

### 7.4.6 Ownership of a Bank Account

The survey also collected data to establish whether SMEs had bank accounts in the name of the business, the frequency of checking the accounts and the information that was critical to them in those accounts. Ownership of bank accounts partly signifies SMEs' level of financial inclusion which is a key component of financial competence. The survey established that slightly less than half of the respondents (46.4%) had a bank account in the name of the business and 53.6% did not.

These results confirm those of the Finmark Trust (2013) that found that 43% of SMEs were financially excluded. Their high level of financial exclusion can be explained by low turnover, irregular income, information asymmetry, a lack of financial awareness and high interest rates and bank charges (RBZ, 2016). Other researchers such as Wachira & Kihiu (2012) have found that distance from a bank inhibits utilization of financial services. Fatoki's (2014) study established that whilst 97% of respondents had personal bank accounts, only 47% had a business bank account and only 32% of those banked their daily takings. In contrast, Gupta & Kaur (2014) found that all (100%) their respondents had savings accounts which were opened due to good relations with bank staff. The ANZ Banking Group (2008) reported that 97% of the respondents had ordinary bank accounts, while Finmark Trust (2010) found that 58.2% of business owners were financially included and 46.9% used bank products. In Singapore, Media Research Consultancy reported that only 4% of respondents did not have a bank account.

### 7.4.6.1 Financial knowledge and use of Bank Accounts

A cross tabulation between financial knowledge levels and ownership of a bank account was conducted to determine whether there is an association between the two. The results are presented in Table 7.46.

**Table 7.46 Cross Tabulation of Financial Knowledge Levels and Bank Account Ownership**

| Crosstab | | | Bank Account Ownership | | Total |
|---|---|---|---|---|---|
| | | | Yes | No | |
| Knowledge Levels | Low financial knowledge | Count | 21 | 12 | 33 |
| | | % within Knowledge Levels | 63.6% | 36.4% | 100.0% |
| | Moderate financial knowledge | Count | 36 | 50 | 86 |
| | | % within Knowledge Levels | 41.9% | 58.1% | 100.0% |
| | High financial knowledge | Count | 72 | 87 | 159 |
| | | % within Knowledge Levels | 45.3% | 54.7% | 100.0% |
| Total | | Count | 129 | 149 | 278 |
| | | % within Knowledge Levels | 46.4% | 53.6% | 100.0% |

*Source: SPSS Analysis of Primary data*

The results of the cross tabulation showed that 63.6% of those with low financial knowledge had bank accounts, whilst 41.9% of those in the moderate financial knowledge category had bank accounts and only 45.3% of respondents with high financial knowledge levels had bank accounts. No distinct relationship was evident. Therefore, a Chi-square test was conducted to determine further whether there was an association between bank account ownership and financial knowledge levels. The hypothesis tested was:

$H_0$ = *Financial knowledge levels and bank account ownership are independent.*

$H_1$ = *there is an association between financial knowledge levels and bank account ownership.*

The results are presented in Table 7.47.

**Table 7.47 Chi-Square tests between Financial Knowledge Levels and Bank Account Usage**

| Chi-Square tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 4.734[a] | 2 | 0.094 |
| Likelihood Ratio | 4.752 | 2 | 0.093 |
| Linear-by-Linear Association | 1.656 | 1 | 0.198 |
| N of Valid Cases | 278 | | |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 15.31.

*Source: SPSS Analysis of Primary data*

Testing at 5% level of significance and 2 degrees of freedom, the critical value is given as 5.99. The decision rule is reject $H_0$ if $\chi^2 > 5.99$. In this case the Chi-Square value is 4.734 and thus the decision is to retain the $H_0$ and hence conclude that there was no association between financial knowledge levels and ownership of a bank account.

### 7.4.6.2 Frequency of checking bank accounts

Respondents who had bank accounts were requested to indicate how often they monitored their accounts. Monitoring bank transactions is considered critical as a business needs to be aware of anticipated withdrawals, and to check transactions to note any errors or fraudulent activities (Atkinson & Messy, 2012). Monitoring financial transactions is also important to ensure the safety of savings and timeous payment of obligations and acts as a barometer of the level of importance attached to such records. Hence, data were collected on the frequency of checking bank accounts as a critical financial behaviour component.

Results showed that some of the business owners kept a close watch on their bank accounts with 23% checking very often and 21.2% checking often. Very few business owners (30.6%) did not monitor their accounts, or only did so rarely. This shows that a majority of those who had bank accounts kept a close eye on transactions to ensure the safety of funds. These results are consistent with those recorded in OECD countries where only 1% to 8% of the respondents did not keep an eye on their finances (Atkinson & Messy, 2012). They are also similar to those reported by the ANZ Banking Group (2008) where 76% of the respondents kept a close eye on expenses and only 23% did not show any concern. A majority of those who did not closely monitor their accounts were in lowest financial literacy quintile. Younger males (under 35) were least likely to keep a close eye (66%) and females aged 45-69 were more likely to closely monitor transactions. About 93% of the respondents in this survey also reported that they frequently checked their credit card and store card transactions indicating a high level of business literacy amongst SMEs.

### 7.4.6.3 Critical aspects on a Bank Statement

Further questions were asked of the respondents that checked their accounts to establish the kind of information about which they were mainly concerned. This aimed to determine whether the SMEs were aware of the kind of information contained in a bank statement and whether they were able to interpret it. The results are reported in Table 7.48

**Table 7.48 Reasons for Checking Bank Account**

| Reasons for checking bank account | % response |
|---|---|
| Account balance | 49.3 |
| Account fees | 10.8 |
| Interest charged | 22.3 |
| Transactions  are correct | 39.2 |
| Amount spent | 16.5 |
| Available balance | 10.1 |
| Foreign exchange fees | 5.0 |
| Date of transaction | 7.9 |
| Payment due | 4.7 |
| Nothing | 11.9 |
| Other | 4.0 |

*Source: SPSS Analysis of Primary Data*

Table 7.48 shows that, those who checked their bank accounts were mainly interested in establishing their balance (49.3%) and checking whether transactions were captured correctly (39.2%). Some respondents indicated that they checked the bank accounts to see the interest charged (22.3%), account fees paid (10.8%), amount spent (16.5%), available credit (10.1%) and the date of transactions (7.9%). About 5% of the respondents indicated that they checked their bank accounts to see foreign exchange fees, 4.9% checked whether payments were due and 11.9% did not have any reason to check their bank accounts.

The ANZ Banking Group's (2008) survey revealed that 74% of the respondents checked credit card transactions to check for fraudulent activities whilst 28% checked whether transactions were correct. Only 7% did not check their transactions. In a study conducted by Atkinson, McKay, Kempson, & Collard (2006), 42% of the respondents kept and checked receipts against statement entries, 36% checked the details of the entries to establish whether they were correct, 16% focused on the final balance in the account and only 6% ignored statements. Fifty-nine per cent of the respondents indicated that they frequently checked their statements. The findings show

that respondents were mainly concerned about bank balances and the accuracy of transactions captured on the bank statements.

### 7.4.6.4 Reasons for not checking transactions

Respondents who did not check their bank accounts were asked to indicate why this was the case. Such questions were deemed important for policy formulation as they provide an indication as to what financial institutions need to show on bank statements. The results are presented in Table 7.49.

**Table 7.49 Reasons for Not Checking Bank Transactions**

| Reason | % response |
|---|---|
| Can't be bothered | 24.5 |
| Don't have time | 8.3 |
| Other priorities | 5.4 |
| Assumed correct | 17.3 |
| Too difficult to understand | 4.0 |
| Someone else reads them | 9.0 |
| Find it depressing | 3.2 |
| Other | 5.0 |

*Source: SPSS Analysis of Primary Data*

Of the total respondents 24.5% indicated that they did not check their bank accounts because it was a bother; 17.3% indicated that they assumed the bank statements were correct; 8.3% reported that they did not have time and 9% had someone else read them on their behalf. Some of the respondents (5.4%) indicated that they did not check bank accounts due to other priorities and 3.2% indicated that checking those statements was depressing, often causing worries about how much they had spent. This shows that about 38.2% of the respondents did not monitor their account due to lack of interest. The ANZ Banking Group's (2008) survey found that 23% of the respondents did not check transactions due to lack of interest and 17% assumed that the transactions were correct; these findings are similar to those in this study.

### 7.4.6.5 Minimising Bank charges

The ANZ Banking Group (2008) survey found that the fees and charges associated with everyday banking impacted on the cost of conducting financial transactions, owning financial products and the returns expected from investments. Lusardi et al. (2012) have suggested that knowledge of bank fees and charges is important so that consumers can come up with ways to reduce these fees. Awareness of bank charges is also important for cost minimisation and making informed choices. Hence the survey collected data on the steps taken by SMEs to minimise fees and charges. The results are presented in Table 7.50.

**Table 7.50 Minimising Bank Fees and Charges**

| Minimising Bank fees & charges | % Responses |
|---|---|
| Minimise transactions | 40.3 |
| Use internet & telephone banking | 16.5 |
| Minimise branch visits | 2.5 |
| Keep minimum bank balance | 7.2 |
| Make cheque payments | 2.2 |
| Nothing at all | 21.2 |

*Source: SPSS Analysis of Primary Data*

The table show that 40.3% of the respondents tried to reduce bank fees and charges by minimising the number of transactions; 16.5% used internet and telephone banking; 7.2% kept the bank balance at a minimum; 2.5% minimised branch visits; 2.2% made payments using cheques and 21.2% were not concerned at all. Thus, the majority of the respondents were aware of the need to reduce costs as these would mean a claim on business profits. These findings are consistent with those by ANZ (2008) where 81% of the adult population surveyed took one or more steps to minimise banking fees and costs. About 91% of the financially literate respondents took steps to minimise fees and charges, showing a strong relationship between financial literacy and cost minimisation.

### 7.4.7 Savings

Savings are considered to be a key determinant of financial behaviour as they provide an indication of the ability of the business to meet unexpected expenses. Savings are also important

as they build financial security and reduce dependence on credit facilities which are often costly (Atkinson & Messy, 2012).

### 7.4.7.1 Importance of Savings

Respondents also provided information on whether they considered savings important. Previous research indicated that savings are important to smooth consumption, provide for retirement in old age and to finance unexpected income shortfalls. The majority of the respondents indicated that savings were either important or very important (89.5%), and only 10.5% were of the opinion that savings were not important.

Although some businesses indicated that they did not save, the results in the current research show that the majority considered savings to be critical. These results are in contrast to those of Kotze and Smit (2009) who found that savings were not considered a priority. 37% of respondents were more concerned about the money they owed (debt), whilst 50% were concerned about money owed to them. They established that 62.1% of the respondents' total disposable income was used to pay debt, leaving only 37.9% as disposable income for monthly expenditure and savings, hence there would not be much to save.

The current survey sought to establish how many of the businesses kept any savings. The findings revealed that 81% of the respondents had some form of savings and only 19% had none. These results show that the respondents appreciate the importance of savings to cover future and unanticipated shortfalls in income, thereby smoothing consumption. Those who did not save could be finding it difficult to do so due to low and uncertain income flows. The results are consistent with those recorded by ANZ Banking Group (2008) where 72% of the respondents saved and only 10% reported having no savings at all.

In this study, 86% of those who saved were in quintiles 4 and 5 where respondents had high financial literacy scores, showing a close link between financial literacy and savings behaviour. Those aged between 18-24 years were more likely to save than the older population (60+ years). These results are contrary to those reported in the UK by Atkinson et al. (2006) who indicated that 43% of their respondents had no savings and were mainly young people. Amongst the older people, 14% had savings that were equal to 10 times their income. However, a study conducted by Kotze and Smit (2009) in South Africa, showed that 60% of the respondents did not set

money aside for savings and 37.8% indicated that they sometimes or never saved for retirement. A large proportion of the respondents indicated that they did not save because they did not have enough money to do so whilst 13.2% stated that they had not thought about saving.

Significant savings were also noted in Oseifuah's (2010) study where 64.8% of the respondents indicated that they saved money whenever it was possible. In another study by Gupta & Kaur (2014), 24% of the respondents stated that they had no plans to save, while 46% said that they would first meet their daily needs and save the balance. Sucuahi (2013) found that a majority of respondents did not deposit their savings in a bank account and highlighted that whilst a number knew that savings were important and had the desire to save, they were not doing so for economic reasons. Xu & Zia (2012) reported that in Malaysia 97% of the respondents had savings, while 87% and 99% of those in Germany and Singapore respectively had savings (Media Research Consultancy, 2005). Low savings were noted in Hungary (27%), Armenia (36%) and Estonia (36%).

### 7.4.7.2 Maintaining Savings

Respondents were then requested to provide information pertaining to how these savings were kept. The responses revealed that 55.4% kept their savings with the bank, 21.2% at home, 5.4% used a savings club, 9.7% bought some form of an asset as a saving which would be disposed of later to liquidate the money, and only 8.3% did not have any savings. A significant proportion of the respondents did not keep their savings at the bank mainly because of the loss of confidence in the banking sector following several bank closures in Zimbabwe. Compared with the results from the Finmark Trust (2013), an improvement was noted. The survey established that 17% of the respondents kept their savings at the bank and 65% of SMEs were reported to keep their savings at home, 31% maintained their savings with a club and 23% saved in the form of an asset to dispose of later. There is still evidence of the use of the informal financial sector by SMEs as a significant number kept their savings with informal groups. The findings are presented in Table 7.51 overleaf.

These results contradict those of Atkinson et al. (2006) that established that 9% of the respondents kept their savings at home, 4% gave their savings to somebody else; 2% kept them with a savings and loans club and the rest kept their savings at a bank. However, they confirm

the findings of Demirguc-kunt, Klapper, Singer, & Oidheusden (2015) who established that financial inclusion was higher in developed countries than in Africa.

**Table 7.51 Ways of Maintaining Savings**

| Savings Method | Frequency | Percent |
|---|---|---|
| Save with a bank | 154 | 55.4 |
| Keep at home | 59 | 21.2 |
| Save with a club | 15 | 5.4 |
| Buy something to dispose of later | 27 | 9.7 |
| Other | 13 | 4.7 |

*Source: SPSS Analysis of Primary Data*

### 7.4.7.3 Financial knowledge level and Savings

A cross tabulation between savings and financial knowledge levels was conducted to determine the association between the two. The results are presented in Table 7.52.

**Table 7.52 Cross Tabulation between Financial Knowledge Levels and Savings**

| Crosstab | | | Savings | | Total |
|---|---|---|---|---|---|
| | | | Yes | No | |
| Knowledge Levels | Low financial knowledge | Count | 26 | 7 | 33 |
| | | % within Knowledge Levels | 78.8% | 21.2% | 100.0% |
| | Moderate financial knowledge | Count | 65 | 21 | 86 |
| | | % within Knowledge Levels | 75.6% | 24.4% | 100.0% |
| | High financial knowledge | Count | 134 | 25 | 159 |
| | | % within Knowledge Levels | 84.3% | 15.7% | 100.0% |
| Total | | Count | 225 | 53 | 278 |
| | | % within Knowledge Levels | 80.9% | 19.1% | 100.0% |

*Source: SPSS Analysis of Primary Data*

The results of the cross tabulation show that 78.8% of respondents in the low financial knowledge category maintained savings, 75.6% in the moderate financial knowledge category had savings and 84.3% of those in the high financial knowledge category confirmed that they had savings. No pattern could be established from these results, therefore Chi-square tests were conducted. The hypothesis was stated as:

$H_0$ = *there is no association between Financial Knowledge Levels and Savings.*

*H₁= there is an association between Financial Knowledge Levels and Savings.*

The findings are reported in Table 7.53.

**Table 7.53 Chi-Square Tests between Financial Knowledge Levels and Savings**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 2.847ᵃ | 2 | 0.241 |
| Likelihood Ratio | 2.801 | 2 | 0.246 |
| Linear-by-Linear Association | 1.736 | 1 | 0.188 |
| N of Valid Cases | 278 | | |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.29.

*Source: SPSS Analysis of Primary Data*

For the Chi-Square value with two degrees of freedom to be significant at 5% level of significance, the value has to be 5.99 or more. In this case the Chi-Square value is 2.847, thus the decision is to retain the null hypothesis and conclude that savings and financial knowledge levels are independent.

### 7.4.8 Investment Behaviour

Investments are considered to be a core financial skill and an important element of financial literacy. The respondents were asked to indicate the type of investments they owned and why they had selected them. The responses are presented in Table 7.54.

**Table 7.54 Investments Owned**

| Investment | Frequency | Percent |
|---|---|---|
| Property | 126 | 45.4 |
| Shares | 70 | 25.2 |
| Term deposits | 12 | 4.3 |
| Unit trusts | 11 | 4.0 |
| Other (specify) | 9 | 3.2 |
| None | 47 | 16.9 |
| Can't recall | 3 | 1.1 |
| **Total** | **278** | **100** |

*Source: SPSS Analysis of Primary Data*

The findings show that nearly half of the respondents invested in property (45%), about 25.2% invested in shares, 4% invested in unit trusts, 4.3% in term deposits, and 21.2% had no investments. Thus, most of the respondents had some form of investments, with assets (property) dominating as these are deemed safe in terms of a better risk-return profile and appreciation in value over time. Similar research by Abreu & Mendes (2010) found a low level of portfolio diversification by European respondents with an average portfolio size of 2.6. Some researchers (Barber et al., 2003; Goetzmann & Kumar, 2001) have noted that investors keep their wealth in the form of assets with most investments concentrated in equity markets. In Singapore, 21% of the respondents with investments had invested in stocks, 19% in unit trusts and 4% in property (Media Research Consultancy, 2005). These results are different from those of the current study.

### 7.4.8.1 Reasons for Making Investments

Those who had indicated that they had investments were asked to give reasons for doing so. The findings are presented in Table 7.55.

**Table 7.55 Reasons for making investments**

| Reason for Investing | Responses (%) |
|---|---|
| Accessibility | 19.8 |
| Risk diversification | 32.0 |
| Low risk | 20.1 |
| Long term returns | 29.9 |
| Saving for the future | 21.6 |
| Nothing | 6.5 |
| Other | 3.2 |

*Source: SPSS Analysis of Primary Data*

The findings reveal that respondents invested in anticipation of positive returns (29.9%) and due to the need to diversify risk (32%). Others indicated that they made investments as a form of future savings (21.6%), or because they were considered low risk (20.1%), and 19.8% indicated that they had investments because of accessibility. The results show that SMEs held investments for a number of reasons that make business sense.

**7.4.9 Sources of Information for Financial Decision Making**

The use of information for decision making is considered important for a financially literate consumer. It is assumed that the financially literate use a variety of information for decision making. However, there is no conclusive empirical evidence to support this conclusion, hence the need for research on this issue. To this effect, the respondents were asked to provide information on the sources of information they used to make decisions. The results are presented in Table 7.56.

**Table 7.56 Sources of Information**

| Sources | Frequency (%) |
|---|---|
| Newspapers | 22.7 |
| Books | 36.0 |
| Internet | 21.6 |
| Workshops | 35.6 |
| Other | 26.3 |

*Source: SPSS Analysis of Primary data*

As shown in Table 7.56 the respondents used workshops (35.6%), books (36%), newspapers (22.7%) and the internet (21.6%) as sources of information. No single source seemed to be a major source of information. This shows that SMEs put some effort in trying to find information to assist decision making, although to a limited extent. The results of this study contradict Cox, Brounen, & Neuteboom's (2014) finding that financially literate individuals actively seek information for decision making. They found that the main sources of information for the participants were newspapers, TV and books and that only 8% used the internet. Those with more assets used newspapers as a source of information while the less educated used their parents, public media and friends. Similar findings were reported by Piprek (2009) who noted that most SMEs were not connected to the business world, and hence lacked the information they needed for business growth. In a study by ANZ Banking Group (2008), 42% of the respondents used newspapers, 26% used books, 27% the internet and 15% seminars as sources of information for business decisions.

### 7.4.9.1 Consultancy Services Used

Financial literacy involves non-cognitive attributes such as the drive to seek additional knowledge in order to make sound decisions (PISA, 2012). This study sought to establish whether SMEs used any consultancy services to improve business decision making and also determine where the information was obtained from. The findings are reported in Table 7.57.

**Table 7.57 Consultancy Services Used**

| Service | Frequency | Percent |
|---|---|---|
| Accountant | 45 | 16.2 |
| Brokers | 10 | 3.6 |
| Taxation specialists | 6 | 2.2 |
| Financial advisor | 43 | 15.5 |
| Family/friends | 93 | 33.5 |
| No one | 81 | 29.1 |
| **Total** | **278** | **100** |

*Source: SPSS Analysis of Primary Data*

The results show low levels of consultation with 33.5% of the respondents indicating that they consulted family and friends to make financial decisions whilst only 16.2% consulted accountants and 15.5% financial advisors. About 29% of the respondents indicated that they did not consult anyone when making financial decisions. The results suggest that most SMEs do not use financial advisory services.

These results support Bernheim (1995) and Kruger's (1999) suggestion that consumers may not see the need for financial advice and hence may not seek out consultancy services. In this study a third of the respondents used family and friends as their sources of business advice, results which are similar to those obtained by Calcagno & Monticone (2015) who found that the sources of financial advice for consumers were banks, family and friends (12.4%) newspapers (23.6%), TV and the radio (26.2%). Lusardi & Mitchell (2007) found that most individuals rely on the help of friends and family for their financial decisions. Van Rooij, Lusardi, & Alessie (2007) showed

that those with low financial literacy are more likely to rely on family and friends for advice, while those with high financial literacy levels use newspapers, books and the internet. ANZ Banking Group (2008) found that 47% of the respondents consulted family and friends for financial advice. The results of the study contradict the ANZ Banking Group's (2008) finding that accountants (64%) were a common source of financial advice. In this study only 2.2% of the respondents used a tax specialist for advice compared with 45% of those in the ANZ Banking Group (2008) survey. In the same study 40% of the respondents were reported to have not used any source of information; the majority of whom had low levels of financial literacy.

The data were further analyzed to establish how many sources each respondent consulted for business decision making. The findings are reported in Table 7.58.

**Table 7.58 Number of Sources for Consultancy**

| Number of Sources | Frequency | Percent |
|---|---|---|
| None | 80 | 28.8 |
| One source | 108 | 38.8 |
| Two sources | 60 | 21.6 |
| Three sources | 25 | 9.0 |
| Four sources | 5 | 1.8 |
| **Total** | **278** | **100.0** |

*Source: SPSS Analysis of Primary Data*

The results show that 38.8% of the respondents consulted one source, 21.8% used two sources, 9% drew on three sources and 1.8% used four sources. This shows limited use of consultancy services mainly due to the costs involved. A significant proportion of the respondents did not seek any advice whilst others used friends and relatives as business advisors as these can be consulted at no or minimal cost. In contrast, in the ANZ Banking Group (2008) survey, 86% of the respondents had consulted one or more sources, and only 14% had not sought any advice, the majority of whom had low levels of financial literacy.

### 7.4.9.2 *Financial Knowledge Levels and Financial Advice Seeking*

A cross tabulation was done to determine the existence of an association between financial knowledge levels and the extent to which respondents sought financial advisory services. The findings are reported in Table 7.59.

**Table 7.59 Cross Tabulation between Financial Knowledge Levels and Consultancy Services used**

| Crosstab | | | Consultancy Score | | | | | Total |
|---|---|---|---|---|---|---|---|---|
| | | | None | One source | Two sources | Three sources | Four sources | |
| Knowledge Levels | Low financial knowledge | Count | 17 | 9 | 5 | 2 | 0 | 33 |
| | | % within Knowledge Levels | 51.5% | 27.3% | 15.2% | 6.1% | 0.0% | 100.0% |
| | Moderate financial knowledge | Count | 29 | 37 | 18 | 1 | 1 | 86 |
| | | % within Knowledge Levels | 33.7% | 43.0% | 20.9% | 1.2% | 1.2% | 100.0% |
| | High financial knowledge | Count | 34 | 62 | 37 | 22 | 4 | 159 |
| | | % within Knowledge Levels | 21.4% | 39.0% | 23.3% | 13.8% | 2.5% | 100.0% |
| Total | | Count | 80 | 108 | 60 | 25 | 5 | 278 |
| | | % within Knowledge Levels | 28.8% | 38.8% | 21.6% | 9.0% | 1.8% | 100.0% |

*Source: SPSS Analysis of Primary Data*

The findings show that about half (51.5%) of those with low financial knowledge did not use any consultancy services and only 21.4% of those in the high financial knowledge category did not seek any financial advice. Nearly a quarter of respondents in the high financial knowledge category (23.3%) used two sources of financial advice whilst 27.3% of the respondents in the low financial knowledge category used consultancy services. These results confirm the findings of Calgagno & Monticone (2015) and Collins (2012) who established that those with low levels of financial literacy did not seek any investment advice. Collins (2012) established that financial literacy and financial advice complemented each other as those with higher levels of financial literacy were more likely to seek investment advice.

Further data analysis was conducted to establish the existence of an association between the use of consultancy services and financial knowledge levels. A Chi-Square test was conducted were the following hypothesis was tested:

$H_0$ = *Consultancy services and financial knowledge levels are independent*

$H_1$ = *There is an association between the use of consultancy services and financial knowledge levels*

The results are shown in Table 7.60.

**Table 7.60 Chi-Square Tests for Consultancy Services and Financial Knowledge Levels**

| Chi-Square Tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 23.632[a] | 8 | 0.003 |
| Likelihood Ratio | 26.477 | 8 | 0.001 |
| Linear-by-Linear Association | 16.060 | 1 | 0.000 |
| Number of Valid Cases | 278 | | |

a. 4 cells (26.7%) have expected count less than 5. The minimum expected count is .59.

*Source: SPSS Analysis of Primary Data*

For a Chi-Square test with 8 degrees of freedom at 5% level of significance the value should be 15.51 or greater for there to be a significant relationship. In this case the Chi-square value is 23.632 with a p-value of 0.003, hence the decision is to reject $H_0$ and accept the $H_1$ and conclude that there is an association between financial knowledge levels and the use of consultancy services for decision making. It is the financially knowledgeable SMEs who actively seek financial advice.

Scholars have not reached consensus on whether financial literacy and financial advice are substitutes or complements. Disney, Gathergood, & Weber (2015) found that financial literacy and financial advice were substitutes as financial literacy reduced the probability of seeking financial advice. On the other hand, Collins (2012) concluded that financial literacy and financial

advice were complements as people with high levels of financial literacy were found to use more financial advisory services.

## 7.5 Principal Component Analysis for financial behaviour

As noted earlier on, financial behaviour was measured using fifteen variables. Principal component analysis was used to derive a small number of variables that can convey the same information about the financial behaviour of the respondents. To determine the adequacy of the sample, KMO and Bartlett's test were conducted and Table 7.61 is a diagrammatical presentation of the results.

**Table 7.61 KMO and Bartlett's Test for Financial Behaviour**

| KMO and Bartlett's Test | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.636 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 426.385 |
| | df | 105 |
| | Sig. | 0.000 |

Extraction Method: Principal Component Analysis.

*Source: SPSS analysis of Primary data*

The KMO which tests the adequacy of the sample was 0.64, and according to the rule of thumb, the results show that the sample is acceptable for a factor analysis. Bartlett's test of sphericity was significant (p=0.000), indicating that correlations are near zero. The two results confirm that results of the principal component analysis would be useful and hence the analysis was conducted.

Principal component analysis was conducted to assess how the fifteen financial behaviour variables clustered. Of the fifteen variables that were under consideration as explaining financial behaviour six components with eigenvalues above 1 were identified as the key factors explaining the financial behaviour of SMEs. The results of the analysis are presented in Table 7.62.

The analysis extracted six components that explained the financial behaviour of SMEs. These components had Eigenvalues that are above 1. The first component, ownership of a bank account accounted for 16,7% of the total variance, component two, record keeping accounted for 10.9% of the total variance, component three, monitoring transactions accounted for 8.7% of the total variance, component four, savings accounted for 7.9% of the total variance, component five, consultancy accounted for 7% of the total variance, and component six, seeking financial advice, accounted for 6.7% of the variance. These six factors are the key components that explain the financial behaviour of SMEs.

**Table 7.62 Total Variance Explained for Financial Behaviour**

| Total Variance Explained | | | | | |
|---|---|---|---|---|---|
| **Component** | **Initial Eigenvalues** | | | **Extraction Sums of Squared Loadings** | |
| | **Total** | **% of Variance** | **Cumulative %** | **Total** | **% of Variance** |
| 1 | 2.505 | 16.702 | 16.702 | 2.505 | 16.702 |
| 2 | 1.639 | 10.926 | 27.628 | 1.639 | 10.926 |
| 3 | 1.310 | 8.733 | 36.360 | 1.310 | 8.733 |
| 4 | 1.194 | 7.963 | 44.324 | 1.194 | 7.963 |
| 5 | 1.053 | 7.023 | 51.347 | 1.053 | 7.023 |
| 6 | 1.017 | 6.782 | 58.128 | 1.017 | 6.782 |
| 7 | 0.994 | 6.625 | 64.753 | | |
| 8 | 0.887 | 5.913 | 70.667 | | |
| 9 | 0.811 | 5.409 | 76.076 | | |
| 10 | 0.755 | 5.035 | 81.112 | | |
| 11 | 0.672 | 4.480 | 85.592 | | |
| 12 | 0.631 | 4.206 | 89.798 | | |
| 13 | 0.562 | 3.746 | 93.544 | | |
| 14 | 0.499 | 3.327 | 96.871 | | |
| 15 | 0.469 | 3.129 | 100.000 | | |

Extraction method: Principal Component Analysis

*Source: SPSS analysis of Primary Data*

A scree plot was also extracted to confirm the results of the total variance explained. The scree plot is a graph of the eigenvalues against all the factors which helps in determining the factors

that can be retained. Figure 7.3 is a graphical presentation of the scree plot. From the graphical presentation it can be noted that at component 6 and 7 the graph begins to flatten out and eigenvalues fall below 1. This confirms that only 6 variables are significant in explaining the financial behaviour of SMEs.
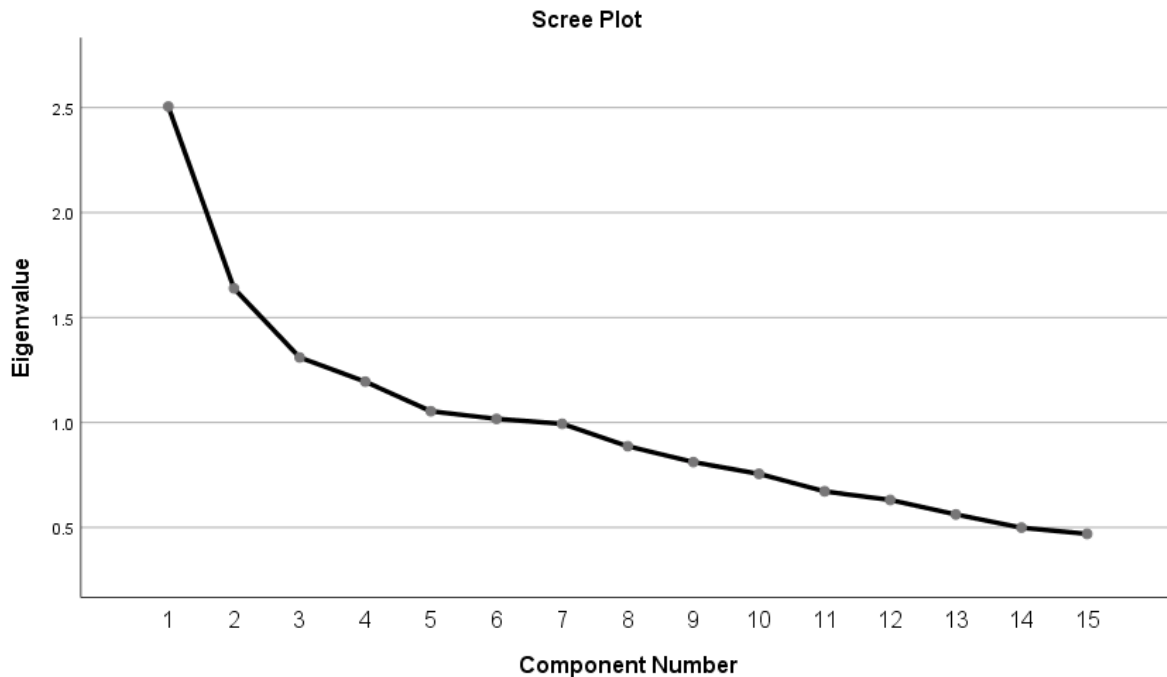


**Figure 7.3 Scree Plot for financial behaviour**

The rotated component matrix shows the factor loadings of all the variables. It can be noted from the table that the first six variables have high factor loadings for component 1 and for the remaining six components. The analysis shows that the variables that explain financial knowledge for SMEs are their ownership of bank accounts, record keeping, monitoring transaction, savings, consultancy and seeking advice. This can be seen in Table 7.63 overleaf.

**Table 7.63 Principal Component Matrix for Financial Behaviour**

| | Component | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| BEH3 ownership of bank account | **0.542** | -0.476 | 0.262 | -0.184 | -0.122 | -0.185 |
| BEH2 record keeping | **0.535** | 0.127 | 0.195 | -0.172 | -0.027 | -0.087 |
| BEH4 monitoring transactions | **0.521** | -0.441 | 0.038 | -0.296 | -0.078 | -0.177 |
| BEH6 Savings | **0.513** | 0.320 | -0.252 | -0.420 | -0.066 | 0.062 |
| BEH10 Consultancy | **0.512** | -0.035 | 0.038 | 0.309 | 0.247 | 0.014 |
| BEH9 seeking advice | **0.511** | 0.072 | -0.305 | 0.197 | -0.391 | -0.184 |
| BEH7 maintaining savings | 0.446 | -0.312 | 0.183 | -0.088 | 0.445 | 0.156 |
| BEH14 timely payment of loans | 0.175 | -0.594 | -0.295 | 0.180 | 0.140 | 0.233 |
| BEH12 Cash shortages | 0.111 | 0.403 | -0.049 | -0.289 | -0.053 | 0.262 |
| BEH16 current financial situation | 0.083 | 0.285 | 0.792 | -0.137 | -0.015 | 0.033 |
| BEH15 loan defaults | 0.410 | 0.117 | -0.051 | 0.566 | -00.120 | -0.028 |
| BEH13 timely payment of bills | 0.362 | 0.258 | 0.337 | 0.462 | 0.086 | 0.355 |
| BEH8 importance of savings | 0.313 | 0.357 | -0.395 | -0.183 | 0.566 | 0.128 |
| BEH11 complaints | 0.424 | 0.177 | -0.138 | -0.045 | -0.452 | 0.335 |
| BEH1 business affairs | 0.207 | 0.399 | -0.047 | 0.143 | 0.215 | -0.708 |

Extraction Method: Principal Component Analysis.[a]

*Source: SPSS analysis of Primary Data*

## 7.6 Financial knowledge and Financial Behaviour

A correlation analysis between financial knowledge score and financial behaviour score was conducted to determine the degree of association between the two variables. The hypothesis tested was:

$H_0$ = *There is no association between financial knowledge and financial behaviour.*

$H_1$ = *There is an association between financial knowledge and financial behaviour.*

The results are reported in Table 7.64

**Table 7.64 Correlation between Financial Knowledge Score and Financial Behaviour Score**

| Correlation | | Financial Knowledge Score (%) |
|---|---|---|
| **Behaviour Score** | Pearson Correlation | 0.186** |
| | Sig. (2-tailed) | 0.002 |
| | N | 278 |

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

*Source: SPSS Analysis of Primary Data*

The results show a correlation coefficient of 0.186 with a p-value of 0.002. This shows that there is a significant weak positive relationship between financial knowledge and financial behaviour. While positive financial behaviour is associated with high financial literacy, the relationship is weak.

## 7.7 Chapter Summary

This chapter presented findings on the level of financial literacy and financial behaviour in SMEs. In line with other international findings the research confirmed a low level of financial literacy among SMEs with most lacking basic financial skills. Significant differences in levels of financial literacy were noted across age, marital status and business sector, whilst no significant differences were noted with respect to gender, years of experience and level of education. Associations were noted between financial knowledge levels and business sector and prior business experience. Two major components that explain financial literacy were found to be interest rates and inflation. With respect to financial behaviour, results showed that respondents show a somewhat positive financial behaviour. An association between financial behaviour and level of education and business sector were noted. Six components were identified that explain financial behaviour and these are ownership of bank account, record keeping, monitoring bank accounts, savings, consultancy and advice seeking behaviour.

# CHAPTER 8

# RESULTS FOR FINANCIAL AWARENESS, UTILIZATION AND DEBT MANAGEMENT

## 8.0 Introduction

This chapter presents the findings on financial awareness and financial product utilization. A review of literature identifies the two components as critical in determining the financial literacy of SMEs and hence data were collected to enable the determination of whether SMEs are aware of financial products available for their use and whether they used them. This chapter also presents data on the debt behaviour of this population group. Financial literacy requires one to have good organizational skills to enable individuals to make decisions regarding financial commitments to avoid taking unnecessary debt which they will not be able to service. In this chapter, findings on the debt behaviour of SMEs are presented.

## 8.1 Financial Products Awareness

One of the objectives of the survey was to ascertain the level of awareness of financial products and determine whether there is an association between financial literacy and awareness. Awareness of financial products and the services available in financial markets is an important determinant of financial literacy and researchers have established a correlation between financial literacy and financial inclusion which describes usage of financial services by marginalized population groups (RBZ, 2016; OECD, 2013; Mpambele, 2013). Whilst it could be assumed that there is a positive relationship between financial literacy and financial awareness those with high levels of financial literacy being more financially aware, this might not necessarily be the case, hence the need for further analysis to test this claim (OECD, 2013). Data were collected to assess the level of awareness of financial products and services among SMEs and results are presented in Table 8.1 which shows the number of respondents who were aware of each product.

**Table 8.1 Financial Product Awareness**

| Financial product | Awareness level |
|---|---|
| Savings | 95.0 |
| Insurance | 78.0 |
| Loans | 75.8 |
| Ecocash | 69.4 |
| Investments | 37.4 |
| Shares | 29.9 |
| Term deposits | 18.3 |

*Source: SPSS analysis of Primary Data*

The results indicate that 95% of the respondents were aware of savings accounts, 37.4% knew about investments and 29.9% had knowledge of shares, whilst 75.8% were knowledgeable about loans. A significant proportion of the respondents (69.4%) were aware of mobile banking services such as Eco-cash, Tele-cash and Net-cash and about 18.3% were aware of term deposits.

According to the OECD (2013) an indicator that counts the number of products an individual knows about is not a sufficient measure of financial awareness. Rather, it recommends a measure that captures an individual who knows about more than five products. Following this recommendation, the data were analyzed to show the number of respondents who were aware of more than five products. These were classified as having high levels of financial awareness and those with knowledge of less than five products were classified as having low awareness. The results are presented in Table 8.2.

**Table 8.2 The Level of Financial Awareness**

| Level of Financial Awareness | Frequency | Percent |
|---|---|---|
| Low financial product awareness | 231 | 83.1 |
| High financial product awareness | 47 | 16.9 |
| **Total** | **278** | **100.0** |

*Source: SPSS Analysis of Primary Data*

Table 8.2 shows that 83.1% of the respondents were not aware of at least five financial products and hence were classified as having low financial product awareness. Only 16.9% were aware of more than five financial products. These results are indicative of low levels of financial product awareness, a situation which stifles the increase in bank customer base.

Similar research by Atkinson et al. (2006) revealed that 98% of the respondents held at least one of the financial products and on average respondents had seven different types of products. The most commonly held were current accounts (89%), and insurance (66%) mainly motor vehicle insurance (61%) and building insurance (56%).

### 8.1.1 Financial knowledge levels and Financial Product Awareness

A cross tabulation was done between the level of financial awareness and financial knowledge levels to determine the existence of an association between the two. The results are shown in Table 8.3.

**Table 8.3 Cross Tabulation for Knowledge Levels and Awareness Levels**

| Crosstab | | | Financial Product Awareness Level | | Total |
| --- | --- | --- | --- | --- | --- |
| | | | Low | High | |
| Knowledge Levels | Low financial knowledge | Count | 31 | 2 | 33 |
| | | % within Knowledge Levels | 93.9% | 6.1% | 100.0% |
| | Moderate financial knowledge | Count | 79 | 7 | 86 |
| | | % within Knowledge Levels | 91.9% | 8.1% | 100.0% |
| | High financial knowledge | Count | 121 | 38 | 159 |
| | | % within Knowledge Levels | 76.1% | 23.9% | 100.0% |
| Total | | Count | 231 | 47 | 278 |
| | | % within Knowledge Levels | 83.1% | 16.9% | 100.0% |

*Source: SPSS Analysis of Primary Data*

From Table 8.3, only 23.9% of those with high financial knowledge had high levels of financial awareness and 76.1% of them had low levels of awareness. This shows that even if consumers have high financial literacy levels it does not follow that they will be highly aware of products in the financial markets. However, 93.1% of those with low financial knowledge also had low

financial product awareness. These results buttress the fact that financial product awareness is low amongst SMEs in Zimbabwe.

For robustness, a Chi-square test was also conducted to check for association between financial knowledge levels and financial product awareness. The hypothesis tested was:

$H_0$ = Financial knowledge levels and financial product awareness are independent.

$H_1$ = There is an association between financial knowledge levels and financial product awareness.

The results are presented in Table 8.4.

**Table 8.4 Results of Chi-Square tests between financial knowledge levels and financial product awareness**

| Chi-Square tests | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 13.003[a] | 2 | 0.002 |
| Likelihood Ratio | 14.151 | 2 | 0.001 |
| Linear-by-Linear Association | 11.359 | 1 | 0.001 |
| Number of Valid Cases | 278 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.58.

*Source: SPSS Analysis of Primary Data*

For the Chi-Square value with two degrees of freedom to be significant at 5% level of significance, it has to take a value that is 5.99 or more. In this case the Chi-square calculated value is 13.003 showing that there is a significant association between financial knowledge levels and financial awareness. The decision is to reject $H_0$ and accept $H_1$ and conclude that there is an association between financial knowledge levels and financial awareness. Those who are financially knowledgeable tend to be more financially aware of financial products compared to those who are not.

## 8.2 Financial Product Utilization

Financial product utilization is an important determinant of SMEs' growth and ensures their participation in the financial market, significantly contributing to economic growth (Nunoo &

Andoh, 2012). Financial inclusion is positively related to poverty reduction and consequently socio economic development of the country. To this effect, seven financial products were used for this study, namely, savings accounts, term deposits, loans, investments, shares, insurance and mobile banking services. Data were collected on the level of utilization of these financial products.

## 8.2.1 Ownership of Insurance Products

As part of measuring product utilization, respondents were asked to indicate whether they owned any form of insurance. It was found that 75% did not have insurance and only 25% had some form of insurance. This shows that insurance schemes were not considered important by the majority of the business owners, indicating a low level of financial utilization of the product. According to RBZ (2016), barriers to financial inclusion in the insurance industry are a lack of innovation by service providers, low levels of financial literacy, lack of product accessibility and low confidence in suppliers of insurance, among others. Atkinson et al.'s (2006) study in the UK reported that 66% of the respondents had insurance, mainly motor vehicle and building insurance. The results of this research study are similar to those of Finmark Trust (2010) that found that only 22% of the respondents had formal insurance. Most SMEs were not insured and used savings and sold assets to cope with unexpected shocks. In Singapore, only 20% of the respondents did not have insurance (Media Research Consultancy, 2005).

### 8.2.1.1 Types of Insurance

The respondents that had insurance were asked what type of insurance they owned. The results are reported in Table 8.5.

**Table 8.5 Types of Insurance owned**

| Type of Insurance owned | Frequency (%) |
|---|---|
| Motor Vehicle | 73.0 |
| Fire Insurance | 20.0 |
| Health Insurance | 20.1 |
| Pension Funds | 9.4 |
| Building Insurance | 8.3 |
| Contents Insurance | 4.7 |
| Other | 6.8 |

*Source: SPSS Analysis of Primary Data*

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The table shows that the majority (73%) of the respondents had motor vehicle insurance. Only 20% had fire insurance and health insurance whilst only 9.4% had pension funds. About 8.3% of the respondents had building insurance and only 4% insured the building contents. There was high uptake of motor vehicle insurance mainly because it is mandatory. Drivers are prohibited from the use of roads without adequate motor vehicle insurance, hence the high levels of utilization of this insurance product. The low uptake of building insurance could be due to the fact that very few SMEs own buildings, with the majority using rented premises or operating informally. These results confirm the findings of the Finscope survey, where 70% of the population did not make use of any insurance products. Health insurance and funeral cover were noted as the main forms of insurance taken by a majority of the population. These results differ from those reported in Singapore where 35% of the respondents that had insurance had car or home policies and 52% had medical insurance.

### 8.2.1.2 Factors Considered when Taking Insurance

Data were also collected on the factors that respondents considered when taking out insurance for their businesses. This would reveal their ability to make product choices and to be aware of the key features to consider. The results are reported in Table 8.6.

**Table 8.6 Factors Influencing Insurance Uptake**

| Factors | Frequency (%) |
|---|---|
| Premium | 42.8 |
| Level of cover | 36.7 |
| Reputation of service provider | 22.7 |
| Benefits | 38.5 |
| Agent | 9.4 |
| Other | 1.5 |

*Source: SPSS Analysis of Primary Data*

The table shows that 42.8% of the respondents took out insurance after considering the premiums they would be charged whilst 36.7% were concerned about the level of cover they would receive in the event that they needed compensation, 22.7% considered the reputation of the insurance company and 38.5% were driven by the benefits they would receive from the insurance scheme. Only 9.4% needed an agent to convince them to take insurance and 1.5%

considered other factors. Atkinson et al. (2006) reported that 61% of their respondents collected information on insurance. About 65% indicated that they made their choice based on the cost of premiums whilst 32% were concerned about the level of cover.

### 8.2.2 Payment Methods

Data were also collected to establish the payment methods used by SMEs in their businesses. The responses are shown in Table 8.7.

**Table 8.7 Payment Methods**

| Payment Methods | Frequency (%) |
| --- | --- |
| Cash | 79.5 |
| Cheque | 12.2 |
| Money Orders | 3.6 |
| Electronic Funds Transfer | 16.9 |
| Direct Debit | 6.5 |
| Internet Banking | 10.8 |
| Lay-bye | 10.8 |
| Eco-cash / Tele-cash / Net-cash | 65.8 |
| Other | 6.8 |

*Source: SPSS Analysis of Primary Data*

The results revealed that the majority of the respondents used cash (79.5%), while a significant proportion also used mobile banking services such as Eco-cash and Tele-cash (65.8%). Responses were low for all the other forms of payment because they were associated with the use of banking facilities that the majority of respondents did not utilize. Electronic Funds Transfer was used by nearly a fifth of the respondents. This shows that this payment mode was gaining popularity due to the cash crisis experienced in Zimbabwe at the time of the study. Those who had bank accounts conducted business transactions through the use of RTGS as this did not involve the actual handling of cash. The high level of financial exclusion confirms Demirgüç-kunt & Klapper's (2012) finding that high growth SMEs were not using formal financial services mainly because financial institutions were not providing appropriate products to suit their needs. They also confirm the findings of the Finscope survey in Zimbabwe where only 14% of SMEs

used banks and 99% paid employees in cash (Finmark Trust, 2013). Several studies have established that sub-Saharan Africa is characterised by low levels of financial inclusion (Demirguc-kunt et al., 2015). The results of this study also confirm Demirgüç-kunt & Klapper's (2012) conclusion that SMEs were less likely to use formal financial services. The extensive use of mobile money recorded in this study confirms the findings of numerous researchers who note the growing use of mobile banking with the greatest success recorded in Kenya where M-Pesa is now extensively used (Colin, 2011; Dermish & Kneiding, 2012; Hannig, 2010). Worldwide, mobile money is now regarded as an effective tool for financial inclusion.

## 8.3 The utilisation of Financial Products

In order to achieve objective 4 of the study which was to determine the level of financial utilization and the existence of an association with financial literacy, data were collected to determine the level of utilization of financial products available in the financial services sector. Results are presented in Table 8.8 showing the number of SMEs who were using different financial products.

**Table 8.8 Financial Product Utilisation**

| Financial Product | Frequency (%) (Utilization) |
|---|---|
| Savings account | 80.0 |
| Investments | 17.6 |
| Shares | 25.2 |
| Term Deposits | 7.9 |
| Loans | 70.7 |
| Insurance | 25.0 |
| Eco-cash/Tele-cash/Net-cash | 65.8 |

*Source: SPSS analysis of Primary Data*

The results show that the majority of the SMEs used savings accounts (80%), loans (70.7%) and mobile banking services through Eco-cash, Tele-cash and Net-cash (65.8%). Increased ownership of savings accounts shows that SMEs are now aware of the importance of a bank account in business, especially as a way of maintaining records. In addition SMEs are tapping into the benefits that come with the use of a bank account such as safety of funds, the possibility of automated bill payments, and reducing the risks associated with carrying cash. More SMEs were aware of the existence of loans due to the expansion of micro finance institutions as many

have been granted operating licenses by the central bank. Loans from micro finance institutions and banks have become a common source of funding for many SMEs, hence the increased use of these facilities. The increased use of mobile banking facilities is a result of the convenience and ease of banking associated with these facilities. Zimbabwe is currently confronting a liquidity crisis and a drive for a cashless society, explaining the increased use of mobile banking.

A low level of utilization was noted for investments (17.6%), shares (25.2%), insurance (25%) and term deposits (7.9%). This is mainly due to the unfavourable economic environment that has created a high level of uncertainty in investments. Zimbabwe is characterized by an economic environment where there is a severe cash crisis eroding confidence in the financial services sector. In addition, citizens have lost confidence in the banking system following the closure of a number of financial institutions. This tends to discourage savings and investment activities, thereby stifling economic growth. Insurance uptake is also low as SMEs do not see the importance of the service. According to the Finscope survey, 30% report that they do not see the use of insurance products whilst 10% cite lack of awareness of the various insurance products. Those using insurance have motor vehicle insurance because it is mandatory. The study's results confirm the findings by the OECD (2013) that insurance product utilization was significant only in Ireland, while in other countries individuals held insurance policies that were a legal obligation such as motor vehicle insurance for those who had cars, and life insurance for mortgage holders.

In order to create an indicator for financial product utilization, the responses were classified as high financial product utilization for those who indicated using five products and above. Those who indicated using less than five financial products were classified as having low financial product utilization. The results of this classification are presented in Table 8.9.

**Table 8.9: Financial Product Utilization**

| Financial Product Utilization | Frequency | Percent |
|---|---|---|
| Low Financial Product Utilization | 266 | 95.7 |
| High Financial Product Utilization | 12 | 4.3 |
| **Total** | **278** | **100.0** |

The results in Table 8.9 show that 95.7% of the respondents were utilizing less than five financial products and only 4.3% were using more than five.

## 8.4 Financial Knowledge levels and Financial Product Utilization

A cross tabulation was done between financial knowledge levels and financial product utilization to determine whether there is an association between financial knowledge levels and financial product utilization. The results are reported in Table 8.10.

**Table 8.10 Knowledge Levels and Utilization Level Cross Tabulation**

| Crosstab | | | Financial Product Utilization Level | | Total |
|---|---|---|---|---|---|
| | | | Low | High | |
| Knowledge Levels | Low financial knowledge | Count | 32 | 1 | 33 |
| | | % within Knowledge Levels | 97.0% | 3.0% | 100.0% |
| | Moderate financial knowledge | Count | 81 | 5 | 86 |
| | | % within Knowledge Levels | 94.2% | 5.8% | 100.0% |
| | High financial knowledge | Count | 153 | 6 | 159 |
| | | % within Knowledge Levels | 96.2% | 3.8% | 100.0% |
| Total | | Count | 266 | 12 | 278 |
| | | % within Knowledge Levels | 95.7% | 4.3% | 100.0% |

*Source: SPSS Analysis of Primary Data*

Table 8.10 shows that there is no relationship between financial knowledge levels and financial utilization levels. A Chi-Square analysis was conducted to test the existence of an association between financial product utilization levels and financial knowledge levels. The hypothesis tested was:

$H_0$ = *Financial knowledge levels and financial product utilization levels are independent.*

$H_1$ = *there is an association between financial knowledge levels and financial product utilization levels.*

The results are shown in Table 8.11.

**Table 8.11 Results of Chi-Square test between Financial Knowledge Levels and Financial Product Utilization Levels**

| Chi-Square test | Value | df | Asymptotic Significance (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 0.713[a] | 2 | 0.700 |
| Likelihood Ratio | 0.688 | 2 | 0.709 |
| Linear-by-Linear Association | 0.034 | 1 | 0.853 |
| Number of Valid Cases | 278 | | |

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.42.

*Source: SPSS Analysis of Primary Data*

Testing at a 5% level of significance and 2 degrees of freedom the critical value is 5.99. The decision rule is to reject $H_0$ if $\chi^2 > 5.99$. In this case the $\chi^2$ is 0.713, hence retain the $H_0$ and conclude that there is no association between financial knowledge levels and financial product utilization. A close link between financial product awareness and financial product utilization was noted especially for savings accounts where 90% of the respondents were aware of this product and 80% were utilizing the service. A discrepancy was noted for insurance products where 78% of the respondents knew about insurance but only 25% had some form of business insurance. Insurance is an unsought after product and hence the majority of respondents would not use it. Previous studies have shown that those who had insurance products held motor vehicle insurance which was mandatory by law. The results also show intensive knowledge and use of mobile banking services such as Eco-cash, Tele-cash and Net cash, with 65.8% of the respondents indicating that they used these services. There is a low level of awareness of investments and shares.

## 8.5 The need for further education

Data were also collected to establish whether SMEs felt that they needed further education to enhance their business success. Findings revealed that 86% of the respondents felt that they were in need of further education whilst only 14% felt that that this was not necessary. This clearly illustrates that SMEs are aware of the need to upgrade their knowledge of financial matters for better business performance.

## 8.6 Confidence to complain

Consumer protection is recognised as an important factor in financial product utilization as it promotes confidence in the financial system, and builds and strengthens trust in formal financial services (Casamer, 2018; RBZ, 2016). Several problems can be encountered as one conducts business, thus requiring the competence to seek redress. It is important that customers know the procedures involved in resolving disputes and that they value their protection in a formal way. Thus, as part of addressing consumer protection, data were gathered on SMEs' level of confidence in lodging complaints. The results are presented in Table 8.12

**Table 8.12 Confidence to complain**

| Confidence Level | Frequency | Percent |
|---|---|---|
| Very confident | 97 | 34.9 |
| Fairly confident | 56 | 20.1 |
| Confident | 64 | 23.0 |
| Not very confident | 26 | 9.4 |
| Not at all confident | 4 | 1.4 |
| Can't say | 31 | 11.2 |
| **Total** | **278** | **100** |

*Source: SPSS Analysis of Primary Data*

The results show that the majority of the respondents had confidence to seek redress where necessary. Those that were very confident to complain made up 34.9% of the respondents, 20.1% were fairly confident and 23% were confident. Thus, a cumulative total of 78.1% were confident whilst the rest were not confident with only 1.4% indicating a lack of confidence.

## 8.7 Debt Behaviour

Financial literacy requires good organisational skills to enable individuals to make decisions on financial commitments in order to avoid unnecessary debt which they will not be able to service (Atkinson & Messy, 2012). Failure to meet debt obligations will result in reduced access to further credit and penalties in terms of fines and interest charged. Debt behaviour is therefore considered to be a crucial element of financial literacy. The study thus sought to establish the debt behaviour of SMEs by investigating how the business dealt with cash shortages, how

comfortable they were with the amount of debt they had and the ability of the business to meet its financial obligations on time. The study also examined whether there had been occasions when the business had been unable to make a loan payment on time, and if they understood the consequences of loan defaults. Finally, the respondents were asked to report on the state of their current debt situation. Financial literacy entails an individual meeting their financial obligations on time and being aware of the consequences of defaults.

### 8.7.1 Dealing with Cash Shortages

Shortfalls in income are unavoidable but relying on credit can be very dangerous and impossible to escape (Atkinson & Messy, 2012). Cash-flow management in business entails the ability to deal with both cash surpluses and cash shortages and a financially literate person makes adequate provision for the future (Atkinson et al., 2006). Data were thus collected on how the businesses dealt with cash shortages. The results are presented in Table 8.13.

**Table 8.13 Dealing with Cash Shortages**

| Sources of cash | Frequency (%) |
|---|---|
| Family/friends | 48.6 |
| Overdraft | 12.9 |
| Loan | 30.2 |
| Delay payment | 21.6 |
| Default payment | 3.2 |
| Use existing resources | 21.6 |
| Do not run out of cash | 13.7 |

*Source: SPSS Analysis of Primary Data*

The table shows that, faced with a shortage of cash, 48.6% of the respondents stated that they would borrow from friends and family members, 12.9% would use overdraft facilities, 30.2% would get a loan from a financial institution, 21.6% would delay payment or use existing resources and 3.2% would default on payment. Only 13.7% of the respondents indicated that they would not run out of cash. These results show that family and friends remain an important source of funds for most businesses. Few respondents considered loans, overdrafts and defaults as an alternative source of finance, pointing to low levels of financial utilization. In the UK, Atkinson, McKay, Kempson, & Collard (2006) found that about 52% of their respondents

always had money left at the end of the month, 7% indicated that they never ran out of cash and only 31% indicated that they sometimes ran out of cash. Of those who needed to borrow to make ends meet, 12% used credit cards, 13% would overdraw their accounts, and 15% had experienced difficulties in the past five years. The results of this survey revealed that 44% of the respondents would make provision to meet a substantial drop in income, especially those who had no dependent children (55%) and those with post graduate qualifications (57%). In Australia, the ANZ Banking Group (2008) reported that 13% of the respondents would use loan facilities to deal with cash shortages whilst 48% would use credit cards. In South Africa, a study by Finmark Trust (2010) found that 41.8% of SMEs rely on family and friends for borrowing.

### 8.7.2 Level of Comfort with Debt

In terms of the level of comfort with debt amongst SMEs, it was found that only 33.9% of the respondents were comfortable with the amount they owed whilst 55.8% were not comfortable and 10.4% were not sure. The results thus show that debt was a burden to most SMEs. This confirms the findings of various studies that finance is a major constraint for business growth among many SMEs. However, it contradicts Atkinson et al.'s (2006) study that reported that 72% of respondents were comfortable with the amount of debt they owed and only 18% were uncomfortable. In South Africa Finmark Trust (2010) reported that 35% of the SMEs regarded borrowing as too risky and hence only 10% used credit facilities. The results are presented in Table 8.14.

**Table 8.14 Level of Comfort with Debt**

| Comfort with Debt | Frequency | Percent |
|---|---|---|
| Very uncomfortable | 83 | 29.9 |
| Somewhat uncomfortable | 72 | 25.9 |
| Neither | 29 | 10.4 |
| Fairly comfortable | 63 | 22.7 |
| Comfortable | 31 | 11.2 |
| **Total** | **278** | **100** |

*Source*: *SPSS Analysis of Primary Data*

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**8.7.3 Timely Payment of Bills**

Data were also collected to establish the respondents' ability to keep bills up to date. The findings revealed that 69.4% agreed that they were able to meet their financial obligations on time and 13.7% indicated that they were not able to do so. This shows that even though the respondents were not comfortable with their level of debt, they made significant efforts to service it. The findings are shown in Table 8.15.

**Table 8.15 Ability to Meet Financial Obligations on Time**

| Financial Obligations | Frequency (n) | Percent response (%) |
|---|---|---|
| Strongly agree that they pay bills on time | 49 | 17.6 |
| Agree that they pay bills on time | 144 | 51.8 |
| Not sure that they pay bills on time | 47 | 16.9 |
| Disagree that they pay bills on time | 33 | 11.9 |
| Strongly disagree that they pay bills on time | 5 | 1.8 |
| **Total** | **278** | **100** |

*Source: SPSS Analysis of Primary Data*

These results are similar to those reported by Atkinson et al. (2006). In their study, 65% of the respondents reported that they were able to keep up to date with their bills and other commitments, 26% said that they struggled to meet obligations timeously and 9% indicated serious inability to do so. This could be caused mainly by low cash inflows or a lack of access to payment facilities. Alternatively, some individuals may fail to meet debt obligations on time due to irresponsible behaviour and failure to appreciate the consequences of loan defaults. A more recent study by Atkinson & Messy (2012) revealed that results varied across the countries surveyed. Whilst most respondents reported that they paid their bills on time, a considerable number failed to do so. For example, in South Africa and Norway, 15% of the respondents indicated that they did not pay their bills on time. In Malaysia, 19% were unable to do so.

The respondents were also asked to indicate whether there had been any time when they had been unable to repay loans. Results showed that 58.3% of the respondents had been able to pay their loans whilst only 41.7% indicated the contrary. These results confirm the findings of Atkinson & Messy (2012) where the majority of respondents were meeting their debt obligations.

### 8.7.4 Reasons for Failing to Pay Loans

Data were collected from the respondents who indicated failure to pay loans to establish why this was the case. The responses are reported in Table 8.16.

**Table 8.16 Reasons for Failure to Meet Loan Obligations**

| Reason | Frequency (%) |
|---|---|
| Borrowed too much | 6.1 |
| Overspent | 7.9 |
| Interest went up | 9.4 |
| Failure to plan | 13.3 |
| Business loss | 14.7 |
| Unexpected expenses | 11.5 |
| Other | 6.1 |

*Source: SPSS Analysis of Primary Data*

The results showed that 6.1% of the respondents stated that they had borrowed too much, 7.9% overspent and 9.4% indicated that they failed to make payment because interest had gone up whilst 13.3% cited their failure to plan. Furthermore, 14.7% of the respondents said that they had failed to meet their obligations because the business had made a loss, whilst 11.5% attributed their failure to unexpected expenses and 6.1% gave other reasons. The results show that financial planning is still a challenge amongst SMEs. In addition it is difficult to forecast cash-flows due to volatility in the economic environment, hence the indication of failure to service loans due to business losses and unexpected expenses. These results are similar to the findings by Atkinson & Messy (2012) who indicated that individuals fail to service loans due to a lack of money. However, they also found that the respondents failed to meet their obligations because of lack of access to payment facilities or inability to take responsibility.

### 8.7.5 Consequences of Loan defaults

It was deemed necessary to collect data on whether the respondents were aware of the consequences of failure to finance their loan obligations. The findings are presented in Table 8.17.

**Table 8.17 Consequences of Loan Defaults**

| Awareness | Frequency | Percent |
|---|---|---|
| Strongly agree | 81 | 29.1 |
| Agree | 134 | 48.2 |
| Not sure | 52 | 18.7 |
| Disagree | 9 | 3.2 |
| Strongly disagree | 2 | 0.7 |
| **Total** | **278** | **100.0** |

*Source: SPSS Analysis of Data*

The results showed that the majority of the respondents were aware (29.1% strongly agree and 48.2% agree) of the consequences of failure to repay loans for their businesses. Although a sizeable number indicated that they were unable to pay their loans, the results show that they were aware of the penalties associated with default. This shows that SMEs operate under conditions of uncertainty dictated by the Zimbabwean economic environment. Whilst they are aware of the penalties, a considerable number of SMEs still fail to service their debt due to reasons beyond their control. The results of this study are contrary to those reported by ANZ (2008) where 20% of the respondents did not understand that they were responsible for debt on a credit card and that late payments in excess of 60 days would lead to a bad credit rating. In Singapore 87% of the respondents were aware that they had to pay interest on the outstanding balance if they failed to pay loans on time and 50% were aware that failure to pay loans would result in a bad credit rating (Media Research Consultancy, 2005).

Finally, data were collected to determine the respondents' attitude to their current financial situation. The results are presented in Table 8.18.

**Table 8.18 Attitude toward Current Financial Situation**

| Current Financial Situation | Frequency | Percent |
|---|---|---|
| Out of control all the time | 16 | 5.8 |
| Out of control most of the time | 40 | 14.4 |
| Fluctuates between being in and out of control | 107 | 38.5 |
| In control most of the time | 87 | 31.3 |
| In control all the time | 28 | 10.1 |
| **Total** | **278** | **100** |

*Source: SPSS Analysis of Primary Data*

About one in five (20.1%) of the respondents indicated that their current financial situation was out of control all or most of the time. Two in every five stated that the situation fluctuates between being in and out of control and 41.3% indicated that they were in control most of the time or all the time. This shows that despite the harsh economic environment, a considerable number of respondents are trying to keep debt levels under control.

## 8.8 Chapter summary

The chapter presented, analyzed and interpreted the data gathered for this study to address three research objectives. According to the measurement criteria used in this study, a significant proportion of the respondents were not aware of the financial products available in the financial markets, nor did they utilize these products. An association was noted between financial knowledge and financial product awareness but no association was established between financial knowledge and financial product utilization. A close link was noted between financial product awareness and financial product utilization. However, SMEs were aware of the need to manage debt and had strategies in place to deal with unexpected cash shortages. Whilst the majority were not comfortable with their debt levels they were aware of the consequences of default and hence made sure their bills were paid on time.

The following chapter presents a summary and conclusion and provides recommendations as well as suggestions for future research.

# CHAPTER 9

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 9.0 Introduction

This chapter is the concluding chapter and begins by providing a summary of each of the chapters, then provides conclusions, and ends with some recommendations. This study sought to develop a financial literacy strategy framework for SMEs and was motivated by the need to ensure success and continued existence of these entities. The study was conducted at a time when there was world-wide recognition of the importance of enhancing financial literacy of citizens, with other countries having made significant efforts to enhance their financial literacy. A thorough review of literature revealed that the lifespan of most SMEs does not exceed five years and yet they are the back-bone of economies through employment creation and consequent poverty eradication. Other countries, especially in the developed world, are already at an advanced stage with efforts to enhance financial literacy among various population groups, but, for Zimbabwe, addressing the financial literacy concerns is still in its infancy. The current study therefore was conducted on a selected group of the population which has been pointed to as marginal and yet critical for the socioeconomic development of the country.

## 9.1 Summary of chapters

The first chapter was an introductory chapter whose main focus was to provide the background of the study. The chapter presented SMEs as the major drivers of economic growth mainly through employment creation and poverty eradication. As such they have become a major area of concern for governments, policy makers and individuals alike. The same chapter brought to the fore the fact that whilst the pillar for most economies are SMEs, these have a short lifespan and one of the reasons is financial incompetence among many other factors. As the face of the financial landscape changes becoming more and more complex due to the introduction of numerous complicated financial products, financial mistakes are eminent and these may result in detrimental effects on the economy. There is increased awareness of the effects of taking critical

financial decisions without adequate skills. The adverse effects of poor financial decisions are evident among SMEs whose roles require them to be accountable for their financial decision. Thus financial literacy has been a focus in this research to address deficiencies in the financial competencies of SMEs. The selection of SMEs as the study population was appropriate because Zimbabwe is pursuing a new plan for economic recovery which recognises them as one of the key sectors with the capacity to ensure that objectives of economic recovery are achieved. Hence the main objective of the study was to formulate a financial literacy enhancement strategy for SMEs in Zimbabwe. Sub-objectives formulated were to investigate the level of financial literacy of SMEs, to describe the financial behaviour of SMEs, to determine the level of financial awareness among SMEs, to determine the level of financial product utilization among SMEs, and lastly to establish patterns in SME debt management.

Chapter 2 of the research focused on the theories that relate to entrepreneurship and financial behaviour providing a basis on which to determine the savings, borrowing and consumption behaviour of individuals. The first set of theories focused on entrepreneurship and these were the Economic theories, the psychological theories, the sociological theories, the anthropological theories and the resource based theories. Of the economic theories, the neoclassical perspective portrays the entrepreneur as a risk taker who seeks to maximise profit by combining scares economic resources efficiently and effectively. The Austrian view recognizes the entrepreneur as someone who is alert and quick to identify opportunities for profit making in the business environment whilst the Schumpeterian suggest that entrepreneurs are driven by the desire to establish business by being innovative and become their own boss. They engage in competition which helps to fulfil their need for accomplishment. The psychological theories of entrepreneurship suggest that an entrepreneur is described by their personal characteristics such as creativity, innovativeness, optimistic, committed and energetic among others. Other theories focus on the role of the society in influencing entrepreneurship such as the social networks, ethnic identification and population ecology. The resource based theory suggests that resources are an important determinant of performance and a significant source of competitive advantage. The theory contends that a firm can gain competitive advantage if it acquires valuable resources that are unique and flexible. The second set of theories discussed in chapter 2 was those that seek to address consumer financial behaviour. Two theories were discussed, the theories of savings and consumption and the theories of consumer financial behaviour.

Theories of savings and consumption discussed are the Relative income hypothesis, the Life cycle theory of consumption and spending and the Permanent income hypothesis. These theories assume that a consumer is able to vary savings and consumption during their lifetime in order to smoothen consumption and this requires an exceptional level of financial literacy.

Theories of consumer behaviour discussed are the Theory of planned behaviour and the Trans-theoretical model of behaviour change. The theory of planned behaviour assumes that an individual controls his behaviour which can be determined by seeking to understand the individual's intention to perform. Intentions are then translated into action hence becoming planned behaviour. Intentions are determined by attitude about the target behaviour, subjective norms and perceived behavioural control. The trans-theoretical model of behaviour change focuses on various stages that are followed to change undesirable behaviour and identifies ten strategies that can be used to bring about behavioural change.

Chapter three was a discussion of the role of SMEs in the economy. The chapter began with a review of literature on the various definitions of an SME and discussed the state of the SME sector in Zimbabwe. A review of literature showed that there is no single definition of a SME as it may be defined either by the number of employees, turnover, or total assets. Definitions were also found to differ across countries, but the importance of SMEs in all countries was prominent. SMEs were found to be crucial in economies following their contribution to economic development through their ability to create jobs. Statistics provided show that there are 2.8 million SMEs in Zimbabwe employing 2.9 million people with a turnover of 7.4 billion with the majority being sole traders owned by women and located in the rural areas. Most of these SMEs have been in operation for less than five years with nearly half being in the start-up stage, a clear indication that Zimbabwe has not reached its full potential from this sector. This chapter also discussed the strategies used by the government to support SMEs highlighting on various policies that have been put in place to ensure continued survival of the sector. Various support institutions were also highlighted and the chapter ended with the role of SMEs in other countries. SMEs have been recognized globally as instruments of economic growth and development and it has been accepted that a more vibrant SME sector of the economy helps to build a nation's prosperity.

Chapter four was a discussion of the importance of financial literacy to the individual, the SME sector, the financial sector and the economy at large. The chapter began with a thorough review of literature on the definition of financial literacy, where it was established that there was no universally agreed upon way of defining the term. However the common thread identified in these definitions was that financial literacy encompasses knowledge acquisition necessary for sound decision making and awareness of the implication of financial decisions made. A review of literature showed that to the individual, financial literacy enables sound budgeting; saving and borrowing, risk diversification and informed choices, whilst to the financial sector it ensures stability and efficient operation of the system. To the economy the microeconomic benefits of financial literacy at household level have a multiplicative effect that enhances the macro economy. Financial literacy establishes consumer confidence through enforcing appropriate consumer rights protection. It also ensures that an inclusive economic system is achieved resulting in economic development. The chapter also highlighted the problems associated with financial illiteracy. Financial illiteracy results in detrimental financial mistakes which may be difficult to reverse, and financial exclusion which has negative effects on the economy. The effects of the global financial crisis provide evidence of the impact of financial illiteracy. The chapter ended with a discussion of the factors that have influenced research in financial literacy across the globe. These were highlighted as changes in demographic trends especially in the developed world where there is an ageing population and baby boomers. This entails longer life expectancy where the aged will then require survival on pensions, calling for the need to save for retirement. Changes in government policies and employment conditions have also triggered research on financial literacy. In developing countries the majority of workers are in temporary positions and hence may need sharpened skills to save for future consumption when they are out of employment. In the developed world governments have cut pension and health benefits, thus requiring one to put in place strategies to fill the gap. Educational costs are on an upward trend, again demanding that parents are financially prepared for such developments. Financial markets have become complex with many sophisticated products being introduced. Technology is advancing so is competition. Under such a scenario financial decisions are difficult to make thus calling for a comprehensive analytical toolkit to avoid financial errors. Financial exclusion, which is evident in many countries, has also necessitated the improvement of financial literacy. There is substantial evidence to show that there is a positive relationship between financial

literacy and financial inclusion. Financial crisis was shown to have also triggered research on financial literacy. Literature on this subject shows that the financial crisis was prompted by individuals that accessed financial products whose characteristics they did not understand hence making the study at hand appropriate.

Chapter five provided a literature review of empirical studies of financial literacy. The review showed that research on financial literacy is fairly new but is receiving increased interest amongst governments, policy makers and researchers alike. The chapter began with a review of literature on how various previous researchers measured financial literacy. Again measurement of the phenomenon proved a challenge due to lack of a widely accepted definition of the term. However two major approaches were identified which are the objective tests and the self-assessment tests. With the objective tests, financial literacy is measured by the extent to which respondents understand the financial terminology and its applicability in real life situations. The self-assessment is based on how people personally evaluate their financial capability and provide information about their financial attitudes. However it was established that uniformity is established through the use of a set of questions that test financial literacy which is then used to construct the financial literacy index.

The aim of chapter six was to describe the methodology used in the study. The chapter provided a detailed explanation of the philosophy that was adopted for the study. The research adopted the positivist approach which assumes that the object under study is independent of the researcher and knowledge is obtained through observation or measurement of phenomena. The chapter also provided an outline of the research design adopted in the study. The appropriate design used was quantitative and cross sectional in nature. A multistage sampling technique was used where in the first stage provinces in Zimbabwe were selected and then the second stage involved a selection of the actual respondents in each province. The research participants were SMEs with the sample drawn from two randomly selected Provinces of Harare and Mashonaland Central. The measurement criterion for financial literacy was specified as the scoring approach, which is in line with past research. Financial behaviour was determined through a thorough examination of various behaviour indicators, consistent with existing research. The determination of financial awareness and financial utilization was carried out through descriptive statistics that provided information on usage and awareness. Associations between variables were tested using Chi-

square tests and ANOVA. The study used a population of 2.8 million SMEs in Zimbabwe as indicated by the results of the Finscope survey. The sample size used was 400 SMEs with 248 drawn from the Harare Province and 152 drawn from the Mashonaland Central Province. A self-administered closed ended questionnaire was used to collect data in order to answer each of the research questions. In order to extract the critical components of a financial literacy strategy, Principal Component Analysis was used.

Chapter seven was a presentation and an analysis of the research results for financial literacy and financial behaviour. It began with a description of findings as shown by the demographics and answers research objectives one and two. Section 9.2, 9.3 and 9.4 provide a summary of the findings. Section 9.5, 9.6 and 9.7 provides a summary of chapter 8.

## 9.2 Demographic profile of respondents

The research established that most of the respondents were the youth, with males being the majority of the respondents. Respondents were educated with the minimum qualification being secondary education. SMEs were found in various business sectors ranging from manufacturing, retailing and wholesaling. Others were involved in primary production such as agriculture and some were in the arts, culture and education sector. Most of the SMEs were still in their infancy as a majority had been in operation for less than 5 years with an equal level of experience.

## 9.3 The Level of Financial Literacy of SMEs

The first objective of the study was to measure the level of financial literacy of SMEs. This was considered the first objective as it would provide leading evidence for conclusions to be made about other objectives. Financial literacy was established by determining respondents' knowledge of interest rates, inflation, risk and numerical ability. Findings revealed that respondents were not sufficiently knowledgeable about inflation, interest rates and risk diversification but were able to do subtraction, multiplication addition and division. A measurement of financial literacy using the three standard questions revealed a low level of financial literacy among SMEs in Zimbabwe. Significant differences in the level of financial literacy were noted across age groups, marital status, business sector and previous business experience. No significant differences were noted with respect to education, gender and years of business operation. Results from the Chi-square tests revealed that financial knowledge level and age, gender, marital status, educational level and years of operation are independent. The young

and the older group over 50 years old were found to have low financial literacy levels whilst the middle aged had higher levels of financial knowledge. Results also indicated that financial knowledge and gender were independent. Average scores for both male and female were found to be the same. With respect to marital status, the married, the single and the separated were found to have higher financial literacy scores as compared to their divorced and widowed counterparts. Results revealed no association between financial knowledge levels and marital status. Financial knowledge was also measured against various levels of education. Those with low levels of education had low average financial literacy scores as compared to those with higher levels of education, but Chi-square tests confirmed no association. Financial knowledge levels were noted to be higher among businesses that were in operation for five years, and declined for those that had been in operation for more than five years.

Findings revealed an association between financial knowledge levels and business sector and prior business experience. High financial literacy scores were noted among those who were in the transport, energy and construction, agriculture, art, entertainment and education sectors. Low financial knowledge was noted among those in the retail sector and the manufacturing sector.

Principal Component Analysis established that the major determinants of financial literacy among SMEs were knowledge of inflation and knowledge of interest rates.

## 9.4 The Financial Behaviour of SMEs

The second objective of the research was to describe the financial behaviour of SMEs. This objective was achieved by identifying financial behaviours that would be used for the study. Fifteen variables were identified and these were record keeping, the person responsible for business records, ownership of a bank account and whether transactions are monitored regularly, ways of minimising bank charges and fees, savings, the importance of savings and how they are maintained, consultancy services and sources of information when making financial decisions, dealing with cash shortages, ability to meet financial obligations on time, timely payment of loans, understanding of the consequences of default and confidence to lodge complaints when necessary.

Financial behaviour levels were classified into three, those that have positive behaviour, somewhat positive behaviour, and negative behaviour. The overall financial behaviour score for

the SMEs was 60.4% and there were no significant differences that were noted as explained by the various socio-demographic variables. No associations were established between financial behaviour and age, gender, marital status, years of business operation and prior business experience, but an association was established between financial behaviour level and the level of education and business sector.

Findings revealed that SMEs keep records of accounting and an association was found between record keeping and financial knowledge. Records were kept either by the business owner, an appointed accountant or it was a shared responsibility.

Only half of the respondents indicated that they had an account in the name of the business and no association could be established between bank ownership and financial knowledge. It was also noted that there was no strict monitoring of bank accounts by the SMEs. Of the few who checked their bank accounts, they were concerned mainly with account balance, the accuracy of transaction captured and the interest charged on the accounts. Most SMEs did not check bank statements because either they considered it a bother or they did not have the time as they did not consider it an important aspect of the business. They also felt that checking bank transactions was not necessary as they always assumed transactions were correctly captured by the bank. Respondents indicated that they minimized costs of banking through reducing transactions and using virtual forms of banking such as internet banking and telephone banking.

Savings were considered to be very important and also a significant form of capital for the business. These were maintained at the bank, at home or with a savings club. However savings and financial knowledge levels were found to be independent. Investments by SMEs were mainly in property and share ownership in order to diversify risk, achieve long term returns and as a form of future savings.

Sources of information for financial decisions were mainly books and workshops, newspapers and the internet whilst family and friends were the main sources of consultancy services. Most of the SMEs did not use any consultancy services and at best they would only consult from one source. An association was established between financial knowledge levels and the use of financial advisory services.

Six components of financial behaviour were identified that explained the behaviour of SMEs. These were ownership of bank accounts, record keeping, monitoring transactions, savings, consultancy and financial advice seeking. A weak positive relationship was found between financial literacy and financial behaviour indicating the need to improve the financial literacy levels and financial behaviours of SMEs.

## 9.5 Financial Product Awareness

Chapter eight presented an analysis of results for financial awareness and utilization as well as the pattern for debt management. There was increased recognition that increasing financial access and usage of financial services facilitates financial savings and increases investments which are key drivers of economic growth. Awareness was measured using seven financial products, namely savings accounts, investments, shares, term deposits, loans, insurance and mobile banking services such as Ecocash, Telecash and One money. High awareness was recorded for savings accounts, loans, insurance and mobile banking services and low awareness was noted for investments, shares and term deposits. An association was noted between financial product awareness and financial knowledge levels. Those who are financially knowledgeable tend to be more financially aware as compared to those who are not.

## 9.6 Financial Product Utilization

Findings on the utilisation of financial products showed that usage was high for products that respondents are aware of such as savings accounts, loans and mobile banking services and utilization was low for products where awareness was low such as investments, share and term deposits. Low utilization of insurance products was also evident, with most SMEs owning vehicle insurance because it is mandatory. Payment methods used by SMEs are mainly cash and mobile money such as Ecocash, Telecash and One money. Overall low usage of financial services is noted among SMEs, but however no association could be established between usage of financial products and financial knowledge levels.

## 9.7 Debt Behaviour of SMEs

The chapter also presented findings on the patterns of debt behaviour by SMEs. Results showed that SMEs have a variety of sources from which to deal with cash shortages such as borrowing from friends and family, taking out loans, delayed payments and the use of existing resources. In

certain circumstances SMEs would delay payment of debt until their cash position improved. However it was also established that some SMEs were not comfortable with their debt levels and at one time had not been able to service their loans despite the fact that they knew the consequences of default. However a majority indicated that they were able to meet their debt obligations and pay their loans on time.

## 9.8 Conclusion

This study concludes that financial literacy among SMEs is low. This population cohort lacks knowledge mainly in areas of interest rate determination and knowledge of inflation. Low levels of financial literacy were more pronounced among the young and the aged, those in the wholesale and retail sector, the manufacturing sector and the construction industry. Low financial knowledge was also noted among those SMEs with less than a year of business experience.

Negative financial behaviour was found amongst those with low levels of education and those in the wholesale and retail sectors, manufacturing sector, construction, and the agricultural sector.

It was established that SMEs were not aware of most investment products and there was low utilization of the same. There was an association between financial product awareness and financial knowledge and no association between financial product utilization and financial knowledge levels.

SMEs financed their businesses mainly from savings, loans and borrowing from family and friends. However, they were not comfortable with their debt positions and have tried to meet their obligations as they are aware of the consequences of default. SMEs do not make use of financial advisory services which are limited to only one source if at all.

## 9.9 Recommendations: The Financial Literacy Strategy Framework

In light of the findings of this research the following is a financial literacy enhancement strategy that can be recommended:

- The government should introduce financial education for SMEs targeting mainly those in the wholesale and retail sector, those in the manufacturing sector and the construction industry as these are the groups where low levels of financial literacy were noted.

- Education should also be extended to the young and those whose businesses are in the start-up stage. This will ensure that SME owners are aware of the importance of financial literacy and will seek to improve. The introduction of financial education will equip SMEs with budgeting and savings skills which will help to smooth their income fluctuations and deal with unexpected expenses without falling into excessive debts. Financial education will equip SMEs with relevant skills to successfully manage their businesses and witness growth which is important in the Zimbabwean context where the economy has become increasingly informal.

- The Ministry of Primary and Secondary Education as well as The Ministry of Higher and Tertiary education should develop a curriculum for financial literacy that will be used to impart the appropriate knowledge. The introduction of financial education should be done at school level as this will introduce financial skills at an early stage.

- The Curriculum Development Committee for Financial Education should develop a curriculum that emphasizes imparting knowledge on inflation and the calculation of interest rates among other key financial literacy aspects.

- Players in the financial services sector should increase awareness about financial products and services as well as build confidence and the ability to compare products and use them. This will promote demand and stimulate participation within the financial services sector. Awareness campaigns may be conducted though radio, television, mass displays, magazines, etcetera, to mention a few.

- Policy makers should come up with policies and programmes that will enhance access to information on financial products and services by the SMEs. This will enable SMEs to manage financial resources optimally, make informed choices, and know how to lodge complaints and seek redress whenever necessary.

- Financial sector regulators should publish information about financial products and services periodically. This information should be easily accessible to increase awareness and enable comparison of various financial products.

- Financial institutions and regulators should create platforms to disseminate information on financial literacy and engage in financial literacy programmes as a corporate social responsibility to ensure that financial literacy objectives are met.

- The government in partnership with tertiary institutions should conduct financial literacy research which will contribute to an understanding of financial literacy levels and the factors that influence financial literacy.

## 9.10 Areas for Further Study

There is need for intensive research on the financial literacy of the population of Zimbabwe. Having realized the importance of financial education, it is important to determine financial literacy levels so that baseline data become available to assist policy making and the design of educational programmes targeted at a specific population cohort. The results of such surveys could be used as a baseline to review existing educational programmes. This will enable the monitoring and evaluation of existing financial literacy initiatives. A national survey of financial literacy forms the initial stage in the development of a financial education programme.

Further research should also be undertaken to establish and maintain sound financial literacy definitions and measurement methodologies. This will enable the monitoring and evaluation of any financial literacy initiative.

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# APPENDICES

**Appendix 1: Student introductory letter**



**UNIVERSITY OF KWAZULU-NATAL**

**INYUVESI YAKWAZULU-NATALI**

**Westville Campus**

**College of Law & Management Studies**
**School of Accounting, Economics and Finance**
Tel: +27-31-260 2160
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23 February 2015
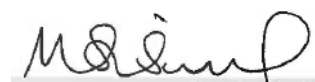
**To whom it may concern**

**REFERENCE: MARGARET MUTENGEZANWA**

This serves to confirm that Margaret Mutengezanwa is a PhD student at the University of Kwa-Zulu Natal. The title of her research is 'Financial Literacy among SMEs in Zimbabwe'. Any assistance rendered to her during the period of study will be highly appreciated.

Please feel free to contact me should you wish to discuss further, the contents of this letter.

Yours sincerely,

Prof Mabutho Sibanda
**Head of School – Finance**

**Appendix 2: Declaration of consent**



**Westville Campus**

## DECLARATION OF CONSENT

**PROJECT TITLE**: FINANCIAL LITERACY AMONG SMALL AND MEDIUM ENTERPRISES (SMEs) IN ZIMBABWE

| RESEARCHER | | SUPERVISOR | |
|---|---|---|---|
| **Full Name:** | Margaret Mutengezanwa | **Name:** | Prof Mabutho Sibanda |
| **School:** | Graduate School of Business & Leadership | **School:** | Accounting, Economics & Finance |
| **College:** | Law and Management Sciences | **College:** | Law and Management |
| **Campus:** | Westville | | |
| **Proposed Qualification:** PhD | | **Contact:** +2781 751 0324 | |
| **Contact:** | +263 774 023 423 | **E-mail:** | sibandam@ukzn.ac.za |
| **E-mail:** | mmutengezanwa@gmail.com | | |

**HSSREC RESEARCH OFFICE**

Full Name: Prem Mohun

HSS Research Office

Govan Bheki Building

Westville Campus

Contact: +27 31 260 4557

Email: mohunp@ukzn.ac.za

I, Margaret Mutengezanwa, Student number 214584628, am a PhD student at the Graduate School of Business and Leadership at University of KwaZulu-Natal. You are invited to participate in a research project entitled, **Financial literacy among Small and Medium Enterprises (SMEs) in Zimbabwe**.

The aim of the study is to develop a financial literacy strategy for SMEs in Zimbabwe by first ascertaining their financial literacy levels, their financial behavior, determining awareness and utilization of financial services and products and finally ascertain their debt patterns. Through your participation, it is hoped that the results of the study will enable the identification of areas where SMEs may require further training and support in order to enhance financial literacy and ensure continued existence and growth of the business.

Please kindly note that participation in this research project is voluntary and there is no penalty if you do not participate. You may refuse to participate or withdraw from the research project at any stage and for any reason without any form of disadvantage. There will be no monetary gain from participating in this research project. I guarantee that your responses will not be identified with you personally. Confidentiality and anonymity of records identifying you as a participant will thus be maintained by the Graduate School of Business and Leadership.

Please sign on the dotted lines to show that you have read and understood the contents of this letter. The questionnaire will take approximately 10 minutes to complete.

# DECLARATION OF CONSENT

I……………………………………………………………… (Full Name) hereby confirm that I have read and understood the contents of this letter and the nature of the research project has been clearly defined prior to participating in this research project.

Participant Signature: …………………………………………………………………

Date: ……………………………………………………………………………………

# QUESTIONNAIRE

**Please answer all questions by putting a circle on your response.**

| | **SECTION A: DEMOGRAPHICS** | | |
|---|---|---|---|
| Q1. | How old are you? | 1=18-19<br>2=20-24<br>3=25-29<br>4=30-34<br>5=35-39<br>6=40-44<br>7=45-49<br>8=50-54<br>9=55-59<br>10=60-64<br>11=65-69<br>12=70+ | |
| Q2. | Gender of respondent | 1= Male<br>2= Female | |
| Q3 | Marital Status of respondent | 1=Married<br>2=Divorced<br>3=Widowed<br>4=Single<br>5=Separated<br>6=Other (please specify)<br>………………………. | |
| Q4 | How many children do you have? | 1=1<br>2=2<br>3=3<br>4=4<br>5=5 or more<br>6=none | |
| Q5 | How many of your children are going to school? | 1=1<br>2=2<br>3=3 | |

| | | 4=4<br>5=5 or more<br>6=none | |
|---|---|---|---|
| Q6 | What is the highest level of education you have attained? | 1=Primary<br>2=Secondary<br>3=Technical/Vocational<br>4=Professional<br>5=University level<br>6=no formal education<br>7=other (please specify) | |
| Q7 | How much initial capital did you use to start your business? | 1=less than $500<br>2=$501 to $1000<br>3=$1001-$1500<br>4=$1501-$2000<br>5=$2001to$2500<br>6=$2501 to $3000<br>7=more than $3000<br>99=don't know | |
| Q8 | In which business sector are you? | 1= Agriculture<br>2= Wholesale and Retail<br>3= Manufacturing<br>4= Transport<br>5= Construction<br>6= Energy and Construction<br>7= Tourism<br>8= Art, Entertainment, Culture, Education and Sport<br>9= Other (please specify)<br>---------------------------- | |
| Q9 | For how many years has the business been in operation? | 1= less than a year<br>2= 1 to 2 years<br>3= 3 to 5 years<br>4= 6 to 10 years<br>5= more than 10 years | |
| Q10 | When you started your business, how many years of business related experience did you have? | 1= less than 1 year<br>2= 1 to 2 years<br>3= 3 to 5 years<br>4= 6 to 10 years | |

| | | 5=more than 10 years | |
|---|---|---|---|
| Q11 | How many employees did you have when you started your business? | 1=no employees<br>2=one<br>3=two<br>4=three<br>5= more than three | |
| Q12 | How many employees do you have now? | 1=no employees<br>2=1-5<br>3=6-30<br>4=31-75<br>5= more than 75 | |
| Q13 | Indicate your average sales turnover per month. | 1=less than $500<br>2=$501 to $1000<br>3=$1001-$1500<br>4=$1501-$2000<br>5=$2001to$2500<br>6=$2501 to $3000<br>7=more than $3000 | |
| | **SECTION B: MEASURING FINANCIAL LITERACY** | | |
| Q14 | Suppose you had $100 in your Savings Account and the interest rate was 2% per year, after 5 years how much would you have in the account if you left the money to grow? | 1= More than 102<br>2= Less than 102<br>3= Exactly 102<br>4= Do not know | |
| Q15 | Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year how much would you be able to buy with the money in this account? | 1= More than today<br>2=Exactly the same<br>3=Less than today<br>4=Do not know | |
| Q16 | Please indicate whether this statement is True or False: Buying a single stock usually provides a safer return than a stock mutual fund. | 1= True<br>2= False<br>3= Do not know | |

| Q17 | An investment with a high return is likely to have a high risk. | 1= True<br>2= False<br>3= Do not know | |
|------|------|------|------|
| Q18 | It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares | 1= True<br>2= False<br>3= Do not know | |
| Q19 | If a person pays for goods valued at $165 with four $50 notes, how much change would they receive? | 1=$50<br>2= 55<br>3=45<br>4= 35<br>5=do not know | |
| Q20 | If 20 lotto players each won a prize of $350, what is the total amount paid out in prize money to them? | 1=$700<br>2=$175<br>3= $7000<br>4= $370<br>5= do not know | |
| Q21 | If a lottery win of 18 000 is shared equally among 6 people how much will each person receive? | 1= 300<br>2=3000<br>3=108 000<br>4= 1800<br>5=do not know | |
| Q22 | If a person takes home $1 400 a month and 50% of this is spent on rent, what is their monthly rent? | 1=$140<br>2=$700<br>3=280<br>4=1 400<br>5= do not know | |
| | **SECTION C: FINANCIAL BEHAVIOUR AND ATTITUDE** | | |
| Q23 | Who is responsible for the financial affairs of the business? | 1=business owner<br>2=Accountant<br>3=Shared responsibility<br>4=no one<br>99= don't know | |
| Q24 | Does the business keep records of accounts? | 1=always<br>2=sometimes<br>3=not at all | |
| Q25 | Indicate the type of investments that the business owns. | 1=Property<br>2=Shares<br>3=term deposits<br>4=Unit Trusts<br>5= Other (please specify)………………<br>………….. | |

| | | 6= none<br>7= can't recall | |
|---|---|---|---|
| Q26 | If the business has some investments indicate why you took the investments?<br><br>*Multiple responses are allowed* | 1= Accessibility and flexibility<br>2= risk diversification<br>3=low risk<br>4=long term returns<br>5=saving for the future<br>6=nothing in particular<br>7=other (please specify)………………<br>……… | |
| Q27 | How important do you consider diversification of your funds across different investments? | 1=very important<br>2=important<br>3=of some importance<br>4=not very important | |
| | **SECTION D: FINANCIAL AWARENESS AND UTILISATION** | | |
| Q28 | Do you have a bank account in the name of the business? | 1=yes<br>2= no | |
| Q29 | How often do you check your bank account? | 1= very often<br>2=often<br>3=sometimes<br>4=rarely<br>5=not at all | |
| Q30 | What do you generally look for when you check your bank account?<br><br>*Multiple responses are allowed.* | 1= account balance<br>2=account fees<br>3=interest charged<br>4=transactions are correct<br>5=amount spent<br>5=amount repaid<br>6=available credit<br>7=foreign exchange fees<br>8=date of transaction<br>9=minimum payment due<br>10=Nothing in particular<br>11= other (please specify) ……………….. | |
| Q31 | If you do not check your bank account transactions, indicate why you do not? | 1= cant be bothered<br>2=don't have time | |

| | | |
|---|---|---|
| | | 3=other priorities are more important<br>4=just assume they are correct<br>5=too difficult to understand<br>6=someone else reads them<br>7=find it depressing/ worried about how much I might have spent<br>8= other (please specify)<br>……………………… | |
| Q32 | What steps do you take to minimize fees and charges associated with everyday banking? | 1=minimize the number of transactions<br>2=use internet banking or telephone banking<br>3=minimize the number of branch visits<br>4=keep a minimum amount in the bank account<br>5=make payments using cheques<br>6= nothing at all | |
| Q33 | Which of the following methods of payment do you use in your business?<br><br>***Multiple responses are allowed*** | 1=cash<br>2=cheque<br>3=money orders<br>4= Electronic Funds Transfer<br> 5= Direct debit<br>6= Internet banking<br>7= lay-bye<br>8= eco-cash/ tele-cash/net-cash<br>10= Other (please specify) ……………… | |
| Q34 | Does the business have any savings? | 1=yes<br>2=no | |
| Q35 | If the answer to the above is yes, how do you maintain these savings? | 1=save with a bank<br>2=keep at home<br>3=Save with a club<br>4=buy something to | |

| | | dispose later<br>5= other (please specify)<br>………………….. | |
|------|------|------|------|
| Q36 | To what extent do you consider savings to be important in your business? | 1=very important<br>2=important<br>3=of some importance<br>4=not very important<br>5= not important | |
| Q37 | Which of the following financial services and products do you know?<br><br>*Multiple responses are allowed* | 1=account with a bank or building society<br>2=Investments<br>3=Shares<br>4=Term deposits<br>5=Loan<br>6= Insurance<br>7=Eco-cash / tele-cash/net cash | |
| Q38 | Which of the following financial services and products do you use in business? | 1=account with a bank or building society<br>2=Investments<br>3=Shares<br>4=Term deposits<br>5=Loan<br>6= Insurance<br>7=Ecocash/ telecash/nettcash | |
| Q39 | Does the business have any insurance? | 1=yes<br>2=no | |
| Q40 | If the answer to the above question is yes, indicate the type of insurance that the business has.<br><br>*Multiple responses are allowed* | 1=Motor Vehicle Insurance<br>2=Fire Insurance<br>3=Health Insurance (Medical Aid)<br>4=Pension<br>5=building insurance<br>6= Contents Insurance<br>7= other (please specify)………………<br>… | |
| Q41 | What factors do you consider when taking out insurance for your business? | 1=premium<br>2=the level of cover<br>3=reputation of the | |

| | | | |
|---|---|---|---|
| | *Multiple responses are allowed* | service provider<br>4=benefits included<br>5=rely on agent<br>6=Other (please specify)<br>-----------------------------<br>-- | |
| Q42 | Indicate whether you have read or used any of the following sources to assist with your financial decision making?<br><br>*Multiple responses are allowed* | 1=financial sections of newspapers or magazines<br>2=books or other financial publications<br>3=finance related sites on the internet<br>4=Workshops<br>5=none | |
| Q43 | Indicate whether you have consulted any of the following regarding your business finances. | 1=accountant<br>2=brokers<br>3=taxation specialists<br>4=financial advisor<br>5=family or friends<br>6=no one | |
| Q44 | Do you think you need further education or information in relation to finance? | 1=yes<br>2= no | |
| Q45 | How confident are you that you would know how to make an effective complaint against a bank or financial institution? | 1=very confident<br>2=fairly confident<br>3=confident<br>4= not very confident<br>5=no at all confident<br>6=can't say | |
| | **SECTION E: DEBT MANAGEMENT** | | |
| Q46 | If the business is short of cash how do you meet your payment obligations?<br><br>*Multiple responses are allowed.* | 1=borrow from family/ friends<br>2=overdraft<br>3=take a loan from a financial institution<br>4=Delay payment<br>5=default payment | |

| | | 6=use existing resources<br>7=don't usually run out<br>of cash | |
|---|---|---|---|
| Q47 | How comfortable are you with the amount of money you owe creditors? | 1=very uncomfortable<br>2=somewhat uncomfortable<br>3=neither<br>4=fairly comfortable<br>5= very comfortable | |
| Q48 | To what extent do you agree with the following statement regarding your business?<br><br>The business is able to meet its financial obligations on time? | 1=strongly agree<br>2=agree<br>3=not sure<br>4= disagree<br>5=strongly disagree | |
| Q49 | Have you ever been unable to make a payment on any loan or any other type of payment? | 1=yes<br>2=no | |
| Q50 | If the answer to the above is yes, what were the main reasons you could not make the payment?<br><br>*Multiple responses are allowed* | 1=borrowed too much<br>2=overspent<br>3=interest rates went up<br>4=did not plan well<br>5=the business experienced a loss<br>6=expenses were more than expected<br>7=other (please specify)<br>……………………… | |
| Q51 | To what extent do you agree with the following statement?<br><br>I understand the consequences of loan defaults. | 1=strongly agree<br>2=agree<br>3=not sure<br>4= disagree<br>5=strongly disagree | |
| Q52 | Which of the statements best describes how you generally feel about your current financial situation? | 1=out of control all the time<br>2=out of control most of the time<br>3=fluctuates between being in and out of control<br>4=in control most of the time<br>5=in control all the time | |

**Thank you for taking your time to answer these questions.**

**Appendix 4: Letter of Permission From The Ministry Of SMEs**

Correspondence should not be addressed to individuals

Reference: SMED/17/8

Telephone No's    731003/6

                  795062

FaxNo             731879
Email. info@smecd.gov.zw
Website. www.smecd.gov.zw

**ZIMBABWE**

Minis`1try of Small and Medium Enterprises
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Enterprises & Coop Develop
2 6 NOV 2014
P. BAG 7740, CAUSEWAY
ZIMBABWE  TEL: 04-793795

26 November 2014

To whom it may concern

RE: GRANT OF INFORMATION: MS. MARGARET MUTENGEZANWA:
ID. NO. 32-110071A 32

The above subject matter refers.

Ms. M. Mutengezanwa is a PHD student at the University of Kwa Zulu Natal. She
is conducting a research project titled " Financial Literacy among SMEs in
Zimbabwe". Her application to access information was approved by the Ministry.
May you offer her the necessary assistance.

S. Nyamukonda.
**For: Secretary for Small and Medium Enterprises and Cooperative
Development.**

## Appendix 5:  Ethical Clearance

UNIVERSITY OF ™
KWAZULU-NATAL

INYUVESI
YAKWAZULU-NATALI

29 January 2015

Ms Margaret Mutengezanwa 214584628
Graduate School of Business and Leadership
Westville Campus

Dear Ms Mutengezanwa

Protocol reference number: HSS/0026/015D
Project title: Financial literacy among Small and Medium Enterprises (SMEs) in Zimbabwe

Full Approval – Expedited Application

In response to your application received on 16 January 2015, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation.  In case you have further queries, please quote the above reference number.

PLEASE NOTE:  Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shamila Naidoo (Deputy Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

Cc Supervisor: Dr Mabutho Sibanda
Cc Academic Leader Research: Dr E Munapo
Cc School Administrator: Ms Zarina Bullyraj

Humanities & Social Sciences Research Ethics Committee
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