A SURVEY OF THE BEHAVIOURAL FACTORS INFLUENCING THE CHOICE OF FINANCING METHODS BY SMES: A CASE STUDY OF RUIRU MUNICIPALITY

BY

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SEPTEMBER, 2010
DECLARATION

This research project is my original work, and has not been presented for the award of a degree in any other university.

Signed date

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SUPERVISOR’S DECLARATION

This research project has been submitted for examination with my approval as the University Supervisor.

Signed Date

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DEDICATION

This study is dedicated to my loving parents, Mr. and Mrs. Nyaribo, who have always told me to hold on to what I believe in.
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ABSTRACT

The Micro, Small and Medium Enterprise (MSME) Sector has continued to play an important role in the Kenyan economy. The sector’s contribution to the Gross Domestic Product (GDP) has increased from 13.8 per cent in 1993 to about 20 per cent in 2007. Many entrepreneurs have limited ways to find the capital to start a new business. There are many sources to consider, so it is important for an entrepreneur to fully explore all financing options. (World Bank, 2006).

The study involved a survey of the behavioural factors influencing the choice of financing methods by SMEs: a case study of Ruiru municipality. Descriptive research design was applied with questionnaires as the main instrument of data collection from the 3,000 Small and Micro Enterprises within Ruiru Municipality. Data was analyzed using Statistical Package for Social Sciences (SPSS).

The findings identified venture investors and government programs, Micro-finance institutions, bank loan, friends and family and personal savings emerged as the sources of finance most preferred by the SMEs owners during the start of the business which the owners were confident of their efficiency as the right sources during their business operation. Further, the findings indicated fear of failure, past success and failures, friends and what other entrepreneurs were doing as the factors which influenced the SMEs owner’s on the choice of finance.
CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

1.1.1 Nature and Role of SMEs

SMEs are defined differently between countries and within sectors. Definitions differ in the break points they employ, and also in the underlying basis used for classification (Ayyagari, Beck and Demirguc-Kunt, 2003). Some of these definitions are based on quantitative measures such as staffing levels and turnover or assets, while others employ a qualitative approach (Meredith, 1994). In Kenya, classification of enterprises is primarily by the number of employees engaged by firms (Republic of Kenya, 1992). Those firms that engage less than five employees are referred to as micro-enterprises, while those that employ five to 49 workers and 50 to 99 workers are respectively classified as small-scale enterprises and medium-scale enterprises. The firms with 100 or more workers are categorized as large-scale enterprises.

In both developing and developed countries, small and medium-scale enterprises (SMEs) play important roles in the process of industrialization and economic growth. Apart from Increasing per capita income and output, SMEs create employment opportunities, enhance regional economic balance through industrial dispersal and generally promote effective resource utilization considered critical to engineering economic development and growth (Ogujiuba and Ohuche, 2004). However, the long-term growth and competitiveness of SMEs are compromised by the constraints on their access to alternative forms of finance, among other systematic and institutional problems in developing countries. Limited access of SMEs to credit and financial services has been
identified as one of the most important supply constraints confronting the sector in Kenya (Soderbom 2001). As a result, SMEs’ share of financing resources is disproportionately less than their relative importance in domestic employment and to the value added.

For a long time in Kenya, promotion of SME sector has been duly recognized as a viable and dynamic strategy for attainment of national goals such as job creation, poverty alleviation and development between diverse sectors. These are the cornerstones of a strong national industrial base and domestic structures that are central to the Kenya government’s vision of achieving newly industrialized country status by the year 2030 (Mullei and Bokea,1999). This recognition has emanated from source of the social economic changes that have taken place in the operating environment in the last two decades. Economic liberalization that was embraced in Kenya in to the early 1990’s soon started taking its toll in terms of collapse of local industries due to competition. To avoid total collapse local enterprises started to downsize their human resource requirements. This led to unemployment as most employees were laid off most of these staff took refuge in setting up small enterprises to earn a living.

The Micro, Small and Medium Enterprise (MSME) Sector has continued to play an important role in the economy of this country. The sector’s contribution to the Gross Domestic Product (GDP) has increased from 13.8 per cent in 1993 to about 20 per cent in 2007 (World Bank, 2006). The Micro and Small Enterprise Sector (MSEs) or Informal Sector provided 78% of total employment and contributed over 57% of the new jobs created in 2005/06 according to the Economic Survey of 2007. The sector therefore plays a key role in employment creation, income generation and is the bedrock for industrializing the Country in the near future. Most of the SMEs have been found to
operate in Informal Sector which is defined as "all enterprises employing less than 50 workers." This includes: Home-based business, self-employed, Street traders and vendors, Temporary contracts in construction and building. Consequently, the sector has a highly personalized decision-making process. It was started to create employment opportunities. By 1996 the sector had 63% of the working population (Kenneth, 1996). The Kenyan informal sector usually operates on small-scale, locally and at a subsistence level (World Bank, 2006).

1.1.2 Entrepreneur’s Financial Options to Start-up a Business

Many entrepreneurs have limited ways to find the capital to start a new business. There are many sources to consider, so it is important for an entrepreneur to fully explore all financing options. He also should apply for funds from a wide variety of sources. World Bank (2006) indicates that the best source of capital for any new business is the entrepreneur's own money. It is easy to use, quick to access, has no payback terms, and requires no transfer of equity (ownership). Also, it demonstrates to potential investors that the entrepreneur is willing to risk his own funds and will persevere during hard times. Friends and family make the second easiest source of funds. They do not usually require the paperwork that other lenders require. However, these funds should be documented and treated like loans. Neither part ownership nor a decision-making position should be given to these lenders, unless they have expertise to provide. The main disadvantage of these funds is that, if the business fails and money goes lost, a valuable relationship may be jeopardized.

Credit cards especially personal credit cards are an easy source of funds to access, especially for acquiring business equipment such as photocopiers, personal computers,
and printers. These items can usually be obtained with little or no money paid up front and with small monthly payments. The main disadvantage is the high rate of interest charged on credit card balances that are not paid off in full each month. Banks are very conservative lenders. As successful entrepreneur Phil Holland explains, "Many prospective business owners are disappointed to learn that banks do not make loans to start-up businesses unless there are outside assets to pledge against borrowing." Many entrepreneurs simply do not have enough assets to get a secured loan from a lending institution. As new firms they lack tangible assets that may be pledged as collateral (Berger and Udell, 1998).

Mason and Harrison (2000) Venture investors are a major source of funding for start-ups that have a strong potential for growth. However, venture investors insist on retaining part ownership in new businesses that they fund. Formal institutional venture funds are usually limited partnerships in which passive limited partners, such as funds, supply most of the money. Corporate venture funds are large corporations with funds for investing in new ventures. These often provide technical and management expertise in addition to large monetary investments. However, these funds are slow to access compared to other sources of funds. Also, they often seek to gain control of new businesses. Angel investors tend to be successful entrepreneurs who have capital that they are willing to risk. They often insist on being active advisers to businesses they support. Angel funds are quicker to access than corporate venture funds, and they are more likely to be invested in a start-up operation. But they may make smaller individual investments and have fewer contacts in the banking community. The importance of angel investment as a source of finance for
new business ventures has become well-established in the entrepreneurship literature (Mason and Harrison, 2000).

Many national and regional governments offer programs to encourage small- and medium-sized businesses. They assist small firms by acting as a guarantor of loans made by private institutions for borrowers who may not otherwise qualify for a commercial loan.

**1.1.3 Interaction Between Psychology and Financing Choice**

In the entrepreneurship literature, the importance of capital to new ventures is well accepted. The probability of individuals becoming entrepreneurs is found to increase with their assets-size (Holtz et al., 1994). As a determinant of firm formation, capital is important because it influences not only the ability of firms to enter into markets, but also their performance post-entry. Empirical studies on new ventures have established that sufficiency and size of initial capital resources boost the ability of new firms to survive (Brander et al., 1992), earn higher profits and grow (Bamford et al., 1999).

Koch (1974) ascents that there may exist capital requirements that discourage entry of new firms, positioning financing requirements is a potential entry barrier. In a review of studies in the economics literature on the determinants of firm entry, capital requirements act as entry barriers because entrepreneurs are usually liquidity constrained, as found by Evans and Jovanovic (1989). The resources required to form a new firm are usually beyond the means of individual entrepreneurs (Bhave, 1994). Entrepreneurs therefore look to external sources of financing to overcome the entry barrier of capital requirement.

Belsky and Gilovich (1999) referred to behavioral finance as behavioral economics. Behavioral economics combines the twin disciplines of psychology and economics to
explain why and how people make seemingly irrational or illogical decisions when they spend, invest, save, and borrow money. Much of economic and financial theories presume that individuals act rationally and consider all available information in the investment decision-making process. However there are repeated patterns of irrationality, inconsistency and incompetence in the way human beings arrive at decisions and choices when faced with uncertainty.

Barber and Odean (2000), argues that some financial phenomena can plausibly be understood using models in which some agents are not fully rational. The field has two building blocks: limits to arbitrage, which argues that it can be difficult for rational traders to undo the dislocations caused by less rational traders; and psychology, which catalogues the kinds of deviations from full rationality we might expect to see. Most of the entrepreneurs do not analyze their choices of finance but depend on their behavioral factors. For example: regret theory, dissonance, overreaction and under reaction.

This paper concentrates on the study of entrepreneurs, instead of entrepreneurship per se, a distinction which is important. While entrepreneurship looks at the macro and micro perspectives of the topic, the study of entrepreneurs concentrates on the person in the process. In examining the determinants of entrepreneurial propensity, the entrepreneurship literature is rich in studies that have focused on the psychological and demographic characteristics of individual business founders. More recently, researchers such as Specht (1993) have moved from the “traits” approach, to adopt a “rates” approach that focuses on factors that influence the choice of finances from an entrepreneurs’ perspective.
1.2 Statement of the Problem

In Kenya one of the greatest challenge facing entrepreneurs is the source of capital to start their business ventures. Most of the people cannot access the formal financing system and mostly depend on informal sources of finance. Even though this is the case they still cannot make a proper decision of which source to go for. This is because their choices are largely affected by their behavioral factors.

According to the financing theories especially trade off theory (Kraus and Litzenberger, 1973) people should way between the costs and benefits of a financing source before they decide on one. This is contradicted by Kahneman and Tversky (1991) who say that decision makers are sensitive to the way action choices are described in terms of losses or gains. This shows that people are irrational in decision making. What then applies to Small and Micro- Enterprises? Is it the benefits or losses or the way the choice is framed in terms of gains or losses. Shiller (2000) asserts that people tend to think that when a unanimous large group of people makes the same judgments, they are certainly right. This then implies that there is a puzzle which needs to be resolved to know whether behavioral factors influence a financing choice or are people being ignorant of the rational criteria of choosing financing sources.

Locally no study has been done to investigate the interaction between behavioral factors and entrepreneur’s choice of financing. A previous study done on the NSE by Okoth (2005) tested whether contrarian investment strategy offer profitable opportunity at the NSE. The findings suggested that the strategy offer profitable opportunities in the short run. Another study done on the weekend effect at the NSE by Mokua (2003) showed that
stock returns are equal over all the days of the week hence time did not appear to be a good indicator on stock returns at the NSE.

Nyambongi (2005) tested the hypothesis that weather in Nairobi is correlated to stock returns at the NSE. The data investigated from the NSE and the meteorological departments revealed that the NSE 20 share index was not affected by the prevailing weather conditions in Nairobi at that time. Werah (2006) carried out a survey on the influence of behavioral factors on investors at the N.S.E. The findings indicated preference of individual investors to act like their colleagues which can be regarded as presence of herd behavior. Waweru et al. (2008) carried out a survey of institutional investors operating at the Nairobi Stock Exchange to establish behavioral factors in investment decision-making. The study established that behavioral factors such as representativeness, overconfidence, anchoring, gambler’s fallacy, availability bias, loss aversion, regret aversion and mental accounting affected the decisions of the institutional investors operating at the NSE.

These studies do not explain how behavioral factors influence entrepreneurs financing sources and yet without finances no business will exist. The basis of this project is to try and understand how financing choices are made and affected by behavioral factors.

1.3 Objective of the Study

The objective of this study was to establish which behavioral factors influence the financing choice an entrepreneur makes and to what extent these factors impact on the decision made.
1.4 Importance of the Study

The study will be significant to the individual entrepreneur because it will help determine various financing sources available, how to choose an informed decision on a financing choice and identify how their psychology affect their decisions.

The study will also be important to financial advisors. The fact that psychology contributes to the kind of decisions an entrepreneur makes, knowing which factors largely influence financing decisions the financial advisor will be able to give a good advice when approached. Scholars of the area of behavioral finance will be updated with the various contributions the field has made in terms of explaining the irrationality of investors decisions.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter looks at the importance of theory in academic writing and the various developments in theory. Different theories starting with traditional finance theories, behavioral theories and financing theory will be discussed. Finally the empirical evidences both locally and globally will be explained.

2.2 Theoretical Literature Review

2.2.1 Traditional Finance Theories

The proposition that has dominated finance for over 30 years is Efficient Market Hypothesis (EMH). There are three basic theoretical arguments that form the basis of the EMH. The first and most significant is that investors are rational and by implication securities are valued rationally. Second is based on the idea that everyone takes careful account of all available information before making investment decisions. It is related to internal consistency. Each decision has to be made in a systematic way such that it is in agreement with one another whatever the subject is. The third principle is that the decision maker always pursues self-interest. Most widely applied in finance is the expected utility model of choice under risk, proposed by DeBondt (1998). Its rationality is based on axioms underlying expected utility maximization as the optimal rule. The accumulation and processing of information and the formation of expectations occur efficiently, yielding possible outcomes (of total wealth) and corresponding possibilities.
2.2.2 Efficient Market Hypothesis Theory

According to the efficient market hypothesis, financial prices incorporate all available information and prices can be regarded as optimal estimates of true investment value at all times Fama (1998). The efficient market hypothesis is based on the notion that people behave rationally, maximize expected utility accurately and process all available information Shiller (1998). In other words, financial assets are always priced rationally, given what is publicly known. Stock prices approximately describe random walks through time: the price changes are unpredictable since they occur only in response to genuinely new information, which by the very fact that it is new, is unpredictable Shiller (2000). Due to the fact that all information is contained in stock prices it is impossible to make an above average profit and beat the market over time without taking excess risk.

2.2.3 Standard Finance Theories

Standard finance is a body of knowledge built on the pillars of the portfolio theory of Markowitz, the capital asset theory of Sharpe, arbitraging theory of Miller and Modigliani and the option pricing model of Black and Scholes. According to Statmen (1999) these theories use minimum tools to build a unified theory intended to answer certain facets of financial security trade outcomes.

Markowitz (1952) explains how an efficient portfolio is constructed by use of mean variance analysis. He describes how to combine assets into efficiently diversified portfolio. In this way, a portfolio’s risk can be reduced and the expected rate of return can be improved if investments having dissimilar price movements are combined. Scholes (1997) identifies that the only risk is diversifiable risk. He developed a model for pricing derivative instruments. Modigliani and Miller (1958) wrote on the irrelevance of capital
structure on a firm’s valuation. Their finding noted that the market value of any firm is independent of its capital structure and is given by capitalization of its expected return at the rate appropriate to its asset class.

The failure of traditional finance theories in explaining certain security price movements and market anomalies on the basis of rationality suggests that this framework of financial market understanding could be incomplete, wrong or inapplicable in all the markets Olsen (1998). Therefore, introduction of behavioral finance can explain some of the deviations from rationality which include using rules of the thumb to make decisions or even one’s own experience to try and outdo the market.

2.2.4 Behavioral Theories and Factors

2.2.4.1 The Prospect Theory

This theory says that losses have more emotional impact than an equivalent amount of gains. Consequently, people respond differently to equivalent situations depending on whether it is presented in the context of a loss or a gain. Most investors are risk averse when chasing gains but become risk lovers when trying to avoid a loss. Prospect theory helps explain how loss aversion, and an inability to ignore sunk costs, leads people to take actions that are not in their best interest. The sting of losing money, for example, often leads investors to pull money out of the stock market unwisely when prices dip, Belsky and Gilovich (1999). The theory is the comprehensive description we can give of the decision process. It summarizes several centuries' worth of findings and insights concerning human decision behavior. Moreover, it has produced an unmatched yield of new insights and predictions of human behavior in decision making. This theory is explained by use of the following behavioral factors.
2.2.4.2 Loss Aversion Factor

Kahneman and Tversky sought to provide a theory that describes how decision-makers actually behave when confronted with choices under uncertainty. They identified a sharp asymmetry between the values that people put on gains and losses. This asymmetry, called loss aversion, has losses weighted about twice as heavily as gains—that is losing $1 is about twice as painful as the pleasure of gaining $1 (Kahneman and Tversky, 1991). This can also be expressed as the phenomena in which people will tend to gamble in losses, i.e. holding on to losing positions in the hope that prices will eventually recover.

Benartzi and Thaler (1995) argues that myopic loss aversion is the combination of a greater sensitivity to losses than to gains and a tendency to evaluate outcomes frequently. Investors’ behavior is sometimes said to be myopic, short-sighted, in that it ignores everything that might happen after the end of the single-period horizon and therefore all investors plan for one identical holding period.

Loss aversion can help to explain the tendency of investors to hold on to loss making stocks while selling winning stocks too early. Shefrin and Statman (1985) called this occurrence of “selling winners too early and riding losers too long” as the disposition effect. Conversely, risk seeking in losses will cause investors to hold on too long when prices decline, thereby causing the prices of stocks with negative momentum to overstate fundamental values. Loss aversion also implies that decision-making is sensitive to the description of the action choices i.e. to the way the alternatives are “framed” (Kahneman and Tversky, 1991).
2.2.4.3 Mental Accounting Factor

Frames and mental accounting describes the tendency of people to place particular events into different mental accounts based on superficial attributes (Shiller, 1998). The main idea underlying mental accounting is that decision-makers tend to separate the different types of gambles they face into separate accounts, and then apply theoretical decisions rules to each account by ignoring possible interaction between the accounts. Mental accounts can be isolated not only by content, but also in respect to time.

Shefrin and Statman (1994) explain the establishment and the maintenance of a new mental account. They explain that when a new stock is bought, a new mental account for the particular stock is opened. The reference point is the purchase price. A running score is then kept on this account indicating gains or losses relative to the purchase price. When another stock is purchased, a separate account is created.

It has been argued that decision-makers encounter considerable difficulty in closing a mental account at a loss. Mental accounting can result in “good money being thrown after bad money” by a continuous operation of non-profitable ventures in the hope that recovery will somehow take place. It may also explain framing which is beneficial to investors with imperfect self-control (Benartzi and Thaler, 1995).

2.2.4.4 Regret (Cognitive Dissonance) Factor

There is a human tendency to feel the pain of regret for having made errors, even small errors. Covering loss aversion, defer selling stocks that have gone down in value and accelerate the selling of stocks that have gone up in value (Larrick, Boles, 1995). The theory may be interpreted as implying that investors avoid selling stocks that have gone
down in order not to finalize the error they make and in that way avoid feeling regret. They sell stocks that have gone up in order not to feel the regret of failing to do so before the stock later fell.

Cognitive dissonance is the mental conflict that people experience when they are presented with evidence that their beliefs or assumptions are wrong. Cognitive dissonance may be classified as a sort of pain of regret, regret over mistaken beliefs. Festinger (1957) asserts that there is a tendency for people to take actions to reduce cognitive dissonance that would not normally be considered as rational, such as avoiding new information or developing contorted arguments to maintain beliefs or assumptions. It’s a feeling of ex post remorse about a decision that led to a bad outcome. If one wishes to avoid the pain of regret, one may alter one’s behavior in ways that would in some cases be irrational.

### 2.2.5 Heuristics Theories

It is defined by behaviorists as the way by which people find things out for themselves, usually by trial and error and the trials always leads them to design “rules of thumb” (Shefrin, 2000). Traditional finance describes it as the use of experience and practical efforts to answer questions or to improve performance. Due to the increased flow of information decision making has been complicated implying the use of heuristics becoming inevitable approach, but not always beneficiary. This concept may help to explain why the market sometimes acts in an irrational manner, which is opposite to the model of perfectly informed markets. The interpretation of new information may require heuristic decision-making rules, which might later have to be reconsidered. The whole
market can initially react in the wrong way. Heuristics can be explained by the following behavioral characteristics.

2.2.5.1 Overconfidence and Over and Under Reaction Heuristic

Overconfidence refers to the tendency of people to exaggerate their talents, skills, knowledge and abilities and under estimate the likelihood of bad outcomes. The combination of overconfidence and optimism causes people to overestimate the reliability of their knowledge, underestimate risks and exaggerate their ability to control events, which leads to excessive trading volume and speculative bubbles. The greater confidence a person has in himself, the more risk there is of overconfidence. This applies, in particular, to areas where people are not well-informed - self-confidence usually bears no relation to their actual knowledge (Goldberg, von Nitsch, 2001).

Price reactions to information are crucial for market behavior. Recent empirical research in finance (Barberis, et al., 1998) has uncovered two families of pervasive regularities: under reaction of stock prices to news such as earnings announcements, and overreaction of stock prices to a series of good or bad news. For this reason, it takes some time before investors begin to conclude that a trend, such as price increases in connection with a speculative bubble, will continue. Further, it is the over- and under reaction that is one of the causes of trends, momentums and fads.

Many investors feel that they do have speculative reasons to trade often, and this must have to do with a tendency for each individual to have beliefs that he or she perceives better than others’ beliefs (Shiller, 1998). Therefore, overconfidence may help to explain possible general market overreactions as well as excess volatility and speculative asset
prices. It may also explain why investment professionals hold actively managed portfolios with the intention of being able to choose winners and why pension funds hire active equity managers. High trading volumes and the pursuit of active investment strategies thus seem inconsistent with common knowledge of rationality.

### 2.2.5.2 Anchoring Heuristic

Anchoring refers to the decision-making process where quantitative assessments are required and where these assessments may be influenced by suggestions. Anchoring (Yates, 1990) is a phenomenon in which in the absence of better information, investors assume current prices are about right. In a bull market, for example, each new high is ‘anchored’ by its closeness to the last record, and more distant history increasingly becomes an irrelevance. People have in their mind some reference points (anchors), for example of previous stock prices. When they get new information they adjust this past reference insufficiently (under reaction) to the new information acquired.

The anchoring phenomena appear relevant to the sticky prices that are so talked about by macroeconomists. As long as past prices are taken as a suggestion of new prices, the new prices will tend to be close to past prices. The more ambiguous the value of a commodity, the more important a suggestion is and the more important anchoring is likely to be for price determination (Shiller, 1998). Anchoring describes how individuals tend to focus on recent behavior and give less weight to longer time trends (Shiller, 2000).

### 2.2.5.3 Herd Behavior Heuristic
Herd behavior is a form of heuristics where individuals are led to conform to the majority of individuals, present in the decision-making environment, by following their decisions. However, herd behavior, as with other heuristics, may lead people astray when they follow e.g. a general market trend. Human herding behavior results from impulsive mental activity in individuals responding to signals from the behavior of others (Prechter, 1999).

Part of the reason people’s judgments are similar at similar times is that they are reacting to the same information. The social influence has an immense power on individual judgment. When people are confronted with the judgment of a large group of people, they tend to change their “wrong” answers. They simply think that all the other people could not be wrong. They are reacting to the information that a large group of people had reached a judgment different from theirs. This is a rational behavior. In everyday living we have learned that when a large group of people is unanimous in its judgments they are certainly right (Shiller, 2000).

Herd behavior can play a role in the generation of speculative bubbles as there is a tendency to observe “winners” very closely, particularly when good performance repeats itself a couple of times. It seems plausible to make a distinction between voluntary and enforced herd behavior. Many players on financial markets might think that a currency or equity is not correctly priced, but they refrain nevertheless from a contrary financial exposure. These people simply feel that it is not worthwhile to combat the herd. This is an example of enforced herd behavior. They follow the herd - not voluntarily, but to avoid being trampled and are therefore enforced into following the herd (Fromlet, 2001).
The “noise trading” theory stems from the fact that investors with a short time horizon are influencing the stock prices more than the long-term investors are. Investors, with no access to inside information, irrationally act on noise as if it were information that would give them an edge (Thaler, 1993).

The notion that the level of market prices reflects the outcome of private investors’ aggregated assessments and consequently the true value of the market may be incorrect. People can instead be rationally choosing not to waste their time and effort in exercising their judgment about the market and thus choosing not to exert any independent impact on the market (Shiller, 2000). This can lead to herd like behavior and act as a source of stock market over- or under pricing.

2.2.6 Disjunction Effect Theory

The disjunction effect is a tendency for people to want to wait to make decisions until information is revealed, even if the information is not really important for the decision, and even if they would make the same decision regardless of the information. The disjunction effect is a contradiction to the "sure-thing principle" of rational behavior (Thaler, 1993).

2.2.7 Financing Decision Theories

Financing decisions deal with the sources of funds whether internal or external. There are two broad theoretical principles underlying the financing choices of businesses, taking into account both explicit and implicit costs of finance. The static trade-off choice framework describes several factors, including costs of exposure to bankruptcy and agency costs associated with the use of debt financing. In the pecking-order theory of capital structure choice, Myers and Majluf (1984) posit that risks associated with
information asymmetries between the firm and potential financiers will result in different expected return rates by financiers and a pecking order of external financing sources preferred by the firm.

Cassar (2004) pointed out that several aspects of the financing choices are unique to start-ups and new ventures. Their newness and smaller scale would make some financing options unavailable and they are also more likely to be subject to context and individual-specific issues. Entrepreneurial ventures are also informational opaque due to their limited track-record and are therefore likely to be more heavily reliant on initial insider finance (Berger and Udell, 1998). As such, in studying the financing options of start-ups, many factors other than the direct cost of funds may influence the financing decisions of both financier and entrepreneur. The complexities of the financing choice decision for start-ups indicate that the effect of different funding sources on entrepreneurial propensity is not uniform. A deeper understanding of the role of financing in venture formation would involve distinguishing and comparing different forms of funding.

Modigliani and Miller (1958) in their theory argue that in perfect financial markets where there are unlimited funds; funds are always available for every project with positive Net Present Value (NPV). They came up with two propositions on the firm’s capital structure. The first proposal stated that the value of any firm is determined by capitalizing its expected net income and thus it is independent of the firm’s leverage. The second proposal holds that as the debt increases, the cost of equity will also increase possibly to offset the advantage of using cheap debt. It states that the firm’s value is determined by its real assets and not by its capital structure decision; hence capital structure decisions are irrelevant as long as firm’s investment are given. The two propositions for MM
therefore hold that in the world without taxes, the value of the firm is not affected by the capital structure and the capital structure decisions are irrelevant and independent on the firm’s investment decisions.

The pecking order theory by Murray and Goyal (2005) suggested that firms avoid external financing while they have internal financing available and avoid new equity financing while they can engage in new debt financing at reasonably low interest rates. According to the theory, the most preferred source of finance is internal source which is the retained earnings or personal savings for informal sector entrepreneurs. The second preferred source is debt this is followed by internal equity and external equity.

Another major theory is the trade off theory in which firms are assumed to trade-off the tax benefits of debt with the bankruptcy costs of debt when making their decisions Kraus and Litzenberger (1973). An emerging area in finance theory is right-financing theory whereby investment banks and corporations can enhance investment return and company value over time by determining the right investment objectives, policy framework, institutional structure, source of financing (debt or equity) and expenditure framework within a given economy and under given market conditions.

2.3 Empirical Literature Review

2.3.1 Global Emperical Literature Review

Kahneman and Tversky present in Prospect Theory (1979), the following experimental evidence to illustrate how investors systematically violate the utility theory; When their subjects were asked to choose between a lottery offering a 25% chance of winning 3,000 and a lottery offering a 20% chance of winning 4,000, 65% of their subjects chose the later (20%; 4,000). On the contrary when the subjects were asked to choose between a
100% chance of winning 3,000 and an 80% chance of winning 4,000 80% chose the former (100%; 3,000). Expected utility theory predicts that they should not choose differently in these two cases since the second choice is the same as the first except that all probabilities are multiplied by the same constant. Therefore, according to the prospect theory, the individuals’ prefer to choose something that is certain and well understood by them. Hence if this theory was to apply to the choice of a financing source people will prefer borrowing from friends than from financial institutions were they have little information about.

Wharton (1995) studied 350 firms: 176 firms in the manufacturing sector, 77 in the primary sector and 97 in the service sector. When asked what was the most important objective of hedging strategy, 49% answered managing volatility in cash flows, 42% managing volatility in earnings and only 8% answered managing the market value of the firm (1% answered managing balance sheet accounts and ratios), 50% of the respondents in the survey reported frequently hedging contractual commitments, but only 8% reported frequently hedging competitive/ economic exposure. It is striking that only 8% reported that their most important objective is the market value of the firm, since maximizing the market value of the firm is, by much financial theory, the ultimate objective of the firm. It is hard to know what people meant by their choices of answers, but there is indeed evidence that firms are driven in their hedging by the objective of hedging specific near term transactions, and neglect consideration of transactions or other potential factors that might also pose longer run risks to the firm. The same case applies to choosing a source of financing where people will only analyze the short term risks and benefits and assume
the long term risks the source of finance will cause which might otherwise lead to closure of the business.

Shiller (2000) sent out questionnaires to 2,000 wealthy individual investors and 1,000 institutional investors; there were 605 completed responses from individuals and 284 responses from institutions. One of the questions asked was: "Did you think at any point on October 19, 1987 that you had a pretty good idea when a rebound was to occur?" Of individual investors, 29.2% said yes, of institutional investors, 28.0% said yes. Among those who bought on that day, the numbers were even higher, 47.1% and 47.9% respectively. The next question on the questionnaire was "If yes, what made you think you knew when a rebound was to occur?". The answers referred to "intuition" or "gut feeling" as determined by overconfidence. From previous repetitive occurrences, entrepreneurs make choices that they are sure will lead to a particular outcome or even ignore information which could otherwise prevent an erroneous mistake.

Another study was conducted by Odean with the title Boys will be boys: Gender, overconfidence and common stock investment. Human beings are overconfident about their abilities, their knowledge and their future prospects. Odean (1998) shows that overconfident investors, who believe that the precision of their knowledge about the value of a security is greater than it actually is, trade more than rational investors and that doing so lowers their expected utilities. The paper examines overconfidence by investors in market trading on the basis of gender and its influence on the level of trading activities.

Psychology predicts that in areas such as finance men are more overconfident than women. This difference in overconfidence yields two predictions: men will trade more than women and the performance of men will be hurt more by excessive trading than the
performance of women. In determining a financing source, men being very overconfident about the outcome of their ventures will go for bank loans while women will be expected to approach friends for funds.

The disjunction effect was first specified by Savage (1954) as a violation of the “sure thing principle”, which can be formulated as follows: if the alternative A is preferred to the alternative B, when an event \( X_1 \) occurs, and it is also preferred to B, when an event \( X_2 \) occurs, then A should be preferred to B, when it is not known which of the events, either \( X_1 \) or \( X_2 \), has occurred. Tversky (1990) presented two possible plays of a gamble that were equally likely to win $200 or lose $ 100. They instructed the gamblers that after the first play was completed, they will be faced with the possibility of another play. They found that 69% chose to play again after a known win, 59% chose to play again after a known loss, but only 36% chose to play when the outcome of the first play was unknown. The ‘three state’ model cannot explain the fact that gambling rate dropped far below the chance rate of 50% during the unknown condition. This situation can be likened to the situation where entrepreneurs use a certain source of finance after the use of it by a particular person proved successful and avoid the one which has mostly led to regrets.

2.3.2 Financial Theories Empirical Literature Review

According to a research done by Gitome (2007) on enhancing capacities of rural based micro enterprises, the main source of finance in most micro and small enterprises is loan. 26.3% take loans from banks while 24.8% believe that loan is very expensive. The loans from MFIs are believed to be affordable but only 30% have access to it. Savings by entrepreneurs is done in given specific ways since 89.6% of the respondents indicated that they save. This is as a result of being compelled to do so by MFI’s.
Frank and Goyal (2003) tested the pecking order theory on the basis of what a broad cross-section of U.S. businesses actually did (rather than what managers said that they felt) during the period of 1980 to 1998. They found that the business behaved exactly in line with the trade-off theory and not as they would have been predicted.

Graham and Harvey (2001) undertook a major survey of attitudes of senior managers in a large sample of larger US businesses in 1999. The range of the study was wide but, they paid quite a lot of attention to testing the pecking order theory. Graham and Harvey found that managers’ behaviors seemed consistent with both trade off theory and pecking order theory. They found that businesses are reluctant to issue new shares where it is perceived that existing shares are undervalued, and that this is an important consideration in share issue decisions. They reported that senior managers in more than two thirds of businesses believe that their shares are undervalued. This is consistent with the pecking order theory.

2.3.3 Local Empirical Literature Review

Waweru et al (2008) did a survey of institutional investors operating at the Nairobi Stock Exchange to investigate how behavioral factors affected their decisions. Prospect theory was evidenced by the presence or absence of the following behavior characteristics: loss aversion, regret aversion and mental accounting. Using the ‘Yes’ or ‘No’ type questions, respondents were asked to indicate whether these factors influenced their investment decision-making process. Only 47% of the behavior of the investors can be explained by prospect theory.
Mental accounting (separate elements) ranked highest (78.2%) followed by regret aversion (avoid selling losing shares). None of the respondents exhibited loss aversion (with a sure loss) behavior. This was contrary to the statement of Tversky and Kahneman (1974) that people become considerably more distressed at the prospect of losses and would exhibit risk-seeking rather than risk-averse behavior.

Regret aversion (quickly selling gaining shares) was displayed by 39.1% of the respondents as was mental accounting (selling–losing investment portfolios). Most investors were unwilling to sell a losing investment even when the account reflected a loss position. This behavior may have resulted in the low trading activities at the NSE.

Past trends of stocks had a low impact on the institutional investor decision-making behavior. Only 43% of the respondents reported that technical analysis had a high impact on their decision-making.

Werah (2006) carried out a survey on the influence of behavioral factors on investors at the N.S.E. It targeted 100 individual investors and 40 institutional investors. Results about investors’ susceptibility to loss aversion found that 49.01% individual investors choose to gamble and hold the stock for one month in order to have the possibility of breaking even, although they face an equal risk to further increase their losses, 39.54% would sell the stock and realize a minor loss, while another 11.45% of individual investors gave other alternative actions including holding the stock until and as long as it will break even. Another 56.52% of institutional investors expressed that they would choose to gamble and hold the stock in question for one month in order to have the possibility of breaking even while 34.09% would choose to sell the stock now and realize a minor lose. The preference for holding the stock longer indicates that investors, both
individual and institutional are risk averse. Entrepreneurs are risk averse like any other investor so they will choose a less risky option of financing.

Migiro and Wallis (2006) did a survey on Kenyan manufacturing SMEs' finance needs to information on alternative sources of finances. They sought information on the enterprise profile, use of alternative sources of finance, information on sources of finance, sources of information used, methods of communication used to access sources of finance and the types of financial information required. On the enterprise profile, three hundred and twelve (82.1%) of the manufacturing SME operators were male, while 68 (17.9%) were female. Regarding the form of business ownership, the majority of the enterprises in the survey were sole proprietorships 233 (61.3%). However, 48 (51.1%) of the textile enterprises and 32 (34%) of the metal enterprises were partnerships. Of the enterprises, 88.2% had less than 10 employees. The majority of the firms (314, or 82.7%) had been in existence for over three years. Most of the manufacturing SME owners had secondary education. The empirical results indicated that the majority of the manufacturing SME operators 324(85.3%) had no formal training in business management.

Further Migiro and Wallis (2006) investigated use of alternative sources of financing, most financing sources were mostly unknown to the respondents. These included leasing 90% (342), angel finance 78% (299), venture capital 82.6% (314), city or municipal loan scheme 90.8% (345) and SMEs development fund 76.6% (317). Apart from lack of knowledge on what they are, it was acknowledged by some respondents that it was difficult to obtain information on them. Other findings based on discussions with the respondents indicated that general knowledge and awareness of finance options available to SMEs in Kenya were poor. This was said to be due to a lack of understanding of what
was available to SMEs, due to fragmented financial information and lack of targeting awareness and educational schemes with a view to raising the profile of finance issues among the SMEs.

Migiro and Wallis also sought to establish how often the manufacturing SME operators used different sources of information to access finance. The aggregate results indicated that 227 (59.7%) of the respondents very often use family and friends to obtain information on external sources of finance, while customers 154 (40.5%); local suppliers 152 (40%); competitors 87 (22.9%) and the Department of Trade and Industry 15 (3.9%) were also used. In conclusion it was observed that Kenya had weak enterprise finance information system that could not support, in particular, the information needs of small business enterprises. The findings revealed that general knowledge and awareness of finance options available to SMEs in Kenya were poor. This was said to be due to a lack of understanding of what was available, due to fragmented financial information, and lack of targeted awareness and educational schemes with a view to raising the profile of finance issues among the SMEs. The study suggested that SME operators need information on available bank loans, sources of business finance, SME loan schemes, information on venture capital and on angel finance.

Nderitu (2008) carried a survey of listed Agricultural companies at the NSE to find out the influence of culture and distance on stockholdings and trading. She administered questionnaires to 48 individual investors. Her findings showed that culture and distance greatly determined the kind of stock the investor chose. Of those who were interviewed, 68% looked at the distance from residence to determine stock invested in. Only 19% of
the respondents rationally chose their investment while the rest just followed what their counterparts were doing.

2.4 Conclusion

From the already discussed literature review it is evident that people’s choice of a financing source is affected by behavioral factors. For example Shiller (2000) asserts that people tend to think that when a unanimous large group of people makes the same judgments, they are certainly right. Some of the behavioral factors tend to agree with the rational finance theories when it comes to risk. The pecking order theory of Frank and Goyal (2003) suggests that people are risk averse and will choose a source of finance that is more comfortable and less risky.

According to the financing theories especially trade off theory (Kraus and Litzenberger, 1973) people should weigh between the costs and benefits of a financing source before they decide on one. This is contradicted by Kahneman and Tversky (1991) who say that decision makers are sensitive to the way action choices are described especially the alternatives. For example people will choose a financing source that is stated in terms of gains and reject one stated in terms of losses even though its benefits are more. This shows that people are irrational in decision making. What then applies to informal sector entrepreneurs? Is it the benefits or losses or the way the choice is framed in terms of gains or losses.

Various empirical studies contend with the fact that people are affected by behavioral factors in their decision making processes. The common data collection method in these studies has been the use of questionnaires to pick out the behavioral factors. Odean (1998) examined overconfidence factor in market trading on the basis of gender. His
findings showed that men are more overconfident and trade more than women even when they are incurring losses. Can this be the same case when it comes to choosing a financing choice? Werah (2006) investigated whether behavioral factors affected investors’ activities at the Nairobi Stock Exchange and found a positive relationship.

This study will therefore seek to clarify whether the behavioral factors affect the financing choices made by informal sector entrepreneurs. This is because none of the studies carried out has established this.
CHAPTER THREE

RESEARCH METHOLOGY

3.1 Introduction

This chapter contains the methodology used to perform the research. It describes the research design, the population targeted and data collection as well as analysis techniques.

3.2 Research Design

The research design used in this study was descriptive research design with questionnaires as the main instrument of collecting data. (Kathuri and Pals, 1993) assert that survey research usually uses questionnaires in order to determine the opinions, attitudes, preferences and perceptions of groups of people of interest in the research. The main objectives of the study were to find out how behavioral factors contribute to the choice of financing option an entrepreneur makes. This instrument would be more accurate in this type of survey given the minimal intellectual sophistication of the subjects. It would also save time on part of the researcher. Coding and tabulation will be simple.

3.3 Population

The research targeted 3,000 Small and Micro Enterprises within Ruiru Municipality. A list of SMEs which were registered in 2009 was obtained from Ruiru Municipal Council. From the list, 100 Small and Micro Enterprises were sampled using systematic sampling procedure in list arranged alphabetically.
3.4 Data Collection

The study mainly focused on primary data. This data was collected by use of questionnaires. A Questionnaire was prepared with both open and closed ended questions to elicit information from the respondents. The questionnaires were self administered to individual respondents. However, secondary data was obtained from existing theories, past research materials, Journals and internet sources to aid in the research.

3.5 Data Analysis

The Statistical Package for Social Sciences (SPSS) was used to analyze the data. They were analyzed in accordance with the objectives of the study. The researcher utilized Factor Analysis technique embedded in SPSS V.17 in analyzing the various behavioral factors that affect financing choices. Sample means and standard deviations of the responses were calculated to establish to what extent behavioral factors influence the entrepreneurs’ financing source. Mean scores would help establish the level of influence. Standard deviation would indicate whether there are significant or insignificant levels of consideration for each factor amongst the entrepreneurs. Graphs, tables and charts would also be used in data presentation because of their ability to bring up a relative form to the otherwise abstract nature of the results.

3.6 Data Reliability and Validity

A research has high validity if the study only contains what one wants to study and nothing else. Validity is subdivided into three subgroups: construct-, internal- and external validity. Construct validity refers to data collection procedure. The primary data collection will be directed towards the SMEs entrepreneurs, who are the mostly faced
with financing challenges. And therefore will highly be influenced by behavioral factors in their decisions.

Internal validity which is a link between theory and empirical research will be ensured as the study tries to discover which behavioral factors mostly influence financing theories by considering existing theories. External validity establishes the domain to which a study’s findings can be generalized. Respondents will be chosen randomly and the study sample is fairly representative.

Reliability demonstrates that operations of study for example data collection procedures can be repeated with the same outcome. The researcher will utilize a quantitative method in form of a questionnaire and considers that the same procedure will easily be applicable to another similar sample of SMEs and render same results if directed towards the same sample group. Therefore the study fulfils reliability criteria. However, answers of respondents are exposed to subjectivity and may distort the responses.
CHAPTER FOUR

DATA FINDINGS, ANALYSIS PRESENTATION AND SUMMARY OF FINDINGS

4.1 Introduction

This chapter presents the data that was found on effects of behavioral factors on SMEs financing choices in Ruiru municipality. The research was conducted among 100 SMEs in this municipality. Data was collected in form of questionnaire. With multiple response questions the study used likert scale in collecting and analyzing where a scale of 5 points were used in computing the means and standard deviations there-to computed. Yes/No questions were also administered. This study made use of factor analysis technique as well as descriptive analysis and the results were presented in tables, graphs and charts as appropriate with explanations being given in prose.

4.2 Background Information

Figure 1: Gender

The respondents were required to indicate their gender. The findings are presented in the figure 4.1 below.
According to the findings given 55% of the respondents were male while 45% were female. This depicts that there is gender equity in SMEs operations at the municipality.

**Table 1: Level of Education**

The respondents were required to state their highest level of education and the findings are stipulated in the table 4.1 below.

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>primary</td>
<td>7</td>
<td>7.0</td>
</tr>
<tr>
<td>secondary</td>
<td>32</td>
<td>32.0</td>
</tr>
<tr>
<td>diploma</td>
<td>33</td>
<td>33.0</td>
</tr>
<tr>
<td>university</td>
<td>28</td>
<td>28.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the findings 33% of the respondents had diplomas, 32% had secondary, 28% were graduates while only a small proportion (7%) of the respondents had primary school level of education. This illustrates that majority of owners of the SMEs were well educated pointing to level of competence in running the SME sector.

**Figure 2: Form of the Business**

The study sought to establish the form of business ownership among the SMEs surveyed.
The results were that, 79% of the respondents indicated that their business was individually owned while 21% said that their businesses were in form of partnership. This would suggest people like to work independently when it comes to running SMEs.

**Figure 3: Age bracket**

The respondents were required to indicate their age brackets.

According to the results, 64% of the respondents were aged below 30 years, 22% were between 30-35 years, 5% had either between 36-40 years or over 45 years while 4% of the respondents had 41-45 years. This depicts that the SME sector is managed by middle aged persons who are energetic persons ready to put their ideas into opportunities and take risk that comes with business operations.

**4.3 Yes/No and Statement Questions Analysis**

**Figure 4: Confidence in Financing Source**

The researcher also sought to investigate whether after some time of operating the business the respondent would be confident that they chose the right financing source.
According to the findings, 95% of the respondents were confident that they chose the right financing source while only a small proportion (5%) indicated that they chose their financing source wrongly. This indicates that majority of the respondents are affected by overconfidence as a behavioral factor since they could not admit that their choices were wrong even in the cases where they were facing losses due to their poor choice of financing sources.

**Figure 5: Financial Descriptions the Respondent Would Choose**

The respondents were given several financial descriptions to choose the descriptions they would prefer most.
On which financial description the respondents would choose, majority of the respondents interviewed (72%) chose, source of finance that gave the chance of making a 30% profit while a small proportion (28%) of the respondent chose; source of finance with a possibility of making 50% loss. Entrepreneurs in this case display a frame dependence behavior as explained in the loss aversion factor. They chose the statement that was described in form of gains to avoid future regret and loss.

**Table 2: Statements**

The study also sought to establish the opinion of the respondents on different statements related to running of their business.

<table>
<thead>
<tr>
<th>Statements</th>
<th>No (%)</th>
<th>Yes (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will continue operating this business even if it is not making profit in</td>
<td>34</td>
<td>66</td>
</tr>
<tr>
<td>hope that the future will improve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will analyze each stock separately not the business as whole to identify</td>
<td>27</td>
<td>73</td>
</tr>
<tr>
<td>loses and gains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will pay attention to big numbers than small number when analyzing the</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>business activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will save my money in banks said to have good managers</td>
<td>31</td>
<td>69</td>
</tr>
<tr>
<td>Past failure in a business represent future failures</td>
<td>75</td>
<td>25</td>
</tr>
</tbody>
</table>

From the study, the statement “will analyze each stock separately not the business as whole to identify loses and gains” was the most preferred with 73% of respondents answering yes to the statement. This showed that majority of the entrepreneurs are affected by mental accounting behavior where they value each item in terms of its attribute and treat it differently basing it on its mental account. Views on the statement “Will continue operating this business even if it is not making profit in hope that the
future will improve” implied that most of the people (66%) are affected by anchoring behavior since they hold on to losers too long in hope that they will become winners. The rest of the respondents (34%) are affected by loss aversion factor. Findings on “Will pay attention to big numbers than small number when analyzing the business activities” indicated that 48% of the respondents were rational investors who consider each cent in their activities while 52% of the interviewees were affected by the innumeracy factor as they answered yes to the statement. “Will save my money in banks said to have good managers” statement 69% said yes implying that they were affected by representativeness behavioral factor, “Past failure in a business represent future failures” impacted less on the SMEs as only 25% answered yes and 75% said no. this implies that the fear of failure is a factor that does not impact on the choices of financing methods SMEs choose.

**Figure 6: Increase in Demand for Loans**

The study also sought to identify how the respondents valued the information related to the statement that during the past two years the demand for loans has increased and there is evidence that more people will be seeking loan. The results were shown in figure below.
From the findings 51% of the respondents indicated that the loan is worth, 39% of the respondents said that the information is not sufficient enough to take the loan while (10%) were of the opinion that the loan is not worth taking. These findings shows that herding behavior can influence one to choose a financing source they did not prefer, in this case bank loans as represented by 51%. It also reveals that a section of entrepreneurs (39%) do not rationally analyze information but make decisions according to disjunction effect behavior. The 10% respondents who indicated that the loan was not worth taking stuck to their initial belief that loans were a bad source of finance. This is explained by existence of anchoring behavior.

**Table 3: Whether Duration is a Factor of Consideration**

The researcher also sought to investigate whether when choosing sources of finance the respondents would consider the duration the business would take.

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<td>No</td>
<td>24</td>
<td>24</td>
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<tr>
<td>Yes</td>
<td>76</td>
<td>76</td>
</tr>
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<td><strong>Total</strong></td>
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According to the findings, 76% of the respondents were of the opinion that they would consider the duration while only a small proportion (24%) indicated that they would not consider the same. This indicates that majority of the SME owners plan ahead of their activities and therefore have some rationality in their decisions.

**Figure 7: The duration considered when choosing sources of finance**

The case study wanted to establish the duration the respondents would prefer when choosing the sources of finances and the results were presented below.
From the findings 57\% of the respondents indicated that they would prefer a long term (more than 5 years) while 43\% indicated that they would consider a short term (less than 1 year) period when choosing a financing source. These findings show that 43\% of the entrepreneurs in SMEs are afraid of uncertainties that come with a longer period. Therefore loss aversion as a factor and a remedy for future regrets impacts on the financing choice made by entrepreneurs who focus on the future cash flows to achieve the objective of the firm which is value maximization.

4.4 Manual

Introduction

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![Form of business](image)

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![Age bracket](image)
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**Figure 8: Confidence in financing Source**

The researcher also sought to investigate whether after some time operating the business the respondent would be confident that they chose the right financing source.

According to the findings, 95% of the respondents were confident that they chose the right financing source while only a small proportion (5%) indicated that they chose their financing source wrongly. This indicates that majority of the respondents are affected by overconfidence as a behavioral factor since they could not admit that their choices were wrong even in the cases where they were facing losses due to their poor choice of financing sources.

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<tr>
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</tr>
</tbody>
</table>

According to the findings, 76% of the respondents were of the opinion that they would consider the repayment duration while only a small proportion (24%) indicated that they would not consider the same. This indicates that majority of the SME owners plan ahead of their activities.

**Table 4: Financing sources preferences**

<table>
<thead>
<tr>
<th>Sources of Finance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>STDEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venture investors and government programs</td>
<td>69</td>
<td>17</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>1.52</td>
<td>0.915</td>
</tr>
<tr>
<td>Friends and family</td>
<td>14</td>
<td>24</td>
<td>19</td>
<td>22</td>
<td>21</td>
<td>3.37</td>
<td>1.365</td>
</tr>
<tr>
<td>Micro Finance Institutions</td>
<td>4</td>
<td>22</td>
<td>29</td>
<td>23</td>
<td>22</td>
<td>3.20</td>
<td>1.169</td>
</tr>
<tr>
<td>Bank Loan</td>
<td>17</td>
<td>17</td>
<td>19</td>
<td>23</td>
<td>24</td>
<td>3.12</td>
<td>1.421</td>
</tr>
<tr>
<td>Personal savings</td>
<td>9</td>
<td>16</td>
<td>21</td>
<td>15</td>
<td>39</td>
<td>3.59</td>
<td>3.59</td>
</tr>
</tbody>
</table>

The respondents were required to rate how they preferred certain financing sources. From the findings, the majority of the respondents indicated that personal savings as the most preferred source of finance when starting a business as shown by a mean of 3.59 and a standard deviation of 3.59. Friends and family, micro-finance institutions, bank loan, and Venture investors and government programs were the other sources of finance that preferred when starting a business whose means were 3.37, 3.20, 3.12 and 1.52 respectively. These findings agree with the pecking order theory that rates internal savings as the safest source of finance.
Table 5: Factors Influencing Choices of Finance

The study also sought to establish how different factors influenced the respondents choice of finance.

<table>
<thead>
<tr>
<th>Factors Influencing choices of finance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents' confidence</td>
<td>72</td>
<td>21</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3.74</td>
<td>1.169</td>
</tr>
<tr>
<td>Friends and what other entrepreneurs were doing</td>
<td>15</td>
<td>29</td>
<td>24</td>
<td>11</td>
<td>21</td>
<td>3.62</td>
<td>1.162</td>
</tr>
<tr>
<td>Fear of failure</td>
<td>2</td>
<td>17</td>
<td>21</td>
<td>25</td>
<td>35</td>
<td>1.36</td>
<td>0.706</td>
</tr>
<tr>
<td>Past success and failures</td>
<td>6</td>
<td>11</td>
<td>24</td>
<td>33</td>
<td>26</td>
<td>2.71</td>
<td>1.217</td>
</tr>
<tr>
<td>Familiarity of the source</td>
<td>16</td>
<td>34</td>
<td>23</td>
<td>17</td>
<td>10</td>
<td>2.94</td>
<td>1.294</td>
</tr>
<tr>
<td>Other sources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.15</td>
<td>0.702</td>
</tr>
</tbody>
</table>

The results were then presented in table 3 above, being the scales ranging from 1 to 5 making an interval of 4 between two extremes. From the findings the level of confidence in the source of finance was the factor that very much influenced the kind of financing source the enterprenuer will take, shown by a meanscore of 3.74 and a stdard deviation of 1.169. Other factors: what friends and family were doing, famiriarity of the source, past success and failures and fear of failure followed in that order. This findings show that overconfidence factor greately affects SME owners to a large extent followed by herding behavior, disjunction effect, representative-ness and loss aversion is the least factor put in consideration when choosing a financing source.

Table 6: Factors Responsible for Incorrect Decision in Using Finances

The study wanted to establish the extent to which different factors were responsible for incorrect decision in using finances.
The study also used likert scale in collecting and analysing the data on a scale of 1 to 5 with 1 point being assigned to no extent and 5 points to very great extent. The results were then presented in table 4.4, being the scales ranged from 1 to 5 making an interval of 4 between the two extremes. From the findings poor market performance was greatly blamed for incorrect decision in using finances shown by a mean of 3.28. This was followed by herding behaviour as reflected by the respondent who indicated wrong advice from friends as a source of wrong decisions shown by a mean of 3.15.

Lack of information owed to disjunction effect behavior, own mistakes and loss aversion were also responsible for incorrect choices respectively. This findings imply that SME owners are risk takers as fear of making losses was considered a least factor in making financial decisions.

**Table 7: Financial Descriptions the Respondent Would Choose**

The respondents were given several financial descriptions to choose the descriptions they would prefer most.
On which financial description the respondents would choose, majority of the respondents interviewed (72%) chose, source of finance that gives chance of making a 30% profit while a small proportion of the respondent chose; source of finance with a possibility of making 50% loss. Entrepreneurs in this case display a frame dependence behavior as explained in the loss aversion factor. They chose the statement that was described in form of gains to avoid future regret and loss.

Table 8: Statements

The study also sought to establish the opinion of the respondents on different statements related to running of their business.

<table>
<thead>
<tr>
<th>Statements</th>
<th>No</th>
<th>Yes</th>
<th>Mean</th>
<th>STDEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will continue operating this business even if it is not making profit in hope that the future will improve</td>
<td>33</td>
<td>66</td>
<td>1.68</td>
<td>0.490</td>
</tr>
<tr>
<td>Will analyze each stock separately not the business as whole to identify loses and gains</td>
<td>27</td>
<td>73</td>
<td>1.73</td>
<td>0.446</td>
</tr>
<tr>
<td>will pay attention to big numbers than small number when analyzing the business activities</td>
<td>48</td>
<td>52</td>
<td>1.52</td>
<td>0.502</td>
</tr>
<tr>
<td>Will save his money in banks said to have good managers</td>
<td>31</td>
<td>69</td>
<td>1.69</td>
<td>0.465</td>
</tr>
<tr>
<td>Past failure in a business represent future failures</td>
<td>75</td>
<td>25</td>
<td>1.38</td>
<td>1.213</td>
</tr>
</tbody>
</table>

From the study, the statement “will analyze each stock separately not the business as whole to identify loses and gains” was the most preferred with a mean of (1.73). This showed that majority of the entrepreneurs are affected by mental accounting behavior where they value each item in terms of its attribute and treat it differently basing it on its mental account. “Will save his money in banks said to have good managers, will continue operating this business even if it is not making profit in hope that the future will improve, will pay attention to big numbers than small number when analyzing the business activities and past failure in a business represent future failures were the other statements that were analyzed which had mean scores of 1.69, 1.68, 1.52 and 1.38 respectively. Again this reveals the level of representative-ness, loss aversion, innumeracy behavioral factors that affect on SME entrepreneur daily activities.

**Figure 9: Increase in Demand for Loans**

The study also sought to identify how the respondents valued the information related to the statement that during the past two years the demand for loans has increased and there is evidence that more people will be seeking loan. The results were shown in figure below.
From the findings 51% of the respondents indicated that the loan is worth, 39% of the respondents said that the information is not sufficient enough to take the loan while (10%) were of the opinion that the loan is not worth taking. This findings shows that herding behavior can influence one to choose a financing source they did not prefer, in this case bank loans. It also reveals that entrepreneurs do not rationally analyze information but make decisions according to disjunction effect behavior. The 10% respondents who indicated that the loan was not worth taking stuck to their initial belief that loans were a bad source of finance. This is explained by existence of anchoring behavior.

Table 9: Other factors

<table>
<thead>
<tr>
<th>Conditions</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Mean</th>
<th>STDEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>16</td>
<td>9</td>
<td>19</td>
<td>56</td>
<td>1.62</td>
<td>0.908</td>
</tr>
<tr>
<td>Marital status</td>
<td>11</td>
<td>22</td>
<td>31</td>
<td>35</td>
<td>2.86</td>
<td>1.101</td>
</tr>
<tr>
<td>Age</td>
<td>15</td>
<td>22</td>
<td>26</td>
<td>37</td>
<td>2.40</td>
<td>1.172</td>
</tr>
<tr>
<td>Level of education</td>
<td>30</td>
<td>26</td>
<td>18</td>
<td>26</td>
<td>2.93</td>
<td>1.027</td>
</tr>
<tr>
<td>Personal income</td>
<td>61</td>
<td>22</td>
<td>11</td>
<td>6</td>
<td>3.15</td>
<td>1.132</td>
</tr>
</tbody>
</table>
The study also sought to identify other factors that were used to determine the source of finance the respondent would choose. From the findings personal income was a condition that was largely considered before determining the source of finance one selected. This was selected by the level of education, marital status, and age while gender was the least considered factor.

**Figure 10: The Duration Considered when Choosing Sources of Finance**

The case study wanted to establish the duration the respondents would prefer when choosing the sources of finances and the results were presented below.

From the findings 57% of the respondents indicated that they would prefer a long term (more than 5 years) while 43% indicated that would consider a short term (less than 1 year) period when choosing a financing source. These findings show that 43% of the entrepreneurs in SMEs are afraid of uncertainties that come with a longer period. Therefore loss aversion as a factor and a remedy for future regrets impacts on the financing choice made by entrepreneurs who focus on the future cash flows to achieve the objective of the firm which value maximization.

### 4.4 Factor Analysis

**Factor analysis on the choice of finance preferred by smes in Ruiru**
The table below shows the variables that are preferred when it comes to choosing a source of finance for small and medium sized businesses. The third column shows that there are three factors that will be considered in making this choice and they all contribute 79.67% of the total variation (cumulative percentage) and the remaining two contribute 20.33%.

<table>
<thead>
<tr>
<th>Total Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

<table>
<thead>
<tr>
<th>Rotated Component Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component</strong></td>
</tr>
<tr>
<td>Personal savings</td>
</tr>
<tr>
<td>Friends and Family</td>
</tr>
<tr>
<td>Micro Finance Institutions</td>
</tr>
<tr>
<td>Bank Loan</td>
</tr>
<tr>
<td>Venture Capital &amp; Govt Programs</td>
</tr>
</tbody>
</table>


The table above shows the distribution of each variable in each factor. Factor one which is borrowing from financial institutions is identified with borrowing from micro finance institutions represented by 82.9% and borrowing from banks 57.2%. This is an indication that most entrepreneurs prefer borrowing from micro finance institutions to borrowing from banks.
The second factor is personal savings at 92.8% which means people will use personal savings once they exhaust or can't qualify to get a loan from a financial institution. It is the most preferred means at 37% in the total variance table (under eigen values). The third factor is venture capital or government funding, this is because venture capital is mostly used for big organisations and small and medium sized firms may not be able to meet the terms and conditions set out by venture capitalists and finally Government funding is not also commonly used because of the political influence needed to access such funds.

The scree plot below is used to show the number of factors that can provide a good evaluation of the variables. Factors that fall below the downward slope are not used as can be seen that the slope steepens after three factors.

![Scree Plot](image)

**Factor analysis on factors influencing choice of finance**
The table below shows the variance between the different factors that may affect the choice of finance. Only two factors were outlined as seen in the scree plot. The two factors contribute 51.9% in total variance. Though the third factor also has an Eigen value greater than one, if used there will not be a clear distinction between the variables as some will be represented in more than one factor. Given that the Eigen value would have
given three factors it was set at two in order for a better interpretation to be made.

Appendix……..

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigen values</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>1.352</td>
<td>27.035</td>
</tr>
<tr>
<td>2</td>
<td>1.246</td>
<td>24.920</td>
</tr>
<tr>
<td>3</td>
<td>1.063</td>
<td>21.256</td>
</tr>
<tr>
<td>4</td>
<td>.826</td>
<td>16.524</td>
</tr>
<tr>
<td>5</td>
<td>.513</td>
<td>10.266</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

As can be seen in the Scree plot above, determining the number of factors to use is very difficult because the slope does not even out as was seen earlier. Therefore the outcome of the rotation matrix will be used to set a better number of factors.

<table>
<thead>
<tr>
<th>Rotated Component Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own Confidence</td>
<td>-.339</td>
<td>.624</td>
</tr>
<tr>
<td>Copied Friends and Other Traders</td>
<td>-.572</td>
<td>.125</td>
</tr>
<tr>
<td>Fear of Failure</td>
<td>-.108</td>
<td>-.824</td>
</tr>
<tr>
<td>Past Experiences</td>
<td>.677</td>
<td>-.123</td>
</tr>
<tr>
<td>------------------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>Familiarity of Source</td>
<td>.660</td>
<td>.389</td>
</tr>
</tbody>
</table>

**Factor analysis on the choice of finance preferred by smes in Ruiru**

The table below shows the variables that are preferred when it comes to choosing a source of finance for small and medium sized businesses. The third column shows that there are three factors that will be considered in making this choice and they all contribute 79.67% of the total variation (cumulative percentage) and the remaining two contribute 20.33%.

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigen values</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>1.871</td>
<td>37.423</td>
</tr>
<tr>
<td></td>
<td>37.423</td>
<td>37.423</td>
</tr>
<tr>
<td></td>
<td>1.613</td>
<td>32.259</td>
</tr>
<tr>
<td></td>
<td>32.259</td>
<td>32.259</td>
</tr>
<tr>
<td>2</td>
<td>1.106</td>
<td>22.121</td>
</tr>
<tr>
<td></td>
<td>59.544</td>
<td>25.576</td>
</tr>
<tr>
<td></td>
<td>57.835</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1.006</td>
<td>20.125</td>
</tr>
<tr>
<td></td>
<td>79.670</td>
<td>21.834</td>
</tr>
<tr>
<td></td>
<td>79.670</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.594</td>
<td></td>
</tr>
</tbody>
</table>
The last two variables ranked highly on factor one, which can be called experience. The two variables are past experiences at 67.7% and familiarity of source at 66%. Familiarity can be seen as an experience because for one to be familiar with a source they must have seen it being used or they may have used it before.

Factor two has two variables also which are; once confidence 62.4% and copying what friend and others are doing, though it does not register highly 12.5% which can be seen as weak percentage point. It is a morale booster and hence can be seen as increasing the confidence levels. Fear of failure does not feature in any factor maybe because it is the opposite of confidence and the two factors are generally based on confidence.

**Factor Analysis on factors responsible for adverse selection**

Here we look at the factors that may lead to the wrong source of finance being used. Extraction was done using Eigen values that are greater than 1.00. Factors with Eigen values less than 1.00 were not used because they account for less than the variation explained by a single variable. From analysis indicates that five variables were reduced to two factors. The two factors had a cumulative total of 48.03%.

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigen values</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>2</td>
<td>1.059</td>
<td>21.175</td>
</tr>
<tr>
<td>3</td>
<td>.999</td>
<td>19.974</td>
</tr>
<tr>
<td>4</td>
<td>.871</td>
<td>17.416</td>
</tr>
<tr>
<td>5</td>
<td>.729</td>
<td>14.575</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
The scree plot shows that there can be three factors as it starts leveling out after the third variable .999. It does not meet the criteria of being greater than one so we end up with two factors.

From the rotated matrix below, which is used because it makes it easier to make an interpretation unlike the component matrix which is complicated, there are two factors derived. Factor one has three variables which are own mistake, poor market performance, and insufficient information. Factor two is incorrect advice from friends. Therefore we can say that factor one is personal and two is advice from outside.

<table>
<thead>
<tr>
<th>Rotated Component Matrix</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Own Mistake</td>
<td>.523</td>
</tr>
<tr>
<td>Incorrect Advice From Friends</td>
<td>-.209</td>
</tr>
<tr>
<td>Poor Market Performance</td>
<td>.609</td>
</tr>
<tr>
<td>Insufficient Information</td>
<td>.662</td>
</tr>
</tbody>
</table>

Factor analysis on personal factors affecting finance

<table>
<thead>
<tr>
<th>Component</th>
<th>Total Eigenvalues</th>
<th>% of Variance</th>
<th>Cumulative %</th>
<th>Total Eigenvalues</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.358</td>
<td>27.160</td>
<td>27.160</td>
<td>1.176</td>
<td>23.526</td>
<td>23.526</td>
</tr>
<tr>
<td>2</td>
<td>.996</td>
<td>19.913</td>
<td>47.073</td>
<td>1.127</td>
<td>22.544</td>
<td>46.070</td>
</tr>
<tr>
<td>4</td>
<td>.860</td>
<td>17.198</td>
<td>83.688</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.816</td>
<td>16.312</td>
<td>100.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

From the above table it can be seen that there is only one factor with an Eigen value greater than 1.00. So we use the scree plot below to determine the number of factors that can be derived. From the scree plot we can see that there are 3 factors just before the slope becomes steeper.
From the rotated matrix below the three factors derived earlier are allocated variables depending on their strongest contribution or percentage. Factor one gender 79.8% and age 62.9% are the main variables. Factor two the level of education 84.6% is the only variable and factor three there is marital status 96% and level of income 6% which is a very low percentage and therefore is not a significant variable.

<table>
<thead>
<tr>
<th>Rotated Component Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Your Gender</td>
</tr>
<tr>
<td>Marital Status</td>
</tr>
<tr>
<td>Your Age</td>
</tr>
<tr>
<td>Level of Education</td>
</tr>
<tr>
<td>Level of Income</td>
</tr>
</tbody>
</table>


4.5 Summary of Findings

The researcher found out that SMEs are fairly distributed among genders and the owners of these businesses had attained secondary education and above. This was owned to the challenges of SMEs operations which require intelligent minds to overcome. Hence most of the SMES were found to be individually owned and by young people below 35 years.
Most of the SME owners in the municipality preferred personal savings were the most commonly used financing source followed by borrowing from friends and family while venture investors and government programs were the least popular. Ruiru municipality SME owners were found to be affected by behavioral factors when making decisions related to finances.

On the issue of which behavioral factors influence financing decisions and to what extent, overconfidence behavior was displayed as the factor that greatly affected the choices that were made. Herding behavior evidenced by respondents saying they would do what others were doing was the second factor that greatly affected choices of financing methods that were used by SME owners in Ruiru municipality. Representative ness and loss aversion were the other behavioral factors found to affect financing methods the entrepreneurs would take though to a small extent. The SME owners largely blamed poor market performance as a source of failure in terms of financial decisions. Wrong advice from others was also among the major factors that led to wrong decisions. Others behavioral factors that led to wrong decisions in financing choices included the Disjunction effect attributed to lack of enough information, own mistakes and loss aversion factor.

The researcher also found out that since the entrepreneurs were afraid of losses they were greatly affected by frame dependence factor where they easily chose a description that was stated in form of a profit while in the rational sense the second option that was stated in form of a loss was a better option. Mental accounting behavioral factor was found to greatly apply to SMEs owners in their daily activities of running their businesses. Representative ness, anchoring behavior and innumeracy were the other factors that influenced daily occurrences in regard to where to take the finances from or even business activity analysis.
Most of the business owners did not have enough information concerning various sources of finances. This made them quickly make decisions of taking a loan because the researcher disclosed that many people were doing so (herding behavior). Long term duration embraced by many which implied that even though the SMEs were affected by loss aversion behavior they still had the courage to embrace risk for realization of their business goals.
CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the conclusions that were based on the findings of the study, recommendations to improve SMEs, suggestions of further research and the limitations of the study.

5.2 Conclusions

Conclusions are drawn in line with the study objectives; a survey of the behavioral factors influencing the choice of financing methods by SMEs: a case study of Ruiru municipality. The researcher concluded that majority of the SMEs in Kenya were run by both genders, majority of whom were well educated and competent entrepreneurs. The study explored various forms of SMEs in Ruiru and concluded that majority of SMEs were individually owned.

The study further concludes that among the sources of finances for setting up the SMEs, personal savings was the most preferred source of finance while government programs and venture investors are the least popular. The study concludes that on how different factors influenced the respondents choice of finance, overconfidence was the most influential factor. The study further concludes that market performance was the factor most responsible for incorrect decisions in using finances followed by the disjunction effect while fear of making losses least affect decisions that were made.

The researcher also concludes that most of the SME owners lack information about various sources of finance and this explained the herding behavior they displayed. Majority of SME operators were not regarding loss aversion as a very important factor as it was well displayed by the long-term duration they considered before making choices on the financing sources they would choose. Other factors that affected SMEs choice of financing methods were: personal income, level of education and marital status.
Overall Ruiru Municipality SMEs Owners like any other investors had some irrationality in choosing their financing sources as it was displayed by the behavioral factors that influenced them. That is: Overconfidence, herding behavior, disjunction effect, representational ness, loss aversion, Regret and innumeracy behavior.

5.3 Recommendations

To The SMEs

Recommendations drawn from the findings according to the study are thereof presented in establishing the behavioral factors influencing the choice of financing methods by SMEs. The study recommends that in order for the SMEs to remain highly competitive, they should source their finances from personal savings due to their reliability. However the study recommends that the entrepreneurs should seek for sufficient information when considering which source of finance to employ when running their businesses instead of using their confidence level, knowledge and experience.

The researcher also recommends that for profitability and sustainability of SMEs, the SMEs operators should consider the finances repayment duration when selecting their financial sources and analyze the business as an entity to determine if it is profitable or not. SME owners are recommended to be risk tolerant as this the only way to achieve firm’s value. However they are cautioned against holding loosing stocks too long and selling winners too early.

5.5 Limitations of the study

The study is prone to changes depending on entrepreneurs’ responses which could be biased or even answered depending on what others were answering. Given that most of the operators in the SMES are semiliterate each them could have had different interpretation of the questions which again could lead to errors in results.
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APPENDICES

Appendix 1: Questionnaire

This questionnaire aims at gathering information on effects of behavioral factors on SMEs financing choices in Ruiru Municipality. The factors include: Overconfidence and Under-reaction, Loss aversion, Regret, Herding behavior and the Disjunction effect. The information is needed for academic purposes only and no information/data will be disclosed to a third party. Please tick appropriately.

Section I: Background

1. What is your Gender?
   - Male
   - Female

2. What is your highest level of Education?
   - a) University
   - b) Diploma
   - c) Secondary
   - d) Primary

3. Please identify the form of your business
   - a) Individually owned
   - b) A partnership
   - c) Any other, specify

4. In what age bracket are you?
   - a) Below 30 years
   - b) 30-35 years
   - c) 36-40 years
   - d) 41-45 years
   - e) Over 45 years
Section II:

Factors That Influence Financing Choice

5) Rate the following sources of finance as you preferred them when you were starting your business.

1 for- Very much preferred, 2- Much preferred, 3-Preferred, 4-Least preferred, 5- Not preferred.

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<tr>
<th>Source</th>
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</thead>
<tbody>
<tr>
<td>a) Personal savings</td>
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<td>b) Friends and family</td>
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<td>c) Micro-finance institutions</td>
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<td>d) Bank loan</td>
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<td>e) Venture investors&amp; Government programs</td>
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Any other, specify………………………………………………………………………………………………………………

ii) After sometime of operating your business, are you confident you chose the right financing source?

Yes {   }

No {   }

6) Represent the order in which the following factors influence your choices of finance. Use: 1 for Most Important factor, 2- More important, 3- Moderately important, 4- least important, 5- Not important.

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
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<tr>
<td>a) Your confidence</td>
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<td>b) Friends and what other entrepreneurs were doing</td>
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<td>c) Fear of failure</td>
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<td>d) Past success and failures</td>
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<td>e) Familiarity of the source to you</td>
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<td>f) Others, specify</td>
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</table>
7) Using the following scale, indicate to what extent the factors indicated below are responsible for incorrect decisions in using your finances:

1- Very large extent, 2- Great extent, 3- Some extent, 4- Small extent, 5- No extent.

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<th>Factor</th>
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<td>a) Your own mistakes</td>
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<td>b) Incorrect advice from friends</td>
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<td>c) Market performed poorly</td>
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<td>d) Lack of information enough information</td>
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<td>e) Fear of making loses</td>
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<td>Others specify and rank</td>
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</table>

8) If you were given the following financial descriptions, which one will you choose?

a) The source of finance which will give you a chance of making a 30% profit. {   }  

b) The source of finance with a possibility of making 50% loss. {   }  

9) Which of the following statements apply to you (Indicate: Yes or No).

a) I will continue operating this business even if it is not making profit in hope that the future will improve. {   }  

b) I analyze each stock separately not the business as a whole to identify loses and gains. {   }  

c) I pay more attention to big numbers than small numbers when analyzing my business activities. {   }  

d) I save my money in a bank that is said to have good managers. {   }  

e) Past failures in a business represent future failures. {   }  

10) Assume the following situation: during the past two years, the demand for loans has Increased and there is evidence that more people will be seeking loans. How do you
value this information?

a) The loan is worth taking. {    }

b) The information is not sufficient enough to take the loan. {    }

c) The loan is not worth taking.

11) Indicate to what extent the following conditions determine the source of finance you choose. 1 for Very great extent, 2 - Great extent, 3 - Some extent, 4 - No extent.
## Appendix 3 Raw Data

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<th>Case No</th>
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### Notes
- Each column represents a different variable.
- The raw data provides insights on various personal and financial attributes across different cases.

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**Confidence** column indicates the level of confidence in data recording.
**Copying** column refers to the source of data copying.
**Fear** column shows the level of fear associated with data.
**Fail** column highlights instances of failure in data entry.
**Past** column provides historical data on the subject.
**Experience** column lists the level of experience of the subject.
**Family** column reflects the family status of the individual.
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</table>
c) Your age { } { } { } { } { }

d) The level of education { } { } { } { } { }

e) Personal income { } { } { } { } { }

12) i) When choosing your sources of finance do you consider the duration your business will take?

Yes { } 

No { } 

ii) If yes, which duration do you consider?

Long-term (More than 5 years) { } 

Short-term (Less than 1 year) { } 

Thank you for your time and patience