St. Mary's University

School of Graduate Studies

The Role of Psychological Biases in Investment Decision Making

The Case of: United Bank S.C.

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May, 2019

Addis Ababa,Ethiopia

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ENDORSMENT

This is to certify that this piece of research was submitted to the University with my approval as the candidate's advisor.

Signature……………………………………………………Date………………………

Simon T. (Ass.Prof.)

Advisor

St. Mary's University

DEDICATION

I dedicate this piece of work to my dear parents and the family for their financial and moral support in my studies, especially for my parents TsedalMengiste and TeferaBegashaw. It is the achievement they have indeed worked for. Thank you and be rewarded abundantly.

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

CHAPTER TWO

LITERATURE REVIEW

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGIES

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

CHAPTER FIVE

SUMMERY OF FINDINGS CONCLUSION AND RECOMMENDATION

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ACRONYMS AND ABBREVIATIONS

BBA-Representativeness Bias

BBB-Overconfidence and Over optimism Bias

BBC-Self Attribution Behavior & Confirmation Bias

BBD-Availability Bias

BBE-Conservatism

BBF-Anchoring and Adjustment Bias

BBG -Familiarity bias

LIST OF TABLES

LIST OF FIGURES AND CHARTS

ABSTRACT

The research objective is formulated in order to gain a better understanding of the role of psychological biases on the decision maker’s investment decision making judgments. Quantitative research approach and descriptive research design is employed.Under the quantitative research approach, asurvey method is used. The data were collected using a *structured and self-administered questionnairesand interviews with some selected officials.Out of the total population the researcher has selected those who have a direct work relation and have the chance to observe the decision makers and also frequently involved in jobs related with the decision makers. Commonly branches at United Bank is classified as Special A,B,C,D,E, the basic criterion to categorize branches are volume of deposit, loan and advance ,foreign currency proceeds and annual income are the major ones. Out of which the researcher has only selected those branches classified as Special A and B, due to the fact they play the major roll and mobilize huge resources to make decision with. To be representative of 120samples were selected according to their proximity to the decision makers and questionnaires were distributed, but only 92 of them, 76% were returned. Also interview has been made with some selected officials about their observation of and their attitudes towards the raised issue at Untied bank S.C. From the survey result it is found that there exists a high degree of behavioral bias during investment decisions by those who have the authority to make investment decisions. In general, from the mean value of the seven perspectives, it is found that there is a bad result, decision are highly affected by the individual decision makers personality, psychological biases specially while they make on the bank's resources weather to invest or not, in what sector to invest and to whom they have to decide resource to be released. From the observation that most of the decision makers who are involved in the decision making process during investment decisions are found to be biased by the seven cognitive measures.Therefore, the researcherhas recommended primarily o be recognized as one decision making elements during investment decisions and by deeply studying their significance, the have to be incorporated in the bank'spolicy and procedure manuals to mitigate their negative consequences.*

KEY WORDS:

Behavioral Finance, Psychological Biases, Investment decisions, Banking

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The central assumption of the traditional finance model is that people are rational. Standard Finance theories are based on the premises that investor behaves rationally. According to Jensen and Merckling "Traditional finance theory stands directly on the notion of the 'Rational man', a person who is much different from individual (Jensen and Merckling, 1994). According to Montier "The rational construct assumes that individuals, both investors and managers are capable of understanding vastly complex puzzles and conduct endless instantaneous optimizations" (Montier, 2002)

As the financial economist were assuming that people(investors) behaved rationally when making various decisions, psychologists have found that economic decision are made in an irrational manner, so they challenge this assumption of standard finance. Cognitive error and extreme emotional bias can cause investors to make bad investment decisions, thereby meaning that they act in irrational manner. Over the past decade, field of behavioral finance has evolved to consider how personal and social psychology influence financial decisions and behavior of investors in general.

The finance field was reluctant to accept the view of psychologists who had proposed the behavioral finance model. Behavioral finance was considered first by the psychologist Daniel Kahneman and economist Vernon Smith, who was awarded the Nobel Prize in Economics in 2002.This was the time when financial economist started to believe that the investor behaves irrationally. Human brains process information using shortcuts and emotional filters even in investment decisions.

Behavioral finance focuses upon how investors interpret and act on information to Make informed investment decisions. Investors do not always behave in a rational, Predictable and an unbiased manner indicated by the quantitative models. Behavioral Finance places an emphasis upon investor behavior leading to various market anomalies.

The emergence of behavioral finance has presented a new realm for analyzing the ways in which investors make decisions that includes psychological factors as well as providing new grounds upon which it question conventional methods of modeling investor behavior. The challenge that behavioral finance assembles is aimed particularly in the direction of the efficient market hypothesis (EMH), which is the model that Statman refers to standard finance Model. Behavioral finance challenge hypothesis that standard finance model of on ‘how investor decision is inaccurate’, as it fails to include psychological and value expressive preferences in calculations (Statman, 1999).

Behavioral finance, as a part of behavioral economics, is the branch of finance that, with the help of theories from other behavioral sciences, particularly psychology and sociology, tries to discover and explain phenomena inconsistent with the paradigm of expected utility of wealth and narrowly defined rational behavior. Behavioral economics is mostly experimental, using research methods that are rarely applied in the traditional, mainstream finance literature (Frankfurther and McGoun, 2002).

Brabazon suggests that the finite aspects of Behavioral finance can be split into two different classification groups (Brabazon, 2000). The first group is the heuristic decision processes, where an individual investor through instinctive psychologicalprocesses can result in decisions that according to the standard finance model are not rational (Statman, 1999). The second groupincludes what Kahneman and Tversky(1979) labels as prospect theory which provides a thicker structure of how individual investment decisions are made.

Gilovichhave referred to behavioral finance as behavioral economics and further defined behavioral economics as combining twin discipline of psychology and economics to explain why and how people make seemingly irrational or illogical decisions when they save, invest, spend and borrow money(Gilovich, 1999).

“Behavioral finance is rapidly growing area that deals with the influence of psychology on the behavior of financial practitioner.”According to Shefrin “Behavioral Finance is the application of psychology to financial behavior-the behavior of practitioner.”(Shefrin, 2000).According to Shefrin “Behavioral Finance is the study of how psychology affects financial decision making and financial markets” (Shefrin, 2001)

According to fromlet “Behavioral finance closely combines individual behaviorand market phenomena and uses knowledge taken from both the psychological field and financial theory” (Fromlet, 2001)

“Behavioral finance is the study of the influence of psychology on the behavior of financial practitioner and subsequent effects on market.” He has statedBehavioral Finance, challenging the theory of Market efficiency by providing insight into why and how market can be inefficient due to irrationality in human behavior (M Sewell, 2007).

W.Forbesdefined behavioral finance as a science regarding how psychology influences financial market. This view emphasizes that the individuals are affected by psychological factors like cognitive biases in their decision making, rather than being rational and wealth maximizing.Behavioral finance is new approach to financial markets that argues that some financial phenomena can be understood by using models where some agents are not fully rational(W.Forbes, 2009).

Behavioral finance actually equips finance professionals with a set of new lenses,which allows them to understand and overcome many proven psychological traps that are present involving human cognition and emotions. This includes corporate boards and managers, individual and institutional investors, portfolio managers, analysts, advisors, and even policy makers. Behavioral traps exist and occur across all decision spectrums because of the psychological phenomena of heuristics and biases. These phenomena and factors are systematic in nature and can move markets for prolonged periods (Hirschey, Mark and John Nofsinger. 2008).

Behavioral finance approach attempts to explain and increase understanding of reasoning patterns of investors, including the emotional processes involved and degree to which they influence the decision making process. Essentially, it attempts to explain the what, why and how finance and investing, form human perspective. These help investors to minimize or eliminate the psychological biases in investment decisions. Therefore, taking in to account mentioned above, in this research the researcher makesprimary task to explicitly show how investment decisions are influenced by human behavior at united bank s.c by those who frequently and mostly involved in the decision making process in a way it could be generalized on a theoretical perspective in to the industry level. Theresearcher believed this could greatly contribute to the current knowledge in finance as an additional input, but widely is being used outside our country's context off course not forgetting its benefit to the subject under study and those related stakeholders by giving a new perspective to look the business in to.

1.2 STATEMENT OF THE PROBLEM

Behavioral finance is not a refutation of standard finance but a way for investors and advisors to operate with in realistic framework one that takes the effect of human emotions on investment decisions into account and improve saving and investing behavior.Understanding behavioral finance and incorporating it in every day planning therefore will help decision makers recognize their biases and devise strategies to overcome them and improve decision making (Hilltops Securities, 2017).

In a country like ours, in which most things depend on people than technology, individuals than systems, a country where several rules and regulations are formulated everyday but, immediately disregarded unable to control the previous deviations, even create another to worry about. In an environment where things are very much volatile, not following a sequence of trends jumping from one to another all of a sudden. A country where there is too much inability to enforce a law, most things will be exposed to positive as well as negative subjective judgments. The fact is not any different when we come in to the business world, including the financial industry. Even though there are a lot of improvements compared to the previous times, most things in the financial industry as well have a lot to improve.

Putting regulatory and country limitations a side, The Industry still has its own limitation;United Bank S.C is believed to be part of this victims as an industry major player. It is a well-known fact that people follow people for various reasons in this industry as well, Individuals has a huge authority to decide in to how, when and to whom things should be done. Since financial institutions control the most important resource of any nation the decisions they make could have the ability to diversify and affect the base of social, political as well as economic status of the nation.Asthe researcher said it above, the fate of these decisionslie in the hands of individuals. In conventional financial economic perspective these decisionmakers where assumed to rational. Hence, behavioral finance has disproved this assumption and provided addition asset to be used along with conventional finance.

Therefore, as a pioneer and major industry player, united bank S.C. should also be seen in this perspective. Like other industry players United Bank as well give the service of collection money from those who have and provide to those who are in need of, after several procedures has been taken to see the viability of those and the bank has put in place several directives in the eyes of the regulatory body to look after all its stakeholders, hence, here also several decision are mostly based individual and group decision makers.These investment decisions are widely exposed to human subjective biases.

Therefore, in this research thesis the researcherhas tried to show the inter relationship between investment decision making and human subjective psychological biases in the decision making process and signify the importance of incorporating psychological perspectives along with the conventional financial and investment decision makings.

1.3 BASIC RESEARCH QUESTIONS

The behavioral finance paradigm has emerged in the response to the difficulties faced by the traditional paradigm. After examining several literatures the researcher prepared the following research questions to lead in answering the problem under study to rich in to the objectives crafted initially above in this road map.

- Which Investment Decisions are prone to the decision makers' psychological biases?
- Who involved in Major Investment Decision Making Activities at United banks.c?
- Which behavioral financeelements could be diversified in identifying irrationality and deviations in united bank's investment decision makers' judgments?
- How strongly are investment and decision makers psychological characteristics relate in united bank s.c?
- What are the significances of surveying these behavioral elements in united bank's investment decisions?
- What are the major negative and positive impacts of these deviations?

1.4 RESEARCH OBJECTIVES

1.4.1GENERAL OBJECTIVES

This recently developed field of study which is currently being used widely in the developed world called "behavioral finance" has evolved and attempts to better understand and explain how emotions and cognitive errors influence investors and the decision-making process. The basic and major research objective and intention of thisthesis is also focused on this to survey and uncovered irrationality in united bank's decision makers judgment while they make various investment decisions at a different decision making levels according to their discretionary or authority limits and also to contribute to current knowledge by inviting a new developing topic for future researches in finance which could be applicable in to many areas in many ways.

1.4.2 SPECIFIC OBJECTIVES

- To define the Major Psychological Cognitive elements which could commonly define and be related to investment decisions at united bank
- To Identify weather there is a developed mechanism to absorb/mitigate such behavioral deviations from the already existed policy and regulations of united bank s.c and or to assimilate along with conventional financial policies
- To develop a framework to relate the relationship between investment decisions and psychological elementsin united bank's context
- To Show the significance of decision makers behavior and there rolein altering investmentdecisions at united bank s.c
- To provide an insight for the banks policy makers as well as other regulatory bodiesabout behavioral finance

1.5 SCOPES OF THE STUDY

In this research the researcher tried to base on the basic concepts of behavioral finance, which studied psychological biases that human possess. Thisbiases, or mental shortcuts, while having their place and purpose in nature, lead to irrational investment decisions. Understandingbehavioral finance could bring individuals as well as companies to be aware of their own decision making process. Even though, this is yet a developing concept, the idea is vast and big and very much practiced and attracting big scholars, like Kahneman and Tversky, who won the Nobel Prizefor developing behavioral finance.

The idea is widely being used currently inWall Street and other corporate areas as well. Therefore, the researchers intention is to bring the case in to attention in our countries financial context as a research topic and particularly show its significance on a very specific situation, by specifically selecting United bank S.C, and among the financial decision making activities by selecting investment decisions to showtheir relation with some of those selectedbehavioral finance elements which could be associated to show the significance of the idea. During data collection only those who are directly or indirectly participating in investment decision making and those who have the experience and opportunity to observe these decision makers who are the subject of the study particularly were part of the study. To make it generalizable those subjects outside the researcher's home town are also participated through facilitating a convenient mechanism to respond to the instruments. An exhaustive literature, empirical as well as theoretical studies hasbeen examined at every step of the way to support the end results with concrete ideas.At the end, the researcher indicated ways on how this could also be extended in to the industry and other situations in finance as well.

1.6SIGNIFICANCE OF THE STUDY

This research paper is believed will be a greater input to united bank s.c, stakeholders, Investors, and other policy maker by showing how significantly is human behavioral elements are affecting not only investment but also other decision making areas and how those things should be controlled and assimilated along with traditional finance theories in bringing better outcomes in every aspect and at every step of the way. These could also be used for future studies which will be initiated on this big and important topic but not yet getting attention so far, especially when the financial industry and many other sectors so far closed are opened to the global market and competition is getting intense, the market will be very sensitive and these elements should be managed in a more scientific manner aside with the traditional finance theories.

1.7 LIMITATIONS OF THE STUDY

Due to the confidential nature of various bank policies, access to bank information's except officially disclosed ones, was not possible. Therefore, this study only emphasized by the employees and officials personal perception and officially disclosed data of the bank. Also, since the nature of the study focus on something recently developed issue, there was also shortage of empirical studies especially in our countries context.

1.8 ORGANIZATION AND STRUCTURE OF THE PAPER

The research report consist the following chapters. Chapter one discuss about the study which includes a brief overview of the issue under study in its introduction section. This chapter also incorporated statement of the problem, research questions, objectives, limitation, scope and definition of terms and also significance of the study.

In chapter two exhaustive literature reviews has been be presented briefly. This chapter discusses important issues related to the study widely about the nature of behavioral finance.

Chapter three have research design, sampling and sampling technique, data collection techniques, data analysis methods and instrument used.

Chapter four presented research findings and results. Finally, the last chapter, chapter five discussed and summarizes the research results and based on these results conclusions and recommendations have been given.

CHAPTER TWO

2. LITERATURE REVIEW

Introduction

Decision making is the most important and the most difficult task thatmanager, executives, investors, politicians perform. On the other side they are most of the time confronted with riskand uncertainty, especially in banking industry. The objective of this study is to examinehowthose who is highly involved in investment decision making process of United bank performs this task, by putting it in the perspectiveof the newest findings from Behavioral finance field. Behavioral finance is based onpremise that decision makers behave less than fully rational. Due to their deeply rootedhuman nature managers are prone to make decisions based on subjective evaluationof available options, relative to certain reference point and to current state of wealth,and also according to their personal interests which may contradict banks`, industry`sand social welfare`s.

Since the mid-1950s, the field of finance has been dominated by the traditionalfinance model developed by the economist of the University of Chicago. The Centralassumption of the traditional finance model is that people are rational. StandardFinance theories are based on the premises that investor behaves rationally. As the financial economist were assuming thatpeople(investors) behaved rationally when making financial decisions, psychologistshave found that economic decision are made in an irrational manner, so theychallenge this assumption of standard finance. Cognitive error and extreme emotionalbias can cause investors to make bad investment decisions, thereby meaning that they act in irrational manner. Over the past decade, field of behavioral finance has evolved to consider how personal and social psychology influence financial decisionsandbehavior of investors in general.

The finance field was reluctant to accept the view of psychologists who had proposedthebehavioral finance model. Behavior finance was considered first by thepsychologist Daniel Kahneman and economist Vernon Smith, who was awarded theNobel Prize in Economics in 2002.This, was the time when financial economist startedto believe that the investor behaves irrationally. Human brains process informationusing shortcuts and emotional filters even in investment decisions.

It is an attempt to explain how the psychological dimensions influence investmentdecisions of decision makers in a corporate structure, how perception influences the decision makingas a whole. It is worth exploring whether field of psychology helps investor to makemore reasonable investment decisions.Specifically, this study explores role of heuristics, biases andintuition in decision making, through concise review of existing literature.

2.1 Concept of Behavioral Finance

2.1.1 Definition ofBehavioral Finance

Linter G. has defined behavioral finance as being study of how humaninterprets and act on information to make informed investment decisions (Linter G., 1998).While Olsenasserts that behavioral finance seeks to understand and predict systematic financial implications of psychological decision process (Olsen R., 1998).

Behavioral finance, as a part of behavioral economics, is that branch of financethat, with the help of theories from other behavioral sciences, particularlypsychology and sociology, tries to discover and explain phenomena inconsistent withthe paradigm of expected utility of wealth and narrowly defined rational behavior. Behavioral economics is mostly experimental, using research methods that arerarely applied in the traditional, mainstream finance literature (FrankandMc. Goun, 2002)

Brabazon suggests that the finite aspects of Behavioral finance can be split into twodifferent classification groups (Brabazon, 2000). The first group is the heuristicdecision processes, where an individual investor through instinctive psychologicalprocesses can result in decisions that according to the standard finance model, are notrational (Statman, 1999) .The second groupincludes what (Kahneman and Tversky1979)labels as prospect theory which provides a thicker structure of how individual investment decisions are made.

Gilovichhave referred to behavioral finance as behavioral economics and further defined behavioral economics as combining twin discipline of psychology and economics to explain why and how people make seemingly irrational or illogical decisions when they save, invest, spend and borrow money (Gilovich ,1999).

Behavioral finance is rapidly growing area that deals with theinfluence of psychology on the behavior of financial practitioner (Shefrin, 1999). According to ShefrinBehavioral Finance is the application of psychology tofinancialbehavior-the behavior of practitioner (Shefrin, 2000) According to ShefrinBehavioral Finance is the study of how psychology affectsfinancial decision making and financial markets (Shefrin, 2001)

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W.Forbesdefined behavioral finance as a science regarding howpsychology influences. This view emphasizes that the individualsareaffected by psychological factors like cognitive biases in their decision making, ratherthan being rational and wealth maximizing.Behavioral finance is new approach tofinancial markets that argues that some financial phenomena can be understood byusing models where some agents are not fully rational(W.Forbes, 2009).

2.1.2 Meaning of Behavioral Finance

Behavioral finance is a discipline that attempts to explain and increase understandingregarding how the cognitive errors (mental mistakes) and emotions of investorinfluence the decision making process. It integrates the field of psychology,sociology, and other behavioral sciences to explain individual behavior, to examinegroupbehavior, and to predict financial markets.According to behavioralfinancepeople are not always rational. Not only that, but they deviate fromrationality in predictable ways. (RichardThaler, 1999) states;

"Behavioral finance is no longer as controversial asubject as it once was. As financial economists become accustomed to thinking aboutthe role of human behavior in driving human decisions , people will look back at thearticles published in the past 15 years and wonder what the fuss was about. I predict that in the not-too-distant future, the term "behavioral finance" will be correctly viewed as a redundant phrase. What other kind of finance is there? In their enlightenment, economists will routinely incorporate as much "behavior" into their models as they observe in the real world. After all, to do otherwise would be irrational."

Thaler's view is likely to prove optimistic. Finance researchers are likely to be studying large, highly competitive asset markets and largely ignore behavioral modifications to traditional theory. Even relatively new field, Behavioral Finance is growing very fast, in explaining not only how people make financial decisions and how markets functions, but also how to improve them. Behavioral finance is integration of various fields. As the evidence of the influence of psychology and emotions on decisions became more convincing, behavioral finance has received greater acceptance.

Behavioral finance relaxes the traditional assumptions of financial economics by incorporating these observable, systematic and very human departures from rationality into standard models of financial markets. The tendency for human beings to be overconfident causes the first bias in investors, and the human desire to avoid regret prompt the second (Barber and Odean, 1999) Individual investor and their behavior had received lot of consideration and focus of interest of many scientists not only being confided only to economist, but, due to the inclusion of the findings and the methodology of psychology into financial studies. Despite many debates, this has slowly led to the establishment of behavioral economics and behavioral finance as widely recognized sub-disciplines.

Behavioral finance promises to make economic model better at explainingsystematicinvestment decisions. Taking into consideration their emotions and cognitive errors and how these influence decision making. So behavioral finance is not branch of standard finance; it is replacement offering a better model of investor psychological decision process.

Behavioral finance can be described in the following ways

- Behavioral finance is the integration of classical economics and finance with psychology and the decision making sciences.
- Behavioral finance is an attempt to explain what causes some of the anomalies that have been observed and reported in the finance literature.
- Behavioral finance is the study of how investors systematically make errors in judgment or ‘mental mistakes’.

According to behavioral finance, investor’s behavior in market dependsonpsychological principles of decision making. It focuses on how investors interpret information and act on informationto implement their financial investment decisions. In short psychological process andbiases influences investors decision making and influence the market outcomes(Barber and Odean, 1999).

2.2 Similarity and Differences between Standard Finance and Behavioral Finance

Richard Thaler, Founding father of Behavioral Finance, captured the conflict in a memorableNBER(national Bureau of Economic Research) conference remark to traditionalist Robert Barro "The difference between us is that you assume people areas smart as you are, while I assume people are as dump as I am". This is how the difference between two sciences is discussed.

Behaviorist argues that behavioral theories are necessary to explain anomalies that cannot be accommodated by traditional finance theory. In return Traditionalist uses a philosophy of instrumental positivism to argue that the competitive institutions in finance make deviationfromHomo Economics(Kahneman, Slovic, andTversky, 1982).

Traditional Finance incorporates no element of human psychology; BehavioralFinance usually incorporates almost no elements, relying on economic theory. Finance institution place people in complex settings that are best described in terms ofinformation, incentives, and actions that can be taken –building block of economic theory. Thus, behavioral studies include only small elements of psychology, integrated into economic theory needed to understand the institution itself. In this way, Behavioral Finance adds only wrinkle to standard finance, which is to alter some of one or more facets of an assumption which is the very foundation of economic theory: how do individual behave?

2.2.1 The key differences between "Traditional Finance" And "Behavioral Finance" is as follows:

- Traditional finance assumes that people process data appropriately and correctly. In contrast, behavioral finance recognizes that people employ imperfect rules of thumb (heuristics) to process data which induces biases in their belief and predisposes them to commit errors.
- Traditional Finance presupposes that people view all decision through the transparent and objective lens of risk and return. Put differently, the form (orframe) used to describe a problem is inconsequential. In contrast, behavioral finance postulates that perceptions of risk and return are significantly influenced by how decision problem is framed. In other words, behavioral finance assumes frame dependence.
- Traditional finance assumes that people are guided by reasons and logic and independent judgment. While, behavioral finance, recognizes that emotions and herd instincts play an important role in influencing decisions.

- Traditional finance argues that markets are efficient, implying that the price of each security is an unbiased estimate of its intrinsic value. In contrast, behavioral finance contends that heuristic-driven biases and errors, frame dependence, and effects emotions and social influence often lead to discrepancy between market price and fundamental value.

2.2.2 Application of Behavioral Finance

Behavioral finance actually equips finance professionals with a set of new lenses, which allows them to understand and overcome many proven psychological traps that are present involving human cognition and emotions. This includes corporate boards and managers, individual and institutional investors, portfolio managers, analysts, advisors, and even policy makers. Behavioral traps exist and occur across all decision spectrums because of the psychological phenomena of heuristics and biases. These phenomena and factors are systematic in nature and can move markets for prolonged periods(Kahneman, Slovic, andTversky, 1982). It applies to:

- Investors
- Corporations
- Markets
- Regulators
- Educations

2.2.3 Characteristics of Behavioral Finance

Four Key Themes- Heuristics, Framing, Emotions and Market Impact characterized the Field. These themes are integrated into review and application of investments, corporations, markets, regulations, and educations-research(Shleifer and Vishny, 1997).

- Heuristics
- Framing
- Emotions
- Market Impact

2.2.3.1 Heuristics

Heuristics are referred as rule of thumb, which applies in decision making to reduce the cognitive resources to solve a problem. These are mental shortcuts that simplify the complex methods to make a judgment. Those who involvedasadecisionmaker, confronts a set of choices within certainty and limited ability to quantifyresults. This leads identification and understanding of all heuristics that affectfinancialad investment decision making. Some of heuristics are representativeness, anchoring &adjustments, familiarity, overconfidence, regret aversion, conservatism, mentalaccounting, availability, ambiguity aversion and effect. Heuristics help to makedecision(Shleifer and Vishny, 1997).

2.2.3.2 Framing

Theperceptions of choices that people have are strongly influenced by how these choices are framed. It means choices depend on how question is framed, even though the objective facts remain constant. Psychologists refer this behaviorasa' frame dependence'. As (Glaser, Langer, Reynders and Weber, 2007) show that investors forecast of the market depends on whether they are given and asked to forecast future prices or future return. So it is how framing has adversely affected people's choices.

2.2.3.3 Emotions

Emotions and associated human unconscious needs, fantasies, and fearsdrive much decision of human beings. How these needs, fantasies, and fears influencefinancial decision? Behavioral finance recognize the role Keynes's "animal spirit"plays in explaining investor choices, and thus shaping financial markets (AkerlofandShiller, 2009). Underlying premises is that our feeling determine psychic reality affectinvestment judgment.

2.2.3.4 Market Impact

Do the Cognitive errors and biases of individuals and groups ofpeople affect market and market prices? Indeed, main attraction of behavioralfinance field was that market prices did not appear to be fair. How market anomalies fed an interest in the possibility that they could be explained by psychology? Standard finance argues that investors' mistakes would not affect market prices because when prices deviate from fundamental value, rational investor would exploit the mispricing for their own profit. But who are those who keep the market efficient? Even institutional investor exhibits the inefficiency. And other limit to this is arbitrage(Barberies and Thaler,2003). .

2.3 Theoretical framework of Behavioral Biases

Psychologists have documented systematic patterns of bias on how people form viewsand take decisions. These biases influence how decision makers form investmentopinions, and then how investors take investment decisions.Information processing may be correct but individual tend to make less rationaldecisions using that information. Nevertheless, most of the financial and investment decisions aredriven by people's emotions and associated universal human unconscious needs,fearsand psychological traits. Thus bias arises and it can be divided into

(i) Prospect theoryand framing

(ii) heuristics and

(iii) Other biases. These biases sit deep within our psyche and as fundamental parts of human nature; they affect all types of investors, both professionals as well as private.

The heuristic decision process by which the investors find things out for themselves usually by trial and error, leads to the development of rules of thumb (Brabazon, 2000) .These decision are those with which humans attempt to make mental shortcuts. These practices however can result in poor decision results that also apply to individual investment decision process. When individuals are faced with complex judgments involving statistical probability, frequency or incomplete information, many individuals usually utilize limited number of heuristics that reduce the decision to simper task(Kahneman, Slovic, andTversky, 1982). Psychological biases or heuristics that can affect decision making are explained in following section.

2.3.1 Heuristics and Biases

2.3.1.1 Representativeness

According to Kahneman, people are wired to seek for certain correlation between events and situations to the extent that he refers to human species as to„pattern seekers". Managers as well have a need to fit in any new circumstance into specific scheme, give it meaning, purpose and justification. It provides sense of control, while loss of control over situation upon which our well-being depends, causes negativefeelings (Kahneman, 2011)

Instead of objective assessment of events and situations, managers find certain context to put those events and situations in. In that way the actual situation or event loses its true context and of course can be misleading for decision making.

It is troublesome especially when this need implies neglect of actual problem that needs to be solved. So, people have this tendency to perceive events and things which share certain attributes as the same (Baker &Nofsinger, 2002).If managers misevaluate potency of certain event`s amplitude to disturb their asset positions, it can significantly change their risk attitudes and behaviors.

2.3.1.2 Overconfidence

Confidence can be described as the “belief in oneself and one’s abilities with full conviction” while “overconfidence can be taken one step further in which overconfidence talks this self – reliant behavior to an extreme” (RicciardiandSimon, 2000).As a human being people have tendency to overestimate their skills and predictions for success.

Extensive evidence shows that people are overconfident in their judgments. Psychologist has found that people tend to be overconfident and hence overestimate the accuracy of their forecasts. Overconfidence stems partly from illusion of knowledge. The human mind is perhaps designed to extract as much information as possible from what isavailable.They may not be aware that the available information is not adequate to develop an accurate forecast in uncertain situations. Not only people are habitually optimistic but they are overconfident as well. People are surprised more often than they think. The classic study in overconfidence is(Lichtenstein, Fischhoff and Phillips, 1982.) Individuals who exhibit overconfidence are said to be not well calibrated. Overconfidence and optimism are potent combination.

The two main facet of overconfidence are mis-calibration and better than average effect. Mis-calibration can manifest itself in estimates of qualities that could potentially be discovered and in estimates of not yet known quantities.

Overconfidence people are not well calibrated. In their prediction they set confidence bands overly narrow, which mean they get surprised more frequently than anticipated(shefrin, 2000). This type of overconfidence is known as mis-calibration. A more general definition of overconfidence is the one by which people overestimate their own capabilities, usually with respect to capabilities of other people on average. Thesis also known as better than average overconfidence (Odean, 1998).

There is explicit and implicit assumption of the way overconfidence is modeledintheoretical finance. Static model or models with constant overconfidence over time assume stable individual differences in the degree of overconfidence that is miscalibration.Some papers such as (Benos, 1998)even refer to investors’differentdegree of overconfidence as different investor types.

People remember their success and forget their failures. Harvard psychologist Lange describes these phenomena as “head I win, Tail its chance”.This is termed as ‘self attribution biases. People often treat their success due to their own skill and capabilities and they attribute failure to other reasons like bad luck etc. Moreover overconfidence leads to higher trading in financial markets.

Overconfidence will result in:

- Mistaking luck for skill

- Too much risk
- Too much trading

So people tend to overestimate their belief and ability. Overconfidence suggests that investors overestimate their ability to predict market events, and because of this theyoften take risk without actually receiving proportionate returns.Psychological studies how that, although people differ in their degrees of overconfidence, almost everyone displays it to some degree. For example most of people rate themselves as above average drivers, but by definition 50% 0f driver are below average.This kind of behavior is predominating in all categories of professionals (Barber andOdean, 1999).Barclays Wealth management highlighted this as a tendency of individuals to placetoo much confidence in their own investment decisions, beliefs and opinions.

2.3.1.3 Confirmation Bias

It is a psychological phenomenon that explains people's bias to seek that sort of information that confirms their existing thoughts and to ignore the sort of information that denies their beliefs. It affects our perceptions and our decision making process, hence we may take non-optimal choices. For example, many TV viewers prefer that television channel that represents their political views, avoiding those that display opinions of different thoughts. People do the same when it comes to financial issues.

Confirmation bias can create problems for investors. When an investor wants to make an investment, he may be inclined unconsciously to seek information that supports his belief concerning his investment and he may not be able to see the information that presents different ideas. The result is a unilateral view of the situation which may cause that investors make poor decisions about the kind of investment they choose or the moment of buying or selling the asset. Confirmation bias serves as a self-confidence source for investors. It helps explaining why the markets don’t always function rationally. However, an investor who is aware of his confirmation bias may be able to overcome it and seek contradictory advice. Confronting people of different thoughts from ours can help us we overcome confirmation biases and helps taking better decisions(Shiller, 1998).

2.3.1.4Availability Bias

According to availability bias, people tend to base their decisions more on recent information rather than any detailed study of past events and thereby become biased to that latest news. In investment world, people often made decisions based on the information readily available and do not take pain to go for any detailed analysis. When people are asked to assess the frequency of a class or the probability of an event, they do so by the ease with which instances or occurrences can be brought to mind(Shiller, 1998).

This heuristic is used to evaluate the frequency or likelihood of an event on the basis of how quickly instances or association come to mind. Availability is a cognitive heuristic in which a decision maker relies upon knowledge that is readily available rather than examine other alternatives or procedures.

2.3.1.5Cognitive Dissonance

A form of self-deception stems from the fact that people seek consistency. The mental discord, that arises when the memory of an event conflicts with a positive selfperceptionor conflict between perception and reality.

Cognitive Dissonance is the mental conflicts that people experience when they are presented with evidence that their belief or assumptions are wrong; people have an incredible degree of self-denial. They will effectively jump through mental hoops in order to reduce or avoid inconsistencies. Cognitive dissonance is the mental suffering that people experience when they arepresentedwiththe evidence that their belief have been wrong (Shiller, 1998)

2.3.1.6 Conservatism

Kahnemanetal.Describes conservatism bias as how people underweight base rates such as extrapolating trend from patterns in a small data set. This is a tendency tocling tenaciously to a view or a forecast. Once the position has been stated most people find it very hard to move away from the view. When movement does occur it is only very slow, which creates under-reaction to events.

Another bias is conservatism, which arises when it is widely recognized that the available data are insufficient to support strong conclusions. In this case, it is a common error to place too little weight on the available evidence, or even to disregard it and to rely solely on prior expectations. In this way, individuals demonstrate are reluctance to search for evidence that contradict their previous views, because theyare reluctant to change their own judgment.

When things have changed, people tend to be slow to adjust to the changes. In otherwords, they prefer to stay on the ways things have normally been. This is whatconservatism is all about. People might under react because of the conservatism bias.

However, if the pattern is long enough, then they will slowly adjust to it and mayoverreact and underweighting the long term average (Ritter and Warr, 2002).Such bias would give rise to momentum in stock market return.Theinvestors take veryconservative approach to changing their minds after taking a decision,despitenewcontradictory information. For example, investors also tend to look at short term investment performance and believe it will continue, rather than lake a long view.

2.3.1.7 Regret Aversion

Loomes et al. developed the term regret aversion, which is used to describe the emotion of regret experienced after making a choice that either turns out to be bad choice or at least an inferior one. Regret aversion is primarily concerned with how apriori anticipation of possible regret can influence decision making. (LoomesandSugden, 1982)and (Bell, 1982)Regret is the emotion individual feels if they can easily imagine having acted in a way that would have led to a more favorable outcome. Classical e.g. of it is fall in price of investment. Regret is the emotion experienced for not having made the rightdecision. It is the feeling of responsibility for loss (shefrin, 2000). In a financialcontext the minimization of possible future regret plays an important role in portfolioallocation. It is also related with preference for dividend in financing consumerexpenditures, because selling a stock that may rise in the future carries a hugepotential for regret.

Regret avoidance is the tendency to avoid actions of interest that could create iscomfort over prior decisions. This explained why investors defer selling losingpositions. In order to avoid the stress associated with admitting a mistake, the investorholds onto the losing position and hopes for recovery.

At the same time, they sell the stock that have gone up in order to feel regret if the prices later fall. This regret avoidance can also be explained when individuals tend to have more regret over the same losses in small stocks rather than the good ones. Asbuyinga small stocks would be more of their own decisions which is ‘out of favors’ to others. When investors lost on small stocks, they feel much guiltier than losingon larger ones. Hence small stocks require higher rate of return to make a buyingdecisions(Shiller, 1998).

Regret of omission is disappointment ofnot taking action that would have had goodresult. Regret of commission is disappointment from taking an action that had badresult. And myopic loss aversion is irrational focus on trying to avoid short termlosses.78So investors avoid loss or regret, at all costs, which can mean we don’t investin way that will truly help us reach our investment objectives.

2.3.1.8 Anchoring and Adjustment

It is well known that when people are asked to form a quantitative assessment theirviews can be influenced by suggestions. When faced with uncertainty people will grasp at straws in order to find basis for the view.

Kahneman and Tversky argued that when forming estimates, people oftenstart with some initial, possibly arbitrary value, and then adjust away from it (Kahneman and Tversky, 1974).Anchoring can be explained as the tendency to attach or 'anchor' our thought to bereference point even though it may have no logical relevance to the decision at hand(Phung, 2008). Although it may seem an unlikely phenomenon, anchoring is fairlyprevalent in situation where people are dealing with concepts that are new or novel.

After forming an opinion, people are often unwilling to change it, even though theyreceive new information that is relevant. Suppose that investors have formed andopinion that company X has above average long term earnings prospect. Suddenly, reports much lower earning that expected. Thanks to anchoring (conservatism), investors will persist in the belief that the company is above average and will not reactsufficiently to bad news. Anchoring manifests itself in phenomena called "post earningannouncement drift", which is well documented empirically. Some evidence suggests that recently observed and experienced events strongly influenced decisions. The recent memory makes the prospect more vivid, and therefore seems more likely.

2.3.1.9 FamiliarityBias

It happens when investors prefer to invest in known assets for them. If you have to choose to invest in one of the two investment funds: the one you have heard somethingabout and the other not. Which of them would you choose? If we surrender to the familiarity bias, we would choose the fund that we have heard somewhere. Familiarity and security are two different things. Familiarity can contribute to a lack of diversification, thus increasing the risk. If people know a certain section because they work for it every day, they feel they know very well this section, thus they can decide to distribute a large part of their investments in the section. The risk is that if the section has a crisis, they are exposed to double risk (employment and investment).

The influence of familiarity on investments choice, relates also to the country where investors live (the bias to invest in local assets - home bias). Some investors tend to buy shares from companies in their country instead of risk-sharing through investment in different countries. Just as a potential risk rises of excessive investment in a particular section, it can also extend from excessive investment in a certain country.

2.3.1.10Optimism Bias

It’s the bias to believe that the future will be better than the past and the present. Hoping to help you achieve your goals and cope with the obstacles. Various researches show that people are more optimistic than realistic. When people predict the future, they overrate the chances of positive events and underestimate the chances of negative events. In a world full of insecurities and competition, being positive without disconnecting from reality, is useful. Nobel Prize winner Daniel Kahneman writes in his book Thinking Fast and Slow; those optimistic individuals play an important role in our lives. They are often inventors, entrepreneurs, leaders who have reached where they are, seeking for challenges and risks. On the other hand, unrealistic expectations for the future may result in impulsive behavior, as borrowing more than what people can afford negligence on insurance, etc. To manage this bias, it is recommended to perform a pre-mortem (Gary Klein, 2007). A pre-mortem is the hypothetical opposite of a post-mortem. The idea is simple: before taking a risky decision (such as starting a business or investing in shares), imagine that it was taken months ago and resulted in a dramatic failure. Now think about all possible reasons of this failure. This method forces people to act against their own confirmation bias, the natural bias to seek only evidences that support an original belief. Pre-mortem will reduce the post-mortem pain that hits when the reality does not match the optimistic expectations. Optimism bias is considered to be one of the most important psychological biases of all.

2.3.1.11 Retrospective Bias

A bias that tends to happen in a situation after an event has occurred; the person believes that the occurrence of that event was predictable and obvious, while in reality the event could not have been rationally predicted. Finding the wrong connection between the cause and effect of an event, may result in incorrect excessive simplification. Financial bubbles are often the subject of this bias. After almost every financial bubble, experts and analysts tried to show that how a past event, unimportant at the time, was actually a warning to future financial problems, the signs were very obvious. This is a clear example of retrospective prejudices: If the bubbles’ signals were clear at that time, it might not have been escalated and eventually exploded. The illusion that we understand the past stimulates the confidence in our ability to predict the future (Thinking Fast and Slow, pg. 218).

2.3.1.12 Self-attribution Bias

Investors, who suffer from self-attribution bias, tend to attribute the successful results to their personal ability and the bad results to 'bad-luck' (Shepherd, pp. 101, 1999). They often manifest this bias as self-defensive. Investors affected by the self-attribution bias can gain excessive self-confidence. When their portfolio grows, they take the credit, but when they lose, they blame immediately external factors outside of their control, for example: market forces.

2.4 Behavioral Finance and Investment Decisions

Decision making is a complex process which can be defined as a process of choosing a particular alternative among a number of possible courses of actions after careful evaluation of each. Most crucial challenges to investors is to make investment decision, having a difference in their profile, like demographic factors, socioeconomic factors, educational levels, age, gender, and race.

Given the run up in stock (capital) market in 2004 to the end of 2007 and subsequent downturn of financial market, understanding irrational investor behavior is as important as it has ever been. In present scenario behavioral finance becomes integral part of decision making process due to its influence on performance of investment.

Most critical issue is market participant cannot behave rationally always, they deviate from rationality and expected utility assumption, while really making investment decisions. Behavioral finance helps investors as well as market participants to understand biases and other psychological constraint in their interplay in market. Behavioral finance approach attempts to explain and increase understanding of reasoning patterns of investors, including the emotional processes involved and degree to which they influence the decision making process. Essentially, it attempts to explain the what, why and how finance and investing, form human perspective. These help investors to minimize or eliminate the psychological biases in investment decisions

2.5 Empirical Studies on the Relationship between Psychology and Finance

Decision-making can be described as the operation of choosing a particular alternative from many available solutions. It is a complex multi-step procedure including research of various individual, technological and situational aspects. Taking financial commitment choices is the most important task experienced by traders. Some individual aspects are age, knowledge, income etc. On the technological side, financial commitment choices can be produced from various designs of finance, for e.g. the main city resource costs design (CAPM). Decisions should not be achieved without considering situational aspects that take into account the atmosphere, the market mindset in other terms.

In the opinion of (Tony, 2002) DanielKacheman with Amos Tversky integrated the concepts of psychology and economics in the process of providing foundations for behavioral finance. Their study focused on decision making under uncertainty of market situation. But on the other hand alternative model, prospect theory gives new insights to the observed behavior of decision makers.

Research done by (Kıyılar, 2009)Study aimed to reveal the qualities of behavior observed in choice of credit card which is one of the financial products that the participants who joined the study used and to determine whether or not this behavior differ on the basis of demographic features. Aim was to explain the individuals do not always act rationally in their financial decisions and their behavior causes them to make different choice about their financial decisions.

Analysis done by (Mokoaleli-mokoteli, Taffler et al., 2009) this analysis tested whether sell-side experts are inclined to behavioral mistakes when making inventory suggestions as well as the effect of financial commitment financial connections on their reasoning. In this study comparative importance of intellectual prejudice and disputes appealing in identifying specialist behavior, they focus specifically on inventory suggestions rather than earning predictions. Research claims that an important determinant of the obvious judgmental mistakes created by analysts is also intellectual prejudice.

Presented by (Qawi, 2010)presented the results in the area of behavioral finance related to herding behavior, thought contagion, threat aversion, trader emotions among others. Several behavioral aspects impacting trader making decisions or changes individual traders bring to the industry have been outlined. Survey revealed that traders were holding similar behavior towards long lasting investing, the resource allowance between ties and shares, buying on down markets and opinions on threat, willing to take.

Study explored by (Emmanuel, Harris et at., 2010) The purpose of this paper is to analyze capital investment process, recommended by ideas from cognitive and social attitude. The objective is to assess the stage to which handling thinking can be identified by making use of a psychological lens to the process.

Tokarresearch aimed to focus on the effects of human behavior, reasoning and selection in strategies and offer sequence control. Research presented structure for determining and dealing with behavioral problems in logistic control (Tokar, 2010). An intension-relevant behavioral supposition of factory location choices models is that manager makes choices to reduce the sum of these expenses.

(Sadi, Hassan et al., 2011) one of the key elements on traders financial choices are perceptual mistakes which impact their choices while dealing inventory. The good of this study is to identify the popular perceptual mistakes among traders and its experience with their character. The finding shows that the provided perceptual mistakes have got a significant experience with the investors' character. The results display that there is direct outcomes of extroversion and awareness whit hindsight prejudice and over assurance prejudice, between neuroticism and randomness prejudice, between escalation of dedication and accessibility tendencies. Also, there is a reverse outcome of conscientiousness and randomness prejudice, between awareness and accessibility prejudice.

According to (Kawitha, 2011) A scientific study is conducted to analyze your time and money behavior and selection style of individual investor. Systematic Hierarchy Process (AHP) is used to find the relative significance of different behavioral traits of the investor. The research recognized four wide measurements of trader behavior that could have an effect on their financial commitment choices (Overconfidence, Investor Positive outlook, Investor Participation and Risk Preferences).

In the opinion of (Spindler, 2011) expert deals with activities finance thinking and its law with regards to the investor protection requirements. This analysis is dedicated to potential come in paradigms of investor protection control, from an interdisciplinary viewpoint which, however, focuses on the outcomes for legal idea.

(Bimal&Naela, 2012)as per classical economic theory, humans are completely rational decision makers who carefully evaluate all facts and evidences before taking a decisions that aim is to maximizing outcomes. They studied the different biases with the gender (male and female). Both are largely unfeasible about the clarity of their financial goals, both are equally liable to behavioral fallacies such as mental accounting and herd behavior. Customized behavioral portfolios can be constructed so as to maximize the financial as well as psychological wellbeing of the investor.

Study conducted by (Masini&Menichetti, 2012) analyzed the decision making process underlying investment in renewable energy technologies. Researcher tested the conceptual model that examines the structural and behavioral factors affecting the investor‘s decisions as well as the relationship between RE investors and portfolio performance. Study based on model in which includes two stages, examines whether behavioral factors have a measurable influence on the decisions to invest in renewable energy projects, and whether in turn, the share of renewable energy in the portfolio that results from these decisions is reflected into the portfolio performance.

Research explored by (Charles &Kasilingam, 2012) Behavioral finance studies the relationship between stock price and human mindset. The present research addressed the issue to find out the sentiment and its impact on investor's financial commitment choices. Multistage unique testing technique was used to gather the information from 742 traders throughout Tamilnadu. The information so gathered was examined quantitatively by using different SPSS tools. Results of this research suggest that traders can be classified based on the impact of emotions are high sentiment, low sentiment and average sentiment traders. Further canonical connections findings expose that certain market and financial commitment factors of investor's impact their emotions behavior.

As per (Maiyaki, Sanuri, et al., and 2012) the paper aimed at exploring the connection between functional top quality, technological top quality, recognized value and corporate image on client behavioral responses in the Nigerian retail store banks. A sample of 800 retail store bank customers was drawn through multistage cluster sampling. The empirical data was analyzed using structural equation modeling with AMOS software. The findings reveal that each of technological top quality, perceived value and corporate image has important positive connection with behavioral objective.

Research Examined by (Tripathi&Chattopadhyay, 2012) this aimed to examine the behavioral aspects of financial decision. Researcher selected the variables like faith, knowledge, and availability of information, uncertainty, and predictability of future outcome, complexity of product and transparency that defines the risk perception of individual investor in equity mutual funds. They found that the factor ―Extent of control over outcome‖ is unique to experts whereas the factor Voluntary Risk Taking is unique to laymen.

Actions fund is a framework that products some areas of normal fund and changes other areas. It shows the behavior of traders and management in decision-making; it demonstrates the results of communications between traders and supervisors in financial and investment marketplaces. As decision-making is an art to perform complicated circumstances and traders make unreasonable choices during their investment strategies (Saqib, Rehman et al., 2012).

Garcanalyzed that how behavioral finance and financial education has helped individuals use information in making financial decisions. Researcher Aimed to complement these recent studies in financial education by researching how individuals process and perceive with the available information in order to make financial decisions (Garc, 2013).

According to (Mitroi, 2014) this research guided on investment portfolio allocation of decisions by understanding the different kinds of errors that investors tend to make in managing their portfolios. Knowledge of psychological foundation of human behavior in financial markets facilitates the formulation of investment strategy for individual and group investors.

Research Revealed by (Willows & West, 2014) Research has revealed that, as a result of certain behavioral tendencies, individuals do not always make financial commitment choices in such a way as to increase their predicted application.

Study examined by (Oprean, 2014) in this article, specialist examined the factors that may describe the dealing quantity progress on two growing investment marketplaces, Romania and South America. The outcomes indicate that dealing is affected by the investors' unreasonable behavior. Thus, the rationality speculation can be refused for both investment marketplaces. The outcomes indicated that, on an investment industry, the investors' logical objectives are not able to explain dealing quantity variation.

According to (Mahapatra, Mehta 2015) According to various conventional economical concepts people behave rationally while creating economical choices. The objective of the research is to find out whether gender differentiation plays a crucial role in impacting economical commitment choices and up to what level men and women traders suffer from behavior prejudice. The research has effects for the finance industry as it efforts to evaluate how behavior and psychological factors impact different traders based on their basic sex difference and would also help to customize the profile with regard to their economical commitment preferences.

In the judgment of (Bashir &Madhavaiah, 2015) The reason of this document is to provide an understanding into the factors of the customers' attitude and behavioral objective to use Online financial services, paying special attention to the role of recognized risk, believe in, entertainment, web design and social impact.

2.6 Summery Of Literatures

All human beings have some specific patterns of thinking, and this may influence our emotional state and behavior. Sometimes these patterns are not very accurate. These are called cognitive distortions or cognitive errors. Its learning would enable us to recognize our cognitive errors and thus our ability to ignore the negative thought or to change it increases. And this helps us changing our emotions and behavior. Following are some of the common cognitive errors that we are confronted to:

- We tend to put our experiences into two categories only viz., good or bad. Nothing is out in between these two.
- We tend to over generalize in the sense that we believe that something will always happen as it has already happened once in past.
- When good thing happens, we do not take it to be important and we do not count it. Thus, we tend to discount positive.
- We all tend to come to conclusion pre maturely in the sense that we jump to the conclusion even if we do not have complete information about the issue under consideration.
- We think that we know what others are thinking or feeling about you though there is no evidence to believe so. People are overconfident so far as their mind reading talent is concerned.
- People have strong confidence in their ability of predicting future and while doing that, they always tend to ignore other possible alternatives.
- People tend to distort (either magnify or minimize) the importance of positive or negative events.
- We believe something to be true because we feel it to be true. This is called emotional reasoning.

- We tend to label our desires as our ideals. When we wish to do something, we tell ourselves that we should do that.
- We tend to label a person as good or bad on the basis of one behavior or mistake.
- People tend to take blame on themselves for an unwanted happening even if they would not have been able to make any difference in that in any way. This is called personalization.

Therefore, as can be seen from the above brief discussions there are no empirical researches as well as theoretical so far made on our country context on the issue of behavioral finance and it has not been well recognized and addressed, ithas motivated the researcher to make an effort in introducing the concept as one and very important research topic in to the our countries financial context.

2.7 Conceptual Framework

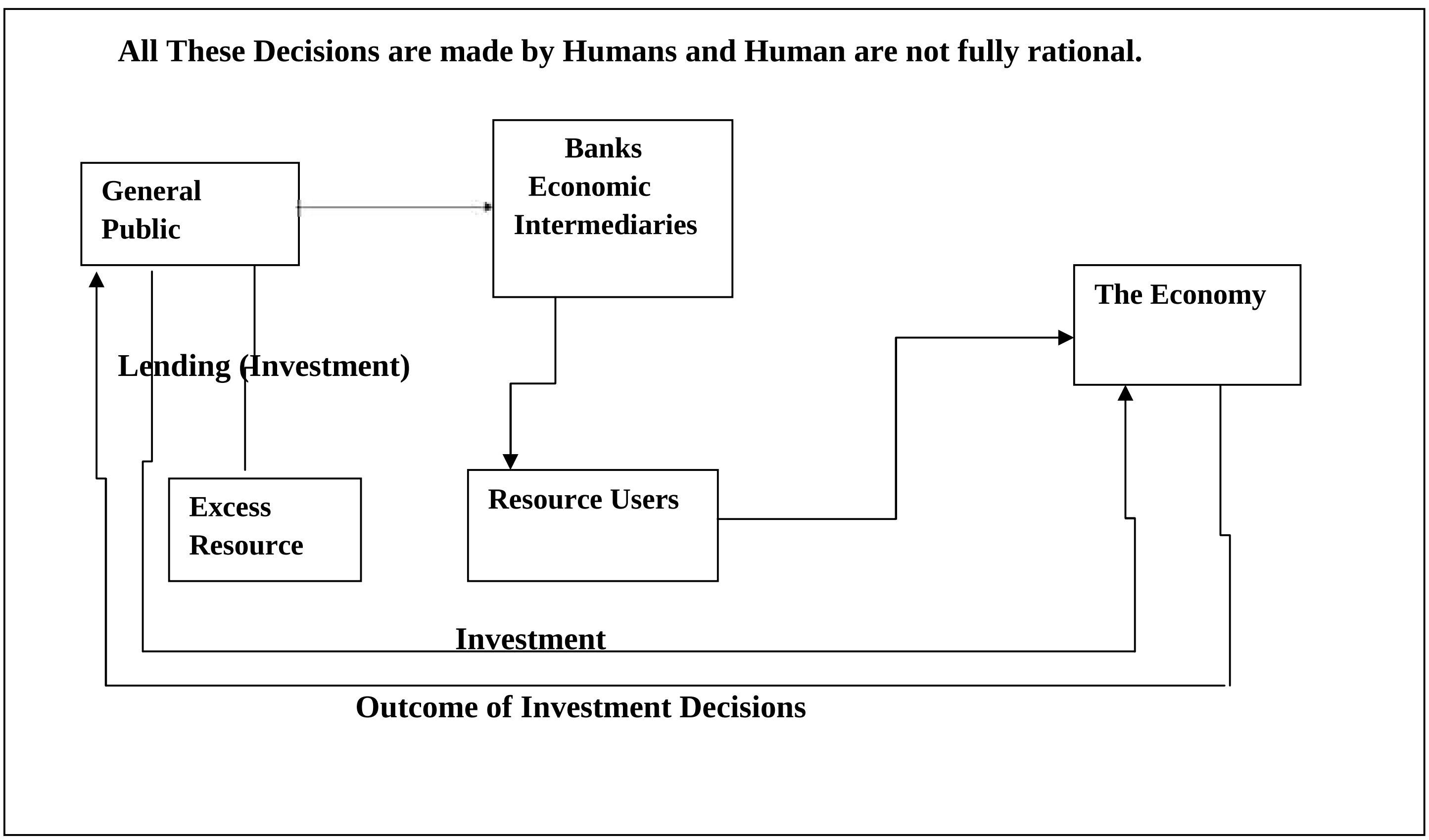

Figure 2.7Conceptual frameworks(The Relationship between Psychology and investment decisions) Developed by the researcher

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

INTRODUCTION

This section covered the research design of the study as well as the methods which is used to collect and analyze data. It starts with discussing the choice of research design by comparing it with other types to show why it is the most suitable one for this study, and then continues with respondent's selection using stratified sampling technique with the aim to have a representative sample in order to generalize for the whole population. In addition, data collection methods namely self-completion questionnaire and semi-structured interviews are discussed, following by the explanation of questionnaire design and the measurements. Especially, this chapter shows how the analysis is carried out once findings are obtained by using software and statistical techniques.

3.1 RESEARCH DESIGN

According to Leedy and Ormrod (2005) research methodology is a means to extract the meaning of data. Data and methodology are highly interdependent. Therefore, the methodology to be used for a particular research problem must always take into consideration about the nature of data that will be collected to resolve the research problem.

The purpose of this study is therefore to identify and show the roll of psychology in investment decision making of united bank s.c and assess which elements of behavioral finance play a significantroll in investment decision making. As it can be seen from the research problem it is more explanatory type and tries to answer the relationship between psychological factors and their roll on the bank's investment decisions. This research design is selected due to the nature of its applicability for conducting research problems which was not well researched before like the one it is planed to do now, which demands priorities, generates operational definitions and provides a better-researched model. It is actually a type of research design which focuses on explaining the aspects of the study in a detailed manner. In these types of research design the researcher starts with a general idea and uses research as a tool which could lead to the subjects that would be dealt with in the incoming future. It is meant to provide details where a small amount of information exists for a certain product in mind of that researcher. It is not used to give some conclusive evidence but helps us in understanding the problem more efficiently. When conducting the research, the researcher should be able to adapt himself/herself to the new data and the new insight he/she discovers as he/she studies the subject. It does not aim to provide final and conclusive answers to the research questions but allows the researcher to explore the research with a varying level of depth. It increase understanding, it is flexible for sources, and can be very advantageous in directing subsequent research approaches, a great understanding of the subject allows the researcher to hone subsequent research questions and can greatly increase the usefulness of a study's conclusions. This exploration likewise, exceptionally valuable in deciding the best way to deal with accomplishing goal.

3.2 QUANTITATIVE RESEARCH APPROACH

This approach is used to answer question about relationships among measured variables with the purpose of explaining, predicting and controlling phenomenon. Quantitative studies represent the mainstream approach to research and structured guidelines exist. Variables, hypotheses and methods of measurement tend to be defined before the study begins and remain the same throughout. In this research, the researcher has identified few variables to study and collect data related to the study.

Quantitative research approach has two strategies of inquiry. The first is survey design which provides a quantitative or numeric description of trends, attitude or opinion of a population by studying a sample of that population. From the sample the researcher generalizes about the population. The second type of design is experimental design used to test the effect of intervention on an outcome, controlling all other factors which may influence that outcome (Creswell, 2003). In experiment design researcher may also identify a sample and generalize to a population (Creswell, 2003).The analysis is made based on deductive reasoning, beginning with certain theory or hypotheses and drawing logical conclusions from it. Formal, impersonal and scientific type of reporting is common. The weakness of this approach is, if the study is made in laboratory, the difficulty to generalize in the real world. Therefore in this study the researcher used a survey method.

3.3 QUALITATIVE RESEARCH APPROACH

According to LeedyOrmrod, this approach is used to answer questions about the complex nature of phenomena and its purpose is describing and understanding the phenomena. The qualitative research process is more holistic with specific focus on design measuring instruments and interpretation developing possibly change along the way(LeedyOrmrod, 2005). The approach operates under assumption that reality is not easily divided into discrete and measurable variables. Qualitative research approach has five common strategies of inquiry. The strategies include case study, ethnography, phenomenological study, grounded theory and content analysis (Leedy and Ormrod, 2005). The approach makes considerable use of inductive reasoning. Under this approach, many specific observations has to be made to draw inferences about larger and general phenomenon while personal and literary style languagehas been be used when reporting the findings. The major weakness of this approachis that findings may be so specific to particular context that they cannot be generalizedto other context (Creswell, 2003).

Considering the research problem and objective shown above along withthe philosophy of the different research approaches, mixed research approach (pragmatic approach)isfound to be appropriate for this study.

3.4 DATA COLLECTION METHOD

Among various kinds of data collection methods such as structured interviews, semi structured Interviews, unstructured interviews, self-completion questionnaire, observation, group discussion, etc, self-completion method is chosen for collecting quantitative data and semi-structured interview method is selected to gather qualitative data for this study. Self-completion questionnaire seems to be one of the most common methods of quantitative researches. With a self-completion questionnaire, respondents answer questions by completing the questionnaire themselves. This method is chosen for some reasons. The first reason is that as the research questions must be defined clearly, questionnaire is the best choice to have standardized data, which is easily to process, and analyze.

Especially, as no interviewers present when the questionnaires are completing, the results may not be affected by the interviewers (Bryman& Bell, 2007,). Moreover, it is cheaper than other methods (Bryman& Bell, 2007). As the research is about united bank's decision makers, it was very expensive for conducting face-to-face interviews. Furthermore, this method helps to save time (Bryman& Bell, 2007) so hundreds questionnaires can be sent out in one batch. As the respondents are managers and those related, they don't have much time for interviews, thus, questionnaires may make them feel more comfortable because they can do it whenever they have free time. Questionnaires also are more convenient for respondents in case they need to provide some sensitive information, in other words; they tend to be more honest than in an interview (Bryman& Bell, 2007,).

According to (Saunders et al., 2009), the self-administered questionnaires are divided into two groups' so-called postal questionnaire, and delivery-collection questionnaire according to the way of distributing. (Bryman& Bell, 2007) state the two options for questionnaire distribution as well. The first option is to mail the questionnaires directly to selected respondents, then ask them to send the answers back by mails or submit to specific people at specific place (Bryman& Bell 2007). The other option for researchers is to deliver the questionnaire by hand to each respondent and collected right after he/she completes it (Saunders et al., 2009). In this research, the second option is selected.

After collecting and analyzing the data which wascollected through questionnaires, semi-structured interviews are going to be employed to expand the scope of the research. Interviews with executive managements who can provide deeper knowledge about the results as well as their experiences about investment decision making. Consequently, rich information about the financial behaviors is hopefully going to be obtained through the talks with experts in this field.

In summary, data for this research are going to be collected by using both quantitative data synthesized from the questionnaires and qualitative data obtained from semi-structured interviews. The data collected from questionnaires indeed provided the basic understandings about the factors affecting decision maker's decisions and the results of data analysis guided the contents of the interviews.

3.5 RESPONDENT SELECTION

As the research aims at exploring the behavioral factors at united bank, a relative large sample size is recommended. The larger sample size is, the more representative it can be, thus, the more reliable result is (Saunders et al., 2009). Nevertheless, the sample size depends on researchers' available resources including time, finance and human (Saunders et al., 2009). (Hair, Black, Babin, Andersion and Tatham, 1998) suggest that with quantitative research, at least 100 respondents should be studied in order to have fit the statistical methods of data analysis. Therefore, 120 questionnaires were distributed to assistant managers, loan and trade finance officers, department assistant managers and their colleagues who have the chance to work closely with the decision makersand observe in the hope of receiving more than 100 responses.

Questionnaires were sent to respondents using stratified random sampling. Initially, convenience sampling was chosen as it is the best technique to get the highest rate of response when sending to friends and relatives. In addition, it would help to save time and money. Nevertheless, convenience sampling is one type of non-probability sampling, which cannot provide representative sample, thus the result cannot be generalized for the whole population (Bryman& Bell, 2007) while the target is to find out the investment behaviors of the whole population of individuals involved in the process. In contrast, stratified random sampling allows us to stratifying the population by a criterion, and then chooses random sample or systematic sample from each stratum (Bryman& Bell, 2007). Stratified sampling ensures that the sample is distributed in the same way as the population (Bryman& Bell, 2007).

3.6 DESIGN OF MEASUREMENTS AND QUESTIONNAIRE

The questionnaire was divided into fourdifferentparts: personal information, brain storming questions, behavioral factors influencing decisions, and investment. In the part of personal information, nominal and ordinal measurements are going to be used. Nominal scales are going to be used to classify objects while ordinal scales are going to be used necessary for both objectives: classifying and ranking order of objects or observations (Ghauri and Gronhaug, 2010). This research based on the theories of behavioral finance and many other authors cited in the literature review, to synthesize a set of questions related to behavioral factors influencing investment decisions and investment performance. In these parts, the 6-point Likert scales, which are rating scales widely used for asking respondents' opinions and attitudes (Fisher, 2010), are utilized to ask to evaluate the degrees of their agreement with the impacts of behavioral factors on their decision as well as with the statements of investment. The 6 points in the scale are respectively from 1 to 6: extremely disagree, highly disagree, somewhat disagree, somewhat agree, highly agree, and extremely agree.

The 6-point Likert measurements were used in this research to limit the bias evaluation of respondents because the respondents cannot find the means of the 6-point scale in the questionnaire which they easily find in the 5-point or 7-point scales

3.7 DATA PROCESS AND ANALYSIS

Before processing the responses, the completed questionnaires were edited for completeness and consistency. The study generates quantitative data which were coded and entered into Statistical Packages for Social Scientists (SPSS) and analyzed using descriptive statistics.

Descriptive statistics involves use of absolute and relative (percentages) frequencies, measures of central tendency and dispersion (mean and standard deviation respectively). Quantitative data were presented in tables and explanation in prose. In addition, the study conducted a multiple regression analysis. This provides the generalization of the findings on impact of behavioral biases on investment decisions in united bank s.c. The regression equation given below was used:

Y (Investment Decisions) = α + Psychological Factors ($\beta 1X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7$)+ ε

Whereby the variables will be identified as follows

Y – The dependent variable represent the investment decisions (profitability, Safety, Diversification, Liquidity, Stability and Productivity of Investment) and is measured by an analysis of the company's investment policy. Scores will be derived from Likert scale for each behavioral factor.

X_1– Overconfidence and Over optimism Bias

X_2-Self Attribution Behavior & Confirmation Bias

X_3-Familiarity Bias

X_4-anchoring and adjustment bias

X_5-Conservatism Bias

X_6-Representativeness Bias

X_7– Availability Bias

α – is the constant (intercept), and

$\beta_1 x_1$.......X_n- the Predictors

ε - Is the error term

Regression analysis was done using statistics software, SPSS. The β coefficients from the equation above represent the strength and direction of the relationship between the independent and dependent variables.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

INTRODUCTION

The previous chapters presented the orientation of the study, theoretical and empirical foundations, literatures were also reviewed to grasp different aspects of previously done researches and scholarly opinions about the subject matter under study and the research methods adopted in the study were also discussed briefly on how relate research problem gathered and analyzed. This chapter presents the results. As discussed in the preceding chapter in this study aimed at examining the roll of psychology on investment decisions of united bank s.c. on the surveyed data and response gained from the respondents.

The questionnaire was distributed to 120 employees, whose positions related tothose who have at most relation to those who make investment decisions at various levels of the bank. Out of 120questionnaires 92, were completed and collected. As the result the response rate is found to be76.6%. According to different researchers, researcher or survey organization differ considerably in the extent to which they devote time and money to improve response rate. Thus, there is no agreed-upon standard for a minimum acceptable response rate.

4.1 GENERAL INFORMATION OF THE RESPONDENTS

4.1.1 GENDER OF THE RESPONDENTS

The table below presents the profile of the respondents in the study. As shown in Table 1, 66.3 % of the respondents are male and 33.7 % are female. Though the number of males dominates in the selected activities which are very close to observing the decision makers, it has no any implication ,it was just happened because .during recruitment examination, males have fortunately passed the entrance exams, not intentionally done to discriminate females employees. United bank s.c. is equal opportunity organization, Everyonewithin the organization has the chance to be advanced in to higher positions within the banks hierarchy.

Table 4.1.1.1 Gender of the respondents.

		Frequency	Percent	Valid Percent	Cumulative Percent
	Male	61	66.3	66.3	66.3
	Female	31	33.7	33.7	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

4.1.2 QUALIFICATION OF THE RESPONDENTS

Most of the respondents are degree holders, almost 85.9% of them are degree holders and about 14.1% have above BA degree. From the respondents profile we can observe, united bank has minimum educational qualification for working in position which has close to those who participated in investment decision making process, which is bachelors' degree. Because it involves intensive financial and customer profile analysis and closely participate in deciding which investment alternative or opportunity to choose from.

Table 4.1.2.1 Educational Qualifications of the respondents.

		Frequency	Percent	Valid Percent	Cumulative Percent
	BA Degree	79	85.9	85.9	85.9
	Above Degree	13	14.1	14.1	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

4.1.3 WORKING POSITION OF THE RESPONDENTS

When we see their positions in the banks structure the large group or 39.1 percent of respondents work in assistant manager positions both at a branch and department level, which is the most significant position and has the opportunity to participate and observe their superiors while they make investment decisions. The second largest numbers about 34.8 percent of respondentswerethose who work in credit related areas for about 20.7 percent trade finance related areas and the remaining 5.4 percent are analysts. All these respondents are active observant and participants in united banks management activities and close to those investment decision making areas, and know well the pros and cons of the their superiors psychological judgments in investment decision making of the bank. They involve somehow either in the formulation or implementation of the investment decisions. Therefore, incorporating all these parties in order to find the psychological roll of their colleagues and superiors psychological make upinthebanks investment decision activities is found very crucial, that is why the researcherparticipates all in the survey to find multi perspective opinions by those very close to observing the decision makers.

Table 4.1.3.1 Work positions of the respondents with in united bank s.c

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 .Credit Related	32	34.8	34.8	34.8
	2.Trade Finance Related	19	20.7	20.7	55.4
	3.Credit Analyst	5	5.4	5.4	60.9
	4. Ass. Manager	36	39.1	39.1	100.0
	Total	92	100.0	100.0	

Source: Researcher’s Findingsand own computation

4.1.4 WORK EXPERIENCE OF THE RESPONDENTS

With respect to experience, 100percent of survey respondents indicated that they had more than five years of experience. From the respondents profile we can observe that most of the respondents have the time, experience and the maturity to tell about the decision makers character and the influence it could have on investment decision making of the bank, from the profile we can tell that most of the respondents have the time to observe several years decision making activities by several decision makers and its impact on the banks overall activities.

Therefore in terms of experience the survey profile can be taken as best observatory activity to rich in to judgment.

Table 4.1.4.1 Respondents work experience with in united bank s.c				
	Frequency	Percent	Valid Percent	Cumulative Percent
More than five years	92	100	100	100
Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

4.1.5 AGEOF THE RESPONDENTS

Age is not that much a facto, however, when experience and age increase the maturity level and the perspective to see things from a much matured angle will be believed increase overtime. If we see the respondents profile from this perspective all the respondent are above 30 of which 46% above 35.this might be taken as a good indicator that the respondents have the maturity and the time to make the right observation of their superiors decision making personality during the time the have to work along with them.

Table 4.1.5.1 Respondents work experience with in united bank s.c					
		Frequency	Percent	Valid Percent	Cumulative Percent
	30-35	46	50.0	50.0	50.0
	Above 35	46	50.0	50.0	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

4.2 QUESTIONS TO BRAINWASH THE RESPONDENTS

several question where asked to be able to measure the respondents opinion about non financial measures of performance and investment measures in order to rich in to a conclusion on how much the concept has been taken in to account at an individual level as well as at a corporate level to take decision making, investment decision making specifically in to another quality level along with the traditional concept of decision making assumptions. About seven questions were asked and the result has been summarized and interpreted bellowed accordingly.

Brain Storming Questions No.1.

Table 4.2.1 Importance of Non financial measures					
1. Non financial measures are as important as financial in investment decisions.		Frequency	Percent	Valid Percent	Cumulative Percent
	YES	79	85.9	85.9	85.9
	NO	13	14.1	14.1	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Non financial measure such as internal business process, learning and growth and customer satisfaction, market share, brand equity are as important as financial measure in determining the company's goals and objectives .when provided to answer this question 79% of the respondents believed that they are as important as financial ones by responding yes, in decision making process of any organization like wise in united bank s.c, 13% of the respondent however think they are not as such important in investment decision making believing that financial measures are enough to make accurate decisions.Hence the majority believed they are important in making difference to make accurate investment decisions.

Brain Storming Questions No. 2.

Table 4.12.2 rationality in decision making					
2.Managers are rational in their decision making		Frequency	Percent	Valid Percent	Cumulative Percent
	YES	9	9.8	9.8	9.8
	NO	83	90.2	90.2	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findings and own computation

To days corporate environment requires managers to be excellent decision makers. Their ability to make fast, widely-supported, and effective decisions will. In large part, shape the performanceof their firm. With a view toward understanding these better we asked the above question to the respondents hence about 83% of the respondents believed most managers are not rational only 9% of the respondents think managers are rational while they make investment decisions during the decision making process. This will support the researcher'sinitial point of view. Most previously done studies support manager's irrational behavior. This implies that organization like united bank should find a solution to mitigate the risk that arises from irrational behavior of such investment decision makers.

Brain Storming Questions No. 3.

Table 4.2.3 Psychological elements in the decision making process				
3.It is Important to accommodate psychological elements in the decision making process	Frequency	Percent	Valid Percent	Cumulative Percent
YES	92	100.0	100.0	100.0

Source: Researcher's Findingsand own computation

Modern decision frameworks recognize the necessity to accommodate factors beyond the algorithmic functions of choice. Decades of psychological studies have clearly established the important role of cognitive elements in decision making (stanfey, 2007).Taking this into consideration the respondents response also 100% support this perspective. It signify the importance of incorporating psychological elements in the decision making process. Ignoring such vital elements has a negative consequence in making rational investment decision.

Brain Storming Questions No. 4.

Table 4.2.4 exposure of investment decision to behavioral biases				
4.investmenrt decisions at united bank are prone to subjective judgments	Frequency	Percent	Valid Percent	Cumulative Percent
YES	92	100.0	100.0	100.0

Source: Researcher's Findingsand own computation

Since united bank is a service giving organization, most decisions are prone to subjective judgments. The respondents' response highly supports this opinion. The survey outcome shows thatthese investments as well as other decisions are influenced by subjective judgments of the decision makers. All the respondents responded investment decisions at united bank are prone to subjective judgments. This implies that decision makers at united bank are not rational, there is no ration decision making therefore taking into account these psychological factors will make an improved decision along with the financial measures.

Brain Storming Questions No 5.

Table 4.2.5 major investment at united bank s.c				
5. The greater share of united bank's investment is lending the deposit mobilized from the general public?	Frequency	Percent	Valid Percent	Cumulative Percent
YES	92	100.0	100.0	100.0

Source: Researcher's Findingsand own computation

The critical investment decision resource at any commercial bank including united bank s.c comes from the general public in the form of deposit and facilitated through branches in the form of lending to those who have shortage or in need of finance to support their business. This resource requires too much care in our country context, because it is very scarce. All the respondents also agreed with the researcher's opinion 100%. The major resource of the bank is deposit and it is the greatest source of income of the bank. While borrowing this resource as well as mobilizing deposit, there exist various subjective decisions emanated from the individual psychology of the decision makers. Therefore in order to utilize this resource in a better way united bank should take those individuals psychological threats in to account the decision making process to mitigate the consequences.

Brain Storming Questions No.6.

Table 4.2.6 key participants of investment decisions at united bank s.c					
6.branch managers are active participants in deposit mobilization as well as lending process of united bank s.c		Frequency	Percent	Valid Percent	Cumulative Percent
	YES	80	87.0	87.0	87.0
	NO	12	13.0	13.0	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

As previously founded results state investment decision making at united bank is prone to subjective judgments, and in order to minimize the risk that arises from these factors the bank should incorporate psychological elements in the investment decision making process of the bank. In our survey question above to find weather managers are active participants in this highly important resource of the bank during the lending process the respondents agreed that 80% managers are highly involve in the deposit mobilization and lending process of the bank however

12 percent of the respondents disagree the involvement of managers on these two important resource not as significant as it is believed. From the result we can generalize that managers are very much involve in the investment decision making process of the bank and they involve highly with greater degree of involvement.

Brain Storming Questions No.7.

Table 4.2.7 role of behavioral elements in united banks policies and procedure

Behavioral elements are considered in investment decisions at united bank s.c		Frequency	Percent	Valid Percent	Cumulative Percent
	YES	28	30.4	30.4	30.4
	NO	64	69.6	69.6	100.0
	Total	92	100.0	100.0	

Source: Researcher'sfinding'sand own computation

From the survey result 64% of the subject responded behavioral elements of the individual decision makers are not considered in the decision making process and there is no way to mitigate the risk of it. However 28% of the respondents the bank has a way and has been considering such factors in the decision making process of the bank.

Therefore from the brain storming question we can generalize that most of the respondents believe non-financial measures are as important as financial measures in the investment decision making process.Since, managers are found irrational on the survey result their investment decision making while they decide on the most scarce resource of the bank on this highly competitive environment during investment decisions might endanger the image and ultimately the performance of the bank. Therefore, it is as important as the financial one to incorporate psychological factors to improve the investment decision making quality of the bank which will ultimately benefit by improving the performance and brand equity of the bank. Therefore taking in to account these elements will improve the investment and its output at the end along with traditional financial criteria's.Disregarding these bold facts will untimely make united bank sacrifice its dream on its way to become one of the most preferred bank not only in our country but in east African financial market.

4.3 THE ROLE OF PSYCHOLOGICAL BIASES ON INVESTMENT DECISION MAKING AT UNITED BANK

4.3.1 PSYCHOLOGICAL (BEHAVIOURAL) BIASES

(Fuller, 2000) addressed behavioral biased as the anomalous condition factors. He summarized scholars inpsychology and decisionmaking science have documented that in some circumstances decision makers do not try to maximize wealth and in other circumstances they make dynamic mental mistakes.Both these cases can result in mispriced decisions and both are the result of behavioral biases. Therefore in order to find such cases at united bank s.c., The researcher has prepared an instrument in order to find those close to these decision makers and the result of their response has been presented below.

4.3.1.1 Representativeness Bias

Three items were included in the questionnaire to address the issue of whether there exist and to what degree it exist the role or significance of psychological cognitive representativeness biases. The tables below shows the descending orders of 3 items in terms of mean value. Mean value of three questions range from 3.08 to 4.49 which represent a positive and good response on measurement scale. The lowest mean value is 3.08 for question number one and Followed by mean value of 3.13 for question number two,hence question number three has a grand mean of 4.6 which is very high comparatively,whichis also greater than the grand mean value of 3.6, on a measurement scale both question number one and two are lower responses. This indicates that those who participated in investment decision making at united bank has more or less base their decision making activities based on sufficient information, they did understand investment developments basing their ground on sufficient information.However, on a measurement scale their exist a mean value of 4.61 for question number three, decision maker at united bank give new information to much weight that well-articulated balanced information. Overall there exist a representativeness bias on the decision makers but, the degree is not as such significant.

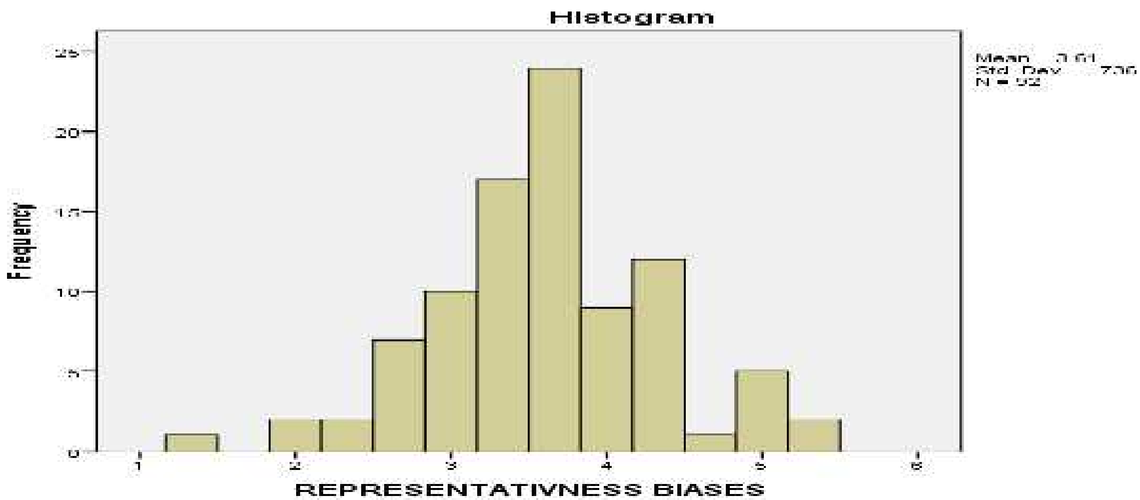

Figure 4.3.1.1.Representativeness bias

Table 4..3.1.1.1understanding investment developments on little information

Question No. 1:- Decision makers at united bank think they understand most investment developments on the basis of too little information?		Frequency	Percent	Valid Percent	Cumulative Percent
Mean 3.08 **Std. Deviation1.122** **Skewness 0.325** **Kurtosis-0.234** **Minimum1** **Maximum6**	1 Extremely Disagree	6	6.5	6.5	6.5
	2 Highly Disagree	21	22.8	22.8	29.3
	3 Some What Disagree	39	42.4	42.4	71.7
	4 Some What Agree	13	14.1	14.1	85.9
	5 Highly Agree	12	13.0	13.0	98.9
	6 Extremely Agree	1	1.1	1.1	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

out of 92 responses for the question to find weather united bank managers base themselves while they make investment decision and their understanding of the process based not on sufficient information 39 respondents responded with their disagreement somehow, and 21 highly disagreed, when 6 of them extremely disagree, only one extremely agreed, 13 and 12 respondents somewhat agree and highly agree respectively. When we look the mean value of the responses we found 3.08, this is below average which could be categorized as most respondents somewhat disagreed, they don't believe managers at united bank understand the development of investment based on little information. However this does not mean there are nothat did.

Table 4..3.1.1.2 drawing conclusion based on small data set					
Question No. 2:- Decision makers at united bank draw conclusions during investment decision from small data sets?					
Mean 3.13 **Std. Deviation1.169** **Skewness 0.542** **Kurtosis 0.144** **Minimum1** **Maximum6**	1 Extremely Disagree	5	5.4	5.4	5.4
	2 Highly Disagree	22	23.9	23.9	29.3
	3 Some What Disagree	37	40.2	40.2	69.6
	4 Some What Agree	16	17.4	17.4	87.0
	5 Highly Agree	8	8.7	8.7	95.7
	6 Extremely Agree	4	4.3	4.3	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

out of 92 responses for the question to find weather united bank managers base themselves while they make investment decision from small data sets37 respondents responded with their disagreement somehow, and 22 highly disagreed, when 5 of them extremely disagree, 4 extremely agreed, 16 and 8 respondents somewhat agree and highly agree respectively. When we look the mean value of the responses we found 3.13, this is below average which could be categorized as most respondents somewhat disagreed, they don't believe managers at united bank draw conclusion from small data sets. However this does not mean there are no that did.

Table 4..3.1.1.3giving new information weigh in forming investment expectations					
Question No. 3:- Decision makersat united bank give new information too much weight in forming their expectation about the future investment					
Mean 4.61 **Std. Deviation1.266** **Skewness-0.715** **Kurtosis 0.083** **Minimum1** **Maximum6**	1 Extremely Disagree	2	2.2	2.2	2.2
	2 Highly Disagree	4	4.3	4.3	6.5
	3 Some What Disagree	9	9.8	9.8	16.3
	4 Some What Agree	27	29.3	29.3	45.7
	5 Highly Agree	21	22.8	22.8	68.5
	6 Extremely Agree	29	31.5	31.5	100.0

Source: Researcher's Findingsand own computation

out of 92 responses for the question to find weather united bank managers give new information much weight in forming expectation about the future investment sets 29 respondents responded with their agreement extremely, and 21 highly agreed, when 9 of them somewhat disagree, 2 extremely disagreed, 27 resp0ndent however some what agreed, while 4 highly disagree. When we look the mean value of the responses we found 3.13, this is below average which could be categorized as most respondents somewhat disagreed, they don't believe managers at united bank draw conclusion from small data sets. However this does not mean there are no that did.

4.3.1.2 OverConfidence and Over Optimism Bias

Three items were included in the questionnaire to address the issue of whether there exist and to what degree it exist the role or significance of psychological cognitive representativeness biases. The tables below shows the descending orders of 3 items in terms of mean value for the question under overconfidence and over optimismbiases. Mean value of three questions range from 4.41 to 4.92 which represent a negative andbad response on measurement scale. The lowest mean value is 4.41for question number two and Followed by mean value of 4.91 for question number three, hence question number three has a grand mean of 4.91 which is very high comparatively, which is also greater than the grand mean value of 4.76, on a measurement scale all the three question are high on measurement scale, which means there a high degree of overconfidence biases at united bank s.c. This indicates that those who participated in investment decision making at united bank overestimate their knowledge than those around who has an expert opinion toward a certain investment opportunity and also this behavior lead them to underestimate the risk they are investing upon and they exaggerate their ability to control this risk .

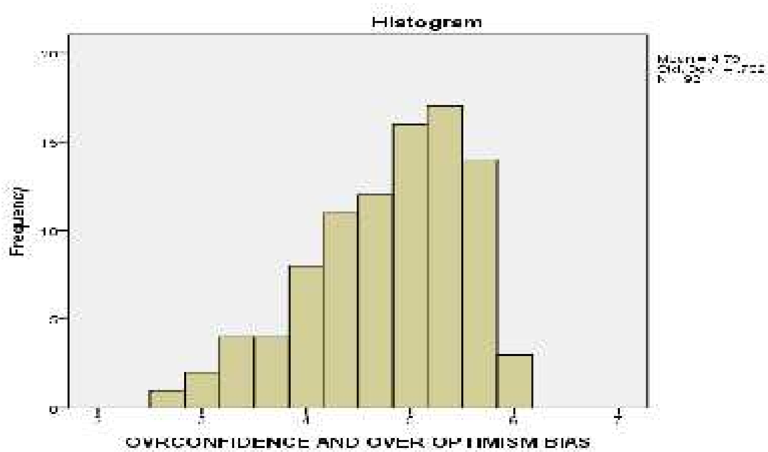

Figure 4.3.1.2.Overconfidence and over optimism bias

Table 4.3.1.2.1 overestimate knowledge in understanding something						
Question No. 4:- Overconfidence behaviors cause united bank decision makers to overestimate their knowledge?						
Mean 4.92 **Std. Deviation1.051** **Skewness - 0.833** **Kurtosis 0.243** **Minimum 2** **Maximum 6**	1 Extremely Disagree	-	-	-	-
	2 Highly Disagree	3	3.3	3.3	3.3
	3 Some What Disagree	5	5.4	5.4	8.7
	4 Some What Agree	21	22.8	22.8	31.5
	5 Highly Agree	30	32.6	32.6	64.1
	6 Extremely Agree	33	35.9	35.9	100.0
	Total	92	100.0	100.0	

Source: Researchersfinding'sand own computation

Out of 92 responses for the question to find weather united bank managers,whichmeans those who have the authority to participate and decide on investment of the bank has been derived by their overconfidence and overestimate their knowledge toward certain investment decisions. With thisit is found that 33 respondents responded with their agreement very extremely, and 30agreed with the ides of overestimating their knowledge through observing their superiors over a period of times.when21 of them somehow agreed,noextremedisagreement has been registered on this one, hence3 and 5 respondents highly disagree and somehow disagreed respectively. When we look the mean value of the responses we found 4.92, this is above the grand mean value 4.76 e which could be categorized as most respondents highly agreed that investment decision makers at united bank overestimate there knowledge.

Table 4.3.1.2.2 underestimating risk					
Question No. 5:- Overconfidence behaviors cause united bank decision makers to underestimate risks?					
Mean4.41 **Std. Deviation1.379** **Skewness - 1.191** **Kurtosis0.864** **Minimum1** **Maximum6**	1 Extremely Disagree	3	3.3	3.3	3.3
	2 Highly Disagree	7	7.6	7.6	10.9
	3 Some What Disagree	2	2.2	2.2	13.0
	4 Some What Agree	10	10.9	10.9	23.9
	5 Highly Agree	31	33.7	33.7	57.6
	6 Extremely Agree	39	42.4	42.4	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Out of 92 responses for the question to find weather united bank managers, which means those who have the authority to participate and decide on investment of the bank has their confidence make them to underestimate risk during their decision making process. With thisit is found that 39 respondents responded with their agreement very extremely, and 31 agreed with the ides of underestimating risks by their superiors and believed their overconfidence in handling this risk make them underestimate the risk., when 10 of them somehow agreed, 3 respondents extremely disagreed with idea of the decision makers overconfidence leads to underestimating risk during investment decision making , hence 3 and 7 respondents highly disagree and somehow disagreed respectively. When we look the mean value of the responses we found 4.41, this is below the grand mean value 4.76 which could be categorized as most respondents highly agreed that investment decision makers at united bank overestimate there knowledge and this has lead them to underestimate risk during investment decision making.

<table>
<tr><th colspan="6">Table 4.3.1.2.3 exaggerated ability in controlling poor investment decisions</th></tr>
<tr><td colspan="2">Question No. 6:- Overconfidence behaviors causes united bank decision makers exaggerate their ability to control events in investment decisions?</td><td colspan="4"></td></tr>
<tr><td rowspan="7">Mean 4.91
Std. Deviation1.356
Skewness -1.461
Kurtosis 1.398
Minimum1
Maximum6</td><td>1 Extremely Disagree</td><td>6</td><td>6.5</td><td>6.5</td><td>6.5</td></tr>
<tr><td>2 Highly Disagree</td><td>4</td><td>4.3</td><td>4.3</td><td>10.9</td></tr>
<tr><td>3 Some What Disagree</td><td>6</td><td>6.5</td><td>6.5</td><td>17.4</td></tr>
<tr><td>4 Some What Agree</td><td>17</td><td>18.5</td><td>18.5</td><td>35.9</td></tr>
<tr><td>5 Highly Agree</td><td>38</td><td>41.3</td><td>41.3</td><td>77.2</td></tr>
<tr><td>6 Extremely Agree</td><td>21</td><td>22.8</td><td>22.8</td><td>100.0</td></tr>
<tr><td>Total</td><td>92</td><td>100.0</td><td>100.0</td><td></td></tr>
</table>

Source: Researcher's Findingsand own computation

Out of 92 responses for the question to find weather united bank managers, which means those who have the authority to participate and decide on investment of the bank has their confidence make them think to exaggerate their ability to control risky investments and other events related with the investment. With this it is found that 21 respondents responded with their agreement very extremely, and 38 agreed with the ideas of exaggerated ability in controlling risky environments., when 17 of them somehow agreed, 6 respondents extremely disagreed with idea of the decision makers exaggerated overconfidence during investment decision making and their ability in controlling these environments, hence 4 and 6 respondents highly disagree and somehow disagreed respectively. When we look the mean value of the responses we found 4.92, this is above the grand mean value 4.76 which could be categorized as most respondents highly agreed that overconfidence and over optimism on investment decision makers at united bank make them exaggerate their ability in controlling events in investment decision making.

4.3.1.2 Self-AttributionBehavior & Confirmation Bias

It is the tendency to search for,interpret,favors, and recall information in a way that confirm one's preexisting beliefs or hypothesis. The effect is stronger for desired outcomes, emotionally charged issues, and for deeply entrenched beliefs this biases contribute to overconfidence in personal beliefs and can maintain or strengthen beliefs in the face of contrary evidence.Poordecisionsdue to these biases have been found in many organizational and politicalcontexts.Therefore, if this issues are as significant as it has been said, the researcher has distributed 120 questionnaires to investigate their existence and the degree to which they are existed, of which 92 has been returned. On the structured questionnaire's four questions here incorporated to measure these biases on united bank investment decision makers on the eyes of their subordinated.With this a grand mean value of 4.99 approximately 5 on a measurement scale is found with a standarddeviation of 0.562.This could be interpreted as their exist self-attribution and confirmation biases at united bank s.c, this means there is a tendency of finding information that are going to strengthen the decision makers existing view rather than something which contradict, and there is a so a tendency to support something which only reinforce their original ideas and any information that support is overweighed and that contradicts their existing view is ignored. This will endanger the participation of others into the decision making process and the chance to find a risky and unworthy investments.

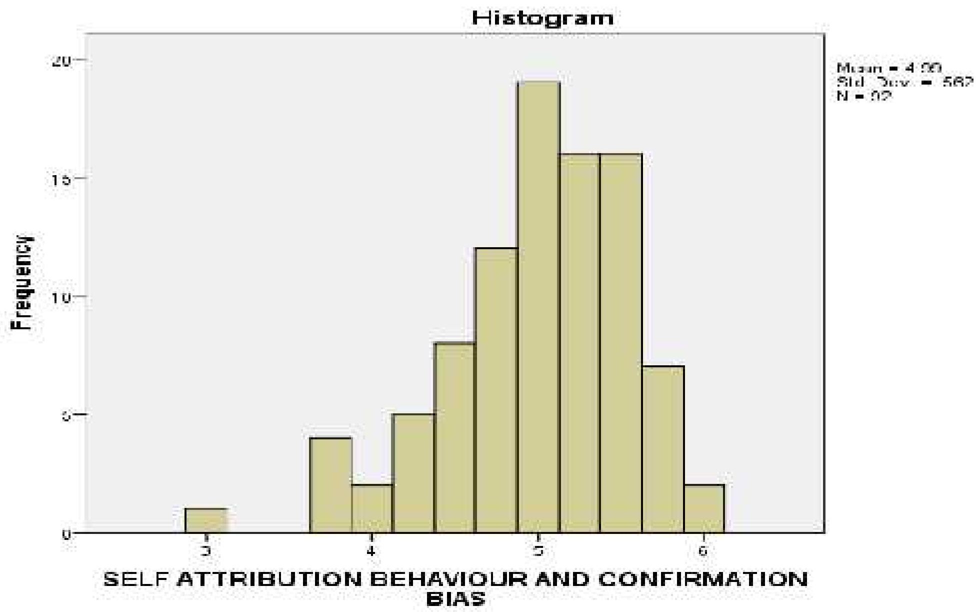

Figure 4.3.1.3.Self Attribution and Confirmation Bias

Table 4.3.1.3.1 the desire to seek information that agree with preformed view					
Question No. 7:- Decision makers at united bank desire to find information that agrees with theirExisting view rather than the truth?					
Mean 4.92 **Std. Deviation1.112** **Skewness -0.877** **Kurtosis0.60** **Minimum2** **Maximum6**	1 Extremely Disagree	-	-	-	-
	2 Highly Disagree	4	4.3	4.3	4.3
	3 Some What Disagree	5	5.4	5.4	9.8
	4 Some What Agree	21	22.8	22.8	32.6
	5 Highly Agree	26	28.3	28.3	60.9
	6 Extremely Agree	36	39.1	39.1	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Out of 92 responses for the question to find weather united bank managers, which means those who have the authority to participate and decide on investment of the bank has their the desire to find information that agree with their existing view rather than the truth and the one that has value in terms of significance. With this it is found that 36 respondents out of 92 responded with their agreement very extremely, which means the fact that decision makers at united bank is desired to find information that has somehow an agreement with their existing belief and 26 agreed with the ideas of the questions but moderately., when 21 of the respondents somehow agreed there is the desire but not as strongly as they believe, there is noextremedisagreed with idea of the decision makers tendency to find information that goes along with their existing view and belief, however, 4 and 5 respondents highly disagree and somehow disagreed respectively.

When we look the mean value of the responses we found 4.92 an almost 5 mean value in terms of measurement scale, even though this is below the grand mean value 4.99 which could be categorized as most respondents highly agreed that their exists a high tendency by the investment decision makers to make everything agree with their existing belief.

Table 4.3.1.3.2 denying information that don't agree with their preformed view					
Question No. 8:- Any information that conflicts with their existing view is ignored					
Mean 5.07 **Std. Deviation1.356** **Skewness -1.572** **Kurtosis2.073** **Minimum1** **Maximum6**	1 Extremely Disagree	2	2.2	2.2	2.2
	2 Highly Disagree	3	3.3	3.3	5.4
	3 Some What Disagree	7	7.6	7.6	13.0
	4 Some What Agree	6	6.5	6.5	19.6
	5 Highly Agree	31	33.7	33.7	53.3
	6 Extremely Agree	43	46.7	46.7	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Out of 92 responses for the question to find weather united bank managers, which means those who have the authority to participate and decide on investment of the bank has the tendency to disregard information's that contradicts with their preexisted view. With this it is found that 43 respondents out of 92 responded with their agreement very extremely, which means the fact that decision makers at united disregard others view that contradict with their preexisted view and 31 agreed with the ideas of the questions moderately., when 6 of the respondents somehow agreed there is a tendency of ignoring information's that contradicts their existing ideas, while 2 extremely disagreed with the idea of ignoring contradicting ideas by those who makes investment decision making , however, 6 and 7 respondents highly disagree and somehow disagreed respectively. When we look the mean value of the responses we found 5.07 mean values in terms of measurement scale, it is above the grand mean value 4.99 which could be categorized as most respondents highly agreed that there exists a high tendency by the investment decision makers to ignore ideas that contradicts with their existing belief.

Table 4.3.1.3.3to overemphasize information that agree with their preformed view					
Question No. 9:- Whilst information that reinforces their existing view is over weighted					
Mean 4.77 **Std. Deviation1.25** **Skewness-1.349** **Kurtosis1.552** **Minimum1** **Maximum6**	1 Extremely Disagree	3	3.3	3.3	3.3
	2 Highly Disagree	4	4.3	4.3	7.6
	3 Some What Disagree	6	6.5	6.5	14.1
	4 Some What Agree	12	13.0	13.0	27.2
	5 Highly Agree	40	43.5	43.5	70.7
	6 Extremely Agree	27	29.3	29.3	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Out of 92 responses for the question to find weather united bank managers, which means those who have the authority to participate and decide on investment of the bank has the tendency to overweight information's that agrees with their preexisted view. With this it is found that 27respondents out of 92 responded with their agreement very extremely, which means the fact that decision makers at united disregard others view that contradict with their preexisted view and overweight their existing view ,40 agreed with the ideas of the questions moderately., 12 of the respondents somehow agreed there is a tendency of overweighting information's that agree with their existing ideas, while 3 extremely disagreed with the idea of overweightingagreeingideas by those who makes investment decision making , however,4 and 6 respondents highly disagree and somehow disagreed respectively. When we look the mean value of the responses we found 4.77 mean values in terms of measurement scale, it is below the grand mean value 4.99 which could be categorized as most respondents highly agreed that there exists a high tendency by the investment decision makers to overweight ideas that only agree with their existing belief.

Table 4.3.1.3.4sticking to what they believe no matter how bad it is					
Question No. 10:- Decision makers at united bank would be more likely to look for information that supports their original ideas about an investment rather than seek out information that contradicts it					
Mean 5.22 **Std. Deviation0.739** **Skewness-1.040** **Kurtosis2.583** **Minimum2** **Maximum6**	1 Extremely Disagree	-	-	-	-
	2 Highly Disagree	1	1.1	1.1	1.1
	3 Some What Disagree	-	-	-	-
	4 Some What Agree	11	12.0	12.0	13.0
	5 Highly Agree	46	50.0	50.0	63.0
	6 Extremely Agree	34	37.0	37.0	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Out of 92 responses for the question to find weather united bank managers, which means those who have the authority to participate and decide on investment of the bank has the tendency to look for information's that supports their original ideas about an investment rather than seek out that contradict. With this it is found that 34 respondents out of 92 responded with their agreement very extremely, which means the fact that decision makers at united disregard others view that contradict with their preexisted view and look for information that support their existing view ,46highly agreed with the ideas., 11 of the respondents somehow agreed managers and investment decision makers look for information that support their preexisting belief and disregard others that contradict, while no extreme disagreement with the idea one has highly disagree. When we look the mean value of the responses we found 5.22 mean values in terms of measurement scale, it is above the grand mean value 4.99 which could be categorized as most respondents highly agreed with the degree with which that there exists a high tendency by the investment decision makers to look for information's that support their ideas and disregard which contradicts.

4.3.1.4Availability Bias

When we make decisions we tend to be swayed by what remember. What we remember is influenced by many things including beliefs, expectations, emotions, and feeling as well as things like frequency of exposure. This can substantially and unconsciously influence judgments of decision makers or any other individual in their choice. Therefore, the researcher has prepared two questions in order to find if there is an element of these biases at united bank s.c in their investment decision maker's judgments during decision making. From the survey data a mean value of 4.34 and a standard deviation of 0.847 has been found, this tells that there is an element of availability bias at united bank decision makers, this means, their is a tendency to think that examples of things that come readily to mind are more representative than is actually the case, this will in fact make them avoid laborious fact-checking and analysis.

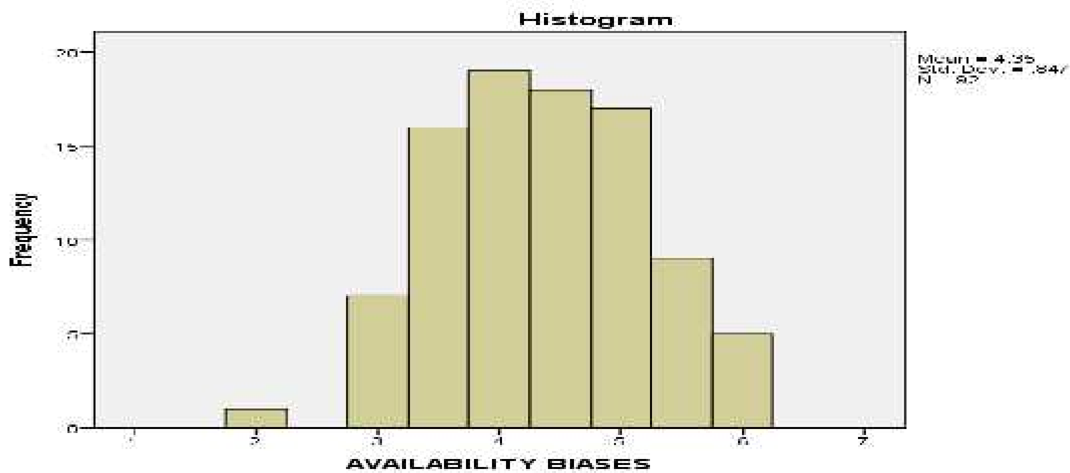

Figure 4.3.1.4.Availability bias

Table 4.3.1.5.1 low attention to previously detailed studies

Question No. 11:- Decision makers at united bank tend to base their decisions more on recent information rather than any detailed study of past events and thereby become biased to that latest news.

		1 Extremely Disagree	-	-	-	-
Mean	**4.95**	2 Highly Disagree	4	4.3	4.3	4.3
Std. Deviation	**0.965**	3 Some What Disagree	2	2.2	2.2	6.5
Skewness-1.240		4 Some What Agree	15	16.3	16.3	22.8
Kurtosis	**1.962**	5 Highly Agree	45	48.9	48.9	71.7
Minimum	**2**	6 Extremely Agree	26	28.3	28.3	100.0
Maximum	**6**	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Out of 92 responses for the question to find weather united bank managers, which means those who have the authority to participate and decide on investment of the bank has the tendency to look for information's that are more recent than detailed study past events. With this it is found that 26 respondents out of 92 responded with their agreement very extremely, which means the fact that decision makers at united are not giving focus to detailed past events, instead they will depend their source on recently developed mythologies, studies, inventions ,45 highly agreed with the ideas., 15 of the respondents somehow agreed managers and investment decision makers look for information that are recent than detailed studies in the past, while no extreme disagreement with the idea 4 has highly disagreed and 2 somehow disagree. When we look the mean value of the responses we found 4.95 mean values in terms of measurement scale, it is above the grand mean value 4.35 which could be categorized as most respondents highly agreed with the degree with which that there exists a high tendency to look for information that are recently developed than any detailed past study.

Table 4.3.1.5.2 problem of other alternative other than they believe

Question No. 12:- Decision maker at united bank relies upon knowledge that is readily available rather than examine other alternatives or procedures and do not take pain to go for any detailed analysis					
Mean 3.76	1 Extremely Disagree	5	5.4	5.4	5.4
Std. Deviation 1.455	2 Highly Disagree	17	18.5	18.5	23.9
Skewness-.162	3 Some What Disagree	19	20.7	20.7	44.6
Kurtosis -1.079	4 Some What Agree	15	16.3	16.3	60.9
Minimum 1	5 Highly Agree	26	28.3	28.3	89.1
Maximum 6	6 Extremely Agree	10	10.9	10.9	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Even though united bank decision makers affected by availability biases as it can be seen from the above survey data, they are not as ignorant on the fact that they have to make detailed analysis. It is obvious they are more biased on recent information's than detailed study of past events, hence the respondents don't agree with the idea of not taking any pain to go for any detailed analysis.Out of the respondents 5 extremely disagree, and 17 highly disagreed with idea of not taking to go for detailed investigation during investment decision making of the bank.Out of 92 respondents while 19 somehow disagree which is 20.7 % of the respondents,15 or 16.3% of the respondents somehow agreed that those who make investment decision making are carriers of availability bias, they don't take any pan to go for any detailed analysis in the past, they pick only what is available in their mind for judgment. This has been strengthen by 26 respondents which is 28.3% of the total respondents by expressing their agreement highly.10 respondents out of 92 extremely support this idea. Generally on a measurement scale 3.76 mean value has been found, this is less than the grand mean value. This could be defined as there is availability bias at united bank by those who participated on investment decision making, the tendency to take what is recent than detailed past study, hence the fact that is mentioned not to go for any detailed analysis has been faced many disagreements from the respondents. Therefore, we can generalize it as recent information has more value than detailed past study, hence with detailed analysis of the presented fact.

4.3.1.5Conservatism

In cognitive psychology and decision making science,conservatism or conservatism bias is bias inhuman information processing,which refers to the tendency to revise one belief insufficiently when presented with new evidence. In order to find such behavioral bias at united bank the researcher has incorporated three questions in the instrument. When the first one tries to find reluctance to search for evidences that contradicts their existing view, the other on is if investment decision makers at united bank are slow changers when things are moving and finally has united bank decision makers have a conservative approach after making a decision. With this from 92 total respondents it is found that a grand mean of 4.87 has been registered, which could be categorized as the idea has been highly supported by the respondents with a standard deviation of 0.648.This indicates that united bank decision makers, those who participated in investment decision of the bank has been observed as conservative in their investment decision making.

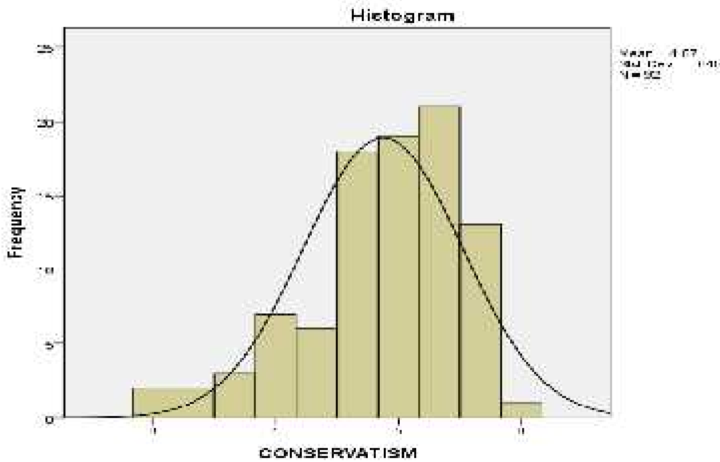

Figure 4.3.1.5.Conservatism

Table 4.3.1.5.1 reluctance to change their judgments						
Question No. 13:- Decision makers demonstrate a reluctance to search for evidence that contradict their previous views, because they are reluctant to change their own judgment.						
Mean	**5.14**	1 Extremely Disagree	-	-	-	-
Std. Deviation	**0.735**	2 Highly Disagree	-	-	-	-
Skewness	**-0.738**	3 Some What Disagree	3	3.3	3.3	3.3
Kurtosis	**0.752**	4 Some What Agree	10	10.9	10.9	14.1
Minimum	**3**	5 Highly Agree	50	54.3	54.3	68.5
Maximum	**6**	6 Extremely Agree	29	31.5	31.5	100.0
		Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Out of 92 responses for the question to find weather united bank managers, which means those who have the authority to participate and decide on investment of the bank demonstrate a reluctance to search for evidence that contradict their previously acquired view not to make a change their judgments. With this it is found that 29 respondents out of 92 responded which is 31.5% out of the total extremely agreed they suffered with this biases, 50 or 54.3% of the respondents highly agreed with the idea of reluctance, 10 of the respondents somehow agreed managers and investment decision makers demonstrate reluctance to search for evidence not tomake their previous judgments, while no extreme disagreement with the idea, only 3 or 3.3%has somehow disagree. When we look the mean value of the responses we found 5.41 mean values in terms of measurement scale, it is above the grand mean value 4.87 which could be categorized as most respondents highly agreed with the degree with which that there exists a high tendency of reluctance by the investment decision makers to search for evidence that contradict their previous views, because they are reluctant to change their own judgment.

Table 4.3.1.5.2Decision makers are slow to adjust to changes					
Question No. 14:- When things have changed, managers at united bank tend to be slow to adjust to the changes					
Mean 5.09 **Std. Deviation 1.281** **Skewness-1.288** **Kurtosis 0.557** **Minimum 3** **Maximum 6**	1 Extremely Disagree	-	-	-	-
	2 Highly Disagree	8	8.7	8.7	8.7
	3 Some What Disagree	3	3.3	3.3	12.0
	4 Some What Agree	14	15.2	15.2	27.2
	5 Highly Agree	15	16.3	16.3	43.5
	6 Extremely Agree	52	56.5	56.5	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

The results have shown that united bank investment decision makers has slow tendency to adjust to things when things change. This has been evidenced by the respondents openion.56.5% of the respondents extremely agreed the decision makers are slow changers when thing changefast, 15 respondent or 16.3% highly agreed with this, and 14 respondentssomewhatagreed. Hencewhile 8 and three respondents around, 12% highly disagree and somehow disagree respectively. No extreme disagreement has been given. This will tell us that witha mean vale of 5.09, with high agreement united bank investmentdecision makers suffer with the tendency to change slowly whenthings move faster than they did.

Table 4.3.1.5.3 conservative approach to changing their mind					
Question No. 15:- Decision makers at united bank s.c take very conservative approach to changing their minds after taking a decision, despite new contradictory information.					
Mean 4.39 **Std. Deviation 1.016** **Skewness-0.855** **Kurtosis 0.077** **Minimum 2** **Maximum 6**	1 Extremely Disagree	-	-	-	-
	2 Highly Disagree	6	6.5	6.5	6.5
	3 Some What Disagree	12	13.0	13.0	19.6
	4 Some What Agree	20	21.7	21.7	41.3
	5 Highly Agree	48	52.2	52.2	93.5
	6 Extremely Agree	6	6.5	6.5	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

The results have shown that united bank investment decision makers have somehow the tendency to change their minds even new when new contradictory information has been presented. This has been evidenced by the respondents openion.6.5% of 6 of the respondents extremely agreed the decision makers are conservative to change despite new information, however 48 respondent or 52.2% highly agreed with this, and 20 respondents somewhat agreed. 6 and 12 respondents which arearound, 19.5% highly disagree and somehow disagree respectively. No extreme disagreement has been given. This will tell us that with a mean vale of 4.39 which is less than the grand mean value, agreed united bank investment decision makers suffer somehow take very conservative approach to changing their minds after taking a decision, despite new contradictory information.

4.3.1.6Anchoring and adjustment bias

This is a cognitive bias where an individual relies heavily on an initial piece of information offered when making decisions. Thisoccurs when, during decision making, an individual relies on an initial piece of information to make subsequent judgments. Once an anchor is set there is a bias towards that value. Therefore if there is such kind of biases at united banks decision makers during investment decision making is the main objective of this section. Out of the questions distributed to find the existence of and the degree of this existence 92 respondents in general a has participated and a grand mean value of 4.91 has been found, this shows there is an anchor, a tendency not to change an already formed opinion despite new relevant information has been presented and recently presented information highly influence during investment decision making. This has been confirmed by the outcome of the research, from the surveyed data.

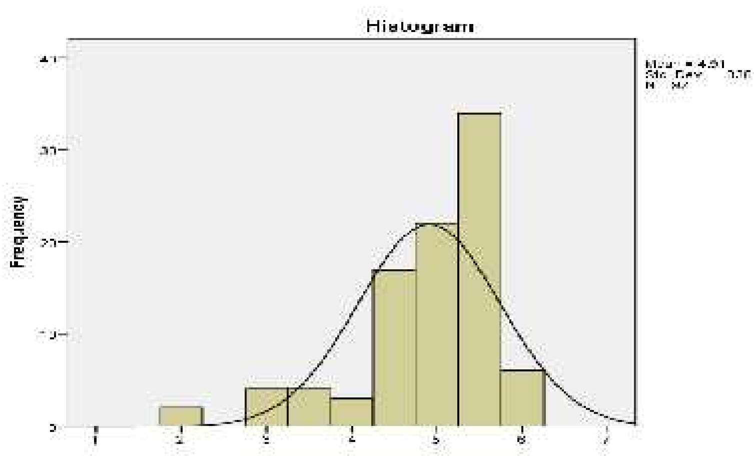

Figure 4.3.1.6.Anchoring and Adjustment Bias

Table 4.3.1.6.1regardless of new information they are unwilling to change						
Question No. 16:- After forming an opinion, decision makers at united bank are often unwilling to change it, even though they receive new information that is relevant						
Mean 4.95 **Std. Deviation 1.103** **Skewness-1.196** **Kurtosis 0.941** **Minimum 2** **Maximum 6**	1 Extremely Disagree	-	-	-	-
	2 Highly Disagree	5	5.4	5.4	5.4
	3 Some What Disagree	6	6.5	6.5	12.0
	4 Some What Agree	10	10.9	10.9	22.8
	5 Highly Agree	39	42.4	42.4	65.2
	6 Extremely Agree	32	34.8	34.8	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

The results have shown that united bank investment decision makers are somehow unwilling to change their mind once they make a decision, even though they receive new relevant information's. This has been evidenced by the respondents openion33.8% or 32 of the respondents extremely agreed the decision makers are conservative to change despite new information, and39 respondents or42.4% highly agreed with this, and 10 respondents somewhat agreed.5 and 6 respondents which are around, 12% highly disagree and somehow disagree respectively. No extreme disagreement has been given. This will tell us that with a mean vale of 495 which isa bit greater than the grand mean value, agreed united bank investment decision makers often unwilling to change it, even though they receive new information that is relevant

Table 4.3.1.6.2 recent experience and events influence investmentdecision					
Question No. 17:- Recently observed and experienced events strongly influenced investment decision of decision makers at united bank s.c?					
Mean 4.87 **Std. Deviation 0.997** **Skewness-1.093** **Kurtosis 1.278** **Minimum 2** **Maximum 6**	1 Extremely Disagree	-	-	-	-
	2 Highly Disagree	4	4.3	4.3	4.3
	3 Some What Disagree	4	4.3	4.3	8.7
	4 Some What Agree	16	17.4	17.4	26.1
	5 Highly Agree	44	47.8	47.8	73.9
	6 Extremely Agree	24	26.1	26.1	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Out of 92 responses for the question to find weather united bank managers, which means those who have the authority to participate and decide on investment of the bank has been influenced by recently developed data's during investment decision making. With this it is found that 24 respondents out of 92 responded which is 26.1% out of the total extremely agreed they suffered with this biases, 44 or 47.8% of the respondents highly agreed with the idea of reluctance, 16 of the respondents somehow agreed managers and investment decision makers are influenced by recently developed data and information's, while no extreme disagreement with the idea, 4 highly disagree and another four persons somehow disagree. When we look the mean value of the responses we found 4.87 mean values in terms of measurement scale, it is below the grand mean value 4.87 which could be categorized as most respondents highly agreed with the degree with which that there exists a high tendency of favoring recent information as an input during investment decision making.

4.3.1.7 Familiarity bias

When decision makers are experiencing a high cognitive load, they may regress to the state of mind in which they have felt or behaved before.Similar biased occurrences have been seen at united bank by their decision makers during investment decision making.it is observed that they are fearful of ambiguous situations, during such times they prefer to use what is they previously put in their mind and they are not comfortable to make decision on investments they feel they don't understand even though it is a worthy investment. From the survey data a 5.41 mean value and 0.58 standard deviation has been observed and registered from the survey results. This means there is a high tendency to fear for ambiguous situations when presented to decide from. When something unfamiliar happen to decide for the decision maker look or an easy way out by looking when is already on their mind to decide from.

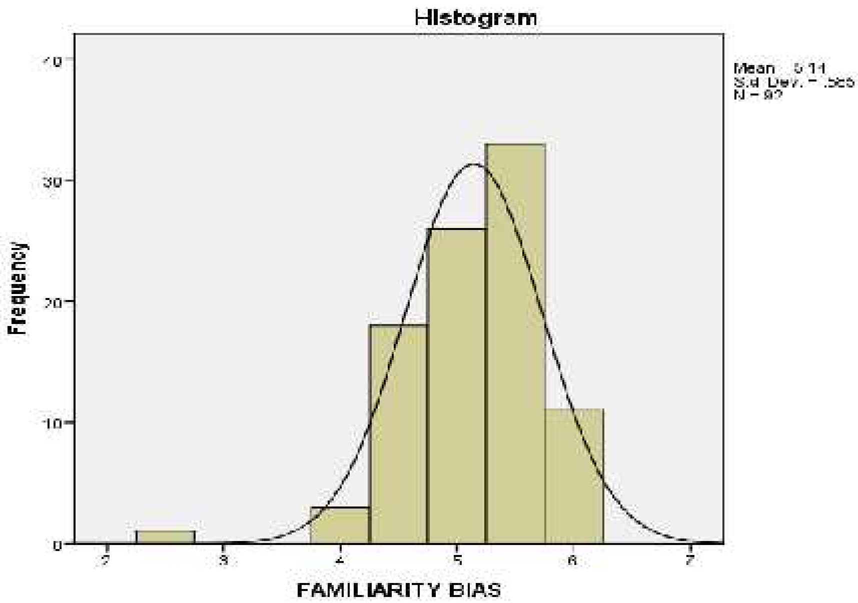

Figure 4.3.1.7.Familiarity Bias

Table 4.3.1.7.1Decision Makers are fearful of ambiguous situations						
Question No. 18:- Decision makers at united bank are fearful of ambiguous situations where they feel that they have little information about the possible outcomes						
		1 Extremely Disagree	-	-	-	-
Mean	**5.08**	2 Highly Disagree	1	1.1	1.1	1.1
Std. Deviation	**0.842**	3 Some What Disagree	2	2.2	2.2	3.3
Skewness-0.824		4 Some What Agree	17	18.5	18.5	21.7
Kurtosis	**0.923**	5 Highly Agree	41	44.6	44.6	66.3
Minimum	**2**	6 Extremely Agree	31	33.7	33.7	100.0
Maximum	**6**	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

As it canbe seen from the result the survey data gave as a clear picture of what the respondents believe regarding the existence of biases specially familiarity biases by their superiors during investment decision making .among 92 respondents 31 or 33.7% of them extremely agreed with the idea of fear for ambiguous situations by those who make decision where they feel they have little information about the possible outcomes. This has actually derive them to pick what is already in their mind instead of going in to detailed analysis this lead them to familiarity bias and affect the bank in spending its resources in newly created industry and country opportunities. The greater portion 44.6% of the respondents highly agree with these ideas and 17 somehow agree, this will lead us to conclude there is a high probability of familiarity biases at united bank s.c. there are also some disagreements 1 highly disagree and 2 somehow disagree but there is not extreme disagreement with this one. Out of the result from the survey data, a mean value of 5.08,this is higher on a measurement scale and a standard deviation of 0.842.

Table 4.3.1.7.2 decision maker worry to decide in something they don’t know

Question No. 19:- Decision makers at united bank are wary of investments that they feel they don’t understand.					
Mean 5.21	1 Extremely Disagree	-	-	-	-
Std. Deviation 0.859	2 Highly Disagree	1	1.1	1.1	1.1
Skewness-1.160	3 Some What Disagree	3	3.3	3.3	4.3
Kurtosis 1.558	4 Some What Agree	11	12.0	12.0	16.3
Minimum 2	5 Highly Agree	38	41.3	41.3	57.6
Maximum 6	6 Extremely Agree	39	42.4	42.4	100.0
	Total	92	100.0	100.0	

Source: Researcher’s Findingsand own computation

As it can be seen from the result the survey data, it gave as a clear picture of what the respondents believe regarding the existence of biases specially familiarity biases by their superiors during investment decision making .Among 92 respondents 39 or 42.4% of them extremely agreed with the idea decision makers at united bank wary with the idea of investing in something they feel they don’t understand personally as decision maker. This will lead them avoid investment opportunities, likewise 41.3% of the respondents highly agree with these ideas and 11 somehow agree, this will lead us to conclude there is a high probability of familiarity biases at united bank s.c. by forgiving investment opportunities due to their personal discomfort on the idea of investing on something unfamiliar. There are also some disagreements 1 highly disagree and 3somehow disagree but there is not extreme disagreement with this one. Out of the result from the survey data, a mean value of 5.21, which is higher on a measurement scale and also a standard deviation of 0.859 has been registered.

4.4 INVESTMENT AND PSYCHOLOGY

Banks basically make money by lending money at rates higher than the cost of the money they lend. More specifically, banks collect interest on loans and interest payments from the debt securities they own, and pay interest on deposits. The difference is known as the spread, or the net interest income, and when that net interest income is divided. Part and parcel of banks lending practices it is evaluation of the credit worthiness of potential borrower and ability to charge different rates of interest, based up on the evaluation. When considering a loan, banks will often evaluate the income, assets and debt of the prospective borrower, as well as the credit history of the borrower. In all this regardless of the science a higher degree of human judgments is involved. As mention above since it is the biggest investment of any commercial bank, anything related with this which can affect the soundness of the investment should be identified and taken care of. Even though united bank has set a several rules and regulation on how to evaluate and mitigate risks that arise from different aspects of the environment, human judgments, something highly involved in investment decision making has denied attention in to most of the banks policies and procedures. Thisiscontrastingly surprising, since most investment decision lies on the hand of individuals, even though structurally followed hierarchy. Therefore, previously on this section the researcher has gathered the opinions of those who have closely worked with those who make high investment decision on the bank and analyzed and interpreted the results. The result has mostly shown that there exist a high degree of behavioral biases during investment decision making. On this section the researcher has tried to look what investment they will affect at united bank.

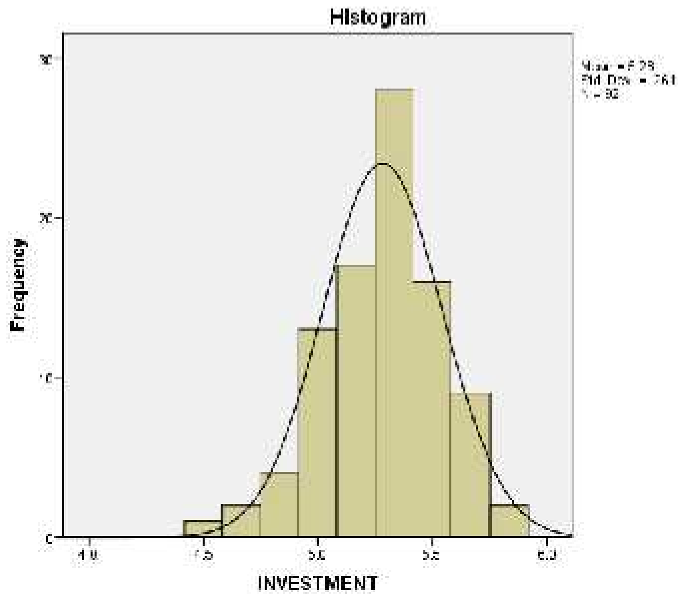

Figure 4.4.Investment

INV1 Investment Decision(Risk and Performance)

Table 4.4.1leads to inappropriate or risky investment					
Question No. 20:- Behavioral biases in decision makers can lead to inappropriate or risky investments, anticipating and dealing with future threats which could affect the banks business performance		Frequency	Percent	Valid Percent	Cumulative Percent
Mean 5.25 **SD .736**	4 Some What Agree	16	17.4	17.4	17.4
	5 Highly Agree	37	40.2	40.2	57.6
	6 Extremely Agree	39	42.4	42.4	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Almost 83% of the respondent agreed and extremelyagreed that behavioral biases in decision makers could lead to inappropriate and risky investments and this could threaten the banks future performance.16 respondent however think moderately, their believed that it has an effect but, not as significantly as it is assumed by other respondents.

Table 4.4.2 lead to lose of business reputation					
INV2 Investment Decision(Business Reputation)					
Question No. 21:- Behavioral biases in all or some of the investment decision makers at united bank could also lead to losing its business reputations with in the industry		Frequency	Percent	Valid Percent	Cumulative Percent
Mean 5.29 SD 0.584	4 Some What Agree	6	6.5	6.5	6.5
	5 Highly Agree	53	57.6	57.6	64.1
	6 Extremely Agree	33	35.9	35.9	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

100% of the respondents agree that the presence of cognitive behavioral biases could possible affect the business reputation of the bank in the long run with in the industry. Knowing that is present and not doing anything about it could endanger business reputation this will make the bank lose market share and good will. When 35.9 extremely agree, 57.6% highly agree behavioral bias could endanger business reputation; reputation is what makes a bank be preferred by its cuasomter.6 respondents somehow agree.

Table 4.4.3 endanger relationship with stakeholders					
INV3 Investment Decision(Stakeholder Relationship)					
Question No. 22:- Behavioral biases in investment decision makers could also endanger the banks relationship with its major stakeholders in meeting the requirements of current and future legislations		Frequency	Percent	Valid Percent	Cumulative Percent
Mean 5.35 SD0.804	3 Some What Disagree	4	4.3	4.3	4.3
	4 Some What Agree	7	7.6	7.6	12.0
	5 Highly Agree	34	37.0	37.0	48.9
	6 Extremely Agree	47	51.1	51.1	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Investment is always assumed to affect directly the financial performance of an institution. Hence, this is not true, even though it doesn't affect directly step by step it will affect the financial performance and overall endanger the business existence of the bank through time. Therefore, banks participate invest in their reputation, stakeholder relationship and many other non financial investments which leads to both financial and non financialworthiness. Not doing so will highly affect the bank in general. This fate has been laid on the hands of individual decision makers. When one manger did has an overall impact on the banks performance financially and none financially, invincible which could be expelled through time. This behavioral biasness of the decision makers could endanger the banks relationship with near and far stakeholders, which has a vital impact on the banks future existence. With this from the survey response it is found that almost all respondents agree with the impact of the investment decision maker’s behavioral bias with local and foreign stakeholders. Only 4 which are 4.3% of the respondent disagree somehow with the impact it has with the banks stakeholders. Most of the respondents believe that the decision makers’ behavioral bias is leading the bank in danger in meeting the requirements of current and future legislations. Overall a mean value of 5.35 has been registered.

Table 4.4.4 limit the development of business capability					
INV4 Investment Decision(business Capability)					
Question No. 23:- Behavioral biases in decision makers could also affect the development of business capability,building new skills and experience in new areas or strengthening management systems		Frequency	Percent	Valid Percent	Cumulative Percent
Mean 5.25 SD 0.586	4 Some What Agree	7	7.6	7.6	7.6
	5 Highly Agree	55	59.8	59.8	67.4
	6 Extremely Agree	30	32.6	32.6	100.0
	Total	92	100.0	100.0	

Source: Researcher’s Findingsand own computation

Also biasness of the decision makers could lead to limited business capability, and limited skill and contribution. This has come from the individual decision makers’ personality .Limited business capability, skill and experience could untimely lead to losing business capability and this will further lead to underperformance and future business threat. This is backed by 100% of the respondent’s response even if the degree various, no disagreement has been registered, it takes almost the highest mean value 5.25.

Table 4.4.5leads to deviation of industry standard and business ethics					
INV5 Investment Decision(Standards)					
Question No. 24:- Behavioral biasesin decision makers could also affect the bank in matching industry standards and good practices		Frequency	Percent	Valid Percent	Cumulative Percent
Mean 5.15 SD 0.662	4 Some What Agree	14	15.2	15.2	15.2
	5 Highly Agree	50	54.3	54.3	69.6
	6 Extremely Agree	28	30.4	30.4	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

Following industry standard and regulatory standards is undeniable in the commercial banking industry. Individualcognitive biases could endanger this by violating most important industry standards. This has also backed 100% by the respondents' agreement with varying degree with a mean value of 5.15 which is the highest on a measurement scale, almost no disagreement, but there are people thing that it existed but the degree is moderate.

Table 4.4.6lose of business competitiveness					
INV6 Investment Decision(Competitiveness)					
Question No. 25:- Behavioral biases in decision makers could highly affect the banks competitiveness with in the industry		Frequency	Percent	Valid Percent	Cumulative Percent
Mean 5.40 SD 0.712	4 Some What Agree	12	13.0	13.0	13.0
	5 Highly Agree	31	33.7	33.7	46.7
	6 Extremely Agree	49	53.3	53.3	100.0
	Total	92	100.0	100.0	

Source: Researcher's Findingsand own computation

This has registered the highest mean value of 5.4 among the questions, the respondents believe mitigating individual investment decision makers is very important for the good wil of the bank in continuing its business performance consistently without affecting its performance, reputation, and relation with other stake holders, not doing so could highly affect the banks overall performance, almost all the respondents agree giving less attention to this detail lead the bank in to unwanted competition which cannoteasily be recovered by the bank, endangering the banks competitivenessdirectly affect the banks performance, this will affect many parties related, the government, stakeholders, employees. Therefore, these individual decision makers cognitive biases should be given due attention by the banks management and incorporated with a detailed study on the banks several policies and procedures on how to mitigate risk of the bank.

4.5. Interpretation of Regressions Results

The use of OLS (Ordinary Least Square) is used for this study andthe regression result showed that the model work well. Before regressing the data the researcher checks multi colliniarity among the independent variables. The following table showed that the multi collinirarity test.

Table 4.5.1 Person Correlation

Correlations

		BBA	BBB	BBC	BBD	BBE	BBF	BBG
BBA	Pearson Correlation	1	.055	.100	-.144	-.045	-.063	.110
	Sig. (2-tailed)		.605	.341	.171	.672	.552	.298
	N	92	92	92	92	92	92	92
BBB	Pearson Correlation	.055	1	.236*	.184	-.031	.124	.036
	Sig. (2-tailed)	.605		.023	.080	.771	.240	.736
	N	92	92	92	92	92	92	92
BBC	Pearson Correlation	.100	.236*	1	.034	.080	.039	.122
	Sig. (2-tailed)	.341	.023		.745	.451	.712	.248
	N	92	92	92	92	92	92	92
BBD	Pearson Correlation	-.144	.184	.034	1	-.054	.213*	-.163
	Sig. (2-tailed)	.171	.080	.745		.607	.042	.121
	N	92	92	92	92	92	92	92
BBE	Pearson Correlation	-.045	-.031	.080	-.054	1	-.008	.173
	Sig. (2-tailed)	.672	.771	.451	.607		.937	.098
	N	92	92	92	92	92	92	92
BBF	Pearson Correlation	-.063	.124	.039	.213*	-.008	1	-.029
	Sig. (2-tailed)	.552	.240	.712	.042	.937		.783
	N	92	92	92	92	92	92	92
BBG	Pearson Correlation	.110	.036	.122	-.163	.173	-.029	1
	Sig. (2-tailed)	.298	.736	.248	.121	.098	.783	
	N	92	92	92	92	92	92	92

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

BBB-Overconfidence and Over optimism Bias, BBC-Self Attribution Behavior & Confirmation Bias, BBD-Availability Bias, BBE-Conservatism, BBF-Anchoring and Adjustment Bias, BBG -Familiarity bias

Source: Researcher's Findingsand own computation

The result of correlations showed that there are no multi collinarity because according to Hair et al.1998 if Pearson correlation results showed that from 0.3 to 0.9 there are no multi colliniarity, that means we can regresses the dependent variable and independent variables. However, it provides no information about the direction of the relationship (positive or negative) between the two variables. It deals the associations/relationships among two ordinal level variables and the aforementioned explanatory variables.

The test for this model is made by R^2 and F-statistics. R^2 indicates that how much is the total independent variable explained the dependent variable. As we can see from the following table the result of R^2 showed that all independent variables explained the dependent variables with 99.3% and which confirm that the model is extremely good.

Table 4.5.2 Regression Model Summery

Model	R	R Square[b]	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.997[a]	.993	.993	.444	.993	1853.279	7	85	.000	2.119

a. Predictors: BBA-Representativeness Bias

BBB-Overconfidence and Over optimism Bias,BBC-Self Attribution Behavior & Confirmation Bias, BBD-Availability Bias, BBE-Conservatism, BBF-Anchoring and Adjustment Bias, BBG -Familiarity bias

b. Dependent Variable: INVESMTNET

Source: Researcher's Findingsand own computation

Table 4.5.3Coffiencients

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
BBA	.143	.062	.100	2.323	.023	.979	.244	.020
BBB	.102	.063	.094	1.623	.108	.986	.173	.014
BBC	.105	.065	.099	1.609	.111	.988	.172	.014
BBD	.156	.055	.131	2.849	.006	.980	.295	.025
BBE	.231	.067	.215	3.462	.001	.990	.352	.030
BBF	.048	.055	.045	.878	.383	.983	.095	.008
BBG	.330	.073	.323	4.511	.000	.993	.440	.039

a. Dependent Variable: INVESMTNET

b. Linear Regression through the Origin
BBB-Overconfidence and Over optimism Bias, BBC-Self Attribution Behavior & Confirmation Bias, BBD-Availability Bias, BBE-Conservatism, BBF-Anchoring and Adjustment Bias, BBG -Familiarity bias

Source: Researcher’s Findingsand own computation

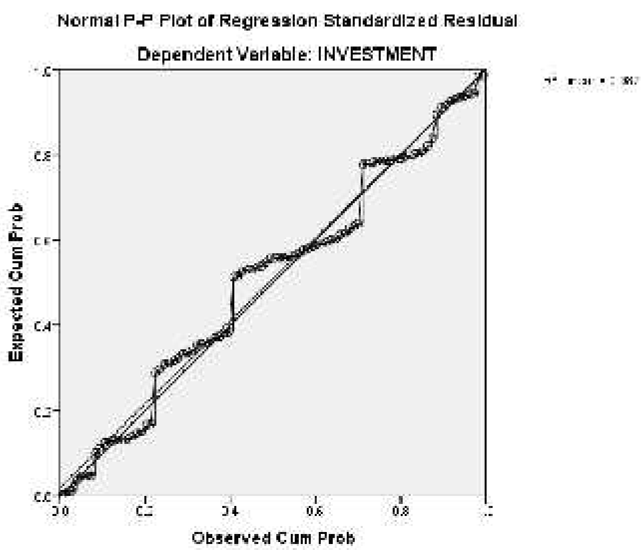

Figure 4.5.Normal P-P PLOT (Normality)

a. Dependent Variable: Investment decision

Significant variables: Familiarity bias

Insignificant Variable: Anchoring and adjustment

As we can see from the above regression table, investment highly affected by psychological biases from the decision maker’s familiarity biases at 5% significance level and lees likely affected by anchoring bias at 10% significance level. Therefore, the regression output strengthen the results we get from our survey data and described above using table and charts. The existence of biased behavior during investment decisions is undeniable. Thesurvey result doesn’t show which manager or decision maker has the most significant contribution in making this biased decisions, hence as per the respondent’s observation almost every decision makers who participated in the decision process has been observed making a biased decision while they make investment decision. investment decision are vast and complex natures, hence in commercial banks, the most significant investment decision is borrowing, this incorporate a huge amount of public money which need great care, otherwise the damage and the consequence is countrywide. When we generalize it united bank and other commercial bank invest in something that brought good profit, maintain social welfare, with a well sophisticated capability and skill and off course with less risk. Therefore they borrow their collected deposit in such a manner. The existence of biased decision making judgment in those who participated in investment decision making will make the investment more risky, and create dissatisfaction with stakeholders, shareholders, employees, and with the regulatory body.

4.6 Interview Results

Even though the interview result has been make with some selected officials who have the chance to involve directly in the decision making process, the result is not as genuinely represented in the survey results. Even though most of them agreed the existence of these biases in there decisions making and their colleagues, they don't think the degree of their existence is as of the one found in the survey results. Almost all respondents however agreed that branch managers are the one highly involved in investment decision making. These willstrengthen the researches methodology to use their immediate subordinate, since they have the chance to observe their superior make several investment decisions for several years. From the interview the researcher has also found that the one big resource that most investment decision makers at united bank S.C. decide is Loan and advance next to that it is foreign currency allocation, hence allocation of these resources is centralized and only few people are involved in decision making process. Hence, when directly come to their personal psychological ability to make decision somehow free from irrationality, they beloved they are rational.This is therefore a contrasting view from what the researcher found from the survey results.

The interviews also agreed that it has been neglected when the bank's policy and procedure manuals was prepared to mitigate and give guidance on how to perform investment decision since every decision cannot be performed centrally. Decision at united bank has been discriminated downward on discretionary limits according to the status of the branches. Therefore, Branch managers have the authority to deicide on the biggest asset of the bank during investment decisions and preparing a clear guideline to avoid their cognitive biases is as important as other quantitative measure, since the result will in the long run affects the banks overall performance.

CHAPTER FIVE

5. SUMMERY OF FINDINGS CONCLUSION AND RECOMMENDATION

5.1 SUMMERY OF FINDINGS

Fromthe survey data and interview with some selected officials of the bank, it is found that united bank has been under the influence of behavioralbiases, those who make investment decisions are found to be biased in the eyes of their colleagues. The research has only used some selected parameters in order to show the existence behavioral influence in the decision making environment of united banks, specifically during investment decision making. event though it is natural common not always make the expected decision and expect a result free from human behavioral interference, the field has been denied attention in our country financial context eve though it is widely being used worldwide. Therefore the research choose some behavioral parameters, those it is believe they will express the nature of the industry and like wise at united bank.

The parameters used are,Representativeness Bias, Overconfidence And Over optimism Bias,Self Attribution Behavior & Confirmation Bias, Availability Bias,, Conservatism, Anchoring and Adjustment Bias, Familiarity bias in a way to represent psychological elements of the decision makers and in a way to answer the research questions. Also 6 questionshave been prepared to represent investment decisions. In general 120 respondents where selected to participate using stratified and purposive sampling techniques, hence the researcher where able to collected from 92 respondents, with a success rate of around 76%.the result has in general show that the banks decision makers has behavioral influence during investment decision making. Even though it need further study who is making the most significant biased decision and to what extent is the damage. All most all decision makers has been observed biased in all measurement scales except some, and the observation results shows the respondents almost responded with a highly agreed measurement scale .in order to see some of the results.

- ❖ The decision makers has been observed to make overconfident decisions and this has been causing the bank to involve in some risky investments, due to they assumptions they have the knowledge to control the environment and the result which arise from their decisions. These lead the bank to highly involve in very risky investments. The decision makers overconfidence and over optimism behavior is leading the bank to involve in unnecessary and not well studied interment, against the industry, regulatory, even the banks strategy.

- The other outcome of the survey data is that decision makers who involve in investment decisions mostly try to find information that only agree with their preexisted opinion and any information that agree is welcomed and those who are not is disregarded. This is a very dangerous attitude, specially, in such an environment where greater risk in involved and the risk could be diversified in to the economy. In order to mitigate such kind of behavioral biases the bank should draft a well articulated policy and strategy otherwise the damage is not easy to recover. This will limit the involvement of those around with an expert opinion and with an interest to suggest new ideas. Since new ideas are not welcomed, it will drag them back and limit the innovativeness of the bank in coming up with new ideas.
- This is also a tendency by united bank decision makers to only like to take recently developed ideas and information rather than detailed studied information done in the past. Theresearcher will also believe this attitude will increase the risk of the bank. Thereforethe bank should accompany recent information along with well articulated studies done in the past and find a way to mitigate the decision maker’s behavior to find only recent information and reluctance to go deep. The desire to go for only the available information will increase the risk and affect the worthiness of the investment.
- There is also a tendency to change once they make an investment decision even though the result is showing it is not a good investment. After forming an opinion, decision makers at united bank are often unwilling to change it, even though they receive new information that is relevant.
- On the contrary those who participated in investment decision making at united bank has been observed to be fearful of investingin something they fell they have little information. Hence to investment it is not their personal feeling that matters it is the fact that matters. Hence the personally take that investment with their emotioneven though it is found sound and feasible.

5.2CONCLUSION

Decision making is the most important and the most difficult task that managers perform. On the other side they are most of the time confronted with risk and uncertainty, especially in banking industry. Objective of this study was to examine how a manager of united bank performs this task, by putting it in the perspective of the newest findings from behavioral finance field.Behavioralfinance is based on premises that decision makers behave less than fully rational. Due to their deeply rooted human nature managers are prone to make decisions based on subjective evaluation of available options, relative to certain reference point and to current state of wealth, and also according to their personal interests which may contradictbanks, industry's and socialwelfares. Specially, this study explores role of biases in investment decision making, through concise review of existing literature and survey opinions from employees closely work and have the chance with the observes.

Importance of the study is in fact that commercial banks aresimultaneously the most important industry for countries economic development and stability and the most submissive industry to the risk. Owing to systematic nature of risk generally in the financialindustry, any irregularity in onecountrybanking industry will eventually reflect on other countries and is able to make ground crisis. This study will contribute in creating better understanding on managerial behavior duringinvestment decision making which is primarily useful for architects of the bank, corporate governance and regulative.

Asit has seen from the survey data and interviews with selective managerial stuffs, investment decision makers have been found under the influence of psychological cognitive biases. Among many developed psychological biases the researcher selected only seven parameters which could highly be related with the banking industry, and further diversified them in to 19 questions to represent the biases and on the investment section the researcher also developed 6 question and participate 120 employees closely work with those we make significant investment decision and interview some selected higher official. With this the researcher has found from the survey results, that investment decision at united bank are under influence of the decision maker's psychology. Even though the degree varies almost in all parameters the decision makers is found biased. This biasness has also been believe by the respondents affect investments made by the bank due to the nature of the decision makers and due to the fact that there is no sufficient mechanism developed to recognize and mitigate the impact of the biases.

As a conclusion, corporations including united bank need a lot of improvement in some of those aspects referring to management and corporate governancebehavioral factors play a vital role in the decision making process ofthe decision makers. Hence thisis maker and the organization he represent has to take necessary steps to minimize or avoid illusions for influencing in their decision making process, investment decisions in particular.

5.3 RECOMMENDATION

- The first recommendation to recognize that there exist behavioral or psychological influence on investment decision making at the banks investment decision making.
- In order to mitigate and avoid if possible, the organization should develop a new one or incorporate behavioral elements in their existing policies and procedures.
- Prepare customized training on how to avoid such kind of biases in their decision maker's behavior.
- Policy makers could also utilize the outcome of this research on how to monitor organizations which are highly significant like the financial industry, because the decision they make diversify and have the potential to damage the country's economy.
- This paper could also inspire a further discussion on how rationality can be efficiently and accurately produced before any further damage is occurred at an organization level as well as country lever.
- Consequently, the study may contribute to a broader discussion on why and how existing financial theories, decision theories, become less important and might lose in practical relevance for the entire field of decision making.

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Appendix

QUESTIONNAIRE

Questionnaire

My name is Bethlehem TeferaBegashaw and I am currently working with the research component of the Master's Degree in business Administration (MBA) at the University of St.Mary's.

The purpose of the thesis study is to survey the roll of psychology in united bank managers' investment decision making. To this end, the study intends to gather information from selected managers, analysts, loan officers, experts, branch managers etc. through a self-administered questionnaire and interview. The participation is fully voluntary and responses will be confidential. The result will be also reported without showing the identity of respondents.

The questionnaire takes about 15-20 minutes to complete. I would appreciate your positive consideration in completing the enclosed questionnaire and assisting me in my research effort. If you have any questions please call 0961-236434or emails bettytt95@G-mail.com.

Thank you in advance.

Bethlehem Tefera

A.SECTION ONE

Background Information

1. Gender

Male ☐

Female ☐

2. Educational background

Bellow diploma ☐

Diploma ☐

Degree ☐

Above Degree ☐

3. For how many years have you been working with united bank?

Less than 1 year ☐

1-2 years ☐

3-5 years ☐

More than five years ☐

4. In what position have you been working at united bank?

Credit Related ☐

Trade Fiance Related ☐

Credit Analyst ☐

Ass. Manager ☐

5 age

20-25 ☐

26-30 ☐

31-35

Above 35

B. SECTION TWO

Brain Storming Questions

1. Non Financial measures are as important as financial in investment decisions?

Yes No

2. Managers are rational in their decision making?

Yes No

3. It is important to accommodate psychological elements in the decision making process?

Yes No

4. Investment decisions at united bank are prone to subjective judgments?

Yes No

5. The greater share of united bank's investment is lending the deposit mobilized from the general public?

Yes No

6. Branch Managers are active participants in deposit mobilization as well as lending process of united bank s.c?

Yes No

7. Behavioral elements are considered in investment decisions at united bank s.c ?

Yes

C. SECTION THREE

The roll of Psychological biases in investment decision making judgment of those who highly involve in United bank's investment decisions.	Extremely Disagree	Highly Disagree	Some What Disagree	Some What Agree	Highly Agree	Extremely Agree
1.Behavioral Biases						
A. Representativeness Bias						
1. Decision makers at united bank think they understand most investment developments on the basis of too little information?						
2. Decision makers at united bank draw conclusions during investment decision from small data sets?						
3.Decision makers at united bank give new information too much weight in forming their expectation about the future investment						
B. Overconfidence And Over optimism Bias						
4. Overconfidence behaviors cause united bank decision makers to overestimate their knowledge?						
5. Overconfidence behaviors cause united bank decision makers to underestimate risks?						
6. Overconfidence behaviors causes united bank decision makers exaggerate their ability to control events in investment decisions?						
C. Self Attribution Behavior & Confirmation Bias						
7. Decision makers at united bank desire to find information that agrees with their Existing view rather than the truth?						
8.Any information that conflicts with their existing view is ignored						
9.Whilst information that reinforces their existing view is over weighted						
10.Decison makers at united bank would be more likely to look for information that supports their original ideas about an investment rather than seek out information that contradicts it						
D. Availability Bias						
11. Decision makers at united bank tend to base their decisions more on recent information rather than any detailed study of past events and thereby become biased to that latest news.						
12.Decision maker at united bank relies upon knowledge that is readily available rather than examine other alternatives or procedures and do not take pain to go for any detailed analysis						
E. Conservatism						

13. Decision makers demonstrate a reluctance to search for evidence that contradict their previous views, because they are reluctant to change their own judgment.						
14.When things have changed, managers at united bank tend to be slow to adjust to the changes						
15. Decision makers at united bank s.c take very conservative approach to changing their minds after taking a decision, despite new contradictory information.						
F. Anchoring and Adjustment Bias						
16.After forming an opinion, decision makers at united bank are often unwilling to change it, even though they receive new information that is relevant						
17. Recently observed and experienced events strongly influenced investment decision of decision makers at united bank s.c?						
G. Familiarity bias						
18.Decison makers at united bank are fearful of ambiguous situations where they feel that they have little information about the possible outcomes						
19. Decision makers at united bank are wary of investments that they feel they don't understand.						
2.Investment						
20.Behavioral biases in decision makers can lead to inappropriate or risky investments, anticipating and dealing with future threats which could affect the banks business performance						
21.Behavioral biases in all or some of the investment decision makers at united bank could also lead to losing its business reputations with in the industry						
22.Behavioural biases in investment decision makers could also endanger the banks relationship with its major stakeholders in meeting the requirements of current and future legislations						
23.Behavioural biases in decision makers could also affect the development of business capability, building new skills and experience in new areas or strengthening management systems						
24.Behavioural biases in decision makers could also affect the bank in matching industry standards and good practices						
25.Behavioral biases in decision makers could highly affect the banks competitiveness with in the industry						

Thank You!

Interview Questions

1. What are the major investment decisions at your organization?
2. Who do you think involve mostly in investment decision at your organization?
3. How much do you know about the concept of behavioral finance?
4. Do you think it is relevant to add psychological factors in the decision making process in order to minimize their consequences?
5. Do you think there is an interference of individual psychological factors during decision making at your organization?
6. Do you think you are rational in your decision making?
7. Do you think you have been threatened by your behavior at your work in order to make such as investment decisions?
8. What do you think is the effect of not recognizing individual irrationality?
9. Is there a mechanisms to recognize and mitigate biases of decision makers behavior at your organization?