Effect of Mental Accounting On Performance Of Financial Institutions In Migori County, Kenya.

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Abstract

Keywords:

Mental Accounting Biase;
Performance;
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Globally, Financial Institutions create platforms for Financial Market participants to achieve their invesment goals. On the other hand, Financial Institutions create investment products with the aim of enhancing their own performance. Individuals and institutions investing in various financial instruments expect good returns and are expected to objectively evaluate the risk-return trade-offs associated with such investments. However, sometimes investors are affected by various behavioral biases which prompt them to take wrong financial decisions. Such decisions are often associated with cognitive errors and emotional biases. Whereas the focus has been on how behavioural biases affect investors, little attention has been given to the effect of investor behavioural biases on performance of financial institutions. Specifically, the objective was to establish the effect of mental accountingbiaseon performance of financial institutionsin Migori County, Kenya. The study adopted correlational research design and anchored on Prospect Theory. The target population for the study was 84 employees of financial institutions in Migori County who are involved in investment management. Census sampling was adopted and key respondents purposively selected from financial institutions in Migori County. Data was collected using structured questionnaires. Data analysis was done using both descriptive and inferential statistics. Descriptive analysis involved frequency, percentages, mean and standard deviation. Pearson Correlation and regressions analysis were used to test the hypotheses and effect of behavioural finance biases on performance of financial institutions respectively. Descriptive results revealed that mental accounting biases had effect on performance of financial institutions with (mean=4.34; std. dev.= 0.678). Regression results revealed that mental accounting biasecontributed 12.4% on performance of financial institutions, while other factors were responsible for 87.6(R=.352; sig. value< 0.05). Therefore, the study concluded that there was a significant effect of Mental Accounting on performance. The study recommends that the management of the financial institutions operating in Migori County need to put in place mitigating strategies on Behavioural Finance Biases. Further studies need to focus on mitigations currently applied by Financial Institutions and how they could be improved upon.

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1. Introduction

Behavioral finance is an interdisciplinary field that explores the role of psychological, emotional, and social factors in financial decision-making. It is concerned with understanding how these factors impact the behavior of individuals and organizations in the financial market and, in turn, the performance of financial institutions. According to Bryne and Utkus (2013), behavioral finance studies the psychology of financial decision-making. Emotions do affect investment decisions and behavioral finance takes the insights of psychological research applying them to financial decision making.

There exists a psychological influence on the actions of investors' while taking financial decisions and its corresponding impact on institutional performance (Zahera & Bansal, 2018). Behavioral finance is the result of the structure of various sciences such as psychology which is a science that analyses processes of behavior and mind, finance which is a system of formation and use of resources and sociology which is the systematic science about socio-behavior of human being or a group emphasizing the influence (Ricciardi & Simon, 2000). Psychology shows that the mind has two frameworks that explain why humans make poor decisions: settling on well thought out choices taking effortful mental activity where decisions are made after careful consideration of available information and mental shortcuts to decide by relying on assumptions and little thought.

Financial institutions, including banks, investment firms, and insurance companies, play a critical role in the development of the economy by providing financial services and products to individuals, businesses, and governments. However, their success and stability depend on the behavior of their clients, who are often influenced by behavioral biases and emotions. As a result, behavioral finance seeks to understand and predict systematic financial market implications of psychological decision processes. It investigates the decision-making process dealing in buying or selling of financial assets providing the rationale behind decision making process. Its main focus is on psychological principals used by investor to make investment decision. Investors are seen to rely on their ability to process, gather and understand an amount of information and this is subject to errors. Confidence plays a major role in how investors make their decisions such that when people have it, they make decisions spontaneously (Gavrilakis& Floros, 2022).

According to Dubyna et al. (2022), investment is the current commitment of wealth in the expectation of reaping future benefits and its main objective is to make money. Previously it was based on performance, market timing and forecasting among others which gave ordinary results meaning investors received ordinary futures. Two important features are current sacrifice of present values for the uncertain future benefit involving commitment of funds in various investment avenues and decisions and the second one is concerned with the management of an investor's wealth which is the sum of current income and the present value of all future incomes (Levy et al., 2015).

Globally, every individual has certain financial obligations which can be fulfilled by proper savings only. According to Zahera and Bansal (2018), this results to individual investing their money in various financial instruments expecting a good return out of it. But sometimes such investors are affected by various behavioural biases which prompt them to take wrong financial decision. For instance, in England, behavioural Finance tries to analyse how the decision-making process of investors' is influenced by their cognitive errors or mental mistakes and emotions. There exists a psychological influence on the actions of investors' while taking financial decisions and its corresponding impact on share markets (Zahera & Bansal, 2018). The knowledge of these biases facilitates the investors' in

recognizing their own mistakes in order to ensure that such mistakes are not committed henceforth.

In South Africa, decision making in commercial banks has been regarded as a rational process. In most of her banks, it will be irrational to claim that there would be no biases in rational decision-making process. Investment decisions are no exception to this. It is common that behavioural elements in the investment decision are ignored either in stock market or in the working capital or capital budgeting decision by small and medium size Enterprises (SMEs) (Daud et al., 2022). As a result, a lot of changes have been called for to create a sound cohesion between the managers and their customers throughout the transaction process.

Similarly, in Kenya loan pricing or interest rate is one of the most important terms in the lending decision process (Makanile&Pastory, 2022). Commercial banks in the country cannot charge loan rates that are too low because the revenue from the interest income will not be enough to cover the cost of deposits, general expenses and the loss of revenue from non-performing loan portfolio. They cannot also charge too high loan rates because they will not be able to keep the banking relationship with the borrowers. Moreover, commercial banks cannot always set high interest rates, for example trying to earn maximum interest income because the system and behaviour will affect most customers, especially borrowers. Hence, these clients can seek the borrowing from other banks with low interest rates and charges.

Behavioral biases and emotions can impact financial decision-making in various ways. For example, Overconfidence: This is a behavioral bias in which individuals overestimate their abilities, knowledge, and the accuracy of their predictions. In the context of finance, overconfidence can lead individuals to take on excessive risk, ignore warning signals, persist with losing investments, and make impulsive investment decisions (Gill & Bajwa, 2018). This can result in lower returns and increased financial losses for both the individual and the financial institution. Herd behavior can result in mass withdrawals from financial institutions during periods of economic uncertainty, causing liquidity problems and potentially leading to bank runs. Greed can drive individuals to make irresponsible investment decisions, such as pursuing high returns without considering the associated risks, leading to financial losses and negative impacts on the performance of financial institutions. Last is the cognitive biases which are systematic errors in thinking that can impact decision-making. In finance, cognitive biases, such as confirmation bias and availability bias, can lead individuals to rely on limited and biased information to make investment decisions, resulting in suboptimal outcomes. Understanding and mitigating the impact of cognitive biases is important for improving financial decision-making and the performance of financial institutions.

It is essential for financial institutions in Migori County, which is one of the fast-growing counties in Kenya. Expenditure, borrowing and lending have been in the rise to meet most of the development projects. It is evident that most commercial banks are offering loans to their customers for such projects to understand the impact of behavioral finance on their performance and to develop strategies to mitigate its effects (Sattar, Toseef & Sattar, 2020). This may involve developing interventions to improve financial literacy and decision-making, providing unbiased and objective financial advice, and promoting a culture of responsible financial behavior. Another strategy is to develop interventions aimed at improving financial literacy and decision-making among their clients. By educating clients on the different cognitive biases and how they can impact financial decisions, financial institutions can equip them with the knowledge they need to make informed decisions and avoid costly mistakes.

Additionally, financial institutions can provide clients with unbiased and objective financial advice to help them make investment decisions that align with their goals and risk tolerance. Similarly, they can aim to promote a culture of responsible and ethical financial behavior. This can be achieved by setting ethical standards for the institution's employees and ensuring that all financial products and services are transparent and free from conflicts of interest. By doing so, financial institutions can reduce the risk of unethical practices and protect the reputation of the institution and its clients. Lastly, financial institutions in Migori County can implement risk management systems that monitor and manage investment portfolios, helping to reduce the impact of behavioral biases and emotions on investment decisions made by most of their clients. These systems can use algorithms and data analysis to provide clients with customized investment portfolios that align with their goals and risk tolerance. The aim of this research is to investigate the influence of behavioral finance on the performance of financial institutions in Migori County, Kenya.

For ages, standard ordinary finance has constantly presumed that investors are typical and sensitive in their investment decision making in the stock market and therefore they are impassive about risk return tradeoffs and exploiting value (Baker & Yi, 2016). Traditional Finance and the Modern Portfolio Theory (MPT) assume symmetry and therefore rationality in the investment environment (Markowitz, 1952). Investors must have to incorporate all the necessary information available according to the efficient market hypothesis (EMH) and are impartial in analyzing securities and choosing winning stocks. However, psychologists have found that human beings do not behave as rationally as economists suppose (Ogunlusi&Obademi, 2019). The occurring of stock market anomalies according to empirical researches conducted by Babajide and Adetiloye (2012) revealed that investors are not always as rational as they are portrayed to be. These anomalies can be explained by a new emerging area of finance called behavioral finance (Gandhi & Lustig, 2015).

Behavioral finance considers how various psychological traits affect how individuals or groups act as investors, analysts and portfolio managers (Placeholder7). It tries to understand how emotions and cognitive errors influence behaviors of individual investors (Kengatharan&Kengatharan, 2014). It also seeks to explain why and how investors can act beyond the boundary of rationality in ways that oppose to what they are supposed to (Mumtaz, Saeed, & Ramzan, 2018). Advocates of behavioral finance has been able to explain a number of psychological factors that affect the decision making of investors in the stock market (Baker & Yi, 2016). However, much is unknown even till today about the human psychology and investor irrational behavioral factors that influence the investment bankers' decision-making process (Nofsinger, 2017).

Research has been conducted about behavioral finance factors affecting investment performance by retail investors in the NSE by Chami (2017), effect of behavioral biases on ranking of financing decisions by financial managers of firms listed in the NSE by Nyakundi (2017), and the effects of behavioral factors in investment decision making on institutional investors by Waweru, Munyoki, and Uliana (2008) and individual investors at the NSE by Kimeu, Anyango, and Rotich (2016). Research similar to this study has been conducted in Nigeria by Ogunlusi and Obademi (2019), Canada by Keswani, Dhingra, and Wadhwa (2019) and Bombay by Bharath (2019) but none has been conducted in a Kenyan context, which prompted this research to investigate the impact of behaviorial finance on investment decisions by investment banks in Kenya.

1.2 Statement of Problem

Globally, Financial Institutions create platforms for Financial Market participants to achieve their invesment goals. On the other hand, Financial Institutions trade in investment products with the aim of enhancing their own performance. Individuals and institutions investing in various financial instruments expect good returns and are expected to objectively evaluate the risk-return trade-offs associated with such investments. Previous studies show that investors are affected by various behavioral finance biases which prompt them to take wrong financial decisions contrary rational approaches advocated by finance theory. Such decisions are often associated with cognitive errors and emotional biases. Behavioural finance focuses on the social and psychological determinants of investment decision-making processes by both individuals and institutions

Whereas the focus has been on how behavioural biases affect investors, little attention has been given to the effect of investor behavioural biases on performance of financial institutions. Available studies on behavioural biases on investment decision, lack consensus on their findings and have mainly concentrated on the demand side of the financial market. The lack of studies among the various scholars on the effect of behavioural finance biases on performance of financial institutions who are on the supply side provided a valid need to conduct this study. It is inevitable that irrational decisions made on the demand side of investment products will affect performance of financial institutions. Therefore, this study sought to investigate the effect of mental accounting biase on performance of financial institutions in Migori County, Kenya.

1.3 Research Objective

i. To establish effect of mental accounting on performance of financial institutions in Migori County, Kenya.

1.4 Research Hypothesis

H_{01}: There is no effect of mental accounting biase on performance of financial institutions in Migori County, Kenya.

1.3 Prospect Theory

According to Daniel Kahneman and Amos Tversky's Prospect theory, individuals in most cases make decisions under conditions of risk and uncertainty (Barberis Mukherjee & Wang, 2016). Prospect theory suggests that people do not make decisions based on objective probabilities and outcomes but rather on their subjective perception of gains and losses relative to a reference point. It also provides insights into how individuals evaluate potential gains and losses and how this evaluation influences their decision-making. In the context of financial institutions, the theory can help explain how investors' behavior is influenced by their sensitivity to losses and gains, leading to suboptimal investment decisions. Loss aversion is a central concept in prospect theory. It suggests that individuals experience the pain of losses more acutely than the pleasure of gains. In the context of financial investments, this means that investors tend to be more risk-averse when faced with potential losses compared to potential gains of the same magnitude.

Financial institutions are in impacted by prospect theory and loss aversion in several ways. For instance, holding onto losing investments. Due to loss aversion, investors may become emotionally attached to losing investments Ruggeri et al.,(2020). They tend to place more weight on the hope of recovering losses rather than objectively evaluating the investment's future prospects. This can lead to a reluctance to sell losing investments, resulting in a failure to cut losses and allocate capital to more promising opportunities.

Conversely, investors influenced by prospect theory may be inclined to sell winning investments prematurely. This behavior stems from the desire to lock in gains and avoid the possibility of subsequent losses eroding those gains. As a result, investors may miss out on further potential gains if they exit positions prematurely. Additionally, loss aversion can intensify during market downturns or periods of increased volatility. Investors may become overly cautious and excessively risk-averse, leading to a reluctance to enter new positions or maintain existing investments. This behavior can impede the growth and performance of financial institutions, as they may miss out on potential opportunities to capitalize on market recoveries. Besides, financial institutions may need to consider investors' loss aversion when designing and implementing investment strategies. If investors exhibit a strong aversion to losses, the institution may need to develop risk management frameworks that emphasize downside protection, such as diversification, hedging strategies, or the use of stop-loss orders. Aligning investment strategies with investors' behavioral biases can help mitigate the negative impacts of loss aversion.

Through prospect theory, behavioral finance recognizd that investors are susceptible to a variety of psychological biases that can impact their financial decision-making, such as overconfidence, confirmation bias, and anchoring. According to Hirshleifer (2015), overconfidence refers to an overestimation of one's abilities and knowledge, which can lead to poor decision-making. For example, an investor who is overconfident in their stock-picking abilities may ignore important information and make impulsive investment decisions, leading to suboptimal outcomes. On the other hand, confirmation bias refers to a tendency to seek out information that confirms one's existing beliefs or opinions, while disregarding information that contradicts these beliefs (Wilczek, 2016). For example, an investor who has a positive view of a particular stock may selectively seek out positive information about the company, while ignoring negative news. Moreover, anchoring refers to the tendency to rely too heavily on the first piece of information encountered when making a decision (Komalasari, et al., 2019). For example, an investor who first hears about a stock at a high price may anchor on this price and be less willing to sell the stock at a lower price, even if it would be a rational decision based on market conditions. These psychological biases can have a significant impact on financial decision-making and can lead to suboptimal outcomes for investors (Lo, 2005). The influence of emotions can be observed in the behavior of investors, who may make decisions based on their emotional reactions to market conditions, rather than on a rational analysis of financial data. This can have implications for the performance of financial institutions in Migori County, as emotions can drive investor behavior, leading to changes in market conditions, and potentially impacting the performance of these institutions. To understand the influence of behavioral finance on financial institutions in Migori County, it is important to consider the role of emotions and their impact on investor behavior.

Moreover, traditional finance theory assumed that investors make rational decisions based on complete information and a clear understanding of their preferences and objectives. However, the limitations of this view have been recognized, as it fails to take into account the role of psychological, emotional, and social factors in financial decision-making. This has led to the development of behavioral finance, which provides a more comprehensive understanding of how these factors impact financial decisions and the performance of financial institutions (Hirshleifer, 2015). In Migori County, the recognition of these behavioral factors can lead to financial institutions taking a more nuanced approach to decision-making and potentially improve their performance.

2. Research Method

In this study, a correlational research design was used. The correlational research design was appropriate for this study as it allowed for a comprehensive and detailed analysis of the effect of mental accounting bisae on Performance of Financial Institutions. The study was conducted in Migori County.The study targeted 84 employees from 12 financial institutions, including commercial banks, savings and credit cooperatives, and microfinance institutions, located in Migori County, Kenya. Since the target population was small, census was used to select the whole population.

Data was collected through structuredquestionnaires. Validity and reliability of the instruments was checked. The Cronbach alpha coefficient was used to determine the reliability of the research instruments. The study obtained a reliability index of 0.710. Therefore, the researcher concluded that the research instruments was reliable.

Data collected was cleaned, coded and entered into the SPSS 23.0 version. Both descriptive and inferential statistics were used to analyse the research data. Descriptive statistics specifically frequencies, percentages, mean and standard deviation were generated. In addition, inferential statistics included Pearson correlation and linear regression were used to determine the extent of the effect of the mental accouinting biase on performance of financial institutions.

3. Results and Analysis

A sample size of a total of 84 were targeted to participate in the study of which 69 were returned, signifying a response rate of 82.1%. This supports Mugenda & Mugenda (2008) a response rate of 50% is adequate for data analysis and reporting, 60% is good and above 70% is excellent. Since the response rate was above 70%, the study regarded the questionnaire to be acceptable for data collection.

Table 1 presents the findings related to various statements that assess the prevalence of mental accounting biases among clients, as well as the overall mean result. The findings reveal the following insights: The statement "Clients often treat investment goals and corresponding results differently" received an average mean score of 4.16, indicating that the majority of respondents tended to agree with this perspective, with a relatively moderate level of dispersion in their responses (Std. Deviation = 0.994).

In addition, the statement "Clients often treat money earned through investing in different products differently depending on how it is earned" obtained a mean score of 4.65, suggesting that respondents generally agreed with this statement, with a relatively low level of dispersion in their responses (Std. Deviation = 0.480).
Besides, the statement "Clients structure their investment portfolio/products in layers to meet different goals rather than considering the correlation between products in a portfolio" garnered an average mean score of 3.64, indicating a mixed response from the participants, with a moderate level of dispersion in their answers (Std. Deviation = 0.939).

Further, the statement "Clients often view incomes and capital gains from the investment products in their portfolio separately" received an average mean score of 4.64, indicating a general agreement among respondents, with a low level of dispersion in their responses (Std. Deviation = 0.484).Moreover, the statement "Clients often overemphasize the current income and related assets rather than previous incomes" obtained an average mean score of 4.61, indicating a tendency for respondents to agree with this statement, with a relatively low level of dispersion in their responses (Std. Deviation = 0.492).

Furthermore, the overall mean result across all the statements was 4.34, with a standard deviation of 0.678, suggesting a generally positive inclination among respondents toward mental accounting biases within the context of the study.

The finding of the study concurred with Santi, Sahara and Kamaludin (2019) who asserted that investors had more diversified portfolio, with investments across different industries and asset classes. This led to higher returns and lower risk compared to investors who did not use mental accounting. The authors suggest that mental accounting can be a useful tool for investors, as long as it is used in a disciplined and systematic way.

It is evident that when mental accounting biases are applied appropriately by the clients, it will lead to effective financial decisions. For instance, it will enable clients view incomes and capital gains from the investment products in their portfolio separately. However, improper application of mental accounting biases can lead to suboptimal investment decisions and lower financial performance. viewed from the side of Financial Institutions, understanding of customers mental accounting behaviour could be important in avoiding the adverse performance of investment portfolios.

The descriptive statistics results were summarized in Table 1

Table 1: Mental accounting biases and performance of financial institutions

STATEMENTS	N	Mean	Std. Deviation
Clients often treat investment goals and corresponding results differently	69	4.16	.994
Clients often treat money earned through investing in different products differently depending on how it is earned	69	4.65	.480
Clients structure their investment portfolio/products in layers to meet different goals rather than considering the correlation between products in a portfolio	69	3.64	.939
Clients often view incomes and capital gains from the investment products in their portfolio separately	69	4.64	.484
Clients often over emphasize the current income and related assets rather than previous incomes	69	4.61	.492
Overall Mean Result	69	4.34	0.678

Key: 1- strongly disagree; 2-disagree; 3-neutral; 4-agree; 5-strongly agree; std. dev. -standard deviation

Source: Research Data (2023)

3.1Testing Hypothesis Between Mental accounting and Performance of Financial Institutions

In order to test the research hypothesis, Pearson Correlation analysis was done. The research hypothesis was "HO_1: Mental accounting has no effect on performance of financial institutions in Migori County, Kenya". The finding is shown in Table 2.

Table 2: Testing Hypothesis Between Mental accounting and Performance of Financial

Institutions

		Mental Accounting Biase	Performance of Financial Institution
Mental Accounting Biase	Pearson Correlation	1	.352**
	Sig. (2-tailed)		.003
	N	69	69
Performance of Financial Institution	Pearson Correlation	.352**	1
	Sig. (2-tailed)	.003	
	N	69	69

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Research Data (2023)

The finding in Table 2 shows that Correlation Coefficient was r = .352 at a significant value less than 0.05. Since the p-value was less than 0.05, the null hypothesis was rejected. Therefore, the study concluded that there was a significant effect of mental accounting biases on performance of financial institutions in Migori County, Kenya.

3.2 Regression Analysis

The study carried out regression analysis to determine the level of significance between the mental accounting biaseand performance of financial institutions in Migori County, Kenya as shown in Table 3 below:

Table 3: Model Summaryof Mental Accounting Biase and Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.352[a]	.124	.111	.61417

a. Predictors: (Constant), Mental Accounting Biase

According to Table 3 findingsMental Accounting Biase had moderate influence on performance (R=.501; sig. value< 0.05). With an R-square of (0.124), mental accounting biase had 12.4% influence on performance financial institutions, while other factors were responsible for 87.6% of it.

Table 4: ANOVAof Mental Accounting Biase and Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.570	1	3.570	9.463	.003[b]
	Residual	25.273	67	.377		
	Total	28.842	68			

a. Dependent Variable: Performance of Financial Institution
b. Predictors: (Constant), Mental Accounting Biase

Mental Accounting Biase had a substantial influence on performance of financial institutions, as shown in Table 4 (F= 9.463; sig. value <0.05).

Table 5: Coefficientsof Mental Accounting Biase and Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.524	.734		2.076	.042
1 Mental Accounting Biase	.518	.168	.352	3.076	.003

a. Dependent Variable: Performance of Financial Institution

The study findings are shown in the regression model below:

$$Y= 1.524+0.518X1+£ \dots\dots\dots\dots\dots\dots \dots\dots\dots\dots\dots\dots\dots \text{(Equation 1)}$$

Where, Y= Performance; X1= Mental Accounting Biases; and £= the precision error (at 95% confidence level).

For every change in performance units at a constant of 1.524, mental accounting biases contributed 0.518 units. According to the model, mental accounting biase had a positive effect on performance of financial institutions at 95% confidence level.

4. Conclusion

Based on the findings, the study concluded that mental accounting biase had effect on performance of financial institutions in Migori County.

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