KWAME NKRUMAH UNIVERSITY OF SCIENCE ANDTECHNOLOGY

COLLEGE OF HUMANITIES AND SOCIAL SCIENCE

SCHOOL OF BUSINESS

ASSESSING THE IMPACT OF MUTUAL FUNDS' PERFORMANCE ON INVESTMENT DECISIONS OF FUND MANAGERS IN GHANA

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DECLARATION

I hereby declare that this submission is my own work towards the award of Master of Business Administration (Finance option) Degree and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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DEDICATION

I dedicate this work first and foremost to the Almighty God, who has been the provider of strength and wisdom throughout this project. Secondly, I dedicate this work to my beloved family, Rev. Nicholas Awuah-Sarpong, Mrs. Victoria Awuah-Sarpong, Priscilla Awuah-Sarpong and Joyce Awuah-Sarpong, for their unceasing prayers and unflinching support in my pursuit of academic excellence. Not forgetting my friends and course mates for their selfless dedication, guidance and tremendous effort in helping us accomplish this work. To all my mates, colleagues and friends who supported me in this pursuit, I say thank you.

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ABSTRACT

In the last few decades, mutual funds have developed due to the global integration of financial markets. The main aim of this study is assessing the impact of some mutual funds' performance on investment decisions of fund managers in Ghana. The study used both primary and secondary data for the research. The secondary data were obtained from the annual reports of the selected Mutual funds from 2014 to 2018 and questionnaires were used to obtain the primary data. The study found that Money Market Fund witnessed an exceptional performance than Equity Mutual Fund and Balanced Mutual Funds in terms of the Sharpe Ratio. However using the Treynor index for comparing the best performance mutual fund, the result found that the best performing mutual fund was Equity Mutual Fund which recorded the highest average ratio of -0.084. The study also found that the investments decisions mutual fund managers adopt were market timing decisions, risk assessment decisions and portfolio selection decisions. The study also concluded that the three key factors that influence investment decisions of fund managers were the economy, market information and anxiety. Based on the findings, the following recommendations were made. Mutual fund managers should make a constructive effort to construct a good portfolio in the equity market since the best performing funds were the equity mutual funds as per the findings of the study. Mutual fund managers should assess and consider those macroeconomic variables that are pertinent in the economy and affects the activities of the economy before making investment decisions. SEC should protect investors by putting in strict measures to check the investment decisions of mutual fund managers.

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LIST OF ABBREVIATIONS

BOG	Bank of Ghana
CAPM	Capital Asset Pricing Model
EMH	Efficient Market Hypothesis
FM	Fund Managers
GSE	Ghana Stock Exchange
MF	Mutual Fund
MPT	Modern Portfolio Theory
SEC	Securities and Exchange Commission

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Mutual fund has developed tremendously since the 1990s. Mutual fund investments continue to grow significantly (Chattopadhyay et al., 2018) and are of significant importance in financial markets of most emerging economies (Song et al., 2017). The increased growth has lowered intermediation costs, made financial markets efficient and increased domestic possession of financial assets (Roopadarshini and Nagaraj, 2015). The growth can be attributed to two key factors: the globalization of the homogenization of many financial markets (SIDA, 2005), and investors' desire of secure and liquid financial securities that yield high returns (Klapper et al., 2012). The significance of mutual fund investments in financial markets cannot be underplayed (Abolghasemi, 2018). Investors' preference for mutual funds over direct investment in stocks is attributed to market volatility and uncertain state of affairs (Abaasewaa, 2019). For instance, mutual fund firms in the United States make up the largest institutional investors in the stock market (Agrawal, 2011).

Similarly, there has been increased growth in investment patterns in mutual funds in emerging economies due to insufficient information systems and market inefficiencies that drive investment in stocks (Qureshi et al., 2018). Mutual funds offer their varied benefits which include including diversification, professional management, liquidity, flexibility and convenience as compared to other investment vehicles (Qureshi et al., 2018). As mutual fund investments are largely held by institutional investors who hold a significant portion of capital assets, they are important to the sustenance of the equity market and growth of the economy (Agrawal, 2011). Inspired by earlier research (Sharpe, 1966; Treynor, 1995), the past few decades have witnessed increasing research interest in the performance of mutual funds and

investment decisions made by investors and fund managers. According to Kr€aussl and Sandelowsky (2007), mutual funds past performance in the eyes of investors is the most significant source of information.

Correspondingly, Francesco and Martin (2017) found that the investment decisions of investors is based on the past performance of funds of which they expect to generate better performance in the future. Relatedly, there is research showing that assessment of the short-term performance of USA mutual funds was predictive of future performance (Ferreira et al., 2012). Contrary to these studies, Bollen and Jeffrey, (2005) posit that the past performance of mutual funds cannot predict future performance or returns. In his seminal work focusing on mutual fund performance, (Jensen, 1967) inferred a risk-adjusted measure of calculating fund portfolio that judges the predicting ability of fund managers in relation to returns. The measure is based on the hypothesis of the valuing of capital resources (Sharpe, 1966). Investment decisions of fund managers are thus at the heart of financial markets due to the complex processes that underpin these decisions. Fund managers employ decision tools, such as technical analysis, fundamental analysis, and judgmental skills (Jagongo and Mutswenje, 2014).

Chandra (2008) also identified two major factors that influence investment decisions of investors: personal factors and technical factors. Comparing the behaviour of investors and fund managers, some scholars (Cici et al., 2012; Frazzini, 2006) have observed similarities in factors that influence investment decisions of investors and that of fund managers. While the bulk of research on the performance of mutual funds has been conducted in developed economies Budiono (2009), literature that establishes a relationship between mutual fund performance and investment decisions of fund managers is lacking, particularly in developing economies. However, Yeboah (2009) identified that, the introduction and performance of

mutual funds have made enormous contributions to capital markets in emerging markets. Thus, there is a need to explore whether past performance of mutual funds influences investment decisions of fund managers' in Ghana, a developing economy.

1.2 Statement of the Problem

The performance of mutual funds has dominated recent literature in finance studies because of the increasing growth in returns and size of funds (Marfo, 2016). Globally, different tools and techniques have been used to assess the performance of mutual funds. In developing economies, Kong (2019) identified that industry players prefer returns in annual reports as a measure of performance. In measuring performance, Plantier (2014) argued that actively managed funds produce higher variability and superior average performance. Fund managers in actively managed funds employ technical and fundamental analysis in making investment decisions (Tijjani et al., 2009) but observations of Indian investors showed that most investors are bereft of the rudimental investment decisions of fund managers (Singh, 2011).

In the Ghanaian context, several studies have been conducted to assess the performance of mutual funds. Boahen (2015) evaluated the performance of mutual funds using Anidaso Mutual Fund as a case study. Similarly, Abaasewaa (2019) examined the performance of equity mutual funds in Ghana and Nigeria markets. These studies among others concentrated on the performance measurement of only a type of mutual funds, i.e. equity funds, hence a gap in research that this study seeks to address. The findings of these empirical studies' may present a limited view of an assessment of mutual fund performance which may be quite essential to the investment decisions made by fund managers in Ghana. Hence, the importance of mutual funds' the investment decisions by mutual fund managers borne out of these performance

measurements have not been empirically examined in Ghana. This is particularly important because finance professionals frequently base on these findings to make references to their clients.

In the last decade, the financial landscape of Ghana has been broiled with a plethora of investments which went bad eventually. For example, surprisingly, some fund management companies such Alltime Capital Limited, Nordea Capital Limited and CDH Asset Management Limited which had been performing well were hit by the crisis heavily. In 2019, the Securities and Exchange Commission revoked the licenses of fifty-three fund management companies in Ghana for various regulatory breaches. Currently, most investors are up in arms over their locked-up funds, thus raising serious concerns about the investment decisions of these fund managers. There is therefore the need to study the impact of performance of mutual funds on investment decisions of fund managers.

1.3 Objectives of the Study

The main objective of this study was to assess the impact of mutual funds on investment decisions of fund managers. The following specific objectives guided the research:

i. To analyze the performance of some selected mutual funds in Ghana from 2014 to 2018.
ii. To examine the investment decisions of mutual fund managers in Ghana.
iii. To investigate the key factors influencing investment decisions of mutual fund managers.

1.4 Research Questions

i. How did selected mutual funds perform in Ghana from 2014 to 2018?

ii. What investment decisions are adopted by mutual fund managers in Ghana?

iii. What key factors affect investment decisions of fund managers in Ghana?

1.5 Significance of the Study

Mutual funds contribute significantly to economic efficiency coming as a result of its purpose in the financial intermediation process of channeling funds to areas where it is most needed. Mutual funds are therefore of significance to the Ghanaian economy at large, stock exchange, financial institutions, individual and institutional investors among others. Insight into this theoretical link would also enhance our understanding of the dealings in competitive markets and how best investors can win in a progressively aggressive financial market. This study will report the performance of mutual funds in Ghana, which should assist individuals and corporations in making good investment decisions.

The study will also bring to fore the tools and techniques fund managers employ in making investment decisions and the factors that influence such decisions. This information will aid stakeholders to assess mutual fund schemes comprehensively. Besides, the current study is one of the first in Ghana to explore the link between mutual fund performance and fund managers' investment decisions. In this regard, the study addresses the paucity of research in this area and contributes to the extant literature by redressing the gap in the knowledge base and providing a platform for a potentially fruitful research direction.

1.6 Scope of the Study

The scope of the study is structured into contextual, geographical, and time horizon. Geographically, the study is carried out on licensed mutual funds in Ghana. The investment decision is based on the decisions made by mutual fund managers with respect to the

deployment of funds into investment vehicles and the construction of portfolios. Mutual fund performance is based on the risk-adjusted return of mutual funds (Sharpe ratio, Treynor ratio), which is computed from their annual returns. In addition, the time horizon of the study lapses from 2014 to 2018 geographical scope of the study was limited to Ghana, assessing the performance of some selected mutual funds from the years 2014 to 2018.

1.7 Summary of Methodology

The methodology of the study includes the research design, sampling procedure as well as data collection and analysis procedure. Descriptive research was employed because it is a study designed to depict the participants in an accurate way. The entire population of study comprises thirty-nine (39) mutual funds registered to the Securities and Exchange Commission (SEC) as at 2018. Following this, the study employed the purposive sampling technique to sample twenty-two (22) mutual funds for the study. Primary and secondary data were used for the study. Primary data were collected through questionnaires which were distributed to fund managers of selected mutual funds. Responses from questionnaires were analyzed using SPSS and Microsoft Excel. Sharpe ratio and Treynor ratio were used to measure the performance of mutual funds from 2014 to 2018. Data of annual returns and benchmarks are sourced from the websites of fund management firms and the Securities and Exchange Commission.

1.8 Limitations of the Study

Although it was the wish of the researcher to have conducted an extensive investigation on mutual funds since its evolution, the study had to be limited to selected mutual funds within a time frame in Ghana. The outcome of the study was limited only to the primary and secondary data available during the research period. Additionally, financial constraints limited the research because of the expenses associated with conducting such a research.

1.9 Organisation of the Study

The research comprises five chapters. Chapter one entails the background of the study, statement of the problem, objectives of the study, research questions, significance of the study, the scope and limitations of the study, summary of methodology as well as organization of the study. Chapter two involves a review of the literature related to the research topic. The chapter explains the conceptual review, theories and empirical reviews. Chapter three entails details of the research methods used for the study. The methods were discussed include research design, the population of the study, sample size and sampling technique, data and data collection instruments variables description and measurement, and ethical consideration.

Chapter four focuses on data presentation, analysis, and discussions of the study. In this chapter results obtained from the field are presented and interpreted under the research objectives. Chapter five presents a summary, conclusion and recommendations for the study. In this chapter, the researcher provided a summary of the results obtained from the field, coupled with conclusion and recommendations for further studies on the topic under study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents and explains concepts related to mutual funds, performance overview and related reviews to aid the appreciation of the research area. The chapter consists of reviews of conceptual literature in section 2.1, theoretical literature review in section 2.2, empirical literature review in section 2.3 and summary of the chapter in section 2.4.

2.1 Conceptual Review

The conceptual review details the nature of mutual funds, classification of mutual funds, benefits of mutual funds, demand for mutual funds and challenges of mutual funds.

2.1.1 Nature of Mutual Funds

The Investment Company Factbook (2011) asserts that almost 30% of the world's wealth is invested in mutual funds. The attractiveness of mutual funds is reflected in its enormous potential for investment portfolio growth, increased rate of return and risk diversification. Mobius (2007), found mutual funds to be professionally managed investment products that pool funds from shareholders to invest in financial assets that generate returns. The financial assets usually invested in are stocks (shares), bonds or a combination. These assets aid fund managers to diversify financial risk and improve returns on the asset portfolio. Mutual funds in nature are either open-end funds or closed-end funds. Funds pooled from investors into a diversified portfolio that issue an unlimited number of shares are termed open-end funds and they are priced daily at their current net assets value (NAV). Because of the redemptive nature of open-end funds, their securities are

generally liquid so they can be redeemed for a fair value. Conversely, Closed-end funds pool funds from investors within a stipulated period after which no new issues flow into the fund (Bogle, 1994). Thus, investors seeking to redeem their funds can only do so by trading on exchanges where the funds are listed.

2.1.2 Classification of Mutual Funds

Ammann et al. (2012) identified seven types of mutual funds namely; equity funds, money market funds, bond/income funds, balanced funds, index funds, global/international funds and specialty funds. Equity funds invest in stocks of corporations. These funds give rights to a portion of returns concerning an investor's holding. They are also referred to as Growth funds because their investment objective looks at long term capital growth through appreciation of stocks. Investors may opt for money market funds because they are low-risk investments that seek to gain modest returns and liquidity on investment portfolio (Macey, 2011). Moreover, money market funds are growing significantly because they are considered haven of investment portfolio (Bhole, 1991). According to a World Bank (2015) report, in the year 2013, money market funds managed $4.76 trillion globally, representing 16% of total assets under management (AUM) in mutual funds.

Another type of mutual fund invests in bonds or fixed-income securities. Baumol (1990) asserted that bond or income funds invest in bonds and other types of debt securities and is appropriate for investors seeking regular provision of income on their investment portfolio. This fund derives its returns from the fixed nature of the financial asset, often government or corporate debt. Differences have been drawn between global funds and international funds; global funds invest in securities in different countries including that of the investing unit while international funds invest in securities in other countries other than the country of the investing unit. Additionally, specialty funds are

invested in economic sectors like finance, technology, agriculture among others. From the above, classifying mutual funds is of significance to the investors and fund managers because it brings to fore the distinctive risk and rewards associated with the funds (Borklo, 2019).

2.1.3 Benefits of Mutual Funds

The importance of mutual funds contribution to the stability, balance and development of capital markets cannot be underplayed (Abolghasemi, 2018). Abaasewaa (2019) reviewed the significance of mutual funds from the point of investors, financial institutions and the economy at large. Individual investors benefit from the expertise of managers in selecting securities and making investment choices, relieving them of the burden of monitoring the performance of individual securities (Ansah, 2015). Another benefit to investors is the reduction of investment risk exposure through portfolio diversification. Furthermore, the wide range of mutual funds provides flexibility and diversity to meet the investment objectives of investors. Besides the benefits of MFs to individual investors, Obeng-Darko (2019) emphasized the advantages of liquidation, lower costs and tax efficiency to firms that invest in mutual funds. Also, Zu (2016) argued that, mutual funds have a positive impact on the financial sector in economies because the pooled funds boost cash flow to drive the general economy.

2.1.4 Demand for Mutual Funds

Mutual funds witnessed explosive growth in the 1990s in the United States and other developed countries around the world (Alexander et al. 2007). The global growth of mutual funds is as a result of the interaction of demand and supply. Demand for mutual funds derives from institutional investors and retail investors. Reid (2000), argued that an increase in demand for mutual funds in the United States was a reflection of a boost in demand for financial assets, rising equity prices

and stability in interest rates and inflation. In emerging markets, the demand for mutual funds has increased steadily. As economies develop, savings shore up and capital markets expand (Alesina et al. 2005). Also, mutual funds demand is influenced by the level of income and wealth of the market as argued by (Ibikunle and Steffen 2017) where he identified that unemployment had an inverse relationship to the performance of mutual funds. Similarly, (Klapper et al. 2012) argued that mutual fund is a luxury good which has a positive income elasticity of demand. Thus, as the income levels of investors increase, the demand for mutual funds also increases.

2.1.5 Challenges of Mutual Funds

Mutual funds over the entire world have been fraught with challenges. Whiles some of these challenges are country-specific, others strike a relation on a global front. Marco and Paolo (2010) assert that supply-side issues; characteristics of the financial service sector will affect the size of the financial services industry. Which is to say, regulation, market confidence, liquidity amongst other things often shape the industry. This point is further corroborated by Mayo (2013), that entry into the mutual fund industry is a function of the cost of setting up, the time required and the presence of government competitive products. Conversely, demand-side factors also share their challenges. Becker et al., (1999) identified that purchase decisions of mutual fund investors are influenced by salient attention-grabbing information; front end loads and commissions than operating expenses. A more country-specific challenge was reflected in the research of Anagol and Gamble (2013) on the Indian mutual fund industry. They identified that contrary to widely held assertions that limiting commissions reduce investment in mutual funds, there was no evidence a reform limited investment in the industry. Another challenge faced by mutual fund managers according to Zechner et al., (2011) is the payment of kickbacks by fund managers to multiple

financial advisors to compensate for price discrimination and marketing. These payments erode investor returns and increase portfolio manager fees.

2.2 Theoretical Review

The theoretical literature review presents salient theories underpinning the study. The theories discussed in this study are Agency theory, Efficient Market Hypothesis theory and Portfolio theory.

2.2.1 Agency Theory

Agency theory argues that in the modern corporation, in which share ownership is widely held, managerial actions depart from those required to maximize shareholder returns (Weinstein, 2012). The theory holds that the owners are principals and the managers are agents. Between these two actors lies a claim of interest; that returns to the owners fall below what would have inured to them had they acted in their stead. This is often referred to as agency loss. Often, an attributable reason is the conflict of interest and the inclination for higher incentives. Some writers have proposed mitigating factors for this phenomenon. A typical example is performance-related incentive schemes which are often tied to shareholder interests. To mitigate the conflict of interest by managers, corporate governance procedures recommend a separation of roles; that the CEO role must be separated from the board chair, else the interests of managers would be served first. England et al. (2014) identified these agents as Theory X; who often seek to maximize personal benefits and avoid punishment.

On the contrary, other agents are self-motivated intrinsically, need for recognition from peers, and self-actualization (Kronmal et al., 2015). However, where CEO duality is operated, the interests

of the CEO and shareholders must be aligned to mitigate this risk. Godos-Díez et al. (2011) opined that shareholders should demand a separation of CEO and Board Chair roles.

2.2.2 Efficient Market Hypothesis (EMH) Theory

The theory explains the concept of market efficiency. According to Malkiel (2013), capital market is said to be efficient if it fully and correctly reflects all relevant information in determining security prices. The theory employs two common approaches in its work. Technical Analysts study past stock prices to predict future prices and Fundamental analysts use company financial information to help investors select undervalued stocks. A frequently used term in this theory is called Random Walk. It asserts that subsequent price changes represent random departures from previous prices (Malkiel, 2013). This is so because, if information is readily available in the market (no information asymmetry), then today's prices only reflect today's news and are unrelated to what happened yesterday. Three market conditions give credence to EMH. A market is said to be in weak form if past information about security prices enable analysts to predict future price movements. Technical analysts often rely on historical information to give rise to the market in this form. This market condition, however, least helps to beat the market, to make superior returns.

Malkiel (2013) asserted that stock price behaviour in the past does not reflect its behaviour in the future. A semi-strong form market exists when analysts use current (publicly available) market information to reflect changes in stock prices. This is the most ideal of all the market conditions; markets are generally semi-strong because current information is largely reflected in stock prices as and when this information becomes available. Although fairly ideal, analysts can only beat the market to some degree. Fama and French (2010) conclude that empirical evidence is largely supportive of weak form and semi-strong form efficiency. Strong form market exists when all

information; both public and private is reflected in the stock price. Malkiel (2013) described earnings estimates, technical analysis and investment advisory services as 'useless'; that the best way to maximize returns is to buy and hold. This is because strong form markets rely on proprietary information. It is largely perceived that insider information will help analysts beat the market because the strong form market is too idealistic. However, the theory holds that insider information will not help investors to earn higher returns. Fama and French (2010), however, reported that stronger evidence of predictability in returns based both on lagged values and publicly available information. He noted that it was possible to operate in a strong form market.

2.2.3 Portfolio Theory

Markowitz (2013) developed what is known as the Modern Portfolio Theory (MPT) or Mean-Variance Analysis. This model maximizes expected returns for a given level of risk. The underlying theme is to avoid putting all eggs in one basket; holding a collection of different securities in an investment basket minimizes the aggregate risk than investing in just one type of financial asset. The theory assumes that risk-averse investors will often choose the less risky asset given two or more. Fabozzi et al., (2012) described the theory of portfolio selection as a normative theory; a standard or norm of behaviour that investors should pursue in constructing a portfolio, in contrast to a theory that is followed. Because risk and return are the motivating factors for portfolio, asset pricing theory such as Capital Asset Pricing Model (CAPM) formalizes the relationship between them. Diversification remains a central theme of portfolio theory (not putting all eggs in one basket). MPT quantifies this concept by introducing correlation and covariance. Diversification ensures that a well-constructed portfolio of securities inculcates the risk and return relationship of each asset in the basket, with others, whiles ensuring an optimized return fort the investor. Furthermore, Fabozi et al., (2012) asserted that it is unlikely the popularity of MPT will

wane anytime in the near or distant future. They assert that it will occupy a permanent place in the theory and practice of finance. However, critics emphasize that its model of financial markets does not match the real world. The analysis is based on expected values and does not capture the statistical features of risk and return. This could lead to inflated growth and reduced volatility.

2.3 Empirical Review

This section presents empirical review of the study in relation to the established objectives. Various researches have explored the link between mutual fund performance and investment decisions of fund managers as well as the factors that affect the investment decisions of mutual fund managers in Ghana. In this rendition, the empirical review is discussed in the following sections: Section 2.3.1 presents empirical studies on the performance of mutual fund in Ghana, Section 2.3.2 presents empirical studies on mutual fund performance and investment decisions of fund managers while Section 2.3.3 presents related studies on the factors that affect investment decisions.

2.3.1 Mutual fund performance evaluation in Ghana

Several studies have been carried out on the performance evaluation of mutual funds in Ghana. Borklo (2019) carried out a study to assess the impact of mutual funds towards increasing the financial gains of investors in Ghana by using Databank as a case study for the research. The study sought to find out investors knowledge about financial investments, why they subscribe to mutual funds and how mutual funds have actually improved their financial gains. The study found that in Ghana, majority of investors invest less than 25% of their total income and in low risk but high return investment and mutual funds. However, most of them rely on third party decisions before investing in mutual funds schemes.

Another study by Boahene (2015) evaluated the performance of the Anidaso Mutual Fund, which is managed by the New Generation Investment Services. The study sought to present a comprehensive trend analysis of the Anidaso Mutual Fund and evaluate it relative to the GSE index, the 91days Treasury bill and the Databank Epack. The comparative trend assessment showed that Anidaso mutual funds performed better than the GSE index in terms of its annual yield with the exception of 2011 and 2012, which saw a decline in its annual yield due to the global economic recession, which happened in the said years. A related trend was revealed by the fund and the 91-day T-bill, which proved that the performance of Anidaso mutual fund was more stable than the 91day T-Bill during the period under study. However, though the number of investors of the fund has increased over the past years, it has not translated into a significant increase in shareholders as compared to other mutual funds. Abaasewaa (2019) using the pooled OLS estimation opined that the stock market had the most profound effect on the overall performance of equity mutual funds in Ghana and in Nigeria. The study sought to evaluate the performance of equity mutual funds in Ghana and Nigeria from 2013 to 2017. It also found that the Nigerian equity fund market underperformed as compared to the Ghanaian equity funds.

Considering studies outside Ghana, Graham and Ribeiro-Navarrete (2020) compared the mutual fund performance of US and Europe by using a qualitative comparative analysis. The study revealed that the main difference between US and European mutual funds is that European funds exhibit a poor Sharpe ratio when fund managers have a long tenure. Moreover, US funds achieved good Profit when they have good Morningstar ratings, good analyst ratings, large size, low management fees, and low ongoing fees. European funds also achieved good Profit when they have good Morningstar ratings, good analyst ratings, large size, low management fees, low ongoing fees, and managers with long tenures. Comparing US and European mutual funds, both

United State of America and European funds achieve good profit under the same conditions, except that European funds must also have managers with long tenures.

2.3.2 Mutual fund performance and investment decisions of fund managers

Capon et al. (1996) examined investment decisions using consumer behavior as a proxy. The study defined consumer behavior as the purchasing decision of investors based on the information gathered. The study analyzed self-report data from 3386 mutual fund investors. The analysis focused on information sources and selection criteria employed in the investment process, and how these process dimensions affect both investment behavior and investor demographics. It was found that investors appear to focus on information sources and selection criteria that are not performance related. Hence, mutual fund managers should recognize the very real trade-offs in allocating resources to improve fund performance versus placing those resources to improve performance on a variety of other investor-related attributes. The results of the study also suggested that it is naive to assume that funds will necessarily flow to those mutual funds with the highest financial performance.

Jantarakolica and Moungnont (2017) assessed the investment decision-making stance on Thai Mutual funds. The research employed the behavioral finance concepts of self-control bias, overconfidence bias, loss aversion bias, mental accounting bias, and degree of risk aversion as measures of investment decisions. Employing the Multivariate Probit models in the experimental survey research using a sample size of 600 investors, the study found that behavioral finance factors are one of the determinants of investment decisions in mutual funds industry. Hence, the perceptions of fund managers are key in determining the investment decisions of investors as well

as performance. Jantarakolica and Moungnont (2017) recommended that fund managers should build their funds around factors that will motivate investors to invest in their funds.

Another study by Qiong et al. (2014) tends to examine how fund management team characteristics affect the performance and style adopted by the fund in their construction of an investment portfolio. The findings of the study postulated that fund managers with more degree and professional certificate holders tend to develop an investment decision style of constructing a risky portfolio. In another stance, large team size, large age diversity and long team tenure also have a positive influence on performance of mutual funds. The study further established that teams with large gender diversity and long team tenure prefer more extreme investment decision styles in their fund management.

In the US, Ammann et al. (2012) found a strong evidence for the presence of the disposition effect among US mutual fund managers. The study elaborated that fund managers with a lower disposition effect are found to invest in larger equities with a higher trade volume, a higher past performance, lower idiosyncratic risk, and a higher risk-adjusted performance. Ammann et al. (2012) in their study realized an influence of fund characteristics and economic environment on this disposition effect. However, their explanatory power is very less across mutual funds.

2.3.3 Mutual Fund Performance and Investment Decision Factors

A study by Mwobobia (2004) study sought to examine the factors that fund managers consider in making investment decisions. From the findings of the study, among the various factors that affect investment decisions of fund managers, certain factors are unique and specific to the various mutual funds, whereas other factors cut across the broad facets of funds. The factors that affect

investment decisions across mutual fund investments are risk, return, growth of capital amount, diversification, income stability and liquidity. However, all these factors were considered important to different degrees. This finding is consistent with the study of Farooq and Sajid (2015). The purpose of the study was to examine how behavioral factors; heuristics, risk aversion, use of financial tools and firm-level corporate governance affect the investment decisions of mutual fund managers in Pakistan. The study concluded that investment decisions made by fund managers are influenced by Heuristics, Use of financial tools and Firm level corporate governance.

2.4 Conceptual Framework

Conceptual framework refers to the organized and logical sequence that depicts the main tenets of the study (Fisher, 2007). This aids understanding as it presents a diagrammatic representation of the general and specific objectives of the study (Grant, 2015). The conceptual framework highlights the relationship of the variables under study, i.e. investment decisions, performance of mutual funds.

Figure 2. 1Conceptual Framework

Source: Author's Construct, 2020

2.5 Chapter Summary

Mutual fund and manager performance are integral to wealth management. The determinants for selection vary considerably from one manager to the other. Risk appetite, skillset and economic indicators significantly influence the choice of portfolio construction. Much of extant empirical evidence is limited to the geographical scope of the jurisdictions researched on. The subsequent chapters scale down the gap to a Ghanaian context.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the data and methodology applied to investigate the topic "assessing the impact of mutual funds' performance on investment decisions of fund managers in Ghana". The chapter is organised in five main sections as follows: Section 3.1 presents the research design that

the study follows, Section 3.2 provides the population of this study, Section 3.3 presents the sample size and sampling technique used in this study, Section 3.4 presents the data and data collection instruments used for this study, Section 3.5 presents the variables descriptions and measurements, Section 3.6 presents ethical consideration and the final section, 3.7 presents the chapter summary.

3.1 Research Design

The study adopted the quantitative research approach, which is generally associated with the positivist paradigm. It usually involves collecting and converting data into numerical form so that statistical analysis could be made and conclusion drawn (Creswell, 2014). The quantitative approach suited the study as it addressed research questions developed to be tested for possible outcome of variables (Amaratunga et al., 2002). This study also employed the descriptive research to define the state of nature at a point to depict the participants in an accurate.. Therefore, descriptive research was employed in this study to define and describe the investment decisions made by mutual fund managers and how they are being informed by the performance of the mutual funds in Ghana.

3.2 Population

The study was done with selected mutual fund companies in Ghana. The study involved mutual fund managers of the selected mutual fund companies in Ghana. The entire population of study comprises thirty-nine (39) mutual funds registered to the Securities and Exchange Commission (SEC) as at 2018. Thus, a total of 39 mutual funds represented the population of the study.

3.3 Sample Size and Sampling Technique

The purposive sampling technique was used to select the mutual funds and subsequently the mutual fund managers for the study. The main goal of the purposive sampling was to focus on a particular characteristic of the population that was of interest in the study, which will best enable research questions to be answered. Thus mutual funds that have been in existence and operating consistently from 2014 to 2018. Following this, the study sampled twenty-two (22) mutual funds for the study. In these 22 mutual funds, the study sampled one mutual fund manager from each mutual fund for the study.

3.4 Data and Data Collection Instruments

The study seeks to examine the investment decisions made by mutual fund managers and how they are informed by the performance of mutual funds in Ghana. Based on this premise, primary and secondary data were used for the study. Secondary data on mutual fund returns in Ghana from 2014 to 2018 were obtained from the Securities and Exchange Commission Annual Reports, mutual fund prospectors, and the websites of mutual fund companies. The motivation for this period was that, data on these mutual funds were readily available for the said period. Primary data was collected through questionnaires administered to fund managers of 22 selected mutual funds. Subsequently, the consent of the participants was sought and the interested participants were given questionnaires to answer through their emails.

The data collection instrument used in the study was a questionnaire. A structured questionnaire was adopted and divided into three parts. The first part of the questionnaire contained questions related to the demographic features of the respondents. The subsequent sections contained questions related to the objective of the study: the investment decisions fund managers adopt and

the third part contained questions related to the third objective; the key factors that influence investment decisions. The rationale behind adopting a questionnaire was to give the respondents the chance to elaborate on the topic under study.

3.5 Variables Description and Measurement

Investment Decisions: Investment decisions relates to how the funds of a firm are being invested into different assets, so that the portfolio of the mutual fund is able to yield the highest possible return for investors. Investment decisions have been measured using a unidimensional construct which was adopted from Farooq and Sajid (2015). Refer to appendix 1.

Treynor Performance Index: The Treynor ratio is a risk-adjusted measure of performance that measures the excess returns of a portfolio per each of the market risk. As a measure of market risk, the Treynor ratio uses the portfolio Beta as a measure of systematic risk. The Beta measures the unpredictability of the returns. Treynor's ratio is computed as:

Performance (Treynor ratio) is measured as $TREYNOR_i = \frac{R_p - R_f}{\beta}$

Where;

R_p = portfolio return

R_f = risk free rate

β = beta of the portfolio

The Sharpe Performance Index: The Sharpe ratio is a measure of performance that takes into consideration the excess return of the risk-free per unit of total risk. This total risk measures the

volatility in the price of the assets or the portfolio and is more appropriate for a well-diversified portfolio. The ratio employs the standard deviation of returns as a measure of risk and computed as:

Performance (Sharpe ratio) is measured as $SHARPE_{p_{i,t}} = \frac{R_{p_{i,t}} - R_{f_t}}{\theta p_{i,t}}$

Where;

- R_p = portfolio return
- R_f = risk-free rate
- δp = standard deviation of the portfolio
- Standard deviation (θ)= $\sqrt{\frac{\Sigma(r_i - r_{avg})}{n-1}}$

3.6 Ethical Consideration

Ethics is a code of conduct a researcher exhibit when gathering data from the respondents. In other words, ethics is an assurance a researcher gives to its respondent to remain loyal and protect their image from the public. This implies that their approach to gathering data should reflect on their behaviour. The participants were told of the purpose of the study before they were involved in the study. The respondents were given the leverage to decide to either partake or withdraw from the data collection process at any point in time. Also, participants of the study were assured that the information collected on them would be used solely for the study. The information they provided for the research was explained to the understanding of the respondents. The ethical consideration as per the ethical principles of research ethics states that no harm should befall any participant; participants should participate in their free will and on consent.

3.7 Chapter Summary

This chapter has presented in details the processes used to conduct the study. The study was based on the quantitative research approach. The study also used descriptive research design as it seeks to define and describe the investment decisions made by mutual fund managers and how they are being informed by the performance of the mutual funds in Ghana**.** This chapter also presented how the data have been collected and the data collection instruments used, the measurement of variables and the ethical consideration adopted in the study.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS

4.0 Introduction

This chapter presents the data and methodology applied to investigate the topic "assessing the impact of mutual funds' performance on investment decisions of fund managers in Ghana". The chapter is structured into six (6) Sections as follows: Section 4.1 presents preliminary evidence in terms of demographic information of the respondents whilst Section 4.2 presents results on performance of selected mutual funds. Section 4.3 presents results on investment decisions of fund

managers, Section 4.4 presents results on factors influencing investment decisions of fund managers, Section 4.5 presents discussions of results and Section 4.6 presents chapter summary.

4.1 Preliminary Evidence

This sub-section explains the demographic data of respondents to the questionnaires employed for the study. This includes the gender, age, educational status, types of funds, and work experience of managers. The results of the study showed that, out of the total number of twenty-two respondents who provided information for the study, fifteen were males while the remaining seven were females. The number of males represents a percentage of 68% while the total number of females represents 32 % of the population. With respect to the age of respondents, 50% of the respondents were between the ages of twenty six to thirty five years, 41% were between the ages of thirty-six to forty-five years and the remaining 9% were between forty-six to fifty-five years. The study also revealed that, more than half of the respondents, which is 64% of the respondents were post-graduate certificate holders and the remaining 36% of the respondents were first degree holders. Information provided by the participants of the study indicated that 59% of respondents were fund managers of money market funds representing majority of the respondents in the study. Consequently, 27% of the respondents were fund managers of balanced funds. The remaining 14% of the respondents were fund managers of equity funds. From the study, the majority of the respondents which is 36% have one to three years working experience as fund managers. Likewise, 32% of the respondents have five to ten years of working experience. Again, 18% of the respondents have more than ten years of working experience and the remaining 14% of the respondents have three to five years working experience. The results from the study are presented in Table 4.1.

Table 4. 1: Demographic Characteristics

Variables	Frequency	Percentage
Gender:		
Female	15	68
Male	7	32
Age		
26-35 years	11	50
36-45 years	9	41
46-45 years	2	9
Highest educational level:		
First Degree	42	36
Master's Degree	44	64
Years of engaging in the company:		
1 – 3 years	8	36
3 – 5 years	3	14
5 – 10 years	7	32
Above 10 years	4	8
Type of fund managed:		
Balanced fund	6	27
Equity fund	3	14
Money market fund	13	59

Source: Field Survey, 2020

4.2 Performance of mutual funds

A risk-adjusted measurement of performance is a vital evaluation tool for assessing the performance of mutual funds and in selecting the best performers and worst performers. In evaluating the performance of mutual funds, the Sharpe ratio and Treynor index were employed as measures for assessment. However, to allow for a better comparison and assessment of performance, the mutual funds were grouped into clusters using the types of funds; Equity Fund, Money Market Fund, and Balanced Fund.

4.2.1 Performance of mutual funds based on Sharpe Ratio

The Sharpe ratio of the funds provided information on the excess portfolio returns per unit risk taken of the various investments. Generally, the higher the Sharpe ratio, the more attractive the risk-adjusted return of the fund. Consequently, a higher Sharpe ratio is preferable when comparing a fund against another fund in terms of their performance. Considered in seclusion, a Sharpe ratio greater than 1.0 is considered very much acceptable by investors as it stipulates a better performance of the investment. On the other hand, a negative Sharpe ratio means that the performance of the portfolio was below the risk-free rate. The Sharpe ratio of mutual funds' performance is presented in table 4.2 below.

Table 4. 2: Performance of mutual funds based on Sharpe Ratio

Mutual Fund	Sharpe Ratio					Average
	2014	2015	2016	2017	2018	
Equity Mutual Funds						
EPACK	0.31	-0.78	-0.64	0.70	-0.68	-0.22
All-time	-0.39	0.49	1.13	3.17	-0.23	0.83
Fortune	-0.40	-0.31	-0.37	0.25	-0.18	-0.20
Anidaso	-0.12	-0.71	-0.11	0.86	-0.21	-0.06
CM	-0.95	-0.08	0.50	0.64	0.35	0.09
Heritage	-0.57	-0.81	-0.74	1.21	-0.86	-0.35
Omega	-2.74	-3.04	-2.37	0.81	-0.46	-1.56
Composite	Average					-1.1
Money Market Mutual Funds						

Mfund	0.13	-0.35	2.40	1.85	0.42	0.89
First	1.79	2.28	3.01	2.32	0.81	2.04
Gold	0.30	0.41	0.43	0.79		0.48
Omega	0.57	1.31	2.05	2.92	0.90	1.55
Sirus	-0.56	0.67	1.04	1.01	0.43	0.52
Composite Average						5.5
Balanced Mutual Funds						
C'Comm	-0.47	-0.68	-0.30	0.95	-0.54	-0.21
Arkfund	-0.69	-0.23	-0.36	1.11	-0.25	-0.08
Bfund	-0.56	-1.08	-0.43	1.19	-0.44	-0.26
EDC Bal	-0.57	-0.53	-0.48	1.65	-0.44	-0.07
EDC Kiddi	-0.08	-0.81	-0.73	1.74	-1.17	-0.21
Merban	-0.65	-0.37	0.02			-0.33
Edufund	-1.11	-0.66	-0.01	2.85	0.53	0.32
Horizon	-0.94	-1.09	-0.27	1.86	-0.98	-0.28
Composite Average						-1.1

Source: Field Survey, 2020

4.2.1.1 Performance of Equity mutual funds based on Sharpe Ratio

From Table 4.2 it was observed that choosing the fund with the maximum Sharpe ratio, the best performing equity mutual fund for the period under study was All-time Bond Fund, which recorded an average Sharpe ratio of 0.83. Also, the worst-performing fund was the Omega Equity Mutual Fund, which recorded an average Sharpe ratio of -1.56. However, on a year-on-year basis, 2014 had EPACK detailing a Sharpe ratio of 0.31 and being the top performer among all the equity funds. Anidaso Mutual Fund, All-time Bond Fund, Fortune Fund, Heritage Fund, Campus Mutual Fund, and Omega Equity Fund followed suit with a Sharpe ratio of -0.12, -0.39, -0.40, -0.57, -0.95, and -2.74 respectively. Conversely, all these funds performed below the benchmark of 1. Again, choosing the fund with the maximum Sharpe ratio in 2015 and 2016 indicates that, All-time Bond Fund is preferable to the other funds in those periods, with a Sharpe ratio of 0.49 and 1.13. An examination of the performance of 2015 and 2016 shows that it includes a lower performance of -3.04 and -2.37 by the Omega Equity Fund.

The year 2017 recorded the best performance among the sampled period with an average Sharpe ratio of 3.17, followed by 1.21. This top performance was registered by All-time Bond Fund and Heritage Fund respectively. Subsequently, the worst funds were Campus Mutual Fund and EPACK with a risk-adjusted return of 0.64 and 0.70 respectively. In 2018, the top-performing fund was Campus Mutual Fund, which recorded a low Sharpe ratio of 0.35 as compared to the top funds in previous years. Fortune Fund (-0.18), Anidaso Mutual Fund (-0.21), All-time Bond Fund (-0.23), Omega Equity Mutual Fund (-0.46), Databank EPACK (-0.68), and Heritage Mutual Fund (-0.86) followed suit. This low performance could be attributed to financial distress as a result of the financial sector cleanup. This saw many panic withdrawals by customers and investors not willing to invest more capital in mutual funds. Overall, the performance of the equity mutual fund reflects the performance of the stock market as the portfolio of the mutual fund investment is comprised of stocks of entities listed on the stock market.

4.2.1.2 Performance of Money market mutual funds based on Sharpe Ratio

Table 4.2 further presents the performance of money market mutual funds in Ghana as measured by the Sharpe ratio. On average for the period under study, First Fund exhibited tremendous performance from the year 2014 to 2018 with an average Sharpe ratio of 2.04. This was followed by the Omega Income Fund, which also recorded a Sharpe ratio of 1.55. An examination of their performance showed that these funds performed above the benchmark of one (1). In terms of the low performers, Gold Money Fund had the least with an average Sharpe ratio of 0.48. In a year-on-year comparison among the various funds in the money market, First Fund emerged as the top-performing mutual fund concerning its risk-adjusted profit of 1.79 in 2014. Omega Income Fund came second with a Sharpe ratio of 0.57. The other funds detailed a good performance except for

Sirus Opportunity Fund, which had a negative Sharpe ratio of -0.56. It is surprising to note that, subsequently in the years 2015 and 2016, First Fund recorded the best performance in terms of its returns of 2.28 and 3.01 respectively.

However, the Databank Money Market Fund and Gold Money Market Fund had the lowest performance in both years respectively with a Sharpe ratio of -0.35 and 0.43. Nevertheless, the year 2016 witnessed the money market funds showing impressive performance among the period under study. In 2017, Omega Income Fund recorded the highest performance with a Sharpe ratio of 2.92, which was followed by First Fund with a Sharpe ratio of 2.32. Also in the same year, Gold Money Market fund had a low performance though a positive Sharpe ratio of 0.79. Second to the year 2016, 2017 produced an impressive fund return for mutual funds in the money market. This performance could be a reflection of the change in governance, which however was not captured in the study. In the last year of the study period, the top-performing fund was Omega Income Fund, which recorded a low Sharpe ratio of 0.90 as compared to the top funds in the previous year. First Fund (0.81), Sirus Opportunity Fund (0.43), and Databank Money Market Fund (-0.86) followed in that particular order.

4.2.1.3 Performance of Balanced mutual funds based on Sharpe Ratio

This study reports an evaluation of the performance of Balanced Mutual Funds in Ghana as presented in Table 4.2. Averagely, the performance of the Balanced Mutual funds in Ghana did not perform the Money Market fund. This comes as Databank Educational Fund had an average Sharpe ratio of 0.32 making it the top-performing fund for the period under study. The second top-performing fund, EDC Balanced Fund, had an average negative Sharpe ratio of -0.07. The least performing fund had an average of -0.33. On a year-on-year basis, it was observed that in 2014

and 2015, EDC, Kiddi fund and Databank Ark fund registered as the top mutual fund respectively. They had risk-adjusted returns of -0.08 and -0.23 respectively. Though these funds emerged as top performers, they recorded a negative Sharpe ratio, which is below the risk-free rate. Subsequently, Databank Educational Fund and Horizon Fund were the worst performers in 2014 and 2015 respectively. They recorded a Sharpe ratio of -1.11 and -1.09 respectively. The low performance of Databank Educational fund can be attributed to the inception of its operation in the year 2014. The fund might have incurred a lot of costs in the said year. In 2016, Databank Educational Fund recorded a negative risk-adjusted return of -0.01. The least performing fund was EDC Kiddi fund, which had a negative Sharpe ratio of -0.73 followed by EDC Balanced Fund with a negative Sharpe ratio of -0.48. This low performance by both funds under the same Asset Management Company could be attributed to a firm-specific factor or factors that might have affected the performance of these funds.

Comparatively, in 2017, all the Balanced Mutual Funds had a good performance with all the funds recording a positive Sharpe ratio. However, Databank Educational Fund earned the returns by earning a Sharpe ratio of 2.85, which is above the Benchmark of 1. This was followed by Horizon Fund, which also earned a high Sharpe ratio of 1.86. Though being the fund with the lowest performance, Christian Community Mutual Fund earned a risk-adjusted return of 0.95. This exceptional performance could be attributed to the change in governance in the year 2017 as earlier stated. Lastly, in 2018, the top three performing funds were Databank Educational Fund (-0.53), Databank Ark fund (-0.25), and Databank Balanced Fund (-0.44). It can be observed these top-performing funds were all under the same Asset Management Company. Subsequently, Christian Community Mutual Fund (-0.54) and Horizon Fund (-0.28), were the least performing funds.

Considering all the funds concurrently, it was observed that the Money Market Fund witnessed an exceptional performance compared to the Equity Mutual Fund and Balanced Mutual Funds.

4.2.2 Performance of Mutual funds based on Treynor Ratio

The Treynor ratio of mutual funds is presented in the table 4.3 below.

Table 4. 3: Performance of mutual funds based on Sharpe Ratio

Mutual Fund	Treynor Ratio					Average
	2014	2015	2016	2017	2018	
Equity Mutual Funds						
EPACK	0.12	-0.30	-0.25	0.27	-0.26	-0.084
All-time	-0.22	0.28	0.64	1.80	-0.13	0.474
Fortune	-0.17	-0.13	-0.15	0.10	-0.07	-0.084
Anidaso	-0.05	-0.27	-0.04	0.32	-0.08	-0.024
CM	-0.44	-0.04	0.24	0.30	0.16	0.044
Heritage	-0.21	-0.29	-0.27	0.44	-0.31	-0.128

Omega	-2.16	-2.40	-1.87	0.64	-0.36	-1.23
Composite Average						-0.084
Money Market Mutual Funds						
M-fund	-0.45	1.25	-8.63	-6.65	-1.50	-3.196
First	-6.48	-8.24	-10.88	-8.39	-2.92	-7.382
Gold	0.57	0.77	0.81	1.51	-2.88	0.156
Omega	-0.59	-1.34	-2.10	-2.98	-0.92	-1.586
Sirus	0.24	-0.29	-0.44	-0.43	-0.18	-0.22
Composite Average						-2.4456
Balanced Mutual Funds						
C'Comm	-0.18	-0.26	-0.11	0.36	-0.20	-0.078
Arkfund	-0.27	-0.09	-0.14	0.43	-0.10	-0.034
B-fund	-0.20	-0.39	-0.16	0.42	-0.16	-0.098
EDC Bal	0.21	-0.19	-0.17	0.60	-0.16	0.058
EDC Kiddi	-0.04	-0.41	-0.37	1.88	-0.60	0.092
Edufund	-0.29	-0.17	-0.00	0.75	0.14	0.086
Horizon	-0.38	-0.44	-0.11	0.75	-0.39	-0.114
Composite Average						-0.01257

Source: Field Survey, 2020

4.2.2.1 Performance of Equity mutual funds based on Treynor Ratio

From table 4.3 above, EPACK performed well in 2017 with a Treynor index of 0.27 but recorded its worst performance in 2015 with an index of -0.30. All-time Bond Fund also recorded its highest risk-adjusted return in 2017 with a value of 1.80. This high risk-adjusted return also denotes the highest index recorded among the various categories of Equity mutual funds. However, a low Treynor ratio of -0.22 was recorded in 2014. Fortune fund as well did not perform well in the period under study. It recorded negative Treynor values in 2014, 2015, 2016, and 2018. Anidaso mutual fund performed well in 2017 with a Treynor index of 0.32 and a low index of -0.27 in 2015. Campus Mutual Fund witnessed an increase in the Treynor value from 0.24 in 2016 to 0.30 in 2017. However, its lowest performance measured up to an index of -0.44 in 2014. The best performing equity mutual fund for the period under study was the Heritage fund, which recorded a risk-adjusted return of 0.44 in 2017. It also recorded its worst performance in 2018 with a value

of -0.31. Finally, Omega fund had a high Treynor value of 0.64 in 2017. The remaining year's performance was very poor as likened to the other Equity mutual funds. In general, the Equity mutual funds showed an overall Treynor average value of -0.084.

4.2.2.2 Performance of Money market mutual funds based on Treynor Ratio

Table 4.3 provides a detailed assessment of the performance of Money market funds in Ghana. Databank Money Market fund performed well in 2015 with a Treynor index of 1.25 and an index of -0.863 in 2016 representing its worst performance in the period under study. First fund also recorded its highest Treynor value in 2018 with a value of -2.92. First Fund had its worst performance in 2016 when it recorded a risk-adjusted return of -10.88. The Gold Fund emerged as the best performing fund among the money market funds. It had the highest return in 2017 with a Treynor ratio of 1.51. It also recorded its worst Treynor ratio of -2.88 in 2018. Omega fund also performed well under the period under study. It recorded negative Treynor values throughout the period under study. Sirus Opportunity Fund performed well in 2014 with a recorded value of 0.24. It also recorded a low Treynor ratio of -0.44 in 2016. By and large, the Money Market Fund recorded an average Treynor ratio of -2.45. Comparatively, using the Treynor ratio as the measure of performance, the money market fund had the worst performance in the mutual fund industry.

4.2.2.3 Performance of Balanced mutual funds based on Treynor Ratio

This study reports an evaluation of the performance of Balanced Mutual Funds in Ghana as presented in Table 4.3. Averagely, the performance of the Balanced Mutual funds in Ghana did not perform well in the period under study. The average performance produced a risk-adjusted return of -0.01257. Comparatively, EduFund recorded an average Treynor ratio of 0.092 making it the top-performing fund for the period under study. The second top-performing fund, EDC Kiddi

Balanced Fund had an average Treynor ratio of 0.086. Again EDC Balanced fund had the third-highest Treynor value of 0.058. The least performing fund had an average value of -0.114. This low performance was recorded by Horizon Mutual Fund. On a year-on-year basis, it was observed that the Christian Community fund, Ark fund, B-fund, EDC Kiddi Balanced Fund, Edufund, and Horizon fund performed very well in 2017 than all the other years. Considering all the funds simultaneously, it was observed that the Equity Mutual Fund -0.084 witnessed an exceptional performance compared to the Money Market Fund and Balanced Mutual Funds which recorded -2.45 and -0.114 respectively.

4.2.3 Trend Analysis

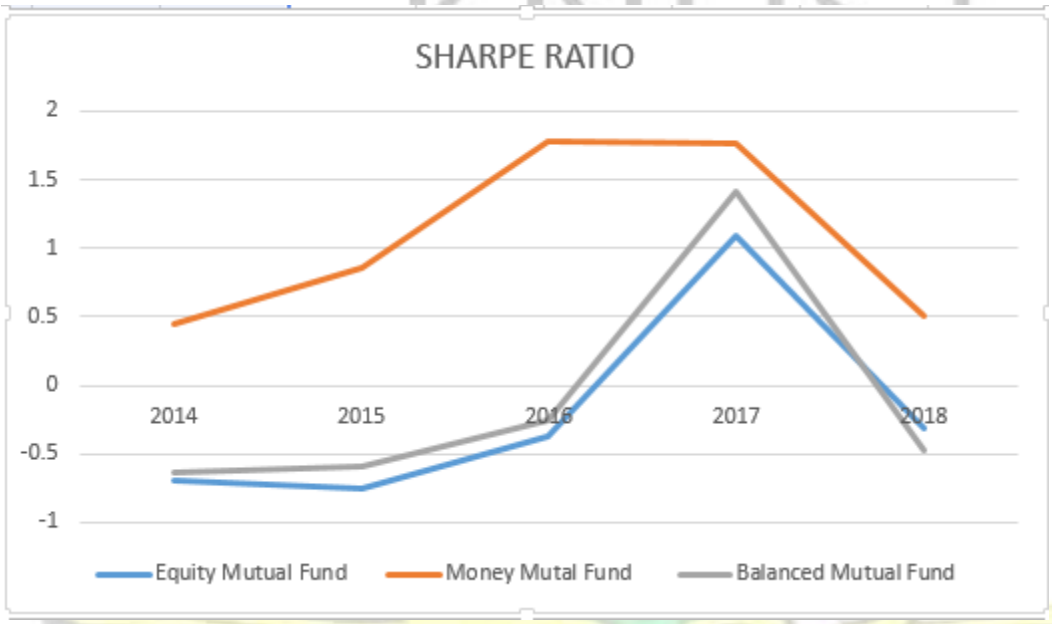
This part of the study presents the trend analysis of the performance of mutual funds for the period under study using the Sharpe and Treynor performance index.

4.2.3.1 Average Trend Analysis on Mutual Funds using the Sharpe Performance Index from 2014-2018

This part of the study presents the trend analysis of the variables under study. In trend analysis, time is deemed as a considerable factor. Figure 4.1 presents the trend analysis of mutual funds' performance using the sharpe ratio of equity mutual funds, money market mutual funds and balance mutual funds from 2014 to 2018. With reference to figure 4.1, the performance of money market mutual fund has been outstanding as compared to equity and the balanced mutual fund. The highest performance of the money mutual fund occurred in the year 2016 while it least performed in 2014. On the other hand, the equity and balanced mutual fund performance was abysmal with their yearly average performance contribution being unfavorable. From the trend analysis indicated in figure 4.1, one can conclude that the performance of the money mutual fund

was outstanding as compared to the equity and the balance mutual fund using the Sharpe Performance Index.

Figure 4. 1: Trend Analysis using Sharpe Performance Index: 2014-2018

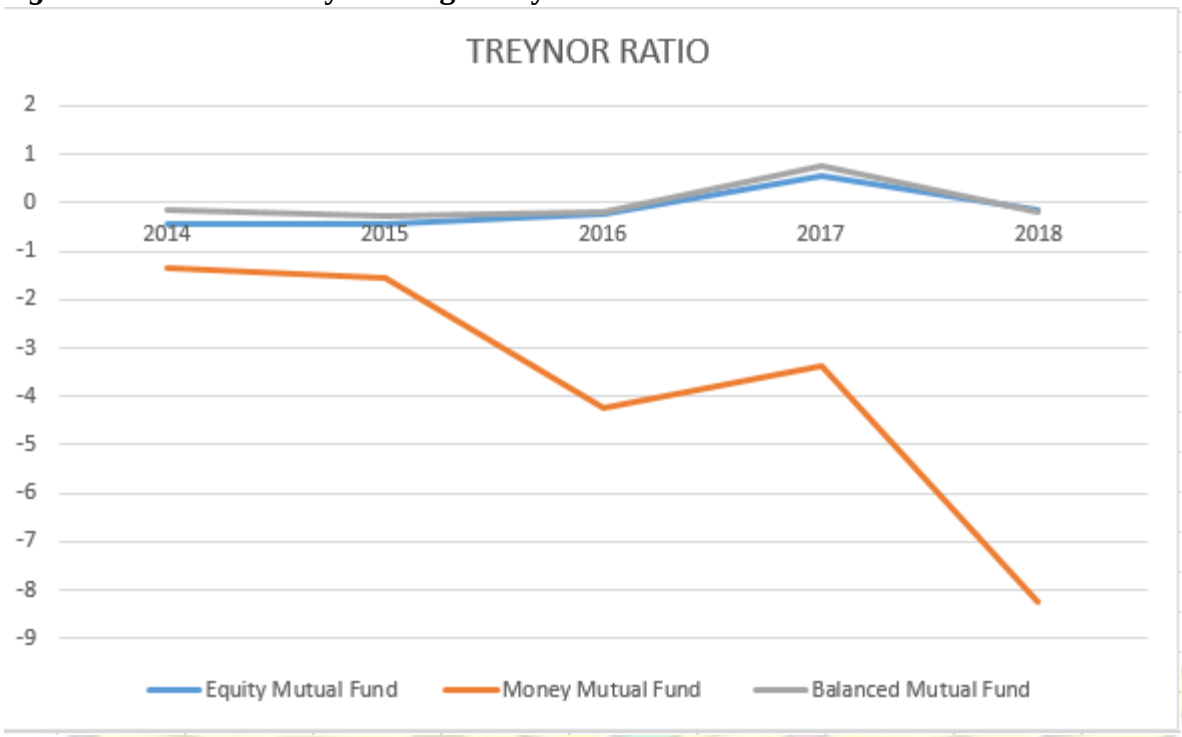


Source: Field Study (2020)

4.2.3.1 Average Trend Analysis on Mutual Funds using the Treynor Performance Index from 2014-2018

This section of the study presents the performance of the mutual funds using the Treynor ratio. Figure 4.2 presents the trend analysis on equity mutual funds, money market mutual funds and balance mutual funds from 2014 to 2018 using Treynor ratio. As indicated in Table 4.2, equity, money and balance mutual funds all experienced unfavourable performance almost across all the years under study. However, in 2017, the performance of equity mutual funds and balanced mutual funds witnessed peak performances. Though the 3 mutual funds' performances were not outstanding, however, using the Treynor ratio, the performance of the balanced mutual funds surpasses that of the equity and the money mutual funds. Figure 4.2 indicates the trend analysis of the mutual funds using the Treynor ratio from 2014-2018.

Figure 4. 2: **Trend Analysis using Trenyor Performance Index: 2014-2018**



Source: Field Study (2020)

4.3 Investment decisions of Fund Managers

4.3.1 Three key Investment Decisions of Fund Managers

Table 4. 4: Three Key Investment Decisions of Fund Managers

Decisions	Frequency	Percentage
Risk assessment, Portfolio selection and Taxation	6	27
Monitor financial market, Fund flow timing and Investment appraisal	5	23
Risk assessment, Investment appraisal and Dividend policy management	3	14
Market timing, Risk assessment and Portfolio selection	8	36

Source: Field Survey, 2020

From table 4.4, majority of the respondents which is 36% opined that, the three key investment decisions managers make as fund managers are market timing, risk assessment, portfolio selection decisions, 27% of the respondents stated risk assessment, portfolio selection and tax benefits decisions and 23% stated financial market monitoring, fund flow timing and investment appraisal

as the three key investment decisions. The remaining 14% of the respondents stated risk assessment, investment appraisal and dividend policy management decisions as the three key investment decisions.

4.3.2 Factors managers consider when choosing a firm to invest in

Table 4. 5: Factors managers consider when choosing a firm to invest in

Factor	Frequency	Percentage
Liquidity	4	18
Listed on the Stock Exchange and Professional management	8	36
Professional Management, Liquidity and Good corporate	3	14
Profit and Dividend	7	32

Source: Field Survey, 2020

From Table 4.5, it was observed that 36% of respondents considered firms listed on stock exchange and professionally managed as a factor when deciding on a firm to invest in whiles 32% of the respondents considered profits and dividend payments of firms. Moreover, 18% of the respondents considered the liquidity positions when deciding on a firm to invest in whiles the remaining 14% of the respondents considered professional management, liquidity, and good corporate governance practices of firms to invest in.

4.3.3 Factors Managers consider when choosing securities for an investment portfolio

Table 4. 6: Factors Managers consider when choosing securities for an investment portfolio

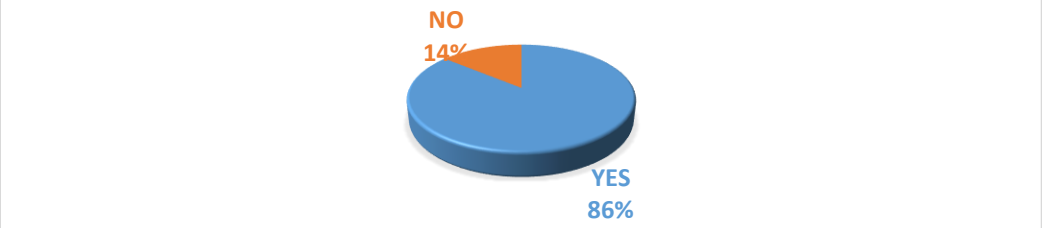
Factors	Frequency	Percentage
Stability in returns	6	27
Investors' expectation	4	18
Tax Benefits	2	9
Low risk and moderate returns	7	32
High risk and high returns	3	14

Source: Field Survey, 2020

From table 4.6, majority of the respondents representing 32% stated that, the factors they consider in choosing securities for investment are low risks and moderate returns and 27% of the respondents considered stability in returns. Also, 18% stated investors' expectation, 14% stated high risk and high returns and the remaining 9% stated tax benefits as factors considered when choosing securities for investment.

4.3.4 Application of tools and techniques in assessing investment decisions

Figure 4. 3: Application of tools and techniques in assessing investment decisions

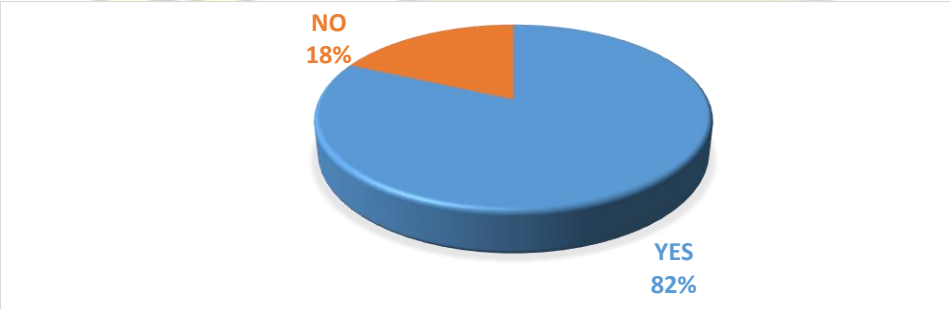


Source: Field Survey, 2020

From figure 4.3, 86% of the respondents answered "YES" to the question that managers apply relevant tools and techniques in assessing investment decisions and the remaining, 14% of the respondents answered "NO".

4.3.5 Application of science and art skills in making investment decisions

Figure 4. 4: Application of science and art skills in making investment decisions



Source: Field Survey, 2020

From figure 4.4, majority of the respondents which is 82% answered "YES" to managers' use of science and art skills in making investment decisions and the remaining 18% of the respondents answered "NO".

4.3.6 Perceptions on investment decisions

Results of perception questions on investment decisions made by fund managers are presented in Table 4.7. This measures how investment decisions take into consideration the investment objectives, the strategies adopted by the asset management company, and whether they are in line with certain externalities.

Table 4. 7: Perceptions on Investment Decisions

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
You make investment decisions based on the investment objectives of the fund.	32%	18%	23%	23%	4%
Fund Manager biases influence investment decisions.	18%	41%	23%	14%	4%
Investment confidence of clients is built on the profile of fund managers.	23%	36%	18%	14%	9%
Investment strategies change with time and market conditions.	36%	14%	9%	23%	18%
A large investment team affects the quality of research, decision making, and responsibility.	4%	32%	23%	27%	14%

Source: Field Survey, 2020

Table 4.7 presents responses to all five questions from twenty two respondents. When the respondents were asked "You make investment decisions based on investment objectives of the

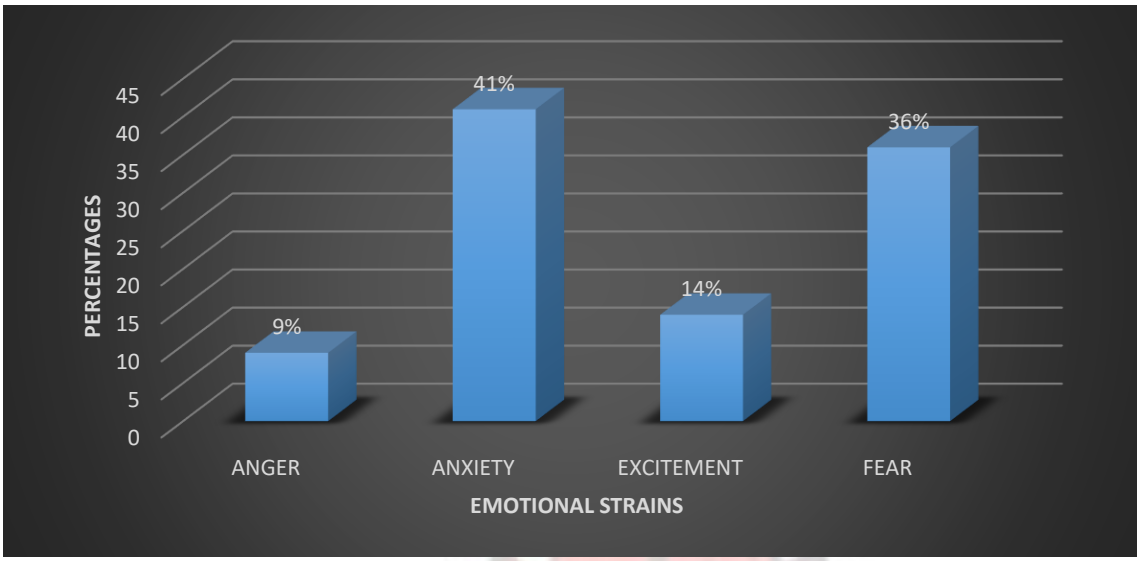
fund" it was found that, majority of the respondents which is 32% of the respondents strongly agreed with the statement, 23% of respondents disagreed with the statement, 23% of respondents remained neutral on the statement, 18% of the respondents agreed with the statement and 4% of the respondents strongly disagreed with the statement. For the statement, "Fund managers' biases influence investment decisions", 41% of the respondents agreed with the statement, 18% of the respondents strongly agreed with the statement, 23% of the respondents remained neutral on the statement, 14% of the respondents disagreed with the statement and the remaining 4% of the respondents strongly disagreed with the statement.

For the statement, "Investment confidence of clients is built on the profile of fund managers", the majority of the respondents, which is 36% agreed with the statement, 9% of the respondents strongly disagreed with the statement, 23% strongly agreed with the statement, 14% disagreed with the statement and 18% remained neutral on the statement. For the statement, "Investment strategies change with time and market conditions", out of the twenty two respondents', 36% of the respondents strongly agreed with the statement, 14% agreed with the statement, 23% disagreed with the statement, 18% strongly disagree with the statement and 9% remained neutral on the statement. For the statement, "A large investment team affects the quality of research, decision making and responsibility", out of the twenty two respondents, 32% of the respondents agreed with the statement, 4% strongly agreed with the statement, 27% disagreed with the statement, 14% strongly disagreed with the statement and 23% remained neutral.

4.4 Factors influencing Investment Decisions of Fund Managers

4.4.1 Emotional Strains Factors

Figure 4. 5: Emotional Strains

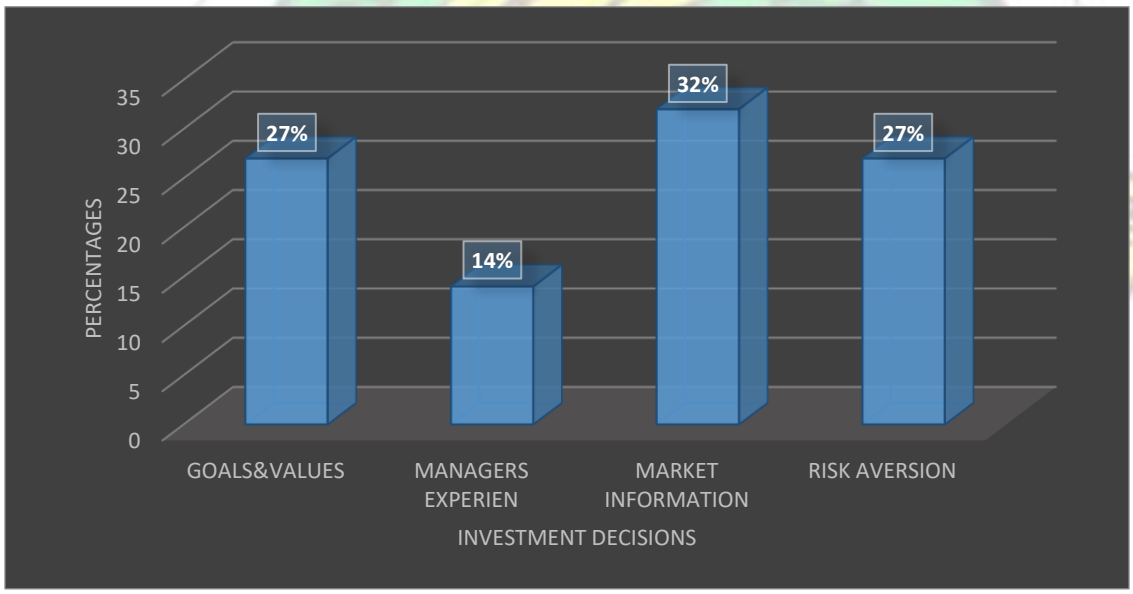


Source: Field Survey, 2020

From figure 4.5, 41% of the respondents claimed "anxiety" as an emotional strain that will have an effect on making rational investment decisions, 36% of the respondents stated "fear", 14% stated "excitement" and the remaining 9% of the respondents stated "anger" as the emotional strains that have effects on making rational decisions.

4.4.2 Bias Factors

Figure 4. 6: Factors that lead to bias investment decision making



Source: Field Survey, 2020

From the figure 4.6, majority of the respondents, 32% attributed "market information" as the main factor that lead to bias in making investment decisions, 27% of the respondents stated "corporate goals and values", 27% stated "risk aversion" and the remaining 14% of the respondents attributed "managers' experience" as a factor that can result in biased investment decisions.

4.4.3 Obstacles to the success of investment portfolio

Table 4. 8: Main Obstacles to the success of investment portfolio

Factors	Frequency	Percentage
Inadequate managerial skills	4	18
SEC regulations	5	23
The Economy	8	36
Investment drive	3	13
Taxation	2	9

Source: Field Survey, 2020

From Table 4.8, majority of the respondents being 36% stated that the main obstacle to the success of investment portfolio in general is the "economy". Additionally, 23% of the respondents cited "SEC regulations", 18% of the respondents stated "inadequate managerial skills", 13% of the respondents stated "investment drive" and the remaining 9% of the respondents stated "taxation" as a main obstacles to the success of investment portfolio.

4.5 Discussion of Findings

4.5.1 Performance of Some selected funds in Ghana from 2014 to 2018

From Table 4.2 and 4.3, an evaluation was done by computing the Sharpe Ratio and Treynor indexes for the selected mutual fund in the period under study. From the analysis it was evident that, in using the Sharpe ratio to compare the performance of selected mutual funds, money market

funds witnessed an exceptional performance than equity funds and balanced funds. However, using the Treynor index to compare the performance of selected mutual funds, equity funds witnessed exceptional performance in the period under consideration. Generally, the year 2018 recorded low values for both Sharpe and Treynor indexes. This could be attributed to the storm that broiled the financial system of Ghana which led to the collapse of many fund management companies, universal banks and non-bank financial institutions.

4.5.2 Investment Decisions of Mutual Fund Managers in Ghana

The second aim of the study also tried to find out the investment decisions adopted by mutual fund managers in Ghana. Results from the study showed that, investors' confidence in fund management firms is based on the profile of fund managers and such profile is boosted by the decisions fund managers make. The decisions FMs make require a combination of science and art skills. Thus relevant tools and techniques vis-à-vis the behavioural perspectives of FMs are employed in making investment decisions. From the study, fund managers execute three key investment decisions, namely; Market Timing decisions, Risk assessment decisions and Portfolio selection decisions. However, other investment decisions such as investment appraisal, financial markets monitoring, fund flow timing among others were also brought to fore by the study. From the study, fund managers consider firms listed on the GSE and professional management when choosing a firm to invest. Similarly, the study found that, FMs prefer securities with low risk and moderate returns.

4.5.3 Key factors influencing Investment Decisions of Fund Managers in Ghana

From the study, the three key factors influencing investment decisions were the economy, market information and fund managers' anxiety. These findings are however inconsistent with the study

of Mwobobia (2004) that found that there are unique and specific factors that influence the different categories of mutual funds. The difference in findings could be due the geographical differences in the mutual funds. Ghana, an emerging economy cannot boast of robust financial systems to withstand changing economic variables. Changing economic variables require FMs to alter their decisions to reflect such changes in order to offer value for their investment portfolio. This was emphasized by Dougan (2019) in establishing the relationship between mutual funds return performance and the benchmarks (stock market, exchange rate and interest rate). It is therefore imperative for mutual fund managers to grasp the skill of macro-economic literacy in making investment decisions.

The study also found that, market information also influences investment decisions of mutual fund managers. Efficient Market Hypothesis posits that capital markets are efficient, but empirical investigations conducted by Mahmood et al. (2011) contradicted this theory by stating that capital markets are not efficienct due to certain discrepancies of the market. From the study, access, quality and timeliness of market information are key determinants influencing investment decisions of fund managers. The study found that, biases influence fund managers' investment decisions and a key bias identified in the investment decision process was "anxiety". According to Gu et al. (2010), anxiety is an attentional bias toward threat-related information and to evaluating ambiguous stimuli as negative ones. The anxiety state of fund managers influences investment decisions which may result in either positive or negative outcomes.

4.6 Chapter Summary

The chapter analysed data from both primary and secondary sources to satisfy the research objectives. Secondary data of mutual funds were analysed to assess the performance of mutual

funds over the stipulated period. Primary data were also analysed to ascertain investment decisions and factors that influence investment decisions of fund managers. The chapter also highlighted discussions made on the findings of the study.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the major findings obtained from conducting the entire study. The chapter is divided into four main sections; Section 5.1 presents a summary of the findings of the study, Section 5.2 is dedicated to conclusion that can be made based on the findings of the study, Section 5.3 provides recommendations of the study, Section 5.4 presents suggested areas of future research and Section 5.5 presents the Summary of the chapter.

5.1 Summary of Findings

Due to varied benefits such as diversification, professional management, liquidity, and the convenience that investors derive from mutual funds, empirical research argued that this has led to increased growth in investment patterns in mutual funds in emerging economies like Ghana.

This performance is of interest to participants of the mutual fund industry, especially investors, and fund managers. Just as investors depend on past performance to make investment decisions, the investment decisions of fund managers are informed by the performance of the funds they manage. Consequently, investment decisions could be influenced by personal factors or technical factors. Therefore, this study sought to examine the impact of the performance of mutual funds on the investment decisions of mutual funds. Using a descriptive research design, 22 mutual fund and mutual fund managers were employed as respondents in the study. The target population for the study from which data are collected comprises licensed mutual fund companies with the Security and Exchange Commission. Structured questionnaire was the main instrument used to gather primary data. The Statistical Package for Social Sciences (SPSS) and Excel were used to analyze data to generate key findings. The Sharpe ratio and Treynor ratio were employed as the measures for risk-adjusted-performance. The key findings from the study have been presented in section 5.1.1 to 5.1.3

5.1.1 Performance Evaluation of Mutual Funds in Ghana

Concerning the performance of the mutual funds selected for the study, some of the funds performed better than the others. From the analysis it was clear that using the Sharpe ratio in comparing the performance of the selected mutual fund, the study found that money market funds witnessed an exceptional performance than equity mutual funds and balanced mutual funds from 2014 to 2018. However, the result found that with the Treynor ratio, the best performing mutual fund was equity mutual funds, which recorded the highest average ratio of -0.084. The first objective of the study was to analyze the performance of some selected mutual funds in Ghana from 2014 to 2018 which has been duly addressed.

5.1.2 Investment Decisions adopted by Mutual Fund Managers in Ghana

The study has established that, Market Timing decisions, Risk assessment decisions and Portfolio selection decisions are the main investment decisions FMs make in Ghana. Notwithstanding, the study found that FMs make other investment decisions such as investment appraisal, financial markets monitoring and fund flow timing. The second objective of the study was to examine the investment decisions of mutual fund managers in Ghana which has been addressed extensively.

5.1.3 Key Factors that influence Investment Decisions of Fund Managers in Ghana

From the study, the three key factors influencing investment decisions were the economy, market information and fund managers' anxiety. The study hence concludes that this market information is heavily influenced by the efficiency of the market. The third objective of the study was to investigate the three key factors influencing investment decisions of mutual fund managers which have been adequately addressed by the study.

5.2 Conclusion

This study was conducted to assess the impact of mutual funds' performance on investment decisions of fund managers. Based on the results of the study, the conclusion of the first objective of the study is that using the Treynor index to compare the performance of selected mutual funds, equity funds have had exceptional performance in the period under consideration as compared to the other types of mutual funds in Ghana. Similarly, the money market funds had a remarking performance as compared to the other mutual funds in Ghana when using the Sharpe ratio as a measure of performance. However, due to the crisis that hit the financial system of Ghana, 2018 witnessed mutual funds exhibiting low performance. The conclusion of the second objective is that the investment decisions mutual fund managers in Ghana exhibit in their portfolio management

are Market Timing decisions, Risk assessment decisions and Portfolio selection decisions. In the application of investment decisions, fund managers consider the listing of assets and the professional management of firms as well. Finally, about the third objective, the study concludes that the three key factors influencing investment decisions were the economy, market information and fund managers' anxiety.

5.3 Recommendations

Given the above conclusion, the following recommendations are worthy of considerations. Mutual fund managers should make a constructive effort to construct a good portfolio in the equity market since the best performing funds were the equity mutual funds as per the findings of the study. A good portfolio in the equity market will mean that fund managers will earn high returns from their investment in the stock whiles they minimize their risks as well.

Moreover, since the economy is one of the drivers of the investment decisions made by fund managers, mutual fund managers should assess and consider those macroeconomic variables that are pertinent in the economy and affects the activities of financial markets before making investment decisions. A Market watch kept on them will support the investment decisions of fund managers. The study also recommends that SEC should protect investors by putting in strict measures to check the investment decisions of mutual fund managers. This will guide the decision making of fund managers.

5.4 Suggested Areas for future Studies

This study examined the investment decisions of mutual fund managers. It, therefore, suggested that further studies can explore the impact of mutual fund performance on the investment decisions

of investors in Ghana. This is because investors form part of the relevant stakeholders in the mutual fund industry in Ghana. Further studies could also employ other measures of risk-adjusted returns like the Jensen Alpha or Information ratio as a measure of performance.

5.5 Chapter Summary

This chapter has presented the summary of findings, conclusions and recommendations on the impact of mutual funds' performance on investment decisions of fund managers in Ghana. The study found that using Sharpe ratio in comparing the performance of the selected mutual funds, Money Market Funds witnessed an exceptional performance than Equity Mutual Fund and Balanced Mutual Funds. However, the results were different using the Treynor ratio, with the best performing mutual fund being Equity Mutual Fund which recorded the highest average ratio of -0.084. The study found that, Market Timing decisions, Risk assessment decisions and Portfolio selection decisions are the main decisions FMs make in Ghana. The study also revealed "economy, market information and fund managers' anxiety" as factors influencing investment decisions. The study has brought to fore key issues in the mutual fund industry and as such, made recommendations that require the Fund managers, economic managers and regulators.

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APPENDIX 1: QUESTIONNAIRES

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF GRADUATE STUDIES

QUESTIONNAIRE

TOPIC: THE MAIN OBJECTIVE OF THIS STUDY IS TO ASSESS THE IMPACT OF MUTUAL FUNDS' PERFORMANCE ON INVESTMENT DECISIONS OF MUTUAL FUND MANAGERS IN GHANA.

PREAMBLE

The main objective of this study is to assess the impact of mutual fund performance on investment decisions of fund managers. The study is mainly for academic purposes. Participants are assured of utmost confidentiality regarding information provided by them.

DIRECTIONS: Please indicate your response to each question by selecting the most appropriate answer for each question.

Section A: Demography

1. Gender: Male [ ] Female [ ]

2. What is your age bracket?

18-25 [ ] 26-35 [ ] 36-45 [ ] 46-55 [ ] 56 and above [ ]

3. What is your highest educational level High School [ ] Diploma [ ] Bachelors [ ] Post Graduate [ ]

4. What type of Mutual fund do you manage?

Equity Fund [ ] Money Market Fund [ ] Balanced Fund [ ] Other……..

5. What is your overall experience in fund management?

1 – 3 years [ ] 3 – 5 years [ ] 5-10 years [ ] 10years and above [ ]

Section B: To examine Fund Managers' investment decisions

6. Which of the following factors do you take into consideration when choosing a firm to invest in?

Listed on a stock exchange [ ] Professional management [ ] Profits and Dividends [ ]

Liquidity [ ] Market Share [ ] Social and Environmental issues [ ]

Good Corporate Governance [ ] Diversification [ ]

7. Which of the following factors do you take into consideration when choosing securities for an investment portfolio?

Stability in returns [ ] Low risk and moderate returns [ ] High risk and high returns [ ]

Investor Expectation [ ] Tax Benefits [ ]

8. Where do you gather information about the performance of different investment schemes?

Financial Institutions [ ] Financial Consultants [ ] Annual Reports [ ] Internet [ ]

9. What exit route from portfolio investment companies do you see as offering the potential for the highest financial return?

Divestment on flotation (IPO) [ ] Trade Sale [ ] Sale to financial institution [ ] Sale of quoted equity post flotation [ ] Divestment by other means [ ]

10. Does the investment mandate provide the tools to achieve an investment objective in different parts of a market cycle?

Yes [ ] No [ ]

11. Are the manager's investment philosophy and style consistent with its ownership structure, incentive structure, team structure and fund capacity?

Yes [ ] No [ ]

12. Are Investment decisions assessed and measured by relevant tools and techniques?

Yes [ ] No [ ]

13. Do Fund managers employ a combination of science and art skills in making investment decisions?

Yes [ ] No [ ]

14. What are the 3 key investment decisions you make as a fund manager?

……

……

…….....

15. Do you have an effective investment decision process? If yes what are the processes

……

……

…….....

Section C: **To investigate the key factors influencing investment decisions of fund managers**

Question	**Strongly Agree 1**	**Agree 2**	**Neutral 3**	**Disagree 4**	**Strongly Disagree 5**
16. You make investment decisions based on investment objectives of the fund.					
17. Fund Manager biases influence investment decisions.					
18. Investment confidence of clients is built on the profile of fund managers.					
19. Investment strategies change with time and market conditions.					
20. A large investment team affects the quality of research, decision making and responsibility.					

21. Which of the following emotional strains will have an effect on making rational decisions?

Anger [ ] Anxiety [ ] Excitement [ ] Fear [ ]

22. Which of the following is likely to lead to bias in making investment decisions?

Manager Experience [ ] Market Familiarity [ ] Risk aversion [ ] Corporate Goals and Values [ ]

23. What would you say are now the main obstacles to the success of your portfolio in general?

The economy [ ] Investment drive [ ] Taxation [ ] SEC regulations [ ] Inadequate managerial skills/expertise [ ]