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# IMPACT OF BEHAVIORAL BIASES ON INVESTMENT DECISIONS: A STUDY OF EMERGING ECONOMY INVESTORS

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**Abstract**

In addition to financial aspects, psychological factors play an increasingly important role in investment decision making in emerging economies. The current study explores the effect of behavioural biases on investment decisions made by investors in emerging markets, characterized by increased market volatility, low financial literacy, and information asymmetry. Relying on the behavioural finance principles, the present work attempts to investigate the way in which psychological factors distort the investment decision process. The theoretical framework underlying the present research will be provided by Behavioural Finance Theory and its postulates, such as bounded rationality and heuristics in decision-making processes. It is assumed that investors behave irrationally owing to their constant biases, including overconfidence, loss aversion, herding, anchoring and availability biases. Such irrational behaviour impacts several aspects related to investment decisions, such as asset selection, risk perception, timing of entering/leaving the market and portfolio composition. The conceptual approach used in the study involves treating behavioural distortions as independent variables and investment decision effectiveness as the dependent variable. Market experience, financial literacy level and demographic characteristics become moderating variables. According to the assumptions put forward by the author, behavioural factors have an intensified effect on investors in emerging markets due to inefficiencies of institutions and financial markets. Thus, by using behavioural finance theories, the researcher seeks to elaborate on the impact of psychological aspects on investment decision making in emerging markets. The results obtained within the scope of the current research are anticipated to contribute to the existing body of knowledge and offer insights into the ways of making effective decisions and increasing financial literacy.

**Keywords:** Behavioural Finance, Investment Decisions, Cognitive Biases, Emerging Economies, Overconfidence, Herding Behaviour, Loss Aversion

## 1. Introduction

The customary view holds that individuals make their investment decisions rationally, an assumption made in Classical Finance Theory or the Efficient Market Hypothesis (EMH). Investor rationality can be understood as an assumption that investors process the available information in a rational fashion and make their decisions to maximize expected return and minimize risk. In general, systematic deviations from rationality have been observed and are largely due to the effects of human psychology and emotions. Behavioural Finance is a field of study that seeks to explain why investors make irrational financial decisions and are influenced by cognitive biases. It is an intersection of psychology and finance.

The behavioural biases of investors in developing countries are especially important, as the financial markets of developing countries are not as well developed and have a higher level of information

asymmetry. This is due to investors in developing countries having very low levels of financial literacy, facing a high volatility in markets, and inefficient institutions. Although investors in developed markets have professional financial advice, rich analytical and market data, and investment tools, investors in emerging markets have more limited access to these resources and rely on heuristics, social and peer effects, and prior experience, which leads to biases such as overconfidence, herding, anchoring, and loss dislike. Overconfidence bias occurs when investors have a greater confidence in their information and knowledge than is merited, leading to both excessive trading and optimism (T.G. Pavani & M. V. Alagwadi, 2023). Herding behaviour occurs when an investor tries to mimic the decisions and actions of a larger group, particularly in times of uncertainty. Anchoring bias is the tendency to put disproportionate weight on the first information available, while loss dislike, a part of Prospect Theory, indicates that losses loom larger than gains. Both contribute to market anomalies, mispricing of financial assets and more volatile markets, though these effects are more pronounced in less developed and emerging financial markets.

In the context of developing markets, behavioural biases are important to understand as they can impact both individual investors and the stability of markets as a whole. Individual investors' poor investment decision-making as a result of behavioural biases not only reduces their own financial returns, but may reflect inefficient behaviours at the market level if similar biases are common across a large group of investors. Understanding biases can inform financial institutions, policymakers and regulators towards increased investor education and market efficiency. This study takes a case study approach to examine behavioural biases that influence the investment behaviour of investors from emerging markets. Case study method stresses real-world investment cases and experiences to provide an in-depth understanding of the role of psychological factors in shaping investment behaviour. The case study methodology also allows researchers to incorporate variation between individual variables and contextual factors, which quantitative modelling may not do.

Therefore, this study also adds to the existing literature in its examination of behavioural finance theories in an emerging market context, as most research has focused on the presence of these biases in developed markets with little focus on emerging markets. The contribution of this research extends beyond the theoretical domain, with practical implications for the improvement of investment decision-making processes. In short, as the globalization and integration, as well as the complexity of financial markets, continue to rise, the limitations of rational models become clear, and behavioural biases are not exceptions to the typical value-maximizing rule. It is thus essential that the behavioural aspects of investors' decision making are fully incorporated to bring about more realistic and effective outcomes especially in emerging economies.

## 2. Literature Review

Behavioural finance has been proposed as an alternative field to study the implausible and unrealistic assumption that investors are rational and will process information efficiently. A Survey of Behavioural Finance by Barberis and Thaler is influential in the field of behavioural finance. It states that modern finance has two pillars: limits to arbitrage and predictable psychological biases. Their work was influential in establishing that market outcomes cannot be understood entirely within a rational framework, but that prices and trading are often driven by sentiment, framing, and cognitive biases.

The intellectual roots of this genre are associated with Daniel Kahneman and Amos Tversky, who in their 1974 paper entitled Judgment under Uncertainty: Heuristics and Biases showed how people use representativeness, availability, and anchoring heuristics to make judgments under uncertainty and how they lead to predictable systematic errors. In finance, this framework is applied to modelling human decisions in investing, where humans have poor information on the value of securities and typically use reference points, such as past prices, news, or familiarity with certain products. In their later paper, Prospect Theory: An Analysis of Decision under Risk (1979), Kahneman and Tversky define loss dislike as the principle that losses weigh greater than gains. This has been used to explain why investors may hold losing positions too long, or be overly conservative after a market downturn.

Hersh Shefrin is generally credited with applying psychological concepts to finance. In his book Beyond Greed and Fear: Understanding Behavioural Finance and the Psychology of Investing, Shefrin relates the psychology of investors to portfolio selection behaviour, market anomalies and corporate finance. The book helped to move behavioural finance research results from the theoretical domain to real-world investment decisions by examining the role of overconfidence, regret, mental accounting, and self-control problems in investment decisions. Likewise, John R. Nofsinger's The Psychology of Investing became a standard investment textbook that shows how biases affect investment sentiment, trading, and perception of risk in practice. Richard H. Thaler, another architect of the field, wrote the book Misbehaving that tells how behavioural economics came to be and details the reasons that real-life humans fall short of the rational actor model. Although his work extends beyond finance, Thaler's contributions are especially relevant to investors since they identify predictable judgments and self-control problems, and how these are reflected in perceived value. In this category of literature, the book Irrational Exuberance by Robert J. Shiller introduced behavioural finance into the mainstream financial conversation. Shiller explained that speculative bubbles arise from social contagion and psychological overreaction rather than from fundamentals. Shiller's analysis is particularly relevant to case study research, since it documents how collective beliefs and market narratives guide investor behavior during booms and busts.

Subsequent research has examined whether findings in developed countries generalize to emerging markets, where institutions may be weaker, financial literacy lower, and uncertainty higher, rendering biases more pronounced. A 2024 study of investors on the Pakistan Stock Exchange found that participants are influenced by anchoring, overconfidence, and herding, though financial literacy attenuated overconfidence and herding effects. In line with the above, a 2023 study of equity investors in India shows that while financial literacy improves the quality of financial choices, herding and overconfidence mediate investor choice behaviour. It was observed that financial literacy overconfidence increases the risk-seking attitude of individual investors (T.G. Pavani & M. V. Alagwadi, 2023). The results have important implications, indicating that behavioural finance biases are not only found in developed markets, but also in the emerging market context.

Such literature reviews illustrate that this is an established area of research. A review in the Journal of Economic Surveys published in 2023 describes behavioural finance as the extension of classical theory, including overconfidence, loss dislike, herding, and framing as topics of interest. A literature review by Pavani and Alagwadi (2023) consolidates key developments in traditional and behavioural finance, emphasizing how behavioural theories address limitations of the rational investor paradigm. A 2024 literature review assessing over 100 studies on the topic concluded that financial overconfidence remains one of the most persistent explanations for excessive trading and misjudgement of risk. Taken together, these works indicate that contemporary scientific attempts at accounting for behavioural biases are moving away from merely finding their existence towards investigating when and where their impact becomes strongest. Since then, the literature has expanded from the psychology of Kahneman and Tversky to the finance of Barberis, Thaler, Shefrin, Nofsinger, and Shiller and more recently to studies of the same issues in Pakistan, India, and several other emerging markets. Studying biases in investment decisions is a well-established stream of literature with potential policy implications for understanding the behaviours of investors in the context of emerging markets.

## 3. Methodology

The study employs a case study-based mixed-method research design to investigate the influence of behavioural biases on financial investment decisions among investors in an emerging economy. The use of a case study research design enables an in-depth exploration of the phenomenon under investigation, providing rich insights into the factors influencing the financial investment decisions of investors in the context of an emerging economy. Combining qualitative and quantitative approaches also improves the reliability and validity of the data collected.

### *3.1 Research Design*

The research takes an exploratory and explanatory multi-method approach, combining quantitative survey data and qualitative case study. The exploratory part identifies overconfidence, herd behaviour, anchoring, and loss dislike as the dominant behavioural biases in the industry. The explanatory research part investigates the impact of these behavioural biases on investment performance and investment decision making. A case study methodology is appropriate because market volatility, access to market information, and socio-economic considerations need to be accounted for as contextual factors in emerging economies.

*3.2 Study area and sample*

We collect our data from individual investors in Andijan province. Andijan province is a developing financial market in Uzbekistan. In the Andijan province, individual investors are chosen using purposive sampling. We choose individual investors who are engaged in trading stocks, cryptocurrencies, and investments in small businesses in Andijan province. This results in a final sample of 120 respondents, equally distributed by age, gender, education and prior investment experience.

*3.3 Data Collection Methods*

The core data are collected using a questionnaire and semi-structured interviews. The questionnaire is based on five-point Likert scale that captures the intensity of behavioural biases and investment decision patterns. It includes demographics, investment experience, risk tolerance, and behavioural traits. And a number of constructs are operationalized with concepts derived from behavioural finance literature.

In addition to the quantitative analysis, three investor case studies were developed to qualitatively examine decision making behaviour and the different types of biases that investors experience when selling or purchasing an asset, following market trends, or continuing to hold losing assets.

To provide theoretical context and engage in comparative analysis, secondary data from journals, financial statements, and previous empirical studies are employed.

*3.4 Data Analysis Techniques*

Descriptive statistics and multiple regression analysis are used in computing quantitative data. Descriptive statistics, such as the mean and standard deviation, summarize investor attitudes towards behavioural biases. To analyse the correlation between the independent and dependent variables (financial literacy and bias strength), a correlation analysis is performed. To analyse the correlation between the independent variables (behavioural biases) and the dependent variable (quality of the investment decision), a regression analysis is performed.

The qualitative data collected from the case studies will be analysed using a thematic analysis. This will identify and analyse patterns of behaviour and explain the "why" behind what was found statistically to show investor psychology.

*3.5 Reliability and Validity*

To strengthen the reliability of the measurements, categories are drawn from similar validated questionnaires used in previous research and pre-tested on 15 respondents. The scale's internal consistency is tested on the obtained data using Cronbach's alpha. Validity claims rest on expert review and established behavioural finance constructs.

*3.6 Ethical Considerations*

Participants were informed of the scope and purpose of the study, and consented to participate. Informed consent relating to the study was confidential, anonymous, and the data would only be used for research.

Overall, the methodology provides an appropriate means to investigate behavioural biases in investment decision making in an emerging economy context.

**4. Data analysis and interpretation**

This section discusses the empirical study's findings based on a survey of 120 investors in Andijan, identifying the most common behavioural biases and their effect on investor behaviour.

**Table 4.1 shows Descriptive Statistics of Behavioural Biases**

| Behavioral Bias | Mean | Std. Deviation |
|---|---|---|
| **Overconfidence** | 4.12 | 0.78 |
| **Herd Behavior** | 3.95 | 0.84 |
| **Anchoring Bias** | 3.88 | 0.81 |
| **Loss Aversion** | 4.25 | 0.72 |

**Interpretation:**

Referring to the descriptive statistics, loss dislike (Mean = 4.25) remains the behaviour bias investors are most prone to, and this result is driven by the fact that investors hate losing more than they enjoy winning, as stated in behavioural finance theory. Also, overconfidence (Mean = 4.12) is an important behavioural bias when investors believe they have knowledge and the ability to predict market movements, leading to excessive trading and overestimating their influence and control over the market. The herd behaviour (Mean = 3.95) shows investors follow the actions of others in the market, especially when the market is uncertain. Anchoring bias (Mean = 3.88) refers to the investors placing undue weight on historic or first price information. The results suggest that behavioural biases are common among investors in emerging markets and influence their investment decisions.

**Table 4.2 presents Correlation Matrix of Variables**

| Variables | Overconfidence | Herd Behavior | Anchoring | Loss Aversion | Investment Decision |
|---|---|---|---|---|---|
| **Overconfidence** | 1.00 | 0.62 | 0.58 | 0.55 | 0.64 |
| **Herd Behavior** | 0.62 | 1.00 | 0.60 | 0.57 | 0.61 |
| **Anchoring Bias** | 0.58 | 0.60 | 1.00 | 0.59 | 0.63 |
| **Loss Aversion** | 0.55 | 0.57 | 0.59 | 1.00 | 0.66 |
| **Investment Decision** | 0.64 | 0.61 | 0.63 | 0.66 | 1.00 |

Interpretation:

The correlation analysis (Table 3) showed that the relationship between the behavioral biases and the choice of investment decision is moderate to strong. Loss dislike (fear of loss) had the strongest correlation (0.66) with the choice of investment decision. Some overconfidence (0.64) and anchoring bias (0.63) are present, suggesting that the assessment of an investor's own ability and experience are important in the decision-making process. However, there is also herding behaviour (0.61), in which the investor behaves as part of the group. Furthermore, the high inter-correlation between the biases indicates that the psychological constructs are more likely to occur jointly, suggesting that investment behaviour is not only affected by rational considerations but also by simultaneously occurring behavioural influences.

**Table 4.3 shows Regression Analysis (Effect of Behavioral Biases on Investment Decision)**

| Variables | Beta Coefficient | t-value | Significance (p-value) |
|---|---|---|---|
| Overconfidence | 0.28 | 3.45 | 0.001 |
| Herd Behavior | 0.22 | 2.98 | 0.003 |
| Anchoring Bias | 0.25 | 3.12 | 0.002 |
| Loss Aversion | 0.31 | 3.76 | 0.000 |
| $R^2 = 0.58$ | | | |

Interpretation:

The values from the regression reveal that all four behavioral biases considerably predict investment decisions ($p < 0.05$), with loss dislike having the highest beta value (0.31), confirming that it is the strongest predictor of investment behavior. The key behavioral biases were overconfidence (0.28), anchoring bias (0.25), and herd behavior (0.22). The fact that all these biases were statistically meaningful shows the prominence of internal judgment and external reference points and the important

role of social dynamics in financial markets. The so-called $R^2$ value of the analysis is 0.58, indicating that 58% of the variance in investment decisions can be explained through the behavioural biases. The finding is compelling because it confirms the salient role of psychological factors on investment decisions in emerging markets.

**Table 4.4 presents Influence of demographics on behaviour**

| Demographic Factor | Category | Mean Bias Score |
|---|---|---|
| **Age** | 20–30 | 4.18 |
| | 31–40 | 4.05 |
| | 41+ | 3.89 |
| **Education** | Undergraduate | 4.12 |
| | Postgraduate | 3.94 |
| **Experience** | < 3 years | 4.22 |
| | 3–7 years | 4.01 |
| | > 7 years | 3.85 |

Interpretation:

Table 1 shows that younger investors and less experienced investors have a higher behavioural bias. The age group of 20-30 years has the highest mean behavioural bias score of 4.18, and less experienced investors with less than 3 years of experience have a higher mean behavioural bias score of 4.22 than experienced investors. A longer duration of experience helps in tempering behavioural bias. Less surprisingly, undergraduate investors are more biased than postgraduate investors. This pattern supports the idea that higher levels of education might lead to more rationality in investment decisions. The overall finding suggests that financial literacy and experience are important factors in reducing biases and making sound investment decisions.

According to the findings in the data analysis, behavioural biases explain the respondents' investment decision-making process in the 4 emerging economies with loss dislike and overconfidence being the two most dominant biases in terms of statistical and demographic importance.

## 5. Findings, recommendations and conclusion

### *5.1 Key Findings*

The main objective of this research study is to analyse the effects of behavioural biases on the investment decision-making behaviour of investors in an emerging market in Andijan Uzbekistan. The major findings are discussed below.

The study also shows that behavioural biases are found among most, if not all, investors, and the most dominant bias for the sample of active investors is loss dislike. This means that investors try to avoid losses more than they try to achieve profits, resulting in ignoring underperforming investments and not taking advantage of profitable investments. The finding is consistent with Prospect Theory, which argues that gains and losses are not equally evaluated.

Secondly, overconfidence bias makes the majority of investors believe that they are more informed and skilled than they really are, leading to overtrading and the underestimation of risk. This effect is magnified in volatile markets. Anchoring bias is also a common cognitive bias in which an investor relies too heavily on an initial piece of information (e.g. purchase price or past performance) rather than the present situation. Another finding is herd behaviour, or the tendency for investors to follow market trends instead of making independent investment decisions based on their own analysis of the market. This phenomenon is particularly relevant during periods of uncertainty or volatility when investors tend to follow the market, leading to market bubbles or crashes.

Using regression analysis, the testing of the hypotheses concluded that all the identified biases affect the investment decision, that behavioural characteristics account for much of the variation in investment decisions, and that investment decisions are not made entirely rationally. According to the demographics of the sample in the study, younger and inexperienced investors were more prone to

behavioural biases, as were those who had less experience or exposure to financial markets and were more prone to emotion- and heuristic-driven decisions. Another study found a small effect of higher education, suggesting that bias is not easily ameliorated and may be deeply secured.

***5.2 Recommendations***

This can lead to the generation of practical implications to improve the investment decision-making process and to reduce the impact of behavioural biases. First, financial literacy needs to be improved. This can be achieved by organizing dedicated programs, seminars, and workshops to help investors to identify and be aware of the most common behavioural biases and their effects. Developing awareness can help people overcome their irrational tendencies.

Banks, wealth and fund managers, and financial advisers can advocate evidence-based decision-making techniques, e.g. portfolio diversification, risk profile modelling and investment strategies, and so on, which can help consumers to make rational decisions. Speculating behaviour is often short-term, which can make it easier for emotional biases to take hold; long-term investment strategies can reduce this risk.

Thirdly, technology and digital options could be used as a tool: automated investment options, robo-advisors or algorithm-based recommendations can help keep emotions out of the decision-making process and give more rational decision-making. Digital options are especially valuable for inexperienced investors. Another intervention includes development of behavioural trainings at financial institutions to increase cognitive awareness, decision-making, and emotional regulation in order to foster disciplined and goal-directed investment behaviour in investors.

Investor protection policies and campaigns can be developed by policymakers. Financial regulators can promote financial transparency and the dissemination of fact-based information to avoid harmful investor behaviours. Investors can also adopt self-control solutions to their behavioural biases, by committing to investment objectives, ensuring their portfolios are sufficiently diversified, and reviewing their decisions instead of acting on impulsive decisions driven by fear or overconfidence.

*5.3 Conclusion*

Ultimately, this study has explored the presence of behavioral biases on investment behavior in emerging markets. Contrary to the beliefs of customary finance, which sees individuals as fully rational, this study draws strong evidence in favor of the psychological influence on individuals.

The behavioural biases of loss dislike, overconfidence, anchoring, and herding display links, are relevant to finance and are increased in emerging markets due to heightened uncertainty, low financial literacy and the inefficiency of financial markets.

It was found that although experience and education were able to reduce bias's they did not entirely remove it, and a combination of awareness, education and structured decision making tools was required to improve investment outcomes. Finally, behavioural biases are not only relevant for the individual investor, but also for financial institutions and policymakers. Behavioural considerations can lead to better financial product design and policy decisions and thus contribute to a more stable and efficient financial system.

These results add to the emerging body of literature on Behavioural Finance, suggesting that the context of an emerging economy can reinforce theoretical findings. This research highlights the role of psychological factors in finance and stresses the need to close the divide between theory and practice in financial decision-making.

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**Abstract**

One of the most crucial financial choices that directly affects a business's profitability and long-term viability is its capital structure. Manufacturing firms must carefully consider the best combination of debt and equity financing because of their capital-intensive nature and high investment in fixed assets. This study reviews traditional financial theories and empirical data from earlier research to investigate how capital structure affects manufacturing companies' profitability. The works of Franco Modigliani and Merton Miller (1958, 1963), as well as Stewart C.'s trade-off theory and pecking order theory, form the theoretical basis. Myers and Majluf, Nicholas S. (1984). To comprehend the connection between leverage and firm performance, empirical studies by Joshua Abor (2005, 2007), Dimitrios Margaritis and Maria Psillaki (2010), Mohd Salim and Raj Yadav (2012), and others are examined. Regression models and secondary data analysis are the foundation of the study's quantitative methodological framework. The results show that while excessive leverage raises financial risk and lowers profitability, moderate debt levels may boost profitability due to tax benefits and financial discipline. The study comes to the conclusion that in order to attain sustainable growth and a competitive edge, manufacturing companies must maintain an ideal capital structure.

**Keywords:** Capital Structure, Profitability, Manufacturing, Equity and Debt

## 1.Introduction

Most important decisions for companies of all sizes is financing. It is claimed that the majority of businesses, particularly small ones, fail or perform poorly as a result of various difficulties managers or owners face when making financing decisions. Businesses' choices about which types of financing to use lead to various capital structures, each of which may have a distinct effect on performance. Studies on capital structure have been presented from a variety of angles; some support the earlier theories, such as those put forth by Modiglian and Miller (1958) regarding the irrelevance of capital structure; others concentrate on agency cost and pecking order theories, which maintain that businesses should balance their capital structures to create an ideal structure that could improve their performance. Since Modiglian and Miller (1958) emphasized that, in ideal circumstances without bankruptcy costs, frictionless capital, and taxes, the capital structure of the firm has no effect on the value of the firm, the implications of capital structure on corporate performance have drawn numerous studies. Since then, a variety of empirical studies have been carried out to investigate the applicability of Modiglian and Miller's theories in the business world. While some findings have emphasized the importance of capital structure on corporate performances, others have supported the idea that it is irrelevant (Carpentier, 2006; Myers, 2001). The percentage of debt and equity that a business uses to fund its operations and investments is referred to as its capital structure. Because manufacturing companies need to make significant investments in plant, machinery, technology, and working capital, capital structure decisions are especially crucial. Retained earnings, bank loans, bonds, and equity financing are frequently used by these businesses. The seminal theory of Franco Modigliani and Merton Miller (1958) started the discussion about whether capital structure influences profitability. They contended that capital structure has no bearing on firm value in a perfect market. However, subsequent developments demonstrated that capital structure is relevant to firm performance due to real-world factors like taxes, bankruptcy costs, and information asymmetry.Manufacturing businesses compete in markets that are frequently unstable. Financial decisions are more delicate due to high fixed costs, operational leverage, and exposure to economic cycles. Therefore, it is crucial for financial managers, investors, and policymakers to comprehend how capital structure affects profitability.In order to comprehend how capital structure affects manufacturing companies' profitability, this research paper will examine theoretical viewpoints and empirical data.

Objectives

The main objectives of this study are:

To examine the theoretical relationship between capital structure and profitability.

To analyze empirical evidence on the impact of leverage on firm performance.

To identify the optimal capital structure for manufacturing companies.

To evaluate whether debt positively or negatively influences profitability.

## 2.Literature Review

Capital Structure Capital Structure One of the most important decisions in business firms is financing. According to Kipesha and Moshie (2014), the majority of businesses, particularly small ones, fail or perform horribly as a result of various difficulties managers or owners face when making financing decisions. Additionally, Abdabi and Abu-Rub (2012) argue that a company's choice to employ various financing sources leads to distinct capital structures, which may have varying effects on a firm's performance. Scholars and researchers have studied capital structure both theoretically and empirically over the years. However, after Modigliani and Miller's irrelevance theory of capital structure was developed in 1958, it caught the interest of financial economists. According to Pinto and Quadras (2016), capital structure is a combination of a company's long-term, permanent financing, represented by debt, preferred stock, and common stock equity. Capital structure, according to Soumadi (2012), is the financing of a company's overall operations and expansion through a combination of long-term debt, specific short-term debt, common equity, preferred equity, and retained earnings. The authors argued that since a firm's capital structure directly affects its risk and return, it is an important financial decision.

According to Suardi and Noor (2015), a company's capital structure is its long-term debt, preferred stock, and net worth. According to related literature, capital structure is the mix of internal and external funding sources that businesses use to finance their assets (Ebrati et al., 2013). The authors confirmed that while businesses can choose to finance their assets through debt or equity, a combination of both is preferable. According to Awais et al. (2016), businesses can rely on a variety of funding sources to support their investments. According to the author, there are two primary sources of funding: internal financing, which includes reserves, preferred shares, and equity shares. According to the author, there are two primary categories of financing sources: internal financing, which includes equity shares, preferred shares, reserves, and retained earnings; and external financing, which includes the issuance of bonds and short- and long-term loans.Influence of capital structure on the financial performance of publicly listed commercial banks. The findings indicated conflicting outcomes regarding the effect of capital structure on firm performance. The finding is that while research in developed nations shows a beneficial effect, studies carried out in developing nations generally suggest a detrimental effect.

## 3. Methodology

Research Design

The study used quantitative, descriptive, and correlational research methods. It also used secondary data collection. The population included all twelve manufacturing companies listed on the Ghana Stock Exchange as of February 28, 2017. The study used annual reports from these companies for the years 2010 to 2016. This provided a total of ninety-six annual reports for analysis. All data was obtained from the Ghana Stock Exchange website. Specifically, the companies' statements of profit or loss and other comprehensive income, as well as their financial position statements, were used. A linear regression model was applied to examine how capital structure affects the performance of listed manufacturing companies in Ghana.

A linear regression model was employed to assess the effect of capital structure on the performance of listed manufacturing companies in Ghana. The explanation for each variable in the regression model is given below. Performance Measurement: A lot of different factors have been used to evaluate how well a company is doing. The most common things used to show how well a company is doing are: Sales or Revenue, Gross Profit Margin (GPM), Operating Profit, Net Profit, Net Profit Margin (NPM), Return on Capital Employed (ROCE), and Return on Equity (ROE). In this study, two performance measurement variables, namely Return on Capital Employed (ROCE) and Return on Equity (ROE), are utilized.

In this study, two performance measurement variables, namely Return on Capital Employed (ROCE) and Return on Equity (ROE), are utilized.

Many researchers have often used these performance variables to evaluate how well firms are doing. Studies by Maina and Ishmail (2014), Suardi and Noor (2015), Awais et al. (2016), Huang and Pan (2016), and Kanwal et al. (2017) all show this. Return on Capital Employed (ROCE) is a measure that shows how much profit a company makes after taxes compared to the total assets it uses. The Return on Equity (ROE) is also defined as the ratio of earnings after preference dividends to the book value of total equity.

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## 4. Data Analysis

Descriptive Statistics

As shown in Table 2, the average return on capital employed (ROCE) for the sample firms was 2.24%, with a standard deviation of 12.36. The ROCE values ranged from a low of -36.67% to a high of 30.86%. The positive average ROCE suggests that, overall, the manufacturing companies generated profits, even though several firms experienced losses as indicated by the negative minimum value. For return on equity (ROE), the mean was 2.71% with a standard deviation of 14.245. The ROE values spanned from -38.31% at the lower end to 34.72% at the upper end. The mean ROE of 2.71% implies

that the firms were, on average, profitable. Nevertheless, the negative minimum value demonstrates that some companies also operated at a loss.

Table 2 shows the mean financial leverage was 21.3%. These listed manufacturing companies weren't heavily geared on average—most of their assets came from equity. The standard deviation of 21.65 reveals massive variation: minimum leverage was 0.00 while the maximum hit 98.47.

Asset sizes varied wildly too. The average was GHS 67.4 million, with companies ranging from GHS 1.09 million to GHS 480.7 million. The standard deviation of 98.35 confirms there's a huge gap between the smallest and largest firms.

The analysis shows that leverage hurts both ROCE and ROE for Ghana's listed manufacturing firms. More debt means lower returns. That's the finding, and it's pretty clear-cut. Here's what gets interesting: this contradicts what agency cost theory would predict. That theory suggests leverage should actually improve performance by forcing managers to be more disciplined with shareholder money. It also contradicts Modigliani and Miller, who argued capital structure doesn't matter at all for firm value. In this case, it clearly does. So why the negative relationship? The most obvious culprit is the interest rate environment. In Ghana, rates were brutal around the end of 2017—somewhere in the neighborhood of 35% annually. When you're paying that much on borrowed money, it's hard to generate positive returns on any capital, whether it's equity or the total capital employed. The interest expense simply eats up whatever profits the business makes. It's worth noting this was a specific moment in time. Rates like that are extraordinary by most standards, and they'd absolutely skew any analysis of how leverage affects performance. The finding makes perfect sense once you factor in that cost of debt. Debt backed by assets actually limits what companies can do with those items. When businesses use property or equipment as collateral, they can't easily sell or leverage those items to generate additional income. Beyond that, debt obligations mean fixed payments regardless of how the company performs. This often forces managers to postpone profitable projects because the cash simply isn't available. The end result is weaker profitability.These results line up with what other researchers have found in developing countries. Maina and Ishmail (2014) looked at companies listed on the Nairobi Securities Exchange and discovered that capital structure had a significant negative effect on performance. Mwangi, Makau and Kosimbei (2014) reached a similar conclusion - their regression analysis showed that financial leverage hurt both return on equity and return on assets. Huang and Pan (2016) found that ROE drops when the capital adequacy ratio, nonperforming loan ratio, and loan-to-deposit ratio go up. Suardi and Noor (2015) got similar results in Indonesia—debt equity ratio hurts ROE. But here's where it gets interesting: Dessi and Robertson (2003), Abor (2005), Margrates and Psillaki (2010), and Ebrati et al. (2013) found the opposite. They argue capital structure actually improves performance. So the relationship isn't clear-cut—it depends on context, industry, and probably a dozen other factors researchers are still unpacking.

**5.Findings**

The findings point to a clear pattern: capital structure choices directly impact how profitable manufacturing firms become. When companies take on moderate debt, ROE tends to improve because of the leverage effect. But too much debt triggers financial distress costs that eat into profits. The data confirms this with a significant negative relationship between leverage and both ROCE and ROE.

So what does this mean for the people running these companies? Basically, before loading up on debt, they need to think through how it will affect their performance metrics. Same goes for investors - checking the leverage level should be part of any basic due diligence.

The practical takeaway is pretty straightforward: many firms would likely benefit from trimming their debt loads. It's not about avoiding debt entirely but finding that balance where the leverage advantage doesn't get swallowed by distress costs. Firm size and asset structure also play a role in what works best for each company.

**6. Conclusion**

Capital structure affects how profitable manufacturing companies become. Early theories suggested debt levels shouldn't matter for firm value, but real-world data shows a clear link between leverage and

performance. Manufacturing firms in Ghana need to find the right balance between debt and equity to maximize profits while keeping financial risk manageable. Sound financial management, strict cost control, and smart investment choices all contribute to sustainable growth.

This study looked at how capital structure affects performance for listed manufacturing companies in Ghana. The researchers used return on capital employed and return on equity as their main performance measures. They applied ordinary least squares regression to estimate the relationship between leverage and firm performance.The results showed that leverage has a significant negative impact on both ROCE and ROE for these companies. This means higher debt levels are associated with lower profitability. The study also found that firm age and the industry a company operates in both have a positive effect on both performance measures. Bigger companies, however, did not show a significant advantage when it came to ROCE.

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