

Major: F-30

**Impact of Currency Fluctuations on Financial Performance of South Asia
Manufacturing Firms**



By:

Zeeshan Nazeer

01-321242-035

Supervisor:

Dr. Asma Zeeshan

Finance and Management Department

Bahria University Islamabad

Fall 2025

FINAL PROJECT/THESIS APPROVAL SHEET

Viva-Voce Examination

Viva Date **13-Jan-2026**

TOPIC OF RESEARCH:

*(IMPACT OF CURRENCY FLUCTUATIONS ON FINANCIAL PERFORMANCE OF SOUTH ASIA
MANUFACTURING FIRMS)*

Names of Student(s): Zeeshan Nazeer

Enroll # 01-321242-035

Class: (MBA/1.5)

Approved by:



(Dr. Asma Zeeshan) Supervisor

() Examiner-I

() Examiner-II

--

Research Coordinator

--

Head of Department

Business Studies

ACKNOWLEDGEMENT

I would like to take this opportunity to offer my most genuine gratitude to Almighty ALLAH who has expressed unconditional love to me all through my life and strength that He granted me to face any problem that arose in my life. I would also like to show my gratitude and appreciation to my supervisor Dr. Asma Zeeshan who has demonstrated her devotional service to the achievement of this dissertation. Overwhelming attitude and irresistible support by her professional advice has turned this dissertation into a possibility within the confined time given. I would like to say thanks to my family, because I am deeply thankful to them, as they supported and loved me during all good and bad moments of my life. The success and achievements that I have acquired in my master degree have been attributed to my family, which has been the best influence in my success. My parents have been my source of constant support and the reason behind my life motivation, and this is why I owe them so much. I would also like to acknowledge the un-taken supportive work of my graduate friends that has assisted me immensely during my graduate degree.

ABSTRACT

The main objective of the study is to test empirically the effect of currency fluctuations and macroeconomic determinants on the financial performance of manufacturing companies in the Asian region referred to as South Asia. With an ever more globalized economy, manufacturing industries in developing economies are becoming more vulnerable to external economic shocks, especially those caused by fluctuation in the exchange rates. The empirical analysis is based on secondary panel dataset on the sample of 2014 to 2024 and manufacturing firms in the South Asian countries and financial performance indicators is based on Return on Assets (ROA) and Return on Equity (ROE) and the macroeconomic regressors are Exchange Rate Volatility (ERV), Inflation (INF), Interest Rates (INT), and Gross Domestic Product (GDP). The research adopts a systematic econometric protocol that involves the Variance Inflation Factor (VIF) to identify multicollinearity and the LevinLinChu (LLC) and ImPesaranShin (IPS) unit-root tests to determine stationarity and the Hausman specification test to test a model. Depending on the results of the diagnosis, a Fixed-Effect model is then used. Results show that the negative association between ERV and ROA, as well as ROE, is statistically significant, which supports the hypothesis that the currency fluctuation on the profitability. Quite the opposite, the effects of inflation, interest rates, and GDP in the final specification are statistically non-significant. On the other hand, the exchange-rate stability is a crucial determinant of performance of firms in the region. The study, thus, indicates that corporate managers should to adopt strict hedging guidelines and that the policymakers ought to prioritize in the exchange-rate stabilization policies over the macro-monetary policies.

Keywords: Exchange Rate Volatility; Financial performance; ROA; ROE; Fixed effects Model; South Asia.

Table of Contents

CHAPTER 1: INTRODUCTION	1
1.1 Background of the Study	1
1.2 Problem Statement	2
1.3 Research Gap	2
1.4 Research Questions	3
1.6 Significance of the Study	4
1.7 Research Contribution	5
1.8 Structure of the Thesis	5
1.9 Summary of the Chapter	6
CHAPTER 2: LITERATURE REVIEW	8
2.1 Theoretical Framework	15
2.2 Hypotheses Statements	16
CHAPTER 3: RESEARCH METHODOLOGY	17
3.1 Methodology	17
3.2 Data and Variables	17
3.3 Research Method	18
• Multicollinearity Diagnostic:	18
• Panel Unit Root Tests:	19
• Model Selection (Hausman Test):	19
• Panel Regression Analysis:	19
CHAPTER 4: DATA ANALYSIS AND RESULTS	20
4.1 Multicollinearity Test (VIF):	20
4.2 Panel Unit Root Test (Stationarity Analysis):	21
4.3 Hausman Specification Test:	25
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	29
5.1 Conclusion	29
5.2 Recommendations	30
5.3 Practical Implications	30
5.4 Limitations and Future Directions	31
CHAPTER 6: REFERENCES	32

CHAPTER 1: INTRODUCTION

1.1 Background of the Study

The world economy is increasingly becoming interconnected and international trade is one of the major components of this. Through this heightened interconnection, business firms become more vulnerable to such risks, which they lack control over such as fluctuations in currency rates. These variations, which are famed as currency fluctuations, have direct implications on the financial performance of a firm particularly those firms that engage in imports and exports. In the case of manufacturing companies whose supply chain can be very complicated and may have international suppliers or exporters, it is especially necessary to understand the impact of such currency changes, and the consequences of such changes on a company can be observed in several financial performance measures, including the profitability of a company.

The south Asian region is a significant and expanding subset of the global economy yet it is not without its fair share of challenges of its own. This region is comprised of such countries as Pakistan, India, Bangladesh, and Sri Lanka and because of its high manufacturing industry at the same time, it is sensitive to external shocks, such as changes in the exchange rates. The region is a good place to research how the changes in the exchange rates can impact businesses.

A study in which authors investigated the effect of the exchange rate fluctuation variables on financial performance of the multinational firms operating in Nigeria, that is, the effect of the variable of exchange rate, real exchange rate, interest rate, and general exchange-rate volatility on the financial performance of the listed multinational oil and gas firms and deposit-money banks in Nigeria. In a desperate attempt to obtain useful data regarding the sampled annual reports of oil and gas companies auditing, secondary sources of data were sought to collect data within the period of 2006 to the year 2020 (Osho and Fagbamila, 2022).

A study from 2020 by Jannat found that change in exchange rates affect how much foreign direct investment comes into South Asian countries, which shows how important this issue is for the region's overall economy (Jannat, 2020a)

The association between exchange rates and business performance has been studied in the past in various respects. As an illustration, the macroeconomic effect has been examined, The relationship between exchange rate volatility and financial performance that has shown mixed results on South Asian manufacturing firms. Some of the studies indicate that fluctuations in

the exchange rate amplifies financial uncertainty and decrease the profitability of firms. (Moyo & Tursoy Head, n.d.2020)

In another research author's indicate that high levels of depreciation of the Pakistani rupee intensifies the financial performance of the firms to a significant level because it leads to rising costs of imports and inflationary pressure. Likewise, suggest that South Asian companies which depend on imported raw materials are largely exposed to currency fluctuations, which cause worsening margins and financial hazards. (Rasheed and Nadeem Ishaq, 2022)

The proposed research will particularly revolve around the financial performance of South Asian manufacturing firms Although there has been a general study on the relationship between currency fluctuations and financial performance, a comparative study based on a panel data analysis which examines the relationship between currency fluctuation and two prominent financial performance indicators would be of great value in this research much-needed study.

1.2 Problem Statement

The problem is that currency fluctuations (exchange rate volatility, inflation, interest rate & GDP) create risks and uncertainty that directly affect the financial performance of South Asian manufacturing firms. Despite the importance of this issue, the comparative firm-level impact across South Asia is underexplored, making it difficult for firms and policymakers to develop effective strategies.

1.3 Research Gap

Major empirical research directions so far have largely followed macroeconomic country level models or have focused on non-South Asian contexts with frequently particular economies such as Nigeria or Indonesia in focus. As such, the literature barely talks about the subtle, firm-level dynamics in the South Asian manufacturing environment.

This more recent work explicitly points to a significant gap in the literature the fact that the country-level aggregated statistics are used, thereby obscuring the heterogeneity of firm-level experiences in South Asia (in this case, Pakistan). It claims that badness of most policy arguments is that they are not based on the insights into the firm that you noted are subtle. Ahmed, F., & Hamid, A. (2025).

The majority of the policy discussion relies on country-level aggregated data, which fail to reveal the necessary heterogeneity of experience in terms of size, sector, and location. This contributes to this analytic blankness of his.

This essay is a review of the structural changes in the Asian economies. It emphasizes the fact that the literature has been very much biased on the success stories of East and Southeast Asia (such as Indonesia and Vietnam) and usually compares South Asia on the macroeconomic lines instead of exploring the micro-level market failure that does not allow its firms to grow at the level of manufacturing. Citation: Sen, K. (2016).

It substantiates the argument that the literature has concentrated on non-South Asian settings in explaining industrialization and that less emphasis has been given to detail structural changes of the firm in South Asia which are slower than those of other regions. Although numerous works are analyzing macro-level energy-wise or infrastructure concerns, this article stands out as one of the rare ones, where the effect of the latter on the technical efficiency of firms was being measured in several South Asian nations. It is also an indication that firm-level constraint research is present although it is new and is usually overshadowed by macro models of efficiency Luqman, M., Haq, M., and Ahmad, I. (2021).

1.4 Research Questions

Following are the research questions of this study:

1. What is the magnitude of Exchange Rate Volatility effects on the profitability (Return on Assets) of manufacturing companies in South Asia?
2. What is the impact of macroeconomic fluctuation of the Interest Rates and Exchange Rates on the shareholder returns (Return on Equity) of these manufacturing firms?
3. Which macroeconomic is mandatory factors (Exchange Rates, Interest Rates) or general economic indicators (GDP, Inflation) are more impact on the financial performance of the South Asian manufacturing sector?

1.5 Research Objectives

According to the problem statement, this research is undertaken with the following purpose:

- The objective of the study is to test empirically the impact of the Exchange rate volatility as applied to the profitability (ROA) of South Asian manufacturing companies.

- To determine the impact of Interest Rates and currency change on the shareholder value (ROE) of the manufacturing industry.
- To ascertain the relative significance of the variables as compared to other greater economic growth factor in influencing the financial performance of firms in South Asian region.

1.6 Significance of the Study

The study can be used to appreciate the significance of exchange rate changes and the impact of sudden change in exchange rates on the financial performance of manufacturing companies in South Asia can be very high. In the meantime, the study will not only enhance the awareness of the corporate stakeholders such as managers and investors but it will as well inform the policymakers and regulatory authorities of the South Asian economies with the information needed to mitigate the exchange rate risks in the long-term to stabilize and ensure growth of the manufacturing sector. Nevertheless, one should appreciate the significance of exchange rates fluctuations and the impact these fluctuations are having on financial performance that signify profitability and shareholder value in these companies. Consequently, having knowledge of the significance of currency fluctuations, governments of South Asian nations will be in a position to consider the economic circumstances that are more likely to cause the exchange rate instability, which subsequently results in lower levels of performance of firms, and their decreased competitiveness.

The validity of this study in supporting the argument that exchange rate fluctuations contribute to alteration in financial performance and the other accruing to it, such as high profitability, consistent operations, and returns to the investors is apparent. Besides this, the existing study will likely offer a reasoned argument on the ground upon which financial performance may be sustained in the long-run amidst the hardships of the exchange rate fluctuations. Because the underlying mechanisms that currency fluctuations influence ROA and ROE also will be examined in the present study, such findings of this study can lead to a change of policies and practices of risk management which can cushion the adverse effects of exchange rate shocks.

The current paper also supports the idea that fluctuations in the exchange rates are strongly culpable of influencing the financial stability and profitability of manufacturing companies in South Asia. In the meantime, the research will play a major role in helping research scholars and finance students to learn more about the connection between currency fluctuations and

business-level financial performance hence form the basis of subsequent scholarly research in international finance and corporate risk management.

1.7 Research Contribution

This research will be significance to policymakers and government of South Asia and business investors by highlighting the importance of being alert and responsive to a fluctuation in the exchange rates before making important financial or strategic decisions. It will also improve the knowledge of financial management as it will inform policymakers and governments of South Asian economies with evidence-based information to resolve the exchange rate risks, thus, guaranteeing improved financial performance of firms. The investigation shows that exchange rate volatility directly influences profitability and shareholder value and therefore, it provides a practical recommendation on how the industrial and financial basis of South Asian economies can be defined.

Moreover, the study will help the organizations of finance, commerce, and central banks to know how fluctuations in the exchange rates among other important macroeconomic variables affect the sustainability of manufacturing sector. By understanding these, governments will be in a better place to formulate policies that stabilize currency markets and enable them to grow at firm level. Meanwhile, evidence-based findings in the study will assist business investors and corporate managers in formulating their strategies to protect profitability and stock returns against unfavorable changes in the exchange rates.

1.8 Structure of the Thesis

The research study was carried out to determine how the financial performance of the manufacturing companies in South Asia is impacted by the exchange rate changes. The research study is concluded with a detailed list of references and an appendix, which have five chapters, which logically explain the impact of the exchange rate variations on the financial performance of South Asian manufacturing companies. The organizational hierarchy is as follows:

Chapter 1: this chapter contains the background of the research. It introduces the background of the study, gives a clear statement of the problem and establishes the research gap that is available. It also establishes the research questions and objectives, explains the significance of the research to the stakeholders and goes into detail concerning the scope and contribution of the research.

Chapter 2 provides a comprehensive literature review on the topic as regards theory and research. It is a critical evaluation of the previous literature on the exchange rate movements, inflation, interest rates and GDP, and how they are theoretically connected with financial performance. At the end of the chapter, the conceptual framework is constructed and the specific hypotheses are formulated and developed.

Chapter 3 elaborates on the methodology used in testing the hypotheses of the study on an empirical basis. It describes the data collection process, sample, and even the truly econometric methods. Specifically, it explains the diagnostic tests used that are the Variance Inflation Factor (VIF) of multicollinearity, the Panel Unit Root tests (LLC and IPS) of stationarity and the Hausman Specification Test to determine the correct regression model.

Chapter 4 will also present the empirical findings in relation to the statistical analysis with the EViews. It begins by the result of the multicollinearity and stationarity analysis to confirm the data validity. It proceeds to mention the findings of the Hausman test, and as such justifies the application of Fixed Effects Model. Finally, the chapter also provides a detailed discussion of the regression coefficients to verify the impact of Exchange Rate Volatility (ERV) and other macroeconomic variables on ROA and ROE.

Chapter 5 is a conclusion of the research, which summarizes the key findings and puts them into perspective of the entire international finance. It gives evidence-based assumptions concerning the negative impact of currency instability on profitability of the firms. The chapter is finalized with the provision of practical recommendations on how the risks can be handled in the corporation and the recommendation to the governmental authorities as well as explaining the constraints and the future research directions of the study.

1.9 Summary of the Chapter

This chapter has defined the exchange rate fluctuation and their possible implications in the financial performance of manufacturing organizations in the South Asian countries. It has also explained the background and the present economic situation of the South Asian economies that render the study pertinent. In addition, this chapter has introduced the problem on which the research study has been anchored, as well as the aims of carrying out the study. It has also presented the research gap that has led to the necessity of this investigation, the significance and contribution of the study to the policymakers, investors, and corporate managers. Lastly, the thesis structure has been presented to help the reader with the guidance. The following chapter will give a full discussion of the available literature regarding exchange rate

fluctuations, the other macroeconomic variables connected to it, including inflation, interest rates, imports, and exports, and how they are correlated with financial performance at firm level.

CHAPTER 2: LITERATURE REVIEW

A number of studies have been dedicated to the correlation between exchange rate volatility and financial performance of emerging economy firms. As an illustration, an experiment has been run on the effect of the exchange rate and other macroeconomic variables on the financial performance of multinational firms particularly in the oil and gas industry in Nigeria. As a part of testing the hypotheses, descriptive and inferential statistics, including correlation and regression analysis, were used based on the secondary data obtained as the audited annual reports of eight purposely-sampled multinational oil and gas companies listed on Nigerian stock exchange between 2006 and 2020. The independent variables in the study were foreign exchange rate fluctuation (FXRF), real exchange rate (REER), nominal exchange rate (NOER), interest rate spread (INSR), firm size (FSIZE), financial leverage (FLV) and business risk (BSR) where the financial performance was in the form of the return on assets (ROA). The findings revealed that nominal exchange rate and interest rate spread had a positive and significant effect on the performance of a firm. Conversely, it was revealed that foreign exchange rate fluctuation, real exchange rate, firm size and financial leverage had negative and significant correlation with return on assets the findings of the study led to the conclusion that the fluctuation of the exchange rate and the economic aspects are strongly statistically related to the financial performance of the listed oil and gas companies in Nigeria. It also suggested that the managers of the oil and gas companies in Nigeria ought to consider the microeconomic aspects in their response strategies to the volatility of the foreign exchange which involves the financial leverage, the size of the company and the risk of the business. At the policy level, the research recommended that authorities require the implementation of the policy to stabilize the local currency to reduce the negative impact of the fluctuation of the exchange rates on the performance of corporate organizations (Osho & Fagbamila, 2022).

Another study has examined the causes of stock return variability in the banking industry. A study on PT Bank Rakyat Indonesia Tbk looked into the degree to which traditional financial and market variables may explain the fluctuations in the stock performance of the bank. Drawing on historical data from reputable financial sources such as Reuters, Bloomberg, and data from business financial records and qualitative knowledge from industry experts, the study used both quantitative regression analysis and supplementary qualitative assessments the independent variables that were considered were the foreign exchange rates, performance of the stock market, and other financial measures. But in the case of regression analysis, low R-Sq and adjusted R-Sq were achieved with the coefficients of all the explanatory variables as

statistically insignificant. These findings indicate that the variables under analysis failed to account sufficiently to the fluctuations in the stock returns of the bank during the research period these findings suggest that other external or non-traditional elements besides the variables studied might play more superior roles in determining the outcome of stock market in the bank. This paper therefore points out a weakness in relying on conventional financial parameters alone to predict performance of the stock markets in situations of emerging markets. It also indicates that the further study can be enhanced by incorporating more variables and more sophisticated methods of modeling to take into account the complexities that are capable of affecting the behavior of the stock returns (Musafa, 2024)

The impact of the foreign exchange rates on manufacturing corporations in Nigeria has also been studied. The connection between exchange rate movements and return on assets (ROA) of ten manufacturing firms engaged in industrial and consumer goods production was investigated in one of the studies and companies listed on the Nigerian Stock Exchange in 2013-2022. The secondary data were obtained on Central Bank of Nigeria Statistical Bulletin and Annual reports of the firms and analyses were performed using E-Views 9.0 the findings indicated that Real Effective Exchange Rate (REER) and return on assets had positive relationship. In addition, the findings of Granger Causality Wald tests revealed that there were possible causal relationship between the exchange rate dynamics and financial performance variables. The research found out that the real exchange rate changes are very crucial in the determination of the financial performance of the manufacturing companies as it is an expression of global economic integration that the Nigerian economy has experienced on the basis of these findings, the paper recommended that policy instruments in the form of the Real Effective Exchange Rate should receive greater focus by financial and economic regulators to improve the financial performance of manufacturing organizations. This was also an idea suggested by it that the dynamics of exchange rates need to be followed by manufacturers in their cross-border trade since currency fluctuations represent a threat and an opportunity in a developing economy (Adebayo AKANDE & Orhunwakho, 2024)

The other work of interest considered how key macroeconomic issues like the interest rates, inflation and exchange rate of rupiah currency impacted the financial performance of the State Bank of Indonesia (SBI) between 2013-2022. In light of the relevance of banks in facilitating monetary transactions in nearly all sectors of the economy, the study sought to determine how the state of the macroeconomy affects the banking activity within the cover of Bank Indonesia the researchers collected secondary data using the quantitative method to collect data on the

State-owned banks and analyzed it with the help of multiple linear regression. The level of financial performance was identified as three major indicators which are return on assets (ROA), loan to deposit ratio and capital adequacy ratio which reflect on profitability, liquidity and capital strength respectively the results indicated that interest rates, inflation and rupiah exchange rate did not have a significant effect on ROA. Nevertheless, both inflation and interest rates along with currency changes were observed to affect indicator but at the same time, indicator were greatly related to exchange rate changes but not to inflation. Generally the analysis indicated that the macroeconomic factors do not impact various facets of performance of banks in a similar manner and, thus, profitability, liquidity, and capital adequacy respond differently to the changes in the performance of the wider economy (Justiro & Irawati, 2023).

Inter-relationship of the exchange rate variations and bank performance post-Brexit was also studied. The profitability was approximated in the analysis based on three dependent variables including a return on equity (ROE), a return on assets (ROA), and a capital to deposits. The independent variables were the government expenditure, GDP, the rate of inflation and a dummy variable of Brexit the study was carried out in two directions first on one hand on the sample of 34 banks in the United Kingdom during the period of 2009-2018 and on the other hand on the level of the national banking sector. The results had indicated that exchange rate movement correlated with bank performance during the Brexit period. Nevertheless, the research has emphasized that the limitations of its findings and conclusions were related to the size and availability of data, which necessitate the use of larger datasets and better methods (Lu et al., 2021).

Studies have also been conducted on the effect of the macroeconomic variables in the banking sector in Albania research has examined how interest rates, exchange rates and inflation affect the performance of commercial banks based on monthly data since December 2015 to May 2022. The data was obtained in Bank of Albania and Institute of Statistics of Albania (INSTAT) and the analysis comprised of a multivariate regression model in which the dependent variable was the return on assets (ROA) the results reported that interest rates volatility had a significant positive impact on ROA and hence the exchange rate volatility which is negative impact. Nominal effective exchange rate (NEER) was also seen to have a minor impact on profitability and the inflation had negative impacts on ROA. The regression model met the demands of the classical statistical assumption of the model but the explanatory power of the model was rather low, which demonstrates the existence of other factors that may have affected the performance of the bank, contrary to the other factors being tested. The researchers established that the

inflation effect on the financial performance can be better explained by the consideration of other variables that are micro or macro-economic variables not included in the model (Merko and Habili, 2023).

The inflation and the fluctuation of the exchange rate has been a factor that has made the performance of commercial banks in Sierra Leone to be examined in the context of West Africa. Profitability measures that were used in the study were the return on equity (ROE) and the return on assets (ROA) which are sensitive of the macro economic stability. The analysis using the autoregressive distributed lag (ARDL) cointegration method was conducted using a sample of data between 2008 and 2022 to estimate the long-term dynamics along with the short-term dynamics of the data the results indicated that both the exchange rate volatility and inflation are key influencing factors in the profitability of the commercial banks. The study also took into consideration the aggravating impact of the pandemic related to the spread of the Covid-19 infection in the country that exerted inflationary pressure due to the disturbance of supply chains and currency instability in the Sierra Leonean economy that is based on imports. The findings on which the authors based the proposed policy interventions have the potential to stabilise the exchange rates and control the inflation process with the aim of stabilising the financial situation and improving the work of the banks in the country (Kamara et al., 2025).

Another study that was conducted established the impact of macroeconomic conditions and profitability of firms on the stock price dynamics of manufacturing firms. The archival information and the multivariate regression analysis used in the study provide the opportunity to examine the contribution of the inflation rate, exchange rates and the turnover on assets (ROA) to the valuation of equity the findings indicated that the impact of inflation on the stock prices had a great negative impact on the stock prices which reflect increases in cost of production, increases in discount rates and decrease in consumer purchasing power, which incurred the future cash flow and multiples on valuations. Comparatively, the exchange rate variation was found to bear no outstanding impact which was ascribed to the process of natural hedging, currency matched contracts and counterbalancing supply chain exposures among producers with domestic orientation. Similarly, the ROA did not play an important role and this explained the movement of the stock price, a finding that seemed to indicate that the investors accorded more importance to the resilience, price power and quality cash flows as opposed to the accounting profitability during the study period the research reported the dominating effect of the inflation of prices of stocks in manufacturing industry and the insignificant reactivity of shares of the same exchange rate changes and profitability ratios.

The authors recommended more intense cost pass-through policies, operating hedging and disclosure of the stability of the cash flows to investors: they suggested that companies should apply such strategies as well (Perdani and Marga, 2025)

Another study that has aimed to determine how the ambient macroeconomic factors interact with the stock returns in the Indonesian context has tried to concentrate on mining industry. In one of the studies, the impact of exchange rates, inflation, Bank Indonesia Certificate (SBI) interest rates and world oil prices on the stock returns were analyzed and return on assets (ROA) was an intervening variable. The secondary data were monthly and annual data 2015-2019 of Bank Indonesia, Indonesia Stock Exchange, and U.S Energy Information Administration (EIA). To test both the direct and indirect relationships, it was conducted as path analysis using Eviews Tools the outcome implied that macroeconomics such as exchange rate, inflation, SBI interest rate and world oil prices had a major direct impact on stock returns in mining companies listed on the Indonesia Stock Exchange on ROA. The study also found that the movements of the exchange rates, inflation and the world oil prices had a strong indirect impact on the stock returns in terms of profitability and the SBI interest rate also turned out to have a strong impact on the whole, the findings suggest the value of direct and mediated links between macroeconomic indicators and equity performance in the mining industry and the need to take into account multifaceted channels of impact on companies and policy-makers to consider the financial results (Dutiva Br. Ginting & Matondang, 2022).

The birth of the Islamic finance has initiated the investigations into the macroeconomic variables and how they influence the performance of the Islamic banks. One of the studies examined how the real exchange rate and real interest rate influenced the financial performance of three Islamic Banks in Jordan i.e. International Islamic Arab bank, Jordanian Islamic Bank and Safwa Bank between 2005 and 2019. Based on the annual data of the panel, it was analyzed using the multiple linear regression to determine the performance of banks in terms of return on assets (ROA), return on equity (ROE), and return on share the findings indicated that real exchange rate and real interest rate negatively affected the performance of Islamic bank. The paper elaborated that the effect of the rise in real exchange rates in the majority of instances is the rise in the quantity of imports and fall in exports which is unfavorable to domestic investment, deposits and facilities and impacts negatively on returns. Likewise, an increase in real interest rates was associated with the increase in returns on investment deposits which lowers the profit margin thereby leading to low ROA, ROE and the level of returns on share.

All in all, the research has determined the sensitivity of Islamic banks to macro economic variations particularly exchange rate and interest rate changes, highlighting the challenges such institutions must withstand to stay profitable in unstable economic conditions (Al Sharif, 2021).

One of the studies has investigated the effect of exchange rates and interest rates on stock prices in the manufacturing industry taking inflation as a moderator variable. The time frame of 2020 was taken into account as the subject of the in-depth research when the Composite Stock Price Index (JCI) constituted a significant decline under the impact of the Covid - 19 pandemic, and it demonstrates the large volatility of the stock market. It was observed that exchange rate movements were a major influence on the stock prices of the manufacturing sector but interest rates and inflation did not have a direct influence. Also, the research established that the moderating variable of inflation had an effect on the relationship between exchange rates, interest rates and stock prices that indicate that macroeconomic factors can alter the magnitude of such effects at times of economic strain. The research demonstrates that currency fluctuations in manufacturing firms and investors are worth watching particularly during economic headaches since exchange rate fluctuation can directly affect equity values despite the seeming other macroeconomic factors being of lesser significance (Ikhsan et al., 2022)

A research was carried out to examine the relationship between the financial performance indicators and the value of the listed companies in manufacturing industries in the Indonesia Stock Exchange in the year 2016-2019. The research variables were the data of return on assets (ROA), return on equity (ROE), net profit margin (NPM) as the independent variable and value of the companies as the dependent variable. The study design was an associative quantitative research design and purpose sampling in the selection of manufacturing companies of interest. The relationships were checked using multiple linear regression analysis. The findings revealed that ROA and ROE made positive contribution to the value of the company and this would mean that the greater the profitability and effective utilization of equity the higher the valuations of the company by the market. In contrast, NPM was not positively impacting the company value, when considered separately. But at the same time, ROA, ROE, and NPM combined produced a significant impact on the value of the companies, therefore, reinforcing the value-added importance of financial performance measures when they are used in combination to determine the market value of manufacturing firms (Supriyadi, 2021)

The study aimed at determining the impacts of the volatility of exchange rates in the performance of commercial banks in the East African Community in the context of Kenya,

Tanzania and Uganda. The ratio was used to calculate the performance of the bank using the return on assets (ROA) as a profitability measure. The research was to establish the degree of the exchange rate risk, and the effect of the volatility on the performance of the banks. The study employed the explanatory research design and was guided by the profit maximization theory and the monetary theory. The secondary data collected between 2000 and 2020 consisted of the central banks of the countries and world bank and panel estimation was employed in data analysis the findings indicated that profitability of the commercial banks in the region was threatened by exchange rate volatility. Uganda was less volatile in its currency compared to Kenya and Tanzania which had greater currency volatility. Generally, the exchange rate volatility affected the bank performance negatively but it was not that strong over the study period. This was shown in the study as the necessity to monitor currency risks and develop the strategies that will reduce the adverse influence of exchange rate.

modifications on the profitability of the banking industry of the East African Community (Njagi & Nzai, 2022)

It carried out a research in an attempt to examine how inflation and exchange rate variations affect the real financial performance of consumer goods industry in the Nigerian capital market. The sample size would be 2012-2023 and the research sampling method would be purposive and elimination method as the research method of selecting the right companies to conduct the study. The financial performance was measured by earnings per share (EPS) and regression analysis was performed to analyse the relationship existing between the macroeconomic and performance the results showed that the financial performances of the consumer goods firms were negatively correlated with the inflation and exchange rate volatility. Growth in inflation and volatile currency was found to be positively correlated with reduction in profitability as a sign of sensitivity of such firms to presence of macroeconomic instability. Based on the findings, the paper suggested that the price stability program ought to be used to control the rate of inflation and exchange rate stabilization policy to curb the cost of imports and increase the profitability of the consumer goods firms in the Nigerian capital market (Areghan et al., 2025).

A research on the effect of exchange rate volatility on foreign direct investment (FDI) inflows in South Asian countries such as Bangladesh, India, Pakistan, Nepal, and Sri Lanka was conducted between 1980 and 2017. The study has dealt with the discrepancy in past theoretical and empirical literature on the association between currency fluctuations and FDI. The

exchange rate volatility cannot be directly observed so the study used a GARCH (1, 1) model to estimate volatility and added this variable in the fixed-effect panel regression models and the use of Driscoll and Kraay standard errors as a factor of cross-sectional dependence findings indicated that the volatility of the exchange rate had a negative effect on the FDI inflows of the South Asia countries and this proves the vulnerability of investment flows to the volatility of the exchange rate. However, this study also found out that the detrimental effects of the exchange rate variation can be neutralized by the augmented openness of the trade that permits FDI inflows even amid volatility. The article mentions the importance of promoting trade liberalization as a policy tool that creates inflow of foreign investment in the economy that is reliant on FDI to expand and advance (Jannat, 2020).

2.1 Theoretical Framework

The conceptual model in this research study has been formulated using the past empirical studies examining macroeconomic determinants and financial performance of firms. The framework examines the effects of the significant macroeconomic factors like exchange rate fluctuation, inflation rate, interest rate, and gross domestic product (GDP) growth on the financial performance of manufacturing companies of South Asian nations.

Two major indicators Return on Assets (ROA) and Return on Equity (ROE) are employed as the dependent variable in this work. Such measures represent profitability and efficiency on the use of the total assets and equity of the shareholders in generation of income.

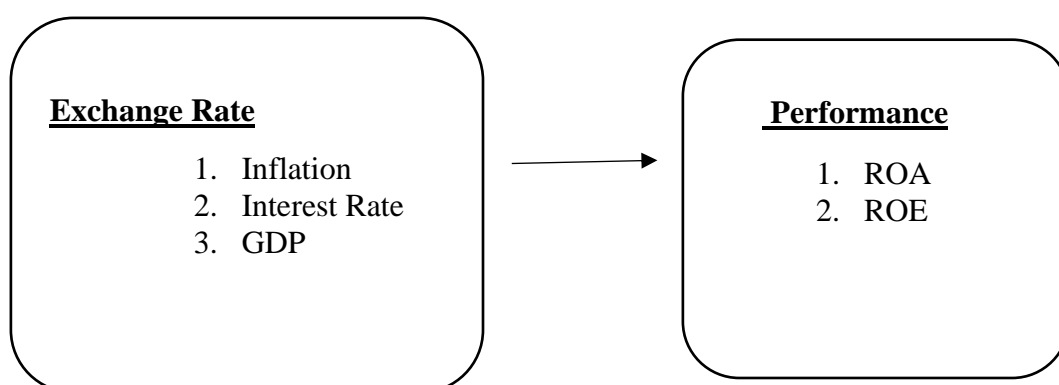


Figure 2.1: Theoretical framework

2.2 Hypotheses Statements

H1: The financial performance of manufacturing firms in South Asian countries is affected by the exchange rate volatility.

H2: The inflation rate has a significant influence on financial performance of South Asian manufacturing firms.

H3: Financial performance of manufacturing firms in South Asian countries depends on interest rate significantly.

H4: Financial performance of manufacturing companies in the South Asian countries greatly depends on the rate of GDP growth.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Methodology

In this study, the research design that would be applied would be quantitative research design to explore empirically the impact of currency fluctuations and macroeconomic variables on financial performance of manufacturing firms in South Asia. This is an explanatory study where the study is founded on panel data, collected based on secondary data, on the financial statements and macroeconomic databases data, spanning 2014-2024.

3.2 Data and Variables

The target market will consist of manufacturing organizations within the stock exchange of the selected South Asian countries (Pakistan, India, Bangladesh, Sri Lanka, Nepal, Bhutan, Maldives, Afghanistan) during 2014-2024. World Bank World Development Indicators (WDI), IMF International Financial Statistics (IFS) and databases of individual stock exchanges provide both firm-level financial data including (ROA) and (ROE). The macroeconomic variables are the exchange rate, the interest rate and inflation rate derived by respective Central Banks and World Bank database.

The following variables are used in this study:

Dependent Variables (Financial Performance Indicators):

- **Return on Assets (Y_1):**

$$\text{ROA} = \text{Net Income} \div \text{Total Assets}$$

- **Return on Equity (Y_2):**

$$\text{ROE} = \text{Net Income} \div \text{Shareholder Equity}$$

Independent Variables (Macroeconomic Indicators):

Exchange Rate Volatility (X_1):

Measured as the annual average of local currency against USD, with fluctuations calculated using the standard deviation method.

Inflation Rate (X_2): Annual consumer price index (CPI) percentage change.

Interest Rate (X_3): Annual average lending/benchmark policy rate set by central banks.

Gross Domestic Product (X₄): Real annual %GDP growth rate measured as the year-on-year percent change in real GDP

3.3 Research Method

The validity of models which are adopted in this study is tested by use of multiple linear regression analysis. This method enables us to examine the dependence in the currency variations and the firm financial results that encompass both firm-specific and macro-economic effects.

Econometric Equations

$$\text{Model 1: } ROA_{it} = \beta_0 + \beta_1 ERV_{it} + \beta_2 INF_{it} + \beta_3 INT_{it} + \beta_4 GDP_{it} + \mu_{it}$$

$$\text{Model 2: } ROE_{it} = \beta_0 + \beta_1 ERV_{it} + \beta_2 INF_{it} + \beta_3 INT_{it} + \beta_4 GDP_{it} + \mu_{it}$$

Where:

Y₁ = (ROA)

Y₂ = (ROE)

X₁ = Exchange Rate Volatility

X₂ = Inflation Rate

X₃ = Interest Rate

X₄ = GDP

β₀ = Constant term

β₁, β₂, β₃ = Coefficients of explanatory variables

μ = Error term

- **Multicollinearity Diagnostic:**

Variance Inflation Factor (VIF) test was employed to ensure that its independent variables, which are Exchange rate volatility, Inflation, interest rate and GDP do not have excess correlation.

- **Panel Unit Root Tests:**

In order to deal with the issue of stationarity and prevent spurious regression, the stationarity of all variables were assessed using the Levin, Lin and Chu (LLC) test along with the Im, Pesaran and Shin (IPS) test and thus, the individual series were found to be stationary on the Level or the First Difference frequency.

- **Model Selection (Hausman Test):**

The Hausman Specification Test was also employed to identify which estimation strategy is correct that is, a Fixed Effects Model (FEM) or a Random Effects Model (REM).

- **Panel Regression Analysis:**

The diagnostic results analysis was directed to fit the Fixed Effects Model to estimate the final coefficients and to test hypotheses of the study in respect to the influence of the macroeconomic factors on the Return on Assets (ROA) and Return on Equity (ROE).

CHAPTER 4: DATA ANALYSIS AND RESULTS

The overall objective of the study is to investigate the subject of the influence of currency changes and macroeconomic conditions on the financial performance of manufacturing operations in South Asia. The chapter, therefore, presents the findings of empirical data on the basis of an effective statistical examination of the panel data, 2014-2024. The analysis has been done through EViews software to guarantee the veracity and reliability of the analysis.

A systematic econometric process was strictly followed to test the hypotheses and to establish a strong relationship between the independent variables i.e. Exchange Rate Volatility (ERV), Inflation (INF), Interest Rate (INT) and Gross Domestic Product (GDP) and the dependent variables, Return on Assets (ROA) and Return on Equity (ROE).

Analysis is done in four significant steps:

4.1 Multicollinearity Test (VIF):

Variance Inflation Factor (VIF) test was undertaken to check that there is no strong intercorrelation between the independent variables which would not allow the distortion of regression results.

Variance Inflation Factors

Variable	Coefficient		
	Uncentered	Centered	
	Variance	VIF	VIF
C	7.247036	20.17633	NA
ERV	0.000128	5.431570	1.827250
INF	0.017548	4.177434	2.358232
INT	0.054285	21.21984	1.528009
GDP	0.007941	1.528164	1.086446

Table 4.1: Variance Inflation Factor (VIF)

Table 4.1 supports the fact that there is no multicollinearity issue, all the centered VIFs of the predictors are much less than the critical value of ten. Exchange rate Volatility(ERV) records a VIF of 1.827, which confirms that the variations of currency are not significantly associated with other macroeconomic factors in this model. The one that is in a comfortable range is inflation (INF) with the highest VIF of 2.358. Interest Rate (INT) has the highest VIF of 1.528 indicating low degree of correlation whereas Gross Domestic Product (GDP) has the lowest VIF of 1.086 indicating that it is basically independent of the other predictors.

4.2 Panel Unit Root Test (Stationarity Analysis):

To avoid this problem of regression, the stationarity of all the variables was verified using the Levin, Lin and Chu (LLC) and Im, Pesaran and Shin (IPS) tests. This was done to know whether each variable was Level or at the First Difference.

In order to make sure the empirical validity of the panel data and to rule out the pernicious effect of the so-called spurious regression that would take us on a wrong path, we made the right panel unit-root test. The rationale behind such statistical endeavor is to ascertain whether the variables in the analysis are stationary (i.e. it has a stable and long-run behavior) or non-stationary (i.e. it has unit-root behavior thus necessitating differencing).

Variable: ROA

Cross-				
Method	Statistic	Prob.**	sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-2.12242	0.0169	8	80
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-				
stat	-0.37746	0.3529	8	80
ADF - Fisher Chi-square	14.0549	0.5946	8	80
PP - Fisher Chi-square	13.6579	0.6242	8	80

ROA At level

Variable: ROE

Cross-

Method	Statistic	Prob.**	sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-2.20557	0.0137	8	80

Null: Unit root (assumes individual unit root process)

Im, Pesaran and Shin W-

stat	-0.54612	0.2925	8	80
ADF - Fisher Chi-square	15.1136	0.5163	8	80
PP - Fisher Chi-square	14.6795	0.5482	8	80

ROE At level

Variable: (ERV)

Cross-

Method	Statistic	Prob.**	sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-8.27024	0.0000	8	70

Null: Unit root (assumes individual unit root process)

Im, Pesaran and Shin W-

stat	-4.20285	0.0000	8	70
------	----------	--------	---	----

ADF - Fisher Chi-square	49.1398	0.0000	8	70
PP - Fisher Chi-square	47.0851	0.0001	8	72

Variable: GDP

Cross-				
Method	Statistic	Prob.**	sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-7.34249	0.0000	8	80

Null: Unit root (assumes individual unit root process)

Im, Pesaran and Shin W-				
Method	Statistic	Prob.**	sections	Obs
stat	-4.10735	0.0000	8	80
ADF - Fisher Chi-square	43.1462	0.0003	8	80
PP - Fisher Chi-square	55.9595	0.0000	8	80

GDP at Level

Variable: INF

Cross-				
Method	Statistic	Prob.**	sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-2.64358	0.0041	8	77

Null: Unit root (assumes individual unit root process)

Im, Pesaran and Shin W-					
stat	-1.73327	0.0415	8		77
ADF - Fisher Chi-square	25.1082	0.0679	8		77
PP - Fisher Chi-square	23.2675	0.1068	8		80

INF is also at level

Variable: (INT)

Cross-					
Method	Statistic	Prob.**	sections	Obs	
<hr/> Null: Unit root (assumes common unit root process)					
Levin, Lin & Chu t*	-3.68962	0.0001	6		51

Null: Unit root (assumes individual unit root process)

Im, Pesaran and Shin W-					
stat	-1.89817	0.0288	6		51
ADF - Fisher Chi-square	26.5638	0.0089	6		51
PP - Fisher Chi-square	23.3512	0.0249	6		54

INT not at Level at 1st Difference

Unit Root Test Results

Variable	Result	Status
ROA	$p < .05$	Stationary at level
ROE	$p < .05$	Stationary at level
GDP	$p < .05$	Stationary at level
INF	$p < .05$	Stationary at level
ERV	$p < .05$ (1st difference)	Stationary at first difference
INT	$p < .05$ (1st difference)	Stationary at first difference

Table 4.2 Results

The results presented in Table 4.2 indicate that the order of integration is not homogenous among the variables under study implying that they are not all of the same degree of integration and they are not all strictly stationary.

Level (I(0)) Both Return on Assets (ROA) and Return on Equity (ROE) which are the dependent variables and the predictors which include Gross Domestic Product (GDP) and Inflation Index (INF) were stationary at level. The p-values are lower than the conventional value of 0.05 and hence, we can reject the null hypothesis of a unit root. This outcome hints that the specified variables are dictated by the long-term equilibrium process that is sustained and does not presuppose any further change.

Variables that turn stationary subsequent to a preliminary exchange of rates (I(1)): Exchange voluntary rate Volatility (ERV) and Interest rate (INT) variables were non-stationary at the beginning with a p -value of greater than 0.05 at level. After a first difference transformation was used, all the tests had a p-value less than the value of 0.05, indicating that they have a unit root though they will be stationary at the first difference.

4.3 Hausman Specification Test:

Hausman test was done to find out scientifically the best estimation model that was to be used in this panel data analysis, so that the decision is made as to whether Fixed Effects Model or the Random effects Model was the correct model that would be used.

Dependent Variable: ROA

Periods included: 11

Cross-sections included: 8

Total panel observations: 72

Variable	Coefficien			
	t	Std. Error	t-Statistic	Prob.
C	8.876590	2.055025	4.319456	0.0001
ERV	-0.046382	0.013791	-3.363252	0.0013
INF	-0.102253	0.092134	-1.109831	0.2715
INT	0.407898	0.228771	1.782998	0.0796
GDP	0.103072	0.053434	1.928958	0.0585

Effects Specification

Cross-section fixed

R-squared	0.805770	Mean dependent var	8.700000
Adjusted R-squared	0.770161	S.D. dependent var	6.302582
S.E. of regression	3.021557	Akaike info criterion	5.200433
Sum squared resid	547.7883	Schwarz criterion	5.579877
Log likelihood	-175.2156	Hannan-Quinn criter.	5.351491
F-statistic	22.62830	Durbin-Watson stat	0.944961
Prob(F-statistic)	0.000000		

Hausman Test Suggest Fixed Effect For ROA

Dependent Variable: ROE

Periods included: 11

Cross-sections included: 8

Total panel observations: 72

Variable	Coefficien			
	t	Std. Error	t-Statistic	Prob.
C	13.04335	2.972517	4.387982	0.0000
ERV	-0.048315	0.019948	-2.422061	0.0185
INF	-0.097958	0.133268	-0.735045	0.4652
INT	0.400657	0.330909	1.210778	0.2307
GDP	0.147096	0.077290	1.903163	0.0618

Effects Specification

Cross-section fixed

R-squared	0.749593	Mean dependent var	12.81250
Adjusted R-squared	0.703685	S.D. dependent var	8.028996
S.E. of regression	4.370570	Akaike info criterion	5.938676
Sum squared resid	1146.113	Schwarz criterion	6.318120
Log likelihood	-201.7923	Hannan-Quinn criter.	6.089734
F-statistic	16.32816	Durbin-Watson stat	1.110904
Prob(F-statistic)	0.000000		

Hausman Test Suggest Fixed Effect For ROE

Hausman Test Results

Model	χ^2 Statistic	p Value	Decision
Model 1 (ROA)	17.43	.0016	Fixed effects
Model 2 (ROE)	22.38	.0002	Fixed effects

Table 4.3

Table 4.3 Hausman test results provide convincing evidence in support of the application of the Fixed Effects Model in the Fixed Effects Model of the dependent variables. Under the event of Return on Assets (ROA): the chi squared value is 17.4293 with the probability value of 0.0016. The null hypothesis is rejected because the 0.0016 value is significantly smaller than the 0.05 value, and hence the observed but unobservable firm-specific effects are correlated with the independent variables, this implies that the Fixed Effects Model makes sense and is efficient. In case of Return on Equity (ROE): value of chi-square is 22.3822 with probability value of 0.0002. On the same note, the null hypothesis is discarded since, at a $p = 0.0358$, the p -value = 0.0363.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

It will be the final chapter in the current research and will be succeeded by recommendations, practical implications and limitations. Additionally, the chapter also determines the areas that can be the future research.

5.1 Conclusion

Countries in the South Asian region rely on the manufacturing sector in generating their economic growth. The analysis is required on the performance of this industry and company with special reference to the response to the external macroeconomic shocks in detail. In the modern competitive and unstable business environment, companies are turning to measures that protect their profit margin against the external risks. The major goal of the research involved an analysis of the influence of the currency variations and macroeconomic factors on the financial performance of manufacturing companies listed in the Stock Exchange of South Asian countries. In addition, financial performance is divided into two segment Return on Asset (ROA) and Return on Equity (ROE).

The study findings indicate unquestionable findings through the Fixed Effects Model on the panel data in 2014-2024. Regarding this, as per the results, the Exchange rate Volatility (ERV) is negatively related to the performance of the firms in ROA and ROE. These findings indicate that the higher the currency instability, the lower the performance of business in South Asia. This is in line with the fact that there is a continuous fluctuation of the exchange rates that will lead to an increase in the cost of imported raw materials and uncertainty in the price of exports thereby reducing the profit margin.

However, there is not much influence on other macroeconomic measures like Interest Rates (INT), Inflation (INF), and GDP growth on how business is performed as measured using the Fixed Effects Model. The reasons behind these insignificant results could be due to the fact that South Asian manufacturing companies have been willing to accommodate continuous inflationary forces or their profitability is much more dynamic to currency shocks than to overall shifts in interest rates. We find however that not every macroeconomic indicator can have a significant effect on corporate performance; in this particular model, the general economic growth (GDP) was having a negligible effect on the measures of firm performance.

The general consideration indicates that currency stability is the major performance driver in comparison to the other economic variables.

5.2 Recommendations

According to the analysis and findings, the paper outlines a few recommendations that would usher in change to the financial performance through proper risk management practices in the South American countries manufacturing industry. This industry must work on the performance of their financial statements since the economy of these South Asian developing nations is so much reliant on the manufacturing industry.

Our findings indicate the effectiveness of exchange rate stability, and efficient hedging mechanism in overseeing management activities that enhance the financial performance of companies. But some of the South Asian developing nations somehow do not have stable currency markets. Consequently, it is advisable to recommend the companies to embrace strong hedging behaviours (like forward contracts and future) to enhance the performance of firms. It implies that they ought to work harder on financial risk management as they lay down the strategic plans of the company on monitoring its performance. Further, the policymakers are advised to focus on policies that stabilize the exchange rates instead of making adjustments to the interest rates since the latter yielded less effects on the profitability of firms. On the whole, effective foreign exchange exposure management is required to realize greater performance.

5.3 Practical Implications

The implications of the findings include the fact that the present study can be useful to the management of manufacturing companies, policymakers and researchers. The implications of our results to the application of the powerful financial risk management in developing countries, especially in particular, are high.

As our investigations reveal, firms that maintain good hedging measures against currency fluctuations are expected to record high accounting and market performances. Theoretically, our research adds to the body of knowledge by taking into consideration the particular vulnerability of the South Asian markets to the external currency shock. Theoretically, it shows that proper management of exchange rate risk leads to reduction in operational expenses, as well as in conserving precious resources to the firms. Consequently, the performance of enterprises in the developing economies can be enhanced through the application of an ideal risk management standard. In addition, our research findings are in line with the theory that the

external environment (currency markets) is stable and thus, firms are able to use its internal resources more efficiently. Specifically, sourcing decisions on imports and prices on exports should be made effectively, with consideration to the currency trends since these aspects have an impact on enhancing the performance of manufacturing companies in developing nations as revealed in our research findings.

5.4 Limitations and Future Directions.

The same area can also be expanded in this research by compiling first-hand information on the financial managers of the companies under various industries. This will offer further insights on how currency risk is specifically being handled by the management of the companies in the various sectors to enhance the performance of the firm secondly, it is possible to expand the study by addressing both primary and secondary data to include the in-depth results on how the political stability or energy prices influence the financial results of firms that were not encompassed in the current model. The same study may also be conducted on the financial sector (banks) in South Asia to determine whether there is a difference in the response of their reactions to interest rates with those of the manufacturing sector. In addition, the sample of developed countries can also be used in the future and compare the results of developing and developed nations to determine whether the currency volatility is still a major issue in more stable economies.

CHAPTER 6: REFERENCES

- Adebayo AKANDE, A., & Orhunwakho, E. (2024). Foreign Currency Exchange Rate and Return on Assets of Listed Manufacturing Firms in Nigeria. *Case Studies Journal*, 13(7), 2305–2509. <https://www.casestudiesjournal.com/http://www.casestudiesjournal.com/>
- Al Sharif, B. M. (2021). Impact of Real Exchange Rate and Real Interest Rate on Islamic Bank' Performance: An Empirical Study. *Indian Journal of Economics and Business*, 20(3), 445–460. <http://www.ashwinanokha.com/IJEB.php>
- Areghan, I., Okoh, J. I., A. E. O., Olusoji, O., Olurotimi, O., Tolulope, A., & Vincent, A. O. (2025). Impact of Inflation and Exchange Rates on Financial Performance of Consumer Goods Sector of the Capital Market in Nigeria. *International Journal of Banking and Insurance Management*, 3(1), 12–31. https://doi.org/10.34218/ijbim_03_01_002
- Dutiva Br. Ginting, E., & Matondang, S. (2022). Effect Of Macroeconomic Factors (Exchange, Inflation, Sbi Interest Rate, World Oil Price) On Stock Returns With Profitability As Intervening Variables In Mining Sector Companies In The Indonesia Stock Exchange 2015-2019. *International Journal of Educational Research & Social Sciences*, 3(4), 1577–1586. <https://doi.org/10.51601/ijersc.v3i4.459>
- Ikhsan, S., Sugito Putra, T. A. P., Sugiyanto, S., Dasuki, R., & Herdiansyah, E. (2022). the Effect of Exchange Rate and Interest Rate on Share Prices in the Manufacturing Sector With Inflation As Moderation. *Jrak*, 14(2), 226–236. <https://doi.org/10.23969/jrak.v14i2.5648>
- Jannat, Z. (2020a). The Impact of Exchange Rate Volatility on Foreign Direct Investment Inflows: Evidence from South Asia. *International Journal of Finance, Insurance and Risk Management*, 10(Issue 3), 101–116. <https://doi.org/10.35808/ijfirm/225>
- Justiro, N. I., & Irawati, Z. (2023). Inflation, Rupiah Exchange Rates, And Interest Rates On The Financial Performance Of State-Owned Banks For 2013-2022 Period. *Jurnal Ilmu Manajemen Advantage*, 7(2), 223–237. <https://doi.org/10.30741/adv.v7i2.1181>

- Kamara, I., Islam, U., & Indonesia, I. (2025). *Procedia on Economic Scientific Research Inflation and Exchange Rate Impact on the Performance of Commercial Banks in Sierra Leone. August.*
- Lu, J., Lu, J., & Lv, J. (2021). Brexit: The Impact of the Fluctuation of Pound Exchange Rate on the Banking Performance and Profitability. *American Journal of Industrial and Business Management*, 11(04), 364–379. <https://doi.org/10.4236/ajibm.2021.114024>
- Merko, F., & Habili, M. (2023). Impact of Interest Rate, Exchange Rate, and Inflation on Commercial Banks' Performance. *Corporate and Business Strategy Review*, 4(2), 15–28. <https://doi.org/10.22495/cbsrv4i2art2>
- Moyo, D., & Tursoy Head, T. (n.d.). *Munich Personal RePEc Archive Impact of Inflation and Exchange Rate on the Financial Performance of Commercial Banks in South Africa IMPACT OF INFLATION AND EXCHANGE RATE ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN SOUTH AFRICA.*
- Musafa, M. (2024). the Effects of Foreign Exchange Rates, Stock Market Performance, and Financial Performance on Stock Returns, Pt Bank Rakyat Indonesia, Tbk (2014-2023). *Multifinance*, 2(2), 129–135. <https://doi.org/10.61397/mfc.v2i2.303>
- Njagi, M. M., & Nzai, C. (2022). Effect of Exchange Rate Volatility on Performance of Commercial Banks in East Africa Community. *EdinBurg Peer Reviewed Journals and Books Publishers Journal of Economics*, 2(2), 1–13.
- Osho, A. E., & Fagbamila, O. A. (2022). Exchange Rates Fluctuations, Economic Factors and Financial Performance Evaluation of Multinational Companies in Nigeria. *Acta Universitatis Danubius*, 18(5), 160–181.
- Perdani, V. M., & Marga, U. P. (2025). *J u m a d.* 3(1), 32–38.
- Rasheed, R., & Nadeem Ishaq, M. (2022). IMPACT OF INFLATION RATE AND EXCHANGE RATE ON THE PROFITABILITY OF FINANCIAL INSTITUTIONS: A PANEL DATA ANALYSIS FROM PAKISTAN. In *Pakistan Journal of Social Research* (Vol. 4, Issue 3). www.pjsr.com.pk
- Supriyadi, T. (2021). Effect of Return on Assets (Roa), Return on Equity (Roe), and Net Profit Margin (Npm) on the Company'S Value in Manufacturing Companies Listed on the

Exchange Indonesia Securities Year 2016-2019. *International Journal of Economics, Business and Management Research*, 5(04), 2021. www.ijebmr.com



0% detected as AI

The percentage indicates the combined amount of likely AI-generated text as well as likely AI-generated text that was also likely AI-paraphrased.

Caution: Review required.

It is essential to understand the limitations of AI detection before making decisions about a student's work. We encourage you to learn more about Turnitin's AI detection capabilities before using the tool.

Detection Groups

- 
0 AI-generated only 0%
 Likely AI-generated text from a large-language model.
- 
0 AI-generated text that was AI-paraphrased 0%
 Likely AI-generated text that was likely revised using an AI-paraphrase tool or word spinner.

Disclaimer

Our AI writing assessment is designed to help educators identify text that might be prepared by a generative AI tool. Our AI writing assessment may not always be accurate (i.e., our AI models may produce either false positive results or false negative results), so it should not be used as the sole basis for adverse actions against a student. It takes further scrutiny and human judgment in conjunction with an organization's application of its specific academic policies to determine whether any academic misconduct has occurred.

Frequently Asked Questions

How should I interpret Turnitin's AI writing percentage and false positives?

The percentage shown in the AI writing report is the amount of qualifying text within the submission that Turnitin's AI writing detection model determines was either likely AI-generated text from a large-language model or likely AI-generated text that was likely revised using an AI paraphrase tool or word spinner.

False positives (incorrectly flagging human-written text as AI-generated) are a possibility in AI models.

AI detection scores under 20%, which we do not surface in new reports, have a higher likelihood of false positives. To reduce the likelihood of misinterpretation, no score or highlights are attributed and are indicated with an asterisk in the report (*%).

The AI writing percentage should not be the sole basis to determine whether misconduct has occurred. The reviewer/instructor should use the percentage as a means to start a formative conversation with their student and/or use it to examine the submitted assignment in accordance with their school's policies.

What does 'qualifying text' mean?

Our model only processes qualifying text in the form of long-form writing. Long-form writing means individual sentences contained in paragraphs that make up a longer piece of written work, such as an essay, a dissertation, or an article, etc. Qualifying text that has been determined to be likely AI-generated will be highlighted in cyan in the submission, and likely AI-generated and then likely AI-paraphrased will be highlighted purple.

Non-qualifying text, such as bullet points, annotated bibliographies, etc., will not be processed and can create disparity between the submission highlights and the percentage shown.



14% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography

Match Groups

- 264 Not Cited or Quoted 31%**
Matches with neither in-text citation nor quotation marks
- 18 Missing Quotations 2%**
Matches that are still very similar to source material
- 0 Missing Citation 0%**
Matches that have quotation marks, but no in-text citation
- 0 Cited and Quoted 0%**
Matches with in-text citation present, but no quotation marks

Top Sources

- 23% Internet sources
- 20% Publications
- 30% Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.