ANALYZING THE RELATIONSHIP BETWEEN MACROECONOMIC FACTORS AND STOCK MARKETS RETURN

A Dissertation submitted to the Office of the Dean, Faculty of Management in partial fulfillment of the requirements for the Master's Degree

by

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August, 2025

CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **Analyzing the Relationship between Macroeconomic Factors and Stock Markets Return**. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor. It has been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

……

Chandra Kumari Rai

REPORT OF RESEARCH COMMITTEE

Miss Chandra Kumari Rai has defended research proposal entitled **Analyzing the Relationship between Macroeconomic Factors and Stock Markets Return**, successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Dr. Dilli Ram Bhandari and submit the thesis for evaluation and viva voce examination.

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Dissertation Proposal Defended Date
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Dissertation Submitted Date
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APPROVAL SHEET

We, the undersigned, have examined the thesis entitled **Analyzing the Relationship between Macroeconomic Factors and Stock Markets Return** presented by Chandra Kumari Rai a candidate for the degree of master of Business Studies (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

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This study entitled **Analyzing the Relationship between Macroeconomic Factors and Stock Markets Return** has been prepared in partial fulfillment for the Degree of Master of Business Studies (MBS) under the Faculty of Management, Tribhuvan University is based on research models involving the macroeconomic indicator of Nepal.

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Chandra Kumari Rai

August, 2025

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ABBREVIATIONS

AD	:	Anno Domini
ATM	:	Automated Tailor Machine
BS	:	Bikram Sambat
CAR	:	Capital Adequacy Ratio
df	:	Degree of Freedom
e.g.	:	Example
F/Y	:	Fiscal Year
FCR	:	Foreign Currency Reserve
GDP	:	Gross Domestic Product
i.e.	:	That is
INF	:	Inflation rate
INT	:	Interest Rate
Ltd.	:	Limited
MS	:	Money Supply
NEPSE	:	Nepal Stock Exchange
NRB	:	Nepal Rastra Bank
SD	:	Standard Deviation
TU	:	Tribhuvan University

ABSTRACT

Analyzing the Relationship between Macroeconomic Factors and Stock Markets Return is the title of the study. Examining the effects of the money supply, GDP, interest rate, inflation rate, and foreign exchange rate on the NEPSE index is the goal of this study. Essentially, the macroeconomic variables are determined by both qualitative and quantitative aspects.

NEPSE is the dependent variable in this study, and the experiment factors include the money supply, GDP, interest rate, inflation rate, and foreign exchange rate. The secondary data was collected from the websites of NEPSE, SEBON, and the Ministry of Finance over a fifteen-year period (2009/10 to 2023/24). The data is analyzed and interpreted using SPSS version 23, with a descriptive and casual comparative study methodology. Correlation research shows that NEPSE has weak positive correlations with the money supply, interest rate, and foreign exchange reserve, while NEPSE and GDP have a weak negative link, suggesting a minor tendency for these variables to move in the same direction. A multiple linear regression model has been used to show how independent variables affect NEPSE. The result demonstrates that, while having an adverse effect on NEPSE, the interest rate and inflation rate are not statistically significant. In a related vein, GDP and money supply both positively impact NEPSE; the former is statistically significant while the latter is not insignificant.

Key Words: NEPSE, GDP, Interest Rate, Inflation Rate, Foreign Exchange Rate

CHAPTER – I

INTRODUCTION

1.1 Background of the Study

Nepal's economic development during the last half-century has not been especially remarkable when compared to its neighbors. Nepal has seen a number of political shifts throughout this time. The liberalized economic policies that had been in effect after democracy was restored continued in the 1980s. The deregulation of trade, industry, finance, and foreign exchange regimes, the simplification of price controls and subsidies, the privatization of significant state-owned enterprises, the substantial reduction of trade-related tariffs, and policies pertaining to industry and foreign investment are just a few of the major liberal reforms the country implemented during this ten-year period. However, political instability resulting from the Maoist insurgency and multiple post-1995 government transitions impeded the nation's economic development by postponing the implementation and completion of some of the more difficult reforms (Wahab et al., 2022).

The entire stock market is used to trade the shares of publicly traded companies. The secondary market is where shares of publicly traded companies listed on the Nepal Stock Exchange (NEPSE) are traded, while the over-the-counter market is where shares of unlisted public enterprises are transacted. Similar to this, stocks are first traded on another kind of market known as the primary or initial public offering (IPO) market. Although a stock's value is determined by the present value of future cash flows or profits, a price or transaction value is required in order for a stock to be traded; prices are arbitrary since they are determined by market supply and demand (Pattawe et al., 2022).

The performance of the stock market is assessed using the NEPSE index, a sophisticated index that is based on market capitalization and is thought to be a representative indicator of the Nepalese stock market. In general, people also think that the stock market is a good indicator of the health of the economy (Dhal et al., 2021).

Common stockholders are in the dark about dividends, capital gains, and residual claims. As a result, they must assume the greatest amount of risk. Common stocks are traded on stock exchanges and over-the-counter (OTC) markets. The Nepal Stock Exchange (NEPSE) only trades the common stocks of listed companies. The history of the stock

market in Nepal is very recent. The Securities Exchange Center (SEC) was established in 1976 to support and promote the growth of the capital market (Carter et al., 2022).

The capital market is seen to be an indicator of an economy. Despite the macroeconomic factors moving more slowly in a positive direction, Nepal's capital market has experienced extreme volatility during the last 10 years. This implied that the Nepali economy's macroeconomic and capital market factors might not be properly synchronized. This situation prompted the question of whether macroeconomic factors like money supply, prices, interest rates, and remittances in the Nepali economy could be used to characterize equilibrium relationships between the stock market and short- and long-term remittances. Therefore, this paper examined the co-integration of the selected six macroeconomic variables with the stock market returns to ascertain how well the Nepali stock market raised the capital required for the economy. Sharma (2021).

A common indicator of the health of the economy is the stock market index. Because it indicates that investors have confidence in the economy's future, a gain in the stock index is usually seen positively. It promotes financial system investment. However, a rapid increase in the stock market index is always cause for concern. The stability of the financial system and the economy are at risk when an index gain that is not backed by the fundamentals is not sustained and finally declines (Koirala & Bajracharya, 2014).

Therefore, this study examines the relationship between the NEPSE Index and the money supply, GDP, interest rate, inflation rate, and foreign exchange reserve. Examine the effects of the foreign exchange reserve, GDP, interest rate, inflation rate, and money supply on the NEPSE.

To prevent bubbles from emerging and the market from bursting, decision-makers must thus keep a close eye on the stock market's rise and be ready to take appropriate action when needed. This requires an understanding of how the factors influencing the stock market index relate to it. Numerous things can influence the stock market. Any element that affects a company's cash flows or the discount rate has an effect on the stock market. However, depending on the size, character, and other characteristics of the market and economy, the factors that have an impact will vary from country to country (Monti, 2022).

In consideration to the above issues, this study aims to analyze the relationship between money supply, GDP, interest rates, inflation rates, foreign exchange reserves, and NEPSE index. Also, examine the impact of money supply, GDP, interest rate, inflation rate and foreign currency reserve on NEPSE index

1.2 Problem Statement

The creation of NEPSE in 1993 A.D. helped to address these kinds of problems to some extent. One problem, though, is that Nepalese people believe stock investments are riskier than they actually are. They start hoarding money as a result of this, which makes them question whether they should invest. Consequently, neither the nation's economy nor investors benefit from this circumstance (Carter et al., 2022).

Nepal's economic development during the last half-century has not been especially remarkable when compared to its neighbors. Nepal has seen a number of political shifts throughout this time. The liberalized economic policies that had been in effect after democracy was restored continued in the 1980s. The deregulation of trade, industry, finance, and foreign exchange regimes, the simplification of price controls and subsidies, the privatization of significant state-owned enterprises, the substantial reduction of trade-related tariffs, and policies pertaining to industry and foreign investment are just a few of the major liberal reforms the country implemented during this ten-year period. By enabling the purchase and sale of shares and securities issued by various firms, the stock exchange market offers a way to turn savings into investments. These markets are essential for the mobilization and creation of capital, which in turn promotes the growth of industry, trade, the service sector, and commerce, so supporting the country's overall economy. Accordingly, the stock market has even been called the mirror of the economy (Ghimire & Mishra, 2018).

Stock markets' capacity to provide capital for business, industry, and general economic expansion is essential. NEPSE has been able to provide that platform to Nepalese investors and listed firms, even though it is a developing market with a tiny market capitalization compared to other countries. The general increase in the number of investors and the rise in the number of dematerialized accounts, which show interest, are signs that people are growing more aware of the share markets (Gurung, Pathak & Magar 2017).

Over the last five years, Nepal's GDP growth rate has only barely exceeded 5%. It was almost 10 percent in the fiscal year 2015–16 and 5.60 percent in the fiscal year (FY) 2022–2022. Nonetheless, the inflation rate has not risen above 5% in recent years. Nepal Rastra Bank and NRB (2012). The Nepali banking sector experienced a serious liquidity crisis between FYs 2019/20 and 2020/21, which caused interest rates to reach an all-time high. During that period, capital market indicators showed notable volatility.

He collects monthly historical yearly operating income to confirm inflation and stock valuation for 1965–2001. The negative correlation between expected inflation and equity valuations was found to be caused by two factors: rising expected inflation is linked to both slower growth in expected real profits and higher required real returns. The earnings channel mainly shows how long-term profit growth and expected inflation are inversely related. The required long-term real stock returns are significantly impacted by anticipated inflation. He concluded that there was a substantial adverse relationship between inflation and stock returns after performing a simple regression (Sharpe, 2012).

The movement of macroeconomic variables is associated with increased stock market price volatility. It is essential to look at any connections that might exist between the Nepali stock market and macroeconomic factors. Finding out if macroeconomic factors, either separately or in combination, have an effect on the dynamics of the Nepali stock market is the primary goal of this study (Phuyal, 2016; Kumar, 2019).

In recent decades, emerging economies' stock markets have grown significantly, attracting the interest of investors from all around the world. Prior studies on the variables affecting stock return have primarily focused on developed markets, giving developing nations less consideration. Empirical testing of the idea in emerging markets would be essential for the finance literature. The capital market is seen to be an indicator of an economy. Despite the macroeconomic factors moving more slowly in a positive direction, Nepal's capital market has experienced extreme volatility during the last 10 years. This implied that the Nepali economy's macroeconomic and capital market factors might not be properly synchronized. This situation prompted the question of whether macroeconomic factors like money supply, prices, interest rates, and remittances in the Nepali economy could be used to characterize equilibrium relationships between the stock market and short- and long-term remittances. Consequently, the study tackles the following issues:

i. What is the situation of money supply, GDP, interest rate, inflation rate and foreign currency reserve in NEPSE index?
ii. Is there any relationship between money supply, GDP, interest rate, inflation rate, foreign currency reserve and NEPSE index?
iii. What is the impact of money supply, GDP, interest rate, inflation rate and foreign currency reserve on NEPSE index?

1.3 Objectives of the Study

Finding the factors impacting the market share price of insurance companies in Nepal is the main goal of this thesis. The following is a list of the study's particular goals:

i. To examine the existing position of foreign currency reserve, GDP, interest rate, inflation rate and money supply in NEPSE index.
ii. To investigate the relationship between money supply, GDP, interest rate, inflation rate, foreign currency reserve and NEPSE index.
iii. To analyze the effect of money supply, GDP, interest rate, inflation rate and foreign currency reserve on NEPSE index.

1.4 Rationale of the Study

The factors influencing macroeconomic indicators are the main subject of this study. Based on this information, investors can decide whether to buy shares of insurance companies. In order to improve the market price of their stock, companies might also change the associated variables. The outcome is robust business and broad market penetration. Ultimately, it produces a successful business with contented shareholders and permits all types of investors to make risk-free, unrestricted investments, irrespective of their financial capacity.

The nation's economy as a whole benefits from this research, which also helps the share market expand and develop. The study provides basic information about the Nepalese stock market and recommendations for lowering stock investment risk. a topic of interest for scholars, students, researchers, educators, and others outside of this study who work in the finance sector.

In order to give present and potential investors accurate perceptions of the sample companies and enable them to make informed investment decisions, this study has attempted to assess the internal financial factors that influence share price. Similarly, this assignment could provide a guide for future research and interested parties.

Those who want to understand more about the influence of signaling variables, stock volume, stock price trend, and the listing of new enterprises in the secondary market on the NEPSE index will find the study useful. The study also helps legislators, market makers, securities dealers, issue managers, and stock brokers to increase the share market's efficiency.

1.5 Limitations of the Study

Even if the study's conclusions were carefully considered, a reliable interpretation of the data still requires consideration of a number of constraints. The primary limitations of the study are as follows:

- Only six macroeconomic variables—the money supply, GDP, interest rate, inflation rate, and foreign exchange reserve—are considered in the analysis. The entire study is based on the analysis of the money supply, GDP, interest rate, inflation rate, foreign currency reserve, and NEPSE index; other factors that might affect the NEPSE index are ignored. The study's analysis and conclusions are solely based on NEPSE indexes.
- The secondary data for the study, which covers the 15-year period from 2009/10 to 2023/24, came from a variety of sources, including the NRB website, SEBON, and NEPSE.
- The only statistical techniques applied in this study are regression, correlation, and descriptive statistics.

CHAPTER - II

LITERATURE REVIEW

In order to acquire information on all previous studies, their results, and any deficiencies so that more research may be conducted, a literature review analyzes research papers or other important statements in the relevant field of study. It is a necessary and necessary step in the study process. It is a crucial part of all dissertations. In other words, the results are based on a sound theoretical foundation and aim to explore linkages through empirical research, resonating, and experiential learning. It is useful to know what has already been found.

2.1 Theoretical Review

2.1.1 Efficient Market Theory (EMT)

The Efficient Markets hypothesis (EMT) is one theory that explains how the capital market has changed. This concept was developed by Fama in 1965 and used by Hodnett and Hsieh (2012). This claim holds that the price of an asset is the sum of all relevant information now available about the asset's intrinsic value, often known as the present value of the cash flows that the owner of the security expects to receive. Nevertheless, the profit opportunities provided by the existence of overpriced and undervalued enterprises motivate investors to trade and push stock prices toward the present value of future cash flows. Since a market is more efficient when its transaction costs—which include the cost of trading and information acquisition—are lower, Fama (1991) reiterated that market efficiency is a continuum.

Informational efficiency of stock prices is important for two reasons. The main question that investors have is if various trading strategies can beat the market and produce additional profits. Second, if stock prices accurately reflect all available information and fresh investment funds are used for their most valuable purposes, the capital market will grow more. The author also covered three different types of market efficiency: weak form, semi-strong form, and strong form. The potential for a certain investor group to consistently succeed utilizing a specific type of information as a trading tool can be ruled out by any variation of the efficient market theory. However, under the assumption that capital markets are efficient, all investors choose a low-risk strategy and make sensible choices.

2.1.2 Capital Asset Pricing Theory (CAPT)

The specific equilibrium model that many investors are interested in is the Capital Asset Pricing Theory, or CAPM as it is most widely known. John Linter's (1965) and William Sharpe's (1964) CAPM, for which Sharpe was awarded a Nobel Prize in 1990, served as the foundation for asset pricing theory. Because the CAPM offers robust and rationally compelling predictions about risk assessment and the correlation between expected return and risk, the market is attracted to it. It allows users to assess the relevant risk of individual equities as well as the relationship between risk and expected profits on investment. The CAPM is a popular equilibrium model due to its simplicity and ramifications. However, as time went on, the model's serious flaws prompted the creation of alternatives. The Arbitrage Pricing Theory (APT), which takes into account a variety of risk sources, is the primary replacement for the Capital Asset Pricing Model (CAPM). The CAPM contains some unrealistic assumptions, even though it is a simple model with a strong logical basis. A few changes were made to the basic CAPM that made one or more of these assumptions less strict (Black, 1972). Remember that no matter how diversified your portfolio is, you can never totally remove risk while investing.

2.1.3 Capital Market Theory

In line with Markowitz's modern portfolio theory, capital market theory looked at what happened when a risk-free asset was introduced. Although the CAPM is frequently credited to Sharpe, Lintner and Mossin independently created similar models in the middle of the 1960s. Some of the assumptions made regarding capital market theory include the following: all investors are Markowitz efficient investors who choose investments based on expected return and risk; all investors can borrow or lend any amount at a risk-free rate of interest; and all investors have homogeneous expectations for returns. The value of assets, usually shares, is the goal of a model known as capital market theory. Securities analysis is based on the framework established by capital market theory.

2.1.4 Fama-French Three-Factor Model

The Fama and French Three-Factor Model, also referred to as the Fama French Model, was created in 1992 and is an asset pricing model that elaborates on the capital asset pricing model (CAPM) by adding size and value risk components to the market risk factor. This model accounts for the fact that value and small-cap stocks often outperform the market. By including these two additional factors, the model takes into consideration this propensity

to perform better, which should increase the model's use as a manager performance evaluation tool. The Fama French 3-factor model is an asset pricing model that expands on the capital asset pricing model by adding size and value risk components to the market risk components.

The Fama and French model consists of three parts: firm size, excess return on the market, and book-to-market values. In other words, small minus big (SMB), high minus low (HML), and the return on the portfolio less the risk-free rate of return are the three factors taken into account. While SMB accounts for publicly traded companies with smaller market caps that generate greater returns, HML accounts for value stocks with high book-to-market ratios that beat the market.

This model, created by Eugene Fama and Kenneth French, expands on the CAPM by adding additional factors that influence stock returns. The three elements of this approach are market risk, size (the size of the company), and value (the ratio of a company's book value to its market value). With this method, mutual fund performance may be evaluated by contrasting its outcomes with these criteria.

2.1.5 Style Box Theory

The style box theory offers an example of a mutual fund's investment style. Funds are divided into nine divisions based on the securities they possess and their investing objectives. The style box typically includes dimensions like market capitalization (large, medium, or tiny) and investing style (value, growth, or blend). This theory helps investors quickly understand the characteristics and investing strategy of a mutual fund.

2.1.6 Darvas Box Theory

The Darvas box hypothesis, a trading approach developed by Nicolas Darvas, combines volume and highs as key indications to pinpoint companies. Important elements of Darvas' trading approach include investing in stocks that are reaching new highs and constructing a box around the most recent highs and lows to identify an entry point and the location of a stop-loss order. The stock is said to be in a Darvas box when price movement breaks above the prior high but returns to a price that is close to that high. The trader creates the boxes by drawing a line over the most recent highs and lows in the timeframe they are using, as the Darvas box theory is not limited to any specific time frame. Darvas box theory

is a technical method that allows traders to select stocks with increasing transaction volume. Applying the Darvas box hypothesis to rising markets and/or bullish industry sectors yields the best results.

2.1.7 The Pricing Decision Theory

- Pricing decision theory is the process of determining the optimal price for a good or service. Making informed price judgments requires using economic concepts and analyzing a number of factors. Some key theories and ideas in pricing decision theory are as follows:
- Supply and Demand: The principles of supply and demand serve as the foundation for pricing decisions. When there is a strong demand and a limited supply for an item or service, prices typically rise. On the other hand, lowering prices may be required to increase sales if supply exceeds demand.
- Price Elasticity: Price elasticity of demand measures how responsive the quantity sought is to changes in price. If demand is elastic, a little change in price will result in a larger change in the quantity needed. However, if demand is inelastic, price changes have a relatively smaller impact on the quantity needed. Understanding pricing elasticity is necessary to ascertain how price changes may affect sales income.
- Cost-Based Pricing: This approach to pricing accounts for both production and running costs as well as the desired profit margin. Target return pricing, which aims to achieve a specific return on investment, and cost-plus pricing, which adds a markup to the cost of manufacturing, are two examples of cost-based pricing strategies.
- Market-Based Pricing: This strategy sets pricing based on the competitive environment, the value that consumers are ready to pay, and the state of the market. Price skimming, which sets high starting prices to maximize revenue from early adopters, and penetration pricing, which sets low initial prices to achieve market share, are examples of market-based pricing strategies.
- Psychological Pricing: This method takes into account the psychological factors that influence how customers view costs. Strategies like charm pricing, which involves setting prices just below whole numbers, such $9.99 instead of $10, and

prestige pricing, which involves setting high charges to inspire thoughts of exclusivity or luxury, are employed to influence consumer behavior.

- Dynamic Pricing: Dynamic pricing is the practice of immediately changing prices in reaction to demand fluctuations, market changes, and other factors. This approach is commonly used in industries like hospitality, e-commerce, and transportation where prices might vary based on the time of day, season, or clientele.

2.1.8 Arbitrage Pricing Theory (1976)

The two APT versions are the macro variable model and the factor loading model.

- The macro variable model uses macroeconomic variables based on their economically interpreted impact on stock prices, while factor loading models employ artificial variables created by factor analysis (Erdugan, 2012).
- Roll and Ross (1995) discussed the advantages of the APT for portfolio management and provided a more thorough explanation of it. The APT was developed in 1976 by Roll and Ross.
- The CAPM is no longer the main analytical tool used to describe the processes observed in the capital markets; instead, the alternative technique known as the APT takes its place.
- It predicts a relationship between a portfolio's returns and the returns of a specific asset using a linear combination of factors.
- The concept of "price via arbitrage" was fully employed with the APT strategy, which deviated from the CAPM's risk vs. return justification.
- The logic and methodology of arbitrage-theoretic reasoning are essential to practically all of finance theory and are not unique to Ross's theory, as he noted in 1976.
- Although it was observed that both APT variants performed much better than the CAPM, there was no clear winner when it came to explanatory power within and outside of the sample.
- In order to determine the number of factors and their importance in predicting the responsiveness of individual securities to various systematic risk variables, the factor loading model employs a factor analysis technique based on artificial factors.

2.1.9 Theory of Finance

Finance theory is a broad field that includes both quantitative measurements and conjecture in order to develop investing strategies and monetary value estimates. Finance theories are also used to construct capital creation and fund-raising plans and to control financial risk.

2.1.9.1 Efficient Market Hypothesis

According to the efficient market hypothesis (EMH), often known as the efficient market theory, share prices fairly reflect all available information and continuous alpha generation is unattainable. Investors cannot purchase cheap stocks or sell them for inflated prices because, according to the Efficient Market Hypothesis (EMH), stocks on exchanges always trade at their fair value. Therefore, the only way for an investor to increase returns is to place riskier bets; expert stock selection and market timing should not be able to beat the market overall. The efficient market hypothesis (EMH) or theory states that share prices reflect all available information. The EMH hypothesis states that stocks trade on exchanges at their fair market value. Proponents of the efficient market hypothesis (EMH) contend that passive, low-cost investing benefits investors.

Critics of the EMH believe that it is possible to outperform the market and that stocks might deviate from their fair market values. Even though the EMH is a cornerstone of modern finance theory, it is very controversial and regularly disputed. Supporters argue that both searching for inexpensive stocks and doing technical or fundamental analysis to predict market moves are pointless. According to theory, neither technical nor fundamental analysis can reliably produce risk-adjusted excess returns (alpha), and only insider knowledge may produce disproportionate risk-adjusted returns (Downey, Scott, and Velaswuez, 2002).

2.1.9.2 Fifty Percent Principle

The fifty percent concept is a basic guideline that forecasts the extent of a technical correction. The fifty percent principle states that after a period of rapid increases, a stock or other asset will lose at least half of its most recent gains before the price begins to rise again. The fifty percent approach can be used to predict how much a stock will drop in value during a decline. This means that if an asset falls after a price increase and then rises again, it will lose half to two thirds of its previous price gains. Technical analysts utilize

the fifty percent principle to assess when a stock is a favorable time to enter the market and to ensure that support levels are present to halt additional drops. The concept works because, in the case of a market fall, most investors act similarly. The fifty percent technique works best for short-term trade and may be less helpful during major economic shocks (Smith, 2001).

The fifty percent notion states that during a price correction, the price of a stock or other security will fall between fifty and sixty-seven percent of its prior gains before rising once more. In order to predict the optimal entry moment and optimize profits when the upward trend persists, traders employ the principle as a technical analysis tool. The fifty percent theory is one of several technical theories that attempt to identify levels of support in market activity. Understanding this concept helps charting techniques like pattern analysis and Fibonacci ratios to watch a stock price that is bouncing between its support level and new highs. This kind of chart analysis is typically used in short-term investing. This is because to the fact that relying solely on charting for long periods of time is risky due to the unpredictable consequences of major economic events. Significant events, such as the financial crisis of 2008, change markets and the economy as a whole (Smith, 2001).

2.1.9.3 Great Fool Theory

According to the broader fool hypothesis in finance, there are situations in which purchasing expensive assets that may be sold for a higher price could lead to financial gain. The acquisition price of these assets is much greater than their inherent value. In this case, a "fool" might buy a costly asset with the intention of profiting from the sale to a "bigger idiot." As long as there are enough new "greater fools" willing to buy the asset at ever-higher prices, this tactic will continue to work. When investors can no longer ignore the fact that the price is out of line with reality, a sell-off may occur, causing the price to fall sharply until it approaches its fair value, which in certain situations may be zero (Malkiel, 2018).

The Greater Fool Theory states that because there will always be buyers willing to pay more, investing in overpriced assets during a market bubble might result in a profit when those assets are later sold. A bubble is indicated by any set of stocks, in this case those associated with the enthusiasm of the Internet, increasing in value. The updraft causes more

people to buy the stocks, which in turn causes greater media and print coverage, which in turn prompts more people to buy, giving early Internet investors significant profits. Successful investors tell you at cocktail parties how easy it is to get rich, which raises stock prices and draws in ever-larger investor bases. The entire process, however, is similar to a Ponzi scheme, where a growing number of unsuspecting investors must be found in order to buy the stock from the original investors. Eventually, there are no more stupid people left (Malkiel, 2018).

2.1.9.4 Odd Lot Theory

According to the odd lot theory, which is based on technical analysis, small individual investors are usually wrong and odd-lot transactions are more likely to originate from individual investors. Thus, it may be a good time to sell if odd-lot sales are up, and it is most likely a good time to buy if odd-lot sales are up and small investors are selling a business. Odd-lot trades are orders involving shares that are smaller than a round lot of 100 shares. It is believed that lone retail traders, who are most likely less experienced market participants, execute the majority of these odd-lot trades. Odd lot theory suggests trading against the behavior of these unsophisticated traders. Testing this hypothesis suggests that this observation is not always accurate. The core of the odd lot concept is tracking the transactions of individual investors in odd lots. This theory also predicts that professional traders and investors usually trade in round lot sizes, which are multiples of 100 shares, to maximize pricing efficiency in their orders. This method of thinking was widely accepted from around 1950 to the end of the century, but it has subsequently lost some of its allure (Scott, 2022).

2.1.9.5 Prospect Theory

Prospect theory holds that since losses and gains are thought to have different values, people tend to base their decisions more on perceived profits than losses. The fundamental tenet of what is often called the "loss-aversion" theory is that if given two equal options, one that is presented in terms of potential profits and the other in terms of potential losses, a person would prefer the former. The prospect hypothesis states that investors regard perceived profits more than perceived losses because they assess gains and losses differently. An investor will choose the choice with the larger potential reward when presented with two equal possibilities. Prospect theory is also known as the loss-aversion

theory. The prospect theory, a branch of behavioral economics, argues that because losses have a greater emotional impact, investors chose perceived profits. The assurance effect states that people prefer to overlook similar facts while making judgments and favor certain outcomes over likely ones. A subfield of behavioral economics known as prospect theory describes how people make decisions based on probabilistic possibilities when there is risk and it is unclear how probable particular outcomes are to occur. This hypothesis, developed in 1992 by Amos Tversky and Daniel Kahneman, is thought to be more psychologically accurate in explaining how people make decisions than the expected utility theory. In 1979, it was originally suggested (Chen, 2022).

2.1.9.6 Rational Expectations Theory

- According to the economic theory of rational expectations, people base their judgments on the best information available in the market and historical trends. It is reasonable to assume that while people will occasionally make mistakes, they will, on the whole, be right. American economist John F. Muth first proposed the concept of rational expectations in 1961. Nonetheless, as part of the new classical revolution, it was widely employed in microeconomics and made famous by economists Robert Lucas and T. Sargent in the 1970s. The following presumptions are stated in the theory:
- When people have reasonable expectations, they always learn from their past errors, create unbiased forecasts, and base their actions on all available data and economic theories.
- People are aware of how the economy functions and how changes in governmental policies affect macroeconomic factors like the level of prices, the rate of unemployment, and the total output.

The reasonable expectations theory comes in two flavors: weak and powerful. The "strong" version assumes that actors can obtain and utilize all pertinent information to make decisions that can be defended. Since the "weak" versions assume that people do not have enough time to compile all relevant information, they base their decisions on people's imperfect knowledge. For example, if they buy cornflakes, it is "logical" for them to keep buying that brand and not worry about being fully aware of how much different brands cost (Muth, 1961).

2.1.9.7 Short Interest Theory

The concept of short interest states that high short interest is a bullish indication. To profit from the anticipated price increase, supporters of this theory will thus attempt to buy massively shorted stocks. Most investors disagree with this approach, interpreting short selling as an indication that the shorted stock is likely to decline. Therefore, short interest theory could be viewed as a contrarian approach to investment. The short interest theory states that equities that are heavily shorted are more likely to rise in the future. This is a contrarian approach because short interest is typically interpreted by investors as a bearish indicator. The observation that short sellers are sometimes forced to make aggressive purchases of shares in order to cover their holdings is the basis of the short interest theory. Short interest theory is based on the short selling ideas. By shorting a stock, an investor effectively borrows money from a broker and immediately sells it for cash. Eventually, the investor will have to buy the shares on the open market and give them back to the broker when the broker asks for payment. Short sellers make money if the price of the shares they purchased declines after they sell their shares. In order to retain the profit margin, the short seller may subsequently buy back the shares at a lower price and return them to the broker (Fernando, 2021).

2.2 Empirical Review

Paterson et al. (2023) investigated on the impact of government policy responses to the COVID-19 pandemic and Brexit on the UK financial market: A behavioral perspective. The purpose of the study is to look at how investors' reactions to the COVID-19 pandemic and Brexit are influenced by government policy announcements. The semi-structured interview guide was purposefully created to allow participants to express their opinions and experiences about certain pre-identified issues pertaining to the GB's expansion. Furthermore, our study indicated that the pandemic and the UK's eventual exit from the European Union (Brexit) would have worsened the outlook for the UK financial market as investors began to diversify their holdings. The study's findings demonstrate that the pandemics frequent policy pronouncements significantly affected investor psychology, which in turn affected the behavior of the market as a whole.

Akter and Rahman (2023) conducted a research on capital market and its prospects and problems in Bangladesh. To give the market more energy and use it as a tool for the

government's aim of rapid economic development, various policy proposals have been put forth. The market has continued to be volatile ever since. In recent years, the market has grown almost continuously. Despite the many improvements over the years, the country's capital market is nevertheless plagued by issues like insufficient financial depth, a lack of product diversity, uneven legal and regulatory frameworks, and other similar issues. Despite the market's many internal and external obstacles, this report highlights its potential. The country's whole financial system might depend on a healthy stock market. Compared to the markets of many other nations, especially its neighbors, Bangladesh's capital market is noticeably less developed. In 1976, Bangladesh's capital market was revitalized.

Goldstein (2023) conducted a research information in financial markets and its real effects. Financial markets have a central role in allocating resources in modern economies. Information discovery is one of the primary roles of financial markets. In turn, this data aids in directing choices in the actual economy. This channel is examined in the literature on the financial markets' "feedback effect." The goal of empirical research is to determine the informational input that markets provide to business decisions. The consequences of this feedback effect for financial market equilibrium and economic efficiency are examined theoretically. The FinTech revolution's current information technology trends alter the way financial markets process information, which could alter the feedback effect. I examine the key ideas of this emerging literature in this piece and relate them to the ongoing information revolution. I also talk about future research directions.

Nguyen et al. (2023) conducted a research on the development of green bond in developing countries: insights from south east Asia market Participants. This study looks at how the green bond is now developing in Southeast Asian countries. 32 players in the capital markets of Southeast Asian countries were interviewed in a semi-structured manner. This study uses a qualitative interpretivist methodology to gain a better understanding of participants' viewpoints and experiences regarding a certain scenario and time period. The results indicate possible barriers, chances, regulatory issues, and expected growth in the green bond market. The study's conclusion presents some possibilities that can be tested in the future in order to generalize the research's findings. Consequently, this research contributes to our knowledge of green bonds in Southeast Asian financial markets and has

consequences for practitioners and decision-makers in the future expansion of green bonds in the region.

Vaidya et al. (2023) examined on opinion on distribution nature of NEPSE return: a qualitative analysis. The study conducted a qualitative analysis of Nepalese investors' perceptions on the Nepalese stock market's (NEPSE) investment climate and the challenges they have faced when choosing investments. The study has also collected the respondents' opinions regarding the NEPSE screening process and the return distribution structure of the market. The paper used grounded theory to extract particular concepts from the viewpoints. The survey's findings indicate that respondents were worried about the soundness of the listed companies' foundations. Concerns regarding false information and trade tactics were also voiced by respondents. Finally, considering the distributional nature of the NEPSE result, most interviewers thought it followed a normal distribution. Additionally, they connected the type of return distribution to the behavioral elements of the investment decision-making process.

Maskey (2023) investigated on specific determinants of share prices: a case study of listed life insurance companies in Nepal Stock Exchange. Investigating the factors affecting the market share prices of life insurance companies listed on the Nepal Stock Exchange (NEPSE) is the aim of this study. The study used a sample of all life insurance businesses that were listed on the Nepal Stock Exchange, using panel data from 2012–13 to 2017–18. The data in this study were evaluated using descriptive and inferential statistics, and the hypothesis was tested using regression coefficients derived from the results of the multiple regression model. The analysis concluded that dividend yield, age of the company, price-earnings ratio, earnings per share, and dividend yield are the primary determinants of share price. According to the survey, dividends play a big role in Nepalese investors' decisions. Additionally, it was shown that the dividend policies of the companies have a big impact on Nepali investors' decisions.

Majeed (2022) examined the effect of macroeconomic variables on stock exchange market performance: Iraq stock exchange market as an example. From January 2005 to October 2021, this study will examine the relationship between the performance of the Iraqi stock market and monthly time series data of macroeconomic variables. The inquiry makes use of regression analysis. Analysis shows a long-term correlation between stock market

performance and long-term macroeconomic indices. Since they all have a big influence, the money supply, interest rate, and exchange rate are the actual variables that affect how well the Iraqi stock market performs.

Suhendra and Malini (2022) analyzed the impact of macroeconomic variable toward Indonesia composite stock price index. This study aims to determine how the Composite Stock Price Index (CSPI), which is traded on the Indonesia Stock currency, is impacted by the Dow Jones Index, interest rates, currency rates, and inflation. The analytical method used in this study was multiple linear regression analysis. The results of the study demonstrate that the CSPI on the Indonesia Stock currency is simultaneously and considerably impacted by the Dow Jones Index, interest rates, currency rates, and inflation. The results of the partial test show that the CSPI is considerably and favorably impacted by inflation, interest rates, and the Dow Jones Index. On the other hand, the exchange rate has a substantial and adverse effect on the CSPI. The study's conclusions might be useful to investors and potential investors.

Carter (2022) conducted a research on the stock price reaction of the COVID-19 pandemic on the airline, hotel, and tourism industries. This study looks at how US travel-related businesses (such as hotels, restaurants, and airlines) performed on the stock market in response to the COVID-19 pandemic between the second half of February and the end of March 2020. This study focuses on the strategies used by market participants to feed the data into stock prices, even though it is clear that the travel industry suffered from the drop in travel. Although they suffered more penalties, larger businesses with greater cash buffers and higher market-to-book ratios displayed fewer negative returns. Additionally, this study found that cash reserves were very important for hotels.

Saputra (2022) conducted a research on analysis of total debt, revenue and net profit on stock prices of foods and beverages companies on the Indonesia Stock Exchange (IDX) Period 2018-2021. Finding the factors affecting the stock prices of food and beverage companies listed on the Indonesia Stock Exchange between 2018 and 2021 is the aim of this study. While total debt, revenue, and net profit were the independent factors being examined, the stock price was the dependent variable. For this study, twenty food and beverage companies listed on the Indonesia Stock Exchange were identified. Simple random sampling is the sampling strategy used to acquire a sample of ten food and beverage

companies. The research methodology used in this study was quantitative descriptive statistics. The tests used were multiple linear regression analysis, the T-test, the F test for coefficient of determination, and the traditional assumption test. The company's 2018–2021 financial statement data was available on the Indonesia Stock Exchange website. According to the research's related corporate website, the IBM program then processed the data. 27 SPSS. The study's combined F test results indicate that Net Profit, Total Debt, and Income all have an impact on stock prices. In contrast, the T-test reveals that Earnings Net has a substantial impact on stock prices, Total Debt has no significant impact on stock prices, and Income has no impact at all.

Li and Pan (2022) researched on a novel ensemble deep learning model for stock prediction based on stock prices and news. Recent years have seen a rise in the use of machine learning and deep learning as methods for evaluating financial data, including textual, graphical, and numerical data. One of the most popular and complex deep learning topics in finance is predicting future stock values. The difficulty in forecasting future stock prices stems from the vast array of factors that could concurrently affect the frequency and magnitude of price swings. Earnings and profit announcements, projected future earnings, dividend announcements, the introduction of a new product or a recall of an existing one, landing a big contract, staff layoffs, a significant management transition, an upcoming acquisition or merger, and accounting errors or scandals are some company-specific factors that could affect the share price. Furthermore, these aspects are unique to the company; the future direction of stocks will also be influenced by other elements like investor sentiment, industry performance, and economic conditions.

This study proposes a ground-breaking deep learning technique for future stock movement forecasting. The model uses blending ensemble learning to integrate two recurrent neural networks with a fully connected neural network. In this study, we use the S&P 500 Index as our test case. Our results show that our blending ensemble deep learning model outperforms the state-of-the-art prediction model by a significant margin utilizing the same dataset. In addition to improving precision rate by 40%, recall by 50%, F1-score by 44.78%, and movement direction accuracy by 33.34%, it achieves a 57.55% reduction in mean-squared error. In contrast to other traditional approaches, ensemble deep learning technologies can actually forecast future stock price patterns more successfully and assist

investors in making better investment decisions. This paper seeks to clarify our design philosophy and illustrate this.

Pokhrel (2022) published an article on predicting NEPSE index price using deep learning models. This study compares three deep learning models: the Long Short-term Memory (LSTM), Gated Recurrent Unit (GRU), and Convolutional Neural Network (CNN) to forecast the closing price of the Nepal Stock Exchange (NEPSE) index the following day. A well chosen set of sixteen predictors is included in the areas of technical indicators, financial text data, macroeconomic data, and fundamental market data of the Nepalese stock market. The models' performances are compared using the standard assessment criteria, which include the correlation coefficient (R), mean absolute percentage error (MAPE), and root mean square error (RMSE). The experimental results show that the LSTM model architecture has a high prediction accuracy and a superior fit. Furthermore, statistical evidence is presented to substantiate the models' reliability and resilience.

Shrestha (2022) examined the effect of macroeconomic variables on Stock market Index with reference to Nepal stock exchange. The study's objective was to investigate how macroeconomic issues affected Nepal's stock market index. Monthly data was gathered using OLS regression techniques in multivariate regression analysis between January 2002 and December 2016. According to the study's findings, the interest rate and wholesale price index had a greater influence on the Nepalese stock market index than the gold price and exchange rate, and they also had a higher capacity to explain changes in the index.

Putra (2021) examined the effect of macro-economic indicators on share prices in the construction sub-sector and building companies listed in Indonesia stock exchange 2013-2018. The purpose of this study is to determine the relationships between global oil prices, inflation, currency rates, and stock prices. Methods for panel data regression that analyze data using a random effect model (RE). The results showed how global oil prices, inflation, and stock prices are related. Meanwhile, the exchange rate has no effect on the stock price. Huy (2021) analyzed the impacts of internal and external macroeconomic factors on firm stock price in an expansion econometric model- A case in Vietnam real estate industry. This essay's goal is to investigate the relationship between stock prices and macroeconomic factors such as exchange rates, inflation, GDP growth rates, and risk-free rates in Vietnam. It makes use of regression analysis. According to this study, the VIC stock price is

positively correlated with the lending rate in Vietnam, but negatively correlated with the risk-free and deposit rates of Vietnamese commercial banks.

Thapa (2021) investigated the influencing factors of stock price in Nepal. This study examined the variables that affected Nepalese stock prices from 2008 to 2018 AD with regard to Nepalese commercial banks that were listed on the Nepal Stock Exchange Ltd. The information obtained from the financial statements and surveys of the pertinent organizations was analyzed using a simple linear regression model. The results of the study showed that profits per share (EPS), dividends per share (DPS), market whims and rumors, company profiles, and success depend on luck and positive association with share price, while interest rate (IR) and price to earnings ratio (PER) showed a significant inverse association with share price. The study found that the stock market in Nepal was significantly impacted by changes in interest rates and dividends.

Norehan and Ridzuan (2020) researched on the impact of macroeconomics variables toward stock market in Malaysia. This study looked at how macroeconomic factors affected the Malaysian stock market between 1981 and 2017 using annual data. The study made use of Autoregressive Distributed Lag (ARDL). The currency rate and inflation have a significant and positive influence on the Malaysian stock market, according to the long-run elasticity data. However, domestic saving and wide money have a long-term negative impact on the stock market.

Devkota and Panta (2020) examined the causal relationship between the Nepalese stock exchange (stock market index) and interest rate, gold price, exchange rate in Nepal. The monthly time series data from January 2006 to June 2018 were used. The time series features of the data are diagnosed using the unit root test and Johansen's Co-integration test. Furthermore, the Granger causality test, which was based on the Vector Error Correction Model (VECM), identified the direction of causation to the short- and long-term correlations between the variables. Devkota and Panta found a feedback relationship between the interest rate and the stock market index, as well as a unidirectional causal relationship between the gold price and the interest rate. The stock market index and exchange rates had a unidirectional causal link over the study period.

Shrestha and Subedi (2020) studied the determinants of stock index in Nepal using monthly data for the period of mid-August 2000 to mid-July 2014. The macroeconomic indicators chosen were the consumer price index, wide money, and the Treasury bill rate. The correlation study's findings showed that the stock market index and macro factors are significantly correlated. The results show that the stock market index responds favorably to inflation and the expansion of broad money and negatively to the rate of treasury bills. Shrestha and Subedi advise Nepali shareholders to consider equities as an alternative financial instrument and use them as a hedge against inflation. Furthermore, investment in the Nepalese stock market is encouraged by the lower borrowing costs. The study also found that changes in the political environment and the NRB's policy had a significant impact on the stock market.

Khan and Khan (2018) published an article on the impact of macroeconomic variables on stock prices: A case study of Karachi Stock Exchange. The study makes a contribution by evaluating monthly data from May 2000 to August 2016 in order to ascertain the impact of key macroeconomic variables on Pakistani stock prices. Since all of the variables are stationary at initial difference, the optimal ARDL approach of bound testing is utilized to confirm the short- and long-term co-integration of the macroeconomic influences on stock prices. The findings suggest that Karachi Stock currency stock values are significantly impacted over the long term by the money supply, currency rate, and interest rate. All of the variables are insignificant in the near term, with the exception of the currency rate, which has a negative co-integration with stock prices. The central bank must be careful when changing the money supply because a large increase could affect the stock and investment markets. The regulator should keep interest rates at a relatively low level to encourage economic activity, improve the external economic environment through rule-based exchange rate management, and avoid acting arbitrarily.

Ndegwa (2016) researched on the effect of macro-economic variables on stock market return at the Nairobi Securities Exchange. Determining the impact of macroeconomic conditions on NSE stock returns was the aim of the study. The macroeconomic variables employed in the study were the money supply (M2), the US dollar exchange rate, and the CBK lending rate. The NSE and the Central Bank of Kenya provided monthly secondary data from July 2011 to June 2016 for the analysis. The results of the study showed that 15.7% of the macroeconomic factors selected for investigation had a little positive effect

on the returns of NSE stocks. The CBK loan rate was shown to be negatively impacted by the money supply, whereas the exchange rate was positively impacted. The Granger Causality test states that exchange rate Granger causes stock market returns. It was also discovered that the exchange rate had an impact on the Granger Cause money supply and the CBK lending rate. Future research should include additional macroeconomic variables that were not included in this study, such as GDP, inflation, the consumer price index, and so on. Establishing the effects of Kenya's new government structure should also take place over a longer study period.

Ouma and Muriu (2014) conducted a research on the impact of macroeconomic variables on stock market returns in Kenya. The Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Theory (APT) monthly data are used in this study to investigate the effects of macroeconomic factors on Kenyan stock returns between 2003 and 2013. The Ordinary Least Square (OLS) technique is used to evaluate the validity of the model and the relative weights of different variables that may have an impact on stock returns. The empirical study produced two fascinating conclusions. To begin with, all variables are I(0). Second, aside from interest rates, there is a substantial association between stock market performance and macroeconomic indices. According to the study's findings, Kenya's stock market performance is influenced by the money supply, inflation, and exchange rates. The money supply and inflation are found to have a significant impact on NSE returns. However, it has been found that while interest rates have no effect on the long-term performance of the NSE, exchange rates have a negative impact on stock returns.

Table 1

Summary of Empirical Review

SN	Authors / Year	Title	Objectives	Methodology	Findings
1	Goldstein (2023)	The information in financial markets and its real effects	To identify the informational feedback from markets to corporate decisions	Survey Method	Earlier kinds of funds are able to monitor a greater number of equities and stocks about which further information is accessible.

2	Nguyen (2023)	The development of green bond in developing countries: insights from south east Asia market Participants	To explores the current development status of the green bond in Southeast Asian countries	Qualitative approach.	Businesses must set up an issuing method, which includes extra work with stakeholders and government agencies, a managerial system, and reporting procedures, before they can issue green bonds. For GB issuance, each of these processes resulted in financial expenses.
3	Paterson, Sakariyahu, Lawal, and Alabi (2023)	The Impact of Government Policy Responses to the COVID-19 Pandemic and Brexit on the UK Financial Market: A Behavioral Perspective	To examine the impact of government's policy announcements on investors' reactions to the concurrence of the COVID-19 pandemic and Brexit	The semi-structured interview guide has been purposefully developed	Regular policy pronouncements during the epidemic greatly influenced investor psychology, which in turn influenced general market behavior.
4	Akter and Rahman (2023)	Capital Market and its Prospects and Problems in Bangladesh	To inject the market with more energy, making it an instrument of the rapid economic development the government has prioritized	Autocorrelation, and regression analysis	Less investment in real sectors was made possible by the slowdown in exports and imports brought on by the global recession, which created the perfect environment for excess cash to be placed in stocks. The DSE was breaking all

					previous records while the actual economy was on track to have its worst growth in eight years.
5	Suhendra and Malini (2022)	The impact of macro-economic variable toward Indonesia composite stock price index.	To determine the effect of Inflation, Interest Rates, Exchange Rates, and the Dow Jones Index on The Composite Stock Price Index (CSPI) listed on the Indonesia Stock Exchange.	Multiple linear regression analysis method.	The CSPI on the Indonesia Stock Exchange is significantly impacted by the Dow Jones Index, interest rates, exchange rates, and inflation all at the same time. The Dow Jones Index, interest rates, and inflation all significantly and favorably affect the CSPI. The CSPI is significantly and negatively impacted by the exchange rate.
6	Majeed (2022)	The Effect of Macroeconomic Variables on Stock Exchange Market Performance: Iraq Stock Exchange Market as an Example	To examine the impact of monthly time series data of macroeconomic variables from January 2005 to October 2021 on Iraqi's stock market performance.	Regression analysis	There is a long-term association between long-term macroeconomic indicators and stock market performance, according to analysis. The money supply, exchange rate, and interest rate are the real factors that determine the success of the Iraqi stock market because they all have a significant impact.
7	Huy, Loan and	impact of selected factors on	To analyze and evaluate the impacts of seven	Regression analysis	With the largest impact coefficient, increases in GDP growth, loan rates,

	Anh (2021)	stock price: a case study of Vietcom bank in Vietnam	macroeconomic factors on stock price of a joint stock commercial bank		and risk-free rates have a major impact on raising the price of VCB stock. Decreases in exchange rates come in second, and a minor decline in the S&P 500 comes in third. Many developing nations' commercial bank systems might utilize the research findings and suggested policy as a guide for creating their own policies.
8	Huy, Nhan, Bich, Hong, Chung and Huy (2021)	Impacts of internal and external macroeconomic factors on firm stock price in an expansion econometric model—a case in Vietnam real estate industry.	To consider the interaction between macro-economic factors such as Viet Nam inflation and GDP growth rate, inflation, exchange rate, risk free rate on stock price.	Regression analysis	This study reveals that the VIC stock price in Vietnam has a positive association with lending rates but a negative correlation with risk-free rates in VN commercial banks' deposit rates.
9	Putra, Wiyuda, Halim (2021)	The effect of macro-economic indicators on share prices in the	To determine the effect of exchange rates, inflation, world oil prices, and	Panel data regression method and random	The findings demonstrated the relationship between global oil prices and inflation and stock prices. The stock price is unaffected by the exchange

		construction sub-sector and building companies listed in Indonesia stock exchange 2013-2018	exchange rates on stock Price.	effect model (RE).	rate.
10	Norehan, Ridzuan (2020)	The Impact of Macroeconomics Variables toward Stock Market in Malaysia.	To investigate the impact of macroeconomic variables in the stock market in Malaysia from the period 1981 to 2017 using annual data.	Autoregressive Distributed Lag (ARDL)	The results based on long-run elasticity show that the exchange rate and inflation have a major and favorable impact on the Malaysian stock market. Over time, wide money and domestic saving have a negative effect on the stock market.
11	Ilhan and Akdeniz(2020)	The impact of macroeconomic variables on the stock market in the time of covid-19: the case of Turkey	To understand the effects of the COVID-19 pandemic on economies through various simulations and forecasts,	Regression analysis-Least Squares method	Based on the quantitative size of the coefficients, the macroeconomic variable that has the biggest effect on BIST 100 is the exchange rate.
12	Assagaf, Murwaningsari Gunawan & Mayan	The effect of macro-economic variables on stock return of companies that listed in	To analyze the effect of macroeconomic variables on the overall return of company shares which is a proxy	Multiple linear regression	Macroeconomic factors that impact companies listed on the Indonesia Stock Exchange include foreign exchange rates, interest rates, money supply, and

	gsari (2019)	stock Exchange: Empirical evidence from Indonesia	with changes in the composite stock price index.		rates of inflation and stock returns.
13	Khan and Khan (2018)	The Impact of Macroeconomic Variables on Stock Prices: A Case Study of Karachi Stock Exchange	To analyze the effect of various macroeconomic variables on stock prices of Pakistan	Time series Data and Regression analysis	Money supply, exchange rates, and interest rates have a long-term impact on Karachi Stock Exchange stock prices. With the exception of the currency rate, which has a negative co-integration with stock prices, all the variables are negligible.
14	NDEGWA (2016)	The effect of macro-economic variables on stock market return at the Nairobi securities exchange	To establish the effect of macroeconomic variables on stock returns at the NSE.	Regression analysis	According to the study's findings, 15.7% of the macroeconomic variables that were chosen for analysis had a marginally positive impact on NSE stock returns.
15	Ouma and Muriu (2014)	the impact of macroeconomic variables on stock market returns in Kenya	To investigate the impact of the macroeconomic variables on stock returns in Kenya	The Ordinary Least Square (OLS) technique is applied	The money supply, inflation, and currency rates have an impact on Kenya's stock market performance. It is discovered that inflation and the money supply have a major impact on NSE returns. However, it has been discovered that

	exchange rates negatively affect stock returns, whereas interest rates have no bearing on the NSE's long-term results.

2.3 Research Gap

Many significant conclusions can be drawn from this review of the literature. First of all, existing theories imply a connection between stock markets and macroeconomic factors, but they do not specify the type or quantity of macroeconomic elements to incorporate. As a result, previous empirical research which this chapter reviews has shown how to apply a variety of macroeconomic variables to examine their effects on stock prices (returns). Because of the variability of the variables examined, the countries chosen, and the time frame of the study, the literature's conclusions are inconsistent, despite the fact that previous research has significantly advanced our understanding of the relationships between financial markets and actual economic activity. The conclusions are difficult to generalize because each market has its own set of rules, regulations, and investor types.

Finally, the lack of study on emerging stock markets is evident, with the Nepalese market in particular getting relatively little attention. Actually, this study only evaluated two empirical studies that examined the Nepalese market and the impact of macroeconomic conditions on its performance. No specific study of the short- and long-term dynamics of these variables on stock returns on Nepalese markets has been conducted among the reviewed literature.

CHAPTER - III

RESEARCH METHODOLOGY

Research technique is a systematic strategy to addressing the research challenge. One could consider it a science that examines scientific research methods. It looks at the justification for the study technique and clarifies why a certain approach or method was chosen. It helps assess the correctness, validity, and applicability of research. Without the aid of suitable research techniques, it is impossible to understand the reasoning behind the current investigation. To achieve the objectives of the study, the applied approach will be used.

3.1 Research Design

This study included a descriptive design in addition to a casual comparative design. The qualitative factors affecting the NEPSE Index have been identified using descriptive research methods, while the cause-effect correlations between the independent and dependent variables have been identified using a casual comparative research design besides correlation and regression analysis. It includes data from 2009/10 to 2023/24 A.D.

3.2 Population & Sampling Method

Nepal Ratra Bank's data may be widely used on the population, which is the study's focus group (NRB, 2023). Purposive sampling, which selects data across a 15-year period from 2009/10 to 2023/24 A.D., is used in this study.

3.3 Nature and Source of Data

The study was based on secondary data. The data sources were NEPSE, SEBON, NRB, and the Ministry of Finance (MOF). The NRB provided information on the independent variables (foreign exchange rate, GDP, interest rate, inflation, and money supply) and the dependent variable (NEPSE Index). Likewise, the publication can provide extra relevant and important information; other publications used for this purpose include books and pamphlets, magazines, journals, newspapers, schools of thought, etc.

3.4 Method of Analysis

The data has been analyzed based on the available data pattern. Numerous financial, accounting, and statistical approaches have been employed in order to accomplish the study's goal.

Descriptive Statistics

Brief informative coefficients known as descriptive statistics provide an overview of a specific data collection, which may be a sample of the population or a representation of the complete population. There are two types of descriptive statistics: measurements of variability (spread) and measures of central tendency. The mean, median, and mode are indicators of central tendency, whereas the standard deviation, variance, minimum and maximum variables, kurtosis, and skewness are indicators of variability.

Mean

The arithmetic mean is the most common and extensively used metric for summarizing all of the data by a single variable. It is computed by dividing the total number of things by the sum of all items. The average value during the study period is represented by the mean values of the various variables.

$$\text{Mean } (\bar{X}) = \frac{\Sigma x}{n}$$

Where,

$\bar{X}$= Sum of the variables 'x'

N = No. of Observation

Standard deviation

The degree to which the separate things vary from a core value is known as dispersion. The absolute dispersion is measured by the standard deviation. The standard deviation increases with the degree of dispersion. A series' homogeneity and the degree of uniformity of the observations are both indicated by modest standard deviations, and vice versa. For earnings per share, dividends per share, dividend payout ratio, retained earnings, market value per share, dividend yield ratio, and price earnings ratio, the standard deviation was computed in this study.

$$\text{Standard Deviation (SD)} = \sqrt{\frac{\sum(X - \bar{X})^2}{n}}$$

Correlation analysis

One statistical method for describing how closely one variable is related to another is correlation analysis. Simple correlation has been used in this investigation. The following financial variables' correlation coefficient has been computed, displayed in matrix form, and thus thoroughly comprehended.

The following formula is used in this study to calculate the correlation coefficient between two variables, X and Y.

$$\text{Correlation Coefficient (r)} = \frac{n\Sigma xy - \Sigma x\Sigma y}{\sqrt{n\Sigma x^2 - (\Sigma x)^2}\sqrt{n\Sigma y^2 - (\Sigma y)^2}}$$

r = 0 means that the variables are correlated lies between -1 and +1 r = -1 implies that there is a perfect negative correlation between the variables r = +1 implies that there is a perfect positive correlation between the variables

Coefficient of determination (r^2)

The degree of linear linkage or correlation between two variables, one of which is independent and the other dependent, is measured by the coefficient of determination. Stated differently, r quantifies the overall percentage variation in dependent variables. The value of the coefficient of determination might be anywhere between zero and one. Only when the unexpected variation is zero—that is, when every data point in the scattering diagram falls precisely on the regression line—can a value of one occur.

t- Statistics: In 1908, Grosset (pen name Student) created it. Then, R.A. Fisher explains this distribution. The t-test is used to evaluate the study's assumptions for small samples. The t-values are computed first and compared with the crucial values at a particular level of significance for a given degree of freedom in order to apply the t distribution. The difference is considered significant at the five percent significance level if the computed value of "t" is more than the table value (let us call t 0.05). However, if tvalues are less than the corresponding critical of the "t" distribution, the difference is not considered significant.

$$t = \frac{r}{\sqrt{1 - r^2}} \times \sqrt{n - 2}$$

Where, r = Sample correlation between two variables

r^2 = Coefficient Determination

n = No of Pair of observations

Level of significance: Level of significance $\propto$ = 5%

Critical Value: Tabulated or critical value of t at $\propto$ % level of significance for (n - 2) degree of freedom obtain from 't' tables.

Decision: If calculated 't' is less than or equal to tabulated value of 't' it falls in the accepted region and the null hypothesis is accepted and if calculated 't' is greater than tabulated 't' null hypothesis is rejected.

Regression analysis

The direction of movement is indicated by regression analysis, but the relative movement of the variables under investigation is not. We can determine the relative movement of the variables with the aid of regression analysis. Analysis of regression for the subsequent variable.-, having undergone computation and interpretation. MPS is the dependent variable in this study, while DPS, P/E ratio, DY, EPS, and DPR are the independent variables. In multiple regression analysis, the standard error of estimate, multiple coefficient of determination, and least squares approaches are typically calculated for this purpose.

This is the model of multiple regression equations:

Model I

This model examines the impact of elements on L&A of commercial banks.

$NEPSE = \beta_0 + \beta_1 MS + \beta_2 GDP + \beta_3 Int.\ R + \beta_4 IR + \beta_5 FCR + \ldots\ldots e_t$

Where

Dependent Variables

NEPSE

Independent Variables

MS = Money Supply

GDP = Gross Domestic Product

Int. R = Interest Rate

IR = Inflation Rate

FCR = Foreign Currency Reserve

e_t = Error terms

3.5 Research Framework and Definition

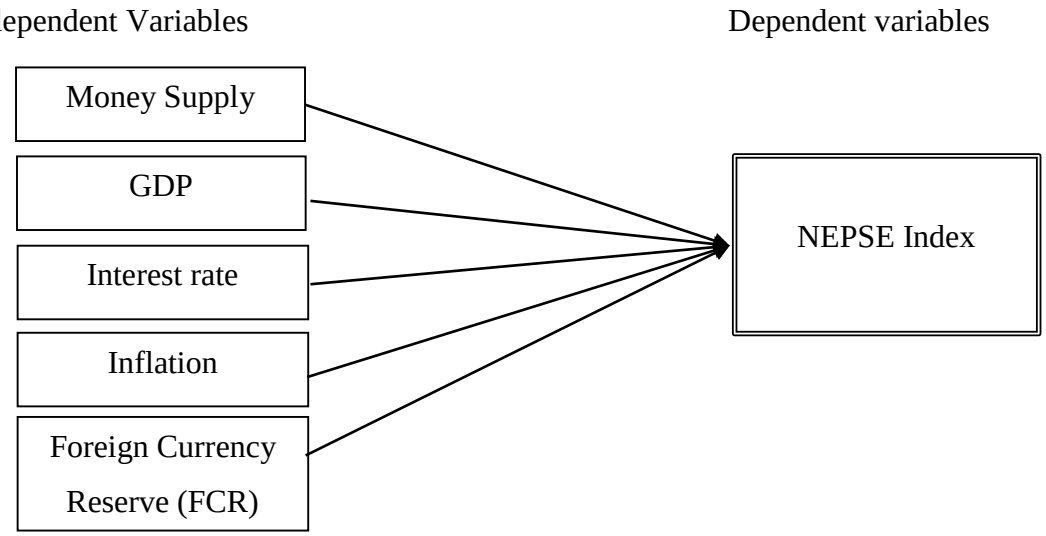

Figure1 Research Framework

Source: Mohammad, 2017

Foreign Currency Reserve (FCR)

Foreign exchange reserves, also referred to as Forex reserves, are essentially merely deposits of foreign currencies maintained by monetary authorities and citizens. According to Cooper and Schindler (2014), a nation's foreign exchange reserves are its foreign assets held in government securities that can be swiftly converted into cash, such as bonds and gold, as well as its holdings of other currencies that can be traded on the foreign exchange market for its own currency.

Gross Domestic Product (GDP)

The gross domestic product is the best indicator of a country's economic health. The total output produced by all of the people and companies in a country is represented by the GDP. C + I + G + (X-M) is the standard formula used to determine a nation's gross domestic product. It does not matter if they are citizens or foreign-owned companies. If they are within the country's borders, the government counts their output as GDP (Davidson, 1996).

Interest rate (IR)

The interest rate is the percentage that banks charge their customers for goods or services. It has a favorable correlation with bank profitability since it provides banks with an extra source of income (Kunt & Maksimovic, 1996).

Inflation rate

The inflation rate is the rate of change in the price of any commodity. Inflation and profitability are inversely related since rising prices lower bank profitability (Hussain, 2002).

Money Supply

The money supply is the total amount of cash and other liquid assets in an economy on the measurement date. The money supply consists of all available currency and bank deposits that can be readily converted into cash by an account holder (Keray, 2009).

CHAPTER- IV

RESULTS AND DISCUSSIONS

This chapter comprises of presentation of data collected related to the variables used in the study. Data for each variable has been presented in separate figures. To find the answer to the research questions, data have been analyzed by using different statistical measures. 0Descriptive statistics like mean, median, maximum, minimum, standard deviation, skew ness and kurtosis has been calculated to describe the factors affecting growth and prospects of capital market.

4.1 Results

4.1.1 Descriptive Analysis

Table 2 displays the descriptive statistics for every variable used in the study. It shows the descriptive statistics for every variable in the analysis. The mean, standard deviation, and C.V. are displayed in sequential order in columns two through five.

Table 2

Descriptive statistics

Variables	Mean	Std. Dev.	C.V (%)
GDP	4.588	2.762	60.20
Inflation Rate	7.285	2.604	35.74
Interest rate	5.031	1.534	30.49
Money Supply	11.281	1.581	14.01
Currency Reserve	10.898	1.340	12.30
NEPSE	6.897	.615	8.92

Source Appendix I

The descriptive statistics table that identifies key characteristics for each variable in the dataset related to the performance of the capital market is explained in Table 2. The table includes six variables: GDP, money supply, inflation rate, interest rate, currency reserve, and NEPSE.

The term "Mean" refers to the average value of each variable. The mean NEPSE for the area under study is 6.897, for instance. The mean values of the GDP, inflation rate, interest rate, money supply, and currency reserve are 4.588, 7.285, 5.031, 11.281, and 10.898 respectively.

The "Std. Dev." (Standard Deviation) measures the dispersion or spread of data points around the mean. It provides information on the variability of the data. For example, the fluctuation in NEPSE values is relatively close to the mean value, as indicated by the NEPSE (Ln) standard deviation of 0.615.

The coefficient of variation, or "CV," is the ratio of the standard deviation to the mean. As the coefficient of variation rises, so does the degree of dispersion around the mean. It is usually expressed as a percentage. For example, NEPSE's coefficient of variation is 0.0892, which suggests that NEPSE results are more consistent.

4.1.2 Correlation Analysis

The association between the variables utilized in the study is shown in Table 3. If there is a correlation between the variables, it is logical to assume that at least one of them affects the other. This table displays the Karl-Pearson correlation coefficient between the variables utilized in the analysis. Between parentheses is the P-value. The variables are presented as follows.

Table 3

Pearson's correlation

Variables	GDP	INF	INT	MS	FCR	NEPSE
GDP	1					
Sig. (2-tailed)						
Inflation rate (INF)	-.228	1				
Sig. (2-tailed)	.413					
Interest rate (INT)	-.018	-.128	1			
Sig. (2-tailed)	.949	.649				
Money Supply (MS)	-.164	-.763**	.094	1		
Sig. (2-tailed)	.559	.001	.738			
Foreign Currency Reserve (FCR)	-.033	-.455	-.102	.314	1	
Sig. (2-tailed)	.907	.088	.717	.255		
NEPSE	.049	-.727**	-.188	.699**	.314	1
Sig. (2-tailed)	.863	.002	.503	.004	.255	

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

**. Correlation is significant at the 0.01 level (2-tailed).

Source Appendix II

According to Table 3, there is no significant link and a lower degree of positive correlation between NEPSE and GDP (0.049). At the 0.01 level of significance, the correlation between inflation and NEPSE is also significant, with a -0.727 value, indicating a high degree of negative association. Similarly, the interest rate exhibits a strong negative

association with NEPSE, which is negligible at a coefficient of -0.188. With a 0.699 coefficient at the 0.01 level of significance, the money supply and NEPSE exhibit a strong positive association. Additionally, there is a negligible association between foreign currency reserve and a high degree of positive correlation (0.314).

4.1.3 Regression Analysis

Determining the impact of the independent factors in the study on the dependent variable was the primary goal of regression analysis. The analysis's objectives were to test the assumptions and investigate how GDP, the money supply, the inflation rate, the interest rate, and the foreign currency reserve affected NEPSE.

Table 4

Model Summary of NEPSE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.933	.871a	.758	.624

a. Predictors: (Constant), GDP, Inflation Rate, Interest Rate, Money Supply, Foreign Currency Reserve

In this case, table 4 shows that r^2 is the proportion of NEPSE variability that can be accounted for by independent factors. Because it also takes sample size into consideration, the adjusted r^2 is a more trustworthy statistic. The correlation's degree of dependability and how much it is influenced by the inclusion of independent variables are assessed using adjusted R-squared. The coefficient of determination, or r^2, is 0.871, meaning that the GDP, inflation rate, interest rate, money supply, and foreign currency reserve account for 87.10% of the variation in NEPSE.

Table 5

ANOVA Table

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.015	5	.803	5.651	.012b
	Residual	1.279	9	.142		
	Total	5.294	14			

a. Dependent Variable: NEPSE

b. Predictors: GDP, Interest Rate, Inflation Rate, Money Supply, Foreign Currency Reserve, and (Constant)

The overall summary and significance of the independent and dependent variables are displayed in ANOVA table 5. This table shows that, at a significance level of 0.05, or 0.012, the relationship between the independent variables inflation rate, interest rate, money supply, and foreign currency reserve and the dependent variable, NEPSE, is statistically significant.

Table 6

Regression Coefficient

		Unstandardized Coefficients		Standardized Coefficients			
	Model	B	Std. Error	Beta	t	Sig.	Remarks
1	(Constant)	6.609	1.967		3.360	.008	Significant
	GDP	.024	.047	.109	.518	.617	Insignificant
	Inflation rate	-.068	.078	-.288	-.876	.404	Insignificant
	Interest rate	-.145	.068	-.362	-2.127	.062	Insignificant
	Money Supply	.355	.167	.913	2.132	.062	Insignificant
	FCR	-.239	.124	-.521	-1.929	.086	Insignificant

a. Dependent Variable: NEPSE

Source: Appendix III

Regression analysis output: coefficient

The linear equation of this model is,

$Y = a + b_1X_1+b_2X_2+b_3X_3+b_4X_4+b_5X_5$

NEPSE = 6.609 + 0.024 GDP – 0.068 Inflation Rate – 0.145 Interest Rate + 0.355 Money Supply – 0.239 FCR

The regression coefficient's statistical significance is displayed in Table 6, which takes into account both the t-value and the corresponding P-value. For example, the t-cal value for constant is 3.360, and the P-value is 0.008 or 0.08%. It demonstrates that the calculated "a" is statistically significant. Inflation, interest rates, and foreign currency reserves all have a negative effect on NEPSE; at the 5% threshold of significance, interest rates and FCR are not significant, but inflation is.

The money supply and GDP also have a positive effect on NEPSE, with the money supply being statistically negligible at the 5% level of significance and the GDP being statistically insignificant, with coefficients of 0.024 and 0.355 (P-value = 0.617 and 0.062), respectively. Since all of the considered variables have p-values greater than 0.05, the

effects of GDP, inflation rate, interest rate, money supply, and foreign currency reserve on NEPSE are negligible.

4.2 Discussions

Since one of the main objectives of the study is to analyze the problems and prospects of the Nepalese stock market. The study on the problems and prospects for stock growth in Nepal will be very helpful to all those interested in the stock market. The study helps potential market players understand the opportunities and difficulties related to stock growth. There are boundaries and limitations to every study. Likewise, this inquiry is subject to certain typical constraints. A basic analysis of the stock market's growth forms the basis of this study.

The NEPSE, money supply, inflation rate, interest rate, and currency reserve all have positive skewness values, which indicate that the data are skewed to the right, with the right tail being longer than the left. A negative GDP value, on the other hand, denotes a leftward skew in the data, meaning that the left tail is longer than the right. While this contradicts the findings of Akter and Rahman's (2023) research, Suhendra and Malini's (2022) findings are comparable.

The correlation coefficient quantifies the linear relationship between two variables and shows its strength and direction. The results demonstrate that NEPSE has weak positive correlations with the foreign exchange reserve, interest rate, and money supply, suggesting a small propensity for these variables to move in unison. However, statistical significance is not met by these correlations. The somewhat small negative correlation between NEPSE and inflation, however, indicates a clear propensity for the inflation rate to be associated with higher NEPSE. This link is statistically significant. The findings reported here are more consistent with those of Devkota (2019) and Paterson et al. (2023).

Furthermore, the modest negative correlation between GDP and FCR suggests a slight tendency for a higher GDP to be associated with a foreign currency reserve. Note that there is no statistical significance in this correlation. This is similar to the findings of Selvarajan and Rahim (2020), but not to those of Edo (2021). However, the findings of Nguyen (2023) and Ukamaka (2021) lend credence to the idea that this link is not statistically significant.

The interest rate, money supply, foreign currency reserve, and inflation rate all have statistically significant effects on the dependent variable, or NEPSE. NEPSE is negatively impacted by both the interest rate and the inflation rate, however none of these effects are significant even at the 10% significance level. Similarly, NEPSE is positively impacted by both GDP and money supply, with GDP being statistically significant but the money supply not. Consequently, the GDP, inflation rate, interest rate, money supply, and foreign exchange reserve all have a linear connection with NEPSE. Though Ukamaka (2021) and Panthi (2022) did not support it, this conclusion is in line with Pandey, Risal, and Chauhan's (2020) findings.

CHAPTER - V

SUMMARY AND CONCLUSION

5.1 Summary

The study looks at the impact of macroeconomic data on the NEPSE index. To achieve the particular objective of the study, research has been done utilizing both descriptive and causal comparison techniques. Numerous works on the topic have been reviewed, including books, journals, essays, and some previous research and theoretical evaluations. A descriptive and informal research design is used to assess the state and trend of the independent and dependent variables. A causal study methodology, regression analysis, correlation, and other financial variables are used to measure the impact of the foreign exchange reserve, GDP, money supply, interest rate, and inflation rate on the NEPSE index. Secondary sources of information were used in this study. The data comes from annual reports from related offices that span a fifteen-year span, from 2009/10 to 2023/24.

In addition to weighted average and percentage analysis, a range of statistical and financial tools were used to analyze secondary data over the study period. The primary research question, the general background, a brief synopsis of the sample banks, the problem statement, the goals and justification for the inquiry, and the study's limitations are all covered in the first chapter. The second chapter provides a summary of relevant and related literature and focuses on the theoretical analysis. Both an overview of the important research generally and an explanation of the conceptual framework are given. The research approach for the study is described in the third chapter.

This chapter covers a number of topics, including the definition of statistical tools, research design, data source, analytic approach, and the analysis of financial indicators and variables. In the fourth chapter, quantitative features of dividend policy are illustrated through the presentation and analysis of data utilizing statistical tools and approaches. The conversations are included in this chapter as well. The conclusion, consequences, and summary are presented in the fifth chapter. Additionally, it offers some suggestions and, to the extent that it is useful, compares them to additional empirical evidence.

5.2 Conclusion

According to the study's findings, NEPSE is significantly impacted by the money supply, GDP, foreign exchange reserve, inflation rate, and interest rate. Descriptive and inferential statistics show that NEPSE has weak positive correlations with interest rate, money supply, and foreign currency reserve, suggesting a slight tendency for these variables to move in tandem. However, statistical significance is not met by these correlations. Nonetheless, there is a weak but statistically significant negative correlation between the two. The findings reported here are more consistent with those of Devkota (2019) and Patterson et al. (2023).

Both descriptive and inferential statistics indicate that NEPSE has weakly positive, statistically non-significant relationships with the money supply, interest rate, and foreign currency reserve. This is similar to the findings of Selvarajan and Rahim (2020), but not to those of Edo (2021). NEPSE and inflation do, however, have a statistically significant, although minor, negative correlation. It is supported by the findings of (Ukamaka, 2021) and (Nguyen, 2023).

Additionally, NEPSE is negatively impacted by both the interest rate and the inflation rate, but neither of these effects is significant even at the 10% significance level. Similarly, both the money supply and GDP have a positive impact on NEPSE; the money supply is not insignificant, but the GDP is statistically significant. Consequently, the GDP, inflation rate, interest rate, money supply, and foreign exchange reserve all have a linear connection with NEPSE. Though Ukamaka (2021) and Panthi (2022) did not support it, this conclusion is in line with Pandey, Risal, and Chauhan's (2020) findings.

5.3 Implications

Following an analysis of the securities market, the following recommendations have been made to improve the securities market:

i. Neptune should regularly review and update the information supplied by the listed companies. When a company is found to be operating outside of NEPSE regulations, it should be dealt with immediately. The NEPSE requires a well-furnished office, automated systems, efficient staff, a high-speed settlement and clearance process, and an environment that is favorable to investors. NEPSE should

focus on the possibility that the current trading procedure could be replaced by an electronic trading system.

ii. Due to investors' inability to obtain reliable advice and recommendations about stocks and market opportunities, the risk involved in stock market investing has increased. Enhancing the stock market's competitiveness and efficiency as well as allowing new brokers to enter the market are necessary to increase public investors' trust.

iii. Strengthening the Security Board of Nepal's institutional capacity through upgrades to its physical facilities, independence in financial and legal matters, and the availability of a sufficient number of qualified human resources is crucial for the board to operate as an efficient stock market regulator. Its internal governance structure should also be strengthened.

iv. Nepalese investors are unaware of the investment approach. They should therefore be given an explanation of the investment plan that is founded on an accurate risk and return analysis.

v. To obtain a competitive edge through superior stock analysis and forecasting, investors should constantly be aware of their capabilities, weaknesses, and risk tolerance. Nepalese investors lack stock market knowledge. They should therefore be obliged to study daily newspapers and publications, as well as the annual reports of NESPE and SEBON.

vi. Continued securities market research and analysis, investor education, awareness-building, and the establishment of an academy for institutional financial education services are all essential for reliable and sustainable capital mobilization.

REFERENCES

Akter, R., & Rahman, M. M. (2023). Capital market and its prospects and problems in Bangladesh. *Sch J Econ Bus Manag, 3*(1), 39-45.

Black, N. (2017). Determinants of share prices: Evidence from listed manufacturing firms in Sri Lanka. *EPRA International Journal of Multidisciplinary Journal, 3*(6), 63-68.

Carter, D., Mazumder, S., Simkins, B., & Sisneros, E. (2022). The stock price reaction of the COVID-19 pandemic on the airline, hotel, and tourism industries. *Finance Research Letters*, *44*(3), 102-147.

Devkota, M.L., & Panta, H. (2020).An inquiry into the effect of the interest rate, gold price, and the exchange rate on stock exchange index: Evidence from Nepal. *Dynamic Econometric Models*, *18*(1), 49-65.

Dhal, K. G., Das, A., Ray, S., Gálvez, J., & Das, S. (2021). Histogram equalization variants as optimization problems: a review. *Archives of Computational Methods in Engineering*, *28*(4), 1471-1496.

Erdugan S. (2018). Effect of macroeconomic variables on stock market returns for four emerging economies: Brazil, Russia, India, and China. *International Business & Economics Research Journal*, *15*(2), 1-12.

Fama, E. F. (1981). Stock returns, real activity, inflation, and money. *American Economic Review*, *71*(4), 545-565.

Fama, E., 1970. Efficient capital markets: A review of theory and empirical work. *Journal of Finance, 25*(2): 383-417.

Ghimire, R. R. & Mishra, D. (2018). Determinants of stock price in Nepalese market. *The International Research Journal of Management Science, 3*(1), 124-135.

Goldstein, I. (2023). Information in financial markets and its real effects. *Review of Finance*, *27*(1), 1-32.

Gurung, J. B. (2004). Growth and performance of securities market in Nepal. *The Journal of Nepalese Business Studies, 1*(1), 85-92.

Gurung, J. B., Pathak, H. P., & Magar, G. B. T. (2017). Impact of bank-specific variables on financial performance of joint venture banks in Nepal. *Janapriya Journal of Interdisciplinary Studies*, *11*(1), 54-74.

Hodnett, M.M., & Hsieh, M. (2013). Macroeconomic variables on stock market interactions: the Indian experience, *ISOR Journal of Business and Management, 11*(3), 15-28.

Hussain, D.I., 2002. Why does Pakistan have to accumulate foreign reserves? *Daily Dawn, 14* (2), 1-22.

Huy, D. T. N., Nhan, V. K., Bich, N. T. N., Hong, N. T. P., Chung, N. T., & Huy, P. Q. (2021). Impacts of internal and external macroeconomic factors on firm stock price in an expansion econometric model-a case in Vietnam real estate industry. *Data Science for Financial Econometrics*, *3*(1), 189-205.

Iftikhar, A. B., Raja, N. J., & Sehran, K. N. (2017). Impact of dividend policy on stock prices of firm. *International Scientific Journal Theoretical & Applied Science, 3*(47), 32-37.

Joshi, P. & Giri, K. A. (2015). Fiscal Deficits and Stock Prices in India: Empirical Evidence. *International Journal of Financial Studies*, *11*(2), 393-410.

Keray, R., 2009. Is there a long-run relationship between stock prices and monetary variables? *Evidence from Jamaica.*

Khan, J., & Khan, I. (2018). The impact of macroeconomic variables on stock prices: a case study Of Karachi Stock Exchange. *Journal of economics and Sustainable Development*, *9*(13), 15-25.

Khatri, M. (2019). Macro-economic influence on the Nepalese stock market. *Economic Review, 2*(1), 47-64.

Kipesha, E. F. (2019). Impact of size and age on firm performance: Evidence from Microfinance institutions in Tanzania. *Research Journal of Finance and Accounting, 4*(5), 105-116.

Koirala, P. & Bajracharya, P. (2014). Nepalese capital market: Issues and challenges. *NRB Economic Review*, *16* (2), 4-19.

Kunt, A.D. and V. Maksimovic, 1996. Stock market development and corporate finance decisions. *Finance and Development English Edition*, *33*(2): 47-49.

Li, Y., & Pan, Y. (2022). A novel ensemble deep learning model for stock prediction based on stock prices and news. *International Journal of Data Science and Analytics*, *12*(2), 1-11.

Lintner, J., 1973. Inflation and common stock prices in a cyclical context. *National Bureau of Economic Research Annual Report*.

Majeed, B. N. (2022). The effect of macroeconomic variables on stock exchange market performance: Iraq stock exchange market as an example. *Journal of Kurdistani for Strategic Studies*, *5*(3), 12-19.

Maskey, S. (2023). Specific determinants of share prices: a case study of listed life insurance companies in Nepal Stock Exchange. *Journal of Economics, 12* (2), 13-27.

Monti, S. (2022). *Market definition as a cornerstone of EU Competition Policy*, Workshop on market definition, Helsinki Fair Centre.

Ndegwa, E. N. (2016). *The Effect of macro-economic variables on stock market return at the Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).

Nguyen, A. H., Hoang, T. G., & Doan, D. T. (2023). The development of green bond in developing countries: insights from Southeast Asia market participants. *The European Journal of Development Research*, *35*(1), 196-218.

Norehan, M. A. H., & Ridzuan, A. R. (2020). The impact of macroeconomics variables toward Stock Market in Malaysia. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *10*(1), 360-367.

Ouma, W. N., & Muriu, P. (2014). The impact of macroeconomic variables on stock market returns in Kenya. *International journal of business and commerce*, *3*(11), 1-31.

Paterson, A., Sakariyahu, R., Lawal, R., & Alabi, A. (2023). The Impact of Government Policy Responses to the COVID-19 Pandemic and Brexit on the UK Financial Market: A Behavioral Perspective. *British Journal of Management, 10*(2), 1-17.

Pattawe, A. (2022). The influence of the internal control system and accountability on fraud prevention in village financial management. *Atestasi: Jurnal Ilmiah Akuntansi*, *6*(1), 217-228.

Phuyal, N. (2016). Can macroeconomic variables explain long term stock market movements? A study of Nepali capital market, *Journal of Business and Management Research, 1*(1), 26-38.

Pokhrel, N. R., Dahal, K. R., Rimal, R., Bhandari, H. N., Khatri, R. K., Rimal, B., & Hahn, W. E. (2022). Predicting NEPSE index price using deep learning models. *Machine Learning with Applications*, *9* (2), 100-385.

Putra, I. G. S. (2021). The effect of macro-economic indicators on share prices in the construction sub-sector and building companies listed in Indonesia stock exchange 2013-2018. *Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12*(9), 107-113.

Saputra, F. (2022). Analysis of total debt, revenue and net profit on stock prices of foods and beverages companies on the Indonesia stock exchange (IDX) Period 2018-2021. *Journal of Accounting and Finance Management, 3*(1), 10-20.

Sharma, R. (2021). The prominent factors for the underdevelopment of security market in Nepal. *SEBON Journal*, *4*(1), 104-117.

Sharpe, W. (2012). Macroeconomic conditions and private equity fund returns a Swiss perspective. *The Journal of Private Equity, 21*(1), 20-30.

Shrestha, P.K., & Subedi, B.R. (2020). *Empirical examination of determinants of stock index in Nepal.* NRB Working Paper.

Shrestha, P.M. (2022). Effect of macroeconomic variables on stock market Index: With reference to Nepal stock exchange. *SEBON Journal*, *7*(1), 95-107.

Suhendra, S. P., & Malini, H. (2022). The impact of macro-economic variable toward Indonesia composite stock price index. *OPTIMISM Journal of Management Business Entrepreneurship and Organization*, *1*(1), 24-37.

Thapa, K.B. (2021). Influencing factors of stock price in Nepal. *NCC journal*, *4*(1), 113-120.

Vaidya, R., Sharma, D. R., & Dangol, J. (2023). Opinion on distribution nature of NEPSE return: a qualitative analysis. *Social Science Studies*, *3*(1), 047-066.

Van Horne J.C. (2002). *Financial management & policy*. New Delhi: Prentice Hall of India.

Wahab, S., Imran, M., Ahmed, B., Rahim, S., & Hassan, T. (2022). Navigating environmental concerns: Unveiling the role of economic growth, trade, resources and institutional quality on greenhouse gas emissions in OECD countries. *Journal of Cleaner Production*, *434* (5), 139-151.

APPENDICES

Appendix I

Essential Information from World Bank and Nepal Rastra Bank

Fiscal year	GDP	Inflation rate	Interest rate	NEPSE	Money Supply	FCR
2023/24	5.6	3.8	7.34	7.6	13.75	11.18
2022/23	4.84	4.09	4.72	7.97	13.86	13.26
2021/22	-2.37	5.05	4.97	7.24	13.75	13.1
2020/21	6.66	5.57	3.74	7.14	13.66	12.96
2019/20	7.62	4.06	5.28	7.1	11.04	10.47
2018/19	8.98	3.63	4.12	7.37	10.89	10.4
2017/18	0.43	8.79	3.9	7.45	10.76	8.23
2016/17	3.98	7.87	5.9	6.87	10.59	10.17
2015/16	6.01	8.36	6.3	6.94	10.45	10.01
2014/15	3.53	9.04	4.1	6.25	10.31	9.88
2013/14	4.67	9.46	8.22	5.97	10.3	10.42
2012/13	3.42	9.23	6.57	5.89	10.03	10.44
2011/12	4.82	9.33	3.66	6.17	10.02	11.03
2010/11	4.53	11.09	3.61	6.62	9.91	10.97
2009/10	6.1	9.91	3.03	6.87	9.9	10.95

Source: www.nrb.com.np and www.worldbank.com

Appendix - II

Variables	Mean	Std. Dev.	Skew ness	Kurtosis
GDP	4.588	2.762	-.89011	.65742
Inflation Rate	7.285	2.604	.33341	-1.990
Interest rate	5.031	1.534	.81567	-.12995
Money Supply	11.281	1.581	.51886	-2.15828
Currency Reserve	10.898	1.340	1.10554	-.79996
NEPSE	6.897	.615	1.02318	1.84012

Source: SPSS Output

Appendix - III

Variables	GDP	INF	INT	MS	FCR	NEPSE
GDP	1					
Sig. (2-tailed)						
Inflation rate (INF)	-.228	1				
Sig. (2-tailed)	.413					
Interest rate (INT)	-.018	-.128	1			
Sig. (2-tailed)	.949	.649				
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Sig. (2-tailed)	.559	.001	.738			
Foreign Currency Reserve (FCR)	-.033	-.455	-.102	.314	1	
Sig. (2-tailed)	.907	.088	.717	.255		
NEPSE	.049	-.727**	-.188	.699**	.314	1
Sig. (2-tailed)	.863	.002	.503	.004	.255	

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

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output

Appendix IV

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.933	.871a	.758	.624

a. Predictors: (Constant), FCR, GDP, INT, INF, MS

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.015	5	.803	5.651	.012b
	Residual	1.279	9	.142		
	Total	5.294	14			

a. Dependent Variable: NEPSE

b. Predictors: (Constant), FCR, GDP, INT, INF, MS

Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	6.609	1.967		3.360	.008
	GDP	.024	.047	.109	.518	.617
	Inflation rate	-.068	.078	-.288	-.876	.404
	Interest rate	-.145	.068	-.362	-2.127	.062
	Money Supply	.355	.167	.913	2.132	.062
	FCR	-.239	.124	-.521	-1.929	.086

a. Dependent Variable: NEPSE

Source: SPSS Output

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