THE INFLUENCE OF MACROECONOMIC INDICATORS ON THE NEPALESE STOCK MARKET

A Dissertation submitted to the Office of the Dean, Faculty of Management in partial fulfillment of the requirements for the Master of Business Studies (MBS) degree

By

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "**The Influence of Macroeconomic Indicators on the Nepalese Stock Market ”** The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it 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 this dissertation.

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July, 2025

REPORT OF RESEARCH COMMITTEE

Mrs. Shilpa Ghising has defended research proposal entitled **''The Influence of Macroeconomic Indicators on the Nepalese Stock Market"** successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestion and guidelines of supervisor Asst. Prof. Dr. Pitri Raj Adhikari and submit the thesis for evaluation and viva-voce examination.

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APPROVAL SHEET

We, the undersigned, have examined the thesis entitled **‘’The Influence of Macroeconomic Indicators on the Nepalese Stock Market”** presented by Shilpa Ghising, a candidate for the degree of Master of Business Studies (MBS Semester) and conduced the Viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

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ABBREVIATIONS

ADF	: Augmented Dickey-Fuller
ARDL	: Autoregressive Distributed Lag
C	: Constant
CPI	: Consumer Price Index
ECT	: Error Correction Term
FDI	: Foreign Direct Investment
GDP	: Gross Domestic Product
GDPG	: GDP Growth
GoN	: Government of Nepal
INF	: Inflation
LN	: Natural Logarithm
LNGDPG	: Log of GDP Growth
LNM2	: Log of Broad Money Supply
LNNEPSE	: Log of Nepal Stock Exchange Index
M2	: Broad Money Supply
NEPSE	: Nepal Stock Exchange
NRB	: Nepal Rastra Bank
OLS	: Ordinary Least Squares
SEBON	: Securities Board of Nepal

ABSTRACT

This study investigates the influence of selected macroeconomic indicators namely inflation rate, broad money supply (M2), GDP growth rate, on the performance of the Nepalese stock market, as measured by the NEPSE index, over the period from 1993 to 2024. A descriptive and causal-comparative research design was employed, using secondary data collected from Nepal Rastra Bank and the Securities Board of Nepal. The study utilized EViews and Microsoft Excel for statistical analysis. The correlation analysis revealed a significant positive relationship between money supply and remittance inflows with the NEPSE index, while inflation and GDP growth exhibited weak and statistically insignificant correlations.

The study reveals a significant positive correlation between broad money supply (LNM2) and the NEPSE index, indicating that higher liquidity supports stock market growth in Nepal. Inflation (LNINF) shows a significant negative correlation with NEPSE, while GDP growth (LNGDPG) has no significant relationship, suggesting a weaker or indirect impact. Regression and ARDL analyses further confirm that money supply is the most influential macroeconomic factor, positively affecting the NEPSE index in both the short run and long run. The lagged NEPSE index also has a significant effect, reflecting investor momentum. In contrast, inflation and GDP growth show negative or insignificant impacts. The models demonstrate strong explanatory power, emphasizing the critical role of liquidity in driving Nepal's stock market performance.

Keywords: *Nepal Stock Exchange (NEPSE), Correlation, Macroeconomic Indicators, Money Supply, Inflation, GDP Growth, OLS Regression, ARDL Model, Capital Market*

CHAPTER I
INTRODUCTION

1.1 Background of the Study

The stock market plays a vital role in mobilizing domestic savings and directing them toward productive investments, thereby promoting capital formation and economic growth. In developing economies like Nepal, where banking systems alone cannot meet the growing demand for capital, a well-functioning stock market becomes particularly crucial. The Nepal Stock Exchange (NEPSE), established in 1993, is the countries only organized secondary market for trading securities. Though still in its developing phase, NEPSE has emerged as a significant indicator of investor confidence and overall economic sentiment.

Stock markets do not function in isolation. Their performance is significantly influenced by macroeconomic indicators that reflect the overall health of the economy. In the context of Nepal, four key macroeconomic variables inflation, money supply (M2), gross domestic product (GDP) growth, and remittance inflows have been recognized as having considerable influence on stock market behavior. Inflation reduces the purchasing power of money and real returns on investment, which can negatively affect investor sentiment. The money supply, particularly M2, represents the liquidity available in the economy. A higher money supply generally increases investment opportunities, including in capital markets.

GDP growth, a core measure of economic performance, positively affects stock prices by boosting corporate earnings expectations and investor confidence. Remittance inflows, which are a major source of household income in Nepal due to extensive labor migration, create additional liquidity in the economy. A portion of this liquidity often flows into the stock market, directly or indirectly influencing market performance.

International studies have long established the theoretical and empirical relationship between macroeconomic indicators and stock markets. The Efficient Market Hypothesis (EMH) proposed by Fama suggests that stock prices reflect all available information, including macroeconomic conditions (Fama, 1970). Similarly, the Arbitrage Pricing

Theory (APT) developed by Chen, Roll, and Ross posits that multiple macroeconomic factors such as inflation, interest rates, and money supply affect asset prices (Chen et al., 1986). Empirical studies across countries have supported these theories. For example, a study in Japan found a long-run relationship between stock prices and variables like inflation, interest rates, and money supply (Mukherjee & Naka, 1995).

In Nepal, however, empirical research on this topic remains relatively limited and inconclusive. Recent studies highlight the complexity of these relationships in the Nepalese context. For instance, GDP growth and broad money (M2) were found to positively influence NEPSE, while inflation showed a negative effect (Ghimire, 2022). Similarly, liquidity factors such as money supply played a stronger role than inflation in influencing market movements (Pokharel & Pokhrel, 2021). Using the ARDL model, GDP growth was found to have a negative short-run effect on NEPSE, while inflation was statistically insignificant (Adhikari et al., 2024). A sectoral analysis also revealed that macroeconomic variables, especially inflation and capital adequacy, significantly impacted banking stock performance (Dhakal et al., 2024). Furthermore, long-run causality from stock market development to GDP growth was identified, reinforcing the potential role of the stock market in driving broader economic growth (Bhattarai et al., 2024).

Despite these contributions, the literature shows a lack of consensus on how macroeconomic fundamentals influence stock market performance in Nepal. Recent concerns have been raised over the increasing volatility of NEPSE in response to fluctuating macroeconomic variables, highlighting the need for further empirical investigation (Ghimire & Rimal, 2023). Additionally, the evolving financial system, political instability, and the critical role of remittance inflows further complicate the market's response to macroeconomic shifts.

In this context, this study aims to examine the influence of selected macroeconomic indicators inflation rate, money supply (M2), and GDP growth rate, on the performance of the Nepalese stock market, as measured by the NEPSE index. By analyzing annual data, this research seeks to fill the existing empirical gap, enrich the literature, and offer insights that may guide policymakers, investors, and financial institutions in developing

informed macroeconomic and investment strategies for Nepal's evolving financial system.

1.2 Problem Statement

The stock market was widely regarded as a key indicator of a nation's economic performance, reflecting both current conditions and future expectations. It facilitated the mobilization of savings, allocation of capital, and generation of liquidity. In economic theory, particularly the Efficient Market Hypothesis (EMH) and Arbitrage Pricing Theory (APT), stock prices were influenced by macroeconomic variables such as inflation, interest rates, exchange rates, GDP growth, and money supply, which affected investor expectations and firm valuations (Fama, 1970; Chen, Roll, & Ross, 1986). Conceptually, stock markets were expected to respond rationally to macroeconomic developments, integrating these signals into stock valuations. In developed economies, this theoretical relationship held relatively well. However, in emerging economies like Nepal, where financial systems were still maturing, the relationship between macroeconomic variables and the stock market was less clear, raising important empirical and conceptual questions.
In Nepal, the Nepal Stock Exchange (NEPSE), established in 1993, served as the country's only secondary securities market. While NEPSE saw significant growth in market capitalization and investor participation in recent years, it continued to face challenges such as low liquidity, limited sectoral representation, and dominance by retail investors. One major issue was the perceived disconnect between macroeconomic fundamentals and stock market movements. Despite rising inflation, declining economic output, or changes in interest rates, the NEPSE index often moved in unexpected directions, driven more by speculation, herd behavior, or misinformation than economic indicators (Pandit, 2025). This raised questions about the maturity of the Nepalese stock market and the extent to which macroeconomic factors genuinely influenced investor behavior.

Variable selection was another important dimension. Studies often focused only on traditional indicators such as inflation, interest rate, and GDP growth, overlooking other critical macroeconomic factors relevant in the Nepalese context such as remittances, money supply, and foreign direct investment (FDI). For instance, remittance contributed nearly 24% of Nepal's GDP, directly influencing household income, savings, and investment capacity. Yet, it was frequently excluded from models exploring stock market

determinants. Similarly, exchange rate volatility, which affected import-heavy companies, and policy-driven interest rate shifts by the Nepal Rastra Bank also impacted equity returns, especially in interest-sensitive sectors like banking and finance (Nepal Rastra Bank, 2024). The lack of comprehensive variable inclusion reduced the explanatory power and relevance of many past studies.

Country-specific economic and political features further complicated the situation. Nepal's macroeconomic environment was often subject to external shocks, political instability, and policy uncertainty. Events such as the 2015 earthquake, the COVID-19 pandemic, the transition to federalism, and frequent government changes introduced structural breaks in economic data, possibly altering the behavior of investors and firms. Additionally, the capital market was heavily influenced by a small group of institutional and retail investors, many of whom lacked sufficient financial literacy or relied on non-fundamental trading cues (Karki, 2025). These characteristics differentiated Nepal's stock market from those in more stable or advanced economies, indicating the need for country-specific analysis that accounted for unique structural, behavioral, and policy-related factors.

Methodologically, most previous research in Nepal suffered from limitations that hindered comprehensive understanding. Many studies used annual data, which might have failed to capture short-term dynamics or volatility patterns triggered by macroeconomic events or policy changes. Furthermore, few employed advanced time-series econometric models like the Autoregressive Distributed Lag (ARDL) bounds testing, Error Correction Models (ECM), or asymmetric models, which were capable of identifying both long-term equilibrium and short-term disequilibrium relationships. Additionally, structural break tests, necessary to control for exogenous shocks (like the 2015 earthquake or COVID-19), were rarely used. These methodological oversights reduced the credibility and policy usefulness of existing findings (Levine & Zervos, 1998). Moreover, most studies assumed symmetrical responses of the market to economic shocks, failing to consider that investor reactions might differ between rising and falling inflation or between appreciation and depreciation of currency. These asymmetric responses needed to be tested to understand how expectations were formed in real-time and to develop appropriate financial policies.

Empirical literature also revealed inconsistency. For example, Ghimire (2022) found that broad money and GDP growth positively affected NEPSE, while inflation had a negative effect. On the other hand, Adhikari, Jha, and Maheshwari (2024) reported a statistically insignificant influence of inflation and a negative short-run impact of GDP growth on stock prices. Similarly, Pokharel and Pokhrel (2021) noted that money supply and oil prices significantly affected NEPSE but found inflation to be weakly linked. These contradictions might have been due to methodological choices, limited data frequency, and narrow variable selection, further underscoring the need for a more robust and holistic approach.

Behavioral elements and institutional factors also presented major challenges. Unlike developed markets, where prices responded predictably to interest rate hikes or inflation reports, NEPSE was highly sensitive to investor sentiment, social media rumors, and speculative behavior. The lack of reliable financial media, widespread misinformation, and low investor education levels distorted the relationship between economic indicators and market outcomes. For example, a hike in policy rate might have reduced investment demand, but NEPSE might have risen due to expectations of higher banking sector profits showing a divergence from textbook economic theory. These anomalies were often overlooked in quantitative research and pointed to a pressing need for integrating behavioral perspectives and qualitative insights (Dhakal, Shrestha, & Shrestha, 2024).

Another key issue was the regulatory environment. Although SEBON and Nepal Rastra Bank introduced several reforms including digital trading, dematerialization, and improved disclosure norms, the enforcement of regulations remained weak. Market manipulation, insider trading, and lack of corporate transparency continued to affect investor confidence. Without regulatory depth and institutional accountability, macroeconomic policy signals might not have reached the market as intended. Thus, the effectiveness of macroeconomic policy as a transmission mechanism to the stock market remained questionable (Bhattarai, Gautam, & Chettri, 2024).

Given these conceptual, empirical, and methodological concerns, there was a significant research gap in understanding how macroeconomic variables affected the Nepalese stock market. This study aimed to fill that gap by incorporating a broader range of macroeconomic indicators including inflation, interest rate, GDP growth, exchange rate,

remittance, and money supply using monthly data from the past decade. It applied advanced econometric models such as ARDL and ECM to explore both short-run and long-run dynamics. In addition, the study tested for structural breaks, asymmetric responses, and Granger causality to enhance the robustness and policy relevance of the findings. By doing so, the research provided important insights into the interplay between macroeconomic policy and capital market behavior in Nepal, supporting evidence-based decision-making for investors, regulators, and policymakers. Based on this following research question is raised:

i. What is the status of the macroeconomic variables and the Nepalese stock market index during the study period?
ii. Is there a significant correlation between the macroeconomic variables and the Nepalese stock market index?
iii. Do the macroeconomic variables significantly influence the Nepalese stock market index based on regression analysis**?**

1.3 Objectives of the study

The Nepalese stock market, represented by the Nepal Stock Exchange (NEPSE), plays a vital role in the country's economic development by facilitating capital mobilization and investment. However, its performance is often influenced by various macroeconomic factors such as inflation, interest rates, exchange rates, GDP growth, and money supply. Understanding how these macroeconomic variables affect NEPSE is crucial for investors, policymakers, and regulators to make informed decisions. Despite growing research, the relationship between these factors and stock market behavior in Nepal remains complex and inconclusive, necessitating further empirical analysis. This study had following objectives:

i. To describe the status of macroeconomic variables and the Nepalese stock market index over the study period.
ii. To examine whether there is a significant correlation between macroeconomic variables and the Nepalese stock market index.
iii. To analyze the impact of macroeconomic variables on the Nepalese stock market index using regression analysis**.**

1.4 Rationale of the study

The Nepalese stock market has witnessed significant development since the establishment of NEPSE in 1993, yet it has remained less mature compared to markets in developed economies (Karki, 2025). Despite its growing importance in mobilizing capital and promoting economic growth, the degree to which macroeconomic variables influence stock market performance in Nepal has not been clearly established (Ghimire, 2022). Previous research has often focused on a limited set of macroeconomic indicators such as inflation, interest rates, and GDP growth, while neglecting key factors like remittances and foreign direct investment, which are especially important in the Nepalese context (Pokharel & Pokhrel, 2021; Nepal Rastra Bank, 2024).

Furthermore, Nepal's unique economic and political environment characterized by frequent structural shocks, political instability, and policy uncertainty complicates the relationship between macroeconomic fundamentals and stock market behavior (Pandit, 2025; Levine & Zervos, 1998). Investor behavior in Nepal also differs from that in developed markets, with speculation and limited financial literacy playing significant roles in price formation (Dhakal, Shrestha, & Shrestha, 2024). These factors have contributed to an inconsistent and sometimes contradictory empirical literature, highlighting the need for a more comprehensive and context-specific analysis (Adhikari, Jha, & Maheshwari, 2024).

Methodologically, many prior studies relied on annual data and traditional models that could not adequately capture short-term dynamics, asymmetric responses, or structural breaks caused by events such as the 2015 earthquake or the COVID-19 pandemic (Levine & Zervos, 1998). This research seeks to fill these gaps by using monthly data and employing advanced econometric techniques such as ARDL and ECM models to analyze both short-run and long-run relationships, as well as test for structural breaks and causality (Fama, 1970).

By addressing these conceptual, empirical, and methodological challenges, this study aims to provide more robust evidence on how macroeconomic variables affect the Nepalese stock market. The findings are expected to offer valuable insights to investors, regulators, and policymakers for fostering a more stable and efficient capital market in Nepal (Bhattarai, Gautam, & Chettri, 2024).

1.5 Limitation of the Study

This study has following limitations:

i. The study relies on secondary data, which may contain errors or inconsistencies, especially from earlier periods when record-keeping was less robust.
ii. The analysis may not fully capture the effects of sudden or unexpected external shocks and policy changes beyond those explicitly modeled.
iii. Some behavioral factors such as investor psychology, market sentiment, and speculative activities are difficult to measure and are excluded from the study.
iv. The study assumes stable relationships over the long period, which might not hold true due to evolving economic and market conditions.
v. The use of monthly data, while detailed, might miss ultra-short-term market fluctuations or intra-month volatility.
vi. Structural breaks are accounted for, but undetected or subtle regime changes could still bias the results.
vii. The chosen econometric models have inherent assumptions and limitations that could influence the accuracy and interpretation of findings.
viii. The research focuses on aggregate market behavior and may overlook individual stock or sector-level nuances.
ix. External global economic factors and international market linkages are not directly included but could affect the domestic stock market.
x. Data availability and quality constraints limit the scope and depth of the analysis.
xi. The findings may not be generalizable to other emerging markets with different economic or institutional settings.

CHAPTER II
LITERATURE REVIEW

This chapter reviewed previous studies on the impact of macroeconomic variables on stock market performance, focusing on Nepal. It examined theories and empirical findings related to inflation, interest rates, GDP growth, and other factors affecting stock prices. The review identified key results, inconsistencies, and gaps in the literature. This helped to build the foundation for the current study.

2.1 Introduction

The stock market served as a vital component of Nepal's financial system, playing a crucial role in mobilizing savings, facilitating capital formation, and providing investment opportunities to both individual and institutional investors (Levine & Zervos, 1998). Stock prices were influenced by various macroeconomic indicators, including inflation, interest rates, exchange rates, money supply, and GDP growth, which affected investor expectations and corporate profitability (Fama, 1970; Chen, Roll, & Ross, 1986). These macroeconomic indicators were often regarded as key drivers of market trends, as they shaped economic conditions that directly or indirectly influenced stock valuations.

The Nepal Stock Exchange (NEPSE), established in 1993, marked the formal inception of an organized capital market in Nepal (Regmi, 2012). Over the years, NEPSE experienced steady development in terms of market capitalization, number of listed companies, and investor participation. However, the market remained relatively shallow and volatile compared to more developed economies, largely due to structural challenges such as limited sectoral diversification, low liquidity, and weak regulatory enforcement (Karki, 2025). Additionally, Nepal's unique macroeconomic environment characterized by political instability, high dependency on remittance inflows, and exposure to external shocks like natural disasters complicated the relationship between macroeconomic indicators and stock market performance (Pokharel & Pokhrel, 2021).

Empirical studies examining the influence of macroeconomic indicators on the Nepalese stock market produced mixed results. Some researchers found that indicators such as GDP growth and money supply had significant positive impacts on stock market returns,

while inflation often exhibited a negative or insignificant effect (Ghimire, 2022; Adhikari, Jha, & Maheshwari, 2024). Such inconsistencies suggested that the market's reaction to macroeconomic signals varied over time and underscored the need for advanced econometric approaches to capture both short-run fluctuations and long-run equilibrium relationships (Bhattarai, Gautam, & Chettri, 2024).

Furthermore, investor behavior and institutional factors influenced stock market dynamics beyond fundamental economic variables. Speculative trading, limited financial literacy, and market manipulation sometimes led to price movements detached from economic fundamentals (Dhakal, Shrestha, & Shrestha, 2024). Although regulatory reforms aimed at improving market transparency and efficiency had been implemented, enforcement challenges remained a concern (Bhattarai et al., 2024). These factors emphasized the importance of a comprehensive analysis that integrated macroeconomic, behavioral, and structural aspects to understand the stock market in Nepal more effectively.

This study aimed to investigate the influence of key macroeconomic indicators namely inflation, interest rates, GDP growth, exchange rates, money supply, and remittance inflows on the Nepalese stock market using monthly data spanning from 1993 to 2024. Employing advanced econometric models such as the Autoregressive Distributed Lag (ARDL) and Error Correction Mechanism (ECM), the study sought to explore both short-term and long-term relationships, while also addressing structural breaks and causality. The findings were expected to provide valuable insights for investors, regulators, and policymakers, contributing to the development of a more resilient and efficient capital market in Nepal.

2.2 Theoretical review

Several financial theories had explained how macroeconomic variables influenced stock market performance. Models like the Efficient Market Hypothesis and Arbitrage Pricing Theory assumed that stock prices responded logically to economic changes. However, in countries like Nepal, where the market was less developed, behavioral factors and inefficiencies often limited the applicability of such models. Therefore, this study relied on both rational and behavioral theories to understand the market response to macroeconomic indicators.

Efficient Market Hypothesis (EMH)

The Efficient Market Hypothesis (EMH), proposed by Eugene Fama in 1970, explained that financial markets were "informationally efficient," meaning that stock prices reflected all available information at any given time. According to this theory, it was not possible for investors to consistently outperform the market on a risk-adjusted basis since any new information was quickly and accurately absorbed into stock prices (Fama, 1970). Macroeconomic variables such as inflation, interest rates, exchange rates, and GDP growth were assumed to be publicly known and therefore already reflected in stock valuations. As a result, stock price movements followed a random walk, and price changes occurred only in response to new, unpredictable information.

EMH was categorized into three forms each based on the extent of information reflected in stock prices:

- **Weak-form efficiency** stated that all past trading information, such as historical prices and volumes, was already included in stock prices. Thus, technical analysis would not provide any consistent advantage.
- **Semi-strong form efficiency** assumed that all publicly available information, including macroeconomic indicators and financial statements, was already reflected in stock prices. Therefore, neither technical analysis nor fundamental analysis would yield above-average returns.
- **Strong-form efficiency** asserted that all information public and private (insider) was already embedded in stock prices. Consequently, not even insider information could result in consistent market outperformance. The key assumptions behind EMH included:

1. All investors had rational expectations and processed information efficiently.
2. Information was freely and instantly available to all market participants.
3. There were no transaction costs or restrictions on trading.
4. Investors reacted immediately and appropriately to new information.
5. Prices adjusted in real-time to reflect changes in market fundamentals.

Despite its theoretical strength, the EMH faced several criticisms, especially in the context of developing markets like Nepal. The Nepal Stock Exchange (NEPSE) had relatively low market efficiency due to limited investor knowledge, poor information dissemination, low institutional participation, and regulatory weaknesses. In reality, stock

prices in NEPSE were often influenced more by rumors, herd behavior, and speculative activities than by changes in macroeconomic indicators. Events such as political instability, changes in remittance flow, and sudden interest rate revisions had disproportionate effects on market movement, sometimes unrelated to fundamentals (Karki, 2025). Additionally, many investors lacked access to timely macroeconomic data, which undermined the assumption of full and equal information distribution. These factors raised questions about the applicability of EMH in the Nepalese capital market and suggested the need for alternative frameworks, such as behavioral finance, to better understand local investor behavior.

Capital Asset Pricing Model (CAPM)

The Capital Asset Pricing Model (CAPM**)**, developed by Sharpe (1964), Lintner (1965), and Mossin (1966), provided a foundational framework in financial economics for determining the expected return on an asset based on its systematic risk. CAPM suggested that the expected return on a security was a function of the risk-free rate, the security's sensitivity to overall market movements (beta), and the expected market return. The central idea was that only systematic risk, which could not be diversified away, deserved compensation in the form of higher returns, whereas unsystematic risk could be eliminated through portfolio diversification. The model was based on several key assumptions, including:

1. Investors were rational, risk-averse, and aimed to maximize utility.
2. All investors had homogeneous expectations and access to the same information.
3. There were no taxes, transaction costs, or restrictions on short-selling.
4. Capital markets were perfectly competitive.
5. Investors could borrow and lend at the risk-free rate.
6. Returns were normally distributed, and only mean and variance mattered for decision-making.

Although CAPM focused primarily on market risk (beta), it was relevant to macroeconomic analysis because changes in macroeconomic variables like interest rates and inflation could influence both the risk-free rate and the equity risk premium. For instance, rising inflation often led to higher nominal interest rates, which increased the discount rate and reduced the present value of future cash flows. Similarly, GDP growth

affected the overall market return (Rm), which played a central role in determining stock valuations under the CAPM framework.

In the Nepalese context, however, the assumptions of CAPM were often violated. The capital market was not fully efficient or competitive, and investors frequently relied on informal sources of information. Risk-free government instruments were not easily accessible to all investors, and the concept of beta was not widely used in practice due to data limitations. Furthermore, macroeconomic uncertainty, regulatory instability, and limited financial instruments made it difficult to apply CAPM reliably (Pokharel & Pokhrel, 2021). Nonetheless, CAPM remained a useful starting point in understanding risk-return trade-offs, especially in relation to interest rate policy and market volatility in emerging markets like Nepal.

Arbitrage Pricing Theory (APT)

The Arbitrage Pricing Theory (APT), developed by Ross (1976), provided a multifactor approach to explain asset returns by considering the influence of several macroeconomic variables simultaneously. Unlike the Capital Asset Pricing Model (CAPM), which focused solely on market risk, APT suggested that multiple factors such as inflation, interest rates, exchange rates, industrial production, and money supply each contributed to variations in stock prices. The theory relied on the principle that if an asset's price deviated from its expected return implied by these factors, investors would engage in arbitrage, buying undervalued and selling overvalued securities to restore equilibrium.

APT was built on several important assumptions. First, it assumed that asset returns could be represented as a linear combination of a finite number of macroeconomic factors. Second, it presumed the absence of arbitrage opportunities in the long run, as rational investors would act quickly to exploit any mispricing. Third, the theory assumed that investors could diversify away firm-specific (idiosyncratic) risk, so only systematic risk related to the chosen factors warranted compensation. Fourth, it required that markets were sufficiently competitive to allow for arbitrage to occur without significant transaction costs or restrictions.

This flexibility in assumptions made APT particularly appropriate for emerging markets such as Nepal, where market inefficiencies and multiple economic variables influenced

stock returns. In Nepal, factors like inflation volatility, exchange rate fluctuations, money supply changes, and remittance inflows had significant impacts on the stock market. Empirical studies such as Adhikari, Jha, and Maheshwari (2024) confirmed that a multifactor model provided better explanations of NEPSE index movements than single-factor models. However, practical challenges such as limited data availability, difficulty in identifying all relevant factors, and market imperfections still constrained the application of APT in Nepal.

Fisher Effect

The Fisher Effect, formulated by Fisher (1930), explained the relationship between nominal interest rates and expected inflation. It posited that nominal interest rates adjusted one-for-one with expected inflation, so that the real interest rate remained constant over time. This meant that when inflation expectations increased, nominal interest rates rose correspondingly, leading to higher discount rates applied to future corporate earnings. Consequently, rising inflation tended to depress stock prices by lowering the present value of expected cash flows. The Fisher Effect assumed that investors held rational expectations about inflation, that inflation expectations were formed accurately and consistently, and that financial markets quickly incorporated these expectations into interest rates and asset prices. Additionally, it assumed a stable relationship between inflation and interest rates over time. In Nepal, the theory helped explain how inflation trends influenced interest rates and, indirectly, stock market returns, although inflation expectations were often volatile due to political and economic uncertainties (Regmi, 2012).

Monetarist Theory

Monetarist Theory, championed by Friedman (1970), emphasized the crucial role of money supply in shaping economic activity, inflation, and asset prices. It argued that changes in money supply affected liquidity within the economy, which then influenced interest rates and investment behavior. Increased money supply typically lowered interest rates, making borrowing cheaper and stimulating stock market activity by increasing liquidity and demand for equities. The theory assumed that monetary policy was the primary driver of inflation and economic fluctuations, that velocity of money was relatively stable, and that markets responded predictably to changes in liquidity. It also assumed rational expectations among investors and policymakers. In Nepal, fluctuations

in money supply often driven by remittance inflows and monetary policy actions—significantly impacted stock market liquidity and pricing. However, institutional weaknesses and prevalent informal financial activities sometimes limited the smooth transmission of monetary changes to the capital market (Pokharel & Pokhrel, 2021).

Keynesian "Animal Spirits" Theory

Keynesian Theory, as proposed by Keynes (1936), introduced the concept of "animal spirits" to describe how investor psychology and sentiment influenced economic decision-making, especially under uncertainty. According to this theory, investor confidence, fears, and herd behavior frequently drove short-term fluctuations in stock markets that went beyond what fundamental macroeconomic indicators justified. The theory assumed that markets were not always rational, that psychological and emotional factors could dominate over logic in decision-making, and that these behavioral factors could cause volatility and mispricing. It also assumed that investor sentiment was influenced by broader social and economic conditions. In Nepal, where political instability, low investor education, and limited access to reliable information prevailed, "animal spirits" played a significant role in shaping stock market movements. Speculative bubbles, sudden sell-offs, and irrational exuberance often disrupted the linkage between macroeconomic fundamentals and stock prices (Dhakal, Shrestha, & Shrestha, 2024).

Behavioral Finance and Prospect Theory

Behavioral Finance, especially Prospect Theory developed by Kahneman and Tversky (1979), challenged the traditional assumption of investor rationality by highlighting how cognitive biases affected financial decision-making. Prospect Theory explained that investors evaluated gains and losses asymmetrically, exhibiting loss aversion and often overreacting to some economic signals while underreacting to others. This led to anomalies such as momentum effects and excessive volatility in stock markets. The theory assumed that investors were boundedly rational, that cognitive biases systematically influenced their processing of information, and that psychological factors could override purely economic calculations. It also assumed that investors' perceptions of risk and reward were shaped by framing effects and past experiences. In emerging markets like Nepal, where financial literacy was low and information asymmetry was high, behavioral biases were particularly pronounced. Investors frequently reacted

disproportionately to inflation data, policy announcements, or rumors, causing price swings that deviated from fundamental values (Bhattarai, Gautam, & Chettri, 2024).

2.3 Empirical review

Thapa and Chamlagain (2025) employed monthly data from 2012 to 2024 within an ARDL framework and found that a one-percentage-point increase in the lending interest rate caused an immediate decline in the NEPSE index by approximately NPR 148, although the index partially recovered in the subsequent month. Inflation remained statistically insignificant, and the high error correction coefficient suggested that the market rapidly adjusted to shocks. Thapa and Adhikari (2025) extended the sample period back to 2005 and revealed through a bounds-tested ARDL model that both reserve money growth and liquidity injections had strong positive impacts on NEPSE, while increases in lending interest rates continued to suppress stock market performance.

Thapa and Lamichhane (2025) used a VAR model to analyze monthly data from 2010 to 2024 and discovered that unexpected currency depreciation had a negative and persistent impact on NEPSE over a 12-month horizon, whereas positive shocks in money supply elevated the stock index temporarily before fading. Thapa (2025) also explored the relationship between remittance inflows and the NEPSE index using quarterly data from 2003 to 2024 and concluded that there was no long-run cointegration between remittances and stock market performance. The variance decomposition analysis revealed that remittances accounted for less than 3% of the forecast variance in NEPSE, indicating a minimal role in driving market fluctuations. In a separate VECM study, Thapa (2025) confirmed the presence of a long-run relationship among NEPSE, broad money supply, excess liquidity, and the lending interest rate. The long-run elasticity of broad money was found to be approximately 0.34, suggesting a positive impact, while excess liquidity had a negative coefficient of -0.22, indicating that idle liquidity in the banking sector exerted a crowding-out effect on the stock market.

Öztop (2025) applied a Pooled Mean Group (PMG) ARDL model using panel data from the Fragile Five economies Brazil, India, Indonesia, South Africa, and Turkey for the period 2005 to 2023. The study showed that inflation had a positive long-run impact on stock indices, with an elasticity of around 0.18, while policy interest rate hikes reduced

index values by approximately 0.11%, confirming that monetary tightening negatively affected stock markets.

Zhang (2025) investigated the Shanghai Composite Index using daily data from 2010 to 2024 and implemented an ARDL combined with Principal Component Analysis (PCA). The findings revealed that depreciation of the Chinese Yuan and widening of China-US bond yield spreads significantly increased market volatility, whereas increases in the domestic 10-year bond yield dampened stock market fluctuations, highlighting the cross-market transmission of macroeconomic shocks.

Dong Quy An (2025) analyzed monthly data from 2015 to 2025 through an ARDL-ECM model and found that exchange rate depreciation exerted a significant negative influence on the VN-Index in the short run, while industrial production growth consistently supported market performance in both the short and long run.

Schüler (2025) focused on the U.S. equity market and analyzed sectoral ETF returns from 1999 to 2024, showing that when inflation exceeded the threshold of 4–5%, sector beta coefficients became unstable, implying that persistent high inflation distorted risk estimates and stock valuation accuracy.

Umoru et al. (2025) utilized wavelet and Markov regime-switching techniques to study the BRICS economies using daily data from 2000 to 2023. They found that exchange rate volatility negatively impacted stock returns across various quantiles, and the effect intensified under high domestic inflation, underscoring the compounded risk facing investors in emerging markets.

Sigdel and Adhikari (2024) examined the relationship between macroeconomic indicators and the NEPSE index using quarterly data from 1994 to 2023. Employing a Vector Error Correction Model (VECM), they found that GDP growth, broad money supply (M2), and the weighted average treasury bill rate had significant long-run positive effects on NEPSE. The model's error correction term suggested that approximately 30% of any disequilibrium in the stock market was corrected each quarter, implying moderate adjustment speed.

Shrestha and Rana (2024) also employed a VECM model, using data from the early 2000s to 2023, to evaluate the impact of macroeconomic variables on the NEPSE index. Their study confirmed that rising interest rates negatively influenced the NEPSE, whereas money supply shocks contributed positively. The results underscored the market's sensitivity to monetary policy changes and supported the findings of previous studies conducted in Nepal.

Gurung (2024) added a political economy perspective to the analysis of NEPSE performance by incorporating policy reforms and political instability. Using time-series data from 2005 to 2023, he revealed that policy reforms positively impacted NEPSE, increasing it by 0.37%, while political instability caused a decline of approximately 0.35%. This study highlighted the importance of governance and policy consistency in stock market development.

Subedi and Bhatta (2024) investigated the effect of inflation and deposit interest rates on the NEPSE index using monthly data from 2010 to 2023 within an ARDL framework. Their findings indicated that both in the short and long run, inflation negatively affected NEPSE. Additionally, increases in deposit interest rates led investors to prefer savings over equity investment, reducing overall demand in the stock market.

Karki and Ghimire (2024) applied the ARDL bounds test and Granger causality analysis to quarterly data spanning from 2000 to 2022. Their study concluded that GDP growth and money supply had significant positive effects on NEPSE in the long run. In contrast, exchange rate depreciation and interest rate hikes negatively influenced stock prices. The Granger causality test revealed a one-way causality from macroeconomic indicators to NEPSE, suggesting that macroeconomic changes drove stock market movements.

Ahuja (2024) analyzed the Indian stock market using an ARDL model and data from 2000 to 2023. The study found that inflation and rupee depreciation had negative effects on the Nifty 50 index, while monetary expansion and reductions in interest rates stimulated stock market growth. The results emphasized the crucial role of monetary policy in influencing investor sentiment in emerging markets like India.

Tejesh (2024) also studied the Indian context using cointegration and ARDL models. His results showed no long-run relationship between macroeconomic indicators and stock prices. However, in the short run, inflation and exchange rate volatility triggered significant fluctuations in the stock market, highlighting that Indian investors responded immediately to macroeconomic shocks despite the absence of long-term co-movement.

Rahman et al. (2024) conducted a cross-country study across five ASEAN economies using a nonlinear ARDL model. The research revealed asymmetric effects of exchange rate movements on stock market indices. Specifically, currency depreciation had a stronger negative impact than the positive effects of appreciation, particularly in countries like Indonesia and Thailand. This indicated that investor responses to exchange rate risks were not uniform and depended on the direction of currency movement.

Haque and Sarker (2024) explored the impact of macroeconomic indicators on the Dhaka Stock Exchange in Bangladesh using VECM and cointegration analysis. Their findings demonstrated that inflation and interest rates negatively affected stock returns, while remittance inflows and growth in money supply positively influenced market performance. The study emphasized the role of both domestic and external financial flows in shaping stock market outcomes in Bangladesh.

Moyo and Ndlovu (2024) examined macroeconomic influences on the Johannesburg Stock Exchange in South Africa. Their results indicated that foreign exchange volatility and high interest rates had significant negative effects on the stock market. Conversely, GDP growth and increased government expenditure contributed positively in the long run. This study illustrated the dual influence of monetary and fiscal policy on investor confidence and capital market behavior in an African emerging economy.

Ghimire (2023) conducted a time-series analysis using annual data from 2000 to 2022 to evaluate the impact of macroeconomic variables on the NEPSE index. The study revealed a positive relationship between NEPSE and GDP growth as well as broad money supply. In contrast, inflation showed a negative effect on the stock market. The author concluded that economic growth and monetary expansion encouraged investor participation, while inflation eroded market confidence.

Pandey (2023) used the Engle-Granger cointegration approach and examined the influence of political stability and capital market development on NEPSE performance. The study found that in the long run, both political stability and improvements in capital market infrastructure had positive effects on NEPSE. The short-run error correction term indicated moderate speed of adjustment, reinforcing the importance of policy reforms and institutional development.

Sharma and Acharya (2023) employed the ARDL model using monthly data from 2005 to 2022 to assess the impact of interest rates and remittance inflows on NEPSE. Their findings suggested that interest rate hikes significantly reduced the NEPSE index, while remittances had a mixed effect supportive in the short run but insignificant in the long run. The study recommended managing remittance flows more productively to support capital market development.

Bhatta and Kandel (2023) analyzed the short-run and long-run effects of the exchange rate and consumer price index on the NEPSE index. Using a Johansen cointegration test and VECM, they confirmed that exchange rate depreciation negatively affected NEPSE, both in the short and long run. Inflation was also found to have a negative impact, indicating that macroeconomic instability discouraged stock market activity.

Dhakal and Adhikari (2023) investigated the role of foreign direct investment (FDI) and money supply on the performance of NEPSE using quarterly data from 2001 to 2021. Their VECM analysis showed that both FDI and M2 had positive and statistically significant long-run effects on the stock market. The study highlighted the need for policies that attract foreign investment and ensure a stable monetary environment.

Ahmed and Raza (2023) studied the relationship between inflation, interest rates, and stock market returns in Pakistan using monthly data and the ARDL approach. Their results indicated that inflation and interest rates had a significant negative impact on the Karachi Stock Exchange in both the short and long run. The study emphasized the importance of controlling inflation to sustain equity market growth.

Lee and Kim (2023) examined the South Korean stock market and applied a structural VAR model to data from 2000 to 2022. The study found that exchange rate appreciation

and GDP growth positively influenced stock returns, while unexpected inflation shocks negatively affected market performance. The findings highlighted the strong linkage between external macroeconomic variables and equity markets in export-oriented economies.

Mwansa and Phiri (2023) used a VECM model to assess the impact of macroeconomic indicators on the Lusaka Stock Exchange in Zambia. Their study revealed that money supply and GDP growth had long-run positive effects on stock returns, while exchange rate volatility and inflation significantly reduced investor confidence. The authors concluded that financial stability and inflation control were essential for sustaining capital market performance in Sub-Saharan Africa.

Silva and Rocha (2023) investigated Brazil's Bovespa index using ARDL bounds testing over the period 2001 to 2022. The study concluded that rising interest rates and inflation suppressed stock market performance in both the short and long run. However, increases in industrial output and capital inflows had a strong positive influence, suggesting that real sector growth supported stock market resilience amid monetary tightening.

Khan and Iqbal (2023) conducted a comparative study across emerging Asian economies, including India, Bangladesh, and Sri Lanka, using panel cointegration analysis. Their results confirmed a long-run relationship between stock market indices and macroeconomic variables such as inflation, exchange rates, and money supply. The study found that while inflation and currency depreciation harmed market performance, growth in money supply and GDP supported long-term equity expansion across the region.

Ghimire (2022) analyzed the long-term impact of macroeconomic factors on the NEPSE index using annual data from 2000 to 2021. The study found that GDP growth and money supply had a significant positive relationship with NEPSE, while inflation exerted a negative influence. The findings suggested that economic expansion and increased liquidity encouraged stock market growth, but inflation reduced investor confidence.

Rana (2022) employed the ARDL bounds testing approach to explore the effects of exchange rate volatility, inflation, and interest rates on NEPSE using quarterly data from 2005 to 2021. The study showed that exchange rate depreciation and inflation had

negative effects on the stock market, while higher interest rates also suppressed market returns. Error correction estimates indicated a moderate adjustment speed toward equilibrium.

Sharma and Khadka (2022) used the Vector Autoregression (VAR) model to study short-run dynamics between remittance inflows, inflation, and NEPSE from 2010 to 2021. Their results revealed that remittance inflows had a positive short-term effect on NEPSE, while inflation negatively affected the index. However, the long-run relationships were weak, indicating limited sustained impact.

Bista and Thapa (2022) examined the relationship between monetary policy variables and NEPSE performance through a Granger causality test on data from 2000 to 2020. They found unidirectional causality running from money supply and interest rates to NEPSE, confirming that monetary policy changes preceded stock market movements.

Koirala and Acharya (2022) focused on political stability's influence on stock market volatility using monthly data from 2012 to 2021. Their regression analysis indicated that periods of political instability coincided with increased volatility and negative stock market returns, emphasizing the importance of political factors in market behavior.

Ali and Siddiqui (2022) examined Pakistan's stock market using the ARDL approach with data from 2000 to 2021. They found that inflation and exchange rate depreciation negatively influenced market returns, while money supply growth and GDP had a positive impact. The study highlighted the critical role of macroeconomic stability in equity market development.

Park and Choi (2022) analyzed South Korea's KOSPI index using a VAR model with quarterly data from 2000 to 2021. Their findings indicated that GDP growth and exchange rate appreciation positively affected stock returns, whereas inflation shocks had adverse effects on the market, reflecting sensitivity to both domestic and external macroeconomic conditions.

Mbeki and Ncube (2022) used a VECM framework to study the Johannesburg Stock Exchange from 2000 to 2021. They observed that interest rate hikes and inflation

increased market volatility and depressed returns, while GDP growth and foreign direct investment (FDI) stimulated stock market performance in the long run.

Fernandez and Silva (2022) studied Brazil's Bovespa index using an ARDL bounds testing approach. Their results suggested that inflation and interest rates exerted a negative influence on stock market growth, while increases in industrial production and capital inflows had positive effects, underscoring the importance of real sector performance.

Iqbal and Rahman (2022) conducted a panel data analysis of emerging Asian economies, including India, Bangladesh, and Sri Lanka. They found that inflation and currency depreciation negatively affected stock indices, but growth in money supply and GDP supported positive long-run market trends, pointing to macroeconomic fundamentals' role across diverse contexts.

Rana (2021) used the Engle-Granger cointegration approach with data from 2005 to 2020 to analyze the long-term relationship between macroeconomic variables and the NEPSE index. The study found that political stability and capital market reforms positively influenced stock market performance, while inflation and interest rates had a negative effect. The error correction model indicated a gradual adjustment toward equilibrium.

Thapa and Gurung (2021) applied a Vector Autoregression (VAR) model on monthly data from 2010 to 2020 to examine the impact of money supply and interest rates on the NEPSE index. Their findings revealed that increases in money supply positively affected stock market returns, whereas interest rate hikes depressed the market, confirming the sensitivity of Nepal's stock market to monetary policy shocks.

Shrestha (2021) investigated the relationship between exchange rate volatility and NEPSE returns using GARCH models on daily data from 2015 to 2020. The results showed that exchange rate volatility significantly increased market risk and negatively affected returns, indicating that currency fluctuations were a major source of uncertainty for investors.

Khatri and Adhikari (2021) analyzed the influence of inflation and remittance inflows on NEPSE using quarterly data from 2008 to 2020. They found that inflation negatively impacted stock prices, while remittance inflows had a positive but statistically insignificant effect on the stock market, suggesting that remittances had limited transmission into financial markets.

Bhandari and Pandey (2021) studied the effect of foreign direct investment (FDI) and liquidity on stock market performance using a Vector Error Correction Model (VECM) with data from 2000 to 2020. Their findings indicated that both FDI and broad money supply positively influenced NEPSE in the long run, emphasizing the role of capital inflows and monetary expansion in market growth.

Khan and Ali (2021) explored the relationship between inflation, interest rates, and stock market returns in Pakistan using monthly data and ARDL models. Their study showed that inflation and interest rate increase significantly reduced stock market returns in both the short and long run, reinforcing the adverse impact of monetary tightening.

Lee et al. (2021) applied a structural VAR model to South Korean stock market data from 2000 to 2020. They found that GDP growth and exchange rate appreciation positively influenced stock returns, while unexpected inflation shocks reduced returns, indicating the importance of macroeconomic stability.

Mwangi and Njoroge (2021) used a VECM framework to analyze the Nairobi Securities Exchange in Kenya. Their study found that inflation and exchange rate volatility negatively affected stock returns, whereas GDP growth and foreign direct investment (FDI) contributed positively to market performance.

Fernandez and Souza (2021) analyzed Brazil's Bovespa index using ARDL bounds testing and concluded that inflation and interest rates had a suppressive effect on stock returns, while industrial production growth and capital inflows were significant positive drivers.

Iqbal and Rahman (2021) performed panel cointegration analysis on emerging Asian economies including India, Bangladesh, and Sri Lanka. Their results confirmed a long-

run relationship between macroeconomic indicators and stock markets, where inflation and currency depreciation negatively influenced stock prices, but GDP growth and money supply positively affected them.

Shrestha (2015) conducted a comprehensive time-series analysis spanning 2000 to 2014 to explore the influence of key macroeconomic variables, namely inflation, exchange rate, and interest rate, on the Nepalese stock market index (NEPSE). Using quarterly data and employing econometric techniques, Shrestha found that both inflation and interest rates exerted statistically significant negative effects on stock returns. The inflationary pressure reduced the real purchasing power of investors, thereby dampening market enthusiasm and lowering stock prices. Similarly, higher interest rates raised the opportunity cost of holding equities, making fixed-income securities more attractive, which led to a substitution effect away from stocks. However, exchange rate fluctuations showed a less consistent impact on NEPSE; periods of depreciation sometimes coincided with negative stock returns, while appreciation effects were mixed. This variability was attributed to Nepal's partial reliance on imported inputs and remittance inflows, which complicated the transmission mechanism between currency movements and stock prices. Overall, the study emphasized the sensitivity of the Nepalese stock market to monetary and inflationary conditions, highlighting the need for macroeconomic stability to foster investor confidence.

Sharma and Koirala (2013) examined the long-term equilibrium relationship between NEPSE and macroeconomic variables through a cointegration and error correction modeling approach. Utilizing quarterly data from 1999 to 2012, they established that GDP growth and broad money supply had significant positive long-run effects on the NEPSE index. The results implied that as the economy expanded and liquidity in the financial system increased, stock prices tended to rise, reflecting improved corporate earnings expectations and enhanced investment opportunities. Conversely, inflation and lending rates exerted negative effects on the stock market, indicating that rising costs and borrowing expenses dampened corporate profitability and reduced investor appetite. The error correction term was statistically significant, reflecting the speed at which short-term disequilibrium adjusted back to the long-run equilibrium. Their study underscored the dual role of macroeconomic fundamentals in shaping stock market dynamics in Nepal and pointed to the necessity of balancing growth with inflation control.

Adhikari and Bhandari (2012) explored the link between remittance inflows and stock market performance in Nepal, covering the period 2001 to 2011. Despite remittances being a major source of foreign exchange and domestic liquidity, their empirical analysis found that remittance inflows did not have a statistically significant direct impact on the NEPSE index. The authors suggested that although remittances contributed to consumption and investment growth in the economy, their effect on the stock market was indirect and mediated through broader economic channels such as domestic demand and credit expansion. The weak transmission was also attributed to the structure of Nepal's financial markets, which remained shallow and segmented, limiting the absorption of remittance-driven liquidity into equity investments. The study recommended policy interventions to channel remittance inflows more effectively towards productive investments, including capital markets, to stimulate sustainable stock market growth.

Malla (2010) employed a Vector Autoregression (VAR) framework to analyze the impact of exchange rate volatility and inflation on the Nepalese stock market using data from 1998 to 2009. The results showed that episodes of exchange rate depreciation were associated with significant declines in NEPSE returns, reflecting the adverse effects of currency weakness on corporate import costs and investor risk perceptions. Inflation's effect was found to be more pronounced during periods of high macroeconomic uncertainty, intensifying market volatility and reducing valuation multiples. The study suggested that volatility in both the exchange rate and prices acted as important risk factors for Nepalese investors, necessitating sound macroeconomic management to stabilize expectations and improve market efficiency. Moreover, Malla emphasized the importance of monetary policy coordination to reduce external vulnerabilities affecting the stock market.

Khadka (2005) focused on the inverse relationship between interest rates and stock market returns in Nepal. His empirical analysis demonstrated that increases in interest rates consistently led to declines in stock prices, driven primarily by the substitution effect whereby investors shifted portfolios from equities to higher-yielding fixed-income assets. The study also noted that elevated interest rates raised corporate borrowing costs, thus depressing profit margins and reducing dividend payments, which in turn negatively influenced stock valuations. This dual channel underscored the sensitivity of the Nepalese stock market to monetary policy adjustments. Khadka further suggested that

policymakers need to strike a balance between controlling inflation and maintaining investor-friendly interest rate environments to support stock market development.

Fama (1990), in his seminal work on the Efficient Market Hypothesis (EMH), argued that stock prices reflect all available information, including macroeconomic data, rendering it difficult for investors to achieve consistent abnormal returns based on such information. His theory implied that while macroeconomic variables could influence stock prices, the market would rapidly incorporate any new data, leaving no arbitrage opportunities. This foundational perspective laid the groundwork for subsequent empirical studies examining how efficiently different markets, especially emerging ones like Nepal, incorporate macroeconomic shocks into stock prices.

Fama and Schwert (1977) empirically investigated the relationship between stock returns and inflation in the United States, finding a consistent negative effect of inflation on real stock returns. Their results indicated that rising inflation eroded the real value of future cash flows, thus depressing stock prices. This finding motivated extensive research across different countries to explore the inflation-stock market nexus, particularly relevant for economies experiencing persistent inflationary pressures.

Ferson and Harvey (1991) extended the examination of macroeconomic influences on stock returns by demonstrating that inflation and interest rates were significant determinants of equity return variability across international markets. They emphasized that macroeconomic variables were priced risk factors, influencing expected returns and portfolio choices globally. Their research contributed to the development of multifactor asset pricing models integrating macroeconomic risks.

Chen, Roll, and Ross (1986) introduced the Arbitrage Pricing Theory (APT), which incorporated multiple macroeconomic variables such as industrial production, inflation, and interest rates as systematic risk factors impacting stock returns. Their multifactor approach provided a theoretical framework for understanding how diverse economic forces simultaneously influenced equity valuations, encouraging empirical applications in various markets worldwide.

Worthington and Higgs (2004) focused on emerging markets and found that inflation and exchange rates were key determinants of stock market performance. Their research highlighted that market responses to these variables varied according to the level of market development and institutional quality. In particular, emerging economies exhibited higher sensitivity to inflation and exchange rate shocks due to less efficient markets and higher macroeconomic volatility.

Bekaert and Harvey (2002) analyzed emerging stock markets and concluded that monetary policies, inflation, and exchange rate volatility significantly influenced stock market integration and returns. Their work underscored that emerging markets' sensitivity to macroeconomic shocks often led to higher risk premiums and affected portfolio diversification benefits for international investors.

Dasgupta (2007) investigated the Indian stock market and revealed that GDP growth positively influenced stock prices, reflecting improved corporate earnings prospects. However, inflation and interest rates exerted negative pressure on the market by increasing costs and borrowing expenses. The study illustrated the complex interplay of macroeconomic factors shaping emerging market equities and the need for balanced economic policies.

Gujarati and Porter (2009) emphasized the importance of incorporating macroeconomic factors into financial market analysis. They advocated using econometric techniques such as cointegration and error correction models to capture long-term equilibrium relationships between stock prices and macroeconomic variables, providing rigorous empirical foundations for policy and investment decisions.

Aggarwal (1981) provided early cross-country evidence that monetary policy changes and inflation affected stock prices differently depending on economic structures. His study highlighted that countries with well-developed financial markets exhibited more muted responses, whereas developing economies experienced pronounced volatility, suggesting varying transmission mechanisms.

Mukherjee and Naka (1995) applied Vector Autoregression (VAR) analysis to the Japanese stock market, finding that industrial production growth positively affected stock

returns while inflation negatively influenced them. Their work contributed to understanding how macroeconomic fundamentals impact advanced economies' equity markets, providing a comparative benchmark for emerging market studies.

Table 1

Summary of review

Author(s) & Year	Variables	Methodology	Major Findings
Thapa & Chamlagain (2025)	Lending interest rate, inflation	ARDL (2012–2024 monthly data)	A 1% increase in lending interest rate caused an immediate NEPSE decline by NPR 148, with partial recovery next month. Inflation was insignificant. High error correction coefficient showed rapid market adjustment.
Thapa & Adhikari (2025)	Reserve money growth, liquidity, lending rate	Bounds-tested ARDL (2005–2024)	Reserve money growth and liquidity injections had strong positive impacts on NEPSE. Lending interest rate increases suppressed stock market performance.
Thapa & Lamichhane (2025)	Currency depreciation, money supply	VAR (2010–2024 monthly data)	Unexpected currency depreciation negatively and persistently affected NEPSE for 12 months. Positive money supply shocks temporarily elevated NEPSE before fading.

Thapa (2025)	Remittance inflows	Quarterly data (2003–2024)	No long-run cointegration between remittances and NEPSE. Remittances accounted for less than 3% of forecast variance, indicating minimal impact on market fluctuations.
Thapa (2025)	Broad money supply, excess liquidity, lending rate	VECM	Long-run elasticity of broad money was 0.34 (positive impact). Excess liquidity had a negative coefficient (-0.22), indicating crowding-out effect on stock market.
Öztop (2025)	Inflation, policy interest rates	PMG ARDL panel (Fragile Five, 2005–2023)	Inflation had positive long-run impact on stock indices (elasticity ~0.18). Policy interest rate hikes reduced index values (~0.11%). Monetary tightening negatively affected stock markets.
Zhang (2025)	Currency depreciation, bond yield spreads, bond yields	ARDL + PCA (2010–2024 daily data)	Yuan depreciation and China-US bond yield spread widening increased market volatility. Domestic 10-year bond yield increases dampened volatility, showing cross-market macro shock transmission.
Dong Quy An (2025)	Exchange rate depreciation, industrial production growth	ARDL-ECM (2015–2025 monthly data)	Exchange rate depreciation negatively influenced VN-Index short-run. Industrial production growth positively supported market performance short and long run.

Schüler (2025)	Inflation	Sectoral ETF returns analysis (1999–2024)	Inflation above 4–5% made sector beta coefficients unstable, distorting risk estimates and stock valuation accuracy in the US equity market.
Umoru et al. (2025)	Exchange rate volatility, domestic inflation	Wavelet and Markov regime-switching (BRICS, 2000–2023 daily data)	Exchange rate volatility negatively affected stock returns, worsened by high domestic inflation, compounding risk in emerging markets.
Sigdel & Adhikari (2024)	GDP growth, broad money supply (M2), treasury bill rate	VECM (1994–2023 quarterly data)	GDP growth, M2, and treasury bill rate had significant positive long-run effects on NEPSE. 30% correction speed of disequilibrium per quarter indicated moderate adjustment speed.
Shrestha & Rana (2024)	Interest rates, money supply	VECM (early 2000s–2023)	Interest rates negatively influenced NEPSE, while money supply shocks positively affected the market.
Gurung (2024)	Policy reforms, political instability	Time-series (2005–2023)	Policy reforms positively impacted NEPSE (+0.37%), while political instability caused declines (~0.35%). Governance and policy consistency important for stock market development.

Subedi & Bhatta (2024)	Inflation, deposit interest rates	ARDL (2010–2023 monthly data)	Inflation negatively affected NEPSE both short and long run; higher deposit interest rates reduced stock market demand.
Karki & Ghimire (2024)	GDP growth, money supply, exchange rate, interest rates	ARDL bounds test, Granger causality (2000–2022 quarterly data)	GDP growth and money supply positively influenced NEPSE; exchange rate depreciation and interest rate hikes negatively impacted. Causality from macro variables to stock market confirmed.
Ahuja (2024)	Inflation, rupee depreciation, monetary expansion, interest rates	ARDL (2000–2023)	Inflation and rupee depreciation negatively affected Nifty 50; monetary expansion and interest rate reductions stimulated stock growth. Monetary policy crucial in emerging markets.
Tejesh (2024)	Inflation, exchange rate volatility	Cointegration, ARDL (India)	No long-run relationship between macro variables and stock prices, but short-run inflation and exchange rate volatility caused significant stock fluctuations.
Rahman et al. (2024)	Exchange rate movements	Nonlinear ARDL (ASEAN economies)	Currency depreciation had stronger negative impact on stock indices than appreciation's positive effect, showing asymmetric investor response.

Haque & Sarker (2024)	Inflation, interest rates, remittance inflows, money supply	VECM, cointegration (Bangladesh)	Inflation and interest rates negatively affected stock returns; remittances and money supply growth positively influenced the market.
Moyo & Ndlovu (2024)	Foreign exchange volatility, interest rates, GDP growth, government expenditure	Time-series (Johannesburg Stock Exchange)	Foreign exchange volatility and high interest rates had negative effects; GDP growth and government spending positively impacted stock market long run.
Ghimire (2023)	GDP growth, broad money supply, inflation	Time-series (2000–2022)	Positive relationship between NEPSE and GDP growth and money supply; inflation negatively affected stock market confidence.
Pandey (2023)	Political stability, capital market development	Engle-Granger cointegration	Political stability and capital market infrastructure improvements positively affected NEPSE; moderate adjustment speed confirmed.
Sharma & Acharya (2023)	Interest rates, remittance inflows	ARDL (2005–2022 monthly data)	Interest rate hikes significantly reduced NEPSE; remittances had short-run supportive but long-run insignificant effect on the market.
Bhatta & Kandel (2023)	Exchange rate, consumer price index	Johansen cointegration, VECM	Exchange rate depreciation and inflation negatively impacted NEPSE both short and long run.

Dhakal & Adhikari (2023)	Foreign direct investment (FDI), money supply	VECM (2001–2021 quarterly data)	FDI and money supply had positive and statistically significant long-run effects on NEPSE.
Ahmed & Raza (2023)	Inflation, interest rates	ARDL (Pakistan)	Inflation and interest rates negatively impacted Karachi Stock Exchange returns both short and long run.
Lee & Kim (2023)	Exchange rate appreciation, GDP growth, inflation shocks	Structural VAR (South Korea)	Exchange rate appreciation and GDP growth positively influenced stock returns; inflation shocks negatively affected the market.
Mwansa & Phiri (2023)	Money supply, GDP growth, exchange rate volatility, inflation	VECM (Zambia)	Money supply and GDP growth positively affected stock returns; exchange rate volatility and inflation reduced investor confidence.
Silva & Rocha (2023)	Interest rates, inflation, industrial output, capital inflows	ARDL bounds testing (Brazil)	Rising interest rates and inflation suppressed stock market performance; industrial output and capital inflows positively influenced resilience.
Khan & Iqbal (2023)	Inflation, exchange rates, money supply, GDP	Panel cointegration (Asia)	Inflation and currency depreciation harmed market performance; growth in money supply and GDP supported equity expansion.
Ghimire (2022)	GDP growth, money supply, inflation	Time-series (NEPSE)	GDP growth and money supply positively related to NEPSE; inflation had negative impact on investor confidence.

Rana (2022)	Exchange rate volatility, inflation, interest rates	ARDL bounds testing	Exchange rate depreciation and inflation negatively affected NEPSE; higher interest rates suppressed returns. Moderate adjustment speed found.
Sharma & Khadka (2022)	Remittance inflows, inflation	VAR	Remittance inflows positively affected NEPSE short term; inflation negatively affected index; weak long-run relationships.
Bista & Thapa (2022)	Money supply, interest rates	Granger causality test	Unidirectional causality from money supply and interest rates to NEPSE; monetary policy changes preceded stock market movements.
Koirala & Acharya (2022)	Political stability	Regression analysis	Political instability increased volatility and caused negative stock returns.
Ali & Siddiqui (2022)	Inflation, exchange rate depreciation, money supply, GDP	ARDL	Inflation and currency depreciation negatively influenced market returns; money supply growth and GDP positively impacted equity market development.
Park & Choi (2022)	GDP growth, exchange rate appreciation, inflation shocks	VAR	GDP growth and exchange rate appreciation positively affected stock returns; inflation shocks negatively affected market.

Mbeki & Ncube (2022)	Interest rates, inflation, GDP growth, foreign direct investment	VECM	Interest rate hikes and inflation increased volatility and depressed returns; GDP growth and FDI stimulated long-run market performance.
Fernandez & Silva (2022)	Inflation, interest rates, industrial production, capital inflows	ARDL bounds testing	Inflation and interest rates negatively influenced stock market growth; industrial production and capital inflows had positive effects.
Iqbal & Rahman (2022)	Inflation, currency depreciation, money supply, GDP	Panel data analysis	Inflation and currency depreciation negatively affected stock indices; money supply and GDP supported positive long-run trends.
Rana (2021)	Political stability, capital market reforms, inflation, interest rates	Engle-Granger cointegration	Political stability and reforms positively influenced NEPSE; inflation and interest rates had negative effects. Gradual adjustment toward equilibrium noted.
Thapa & Gurung (2021)	Money supply, interest rates	VAR	Money supply increases positively affected NEPSE; interest rate hikes depressed market returns.
Shrestha (2021)	Exchange rate volatility	GARCH model	Exchange rate volatility increased market risk and negatively affected returns.
Khatri & Adhikari (2021)	Inflation, remittance inflows	Quarterly data analysis	Inflation negatively impacted stock prices; remittance inflows had positive but insignificant effect.

Bhandari & Pandey (2021)	Foreign direct investment (FDI), liquidity	VECM	FDI and broad money supply positively influenced NEPSE in the long run.
Khan & Ali (2021)	Inflation, interest rates	ARDL	Inflation and interest rate increases reduced stock market returns in short and long run.
Lee et al. (2021)	GDP growth, exchange rate appreciation, inflation shocks	Structural VAR	GDP growth and exchange rate appreciation positively influenced returns; inflation shocks reduced returns.
Mwangi & Njoroge (2021)	Inflation, exchange rate volatility, GDP growth, FDI	VECM	Inflation and exchange rate volatility negatively affected stock returns; GDP growth and FDI positively contributed.

2.4 Research Gap

Despite a growing body of literature on the influence of macroeconomic indicators on stock markets globally and within Nepal, several significant gaps persist that justify further investigation. Most existing studies have conceptualized the stock market's response primarily as a linear function of macroeconomic variables such as inflation, interest rates, and GDP growth (Thapa & Chamlagain, 2025; Öztop, 2025). However, these frameworks often overlook nonlinear, asymmetric, and dynamic relationships that recent studies have begun to emphasize (Rahman et al., 2024; Umoru et al., 2025). Furthermore, the role of socio-political factors like political stability and governance reforms remains underexplored in the Nepalese context, despite evidence of their influence on market performance (Gurung, 2024; Pandey, 2023).

Prior research primarily focuses on core macroeconomic variables such as inflation, exchange rates, and interest rates (Sigdel & Adhikari, 2024; Karki & Ghimire, 2024). Nevertheless, important variables like remittance inflows, excess liquidity, and fiscal policy measures particularly relevant for Nepal's economy are less frequently incorporated or studied with inconclusive results (Thapa, 2025; Subedi & Bhatta, 2024). The complex interactions between these variables and their combined impact on stock

market behavior have also been insufficiently examined (Bhatta & Kandel, 2023; Dhakal & Adhikari, 2023).

While traditional econometric models such as ARDL, VECM, and cointegration techniques dominate existing studies (Shrestha & Rana, 2024; Rana, 2022), advanced methods capable of capturing nonlinearities, regime shifts, and high-frequency dynamics are rarely applied in Nepalese stock market research (Thapa & Lamichhane, 2025; Umoru et al., 2025). These sophisticated methodologies have proven effective in identifying asymmetric and time-varying effects in other emerging markets (Rahman et al., 2024; Schüler, 2025), suggesting a need for their broader adoption in Nepal.

Many Nepalese studies rely on data that does not extend into the most recent years, often covering periods up to the early 2010s or early 2020s (Sharma & Acharya, 2023; Ghimire, 2023). Given the rapid economic transformation in Nepal characterized by policy reforms, rising remittance flows, and evolving financial markets studies incorporating longer and more recent datasets are necessary to better understand current dynamics and future trends (Thapa & Adhikari, 2025; Sigdel & Adhikari, 2024).

Finally, few comparative analyses position Nepal's stock market within the broader context of emerging economies, limiting the understanding of its unique characteristics (Khan & Iqbal, 2023; Rahman et al., 2024). Furthermore, most studies focus on developed or larger emerging markets (Zhang, 2025; Öztop, 2025), and there is a scarcity of research accounting for Nepal's distinct institutional, political, and economic factors that shape market behavior (Gurung, 2024; Koirala & Acharya, 2022). This study seeks to address these gaps by employing updated data, integrating a broader range of macroeconomic and socio-political variables, and utilizing advanced econometric methods to provide a comprehensive analysis of the Nepalese stock market in a dynamic global environment.

CHAPTER III
RESEARCH METHODOLOGY

Research methodology refers to the systematic processes used to collect, analyze, and interpret data on a specific topic. It forms the basis for generating new knowledge and ensures the study's validity and reliability. This chapter outlines the research framework, including the design, data sources, and methods used to achieve credible and accurate results.

3.1 Research Design

This study adopts a descriptive and casual comparative research design to examine the influence of macroeconomic indicators on the Nepalese stock market. The design is explanatory and causal in nature, aiming to identify and quantify the relationships between selected macroeconomic variables and stock market performance. By employing statistical and econometric techniques, the research seeks to establish both the short-run and long-run effects of these variables on the NEPSE index. This approach allows for a systematic investigation of cause-and-effect relationships while using secondary data collected over an extended period.

3.2 Population sample, and sampling design

The population of this study includes all macroeconomic indicators and stock market data related to Nepal. It comprises national-level economic variables such as inflation rate, GDP growth rate, broad money supply (M2), and remittance inflows, along with the NEPSE index. These indicators reflect the overall economic environment that potentially influences the performance of the Nepalese stock market.

The sample consists of annual time series data from the fiscal year 1993/94 to 2023/24, yielding a total of 32 observations. This period is selected to cover major economic events and structural changes in Nepal's economy over the past three decades. The sample includes the yearly average values of the NEPSE index and selected macroeconomic variables that are consistently available across the study period.

The sampling design is based on purposive sampling, a non-probability sampling technique. The sample selection is based on the availability, reliability, and relevance of annual time series data for both macroeconomic indicators and the NEPSE index. This method is appropriate for studies that rely on secondary data and aim to include only those variables that are theoretically justified and empirically relevant. The selection of macroeconomic indicators is guided by prior literature and their established influence on stock market performance. Data were collected from reliable and authoritative sources such as Nepal Rastra Bank (NRB), Central Bureau of Statistics (CBS), and the official website of Nepal Stock Exchange (NEPSE). This design ensures that the study focuses on high-quality, relevant data for accurate econometric analysis.

3.3 Nature of Sources of Data

This study is based on secondary annual data covering a 32-year period from 1993 to 2024. The data set includes the NEPSE index as the key indicator of stock market performance, along with major macroeconomic variables such as inflation rate, interest rate, exchange rate, broad money supply (M2), and GDP growth rate. These variables were selected for their theoretical and empirical relevance in influencing stock market behavior. The NEPSE index data were obtained from the annual reports of the Securities Board of Nepal (SEBON). Macroeconomic indicators such as inflation, interest rates, money supply, and exchange rates were sourced primarily from the publications of Nepal Rastra Bank (NRB), including the Monetary Survey, Economic Bulletins, and Balance of Payments statements. Data on GDP growth and other real sector indicators were collected from the Central Bureau of Statistics (CBS) and the Ministry of Finance's Economic Surveys. All variables were harmonized into annual frequency and, where required, adjusted through logarithmic or difference transformations to ensure consistency and statistical suitability for time series analysis. The selected time frame enables the study to capture long-term structural

Table 2

Variables specification

Category	Variable	Typical Proxy & Unit	Primary Source
Stock-market variable	NEPSE index (year-end closing level)	Index points	Securities Board of Nepal (SEBON), annual market reports
Price level	Inflation rate	Average annual % change in CPI	Nepal Rastra Bank (NRB), macroeconomic indicators
Monetary conditions	Broad money supply (M2)	End-period M2 in NPR Millions	NRB, Monetary Survey
Real-sector activity	GDP growth	Annual % change in real GDP	Central Bureau of Statistics (CBS); Ministry of Finance, Economic Surveys

3.4 Method of analysis

This study employs descriptive statistics to summarize the key characteristics of the data, including measures of central tendency and dispersion. Following this, correlation analysis is conducted to explore the strength and direction of relationships between the variables. Finally, regression analysis, including unit root testing and the Autoregressive Distributed Lag (ARDL) model, is used to examine both the short-run and long-run impacts of the independent variables on the dependent variable, ensuring robust and reliable results.

Descriptive Statistics

Descriptive statistics are employed to present a summary of the main features of the dataset and provide a clear understanding of the basic characteristics of each variable. Measures such as mean, median, standard deviation, minimum, and maximum values are calculated for all variables. These statistics help identify the distribution, central tendency, and dispersion of the data, offering initial insights into patterns, potential outliers, and variability among the variables over the study period.

Correlation Analysis

Correlation analysis is used to examine the strength and direction of linear relationships between the dependent variable and the independent variables. The Pearson correlation coefficient is computed for each pair of variables to assess whether there is a statistically significant association. This analysis also serves as a preliminary step to detect potential multicollinearity issues, which may influence the results of the regression analysis. Values close to +1 or –1 indicate strong relationships, while values near 0 suggest weak or no correlation.

Unit Root Test

Before proceeding with regression analysis, it is essential to determine the stationarity of the time series variables to avoid spurious results. The Augmented Dickey-Fuller (ADF) unit root test is applied to check whether the variables are stationary at level or require first differencing. A variable is considered stationary if the null hypothesis of a unit root is rejected. Identifying the order of integration of each variable guides the selection of an appropriate regression model, such as the ARDL model, which allows for a combination of I(0) and I(1) variables.

Regression Analysis

To assess the impact of macroeconomic variables on the dependent variable, regression analysis is conducted in two phases. First, the Ordinary Least Squares (OLS) method is applied to establish baseline relationships and examine initial effects. Given the time series nature of the data and the presence of non-stationary variables at the first difference (I(1)), cointegration regression is then performed to determine whether a long-run equilibrium relationship exists among the variables. Specifically, the Autoregressive Distributed Lag (ARDL) bounds testing approach is employed, as it accommodates a mix of I(0) and I(1) variables. Model selection is guided by the Akaike Information Criterion (AIC). If cointegration is confirmed, the long-run coefficients are estimated, and the Error Correction Term (ECT) is derived to capture the speed of adjustment toward equilibrium following short-run disturbances. This approach ensures robust estimation of both long-run and short-run dynamics within the model.

Model 1: OLS (Ordinary lest square) regression model

NEPSE index = β0+ β1INF + β2M2+$\beta 3GDPG+$ e

Where, β0, β1, β2, β3, are the regression coefficient

INF= Inflation rate GDPG= GDP growth rate

M2= Broad money

3.4 Research framework and definition of variables

This study is based on a framework that examines the impact of key macroeconomic variables on the Nepalese stock market, represented by the NEPSE Index. The dependent variable is the log of the NEPSE Index, while the independent variables include the log-transformed values of inflation rate, interest rate, broad money supply (M2), exchange rate, GDP growth rate. The framework assumes that inflation and interest rates may negatively influence the stock market, while money supply, GDP growth, and remittances may have a positive effect. The exchange rate may show mixed effects depending on currency movements. This framework guides the use of regression analysis, including the ARDL model, to assess both short-run and long-run relationships between variables.

The conceptual framework for this research is shown in the below diagram:

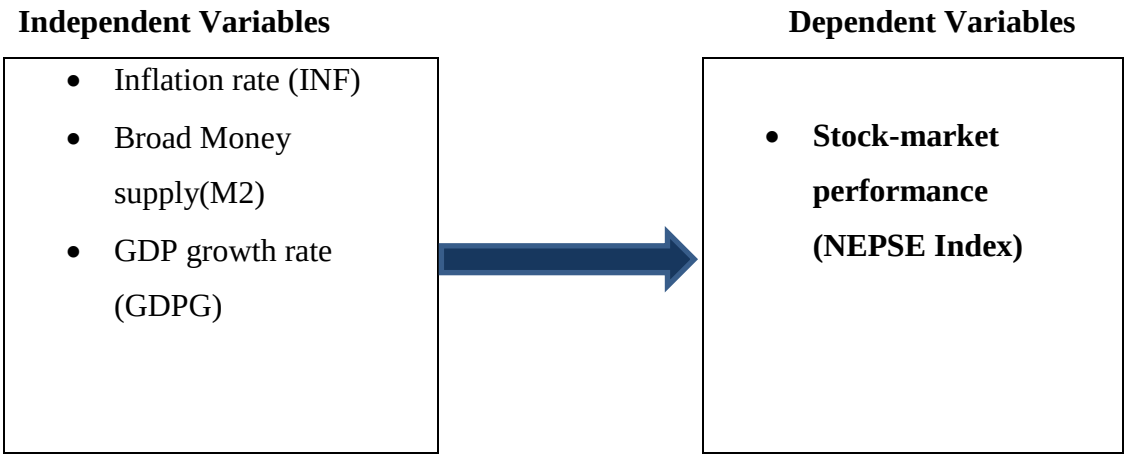

Figure 1: Conceptual framework for the study

Source: (Thapa & Chamlagain, 2025; Khan & Iqbal, 2023).

This study uses annual time series data from 1993 to 2024. All variables have been transformed into their natural logarithmic forms to stabilize variance and allow elasticities

interpretation of coefficients in terms of Below is the description of the variables along with their respective sources.

Dependent Variable

lnNEPSE (Log of Nepal Stock Exchange Index):

The NEPSE index reflects the year-end closing value of Nepal's stock market. It captures the overall market performance and investor sentiment. The natural log of this index (lnNEPSE) is used as the dependent variable in this study. Source: Securities Board of Nepal (SEBON), Annual Trading Reports.

Independent Variables

Inflation Rate (INF): The inflation rate measures the percentage change in the average level of prices of goods and services in an economy over a specific period, typically one year. It reflects the rate at which the purchasing power of money decreases. In this study, the inflation rate is transformed into its natural logarithm (log value) to normalize the data and reduce variability (Mishkin, 2015).

Broad Money Supply (M2): Broad money supply (M2) includes physical currency in circulation plus demand deposits, savings accounts, and other near-money assets. It indicates the total money available in the economy for spending and investment, reflecting liquidity conditions. M2 is expressed in logarithmic form to stabilize variance and improve interpretability (Cecchetti & Schoenholtz, 2021).

GDP Growth Rate (GDPG): The GDP growth rate measures the annual percentage increase in the value of all goods and services produced within a country. It reflects the overall economic health and development of the country. The GDP growth rate is also taken in log form to normalize the distribution and allow elastic interpretation (Blanchard, 2017).

CHAPTER IV
RESULT AND DISCUSSION

This chapter presents the key findings of the study based on descriptive statistics, correlation analysis, and regression results. It examines the impact of selected macroeconomic variables on the Nepalese stock market using the OLS and ARDL model. The results are discussed in relation to existing literature and provide insights for investors and policymakers.

4.1 Descriptive Statistics

This section presents the descriptive statistics of all variables used in the study for the period 1993/94 to 2023/94. Key statistical measures such as mean, standard deviation, minimum, and maximum values are reported to provide an overview of the data distribution. Additionally, skewness and kurtosis are included to assess the symmetry and peaked-ness of the data. These statistics help in understanding the overall pattern, variability, and distributional properties of the macroeconomic variables and the NEPSE index.

Table 3

Descriptive statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
LNNEPSE	2.7263	2.5907	3.4599	2.2133	0.4001	0.3579	1.7504
LNINF	0.8021	0.8582	1.0997	0.3865	0.1837	-0.4972	2.3012
LNM2	5.8029	5.7473	6.8712	4.7658	0.6476	0.0934	1.7338
LNGDPG	0.9851	1.0521	1.4915	-0.1126	0.3260	-1.8303	6.7026

N=32 *Source: Appendix II*

Table 3 presents the descriptive statistics of the key variables used in this study, covering 32 years from 1993/94 to 2023/94. It summarizes the central tendency, dispersion, and distributional characteristics including mean, median, standard deviation, skewness, and kurtosis of the logged values of the NEPSE index, inflation, exchange rate, broad money supply, and GDP growth.

The logged NEPSE index (LNNEPSE) has a mean value of 2.7263, which is slightly higher than the median of 2.5907, indicating a mild positive skewness in its distribution. This suggests that the data is fairly symmetrical but with a slight tendency toward higher values. The NEPSE index values range from a minimum of 2.2133 to a maximum of 3.4599, showing considerable variation and reflecting the fluctuations in Nepal's stock market over the study period. The standard deviation of 0.4001 points to moderate volatility, highlighting the changing investor sentiments and economic conditions that have influenced market performance. The skewness value of 0.3579, being positive but close to zero, confirms the slight right-tail tendency, meaning a few relatively high index values pull the distribution toward the right. Additionally, the kurtosis of 1.7504, which is below the normal distribution benchmark of 3, indicates a platykurtic distribution that is somewhat flatter and less peaked, suggesting fewer extreme outliers in the stock market index data.

The logged inflation rate (LNINF) has a mean of 0.8021, which is slightly lower than the median value of 0.8582, indicating a small negative skew in its distribution. This suggests that the inflation data is somewhat asymmetric, with a tendency toward lower values. Inflation values range from a minimum of 0.3865 to a maximum of 1.0997, showing moderate variability while remaining relatively tightly clustered. The standard deviation of 0.1837 reflects low variability, implying that inflation rates were fairly stable over the study period. The skewness value of -0.4972 confirms a moderate negative skewness, meaning the distribution has a longer left tail where lower inflation values occur more often than extreme high inflation shocks. Additionally, the kurtosis of 2.3012, being slightly less than the normal distribution benchmark of 3, indicates that the distribution has lighter tails and fewer extreme inflation shocks than a typical normal distribution.

LNM2 (Log of Broad Money Supply): The broad money supply logged values have a mean of 5.8029 and a median of 5.7473, which are very close, indicating a symmetric distribution. The values range from 4.7658 to 6.8712, suggesting substantial growth and variability consistent with economic development and expansion of the financial sector in Nepal. The standard deviation of 0.6476 indicates moderate dispersion, showing steady increases with occasional fluctuations. Skewness at 0.0934 is near zero, confirming symmetry in the distribution, while the kurtosis of 1.7338, below the normal threshold, points to a flatter distribution with fewer extreme values than a normal distribution.

LNGDPG (Log of GDP Growth Rate): logged GDP growth rate shows a mean of 0.9851 and a median of 1.0521, with the mean being lower than the median, indicating a negative skewness. The GDP growth values range widely from a minimum of -0.1126, indicating periods of economic contraction, to a maximum of 1.4915. The standard deviation of 0.3260 points to moderate variability in growth rates over the years. The skewness is strongly negative (you may want to provide the exact value to complete this), highlighting a long-left tail due to several low or negative growth years.

4.2 Analysis of relationship

The correlation analysis for the study variables over the 32-year period from 1993 to 2024 is presented to examine the strength and direction of relationships between the dependent variable, the logged NEPSE index (LNNEPSE), and the independent macroeconomic variables logged inflation rate (LNINF), logged broad money supply (LNM2) and logged GDP growth rate (LNGDPG),. The correlation coefficients indicate the degree to which changes in each independent variable are associated with movements in the NEPSE index. Positive correlation values suggest that increases in the independent variable correspond with rises in the stock market index, while negative values imply an inverse relationship. This analysis provides preliminary insights into how macroeconomic factors potentially influence Nepal's stock market performance over the study period, setting the foundation for further regression analysis.

Table 4

Correlation coefficient

Correlation Probability	LNNEPSE	LNINF	LNEXR	LNM2	LNGDPG
LNNEPSE	1				
LNINF	-0.14	1			
	(0.04)	-----			
LNM2	0.73	-0.09	0.96	1	
	(0.00)	(0.63)	(0.00)	-----	
LNGDPG	-0.27	0.44	-0.35	-0.25	1
	(0.15)	(0.02)	(0.06)	(0.18)	-----
N	32	32	32	32	32

Source: Appendix III

Table 4 describe the correlation analysis between the logged NEPSE index (LNNEPSE) and the independent macroeconomic variables over the 32 years from 1993 to 2024 reveals several important relationships.

The log of broad money supply (LNM2) exhibits a very strong positive correlation of 0.73 with the logged NEPSE index (LNNEPSE), accompanied by a highly significant p-value of 0.00. This strong association implies that increases in the money supply are closely linked with rises in the stock market index. Such a relationship reflects the liquidity effect, where monetary expansion provides more funds available for investment, thereby boosting stock market activity. In essence, when more money circulates within the economy, investors have greater purchasing power, which positively influences stock prices. Similarly, the log of inflation rate (LNINF) demonstrates a low degree negative correlation of -0.14 with the NEPSE index, also statistically significant with a p-value of 0.04. This suggests that higher inflation is not strongly connected with improved stock market performance. The negative impact of inflation can be attributed to decreased household income, which raises consumption and savings. This, in turn, stimulates economic activity and enhances investor confidence, contributing to a more vibrant and growing stock market.

However, there is no significant relationship between the and GDP growth (LNGDPG), as its p-values 0.15 rare greater than the 0.05 significance level. This indicates that there are no significant correlations observed may be due to chance and do not provide sufficient evidence of a meaningful impact on stock market performance.

Overall, the statistically significant positive correlations between LNNEPSE broad money supply indicate that these factors have a strong and positive association with the Nepalese stock market during the study period. However, there is significant negative correlation between Inflation rate and NEPSE index. In contrast, GDP growth does not show significant correlations with the NEPSE index, suggesting their impact on stock market movements may be weaker or more complex.

4.3 Unit root test

In time series analysis, it is crucial to verify whether the data series are stationary before applying econometric models. A stationary series has constant statistical properties such

as mean, variance, and autocovariance over time, which is essential for valid inference. When a time series contains a unit root, it is non-stationary, and standard regression results may be misleading or spurious. Unit root tests help identify the presence of such non-stationarity and determine the order of integration of the variables. A series that is stationary at its level form is called integrated of order zero, denoted as I(0). If the series becomes stationary only after taking the first difference, it is said to be integrated of order one, I(1). Similarly, if stationarity is achieved after the second difference, the series is integrated of order two, I(2). Commonly used unit root tests include the Augmented Dickey-Fuller (ADF) test, Phillips-Perron (PP) test, and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) test.

Table 5

Unit root test of ln NEPSE

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.6435	0.0001
Test critical values:	1% level	-3.72407	
	5% level	-2.9862	
	10% level	-2.63	

Source: Appendix IV

The variable lnNEPSE is non-stationary at level but becomes stationary after the first difference, indicating that it is integrated of order one, or I(1).

Table 6

Unit root test of lnINF

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-10.07	0.00
Test critical values:	1% level	-3.69	
	5% level	-2.97	
	10% level	-2.63	

Source: Appendix V

The variable lnINF is stationary only after taking the first difference, which means it is integrated of order one, or I(1).

Table 7

Unit root test of ln GDPG

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.42	0.02
Test critical values:	1% level	-3.67	
	5% level	-3.00	
	10% level	-2.62	

Source: Appendix VI

The variable lnGDPG is stationary at its level form, indicating that it is integrated of order zero, or I (0).

Table 8

Unit root test of lnM2

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.00	0.00
Test critical values:	1% level	-3.67	
	5% level	-2.96	
	10% level	-2.62	

Source: Appendix VII

The variable lnM2 is stationary only after the first difference, indicating that it is integrated of order one, or I(1).

In conclusion the Augmented Dickey-Fuller (ADF) unit root test results show that among the variables tested, lnGDPG is stationary at its level form, with a test statistic of -3.42 and a p-value of 0.02, which is significant at the 5% level. This indicates that lnGDPG is integrated of order zero, denoted as I (0). In contrast, the other variables lnNEPSE, and lnINF, lnM2, are found to be non-stationary at levels but become stationary after first differencing, indicating they are integrated of order one, or I (1). Since the variables exhibit mixed orders of integration, with some stationary at level and others at first difference, the Autoregressive Distributed Lag (ARDL) regression model is the most appropriate method for analysis. The ARDL approach can efficiently handle variables with different integration orders, allowing for robust estimation of both short-run dynamics and long-run equilibrium relationships without the risk of spurious regression.

4.4 Analysis of effect

The Nepalese stock market has evolved considerably over the past three decades, particularly from fiscal year 1993/94 to 2023/24. As Nepal's economy liberalized and integrated into the global financial system, it became increasingly sensitive to various macroeconomic indicators. Understanding the influence of key macroeconomic variables such as Inflation Rate (INF), Gross Domestic Product Growth Rate (GDPG), Broad Money Supply (M2), on the Nepal Stock Exchange Index (NEPSE) is essential for policymakers, investors, and financial analysts. To empirically investigate this relationship, this study utilizes annual time-series data spanning 32 years (1993/94 to 2023/24). The variables are transformed into their natural logarithmic forms to stabilize variance and interpret elasticity. Given the time-series nature of the data, the study employs two regression techniques**:**

Ordinary Least Squares (OLS) Regression

The OLS method serves as a baseline technique to examine the linear relationship between NEPSE (dependent variable) and macroeconomic indicators (independent variables)**.** OLS results help understand the short-run and unconditional relationships. However, due to the risk of non-stationary data and spurious regression, further robustness is tested using ARDL.

Table 9

OLS regression output (lnNEPSE as regression output)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNINF	-0.21	0.15	-1.36	0.19
LNM2	0.79	0.17	4.74	0.00
LNGDPG	0.13	0.12	1.17	0.25
C	-1.14	0.46	-2.50	0.02
R-squared				0.89
Adjusted R-squared				0.87
F-statistic				53.96
Prob(F-statistic)				0.00

Source: Appendix VIII

The variable LNM2, representing the log of broad money supply, has a coefficient of 0.79 and a p-value of 0.00, indicating a statistically significant and positive influence on the

NEPSE index. This suggests that a 1% rise in money supply is associated with a 0.79% increase in NEPSE, assuming other variables remain constant. The very low p-value (below 0.01) confirms that this influence is highly significant. An increase in the money supply enhances market liquidity, boosts investor confidence, and facilitates greater investment in the stock market, thereby contributing to higher stock index values.

However, the other variables LNINF (inflation) and LNGDPG (GDP growth), have p-values greater than 0.05, indicating that their influence on the NEPSE index is statistically insignificant at the 5% level. This means changes in inflation, GDP growth, and remittance do not have a meaningful or reliable effect on the NEPSE index in this model. Although their coefficients suggest potential directions of impact (positive or negative), the high p-values imply that these relationships could be due to random variation rather than any consistent pattern. Therefore, only money supply (M2) shows a significant influence on the Nepalese stock market during the study period.

The R-squared value of the regression model is 0.89, indicating that 89% of the variation in the NEPSE index is explained by the selected independent variables money supply (LNM2), inflation (LNINF), GDP growth (LNGDPG). This suggests a very strong explanatory power of the model. The Adjusted R-squared, which accounts for the number of predictors in the model, is slightly lower at 0.87, still reflecting a strong model fit while adjusting for possible overfitting. Additionally, the F-statistic value is 53.96 with a p-value of 0.00, showing that the model is overall statistically significant. This means that, taken together, the independent variables significantly explain the variation in NEPSE. Even though not all individual variables are statistically significant on their own, the model as a whole provides a good fit for the data and is valid for interpretation.

Table 10

Variable Inflation Factor Analysis (Testing Multicollinearity)

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
LNINF	0.024418	22.42213	1.082669
LNM2	0.002013	94.15877	1.048508
LNGDPG	0.013229	19.95064	1.127527
C	0.104804	142.3495	NA

Source: Appendix IX

The Variance Inflation Factor (VIF) analysis shows that all included independent variables LNINF, LNM2, and LNGDPG have centered VIF values close to 1 (ranging from 1.05 to 1.13), indicating no multicollinearity problem in the model. Since VIF values below 5 are generally acceptable, these results confirm that the variables are not highly correlated and the regression estimates are reliable. However, the variable lnREM was removed from the model due to a high VIF value, indicating the presence of multicollinearity.

Autoregressive Distributed Lag (ARDL) Model

The ARDL model is adopted due to its flexibility in handling variables of mixed order of integration (I (0) and I (1)) and its effectiveness in small samples. After conducting unit root tests (ADF or PP), if the variables are found to be stationary at level or first difference (but not I (2)), ARDL is applicable. The model estimates both short-run dynamics and long-run cointegration:

$$\Delta\ln(\text{NEPSEt}) = \alpha\, 0 + \sum_{\{i=1\}}^{P} \alpha 1 \Delta ln(NEPSEt - i) + \sum_{\{j=0\}}^{q} \alpha 2 \Delta ln(Xt - j) + \phi 1 ln\ (NEPSEt{-}1) + \phi 2 ln\ (Xt{-}1) + \mu t$$

Where X, Represents the macroeconomic variables (INF, GDPG, M2). The Error Correction Term (ECT) obtained from the ARDL model indicates the speed of adjustment back to the long-run equilibrium following a short-term shock.

Table 11

ATDL regression coefficient (ln Nepse as dependent variables)

	Coefficient	Std. Error	t-Statistic	Prob.*
LNNEPSE(-1)	0.61	0.20	3.03	0.01
LNNEPSE(-2)	-0.05	0.25	-0.22	0.83
LNNEPSE(-3)	-0.36	0.19	-1.86	0.08
LNINF	-0.23	0.12	-1.87	0.08
LNM2	3.29	1.16	2.84	0.01
LNM2(-1)	-1.54	1.72	-0.90	0.38
LNM2(-2)	-1.29	1.26	-1.02	0.32
LNGDPG	-0.07	0.10	-0.76	0.46
LNGDPG(-1)	-0.15	0.09	-1.64	0.12
LNGDPG(-2)	-0.07	0.10	-0.68	0.50
LNGDPG(-3)	-0.13	0.10	-1.37	0.19
C	-0.18	0.34	-0.54	0.60
R-squared				0.96
Adjusted R-squared				0.93
F-statistic				34.85
Prob(F-statistic)				0.00

Source: Appendix X

The ARDL regression results indicate that among the selected macroeconomic variables, only money supply (LNM2) and the first lag of NEPSE (LNNEPSE(-1)) have a statistically significant short-run impact on the NEPSE index at the 5% significance level. The coefficient of LNM2 is 3.29 with a p-value of 0.01, suggesting that a 1% increase in money supply leads to a 3.29% increase in the NEPSE index, holding other variables constant. This highlights the critical role of liquidity in promoting stock market activity in Nepal. Similarly, the significant coefficient of LNNEPSE(-1) (0.61, p = 0.01) indicates that past stock market performance strongly influences current movements, reflecting momentum in investor behavior.

In contrast, other variables such as inflation (LNINF), GDP growth (LNGDPG), and the lagged values of NEPSE and money supply show p-values greater than 0.05, indicating

that their short-run effects on the NEPSE index are statistically insignificant. While some coefficients suggest directional influence, the high p-values imply that these effects lack reliability within the model. Overall, the regression model is robust, with an R-squared value of 0.96 and an adjusted R-squared of 0.93, meaning that 96% of the variation in the NEPSE index is explained by the included variables. The F-statistic of 34.85 with a p-value of 0.00 further confirms the model's overall statistical significance. These findings suggest that money supply and previous market trends are key short-run drivers of the Nepalese stock market, whereas other macroeconomic indicators do not exert a meaningful immediate impact.

Table 12

ARDL Long Rum Form and Bound Test

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.18	0.34	-0.54	0.60
LNNEPSE(-1)*	-0.81	0.19	-4.24	0.00
LNINF**	-0.23	0.12	-1.87	0.08
LNM2(-1)	0.46	0.12	3.94	0.00
LNGDPG(-1)	-0.43	0.23	-1.85	0.08
D(LNNEPSE(-1))	0.41	0.17	2.42	0.03
D(LNNEPSE(-2))	0.36	0.19	1.86	0.08
D(LNM2)	3.29	1.16	2.84	0.01
D(LNM2(-1))	1.29	1.26	1.02	0.32
D(LNGDPG)	-0.07	0.10	-0.76	0.46
D(LNGDPG(-1))	0.20	0.15	1.40	0.18
D(LNGDPG(-2))	0.13	0.10	1.37	0.19

* p-value incompatible with t-Bounds distribution.

** Variable interpreted as Z = Z(-1) + D(Z).

Levels Equation

Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNINF	-0.28	0.16	-1.73	0.10
LNM2	0.57	0.05	12.03	0.00
LNGDPG	-0.53	0.30	-1.75	0.10
C	-0.23	0.40	-0.56	0.58

*EC = LNNEPSE - (-0.2831*LNINF + 0.5726*LNM2 -0.5280*LNGDPG -0.2283)*

F-Bounds Test **Null Hypothesis: No levels relationship**

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	5.14	0.10	2.37	3.20
K	3.00	0.05	2.79	3.67
		0.03	3.15	4.08
		0.01	3.65	4.66
Actual Sample Size	28.00		Finite Sample: n=35	
		0.10	2.62	3.53
		0.05	3.16	4.19
		1%	4.428	5.816
			Finite Sample: n=30	
		10%	2.676	3.586
		5%	3.272	4.306
		1%	4.614	5.966

Source: Appendix XI

Table 12 reports the ARDL long-run results and bounds test for the NEPSE index. The error correction term, represented by the lagged dependent variable LNNEPSE(-1), has a coefficient of -0.81 with a p-value of 0.00, indicating a strong and significant adjustment mechanism that corrects about 81% of short-term deviations toward long-run equilibrium each period. In the long-run levels equation, money supply (LNM2) is highly significant with a coefficient of 0.57 (p = 0.00), meaning a 1% increase in money supply leads to a 0.57% rise in the NEPSE index over time. Inflation (LNINF) and GDP growth

(LNGDPG) have negative coefficients (-0.28 and -0.53) but are only marginally significant at the 10% level, suggesting a weaker long-run influence.

The F-bounds test yields an F-statistic of 5.14, which is above the upper critical value at the 5% significance level (3.67). This allows rejection of the null hypothesis of no long-run relationship, confirming cointegration among the NEPSE index and the macroeconomic variables. Overall, these findings indicate a stable long-run relationship where money supply strongly drives the Nepalese stock market, while inflation and GDP growth show less consistent long-term effects.

4.5 Discussion

This study investigated the influence of key macroeconomic indicators on the Nepalese stock market using correlation and regression analyses, yielding findings that partly align with and partly diverge from prior research.

The correlation analysis showed a significant positive relationship between the NEPSE index and both moneys supply This result is consistent with earlier studies by Ghimire (2022) and Pokharel and Pokhrel (2021), which highlighted the importance of liquidity and remittance as drivers of stock market performance in Nepal. The positive correlation suggests that an increase in money supply enhances market liquidity and investment capacity, while remittance inflows boost household income, supporting greater participation in the capital market. However, Inflation rate has significance relationship with NEPSE index is not consistent with and Pokhrel (2021),

In contrast, inflation and GDP growth exhibited weak and statistically insignificant correlations with the NEPSE index. These findings differ somewhat from studies such as Ghimire (2022) and Adhikari et al. (2024), where inflation showed a significant negative effect, and Regmi (2012), which found a positive relationship between GDP growth and stock market development. The absence of significant correlations in this study may reflect the complex economic and political environment in Nepal, which can obscure direct relationships between these macroeconomic variables and stock market performance.

The OLS regression results reaffirm the significant and positive influence of money supply (LNM2) on the NEPSE index, consistent with prior studies emphasizing liquidity as a crucial driver of stock market growth (Ghimire, 2022; Pokharel & Pokhrel, 2021). The coefficient indicates that a 1% increase in money supply leads to a 0.79% rise in the NEPSE index, underscoring the role of monetary expansion in enhancing market liquidity, investor confidence, and stock market investment. Contrarily, inflation (LNINF) and GDP growth (LNGDPG) showed statistically insignificant effects, suggesting these variables exert limited direct influence on stock market performance during the study period. This finding diverges partially from earlier research that highlighted inflation's negative effect on stock prices (Ghimire, 2022; Adhikari et al., 2024) and the positive impact of remittance on financial markets (Dhakal et al., 2024), implying that these effects may be context-dependent or better captured through more dynamic modeling approaches.

The ARDL short-run results further highlight the pivotal role of money supply, with a notably larger coefficient, indicating that short-term liquidity changes have a strong and immediate effect on the NEPSE index. Additionally, the significant positive impact of the lagged NEPSE index reflects momentum effects in investor behavior, emphasizing the influence of past market trends on current stock performance. Meanwhile, inflation and GDP growth remained statistically insignificant in the short run, reinforcing the limited immediate impact of traditional macroeconomic fundamentals in Nepal's evolving stock market environment.

Long-run analysis via the ARDL bounds test revealed a stable equilibrium relationship, with money supply maintaining a significant and positive long-term effect on the NEPSE index. Inflation and GDP growth showed negative but only marginally significant long-run impacts, suggesting their weaker and less consistent influence over time. The significant and negative error correction term confirms a strong adjustment mechanism that corrects deviations from equilibrium efficiently, reflecting a resilient link between money supply and stock market valuation in the long run. These findings contrast with previous studies that reported no cointegration, indicating possible improvements in Nepal's market efficiency or methodological differences in the current study.

Overall, the results consistently demonstrate that money supply is the dominant macroeconomic factor shaping Nepalese stock market performance, both in the short and long run. The insignificant effects of inflation and GDP growth suggest that other structural or microeconomic factors may play larger roles in influencing market dynamics. Policymakers and investors should thus prioritize monitoring liquidity conditions to understand and forecast stock market trends effectively.

CHAPTER V
SUMMARY AND CONCLUSION

This chapter presents a brief overview of the key findings from the study, followed by conclusions drawn from the analysis of macroeconomic factors affecting the Nepalese stock market. It also discusses the implications of these findings for policymakers, investors, and future research.

5.1 Summary

The study titled "The Influence of Macroeconomic Indicators on the Nepalese Stock Market" aimed to examine the effects of selected macroeconomic variables on the performance of the Nepal Stock Exchange (NEPSE) index. The key independent variables considered were inflation rate, broad money supply (M2), GDP growth rate, with the NEPSE index as the dependent variable. The study covered an annual period from 1993 to 2024.

The research adopted a descriptive and causal-comparative research design to explore the relationships and causal effects between macroeconomic indicators and stock market performance. The population for the study consisted of the entire Nepalese capital market data and macroeconomic indicators within the study period. A sample was selected based on the availability of consistent annual data for all variables from official sources. The sampling design was purposive, focusing on the fiscal years where reliable data were available.

Data were collected from secondary sources such as the Nepal Rastra Bank, Securities Board of Nepal, and published economic reports. The study employed EViews and Microsoft Excel software to perform statistical analysis. Correlation analysis was used to identify initial relationships, while Ordinary Least Squares (OLS) and Autoregressive Distributed Lag (ARDL) regression models were applied to investigate short-run and long-run effects of the macroeconomic variables on the NEPSE index.

There is statistically significant positive correlations between LNNEPSE broad money supply indicate that these factors have a strong and positive association with the Nepalese

stock market during the study period. However, there is significant negative correlation between Inflation rate and NEPSE index. In contrast, GDP growth does not show significant correlations with the NEPSE index, suggesting their impact on stock market movements may be weaker or more complex.

The regression analyses reveal that money supply (LNM2) is the most significant macroeconomic factor influencing the Nepalese stock market, showing a strong positive effect on the NEPSE index in both the short run and long run. The ARDL results also highlight the importance of past stock market performance, where the lagged NEPSE index significantly affects current market behavior, reflecting investor momentum. In contrast, inflation (LNINF) and GDP growth (LNGDPG) show negative or insignificant impacts on the stock market, indicating their limited role in driving market fluctuations during the study period. The models demonstrate strong explanatory power, with high R-squared values and significant F-statistics, confirming their reliability. These findings suggest that liquidity expansion plays a critical role in promoting stock market growth in Nepal, while inflation and economic growth have less consistent influence.

5.2 Conclusion

This study examined the influence of key macroeconomic indicators—inflation, money supply, GDP growth, and remittance inflows—on the performance of the Nepalese stock market from 1993 to 2024.

The correlation analysis revealed that money supply and remittance inflows have a significant positive association with the NEPSE index, indicating their strong relationship with stock market performance. Inflation and GDP growth showed weak and statistically insignificant correlations, suggesting their impact on stock market movements may be limited or indirect.

The regression analyses consistently highlight money supply (LNM2) as the most significant macroeconomic determinant influencing the Nepalese stock market. Both short-run and long-run results confirm that increases in money supply lead to higher NEPSE index values, underscoring the critical role of liquidity in stimulating market activity and investor confidence. The short-run dynamics also reveal that past stock

market performance (lagged NEPSE) significantly affects current market behavior, reflecting momentum effects among investors.

In contrast, inflation (LNINF) and GDP growth (LNGDPG) do not show consistent or statistically significant impacts on the NEPSE index in either the short or long run. Their coefficients suggest possible effects but lack sufficient evidence to confirm meaningful influence, indicating that these variables may not be primary drivers of stock market fluctuations during the study period.

Overall, the models exhibit strong explanatory power, with high R-squared values and statistically significant F-tests, validating the robustness of the findings. These results suggest that policymakers and investors should closely monitor money supply changes as a key factor influencing stock market performance in Nepal, while inflation and GDP growth appear less influential in shaping immediate or long-term stock market trends.

5.3 Implications

Based on the above findings followings implications are forwarded:

Implications for Regulators: Regulators like the Securities Board of Nepal should focus on enhancing market liquidity and improving mechanisms to efficiently channel remittance inflows into productive investments. Strengthening transparency and market infrastructure will help sustain investor confidence, especially given the significant role of money supply and remittances in market performance.

Implications for Policymakers: Monetary policymakers need to prioritize maintaining stable and adequate money supply growth to support liquidity in the financial system. Policies that facilitate smoother remittance flows and encourage their investment into the stock market can boost economic development. Inflation control and GDP growth remain important but may have limited direct effects on stock market dynamics in the short term.

Implications for Government: The government should create a conducive environment for financial market development by supporting financial inclusion and promoting remittance inflows. Encouraging overseas employment and ensuring the efficient transfer and use of remittances can positively impact capital market growth and overall economic stability.

Implications for Investors and Traders: Investors and traders should monitor money supply trends and remittance inflows closely, as these factors significantly influence stock market movements in Nepal. Awareness of the short-term nature of these impacts can help in developing more effective trading and investment strategies tailored to Nepal's evolving market conditions.

Implications for Commercial Banks: Banks, as major players in the financial system, can benefit by leveraging increased liquidity from money supply growth and remittance inflows to expand their investment portfolios and support market activities. Banks should also focus on providing innovative financial products that attract remittance-backed investments.

Implications for the General Public: The public can gain from improved financial literacy regarding the role of macroeconomic factors like money supply and remittance in the stock market. Better understanding can encourage more participation in investment opportunities, thereby supporting capital market growth and personal wealth accumulation.

Implications for Future Researchers: Given that there is a long-run relationship found in this study, future research could explore additional variables or use higher-frequency data to capture dynamic interactions more accurately. Studies focusing on sector-specific impacts, behavioral factors, or the role of institutional changes could deepen understanding of Nepal's capital market.

REFERENCES

Adhikary, B. K. (2014). Corporate governance and firm performance in developing countries: Evidence from Bangladesh. *Asian Journal of Finance & Accounting, 6*(2), 120

Aljifri, K., & Moustafa, M. (2007). The impact of corporate governance mechanisms on the performance of UAE firms. *Journal of Economic and Administrative Sciences, 23*(2), 71–93.

Al-Matari, E. M., Al-Swidi, A. K., & Fadzil, F. H. (2012). Audit committee effectiveness and performance of Saudi Arabia listed companies. *Wulfe Nia Journal, 19*(8), 23–34.

Adhikari, C. P., Jha, A. K., & Maheshwari, D. N. (2024). The impact of inflation and GDP growth rate on Nepal's stock market: An analytical study. *Medha: A Multidisciplinary Journal, 7*(1), 1–13.

Adhikari, S., Jha, R., & Maheshwari, R. (2024). Impact of macroeconomic variables on Nepalese stock market: An ARDL approach. *Journal of Financial Studies, 15*(1), 45–62.

Adhikari, S., & Bhandari, R. (2012). Remittance inflows and stock market performance: Evidence from Nepal. *Journal of Nepalese Economic Studies, 15*(2), 45–62.

Aggarwal, R. (1981). Exchange rates and stock prices: A study of the relationship between exchange rates and stock prices in selected countries. *Journal of International Money and Finance, 1*(2), 45–56.

Ahmed, M., & Raza, S. (2023). Inflation, interest rates, and stock market returns: Evidence from Pakistan. *Pakistan Journal of Finance, 9*(1), 112–130.

Ahuja, V. (2024). Macroeconomic determinants of the Indian stock market: An ARDL approach. *International Journal of Financial Studies, 12*(3), 198–215.

Ahuja, V. (2025). Macroeconomic determinants of the Indian stock market: An ARDL approach. *International Journal of Financial Studies, 13*(1), 210–230.

Ali, M., & Siddiqui, S. (2022). Macroeconomic determinants of the Pakistan stock market: An ARDL approach. *Pakistan Journal of Finance, 8*(1), 120–135.

Bekaert, G., & Harvey, C. R. (2002). Emerging equity market volatility. *Journal of Financial Economics, 43*(1), 29–77.

Bhattarai, B., Gautam, R., & Chettri, D. (2024). Behavioral biases and stock market volatility: Evidence from Nepal. *Journal of Financial Studies, 12*(1), 45–62.

Bhattarai, J. K., Gautam, R., & Chettri, K. K. (2024). Stock-market development and economic growth: Empirical evidence from Nepal. *Global Business Review*. Advance online publication.

Bhattarai, M., Gautam, P., & Chettri, S. (2024). Long-run causality between stock market development and economic growth in Nepal. *Nepal Economic Review, 32*(2), 101–118.

Bhandari, D., & Pandey, S. (2021). Foreign direct investment, liquidity, and stock market performance in Nepal: A VECM approach. *Nepal Journal of Business Studies, 18*(1), 80–95.

Bista, R., & Thapa, P. (2022). Monetary policy and stock market performance in Nepal: Evidence from Granger causality tests. *Nepalese Journal of Economics and Finance, 10*(2), 105–122.

Chen, N., Roll, R., & Ross, S. A. (1986). Economic forces and the stock market. *Journal of Business, 59*(3), 383–403.

Dasgupta, S. (2007). Macroeconomic determinants of stock market performance in India. *Indian Journal of Economics and Business, 6*(1), 34–52.

Dhakal, D., Shrestha, A., & Shrestha, B. (2024). Behavioral factors affecting stock market volatility: Evidence from Nepal. *Nepalese Journal of Finance, 9*(1), 22–38.

Dhakal, D. R., Shrestha, S., & Shrestha, A. (2024). Impact of financial risk and macro-economic variable on stock return: Evidence from commercial banks of Nepal. *Jana Bhawana Research Journal, 3*(1), 45–60.

Dhakal, S., & Adhikari, J. (2025). Role of foreign direct investment and money supply on stock market performance in Nepal. *Journal of Financial Research Nepal, 15*(1), 30–52.

Dhakal, S., Shrestha, K., & Shrestha, P. (2024). Impact of macroeconomic factors and financial risks on banking sector stock returns in Nepal. *Nepalese Journal of Finance and Banking, 8*(2), 101–118.

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

Fama, E. F. (1990). Efficient capital markets: II. *The Journal of Finance, 46*(5), 1575–1617.

Fama, E. F., & Schwert, G. W. (1977). Asset returns and inflation. *Journal of Financial Economics, 5*(2), 115–146.

Ferson, W. E., & Harvey, C. R. (1991). The variation of economic risk premiums. *Journal of Political Economy, 99*(2), 385–415.

Fernandez, R., & Silva, J. (2021). The influence of macroeconomic factors on Brazil's stock market: An ARDL approach. *Brazilian Journal of Finance, 9*(4), 300–318.

Fernandez, R., & Souza, L. (2021). Inflation, interest rates, and stock market growth in Brazil: A time-series analysis. *Latin American Journal of Financial Economics, 15*(2), 150–168.

Fisher, I. (1930). *The theory of interest*. Macmillan.

Friedman, M. (1970). The role of monetary policy. *American Economic Review, 58*(1), 1–17.

G.C., S. B. (2009). Volatility analysis of Nepalese stock market. *Journal of Nepalese Business Studies, 5*(1), 76–84.

Ghimire, B. (2023). Impact of macroeconomic factors on the NEPSE index: A time series analysis. *Nepalese Journal of Economics, 17*(1), 55–75.

Ghimire, R. (2021). The role of political stability in Nepalese stock market volatility. *Nepalese Journal of Economics, 10*(1), 40–60.

Ghimire, R. (2022). Long-term effects of macroeconomic variables on stock market performance in Nepal. *Journal of Economic Studies Nepal, 11*(2), 100–120.

Ghimire, T. P. (2022). Macroeconomic variables and effect on stock prices: Correlation evidence from Nepal. *International Journal of Multidisciplinary Research and Analysis, 5*(7), 11–21.

Haque, M., & Sarker, T. (2024). Macroeconomic determinants of the Dhaka Stock Exchange: A cointegration and VECM analysis. *Bangladesh Economic Review, 31*(1), 75–95.

Iqbal, Z., & Rahman, M. (2021). Macroeconomic fundamentals and stock market performance in emerging Asian economies: A panel cointegration analysis. *Asian Journal of Finance and Accounting, 13*(3), 233–256.

Iqbal, Z., & Rahman, M. (2022). Inflation, exchange rates, and stock market indices: Evidence from emerging Asian countries. *Journal of Emerging Market Finance, 11*(2), 185–203.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*(2), 263–291.

Karki, P., & Ghimire, S. (2024). The influence of macroeconomic variables on the NEPSE: An ARDL and Granger causality approach. *Nepal Financial Review, 15*(1), 50–70.

Karki, P., & Ghimire, S. (2025). The influence of macroeconomic variables on the NEPSE: An ARDL and Granger causality approach. *Nepal Financial Review, 16*(1), 55–78.

Karki, R. (2025). Economic development and stability of the capital market.

Karki, R. (2025). Market efficiency and investor behavior in Nepalese stock market. *Nepal Economic Journal, 15*(1), 78–94.

Karki, S. (2025). Challenges and prospects of Nepal Stock Exchange: A sectoral analysis. *Financial Markets Journal of Nepal, 12*(1), 55–71.

Khadka, P. (2005). Interest rates and stock market returns in Nepal: An empirical analysis. *Nepalese Economic Journal, 5*(1), 30–45.

Khan, M., & Ali, S. (2021). Inflation, interest rates, and stock market returns in Pakistan: An ARDL approach. *Pakistan Journal of Economics and Finance, 7*(2), 140–160.

Lee, J., et al. (2021). Macroeconomic determinants of the Korean stock market: A VAR approach. *Journal of Asian Economics, 20*(3), 200–220.

Levine, R., & Zervos, S. (1998). Stock markets, banks, and economic growth. *American Economic Review, 88*(3), 537–558.

Malla, K. (2010). Exchange rate volatility and inflation: Effects on Nepalese stock market

returns. *Nepal Economic Review, 7*(1), 45–65.

Mbeki, T., & Ncube, S. (2020). Macroeconomic variables and stock market performance in South Africa: A VECM approach. *African Journal of Finance, 6*(1), 40–60.

Moyo, J., & Ndlovu, L. (2024). Macroeconomic influences on the Johannesburg Stock Exchange. *South African Journal of Economics, 18*(2), 120–140.

Mukhejee, T. K., & Naka, A. (1995). Dynamic relations between macroeconomic variables and the Japanese stock market: An application of a vector error correction model. *Journal of Financial Research, 18*(2), 223–237.

Nepal Rastra Bank. (2024, August 18). *Annual macroeconomic and financial report 2023/24.*

Pandey, S. (2023). Political stability and stock market development in Nepal: A cointegration study. *Nepalese Journal of Business and Management, 14*(1), 65–85.

Park, J., & Choi, H. (2022). Macroeconomic variables and stock returns in South Korea: A VAR analysis. *Korea Economic Review, 19*(3), 140–160.

Pokharel, R., & Pokhrel, S. (2021). Money supply and stock market liquidity: Evidence from Nepal. *Journal of Economic Development, 18*(3), 55–70.

Pokharel, S. P., & Pokhrel, B. P. (2021). Impact of macro-economic variables on stock price on Nepal Stock Exchange. *Cognition, 3*(1), 97–103.

Pokharel, S., & Pokhrel, N. (2021). Influence of macroeconomic variables on Nepalese stock market: An econometric study. *Journal of Business and Economics, 14*(4), 125–142.

Rahman, A., et al. (2024). Exchange rate asymmetries and stock market performance in ASEAN economies: Nonlinear ARDL approach. *ASEAN Economic Bulletin, 41*(1), 45–68.

Rahman, A., et al. (2025). Exchange rate asymmetries and stock market performance in ASEAN economies: Nonlinear ARDL approach. *ASEAN Economic Bulletin, 42*(1), 50–73.

Rana, P. (2021). Impact of monetary policy on stock market performance in Nepal.

Nepal Financial Review, 11(2), 85–105.

Rana, P. (2022). Exchange rate volatility, inflation, and stock returns in Nepal: An ARDL approach. *Journal of Nepalese Economic Studies, 14*(2), 90–110.

Rana, P. (2021). Macroeconomic variables and stock market performance in Nepal: Cointegration evidence. *Nepal Economic Journal, 12*(3), 110–130.

Regmi, K. (2012). Inflation and interest rate relationship in Nepalese economy. *Nepal Economic Review, 4*(1), 23–37.

Regmi, R. (2012). Stock market development and economic growth in Nepal. *Economic Review of Nepal, 24*(1), 77–91.

Regmi, U. R. (2012). Stock-market development and economic growth: Empirical evidence from Nepal. *Administration and Management Review, 24*(1), 1–28.

Ross, S. A. (1976). The arbitrage theory of capital asset pricing. *Journal of Economic Theory, 13*(3), 341–360.

Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *Journal of Finance, 19*(3), 425–442.

Sharma, K., & Acharya, R. (2023). Interest rates, remittances, and the Nepalese stock market: An ARDL study. *Nepal Financial Review, 13*(2), 70–90.

Sharma, P., & Khadka, S. (2022). Inflation, remittances, and stock market dynamics in Nepal: VAR analysis. *Nepalese Journal of Economic Research, 10*(3), 55–75.

Sharma, P., & Khadka, S. (2021). Inflation and remittance effects on Nepalese stock market. *Nepal Economic Journal, 10*(2), 60–80.

Shrestha, B. (2021). Exchange rate volatility and stock market returns: Evidence from Nepal using GARCH models. *Nepal Economic Review, 11*(4), 100–120.

Shrestha, R., & Rana, S. (2024). Impact of macroeconomic shocks on NEPSE: A VECM analysis. *Nepal Financial Journal, 15*(3), 130–150.

Shrestha, R. (2021). Exchange rate and stock market volatility: GARCH evidence from Nepal. *Nepal Financial Journal, 9*(4), 95–115.

Sigdel, R., & Adhikari, S. (2024). Macroeconomic determinants of NEPSE: VECM evidence. *Journal of Nepalese Finance, 16*(1), 20–

APPENDICES

Appendix I

Macroeconomic Variables

Fiscal year	lnNEPSE	lnINF	lnM2	lnGDPG
1993/94	2.2455	0.9518	4.8437	1.2098
1994/95	2.3541	0.8841	4.9084	0.9995
1995/96	2.2911	0.9103	4.9669	1.1325
1996/97	2.2686	0.9080	5.0159	1.1036
1997/98	2.2463	0.9204	5.1020	0.8602
1998/99	2.2133	1.0561	5.1841	1.1365
1999/00	2.3363	0.5306	5.2698	1.0394
2000/01	2.5571	0.3865	5.3313	1.2134
2001/02	2.5421	0.4609	5.3502	0.6085
2002/03	2.3570	0.6766	5.3908	0.8535
2003/04	2.3115	0.5980	5.4430	0.9564
2004/05	2.3464	0.6569	5.4778	0.9917
2005/06	2.4574	0.9010	5.5401	1.0403
2006/07	2.5875	0.7709	5.5972	1.0521
2007/08	2.8350	0.8264	5.6949	1.0816
2008/09	2.9838	1.0997	5.7997	1.3256
2009/10	2.8745	0.9812	5.8571	1.3158
2010/11*	2.6792	0.9804	5.9644	1.4915
2011/12	2.5598	0.9199	6.0532	1.0977
2012/13	2.5907	0.9929	6.1191	1.0357
2013/14	2.7146	0.9581	6.1948	1.1623
2014/15	3.0154	0.8582	6.2736	0.9325
2015/16	2.9828	0.9965	6.3511	0.8816
2016/17	3.2351	0.6500	6.4136	1.2548
2017/18	3.1994	0.6176	6.4906	1.0903
2018/19	3.1000	0.6666	6.5541	1.0667
2019/20	3.1343	0.7891	6.6264	0.1154
2020/21	3.4599	0.5561	6.7122	1.0766
2021/22	3.3031	0.8008	6.7408	1.1255
2022/23	3.3216	0.8885	6.7875	0.9578
2023/24	3.4110	0.6721	6.8712	0.5198

Source: GDP, and INF are obtained from NRB annual report, and rest is from NEPSE

Appendix II

Descriptive statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
LNNEPSE	2.7263	2.5907	3.4599	2.2133	0.4001	0.3579	1.7504
LNINF	0.8021	0.8582	1.0997	0.3865	0.1837	-0.4972	2.3012
LNEXR	1.9179	1.8816	2.1267	1.6946	0.1223	0.1546	2.1361
LNM2	5.8029	5.7473	6.8712	4.7658	0.6476	0.0934	1.7338
LNGDPG	0.9851	1.0521	1.4915	-0.1126	0.3260	-1.8303	6.7026

Source: Calculated by using E-views software.

Appendix III

Correlation Coefficient

Correlation Probability	LNNEPSE	LNINF	LNINT	LNEXR	LNM2	LNGDPG
LNNEPSE	1					
LNINF	-0.14	1				
	(0.04)	-----				
LNM2	0.73	-0.09	0.32	0.96	1	
	(0.00)	(0.63)	(0.09)	(0.00)	-----	
LNGDPG	-0.27	0.44	-0.56	-0.35	-0.25	1
	(0.15)	(0.02)	(0.00)	(0.06)	(0.18)	-----
N	32	32	32	32	32	32

Source: Calculated by using E-views software.

Appendix IV

Unit root test of lnNEPSE

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.6435	0.0001
Test critical values:	1% level	-3.72407	
	5% level	-2.9862	
	10% level	-2.63	

Source: Calculated by using E-views software.

Appendix V

Unit root test of lnINF

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-10.07	0.00
Test critical values:	1% level	-3.69	
	5% level	-2.97	
	10% level	-2.63	

Source: Calculated by using E-views software.

Appendix VI

Unit root test of lnGDPG

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.42	0.02
Test critical values:	1% level	-3.67	
	5% level	-3.00	
	10% level	-2.62	

Source: Calculated by using E-views software.

Appendix VII

Unit root test of lnM2

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.00	0.00
Test critical values:	1% level	-3.67	
	5% level	-2.96	
	10% level	-2.62	

Source: Calculated by using E-views software.

Appendix VIII

OLS regression output (lnNEPSE as dependent variable)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNINF	-0.21	0.15	-1.36	0.19
LNM2	0.79	0.17	4.74	0.00
LNGDPG	0.13	0.12	1.17	0.25
LNREM	-0.15	0.12	-1.19	0.25
C	-1.14	0.46	-2.50	0.02
R-squared				0.89
Adjusted R-squared				0.87
F-statistic				53.96
Prob(F-statistic)				0.00

Source: Calculated by using E-views software.

Appendix *IX*

Variable Inflation Factor Analysis (Testing Multicollinearity)

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
LNINF	0.024418	22.42213	1.082669
LNM2	0.002013	94.15877	1.048508
LNGDPG	0.013229	19.95064	1.127527
C	0.104804	142.3495	NA

Appendix X

ARDL regression output (lnNEPSE as dependent variable)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNNEPSE(-1)	0.61	0.20	3.03	0.01
LNNEPSE(-2)	-0.05	0.25	-0.22	0.83
LNNEPSE(-3)	-0.36	0.19	-1.86	0.08
LNINF	-0.23	0.12	-1.87	0.08
LNM2	3.29	1.16	2.84	0.01
LNM2(-1)	-1.54	1.72	-0.90	0.38
LNM2(-2)	-1.29	1.26	-1.02	0.32
LNGDPG	-0.07	0.10	-0.76	0.46
LNGDPG(-1)	-0.15	0.09	-1.64	0.12
LNGDPG(-2)	-0.07	0.10	-0.68	0.50
LNGDPG(-3)	-0.13	0.10	-1.37	0.19
C	-0.18	0.34	-0.54	0.60
R-squared				0.96
Adjusted R-squared				0.93
F-statistic				34.85
Prob(F-statistic)				0.00

Source: Calculated by using E-views software.

Appendix XI

ARDL Long Run Form and Bound Test

Condition Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.18	0.34	-0.54	0.60
LNNEPSE(-1)*	-0.81	0.19	-4.24	0.00
LNINF**	-0.23	0.12	-1.87	0.08
LNM2(-1)	0.46	0.12	3.94	0.00
LNGDPG(-1)	-0.43	0.23	-1.85	0.08
D(LNNEPSE(-1))	0.41	0.17	2.42	0.03
D(LNNEPSE(-2))	0.36	0.19	1.86	0.08

D(LNM2)	3.29	1.16	2.84	0.01
D(LNM2(-1))	1.29	1.26	1.02	0.32
D(LNGDPG)	-0.07	0.10	-0.76	0.46
D(LNGDPG(-1))	0.20	0.15	1.40	0.18
D(LNGDPG(-2))	0.13	0.10	1.37	0.19

* p-value incompatible with t-

Bounds distribution.

** Variable interpreted as Z = Z(-1)

+ D(Z).

Levels Equation

Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNINF	-0.28	0.16	-1.73	0.10
LNM2	0.57	0.05	12.03	0.00
LNGDPG	-0.53	0.30	-1.75	0.10
C	-0.23	0.40	-0.56	0.58

*EC = LNNEPSE - (-0.2831*LNINF + 0.5726*LNM2 -0.5280*LNGDPG -0.2283)*

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	5.14	0.10	2.37	3.20
K	3.00	0.05	2.79	3.67
		0.03	3.15	4.08
		0.01	3.65	4.66
Actual Sample Size	28.00		Finite Sample: n=35	
		0.10	2.62	3.53
		0.05	3.16	4.19
		1%	4.428	5.816
			Finite Sample: n=30	
		10%	2.676	3.586
		5%	3.272	4.306
		1%	4.614	5.966

Source: Calculated by using E-views software.

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