"Empirical Relationship between Macroeconomic Volatility and Stock Market Return in Nepal"

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Abstract

This study investigates the empirical relationship between macroeconomic volatility—specifically interest rate, inflation, and money supply—and stock market return in Nepal, represented by the NEPSE index. The primary purpose is to determine how these macroeconomic variables influence stock market performance in an emerging economic context. Employing a descriptive and causal research design, the study utilizes monthly time-series data from 2015 to 2023, with variables operationalized using the 91-day treasury bill rate (interest rate), consumer price index (inflation), and broad money supply (M2). Statistical analyses, including correlation and multiple regression, reveal that interest rates have a significant negative impact on stock market returns, while money supply shows a small but significant positive effect. Inflation demonstrates a weak and statistically insignificant influence. The model's explanatory power is limited, accounting for only 11.3% of the variation in stock returns, suggesting other non-economic factors may also play a role. The study concludes that while certain macroeconomic variables significantly influence NEPSE returns, overall stock market behavior in Nepal remains partially explained by these factors, highlighting the importance of considering broader economic and investor sentiment dynamics. These findings hold practical implications for policymakers, investors, and financial institutions aiming to enhance market stability and efficiency.

Keywords: Macroeconomic Volatility, Stock Market Return, Interest Rate, Money Supply, Nepal Stock Exchange (NEPSE).

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I. Introduction

The Macroeconomic indicators and Stock Market performance are key components of a country's economic development. Government regulations pertaining to financial markets, risk management procedures, monetary policy, and the valuation of financial securities are all significantly impacted by the way macroeconomic factors affect stock market return. Financial markets are directly and indirectly influenced by macroeconomic variables, and an increase in any of these can lead to a change in investment strategies, usually shifting from capital markets to fixed income securities (Karki, 2018).

Stock markets are integral to economic development, reflecting the financial health and investment climate of a nation (Mishkin, 2019). In emerging economies like Nepal, stock market volatility often mirrors fluctuations in macroeconomic indicators (Fama, 1981). Understanding the relationship between macroeconomic volatility and stock market returns is crucial for investors, policymakers, and financial analysts.

Macroeconomic factors such as interest rates, inflation, and money supply play a crucial role in shaping stock market behavior (Chen, Roll, & Ross, 1986). The relationship between macroeconomic variables and stock market returns is extensively studied in developed economies, yet remains underexplored in developing markets like Nepal (Naik & Padhi, 2012). Given Nepal's

economic structure, where financial markets are still in a growing phase, understanding the effect of macroeconomic volatility on stock returns is vital. Interest rates impact investor behavior (Majeed, 2022), inflation influences purchasing power (Rahman et al., 2018), and money supply affects market liquidity (Hussain et al., 2020)—all of which contribute to stock market movements.

Nepse has not been considered mature by many yet and hence movements in NEPSE is said to be at the discretion of some major investors. This volatility is attributed to either the demand or supply of the stocks or macroeconomic variables by different individuals. Furthermore, because investors lack the knowledge of the stock market and macroeconomic factors required for fundamental research, technical analysis is the primary basis for stock market investing decisions. Just like any other emerging stock markets in developing countries, Nepalese stock markets are not at all efficient, and sometimes their reflection on economic fundamentals is also incomplete (Samadi, et al, 2012).

Nepal's stock market, represented by the Nepal Stock Exchange (NEPSE), has witnessed periods of both rapid growth and steep declines, often driven by changes in macroeconomic conditions (Shrestha, 2021). Investors, financial institutions, and policymakers need a comprehensive understanding of these relationships to formulate effective investment and economic policies. By analyzing the impact of macroeconomic volatility on stock market returns, this study seeks to fill the research gap and provide insights for decision-making.

The primary objective of this study is to assess how macroeconomic volatility affects stock market performance in Nepal. The study seeks to determine the individual and collective influence of interest rate, inflation, and money supply growth on stock market returns. By examining these relationships, the study aims to provide insights for investors and policymakers to make informed financial and economic decisions.

This study's main goal is to determine how interest rates, inflation rates, money supply, and stock market return are related. These are the study's objectives:

- To examine the relationship between Interest Rate, Inflation Rate, Money Supply and Stock Market Return.
- To analyze the effect of change in Interest Rate, Inflation Rate, Money Supply on Stock Market Return.

II. Review of Literature

Theoretical Review

Efficient Market Hypothesis (EMH) - According to Fama's Efficient Market Hypothesis, which was put forth in the 1970s, financial markets are "informationally efficient" at all times. Since stock prices already take into account and represent all pertinent information, the EMH contends that it is impossible to regularly generate returns that are higher than the average market returns on a risk-adjusted basis. EMH can be classified as weak, semi-strong, or strong depending on the kinds of information that are represented in stock prices. Understanding how the money supply, inflation rate, interest rate, and stock market return relate to the EMH is essential to comprehending how these variables affect stock prices and market efficiency.

The Nepalese stock market is reflected by the performance and expectations of the listed companies in the Nepse. According to the conditions under EMH, the stock market return is supposed to adjust rapidly in response to new information related to macroeconomic variables so that stock prices reflect new information at all times. This sensitivity of the stock market return to macroeconomic variables implies its efficiency in measuring general market sentiment and overall economic conditions (Shrestha & Pokhrel, 2019).

Capital Assets Pricing Model (CAPM)

The CAPM explains how the expected return of an asset is to be calculated based on its systematic risk or beta, the risk-free rate, and the expected market return. It was independently invented by Sharpe (1964), Lintner (1965), and Mossin (1966). Each stock's predicted return is influenced by macroeconomic factors that impact the overall market, according to the CAPM. Increased macroeconomic factor volatility in this situation could increase systematic risk and impact stock returns.

The Stock exchange index reflects the general performance of the stock market and therefore acts as a benchmark for the market return E(Rm). According to CAPM, the expected return on an individual stock depends upon its beta (βi), which is the sensitivity of the stock to the movement in the market index. The higher the beta, the more sensitive the stock is to the market movements and hence the higher the required return due to the increased risks (Sharpe, 1964). The performance of the NEPSE Index may affect investor expectations of market returns and required returns on stocks (Bodie, Kane, & Marcus, 2018).

Arbitrage Pricing Theory (APT)

Ross (1976) established the APT, a multi-factor model that illustrates the connection between many macroeconomic conditions and an asset's projected return. As opposed to the CAPM, which relies on a single market factor, in APT, multiple factors such as inflation rates and interest rates can have an impact on stock returns. This makes APT particularly useful for analyzing the impact of macroeconomic volatility.

The Stock exchange Index reflects the performance of the overall stock market, which is itself affected by all the aforementioned macroeconomic factors. Changes in the stock market return are the aggregate effects of interest rates, inflation, money supply, and on the market. APT views the stock market index as a result of several factors operating together to determine asset returns. Sensitivity of a particular stock to these factors determines the expected return for that particular stock (Clare & Thomas, 1994).

Fama-French Three-Factor Model

Market risk, size effect, and value effect are the three components that the Fama-French Three-Factor Model uses to describe stock returns, which is an extension of the CAPM. This model would serve better in explaining such effects than the traditional CAPM because the latter uses only the single market risk factor. The Fama-French Three-Factor Model was an extension of CAPM developed by Eugene Fama and Kenneth French in 1993, and it includes two additional factors: size and value.

All these macroeconomic variables influence stock market return, which is representative of overall performance of the stock market in Nepal. It can thus be said that, using the Fama-French model on the stock market return would reflect how market risk through

the overall market factor, size through the small minus big factor, and value through the high minus low factor explain the variations in stock returns in the context of the Nepalese market. Thus, this model can assist in breaking down how various macroeconomic factors affect stock market return (Panta, 2020).

Empirical Review

Bellalah et al. (2013) examined the long-term correlation between the stock market prices in China, Japan, and the United States and macroeconomic indices. The study employed secondary time series data from May 2005 to May 2010 to examine trade, the price of oil, interest rates, the money supply (M3), and the index of industrial production. The study used the autoregressive distributive lag model to provide evidence that the money supply, industrial output index, and long- and short-term interest rates were positively correlated with stock exchange prices in both China and the United States. For example, while interest rates were positive and highly significant in the long term but less significant in the short term in Japan. While the money supply depicted a positive long-term relation and a negative short-term with stock exchange prices.

Kibria et al. (2014) analyzed the impact of five key macroeconomic variables—inflation, GDP per capita, GDP savings, money supply, and exchange rate—on Pakistan's KSE 100 index using 23 years of annual data from 1991 to 2013. Various statistical techniques were applied, including descriptive analysis, correlation analysis, Granger causality tests, and regression analysis. The Granger causality test indicated a unidirectional causal relationship where GDP savings and exchange rate influenced money supply. Furthermore, GDP savings also exhibited a unidirectional causal effect on the KSE 100 index. Regression analysis results demonstrated that inflation; exchange rate, money supply, GDP per capita, and GDP savings had a significant and positive impact on the KSE 100 index.

Majeed (2022) uses monthly time series data from January 2005 to October 2021 to examine how macroeconomic factors affect the performance of the Iraqi stock market. Regression research revealed a long-term correlation between stock market performance and macroeconomic indices. The findings showed that interest rates and the money supply are the main factors influencing the performance of the Iraqi stock market.

Ahmad and Raoof (2010) examined the effects on Pakistan's economy of interest rates, exchange rates, and stock market returns. The information on short-term interest rates, currency rates, and stock returns was collected between 1998 and 2009. To investigate the impact of interest and exchange rate changes on stock returns, the multiplicative regression model was used. They found out that the stock market return throughout the sample period was significantly impacted negatively by changes in the interest rate and currency rate.

Hassan and Sangmi (2013) examined the influence of macroeconomic variables on stock price movements in India. The independent variables included six key macroeconomic indicators: inflation, foreign exchange rate, industrial production, money supply, gold price, and interest rate. The dependent variables consisted of three major Indian stock market indices—SENSEX, NIFTY, and BSE-100. Using monthly time series data from April 2008 to June 2012, the research applied a multiple regression model

to analyze the relationships. The findings revealed that macroeconomic factors do impact the Indian stock market, though their effects vary, with some variables exerting a positive influence while others have a negative impact.

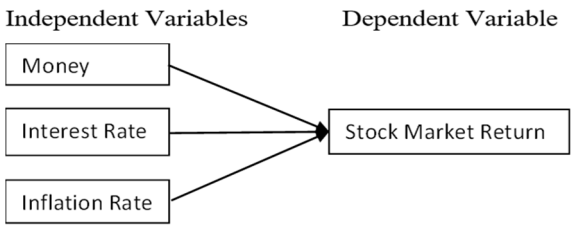
Joshi (2009) concluded that while Nepal's secondary stock market remains relatively small, it has been experiencing steady growth. Nepalese stocks were found to be highly volatile, with a significant concentration in the banking sector. Regarding the primary stock market, Joshi observed that although it was initially underdeveloped, it has been gradually improving. Key findings included fluctuating yet increasing trends in annual turnover, market capitalization, the number of listed and traded companies, the market capitalization-to-nominal GDP ratio, and stock market returns. Additionally, Joshi's study established a positive relationship between stock market indicators and economic growth, indicating that the stock market plays a beneficial role in Nepal's economic development.

Karki (2018) indicated that stock market returns tend to increase with inflation and broad money supply but decline when interest rates rise. However, the study found no evidence of a long-term relationship between macroeconomic indicators and the stock market index. This suggests that fluctuations in stock prices in Nepal are not consistently driven by changes in these economic variables. The absence of long-run equilibrium aligns with the random walk hypothesis, implying that stock prices fully incorporate all available information and respond instantly to new developments, without following predictable trends based solely on macroeconomic factors.

Panta (2020) showed that in the long run, the change in the stock market return is significantly related to broad money supply, interest rates and inflation rate. Precisely, in the short run, money supply was positively related, while in the long run, only money supply maintained a positive relationship. This infers those shocks in broad money supply, interest rates, inflation significantly affect the Nepalese stock market in the long term, influencing its overall performance and dynamics.

Shrestha (2019) also carried out a study on the impacts of macroeconomic variables on the Stock Market Index at the NEPSE Consequently, the research focused on how these variables relate to or influence the stock market index in Nepal. It used monthly data ranging from January 2002 to December 2016, with statistical procedures involving Multivariate Regression and Ordinary Least Squares regressions. The findings of the study stated that interest rates and the wholesale price index (WPI) were better at explaining changes in the stock market index for the Nepalese stock market. In particular, interest rate and WPI were singled out as having a more significant impact on the stock market index, indicating that they are the most important factors in determining the performance of the stock market in Nepal within the period studied.

Research Framework



Note. Adopted from Kibria et.al (2014)

Hypotheses

The independent variables like Interest Rate, Inflation Rate, Money Supply, is used to test the effect on stock market return. Following are the Hypotheses:

H1: There is a significant effect of Interest Rate on Stock Market Return.

H2: There is a significant effect of Inflation on Stock Market Return.

H3: There is a significant effect of Money Supply on Stock Market Return.

III. Research Methodology

This study uses descriptive research design to study the characteristics of data and casual research design to study the influence that independent variables have on a dependent variable using monthly time series data of Stock market Return, serving as a proxy for Nepse Index as a dependent variable, while interest rate (IR) as a proxy for 91 days treasury bill, inflation rate (INF) as a proxy for consumer price index and Money supply (MSP) as a proxy for broad money supply (M2).The data was collected from the report of Central Bank of Nepal (NRB) from 2015 to 2023 A.D.

Operationalization of Variables

Interest Rate

Interest rates represent the cost of borrowing money and influence investor decisions. Higher interest rates often lead to lower stock market returns due to increased borrowing costs and reduced corporate profits (Majeed, 2022).

Inflation Rate

Inflation refers to the rate at which general price levels rise. It erodes purchasing power and can negatively impact stock returns by increasing business costs and reducing consumer spending (Rahman et al., 2018).

Money Supply

Money supply growth refers to the total amount of monetary assets available in an economy. Increased money supply generally boosts market liquidity and investment, positively influencing stock market performance (Hussain et al., 2020).

Stock Market Return

The return on the stock market is defined as the percent change in value of investment in stock market index over time. It is an indicator for the profit and loss that was generated by the market, considering changes in price. For this study, the stock market return is calculated using the formula:

$$\text{Stock Market Return} = \left(\frac{Current\ Month\ Index - Previous\ Month\ Index}{Previous\ Months\ Index}\right) * 100$$

This gives the monthly return of the stock market index. Return calculation in the stock market is very important with regard to assessing the efficiency of the market and the influence of macroeconomic factors (Naik & Padhi 2012).

Model for Analysis

This research follows the Stock market return as the dependent variable, and interest rate, money supply, and inflation rate as independent variables based on the regression. This model aims to examine the strength of the relationship between independent variables with the stock market return.

$$SMR = \alpha + \beta_1 INF + \beta_2 IR + \beta_3 MS + e \ldots\ldots\ldots (i)$$

Where, SMR = Stock Market Return,

INF = Inflation Rate (Consumer Price Index)
IR = Interest Rate, (91 days Treasury bill)
MSP = Money Supply, (M2)
t = 2015- 2023
α = Constant term, assumed to be constant over time.
e = Speculative error term with the conventional statistical 3 are the respective β3 and β2, β1, properties and parameters of the explanatory variables to be estimated.

Stock market return is calculated using the formula:

$$SMR = \frac{NI_t - NI_{t-1}}{NI_{t-1}} \times 100$$

Where, $NI_t = Nepse\ index\ at\ time\ t$

$$NI_{t-1} = Nepse\ index\ at\ time\ t-1$$

IV. Results and Discussion

The data collected is analysed using statistical methods such as mean, median, standard deviation, correlation, and regression. The analysis is conducted using E-views software to ensure accurate and reliable results.

Descriptive Statistics

Table 1 - *Descriptive Statistics*

	SMR	IR	INF	MSP
Mean	0.400946	3.660883	5.883229	3763904.
Median	-0.059147	2.838942	5.705000	3572591.
Maximum	20.14578	10.89392	12.06000	6164763.
Minimum	-17.74168	0.045600	2.300000	1866360.
Std.Deviation	7.074790	3.145023	2.342087	1296214.
Skewness	0.120581	0.952667	0.655265	0.246833
Kurtosis	3.125253	2.877737	2.690811	1.676226
Jarque-Bera	0.295391	14.58098	7.252346	7.984330
Probability	0.862694	0.000682	0.026618	0.018460
Sum	38.49083	351.4447	564.7900	3.61E+08
Sum Sq.Dev	4755.003	939.6611	521.1105	1.60E+14
Observations	96	96	96	96

Note. Authors Calculation using Eviews 10

Table 1 depicts the descriptive statistics analysis by using descriptive statistics of selected variable during August 2015 to July 2023 A.D. As per table 1, the average stock market return during the study period is 0.40 percent and standard deviation is 7.07 percent. The average inflation rate during the study period is 3.66 percent and standard deviation is 3.14 percent. The average inflation rate is 5.88 percent and standard deviation is 2.34 percent. The average money supply during the selected period is 3.76 million and its standard deviation is 1.29 million.

Correlation Analysis

Table 2 - *Correlation Matrix*

Variables	SMR	MSP	IR	INF
SMR	1.000000			
MSP	-0.026845			
	(0.7951)	1.000000		
IR	-0.239114	0.702354		
	(0.0190)	(0.0000)	1.000000	
INF	0.014302	-0.017126	0.236385	
	(0.8900)	(0.8685)	(0.0204)	1.000000

Note. Authors Calculation using Eviews 10

Table 2 shows the correlation analysis between the stock market return and independent variables. The correlation coefficient between stock market return and money supply is -0.027 percent and p value is 0.7951.The correlation coefficient between stock market return and interest rate is -0.24 percent and p value is 0.0190. Whereas, stock market return and inflation rate has correlation coefficient of 0.014 percent and p value is 0.89.

Table 3 - *Regression Analysis*

Variables	Coefficient	Std.Error	t-statistics	Prob.
MSP	1.79E-06	7.81E-07	2.297782	0.0238
IR	-1.130891	0.331055	-3.416017	0.0009
INF	0.419174	0.316490	1.324445	0.1886
C	-4.676165	3.192064	-1.464935	0.1463

R-squared	0.113371	Mean dependent var	0.400946
Adjusted R-squared	0.084459	S.D. dependent var	7.074790
S.E. of regression	6.769434	Akaike info criterion	6.703486
Sum squared resid	4215.922	Schwarz criterion	6.810334
Log likelihood	-317.7673	Hannan-Quinn criterion.	6.746675
F-statistic	3.921280	Durbin-Watson stat	2.110885
Prob(F-statistic)	0.011046		

Note. Authors Calculation using E views 10

Table 3 regression analysis output shows that the variable MSP has a positive coefficient of 1.79E-06 and is statistically significant with a p-value of 0.0238, indicating that it has a small but meaningful impact on the dependent variable. The interest rate (IR) has a negative coefficient of -1.130891 and is highly significant (p = 0.0009), suggesting that an increase in interest rates negatively affects the dependent variable. Inflation (INF) has a positive coefficient of 0.419174, but it is not statistically significant (p = 0.1886), indicating a weak relationship. The constant term is -4.676165, also statistically insignificant (p = 0.1463). The model has an R-squared value of 0.113, meaning it explains only 11.3% of the variation in the dependent variable, with an adjusted R-squared of 0.084. The F-statistic is 3.921 with a p-value of 0.011, showing that the overall model is statistically significant. The Durbin-Watson statistic is 2.11, suggesting no autocorrelation in the residuals. Model selection criteria such as AIC (6.703), Schwarz Criterion (6.810), and Hannan-Quinn Criterion (6.747) are provided for comparison purposes. Overall, the model shows limited explanatory power but is statistically valid.

It was found that the interest rates were inversely related to stock market returns, which agrees with the traditional economic theory and has been supported by findings from various markets. For instance, Fama and Schwert (1977) also document that stock market returns decline as interest rates increase. This is because higher interest rates raise the cost of borrowing, thereby reducing corporate profitability and subsequently investment returns. However, the findings are at variance with literature in other larger emerging market economies. Naik &Padhi (2012) investigating evidence in Indian stock market noted that interest rate did not influence stock return significantly in the long-run period. This could be because of the fact that the Nepalese stock market is relatively smaller and less developed, so that monetary policy changes more directly impact stock performance compared to more mature markets. The study found that inflation does not have a statistically significant effect on the stock market return. This finding runs somewhat contrary to some earlier studies in developed economies where inflation is considered a key determinant of stock performance. For instance, Geske and Roll (1983) found that inflation strongly influenced the negative performance of common stock in the United States. In their case, higher inflation meant higher costs, reducing consumer purchasing power and diminishing corporate profits.

In contrast, a study on the Nairobi stock exchange by Barasa (2014) indicated that inflation was an insignificant determinant in the performance of the stock market, an aspect also portrayed in Nepal. This is because at the present level, the effects of inflation are not very crucial for investors in Nepal; hence, there might be stronger determinants than it, including non-economic ones, such as political instability or even the sentiment in the market.

Nonetheless, it is noteworthy that this fact is contrary to the findings of a study by (Khatri, 2019) whereby the author indicated that interest rates had no significant negative impact. The incoherence that we are observing may be caused by many variations in the period for which data is calculated or it may be caused by the malleability of investor sentiment, particularly how it reacts and adjusts to changing monetary policy. On the same note, while Naik &Padhi (2012) conducted their study and established that there is a negative interest rate impact on the Indian stock market, it should be noted that the magnitude of this relationship was discovered to be of smaller size. This smaller size refers to the different market structures and economic environments found between the two countries being considered. Money supply and its relation to the stock market returns proved to be of weak and statistically insignificant parameters.

On the other hand, Megaravalli and Sampagnaro (2018) established that in Asian emerging economies such as India and China, money supply exerts a significant long-term influence on stock market returns. This might be indicative of some underlying structural differences between Nepal and these larger economies, in which money supply does have a more substantial impact on stock market liquidity and hence performance. This result is consistent with Samadi.et.al (2012), who also faced problems of multi-collinearity when analyzing the relationship between some macroeconomic variables and stock prices in developing markets. Multi-collinearity would suggest that these variables may be moving together because of broader conditions and not independently influence stock market performance.

The supportive and positive correlation that is observed between the money supply and the returns seen in the stock market is very well in accordance with the findings underlined by (Karki 2018). Karki noted a similar positive correlation in the context of Nepal as well. These findings suggest that with an increase in liquidity within the economy, it actually supports and advances higher levels of investments in equities and, hence, may favor higher returns for investors. But this result stands as a striking contrast to the one from the study by Shrestha &Pokhrel, (2019) who found a negative relationship between the money supply and the stock index in the case of Nepal owing to various reasons. Among the other possible determinants, they mentioned such things as speculative activities and inefficiencies in the market that are specific to the capital market. With a high number of factors, money supply has apparently shown a relation which may probably be positive or negative—a study symbolizing the complexity and the multifaceted nature of the Nepalese stock market.

This study suggests that there is a significant effect of the inflation rate upon the stock market returns. However, this impact is statistically insignificant. These findings are contrary to Karki (2018) who showed that there was a positive significant relationship between inflation and stock market performance. Karki has provided a study as a basis for his claim that inflationary pressures may tend to first, increase corporate earnings, which in turn, would sustain and drive stock prices upwards in the market. This is, however, right on course with what Barasa (2014)—therefore, finding that there is no substantive relationship which can be observable between inflation rates and the performance of the stock market in Kenya. This shows the very fact that in less mature markets; inflation apparently has no relationship with a view of the way the investors act. These contradictory findings make it indispensable to study and probe in-depth into the particular dynamics connected with the context of inflation and its influence on stock markets in varied backgrounds.

The regression model indicates that it explains only 11.34% of the variation that is being witnessed in the returns of the stock market, and clearly, it is seen in the computed R-squared. This is relatively low explanatory power, in line with the findings by Khatri (2019), who argues that the ability of macroeconomic variables alone to account for variations in stock price movements in Nepal is very low. This lack of explanation is all the more patent as the stock market is greatly influenced by various non-economic factors, like political stability, speculation, and sentiment among investors. In a related but weaker form, Panta (2020) inferred that the stock market in Nepal is of a weak form of the Random Walk Hypothesis. Because that finding shows the existence of market inefficiencies, overall efficiency is lowered, and, in turn, the ability for macroeconomic variables to predict the change in stock prices is also weakened.

V. Conclusion and Implication

This study concludes that Money Supply, Interest Rate and Inflation Rate are connected with Stock Market Return, though in different ways. Interest Rate is strongly and negatively correlated with Stock Market Return, and an increase in Interest Rates hurts the return from the stock market. Money Supply is positively related to Stock Market Return at a statistically significant level, which means that liquidity in the economy can increase returns from the stock market.

Inflation, on the other hand, is positively related but not at a statistically significant level to Stock Market Return, which implies that inflation does not have a direct influence on returns in the stock market to a large extent.

The research also concludes that Stock Market Return is moderately influenced by Money supply and Interest Rate, where Money Supply has a positive influence and Interest Rate has a significant negative influence. Inflation Rate, on the contrary, has a weak positive influence on Stock Market Return, which is not statistically significant. The low explanatory power of the regression model means that macroeconomic variables like Money Supply, Inflation Rate, and Inflation Rate do not account for how the stock market behaves completely. Political situations, investors' mindset, and problems in the market could also be influential. Overall, Stock Market Return is linearly related to Money Supply, Interest Rate, and Inflation Rate, yet the strength and significance could be different.

The strong negative correlation between interest rates and stock market returns indicates that the investors must closely observe the interest rate movements while formulating their investment plan. An increase in interest rates can reduce the returns on equity, thereby compelling the investors to diversify their portfolio by incorporating the fixed-income securities or other low-risk investments in times of high interest rates. Besides, the minimal but positive effect of money supply on returns suggests that investors are able to gain from higher market liquidity, which typically creates good conditions for equity investment. The findings suggest that the Nepal Stock Exchange (NEPSE) should concentrate on making the market more efficient and its operations more transparent. The weak link between inflation and stock returns suggests problems in the transmission mechanism of economic changes to market prices. NEPSE can offer training courses for investors to make them more financially literate and capable of making wise investment choices. Policymakers, particularly the central bank, must consider the effects of interest rates on the stock market. Policymakers must come up with monetary policies that balance the direction of interest rates with economic growth to steady the market. The high positive correlation between money supply and stock return demonstrates the significance of liquidity to economic activity. Policymakers, however, must not permit the money supply to overshoot and trigger inflation that will destabilize the general economy. The present study indicates that some of the macroeconomic variables, such as interest rates and money supply, have a significant effect on stock market returns, while others, such as inflation, show relatively weak influences. Other future studies should seek to incorporate some additional factors like political stability, investor sentiment, and global economic conditions that may influence performance at the stock markets. Cross-country comparative studies could further offer deeper insight into how macroeconomic variables interact differently in other emerging markets, enabling more robust policy recommendations tailored to specific contexts.

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