The OCEM Journal of
Management, Technology & Social Sciences

Received: Aug. 04, 2023 | Revised: Aug. 17, 2023 | Accepted: Sept. 19, 2023 | Published: Jan. 2024

DOI: https://doi.org/10.3126/ocemjmtss.v3i1.62228 **Paper Type: Research Article**

Impact of GDP and Inflation on Stock Market Performance in Nepal and Sri Lanka: A Comparative study of NEPSE and CSE index

Satyendra Kushwaha [1*], Sarad Chandra Kafle [2]
[1]BBA Student, Valley State College, Pokhara University, Nepal
[2]Department of Research, Oxford College of Engineering and Management, Pokhara University, Nepal
[*]Corresponding email: satyendrakushwaha141@gmail.com
*Orcid: https://orcid.org/0009-0008-8948-5820

Volume 3, Issue 1
ISSN Print:2705-4845
ISSN Online:2705-4845

Abstract

The stock market is a complex phenomena that can be influenced by a myriad of factors. However, gross domestic product and inflation rate are considered two most critical variables affecting the stock market's performance. This research aims to investigate the impact of GDP and inflation on the volatility of stock exchange performance of Nepal and Sri Lanka by employing the Least Square Regression Approach. Both countries are situated in South Asia and boast agrarian-based economies. Additionally, they are renowned for their rich cultural heritage, ancient civilizations, and historical sites. As a result, this research is centred on investigating the unique aspects of these two nations. Time series data of closing stock of every fiscal year from 1997 to 2021 was collected from authentic online sources and analyzed with the help SPSS Version 20.

The findings of this study indicate a significant influence of GDP and inflation on stock index of both countries (p-value < 0.05). The analysis further indicates that the microeconomic variables accounted for 78.7% and 91.9% of the stock index variation for Nepal and Sri Lanka, respectively. Furthermore, the study finds a strong positive correlation between GDP and stock index of both countries, while inflation exhibits a weak negative correlation with the NEPSE index and a moderate negative correlation with the CSE index. Despite the focus on only two independent macroeconomic variables, this research highlights their significant impact on stock market performance. Policymakers and investors can leverage these findings to make informed decisions while navigating the complexities of the stock market.

Keywords: *colombo stock exchange, correlation analysis, inflation, nepal stock exchange, real gross domestics product, regression analysis*

How to cite this paper:
Kushwaha, S., & Kafle, S. C. (2024). Impact of GDP and Inflation on Stock Market Performance in Nepal and Sri Lanka: A Comparative study of NEPSE and CSE index . *The OCEM Journal of Management, Technology and Social Sciences, 3*(1), 85-93.

Introduction

The stock market is a marketplace where stocks of different companies are traded and listed. Also, the stock market states about the condition of listed companies by their profitability, effectiveness, value and capacity. Stock market is the open market where any one can trade their share throughout the world (Investopedia, 2023). It offers a platform for stakeholders to build portfolio expansion, and also maximize their profit and capital appreciation for various business-related, governmental, and public events have an impact on the stock market because they change the supply and demand for shares. A stock exchange is a company in every country which is regulated by the government of the particular corresponding country (Brokers, 2020).

The current generation is highly focused on the stock market, as it shows the financial condition of a particular country (Investopeida, 2022). Both Nepal's and Sri Lanka's stock exchange are significantly volatile. Due to the factor contributing for this volatility is crucial for investors and policy-maker. Researchers have found the results that the micro economic variables: Gross Domestic Product (GDP) and inflation have impact on Stock market value (Reddy, 2012), thus GDP and inflation are taken as independent variables to predict stock price.

GDP refers to the total profit of services and goods created inside a country in the particular period of time. It helps to measure the monetary policy of final goods and services which are acquired for one closing user to produce goods and service in a country in a likely magnitude. It counts all of the profit created inside the borders of a country (IMF, 2022). GDP of any nation helps to know the size and health of an economy. GDP may be studied by adjoining up the profit of consumption, financing, management giving and net exports. However, GDP does not give a reason for the effects of inflation that is the comprehensive rise in prices over opportunity. To regulate inflation, economists use Real Gross Domestic Product (RGDP), that is GDP signified in constant prices of a base year. In RGDP Inflation is adjusted.

Inflation rate means prices for goods and services are going up, so the worth of money decreases. During inflation, money can buy less quantity of goods because prices of goods are higher (KC & Thapa, 2022). When the comprehensive price level goes up, the value of money goes down. The inflation rate measures how much prices are growing. Inflation can take place when there is more demand for goods and services than there is supply, or when there are unexpected events like wars or natural disasters. Inflation can have good and bad effects on the economy (KC & Thapa, 2022). This study's major goal is to investigate and attempt to determine how GDP and inflation affect the performance of the Nepal Stock Exchange and the Colombo Stock Exchange.

The objective of this study is to investigate the impact of GDP and inflation on the volatility of stock exchanges. So, we want to know and compare the effect of inflation and GDP on stock market of both countries. The two sample countries are taken because both of them are located in South Asia and have agro based economies. They are also rich in cultural heritage and ancient civilization and historical sites.

This study analyzes the impact of GDP and inflation on the stock market performance. The study has only focused to these two countries and two macroeconomic variables: inflation and GDP. However, there might be the other variables which might affect stock exchange. Some of the variables influence stock exchange that can be interest rates, dividend, PCI, FDI, foreign exchange and remittance (Al-Rimawi & Thair, 2021). The study used secondary data of closing stock of 25 fiscal years from 1997 to 2021. The data is taken from the web portal http://imacrotrends.com, as this source is well known site for the data of stock with different variables for many countries. Also the data is taken from other two sites: http://isharesansar.com and http://iinvesting.com. Both are the renowned sources of the stock exchange index.

Literature Review

The selection criteria of literature review in this research are the research articles conducted in the field of GDP, inflation, interest rate, and exchange rate of stock prices which are available in Google Scholar. The research articles of Wanigasuriya (2022), Algarini (2020), Khatri (2019), Karki (2017), Kotha & Sahu (2016), Tripathi & Seth (2014), Usman & Adejarae (2013), Reddy(2012)

were focused on meeting our review criteria.

Wanigasuriya (2022) explored the effects of macroeconomic factors on Sri Lanka's stock market performance. The study relies on the All Share Price Index (ASPI) to evaluate stock market performance and takes into account of macroeconomic indicators which are inflation, interest rates, exchange rates, foreign direct investment, gross domestic product (GDP), and broad money supply. This study has collected research studies to evaluate the related literature between 1997 and 2019. The review results show that ASPI and the macroeconomic factors have both long-term and short-term correlations. The results from short-term and long-term GDP trends are favorable for ASPI, but short-term changes in GDP's value have no effect on ASPI. However, in the short term, ASPI is adversely impacted by GDP's historical value. In the long run, Broad Money Supply (M2) and ASPI have a negative association as well, However there is a short-term positive association between the above-mentioned factors. The consequences of the above mentioned findings for stock market experts, investors, and policymakers are practical.

Algarini (2020) examined the relationship between macroeconomic factors (eg., GDP, FDI, inflation rate, and interest rates and the two-point stock exchange principles of Saudi Arabia's). The analysis reveals no short-run association between the fundamentals of the stock market and the above-mentioned factors, but a long-run relationship between macroeconomic indicators and market values, particularly between GDP and other variables. This study used annual time series data for the years 1993 to 2018. The finding suggests that Saudi Arabia's officials pay close attention on how monetary policies and financial activity indicators affect the stock exchange index.

Khatri (2019) explored the relationship between Nepal's stock market and macroeconomic factors, showing a large positive relationship between stock prices and money supply, as well as slight positive relationships with foreign direct investment, inflation, and exchange rate. The Johansen and Juselius method for multivariate co-integration is used on data from mid-July 1994 to mid-July 2015. Based on the presence of co-integration and origin, this analysis indicates that the Nepalese stock market is inefficient in both the short and long run.

Karki (2017) explored how macroeconomic factors affect the performance of the Nepali stock market. The real GDP, inflation, interest rate, and total money supply are the four factors that are the subject of the study. This study uses annual data from 1994 to 2016. It focuses on how the above-mentioned factors link to the Nepalese stock market, which is represented by the "NEPSE Index." According to the empirical findings, real GDP, inflation, and money supply have a positive impact on stock values in Nepal, whereas interest rates have a negative impact on stock exchange. This study does not discover any long-run relationship between macroeconomic indicators and the stock market index, indicating that the above mentioned variables are not responsible for Nepal's stock price changes which supports the Random Walk Theory in the capital market of Nepal. The creation of policies targeted at stabilizing Nepal's capital market can be informed by the above-mentioned findings.

Kotha and Sahu (2016) examined the relationship between the Indian economy's rapid expansion and the relationship between stock prices and macroeconomic variables. This study analyzed monthly data from 2001 to 2015 by using multivariate Co-integration analysis. Implementing a correlation and error correction method, this study explores long and short-term relationships between macroeconomic indicators and the stock market. The study evaluated the long-term association between the BSE Sensex and macroeconomic factors.

Tripathi and Seth (2014) demonstrated the association between the Indian economy's real economy and stock market growth. This study investigates the relationship between the Indian stock market and preferred macroeconomic variables. In this study monthly data of stock index were used from July 1997 to June 2011. Findings of this study shows that stock market and macroeconomic variables have a statistically significant relationship. The variables in this study were identified using factor analysis i.e. interest rate, inflation, and exchange rate. The entire regression model has Sensex, market capitalization, and market turnover at 23.3%,

23.8%, and 16.9%, respectively.

Usman and Adejarae (2013) concluded that capital market offers long-term financing to help the governments and industry to achieve their capital needs. The Nigerian Stock market was impacted by inflation, despite its strong performance. Inflation was determined to be responsible for 18.9% of the volatility in capital market performance in this study's analysis of data from 1970 to 2010. There was poor relationship between inflation and the Nigerian stock exchange. However, there was a strong relationship between market volume and inflation. The study recommended that Central Bank of Nigeria should implement measures to keep inflation low and protect the true value of stock returns.

Reddy (2012) investigated the relationship between Stock Market Value Index of the listed firms and RGDP, interest rate, and inflation rate using time series data from 1997 to 2009. The regression analysis study demonstrated that the independent variables shows 95.6% of the variation in stock prices. The judgments submitted that stock prices increase when interest and swelling rates decrease, and RGDP has a positive impact. This study has suggested the government to lower swelling rates and reinforce the living guidelines of the citizens through policy mediations. Furthermore, moderate interest rates can provoke money and stock transactions.

After reviewing the literature pertaining to the appropriate area concerning to this research, it is evidenced that there is a lack of consensus concerning the impact of macroeconomic variables on the stock exchange. The findings of previous studies were different from each other, possibly by the reason of the use of various methodologies, variables factors, time periods, and analytical tools. Nevertheless, the literature summarise fundamental macroeconomic variables in the way that GDP and inflation have an important impact on stock exchange.

Methodology

The information regarding inflation, GDP and Stock Index data were collected by online sources: "www.macrotrend.net", "www.sharesansar.com", "www.investing.com" and analysed using multiple regression model. For the regression model, the independent variables are GDP(X1), Inflation(X2) and the dependent variable is Stock Index (Y), the linear regression is then fitted as:

$$LnY = \alpha + \beta 1 LnX1 + \beta 2 LnX2 + e \text{ ----------(i)}$$

While checking for linearity between dependent and independent variables, it is found that the variables are not linearly related but after taking natural logarithm the variables are found linearly related. Thus, the model (i) expressed in logarithmic form. Data were collected from last 25 years to investigate the relationships between variables. We use a correlational research design. Statistical tools in the way that correlations and regression analysis were applied using SPSS Version 20. The study analysed the correlations between GDP, inflation, NEPSE index, and CSE index using the closing prices of shares from each fiscal year. Various statistical measures like correlation coefficient, regression analysis, and ANOVA were used to analyse the relationships between the variables and drawn conclusions**.**

The data collected were cleaned and processed for the further analysis. The data analysis was carried out with the help of SPSS software version 20. The necessities of regression analysis like linearity and Normality are checked before running a regression analysis. ANOVA is used to determine the significance of regression model fitted.

Results and Discussion

Data analysis is started with correlation analysis, after the variables are found significant they are used for further analysis for regression model.

Correlation Analysis

Table 1: *Correlation Analysis Summary for* NEPSE

		LN(GDP)	LN(Inflation)	LN(NEPSE)
LN(GDP)	Pearson Correlation	1	0.229	0.862
	Sig. (2-tailed)		0.272	0.000
	N	25	25	25
LN(Inflation)	Pearson Correlation	0.229	1	-0.008
	Sig. (2-tailed)	0.272		0.972
	N	25	25	25
LN(NEPSE)	Pearson Correlation	0.862	-0.008	1
	Sig. (2-tailed)	0.000	0.972	
	N	25	25	25

*Note: ** Correlation is significant at 1%. Correlation analysis is carried after taking natural logarithm.*

The results show that there is strong positive correlation coefficient between NEPSE and GDP (r = 0.862), which is statically significant at 1% level of significant (p-value< 0.01), which represent that

However, there is weak negative correlation between Inflation and NEPSE index (r = -0.008) implying when inflation rises the NEPSE index falls, and found statistically insignificant at 5% level of significance (p-value > 0.05). (see Table 1).

Table 2: *Correlation Analysis Summary for* CSE

		LN(Inflation)	LN(GDP)	LN(CSE)
LN(GDP)	Pearson Correlation	1	-0.487	0.958
	Sig. (2-tailed)		0.013	0.000
	N	25	25	25
LN(Inflation)	Pearson Correlation	-0.487	1	-0.441
	Sig. (2-tailed)	0.013		0.027
	N	25	25	25
LN(CSE)	Pearson Correlation	.958	-0.441	1
	Sig. (2-tailed)	.000	0.027	
	N	25	25	25

The findings reveals that there is strong positive correlation coefficient between CSE index and GDP (r = 0.958) which is statically significant at 5% level of significant (p-value < 0.05). The positive correlation represents that if GDP increases NEPSE index also increases then index (r = -0.441) which is statically significant at 5 % level of significant (p-value< 0.05). This shows that when inflation rises the CSE index decreases (see Table 2).

Hence, the correlation analysis indicates a strong positive correlation between GDP and the stock market in both countries, which is highly statistically significant. However, inflation shows a very weak correlation with the dependent variable and is highly statistically insignificant in the Nepalese stock exchange. On the other hand, inflation exhibits a moderate correlation and is statistically significant in Sri Lanka. Which suggests that inflation has no significant impact on the stock market in Nepal . The reason could be Nepalese investors are investing in stock market haphazardly and don't care about inflation. To tackle inflation and receive high returns, people invest their money in the stock market between dependent and independent variables. Scatter diagram is used to determine the linearity between above mentioned variables (see Figure 1).

Regression Analysis

Before carrying a regression analysis, the data is checked for linearity using scatter diagram. These requirements are crucial factors to start a regression analysis.

Linearity

Scatter diagram is used to determine linearity between Stock Index, GDP and inflation for both countries The results show the linearity between dependent and independent variables for both the countries (see Figure 1).

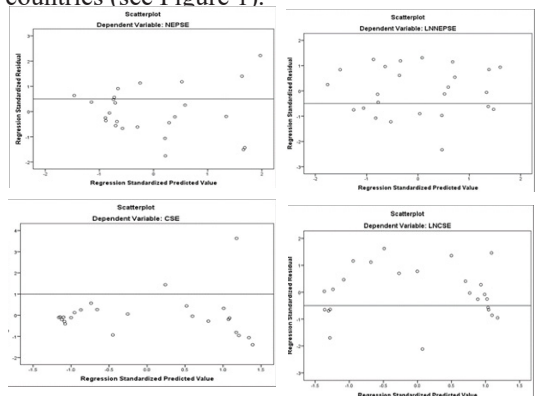

Figure 1*: Scatterplot to Study the Linear Relationship between Stock Index and Explanatory Variables*

To find out whether the regression model is significant or not Analysis of Variance (ANOVA) for model fit is applied. The findings indicate that there is statistically significant relationship between the dependent and independent variables for NEPSE data(P-value < 0.05). The regression model fitted for NEPSE data can be used for further analysis (see Table 3).

Table 3: *ANOVA for Testing the Significance of Regression Model for NEPSE Data*

Model	SS	df	MS	F	P-value
Regression	12.219	2	6.110	40.580	0.000
Residual	3.312	22	0.151		
Total	15.531	24			

The results further indicate there is statistically significant relationship between the dependent and independent variables in case of CSE data (p-value <0.05). ANOVA shows that the model is significant, so the fitted model can be used for prediction of stock exchange using GDP and inflation in case of CSE index of Sri Lanka (see Table 4).

Table 4: *ANOVA for Testing the Significance of Regression Model for CSE Data*

Model	SS	df	MS	F	P-value
Regression	23.350	2	11.675	124.132	0.000
Residual	2.069	22	0.094		
Total	25.420	24			

The findings indicate that an Coefficient of determination (R^2) of 0.787 suggests that GDP and inflation collectively account for 78.7% of

the variation observed in the NEPSE index, with the remaining 21.3% attributable to unexamined variables which are not studied here in the research. The standard error indicating on average, there is an estimated 0.388 difference between the predicted value using the fitted model and actual values of the NEPSE index(see Table 5).

The results highlight that the Coefficient of determination (R^2) is 0.919, signifying that 91.9% of the variation in CSE is accounted by GDP, while the remaining 8.1% is attributed to other variables. Additionally, the standard error of the estimate is 0.307, indicating an average difference of 0.307 between observed and expected CSE values. These findings suggest that the fitted model is robust and effectively explains a significant portion of the variation in stock prices, making it a valuable tool for analysis(see Table 5).

Based on the value of coefficient of determination regression model fitted for NEPSE data is explaining less proportion of variation in stock index than that for CSE data, however both the model are statistically significant. Thus the models are good to forecast stock index.

Table 5: *Coefficient of Determination and Standard Error of fitted Model for NEPSE and CSE*

Model	R	R Square	Adj. R Square	SE of the Estimate
NEPSE	0.887	0.787	0.767	0.388
CSE	0.958	0.919	0.911	0.307

Histogram

To check the normality of residuals histogram is used. The results show that the residuals for the both data set of NEPSE and CSE are normal. As the model shows Normality of the residuals, the linear regression model is now suitable model for the data set to predict the dependent variable see Figure 2).

Regression Model

A multiple regression model with stock index as dependent variable and, GDP and inflation as independent variable is fitted for Nepal and Shrilanka (see Equation i and ii).

At first regression model for NEPSE index is fitted, which is the Nepalese stock index data. The regression model is obtained as:

LnY= 4.275 + 1.022 LnX1-0.339 LnX2+e ----- (i)

Where, in the equation (i) Y is NEPSE, X1 and X_2 Model (i) shows that, if GDP increases by 1 % then NEPSE index increases by 1.022 % keeping the other factor or variables constant (β1= 1.022). This relationship is statistically significant (p-value = 0.00) indicating GDP is an important variable of the NEPSE index, Also another regression coefficient β2= -0.339 indicates if inflation increases by 1 %,then NEPSE index decreases by 0.339% keeping the other variables constant. The regression coefficient of NEPSE on inflation (β2) is statistically significant because p-value is 0.044 which is less than the significance level 5%. Finally, the variance inflation factor (VIF) for both LnGDP and LnInflation is 1.055, which is less than 5, indicating that there is no multi collinearity among the independent variables. So, we can use independent variables for dependent variable on NEPSE index. Hence, the regression model (i) has statistical logic to use as it has satisfied all the statistical requisites (see Table 6).

Ln (CSE) = 2.668+ 1.375 Ln (GDP) +0.064 Ln (Inflation) +e ---------- (ii)

The first regression coefficient in the regression equation (ii) is β1 = 1.375 that implies that if GDP increases by 1 % then CSE index increased by 1.375 % keeping the other variables constant.

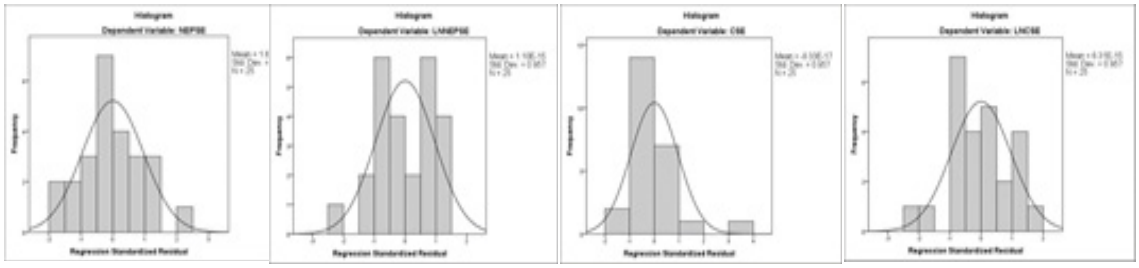

Figure 2: *Histogram to check Normality of Data*

It is statistically significant (p-value = 0.000), indicating that GDP is an important independent variable for CSE index. Also β2 = 0.064 indicates that if inflation increases by 1 %, then CSE index increases by 0.064 % keeping the other variables constant.

Table 6: *Regression Model Summary for NEPSE*

Model	Unstandardized Coefficients		Standardized Coefficients	t	p-value	Collinearity Statistics	
	B	*Std. Erro*	*Beta*			*Tolerance*	*VIF*
(Constant)	2.668	0.539		4.953	0.000		
Ln (GDP)	1.375	0.098	0.974	13.989	0.000	0.762	1.312
Ln (Inflation)	0.064	0.132	0.034	0.486	0.632	0.762	1.312

Table 7: *Regression Model Summary for CSE*

Model	Unstandardized Coefficients		Standardized Coefficients	t	p-value	Collinearity Statistics	
	B	*Std. Erro*	*Beta*			*Tolerance*	*VIF*
(Constant)	4.275	0.363		11.766	0.000		
Ln (GDP)	1.022	0.113	0.911	9.009	0.000	0.948	1.055
Ln (Inflation)	-0.339	0.159	-0.216	-2.134	0.044	0.948	1.055

Also, this relationship is statistically insignificant (P-value > 0.01) so, inflation is not a good predictor of CSE index. Finally, the variance inflation factor (VIF) for both LnGDP and LnInflation is 1.312, which is less than 5, indicating that there is no multi collinearity among the independent variables. So, we can use independent variables to explain dependent variable CSE index (see Table 8). The results show that in both countries GDP has statistically significant relationship with stock value, thus GDP is an important variable to predict the NEPSE index and CSE index. Instead of presence of low correlation between stock value and inflation, regression analysis shows there is significant effect of inflation on stock value in case of Nepal, however in case of Sri Lanka the impact of inflation on stock is not found significant, so it is not a good predictor of stock value in case of Sri Lanka. In Sri Lanka quarter century there is chances of cornering and manipulating in stock in CSE by certain players. Generally, moderate inflation is considered good for the stock market, as it indicates a healthy and growing economy (Place, 2023). So, investors may need to adjust their portfolio division and modification strategies according to the inflation outlook.

The results show that in both countries GDP has statistically significant relationship with stock value, thus GDP is an important variable to predict the NEPSE index and CSE index. Instead of presence of low correlation between stock value and inflation, regression analysis shows there is significant effect of inflation on stock value in case of Nepal, However in case of Sri Lanka the impact of inflation on stock is not found significant, so it is not a good predictor of stock value in case of Sri Lanka. In Sri Lanka quarter century there is chances of cornering and manipulating in stock in CSE by certain players. Generally, moderate inflation is considered good for the stock market, as it indicates a healthy and growing economy (Place, 2023). So, investors would need to adjust their portfolio division and modification strategies according to the inflation outlook.

Conclusion

We aimed to assess the long-term relationship between GDP, inflation, and the stock markets of Nepal and Sri Lanka. This study identified a significant influence of microeconomic variables on stock prices in both countries. The regression analysis demonstrated that, for Nepal and Sri Lanka, approximately 78.7% and 91.9% of the variations in stock prices, respectively, could be explained by the microeconomic factors of GDP and inflation. High inflation rates were found to have an adverse impact on the economy, likely due to an excessive money supply in the market.

Furthermore, the regression analysis indicated that GDP was a crucial determinant of stock prices in both nations, with a strong positive impact (p-value<0.05). In contrast, the relationship between inflation and the NEPSE index was not statistically significant (p-value > 0.05) for Nepal. However, for Sri Lanka, inflation significantly contributed to the CSE index (p-value < 0.05), albeit with a moderate negative effect.

The above mentioned findings align with prior research by Reddy (2012), who revealed that 95.6% of stock price variations were explained

by RGDP, inflation, and interest rates. Similarly, the results are consistent with Usman & Adejarae (2013), who found that inflation accounted for 18.9% of volatility in capital market performance in the Nigerian Stock market. Additionally, Karki (2017) focused on the Nepalese stock market and determined that real GDP, inflation, and money supply all positively impacted stock values in Nepal, while interest rates had a negative effect. Karki (2017) also concluded that RGDP had a positive influence on stock prices, whereas the correlation with inflation was weak. Therefore, the findings of this research are in line with the findings of Karki (2017).

Finally, it is evident that there is a positive impact of GDP in the NEPSE index and CSE index. However, there is negative impact of inflation in the NEPSE index. Together with that, the microeconomic variable inflation is found a weak explanatory variable for CSE index in the long run study. So, concern authorities should focus on this serious issue. This research established a statistical relationship between microeconomic variables and stock price for Nepal and Shri Lank, the result of this research is helpful for the government bodies and helpful on decision making for the people investing in stock.

References

Algarini, A. (2020). Impact of GDP, Foreign Direct Investment, Inflation Rate, and Interest Rate on Stock Market Values in Saudi Arabia. *International Journal of Social Science and Economic Research,5*(7), 1667-1678.

Al-Rimawi, M., & Thair, K. (2021). Factors affecting stock market index volatility: Empirical study. Journal of *Governance and Regulation, 10*(3), 169–176. https://doi.org/10.22495/jgrv10i3art15

Georgiadis, S. (2022, July 28). What Does Inflation Do to the Stock Market? *InvestorPlace; InvestorPlace*. https://investorplace.com/what-does-inflation-do-to-the-stock-market/IMF. (2023, August 15). CSE All-Share HistoricalRates (CSE). *Finance & Development*. Retrieved from https:/www.investing.com/indices/cse-all-share-historical-data.

Interactive Brokers. (2020). *Intro to the Stock Market*.http://www.interactivebrokers.com. https:// ibkrcampus.com/

Karki, D.F (2018). Stock market responses to macroeconomic dynamics: Testing for long-run equilibrium in Nepal. *Pravaha, 24*(1), 64-82.

KC, T., & Thapa, J. (2022). A Basic Book on Agriculture Development Bank. Kathmandu: Goodwill Publication Pvt.l Ltd. Khatri, M. B. (2019). Macroeconomic influence on the Nepalese stock market. *NRB Economic Review, 31*(1), 47-64.

Kotha, K. K., & Bhawna, S. (2016). Macroeconomic factors and the Indian stock market: Exploring long and short run relationships. *International Journal of Econmics and Financial Issues, 6*(3), 1081-1091.

Reddy, D. L. (2012). Impact of inflation and GDP on stock market returns in India. *International journal of advanced research in management and social sciences, 1*(6), 120-136.

Singh, P. (2014). Indian stock market and macroeconomic factors in current scenario. *International Journal of Research in Business Management, 2*(11)*,* 43-54.

Sthapit, A. B., khanal, S. P., Poudel, D. R., Tamang, G., Upreti, P., & Bam, N. (2017). *Data Analysis and Modeling.* Asmita Publication.

Sykes, A. O. (1993). *An Introduction to Regression Analysis. Coase-Sandor Institute for Law & Economics*, Working Paper No. 20.

Tripathi, V., & Seth, R. (2014). Stock market performance and macroeconomic factors: The study of Indian equity market. *Global Business Review, 15*(2), 291-316. https://doi.org/10.1177/0972150914523

Usman, O. A., & Adejare, A. T. (2013). Inflation and Capital Market Performance:The Nigerian Outlook. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS), 5*(1), 93-99.

Wanigasuriya, W. (2022). Impact of Macroeconomic Variables on Stock Market Performance in Sri Lanka. *Applied Economics and Business, 6*(2), 9-16

Yahya, T. (2020). The effect of macro variables on the Jakarta Islamic Index. *Asian Journal of Islamic Management (AJIM), 2*(1), 36–45.

https://doi.org/10.20885/ajim.vol2.iss1.art4

Investing.com. (2023). Investing.com. http://www.investing.com. https://www.investing.com/indices/cse-all-share-historical-data

Investopeda. (2023). Top financial literacy education gaps across generations. https://www.investopedia.com/financial-literacy-survey-5223919

Karki, D. E. (2018). Stock market responses to macroeconomic dynamics: Testing for long-run equilibrium in Nepal. *Pravaha, 24*(1), 64–82. https://doi.org/10.3126/pravaha.v24i1.20227

Khatri, M. B. (2019). Macroeconomic influence on the Nepalese stock market. *NRB Economic Review, 31*(1), 47–64. https://doi.org/10.3126/nrber.v31i1.35307

Kotha, K. K., & Bhawna, S. (2016). Macroeconomic factors and the Indian stock market: Exploring long and short run relationships. *International Journal of Economics and Financial Issues, 6*(3),1081–1091.

Reddy, D. L. (2012). Impact of inflation and GDP on stock market returns in India. *International Journal of Advanced Research in Management and Social Sciences, 1*(6), 120–136.

Singh, P. (2014). Indian stock market and macroeconomic factors in current scenario. *International Journal of Research in Business Management, 2*(11), 43–54.

Sthapit, A. B., Khanal, S. P., Poudel, D. R., Tamang, G., Upreti, P., & Bam, N. (2017). *Data analysis and modeling*. Asmita Publication.

Sykes, A. O. (1993). An introduction to regression analysis. Coase-Sandor institute for law and economics, Working Paper no. 20.

Tripathi, V., & Seth, R. (2014). Stock market performance and macroeconomic factors: The study of Indian equity market. Global .Business Review, 15(2), 291–316. https://doi.org/10.1177/0972150914523599

Usman, O. A., & Adejare, A. T. (2013). Inflation and capital market performance: the Nigerian outlook. Journal of Emerging Trends in *Economics and Management Science (JETEMS), 5*(1), 93–99.

Wanigasuriya, W. (2022). Impact of macroeconomic variables on stock market performance in Sri Lanka. *Applied Economics and Business, 6*(2), 9–16.

Yahya, T. (2020). The effect of macro variables on the Jakarta Islamic Index. *Asian Journal of Islamic Management, 2*(1), 36–45. https://doi.org/10.20885/ajim.vol2.iss1.art4

Interactive Brokers. (2020). Intro to the Stock market. Retrieved from www.interactivebrokers.com: https://ibkrcampus.com/