

Evaluating the Impact of Macroeconomic Variable on Indian Stock Market

Sarika Keswani, Bharti Wadhwa



Abstract: *The prices of shares and other financial assets have constantly had a significant influence in the improvement and advancement of financial activities, and this has turned out to be clear ever. Macroeconomic factors show the prosperity of any economic system and determine the investment future. Macroeconomic factors influence pricing in any economy. Macroeconomic vulnerability influences stock and commodity market, which altogether decides price instability. The securities exchange is a basic stage in the money related arrangement of our nation as it assumes a major role in directing shortage area investment funds to the surplus part. The research examined the impact of certain macroeconomic factors (disposable revenues, interest rates, govt. policies, inflation and exchange rates) on the results of securities market performance in the National and Bombay stock exchanges. Thusly, the causal connection between the securities exchanges returns and chose macroeconomic factors in the NSE and BSE has been resolved in the investigation. The examination utilized the ADF, correlation, multiple regression and granger causality test for analyzing the association between the chose factors. The study period was assessed by monthly data for 2006-2016. The findings showed that in the first difference the variables are stationary. There is a strong relationship exists between disposable income, government policies, the exchange rate and share price. This means that if these variables change, the stock prices of NSE and BSE will be affected. Furthermore, there is an unfavorable connection in the NSE and BSE between interest rate and inflation rate and share price, which means a shift in inflation and interest rate that will not have a strong impact on stock prices and will be in an adverse direction. In addition, a multiple regression that showed these variables was used to check the effect of selected macroeconomic factors on Indian stock prices. They have an influence on the NSE and BSE share prices.*

Keywords: Macro-Economics, Stock Market, GDP, Investor, Inflation and Economic Growth

I. INTRODUCTION

In the advancement of economic activity, share prices and other financial assets have always been of excellent importance and have also played a crucial part in nations' economies, and this is seen in history.

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Many scientists have also shown that stock markets have always played a major part in the prosperity of the nation, creating capital formation and promoting the economy's financial development (Essaied, Hamrita et al., 2009; Charles and Adjasi, 2008; Pilinkus, 2015). The stock market has helped businesses organize assets from shareholders to investors in exchange for ownership shares as one of the most important components of a free-market economy. Prices of stock are considered an indicator of the country's economic state. Share prices also influence much more, including wealth, savings and decision making in households. It will not be wrong to say that stock market are a vital part of every nation's financial system because they have an important part to play in shifting funds and in bringing together investors and savers to boost economic growth. By examining the market output and market index, investors monitor their investments. The market index is used to evaluate each portfolio's function and also provides an overview of future market trends. Elementary changes to the macroeconomic structure and policies that play a significant role in achieving financial stability can be tactful to the stock markets of the new growing countries. Because the stock market is an important pillar of the economy of the nation, government bodies, companies and investors are also observing it closely (Nazir and others, 2010). Because stock markets are vital to economic and financial stability, economic policymakers and scientists are trying to provide it with smooth and risk-free activities by taking stock market conduct into account. Economic experts, business analysts, investors, practitioners and policymakers have been weakened by the continued link between macroeconomic factors and stock prices (Kwon and Shin, 1999). However the relationship between the two variables has been deep rooted since two decades and is an area of interest among the academicians and researchers. The initial attempts were made by Fama in 1981, thereafter there has been increasing efforts to evaluate the relationship between the two variables with the help of empirical studies among one country or a group of country. Macro economic variables are responsible for the expansion of an economy and they are responsible for the amount of investments. The pricing method is governed by these factors. Changes in the macroeconomic variables contribute to price changes through their share and commodity impact. The stock market is one of the major industries that contribute to turning deficit sector savings into surpluses. Article AL-Sharkas, Adel (2004), "examines the long-term equilibrium, using macroeconomic variables to be specific, mechanical creation files, customer value files, cash supply (M2) and treasury charge rates, between collections of macroeconomic factors, and the Amman Stock Exchange (Jordan).

In addition, quarterly data were used from the 1980:Q1 to 2003:Q3 surveys in relation to the Vector error correction model (VECM) technique. The study's implications showed that these macroeconomic factors are co-integrated. In creating Sri Lankan securities exchange (Colombo Stock Exchange), Menike (2006) studied "the impact of macroeconomic variables on stock costs" utilizing multivariate relapse. Month to month time arrangement information from September 1991 to December 2002 was considered for the examination. Various factors were used for the analysis such as cash supply, conversion standard, expansion rate and loan cost. The research further outlined that the reverse connection between inflation expenditures and conversion expenditures with respect to the Colombo Stock Exchange's (CSE) stock costs and the adverse effect of the treasury securities tax rate explains that stock costs decrease with the increase in the debt charge of treasury securities. Chuang et al. (2007) examined that "Stock prices in Taiwan, Hong Kong, Singapore and South Korea" influenced the economic supply and budget deficit. He used the same four-monthly information. It showed a long-standing connection among the nations taken into account between monetary supply, budget deficits and stock prices. In addition in the short-term stock prices the changes in currency and fiscal policy take time to adjust fully. Sohail and Hussain (2009) inspected "the long-run and short-run links between Lahore Stock Exchange and macroeconomic factors," such as mechanical creation file, money supply (M1), CPI and loan price in Pakistan. The examination was based on quarterly information from 1973 to 2004. In order to evaluate the effects of the examination, cointegration tests and VECM tests were employed. The results show that the stock record of customer valuation has a negative effect, while the contemporary generating file, which is a real effective exchange rate, has a significant positive long-term effect on stock returns. Sajjad, Shafi et al. (2012) examined the connection between macroeconomic factors, i.e. growth rate, conversion standard, treasury bills and credit costs and stock trading in Karachi, using monthly information from January 2005 to December 2010. The test of cointegration and the causality of the granger were linked to the short and long-term review. The findings showed that KSE and KSE are bi-directional inductors from loans to swap scales and unidirectional inducements of grangers. Ozlen & Ergun (2012) used Gregorian calendar month 2005-2012 in its evaluation inquiry and rate of return, rate, present businessmen inadequate and proportion as independent variables and stock returns as variable balance due to misuse. The autoregressive lag method distributed completes the variables required by the exchange rate and rate area. Rafy (2014) discovered one hundred index and shopper indicator, import and export, and exchange rate causative connection between KSE. They use nineteen-year data from 1992 to 2012 to understand the connection of these factors with the securities industry. In order to examine the association, enforced multivariate analysis and farmer relationship look at. Their unquestionable bi-directional connection between interest and KSE is one hundred index, whereas there is no causative connection between export, shopper and KSE one hundred index. Ouma & Muriu (2014) explored the effect of economic factors on African country securities market yields from 2003 to 2013. The research did not hide that exchange rate, money supply, and inflation distress the securities market is backing the

African country and that they are NSE's essential unit determinants while exchange rates have a adverse effect on the return on the securities market. Ilahi, I et al. (2015) investigated the link between securities exchange return funding costs and macroeconomic variables, particular swelling rates, conversion standard in Pakistan (Karachi stock trading), using month-to-month recurrence data from January 2007 to December 2012. The linked approach was Multiple Linear Regression with the end objective of data review. The inquiry discovered that macroeconomic factors and returns on securities exchange are powerlessly associated. Mugambi and Okech (2016) investigated "the connection between macroeconomic factors on the Nairobi Securities Exchange's stock returns of listed companies." Research has shown that exchange rate, interest rate, and inflation have a significant impact on stock returns from banks, while GDP has a negligible impact on stock returns from banks. The same secondary data was used by the Central Bank of Kenya between 2000 and 2015. To establish the link, the research used correlation evaluation, unit root test and linear regression model. Poornima and Ganeshwari (2016) examined "the vibrant connection between the NIFTY index and the exchange rate" by taking into account the daily closing index information from July 2014 to July 2016. Research investigated the adverse link between these variables and Granger causality tests underscored that NIFTY returns and exchange rates had a unidirectional cause relationship.

II. RESEARCH METHODOLOGY

Research Design

This study tried to assess the effect on stock-market returns at the National and Bombay Stock Exchange of selected macroeconomic variables (Disposable income, Govt. Policies, Interest Rate, Exchange Rate and Inflation). Therefore, the study used an empirical research design. Therefore, an empirical research design helped identify the causal relationship between selected macroeconomic variables and stock market returns from NSE and BSE.

Data Collection

For this study, the interaction between stock price and selected macroeconomic factors is evaluated for disposable income, Govt policies (tax rates), interest rates, inflation, and exchange rates. In this study, the secondary information was used. Secondary data was collected from the various websites. To have consistency in the analysis, available annual average data of NSE index was transformed into monthly data. Empirical analysis in this study covers a 10-years period (April 2006 -March 2016) using monthly time series data. Nifty and sensx price index values were used for stock prices (NSE and BSE) at the end of the month. CPI (consumer price index) has been used as a proxy for inflation. The exchange rate represented by the use of nominal effective exchange rate, the dollar-related bilateral exchange rate.

Database of inflation, exchange rates, interest rates, Government policies and disposable income was taken from website of economic outlook and industry outlook. i.e. prowess database. All values converted into log.

Data Analysis

The data was analyzed using using E-views version 8.0. Descriptive statistics of the study variables was computed and presented in the form of the mean, maximum, minimum and standard deviation whereas several inferential statistical models were used to draw conclusions.

Analytical Models

Augmented dickey fuller model, normality test, serial correlation, multicollinearity, heteroskedasticity, multiple regression and the granger causality test were used to analyze the relationship between study variables.

Augmented Dickey Fuller Model or Unit Root Tests (ADF)

To estimate the unit root, the Augmented Dickey Fuller (ADF) test was implemented. ADF tests normally check the series of stationarities where; if the ADF statistics exceeded the critical value, the series ' null unit root hypothesis was rejected.

Multiple Regression Analysis

In order to define the connection between the autonomous and dependent variable, regression analysis was used.

$$\text{Stock returns} = a + \beta_1 \text{DOI} + \beta_2 \text{GP} + \beta_3 \text{INF} + \beta_4 \text{INT} + \beta_5 \text{ER} + e$$

Where Stock returns are the monthly % in change in stock market returns.

DOI= the disposable income.

GP = direct and indirect tax policy of the govt.

INF = inflation rate change measured in the CPI by monthly changes.

INT = rate is the monthly change in interest rate

ER is the change in the exchange rate

ϵ_t is defined as the error term

In the above equation, β_0 is continuous and $\beta_1, \beta_2, \beta_3, \beta_4$ are the coefficients of the chosen macroeconomic factors; whereas the error expression e is the remaining regression error.

Granger Causality Test

The Granger causality test was used to determine the link between (or more) variables to follow the direction of causality. Granger Causality Tests the causal short-run relationship between the dependent variable and Granger Causality tests can test each of the factors (Paramaia; Akway, 2008). A causality test is to understand if one variable's lags go into another variable's equation (Enders 1995).

III. ANALYSIS AND INTERPRETATION

Five macroeconomic predictors in the research, namely: disposable income, Govt policies (taxes), exchange rate, inflation rate and interest rate and the criterion variable were stock market returns measured by the NSE Share Index.120 monthly time series information for all factors from April 2006 to March 2016 were compiled, i.e. N=120 (see Table 1 below). Calculations were implemented for the different descriptive statistics. Descriptive statistics presented in Table 1. The table showed sample mean, median, maximum, minimum, standard deviations.

Table: 1 The summary of results is given below:-

Variable	Index Nifty	Index Sensex	Disposable Income	Govt. Policies	Exchange Rate	Inflation Rate
Mean	5540.394	1848.234	6532500.	44.25400	51.38051	6.733167
Me	5329	1772	54859	42.50	49.09	6.73

dian	.925	8.85	19.	000	500	0000
Maximum	8901.850	2936.150	12440620	48.49000	68.25000	6.920000
Minimum	2755.100	8891.610	2493458.	42.50000	39.36000	6.530000
Std. Dev.	1532.885	5019.722	3133945.	2.236048	8.225928	0.116633
Observations	120	120	120	120	120	120

Descriptive statistics' results are:

Mean and median showing the center of data. The maximum and the minimum information display the range of data. Standard deviation demonstrates that the information is closely clustered around the mean and more reliable.

Table-2: ADF Unit Root Test Analysis at level

Variables	t-Statistics	ADF at level	Critical Value at 1%	Critical Value at 5%	Critical Value at 10%
Disposable Income	0.963125	0.9960	-3.486064	-2.2885863	-2.579818
Govt. Policies	-0.211717	0.9327	-3.486064	-2.2885863	-2.579818
Interest Rate	-1.587157	0.4860	-3.486064	-2.2885863	-2.579818
Inflation Rate	-3.428783	0.0118	-3.486064	-2.2885863	-2.579818
Exchange Rate	-0.195464	0.9348	-3.486064	-2.2885863	-2.579818
Stock Prices Nifty	-1.156109	0.6916	-3.486064	-2.2885863	-2.579818
Stock Prices Sensex	-1.173040	0.6845	-3.486064	-2.2885863	-2.579818

Table-3: ADF Unit Root Test Analysis at 1st difference

Variables	t-Statistics	ADF at level	Critical Value at 1%	Critical Value at 5%	Critical Value at 10%
Disposable Income	-12.17866	0.0000	-3.486064	-2.2885863	-2.579818
Govt. Policies	-10.94320	0.0000	-3.486064	-2.2885863	-2.579818
Interest Rate	-10.78045	0.0000	-3.486064	-2.2885863	-2.579818
Inflation Rate	-13.29100	0.0000	-3.486064	-2.2885863	-2.579818



Exchange Rate	- 8.378613	0.0000	- 3.486064	- 2.2885863	- 2.579818
Stock Prices Nifty	- 11.13451	0.0000	- 3.486064	- 2.2885863	- 2.579818
Stock Prices Sensex	- 10.74663	0.0000	- 3.486064	- 2.2885863	- 2.579818

Interpretation

ADF test has applied to check the stationary of the data. All the variables are stationary at 1st difference

IV. PRELIMINARY TESTS

Multicollinearity Test

The results of the variance inflation factor (VIF) were shown in Table 4. The results in Table 4 show that the explanatory variables are not collinear, since the VIF for all the variables is less than ten, which means that multicollinearity does not exist among all the explanatory variables in the study. This is consistent with the investigation of multicollinearity tests carried out in similar studies in Kenya. Some of the studies that have shown similar results are: Kirui et al (2014), Aroni (2011) and Olweny (2011).

H0: There is no multicollenarity problem.

Table 4: Multicollinearity Results for the Macroeconomic Variables

Variable	VIF
INTEREST_RATE	1.594642
INFLATION_NEW	1.481506
GOVT_POLICIES	1.061619
EXCHANGE_RATE	1.088252
DISPOSABLE_INCOME	1.220328

Table 5: Multicollinearity Results for the Macroeconomic Variables Sensex

Variable	VIF
INTEREST_RATE	1.051868
INFLATION_NEW	1.576279
GOVT_POLICIES	1.523118
EXCHANGE_RATE	1.045766
DISPOSABLE_INCOME	1.058643

Auto Correlation

A number of methods have been used to test autocorrelation. The most common methods are; the Durbin-Watson statistic, Portmanteau and Lagrange Multiplier (LM). This study chose to employ Portmanteau and Lagrange Multiplier (LM) tests. In these methods, autocorrelation occurs if the P-values are more than 0.05. Results in table 6 and 7 indicate that there is no auto correlation since the p-values are less than 0.05 at lag 4 and 2 respectively.

Table 6: VEC Residual Portmanteau Tests Results for Autocorrelation

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	2.694828	Prob. F(2,111)	0.0720
Obs*R-squared	5.510533	Prob. Chi-Square(2)	0.0636

Autocorrelation, also known as serial correlation, is the correlation of a signal with a delayed copy of itself based on

the delay. Actually, it is the similarity between observations based on the time delay between them.

H0: no serial correlations (Nifty)

Interpretation: Null hypothesis is not rejected because P value is >.05 so it indicates that there is no problem of serial correlation.

Table 7: VEC Residual Portmanteau Tests Results for Autocorrelation (Sensex)

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.992076	Prob. F(2,111)	0.3741
Obs*R-squared	2.089798	Prob. Chi-Square(2)	0.3517

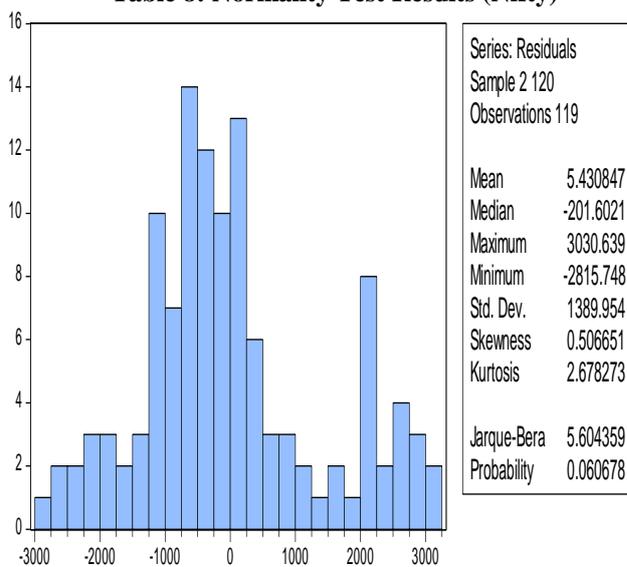
H0: There is no serial correlation

Interpretation: Null hypothesis is not rejected because P value is >.05 so it indicates that there is no problem of serial correlation.

Normality Test

A normality check is completed to determine whether or not the pattern records has been acquired from a normally distributed population. The test sought to test the normality of the data that is crucial specifically while parametric checks like correlation and regression evaluation are used. To test whether the data follow the normal probability distribution, Shapiro Wilk take a look at for normality turned into accomplished. The test has a null hypothesis that the data is normally distributed. The test statistics for normality distribution of every variable are shown in table 8 and 9. From the results, the normality measures did not suggest extreme departure from normality assumption due to the fact, table 8 and 9 suggests that the skewness of all variables had been under one and hence in the 0 range at the same time as the Kurtosis was within the range of 3. And jarque-bera value should not be less than 0.05.

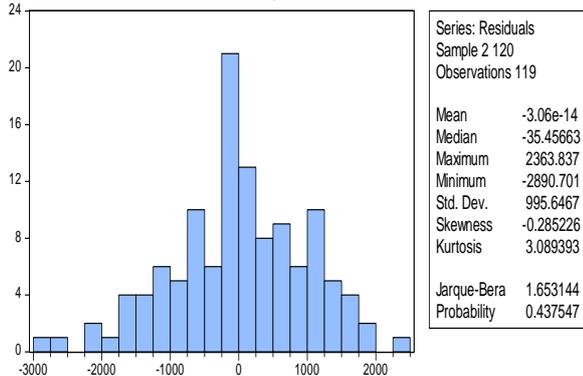
Table 8: Normality Test Results (Nifty)



H0: Residuals are normally distributed

Interpretation Residuals are normally distributes so we will not reject the null hypothesis because jarque-bera value (5.604359) is >.05 and even P value (0.06) is .05 that shows that's residuals are normally distributed.

Table 9: Normality Test Results (senssex)



H0: Residuals are normally distributed

Interpretation: Null hypothesis cannot be rejected because Jarque-Bera value (1.653144) is above 0.05 and p value (0.437547) is >0.05 that shows that residuals are normally distributed.

Heteroskedasticity

Heterodisclasticity is a difficult word to pronounce, but it doesn't have to be a difficult notion to comprehend. In short, heteroskedasticity refers to the circumstance where a variable's variability is not equal in a second variable's range of values predicting it.

H0: There is no heteroskedasticity

Table 10: Heteroskedasticity (Nifty)

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.504788	Prob. F(5,113)	0.7721
Obs*R-squared	2.599882	Prob. Chi-Square(5)	0.7614
Scaled explained SS	2.902522	Prob. Chi-Square(5)	0.7150

Table 11: Heteroskedasticity (Senssex)

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.301779	Prob. F(5,113)	0.9109
Obs*R-squared	1.568076	Prob. Chi-Square(5)	0.9051
Scaled explained SS	1.477135	Prob. Chi-Square(5)	0.9157

Interpretation: Null hypothesis cannot be rejected because P value is >.05 so it indicates that there is no problem of heteroskedasticity.

Multiple Regression

H1: There is a significant impact of selected macroeconomic variables on stock prices at the NSE.

Table: 12 Multiple Regression with NSE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	59265.94	6462.463	9.170798	0.0000
DISPOSABLE_INCOME	0.001072	7.13E-05	15.04965	0.0000
GOVT_POLICIES	-490.2396	86.39349	-5.674497	0.0000
INFLATION_RATE	-84.05487	26.75732	-3.141378	0.0021
EXCHANGE_RATE	-137.6792	19.35593	-7.113025	0.0000
INTEREST_RATE	-4730.986	556.6209	-8.499476	0.0000
R-squared	0.880722	Mean dependent var	5540.394	
Adjusted R-squared	0.875491	S.D. dependent var	1532.885	
S.E. of regression	540.8914	Akaike info criterion	15.47302	

Sum squared resid	33352243	Schwarz criterion	15.61240
Log likelihood	-922.3813	Hannan-Quinn criter.	15.52962
F-statistic	168.3507	Durbin-Watson stat	0.688879
Prob(F-statistic)	0.000000		

Interpretation

The hypothesis has been accepted because (p <0.05, 0.000) in this study there is the selected macroeconomic variables (disposable income. Govt policies, exchange rate, interest rate and inflation rate have influence on the on the stock prices at the NSE.

H2: There is a significant impact of selected macroeconomic variables on stock prices at the BSE.

Table: 13 Multiple Regression with BSE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	192014.9	22196.17	8.650812	0.0000
DISPOSABLE_INCOME	0.003457	0.000245	14.12423	0.0000
GOVT_POLICIES	-1578.917	296.7297	-5.321061	0.0000
INFLATION_RATE	-322.8496	91.90153	-3.512995	0.0006
INTEREST_RATE	-15289.62	1911.787	-7.997552	0.0000
EXCHANGE_RATE	-445.3126	66.48047	-6.698398	0.0000
R-squared	0.868786	Mean dependent var	18482.34	
Adjusted R-squared	0.863031	S.D. dependent var	5019.722	
S.E. of regression	1857.762	Akaike info criterion	17.94084	
Sum squared resid	3.93E+08	Schwarz criterion	18.08021	
Log likelihood	-1070.450	Hannan-Quinn criter.	17.99744	
F-statistic	150.9625	Durbin-Watson stat	0.625191	
Prob(F-statistic)	0.000000			

Interpretation

The hypothesis has been accepted because (p <0.05, 0.000) in this study there is the selected macroeconomic variables (disposable income. Govt policies, exchange rate, interest rate and inflation rate have influence on the on the stock prices at the BSE.

Granger Causality Analysis

Table-14: Granger Causality Analysis (Nifty)

Null Hypothesis	Obs	F-Statistic	Prob	Result
Disposable Income does not Granger Cause stock prices.	119	5.87452	0.0169	Rejected
Stock prices do not Granger Cause Disposable Income.		0.26585	0.6071	Not Rejected
Govt Policies do not Granger Cause stock prices.	119	2.74670	0.1002	Not Rejected
Stock prices do not Granger Cause Govt Policies.		2.34549	0.1284	Not Rejected
Interest Rate does not Granger Cause stock prices.	119	0.22952	0.6328	Not Rejected
Stock prices do not Granger Cause Interest Rate.		1.17742	0.2801	Not Rejected
Inflation rate does not Granger Cause stock prices.	119	8.74563	0.0038	Rejected
Stock prices do not Granger Cause Inflation rate.		1.18007	0.2796	Not Rejected

Exchange Rate does not Granger Cause stock prices.	119	6.14832	0.0146	Rejected
Stock prices do not Granger Cause Exchange rate.		0.75683	0.3861	Not Rejected

unidirectional causality of disposable income, inflation rate and exchange rate.

The null hypothesis indicates that stock prices (Nifty) do not create macroeconomic factors and there is no hypothesis that the macroeconomic variable does not cause Granger to trigger stock prices (Nifty), except for disposable income, inflation and stock price exchange owing to the important F-statistical ratio. Consequently, the findings of the Granger causality test are described below, a change in macroeconomic factors except for disposable income, inflation, and exchange rates have had a statistically insignificant effect on changes in share prices, while stock prices appear to be an insignificant variable explaining portion of the movements in macroeconomic factors. This indicates that at the cost of the shares there is a unidirectional causality of disposable income, inflation rate and exchange rate.

Table-15: Granger Causality Analysis (Sensex)

Null Hypothesis	Obs	F-Statistic	Prob	Result
Disposable Income does not Granger Cause stock prices.	119	5.31104	0.0230	Rejected
Stock prices do not Granger Cause Disposable Income.		0.36943	0.5445	Not Rejected
Govt Policies do not Granger Cause stock prices.	119	2.64596	0.1065	Not Rejected
Stock prices do not Granger Cause Govt Policies.		1.96291	0.1639	Not Rejected
Interest Rate does not Granger Cause stock prices.	119	0.18811	0.6653	Not Rejected
Stock prices do not Granger Cause Interest Rate.		1.11437	0.2933	Not Rejected
Inflation rate does not Granger Cause stock prices.	119	9.50555	0.0026	Rejected
Stock prices do not Granger Cause Inflation rate.		1.27836	0.2605	Not Rejected
Exchange Rate does not Granger Cause stock prices.	119	5.96915	0.0161	Rejected
Stock prices do not Granger Cause Exchange rate.		0.55883	0.4562	Not Rejected

The null hypothesis indicates that stock prices (Sensex) do not create macroeconomic factors and there is no hypothesis that the macroeconomic variable does not cause Granger to trigger stock prices (Sensex), except for disposable income, inflation and stock price exchange owing to the important F-statistical ratio. Consequently, the findings of the Granger causality test are described below, a change in macroeconomic factors except for disposable income, inflation, and exchange rates have had a statistically insignificant effect on changes in share prices, while stock prices appear to be an insignificant variable explaining portion of the movements in macroeconomic factors. This indicates that at the cost of the shares there is a

V. FINDINGS

In the first distinction, all variables are stationary. The residues are normally distributed and multicollenerity, heteroskedasticity and serial correlation are no issue. The hypothesis was accepted because there are selected macroeconomic variables (disposable income) government policies in this study ($p < 0.05, 0.000$), the exchange rate, interest rate and inflation rate influences the NSE share prices, the hypothesis was accepted because ($p < 0.05, 0.000$) selected macroeconomic variables (disposable income) are present in this study. Government policies, exchange rates, interest rates and inflation rates affect the prices of BSE stocks, the theory indicates that stock prices (Nifty) do not create macroeconomic factors and neither does the assumption that the macroeconomic variable does not cause Granger to cause share prices (Nifty) and (Sensex) with the exception of available revenue, inflation and BSE. A Change in macroeconomic factors except for disposable income Inflation and exchange rates have been statistically impacted by changes in share prices, whereas changes in stock prices also appear to be an insignificant factor explaining portion of stock market movements. The variables of macroeconomics. This indicates that at the cost of the shares there is a unidirectional causality of disposable income, inflation rate and exchange rate.

VI. CONCLUSION

The research's primary goal is to evaluate the connection between Indian stock markets ' macroeconomic factors and stock prices. The monthly information of disposable revenue, Govt, is used to justify the goal. Collected policies, inflation rate, and interest rate. The findings indicate that in the first difference the variables are stationary. The residues are normally distributed and multicollenerity and heteroskedasticity and serial correlation are no issue. Furthermore, to check the effect of chosen macroeconomic factors on Indian equity prices, the multiple regression showing these variables (available revenue, interest rate and inflation rate) affects both the NSE and the stock prices as opposed to BSE. The null theory indicates that stock prices (Nifty) do not produce macroeconomic factors, nor does the theory that the macroeconomic variable Granger does not cause stock prices (Nifty) and (Sensex), except for accessible revenue, inflation and stock price exchange owing to the important F-statistics ratio. Furthermore, the study suggests that a change in the net macroeconomic factors of disposable income, inflation, and exchange rates has had a statistically insignificant effect on changes in share prices, while a change in share prices appears to be an insignificant factor explaining portion of the movements within the variable macroeconomic structure. The study article proposes a unidirectional causality of disposable revenue, inflation rate, and share-price exchange rate.



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