



An Empirical Study on Implications and Impact of GDP on the Indian Stock Market

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Abstract

The gross domestic product is one of the key macroeconomic elements that significantly impact the movement of stock market indices. The persistent shifts that have taken place in the Indian stock market and GDP throughout the preceding decade have served as the impetus for several empirical studies. This paper aims to investigate the relationship between the Gross Domestic Product (GDP) and the stock market, as well as the impact that the GDP has on the stock market. The study is carried out with the assistance of two variables: an independent variable (GDP) and a dependent variable (stock market). Statistical methods like Karl Pearson's Correlation and the Simple Linear Regression Analysis are used to test the hypothesis. The result for the Correlation between GDP and the SENSEX is 0.909, and the Correlation between GDP and the NIFTY 50 is 0.913; both of these results indicate a significant positive relationship between the two variables. The study's findings indicate a significant relationship between India's GDP and the stock market. The regression findings have also shown that the GDP does, in fact, impact the stock market in India. These data show that any movement in the Indian stock market is reflected in the country's gross domestic product (GDP).

Keywords: Gross Domestic Product, GDP, Stock market, Sensex, Nifty 50, Correlation, Regression, Bombay Stock Exchange (BSE), National Stock Exchange (NSE)

Introduction

The stock market is often seen as a particularly accurate indicator of the state of the economy in any given nation. Finance industry experts, economists, and policymakers are interested in stock markets because of the advantages that seem to accrue to the economy via stock markets. The stock market's role in the economy is an indicator or prediction of how the economy will develop in the future. There is widespread consensus that falling stock prices point to impending economic contraction. On the other side, an increase in the prices of stocks is a reflection of the expansion of the stock.

In addition to its primary role as a central location for the exchange of shares, the stock market also plays a number of other important roles. It makes it possible for companies to get funds for their operations. It makes it possible for securities issued by a variety of companies to be sold in a broad market. People are able to put their savings into several types of investments. It is also beneficial to the development of the firm and the distribution of profits. Companies need to keep stronger management records to improve their chances of becoming listed on the stock market. This sets the path for stricter standards and more effective corporate governance. The



stock market creates chances for investors with less capital to participate in large companies. It opens up more opportunities for financial investment. It provides higher liquidity, and it makes it easier for investors to transfer from investing in one investment to another. Governments may raise money by selling bonds to markets on the stock market. As a consequence, the stock market's influence on the economy is complicated and wide-ranging. Stock markets provide a variety of services, which individual investors, corporations, and governments may all use to their advantage. Researchers are drawn to the stock markets by all of these characteristics, which motivates them to discover more about them.

There has been a significant growth in stock market activity during the last several decades. Consequently, it is becoming increasingly essential to comprehend the function that stock markets perform in the economy. The stock market makes it easier for individuals and funds to move their money around in the economy. Allocating funds effectively is necessary in order for economies to make full use of their resources. It collects the savings of individuals in the household sector and then transfers them to the government and the business sector. This gives the government and the business sector the ability to obtain long term capital for financing expansions as well as new initiatives. As a consequence, the stock market is an essential component of the economy. As a result, it is considered a barometer of the firm's direction (Gupta 2010).

Stock Market Movement

Stock market performance is often cited as a proxy indicator of a country's overall financial health. The fluctuations of the stock market are a reflection of the status of the national economy. In this day of globalization, it is quite difficult to understand the fundamental reasons behind stock market fluctuations. There are many different domestic and international variables that have an impact on the stock market. An effective technique to monitor the behavior of the stock market is by keeping a watch on how the stock index changes. Stock index fluctuation reflects the general reflection of the stock market.

A stock index or a stock market index may be used to calculate the worth of a certain stock market section. The prices of certain equities are used in the calculation of an index of the stock market (usually a weighted average). As a technique for describing the market, investors and those in financial management make use of it. It is possible to describe it as the overall value that is created when numerous stocks or other investment instruments are combined together. Indexes of the market are used to monitor changes in the market over a period of time since they are representative of the whole stock market. The indices of various nations' stock markets are good indicators of the economic market of such countries. Stakeholders, financial experts, investors, and policy makers all keep an eye on the stock market index and pay attention to any changes it may undergo. Having a solid grasp of the complex relationships that exist between the movement of the stock market and the many macroeconomic variables would be advantageous to your circumstance.

The stock market's fluctuations are thought to have an effect on investors' confidence, the accumulation of capital, global trade, and therefore, total economic development. The macroeconomic environment often affects how the financial markets function and investment

opportunities. Understanding which macroeconomic variables have a greater result on the stock market is crucial because of this. As a result, the investors will be able to comprehend the options for choosing stocks with more clarity.

Stock Market Development

The stock market's development is an important component of the nation's economy's growth (Demirguc & Levine, 1996; Levine & Zervos, 1999). Even while individuals researching the financial markets often use the term "stock market development," it is difficult to define it. The most important indices of stock market development have been identified to be the market capitalization to GDP ratio, the total value of shares traded to GDP ratio, or the total value of shares traded to market capitalization (Demirguc and Levin, 1996; Seetanah and Ramessu, 2008). The idea of stock market capitalization is used in the research being given here as an indicator of stock market development. The stock market capitalization statistic seeks to measure the stock market's ability to direct resources into investments. Additionally, it takes into account its ability to disperse the risks assumed by investors. Simply divide the market value of all listed shares by GDP to arrive at this figure. The results of this research suggest that market capitalization stated as a percentage of GDP serves as an example of the development of the stock market.

The academics are using this indicator as a gauge for the development of the stock market for a number of different reasons. In the first place, it gives an indication of the market's size, which in turn gives an indication of the market's capacity to raise capital and manage risk. Second, it's widely acknowledged that a company's market capitalization also offers an indication as to its prior performance, accumulated earnings, and potential for future growth. A higher ratio indicates the stock market's growth potential as well as development (Levine and Zervos, 1996; Rajan and Zingales, 2003). Since doing so will reveal the set of economic variables that have an impact on the development of the stock market, it is crucial to explore the link between macroeconomic factors and the development of the stock market. The data that the global bank provides for each and every nation includes the MCAP data, which is freely accessible.

According to many empirical studies, stock markets promote economic growth. The focus of recent research has shifted to the variables that have shaped the stock market's evolution during the last ten years. If one had a greater understanding of the factors that contributed to the growth of stock markets, it would be easier to appreciate the link between finance and economic development. It also helps people who make policy, which has implications for policy since it helps those who make policy.

Understanding the variables influencing the stock market's development is challenging. To understand the effect that economic variables have on the development of the stock market, it would be advantageous to carry out thorough research.

Economic Growth Rate (GDP)

An increase in the volume of products and services produced by an economy during a certain period is called economic growth. It is common practice to see economic growth as an essential driving force that results in an improved level of life. Growth in both the accumulation and distribution of capital is a necessary condition for sustained economic expansion. The

distribution of the economy's available capital is what drives the progression of technology. Financial intermediaries are the ones who are responsible for the distribution of money from the sector with a surplus to the sector with a deficit (Levine, Loayza & Beck, 2000).

One of the main indicators used to assess a country's present level of financial health is the gross domestic product (GDP). A nation's gross domestic product (GDP) is calculated as the market value of all the finished products and services generated within a certain time period. The Gross Domestic Product is a reliable indicator of a country's standard of living. The method used to calculate a country's GDP is uniform and applies to all nations. When comparing nations, the Gross Domestic Product is a helpful indicator.

An rise in a country's "Gross Domestic Product (GDP)" is indicative of the economic growth of that nation. It indicates that the country's national production or national income is increasing as time goes on. The increase in production will lead to an improvement in people's overall level of life. The "Gross Domestic Product (GDP) is a measure of the total value of production in a particular period of time", most often a year, and is calculated using a formula that consists of four individual elements.

The following formula is often used in order to calculate GDP:

$$Y = \text{Cons} + \text{Invt} + \text{GovtExp} + (X - M)$$

where,

"Y = Gross domestic product

Cons = total consumption by consumers

Invt = total investment (spending on goods and services) by businesses

Govt = total spending by government (federal, state, and local)

(X - M) = net exports (exports - imports)"

GDP is an indicator of a nation's overall economic health and has an impact on all aspects of economic activity. The fact that investors see this as a good indicator suggests that the economy is doing well overall. Investors are pushed to put more money into a nation's stock market by a faster rate of economic growth in that country. According to the findings of this research, yearly percentage change in GDP is used to represent economic growth.

The direction that GDP is heading might have an effect on the stock market. Therefore, it would be economic for investors and policy makers to have information on the interplay between "the growth of the economy and the stock market".

The rate at which a nation's gross domestic product (GDP) increases from one year to the next is referred to as the economic growth rate. It gives an insight about the trajectory of economic growth in a nation. Even if economic growth is indicative of a generally favorable trend, a slowdown in the growth rate suggests that economic activity is on the decline.

Implications and Impact of GDP on Indian Stock Market

During the last few years, there has been a lot of discussion among practitioners and scholars on the link between "the development of the stock market and GDP". While policymakers are interested in any indicator that might impact economic development, many academics and investors have shown a great desire to find factors that can assist in the forecast of stock prices. The ability of investors to use or rely on the market of macroeconomic news to predict market

direction or the ability of policymakers to use stock market growth to forecast market development must be thoroughly investigated.

The term “Gross Domestic Product,” more often abbreviated as “GDP,” describes the total amount of goods and services generated by a nation during a certain period of time. One of the most important ideas for the government and other regulatory agencies to keep in mind when making plans and formulating policies is the gross domestic product (GDP). If we look at GDP, we may be able to tell if the economy is experiencing a recession, a depression, or a boom. The “Gross Domestic Product (GDP)” of a nation is a comprehensive indication of its national revenue.

On the other hand, a stock market may also be referred to as a stock exchange or an equity market. All of these words are synonyms to one another. One of the most significant factors that affects the nation’s total economy is the stock market. It is a kind of centralized market where sellers sell shares and buyers buy shares, with the price being decided by the supply and demand for shares. The SEBI has control over the Indian stock market. The two stock exchanges regarded as the most significant in India are the “Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE)”. The NSE is by far India’s most significant exchange, even if the BSE may be the oldest stock market in Asia.

The Gross Domestic Product is often considered to be the most significant economic indicator. Economists and financial professionals have noticed that the position of the stock market responds proportionally to changes in the GDP, whether such changes are positive or negative. Now, the question that has to be asked is, “Is GDP a good indication of the health of the stock market?”

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For a very long time, the solution to this issue has been the focus of intense discussion. Some people think that the state of the stock market and the gross domestic product are intimately linked. They come to the conclusion that traders have a greater level of confidence in investing when the economy is in a better position (i.e., when GDP and profits are both higher). However, there are some financial experts who believe that a stable economy will never be attainable, and while this is one factor that contributes to the industry’s ongoing uncertainty, it is not the only one. Despite the fact that the GDP seems to be growing, they believe that there will always be something that causes an upheaval in the status quo. GDP is only one kind of economic indicator that may be used. There are other aspects that need your consideration as well. Looking just at GDP is not enough to accurately forecast what will happen with the stock market.

Many studies have been conducted in the past to attempt to figure out what kind of relationship there is between “broad macroeconomic prices and stock market values”. The findings of this research indicate that there is a significant relationship between stock prices and macroeconomic conditions. Numerous investigations came to the conclusion that there is no research connecting the two. As a direct result, research will be conducted to ascertain the impact of GDP on the stock market as well as the relationship between GDP and stock market participants’ behavior.

Literature Review

Based on correlation results as well as an influence of GDP on stock market movement in India, researcher Vithalbhai (2020) discovered that there is a significant relationship between GDP and stock market movement in India based on regression results in their study “Analysis of Impact of Gross Domestic Products (GDP) on Stock Market Movement in India.” This study shows that any change in the Indian stock market is reflected in the GDP, as shown by the finding. The researchers provide their impact on the primary result of the study, which is that India’s stock market is influenced by GDP, in addition to other macroeconomic factors. As a consequence of this, other academics now have a wider scope within which to continue their research by adding a greater variety of macroeconomic and microeconomic factors (Vithalbhai, 2020).

Researcher Reddy (2012) highlighted in his research work titled “Impact of inflation and GDP on stock market returns in India” that the market responds differently to a range of situations. These factors include economic, political, and socio-cultural issues. There are a lot of factors that may have an impact, either favorably or adversely, on the stock values of the companies that have been described, and these factors can take place inside or outside of the economic system. The impact that “Real Gross Domestic Product (RGDP), Interest Rate (INT), and Inflation Rate (INF) had on the stock prices of listed companies” between the years 1997 and 2009 is analyzed here. Within the framework of the model, the Stock Market Value Index served as a representation of stock prices. According to the findings of a regression study, the variables that explain the variation in stock prices were responsible for 95.6 percent of that fluctuation. The increased RDGP has a positive affect, and the decreased interest and inflation rates have led to an increase in stock values. (Reddy, 2012).

A study of interlink age between “stock market and GDP growth” is the topic that the researcher Duda (2020) investigates in his work, which is named “A study of interlink age between stock market and GDP growth.” The data indicate that economic expansion and stock market indices have a tenuous link, almost to the point where there is no connection at all. It demonstrates that the stock market cannot be utilized on its own to conduct the analysis of the relationship; other features, such as market capitalization and liquidity, must also be examined. The assumption that the size of a securities exchange isn’t essential for monetary growth should be treated with some degree of skepticism since multi-co linearity appeared in the data that was utilized by many analysts for research that were quite similar to one another (Duda, 2020).

On the other hand, a number of studies (Schwert, 1989), (Fung, 1990), (Richards, 1996), and (Allen, 1997) came to the conclusion that “the stock market has in the past communicated incorrect information on the economy and hence should not be relied on as an economic indicator”. It’s possible that the stock market crash was an instance where stock prices incorrectly predicted the direction of the economy: instead of predicting into a recession, as many people thought it would, the economy grew for many years after the catastrophe.

Problem Statement

There is a strong correlation between a nation’s stock market and its GDP in most countries, and India is not an exception to this rule. This is something that has been verified by a great number of industry specialists; however, there are some studies that suggest that the stock market and

GDP are not directly related, and that when evaluating their relationship, a variety of other factors need to be taken into consideration. A recent study found that there was a strong correlation between India's "Gross Domestic Product (GDP)" and the success of the stock market many years ago. On the other hand, there is less and less evidence to support this link over the past 18 years. In the most recent five to seven years, the Correlation has become nearly statistically insignificant. In addition, the GDP growth rate and the Nifty 50 index both moved in opposite directions in 2019, a trend that continued through 2020 and 2021. A recent study found that there was a strong correlation between India's "gross domestic product (GDP)" and the success of the stock market many years ago. On the other hand, there is less and less evidence to support this link over the past 18 years. In the most recent five to seven years, the Correlation has become nearly statistically insignificant. In addition, the GDP growth rate and the Nifty 50 index moved in opposite directions in 2019, and it is anticipated that this trend will continue in both 2020 and 2021. This is due to a number of factors, including a forward-looking stock market, high liquidity, a lack of investment opportunities other than equity, foreign fund flows, and improved company profitability. These factors are expected to continue to play a role in the continuation of this trend.

Objectives of the Study

1. In order to comprehend the relationship between GDP and stock market values.
2. To determine how much of an impact the GDP has on stock prices.
3. In order to determine whether or not GDP is a reliable indicator of stock prices.

Methodology of the Study

The research uses secondary sources of data as its foundation. The data included in the investigation came from a wide variety of sources, including websites, magazines, and online portals. From 2005 through 2021, annual data on the GDP, the BSE SENSEX index, and the NSE NIFTY 50 index were gathered for this study. The "World Bank, the Bombay Stock Exchange, and the National Stock Exchange" websites were used for the data collecting procedure, and the probability sampling methodology was used. For the goal of performing a data analysis in this study, statistical methods such "Karl Pearson's Correlation and the Simple Regression model" were used.

Hypothesis of the Study

A. Hypothesis 1:

H_0 = "There is no relationship between GDP and Stock market".

H_1 ="There is a relationship between GDP and Stock market".

B. Hypothesis 2:

H_0 ="There is no significant impact of GDP on Stock market".

H_1 = "There is significant impact of GDP on Stock market".

Results & Discussion

Table 1: Data of GDP, SENSEX & NIFTY_50 from 2005-2021

Year	GDP	SENSEX	NIFTY_50
2005	5480380	9397.93	2836.55
2006	5914614	13786.91	3966.40

2007	6391375	20286.99	6138.60
2008	6881007	9647.31	2959.15
2009	7093403	17464.81	5201.05
2010	7651078	20509.09	6134.50
2011	8301235	15454.92	4624.30
2012	8736329	19426.71	5905.10
2013	9213017	21170.68	6304.00
2014	9801370	27499.42	8282.70
2015	10527674	26117.54	7946.35
2016	11369493	26626.46	8185.80
2017	12308193	34056.83	10530.70
2018	13144582	36068.33	10862.55
2019	14003316	41253.74	12168.45
2020	14569268	47751.33	13981.75
2021	13512740	58253.82	17354.05

➤ **Karl Pearson’s Correlation Analysis**

This section presents the findings and a discussion on the correlation test performed between GDP and the Sensex from 2005 to 2021.

Table 2: Correlations between GDP & Sensex

		GDP	Sensex
GDP	Pearson Correlation	1	.909**
	Sig. (2-tailed)		<.001
	N	17	17
Sensex	Pearson Correlation	.909**	1
	Sig. (2-tailed)	<.001	
	N	17	17

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

The relation coefficient between GDP and SENSEX was found to be 0.909, demonstrating a significant positive relation between the two variables. As a result of the interaction between the two, if the GDP increases, so will our SENSEX.

It is clear that we cannot accept the null hypothesis since the p-value in this instance is 0.001, which is below the 5% significant threshold (H0). Because of this, we may say that there is a statistically significant correlation between the GDP and the Sensex.

The results of the correlation test between the GDP and the Nifty 50 from 2005 to 2021 are shown in this section, along with a commentary of the results.

Table 3: Correlations between GDP & Nifty 50

		GDP	Nifty_50
GDP	Pearson Correlation	1	.913**
	Sig. (2-tailed)		<.001



	N	17	17
Nifty_50	Pearson Correlation	.913**	1
	Sig. (2-tailed)	<.001	
	N	17	17

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

The GDP-NIFTY 50 correlation coefficient was calculated to be 0.913, indicating a very significant positive correlation between these two variables. In result of this, we are able to predict that when GDP rises, so too would our NIFTY 50. Our p-value is 0.001, which is far lower than the 5% threshold of significance, making it clear that we cannot accept the null hypothesis (H0). We are able to conclude that there is a statistically significant correlation between GDP and the Nifty 50 as a result.

➤ **Simple Linear Regression Model:**

This section presents the findings and a discussion on the regression analysis performed between GDP and the Sensex from 2005-2021.

Table 4: Model Summary of GDP & Sensex

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.909 ^a	0.827	0.815	5807.46
a. Predictors: (Constant), GDP				

Table 5: ANOVA^a table of GDP & Sensex

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2414259150.331	1	2414259150.331	71.583	<.001 ^b
	Residual	505898730.647	15	33726582.043		
	Total	2920157880.978	16			
a. Dependent Variable: Sensex						
b. Predictors: (Constant), GDP						

Table 6: Coefficients^a of GDP & Sensex

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-13546.156	4900.180		-2.764	.014
	GDP	.004	.000	.909	8.461	<.001
a. Dependent Variable: Sensex						



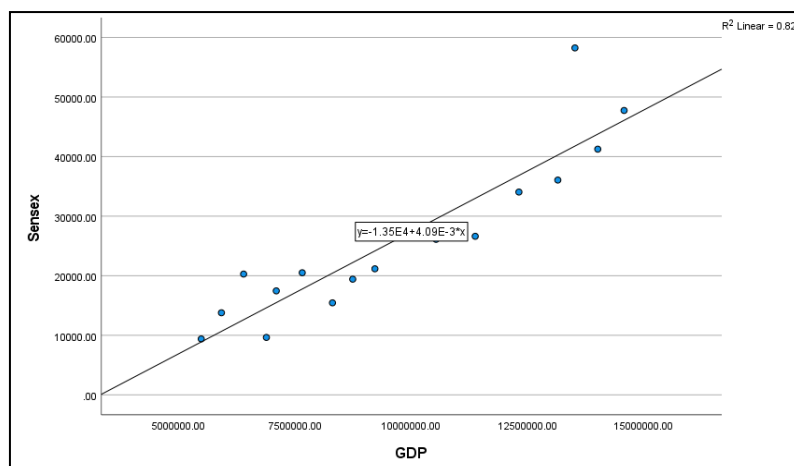


Figure 1: Regression Chart of GDP & Sensex

Table 7: Summary Output of GDP & Sensex

Regression weights	R ²	Beta Coefficient	F	p- value	Regression equation	H0
GDP → Sensex	.827	.004	71.583	.001	y= -1.35E4 + 4.09E-3x	Rejected

According to the R² value in this situation, the independent variable accounts for 82.7% of the variance in the dependent variable (Sensex) (GDP). This would demonstrate that the model is capable of identifying the kind of relationship that exists between the two variables with accuracy. We calculated the F (1, 15) = 71.583 from the ANOVA table, and the resulting p-value was 0.001. The null hypothesis (H0) cannot be accepted at a level of significance of 5%, as can be shown from the fact that the p value of 0.001 is lower than the significance threshold of 0.05. As an impact, we may draw the conclusion that GDP has a strong bearing on the Sensex index. This section presents the findings and a discussion of the regression analysis performed between 2005 and 2021 on the Nifty 50 index.

Table 8: Model Summary of GDP & Nifty 50

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.913 ^a	.834	.823	1687.50381

a. Predictors: (Constant), GDP

Table 9: ANOVA table of GDP & Nifty 50

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	214034013.068	1	214034013.068	75.161	<.001 ^b
	Residual	42715036.442	15	2847669.096		
	Total	256749049.510	16			

a. Dependent Variable: Nifty_50

b. Predictors: (Constant), GDP

Table 10: Coefficients^a of GDP & Nifty 50

Model	Unstandardized Coefficients	Standardized	t	Sig.
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				Coefficients		
		B	Std. Error	Beta		
1	(Constant)	-3977.370	1423.871			-2.793 .014
	GDP	.001	.000	.913		8.670 <.001

a Dependent Variable: Nifty_50

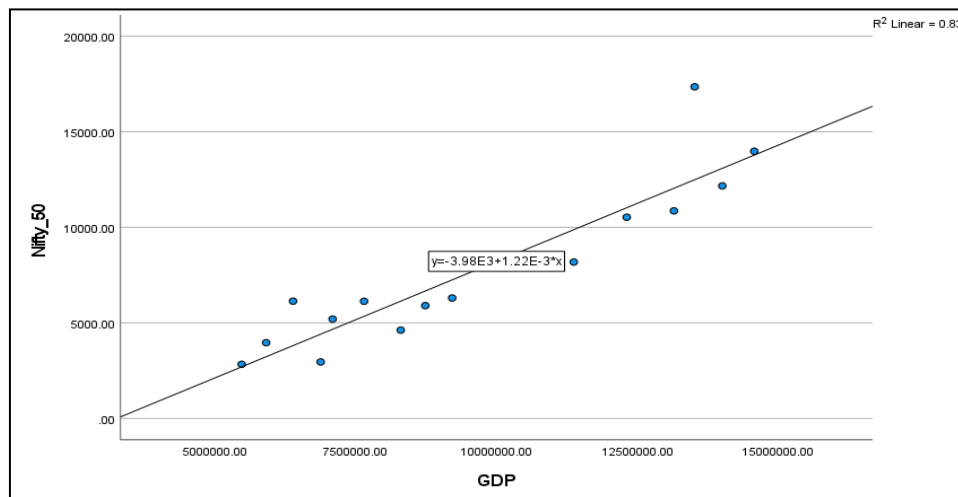


Figure 2: Regression Chart of GDP & Nifty 50

Table 11: Summary Output of GDP & Nifty 50

Regression weights	R ²	Beta Coefficient	F	p-value	Regression equation	H0
GDP → Nifty 50	.834	.001	75.161	.001	y = -3.98E3 + 1.22E-3x	Rejected

The value of R Square in this context indicates that the independent variable is responsible for explaining 83.4% of the “variance in the dependent variable (Sensex)” (GDP). It would appear that the model is able to identify the link that exists between the two variables. The table for the ANOVA gave us the result $F(1,15) = 75.161$, and the p value was 0.001. It is obvious that we cannot accept the null hypothesis (H0) at a significance level of 5% since the p-value of 0.001 is lower than the critical value of 0.05. As an impact, we may draw the conclusion that GDP has a strong bearing on the Nifty 50 index.

Research Findings

- The value of the Correlation between GDP and SENSEX has been discovered to be 0.909, which indicates that these two variables have a significant positive link with one another. As a result of the correlation effect, we are able to conclude that if the GDP rises, then our SENSEX will also increase.
- It has been shown that the GDP and the NIFTY 50 have a significant positive relationship. Since these two variables have a computed correlation of 0.913, there is a high correlation between them. As a result of the Correlation, our NIFTY 50 also rises in response to an increase in GDP.
- The p-value in the ANOVA table is less than 0.05 at the level of significance of 5%, according to the regression analysis. This finding is significant. As a result, it is impossible to accept the hypothesis of no impact (H0). As a result, we conclude the conclusion that the GDP has a significant influence on the BSE SENSEX index.



- The p-value in the ANOVA table is less than 0.05 at the level of significance of 5%, according to the regression analysis. This finding is significant. The hypothesis of no effect (H₀) cannot be maintained as a result of this. Therefore, we draw the conclusion that the GDP also significantly affects the NSE NIFTY 50 index.

Limitations of the Study

Only the GDP itself was taken into impact in the study, since it was all that was needed to determine how the GDP affects the stock market. On the other hand, macroeconomic factors such as inflation, unemployment, currency rate, interest rate, etc. may all have an equally significant impact on the price and behavior of the stock market. It will be more suitable to investigate other macroeconomic factors for future research in order to have a better understanding of the real situation on the stock market.

Conclusion

The goal of the research was to look at the relationship between GDP and the stock market as well as the impact of GDP on the Indian stock market. It would seem that a range of macroeconomic and microeconomic factors influence the stock market's behavior. However, in this specific study, the BSE Sensex and the Nifty 50 Index were employed as the dependent variables, while the Gross Domestic Product served as the independent variable. Thus, based on the results of the Correlation, we may conclude the conclusion that there is a significant relation between the GDP and stock market of India. Additionally, based on the regression's findings, we may draw the conclusion that India's stock market is impacted by its GDP. The results of this study demonstrate that the GDP changes in finding to changes in the Indian stock market.

As is well known, the performance of companies that are traded publicly has a significant impact on the stock market. However, both domestic and economic conditions have a significant impact on how much people want a company's products and services, which has an impact on the company's development and profitability. Given that the GDP and the stock market are going in the same general direction, we may conclude from the analysis of the Correlation between GDP and the stock market that GDP is a credible indicator of the direction of the stock market.

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