AFFILIATION AMONGST MACRO ECONOMIC INDICATORS AND NATIONAL STOCK EXCHANE – INDIA

[1]Mrs. P. Revathi, [2]Dr. S. Allimuthu

[1]Research Scholar, [2]Associate Professor
Department of Management Studies
GRG School of Business, PSGR Krishnammal College for Women,
Coimbatore.

Abstract- **This study is focused on understanding the impact of the growth of macroeconomic indicator on the Indian stock market benchmark index NIFTY 50. The aim of this paper is to analyze the growth of GDP that affects NIFTY in capital market development. The study uses secondary data collected from official websites of Indian government and NSE. Statistical tools like break point analysis, multi break point analysis, unit root test and regression are been used to analyze the data for its stationarity and to find out the relation. The empirical evidence suggests that there is a positive relation between GDP and the Nifty index. A growing economy typically indicates increased business activity, higher corporate earnings, and improved investor sentiment, which tend to drive stock prices higher. As GDP expands, companies generally experiencehigher revenues and profitability, leading to an increased demand for their stocks. it is important to note that the relationship between GDP and the Nifty index is not always linear and can be influenced by various other factors.**

INTRODUCTION:

The study focuses on the relationship between capital market development and economic growth. The importance of capital market development in the context of India, a quickly developing economy, cannot be stressed. In recent decades, the nation has made significant progress, with noteworthy developments in industries including manufacturing, services, and information technology. However, attaining long-term, inclusive economic growth continues to be a major obstacle. In light of this, understanding the connection between India's capital market expansion and economic growth acquires paramount significance. The country's capitalist system is supported by the capital market. The Securities and Exchange Board of India (SEBI), along with the Reserve Bank of India are the two regulatory authorities for Indian securities market, to safeguard the interest of the investors and improve the microstructure of capital markets in India. One of the strongest forces driving economic growth and wealth creation, the capital markets are one of the most important components of an economy. The access to foreign capital for domestic industry is being provided by the developed capital market. This paper is based on the capital market development and economic growth. It provides opportunities for companies to source funds needed for long term investment purposes. The findings of this research are expected to contribute to the existing body of knowledge by enriching our understanding of the specific mechanisms through which capital market development influences economic growth in India. In the subsequent sections, this project will develope into a comprehensive review of relevant literature, followed by an empirical analysis of key economic indicators to explore the relationship between capital market development and economic growth in India.

REVIEW OF LITERATURE:

- This study examines and tests the effects of capital market growth on the per-capita GDP growth. The results highlight important concerns regarding the market's size, the actions and attempts made to develop the capital market, and their effects on how well the market works and how effective it is at promoting per-capita GDP growth.(Abdulaziz Hamad Algaeed, 2018)
- India will need to pay particular attention to a number of elements to increase its resistance to shocks, including changes in the open trade environment, banking system reforms, the strength of financial institutions, and the regulation of the financial sector. **(**Nyamwero Bwire Nyamwero, Nalsar University of Law, 2022)
- This study employed annual time series data to examine the relationship between Nigeria's shadow economy, financial market inclusion, and economic growth over the short- and long- terms. The short-run results, however, demonstrate that only one prior lagged value of the shadow market statistically accounts for the growth of the financial market inclusion in Nigeria. (Bernhard O. Ishioro, 2017)
- The paper investigates whether Granger causal relationships exist between bond market development, stock market development, economic growth and two other macroeconomic variables, namely, inflation rate and real interest rate. (Rudra P. Pradhan, Mak B. Arvin, Neville R. Norman, Sahar Bahmani, 2020)
- This study looked at how Nigeria's capital market affected economic development and growth. Data were gathered from reports from the Security Exchange Commission, the Nigerian Stock Exchange Review Reports, and the Central Bank of Nigeria Statistical Bulletin, respectively. The study makes several recommendations, including that the government take action to dispel the buying and holding securities syndrome in investors' minds, increase the number of investment instruments available on the market, increase the number of fair transactions, and provide basic infrastructure.(Sajuyigbe A.S, 2012)
- The author examines the effects of financial intermediation and worker remittances on economic growth within a theoretical framework. The empirical research shows that financial intermediation tends to improve the responsiveness of growth to

remittances after controlling for fixed time and country effects, taking into account the impact of long-run investment and demographic variables.(B. Gabriela Mundaca, 2009)

- This study shows that the link between stock market development and economic growth, accounting for the impact of the banking system and stock market volatility, using time series methods and data from five industrialised economies.(Philip Arestis, Panicos O. Demetriades and Kul B. Luintel, 2009)
- This study employed annual time series data to examine the relationship between Nigeria's shadow economy, financial market inclusion, and economic growth over the short- and long- terms. Unit root and cointegration tests were added to the simple Ordinary Least Squares (OLS) regression and the Error Correction Mechanism (ECM). (Bernhard O. Ishioro, 2022)
- This study offers proof of the significance of financial development in predicting economic growth in low- and middle-income nations divided into geographical zones. In order to examine which proxy measures of financial development are most crucial in accounting for economic growth. In developing nations, financial development and economic growth are found to be positively correlated. (M. Kabir Hassan, 2014)
- In this study they represents the economy how reflects in the human life. The capacity to live comfortably is one of the most crucial characteristics of human growth. here nations are all distinguished by rapid and sustained economic growth, low unemployment rates, rising incomes, and increased consumption. (lkhom Shapirov, 2015)
- The purpose of this paper is to contribute to empirical evidence by recognizing the importance of stock markets in the financial system and consequently its causality to economic growth and vice versa. (Saganga Mussa Kapaya, 2020)
- This study uses a panel dataset of 26 European Union nations from 1990 to 2016 to investigate the relationship between financial development and economic growth in the wake of the recent financial crisis. According to the findings, financial development encouraged economic growth prior to the crisis but hampered it thereafter. (Dimitrios Asteriou, 2019)
- According to this journal In terms of bank-based and market-based financial structures, the article empirically investigates the dynamic relationship between financial growth and economic development in Australia The study offers empirical proof of the financial market's causal influence on the expansion of the Australian economy. (James B Ang,Nanyang, 2004)
- In this study the relationship between stock market development and economic growth is revisited in this study. This study discovers a long-term relationship between stock market development and economic growth using the bound test for co-integration. (Mohammad Enamul Hoque, 2017)
- To examine aggregate data for growth indicators and capital market indicators, we employed a structural dynamic model. It is asserted that large, liquid and efficient stocks markets can ease savings mobilization. The paper recommends that stock market should be made attractive to foreign economies, although it can also evidence for capital market development will helps economy. (Ologunwa, O. P. and O. V. Sadibo, 2016)

Statement of the problem:

The extent to which capital market development promotes economic growth may depend on variety of factors. This study focuses on influence of Indian Economic development (Real GDP) influence on benchmark index (Nifty50).

Objectives of the Study:

- To analyze the impact of macroeconomic indicator on Nifty 50 Index
- To find out the capital market development in mobilising the savings and making them available to the enterprising investors.
- To study on the initiatives taken in capital market in support of economic growth.
- To analyse whether safety, income, and capital gains are the big three objectives of investing.
- To analyse the growth of equity investments in capital market.

Scope of the Study:

This study mainly concentrates on the determination of whether the growth of the macroeconomic indicator has an effect on the expansion of our capital market. In order to identify any possible linkages, correlations, or causal relationships between the capital market and economic growth, the research tries to investigate this relationship. The study aims to forecast and comprehend the nature of the relationship between the capital market and economic growth by examining a number of variables, including stock market performance, investment activity, and market liquidity.

Research Methodology:

This paper involves quantitative research type and descriptive research design, using secondary sources of data collected from official websites of Reserve bank of India and NSE. A purposive sampling method is used for analysis. Research tools such as unit root test and regression has been used to analyze the data and present the findings.

Sampling Technique and size:

Purposive sampling technique is been used in this study. Selecting one variable amongst various macroeconomic indicators and choosing one benchmark index from various stock market indices. In this study we have selected Gross Domestic Product (GDP) to represent macroeconomic indicators as independent variable and Nifty 50 Index of NSE from various indices as dependent variable. The period taken for analysing the impact of GDP on Nifty 50 index is FY 2011-2012 to FY 2022-23

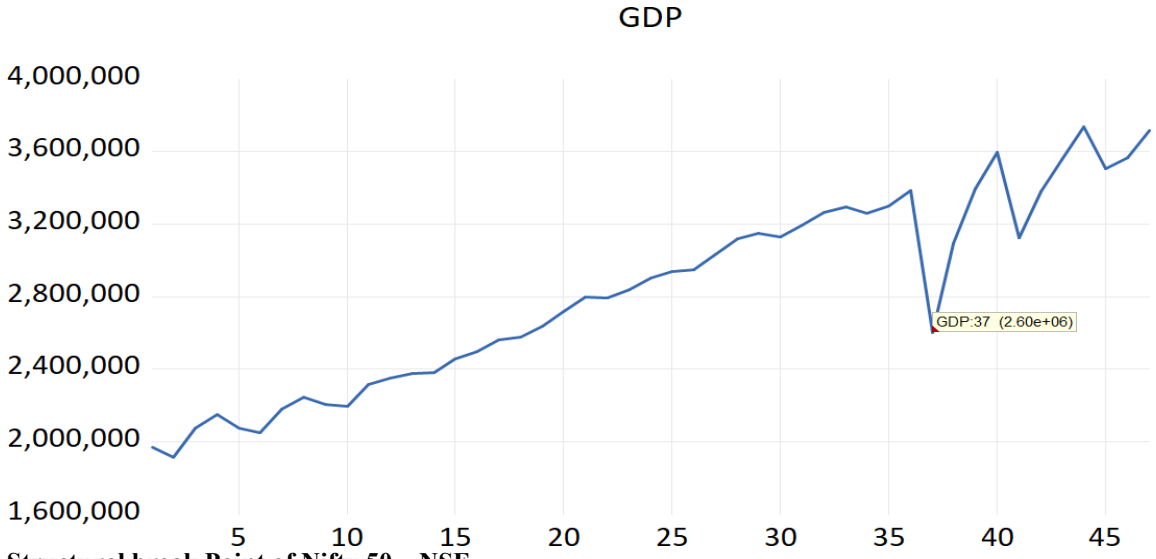
Data Collection:

This research paper used secondary data sources from official website of Reserve Bank of India and NSE India.

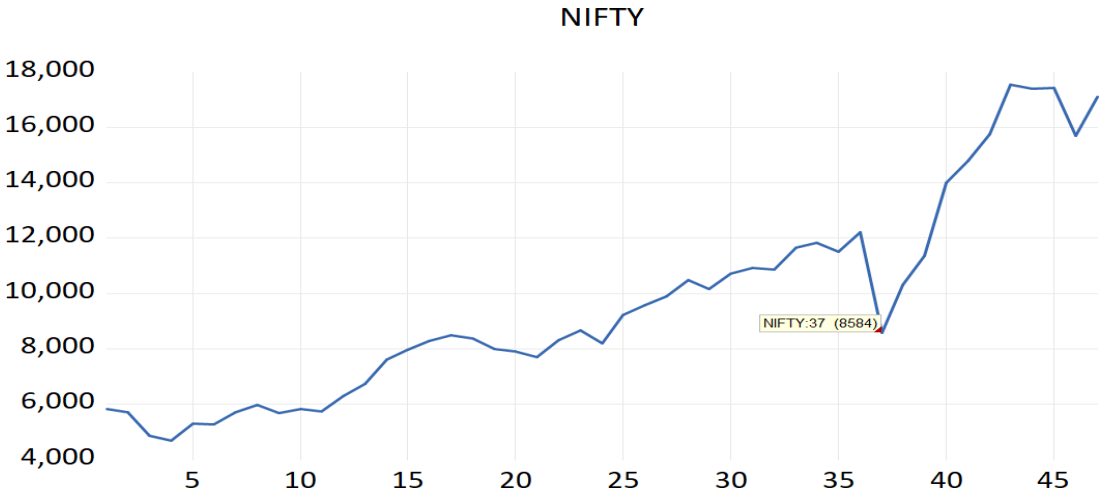
Data Analysis and Interpretation:

1. Structural break Point of Gross Domestic Product (GDP)

. The above graph represents a gradual increase in the trend line. In the mid of point 35 to 40 (2019-2021) there is a first break due to COVID'19 pandemic. But after that there is increase in the trend line showing a green signal for the investors



2. Structural break Point of Nifty 50 – NSE



The above graph represents a gradual increase in the trend line. In the mid of point 35 to 40 (2019-2021) there is a first break due to COVID'19 pandemic same as GDP . But after that there is increase in the trend line showing a green signal for the investors.

3. **UNIT ROOT TEST for GDP (X variable)**

Augmented Dickey-Fuller Test Equation
Dependent Variable: X (GDP)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X(-1)	0.874552	0.071918	12.16037	0.0000
C	290777.1	163023.6	1.783650	0.0817
INCPTBREAK	123150.9	95703.63	1.286794	0.2052
BREAKDUM	-149493.1	192978.5	-0.774662	0.4429
R-squared	0.884303	Mean dependent var		2838051.
Adjusted R-squared	0.876038	S.D. dependent var		518389.1
S.E. of regression	182515.4	Akaike info criterion		27.15000
Sum squared resid	1.40E+12	Schwarz criterion		27.30901
Log likelihood	-620.4499	Hannan-Quinn criter.		27.20956

F-statistic	107.0052	Durbin-Watson stat	2.433330
Prob(F-statistic)	0.000000		

The above table shows the calculations of unit root test under Dicky - Fuller equation for GDP (X variable) to test its stationarity. Its proofed that the time series data for GDP has a unit root because the P value is < 0.05 (5% Significance level) means that the data is not stationary.

4. UNIT ROOT TEST for Nifty 50 Index:

Augmented Dickey-Fuller Test Equation
Dependent Variable: Y (Nifty 50)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Y(-1)	0.841919	0.057499	14.64232	0.0000
D(Y(-1))	-0.245046	0.141741	-1.728834	0.0920
D(Y(-2))	0.518322	0.231652	2.237503	0.0312
C	1388.520	494.9300	2.805487	0.0079
INCPTBREAK	1369.642	563.1914	2.431930	0.0198
BREAKDUM	2216.110	1424.893	1.555281	0.1282
R-squared	0.956636	Mean dependent var		9906.664
Adjusted R-squared	0.950930	S.D. dependent var		3629.212
S.E. of regression	803.9367	Akaike info criterion		16.34304
Sum squared resid	24559942	Schwarz criterion		16.58634
Log likelihood	-353.5469	Hannan-Quinn criter.		16.43327
F-statistic	167.6586	Durbin-Watson stat		2.154022
Prob(F-statistic)	0.000000			

The above table shows the calculations of unit root test under Dicky - Fuller equation for Nifty 50 (Y variable) to test its stationarity. Its proofed that the time series data for Nifty has a unit root because the P value is < 0.05 (5% Significance level) means that the data is not stationary.

5. Regression Analysis:

Regression analysis allows us to calculate the influence or effect of one variable on another. It enables us to measure the extent to which a dependent variable alters when an independent variable changes. Understanding the nature, relevance, and strength of the link between the variables is made easier by this approach.

Dependent Variable: Y (Nifty 50 Index)
Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4553.328	942.4128	-4.831564	0.0000
X(-1)	0.004819	0.000351	13.74393	0.0000
DUMMY	3527.046	434.3010	8.121201	0.0000
R-squared	0.929742	Mean dependent var		9705.942
Adjusted R-squared	0.926474	S.D. dependent var		3674.171
S.E. of regression	996.2732	Akaike info criterion		16.70891
Sum squared resid	42680090	Schwarz criterion		16.82817
Log likelihood	-381.3050	Hannan-Quinn criter.		16.75359
F-statistic	284.5161	Durbin-Watson stat		1.025671
Prob(F-statistic)	0.000000			

The P value is lesser than the 5% significance level which indicates that independent variable GDP has a significant impact on Nifty 50 the dependent variable.

Findings and Conclusion:

- In general, both GDP and the NIFTY 50 index show an upward trend over the years, indicating positive economic growth and a well-performing stock market.
- There are fluctuations in both GDP and the NIFTY 50 index from quarter to quarter, which is expected as economic conditions and market sentiments change.
- During the period of 2011-2016, both GDP and the NIFTY 50 index experienced growth. This suggests a positive correlation between capital market development (reflected in the NIFTY 50 index) and economic growth (measured by GDP) during that time.
- From 2016 onwards, there is a divergence between GDP and the NIFTY 50 index. While GDP continues to increase, the NIFTY 50 index experiences fluctuations and does not consistently mirror the upward trend. This indicates that other factors may be influencing the performance of the stock market, such as global economic conditions, corporate earnings, and policy changes.
- Notably, there was a sharp decline in GDP during the 2020-2021 financial year, likely due to the impact of the COVID-19 pandemic. However, the NIFTY 50 index showed a significant recovery in the latter part of the financial year, reflecting the resilience of the stock market