

A Causal Relationship between Capital Market and Economy Development: An Empirical Analysis in context with Indian Economy.

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Abstract:

By encouraging the channelization and mobilization of financial resources and integrating those with the need for funds to bring about innovation and achieve growth with those who have resources to invest, effectively functioning stock markets foster economic growth and development. The NSDL and CDSL alongside a few vault members assume a significant part to work with exchange. However, despite the fact that stock exchanges play a significant economic role, the connection between economic growth and stock exchanges is not widely acknowledged or understood. The crux of the argument is whether economic data is lagging indicator or is it stock market's tendency to think forward. This debate is given conclusion by analyzing quarterly data of GDP and two indices' performance.

Key Words: Stock market, Nifty 50, GDP, Economy Development

Introduction:

The expanding importance of financial markets around the world has contributed to the widespread perception that "finance" is essential to economic expansion. As a result, the emphasis has remained on stock market growth and economic prosperity. The development of business and industry, which has a substantial impact on the general health of the country's economy, is significantly influenced by the stock market, a vital economic pillar. This serves as the rationale for why the nation's central bank, advisors to the government, and business

organizations all actively follow stock market activity. The stock market and economy are usually discussed in the same breath, giving the idea that they may be one and the same. There has never been a solid connection between the stock market and the economy. Just to be clear, the stock market is not the economy. Despite the fact that over time they tend to move in the same direction.

On the stock market, investors can purchase and sell investments, most frequently stocks, which are ownership shares in public corporations. People commonly refer to one of the significant indexes, such as the Nifty 50, while discussing the stock market. This is due to the difficulty in keeping track of every stock and the belief that these indices correctly represent the whole market. The economy is the relationship between resource distribution and production and consuming activities. To satisfy consumer needs, businesses produce goods and services. Simply explained, this is how our economic system works. Investors and traders routinely examine the economic data to comprehend stock market prices and their future tendencies. Some people also keep an eye on market indexes to get a sense of how the economy is doing.

The stock market and economy generally, but not always, move in lockstep with one another. Stock prices could decrease in prosperous economic times as well as increase in difficult ones because of market volatility. If the GDP is rising and the economy seems to be strengthening, stock market values are likely to reflect this feeling, though not always in the short term. Because the stock markets react swiftly, if strongly, to events that may have little long-term relevance, it is acceptable to claim that the markets do not always adequately reflect the status of the economy. Traders and investors regularly fault the markets for "overreacting" or "not properly accounting for a particular move."

The markets may be impacted by a number of things that don't directly affect the nation's economy. Geopolitics, natural disasters, interest rates, and tax rates, for instance, may not always have an impact on the economy, but they all have an impact on stock values. The same way that any legislation change that would affect dividends or share buybacks would affect share prices but not GDP. Another thing that might produce a disconnect between the markets and economy is high expectations that are already reflected in stock prices before they have any impact on the

economy. As a result, when the economy as a whole expands, stock prices do not leap since they already reflect investor enthusiasm. It is indisputable that markets and the economy tend to go in the same general direction over time. However, news events and policy reports that might not have any impact on a country's macroeconomic fundamentals sometimes cause the financial markets to react in an extreme fashion (on either side).

1.2 Purpose of Stock Market

A stock market is a place where an investor may purchase and sell of marketable securities like equity shares, currency, commodity, future and options etc. A Security is a sort of that denotes a person's ownership in a organisation. In order for businesses to develop, pay off debt, or raise cash through public funding, trading stocks on a public exchange is crucial for economic progress.

The primary objective of the stock market is to provide best business opportunities. Businesses can get an opportunity to raise their funds through different avenues which are provided by the stock market like Fresh Issues for new company and Further Public offer for the existing company. By the way of these market is providing the options of fund raising and company use that fund for expansion and modernization. That thing extends to business growth. And business growth ultimately develops the economy in a long run.

If company wants to avoid risk on by taking debt and paying fixed portion of interest rate, company wishes to raise their fund through the stock market. On the other side Investors have an opportunity to invest in the stock market and get chance to earn periodically dividend amount and also get the benefit of price changes of share prices. Some the investors purely want to earn dividend income and some of the traders are always focus on the market fluctuations for short term capital gain. Any of the reason ultimately investors invest in the market to earn something. These kind of collective earnings leads to develop the economy.

1.3 Stock Market Affects the Economy:

The increase and decrease in stock prices can influence numerous factors in the economy such as consumer and business confidence which can, in turn, have a positive or negative impact on the

economy as a whole. Alternatively, different economic conditions can affect the stock market as well. Here are a few ways the stock market can affect the economy of a country:

Movements in the Stock Market:

Movements in individual stock prices give the stock market a volatile character. When stock prices rise or fall, their volatility can have positive or negative effects on consumers and businesses.

When there is a bull market or stock prices rise, general confidence in the economy increases. People's consumption will also increase as they become more optimistic about the market. More investors will also enter the market and this will promote greater economic development of the country.

When the prices of stocks fall for a continuously longer period, also known as a bear market, it has a negative effect on the economy. People are pessimistic about the economic conditions and news reports on falling stock prices can often create a sense of panic. Fewer investors enter the market and people tend to invest in lower-risk assets which further depress the state of the economy.

Consumption and the Wealth Effect:

When stock prices rise and there is a bull market, people trust the market conditions and their investments increase. They tend to spend more on expensive things like houses and cars. It is also called the wealth effect, whereby a change in a person's income affects their consumption habits and ultimately leads to economic growth.

In a bear market or falling stock prices, there is a negative wealth effect. This creates an environment of uncertainty among consumers, and the decline in the value of their investment portfolio reduces the consumption of goods and services. This affects economic growth because consumption is an important part of the gross domestic product.

Impact on Business Investment

In addition to consumer spending, business investments are also a key indicator of economic growth. When stock prices are high, companies are likely to make more capital investments due

to their high market capitalization. Many companies go IPO at this time because market optimism is high and it is a good time to raise capital by selling shares. During a bull market, there are also more mergers and acquisitions, and companies can use their stock value to buy other companies. This increased investment will encourage higher economic growth. When the stock market goes down, it has the opposite effect on investments. Confidence in the economy is decreasing and companies no longer want to invest in the economy.

Other Factors

The stock market also affects the bond market and pension funds. A large part of pension funds is invested in the stock market, and a fall in the share price lowers the value of the fund and affects future pension payments. This can slow economic growth as people dependent on retirement income save more, which reduces spending and ultimately GDP.

Falling stock prices have a negative effect on the country's economic growth and GDP, but a positive effect on the bond market. When the stock market is depressed, people look to other assets like bonds or gold to put their money. They often offer a better return on investment than shares in the stock market.

2. Literature Review:

Srinivasan Palamalaia and Karthigai Prakasamb wrote in their study "Stock Market Development and Economic Growth in India: An Empirical Analysis" that this study attempts to determine the causal relationship between stock market development and economic growth in the Indian context. Using integration and causality tests for the period June 1991 to June 2013, the study confirms a well-defined long-run equilibrium relationship between stock market performance and India's economic growth. The empirical results show bidirectional causality between market value and economic growth and unidirectional causality between turnover and economic growth in the long and short run. In general, it can be concluded that the development indicators of the stock market, i.e. market value and turnover ratio have a positive effect on India's economic growth. (Srinivasan Palamalaia, 2014)

Dr. Mahmoud Abdel-Aziz Touny wrote in his study Stock Market Development and Economic Growth: Empirical Evidence from Some Arab Countries that the results of both fixed and random effects models show that stock market development has a positive effect (measured by the market) . Capital ratio and turnover ratio) economic growth. This result supports the view

that stock market development can promote economic growth and refutes the skeptical view that stock market volatility and speculation in developing countries can slow down economic growth. On the other hand, the results confirm that economic growth has a positive and statistically significant effect on the development indicators of stock markets. This finding shows that there is a reciprocal relationship between stock market development and economic growth. The results of this study suggest some policy issues that policy makers in Arab countries should actively participate in promoting their stock markets by removing legal and regulatory barriers to Arab stock markets and implementing international integration of these markets.(Touny, 2012)

Ross Levine wrote in her research paper titled by Stock Markets, Economic Development, and Capital Control Liberalization- Recent studies show that the last two for decades, the liquidity of stock markets has been a catalyst to the long-term growth of developing countries. Without a liquid stock market, many will benefit no long-term investments are made because savers would not want to fulfill their obligations investments for a long period. On the other hand, a liquid stock market allows savers to sell their shares easily, which allows companies to raise equality on favorable terms. Favoring longer term more productive investments, liquidmarkets improve the allocation of capital and improve long-term economic growth prospects.(Levine, 1997)

Dipti ranjansahool ,Minati Pradhan wrote in their research paper titled-The Role of Stock Market and Growth of Indian Economy that The ultimate goal of this study was to determine the causal relationship between the strains market functioning and economic growth and development as a frame of reference for the empirical literature. Provisions market experts expressed several opinions about the performance of the stock market, such as an improvement in the liquidity position collection and pooling of capital in the economy, monitoring of supervisors and implementation of company control, giving pooling of threats and sharing of management, including levels of speculation. Current literature argues that the stock market is significantly related to economic growth, so there is a positive relationship between them the efficient operation of the stock market and the economic prosperity of the country, affecting the total amount investments. (Pradhan, 2018)

Hasim Khan said in his research paper The Impact of Stock Market on Economic Growth of India that The main objective of this study was to examine the relationship between stock market development and economic growth in India using a simple theoretical framework from the literature. Indian economy is the third largest economy in the world in terms of purchasing power. It will reach new heights in the coming years. Global investment bank Goldman Sachs predicts that India will be the third largest economy in the world by 2035, after the US and China. It accounts for 60% of the American economy. Today's booming economy has to go through several stages before it reaches the current 9% of GDP. Experts have different views on the importance of the stock market in terms of economy, development, which fulfills the following functions: capital accumulation and mobilization, improving the profile, increasing the value of companies, impact of consumption and wealth, and reducing the cost of capitalist The theoretical literature argues that the stock market is significantly related to economic growth. (Khan, August 2019)

3. STATEMENT OF PROBLEM

According to the several studies, if the functioning of the stock exchange is at optimum, economic growth is guaranteed in the long run. However, somehow at many times the operations run at suboptimal level, especially in the context of developing countries like India. In light of this, the study is being undertaken. Several studies have established that a well functioning stock market increases economic efficiency, investment, and growth. The stock markets integrate funds that are surplus with the sectors that are in deficit.

4. Research Methodology:

4.1 Objectives of Study:

The primary objective of this study is to find out the causal relationship between GDP of the country and its impact on the performance of benchmark indices of capital market.

4.2 Research Design:

These study possess Descriptive Research Design.

4.3 Data Collection and Analysis

Secondary data from published sources, journals and website and growth indices published after surveys undertaken by government. To find out the causal relationship between GDP and capital markets, two factors data are considered. Bank nifty index broadly represent the barometer of

financial sector of the country and to measure the overall performance of across sector, Nifty 50 is considered.

4.4 Scope of Study:

Investors, Brokers, Operators, Promoters and Government can enhance understanding that a stock exchange addresses the presentation of the organizations recorded on the stock trade in total, in this manner providing the financial backer with a thought of the monetary development of the district. Micro economic and macroeconomic variables, the business climate, the legitimate design, and duty arrangements appropriate to every economy influence securities exchange developments.

4.5 Limitation of Study:

The duration of the study is 2 years consisting of 8 quarters. However, the purpose of research is to find out short term impact.

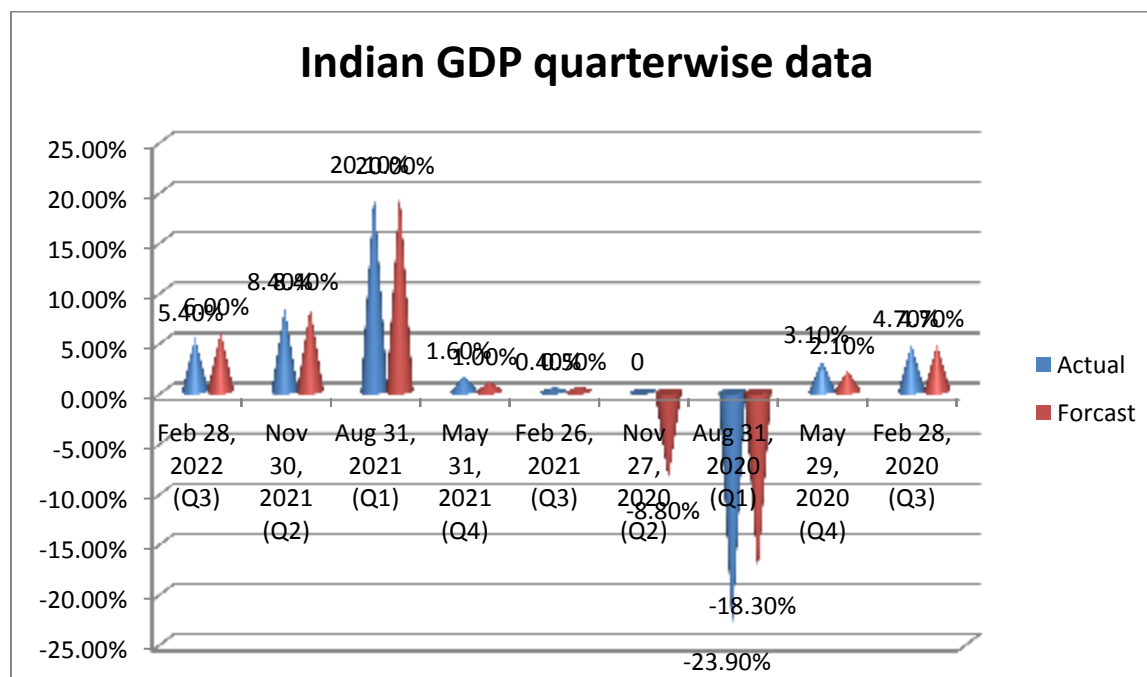
5. Data Analysis and Interpretation

For the analysis of country's GDP data, following has been collected for the two calendar year 2020 and 2021. However, the data is published quarterly by RBI, the data is analyzed accordingly:

Release Date	Actual	Forecast	Previous
Feb 28, 2022 (Q3)	5.4%	6.0%	8.4%
Nov 30, 2021 (Q2)	8.4%	8.4%	20.1%
Aug 31, 2021 (Q1)	20.1%	20.0%	1.6%
May 31, 2021 (Q4)	1.6%	1.0%	0.4%
Feb 26, 2021 (Q3)	0.4%	0.5%	-7.5%

Nov 27, 2020 (Q2)	-7,5%	-8.8%	-23.9%
Aug 31, 2020 (Q1)	-23.9%	-18.3%	3.1%
May 29, 2020 (Q4)	3.1%	2.1%	4.1%
Feb 28, 2020 (Q3)	4.7%	4.7%	5.1%

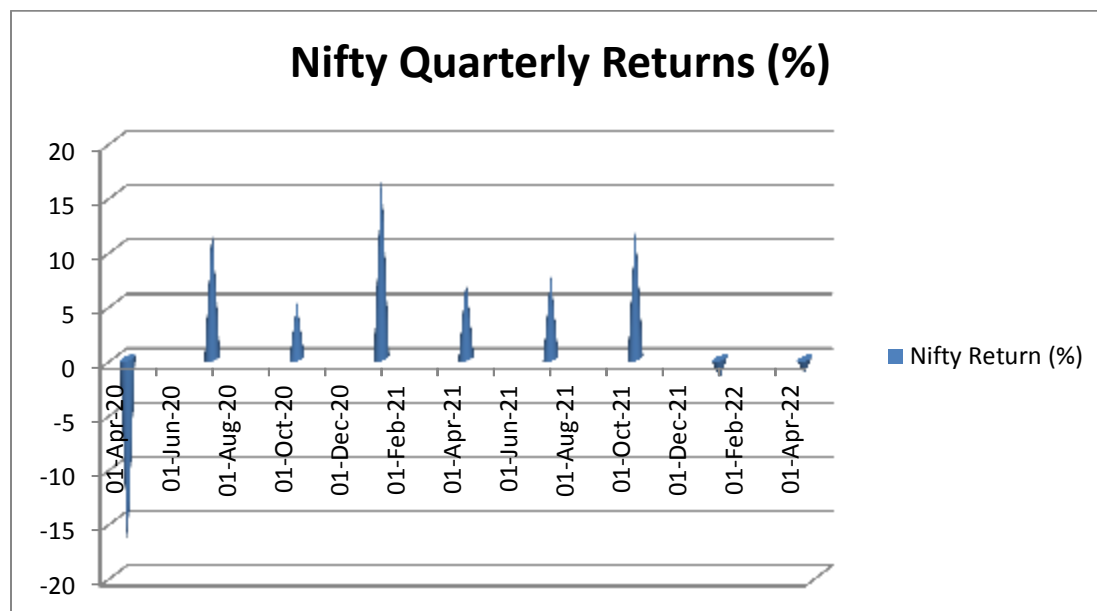
Looking at the data, in 2020 beginning, India has recorded 4.7% GDP however, due to disruption in industrial activity because of COVID-19, the GDP was adversely affected in the first second quarter of financial year 2020-21. From the third quarter of 2020-21, GDP turned positive and peaked during 1st quarter of 2021-22. First quarter of 2021-22 recorded the highest GDP of 20.1% due to low base effect. The same has been depicted in below graph :



For measuring performance of Economy two index data has been considered viz. Nifty and Bank Nifty :
Quarterly Performance of Nifty 50 Index

Nifty			
Date	Close*	Return (Amount)	Return In Percentage
1-Apr-22	17,102.55	-237.30	-1.37
1-Jan-22	17,339.85	-331.80	-1.88
1-Oct-21	17,671.65	1,908.60	12.11
1-Jul-21	15,763.05	1,131.95	7.74
1-Apr-21	14,631.10	996.50	7.31
1-Jan-21	13,634.60	1,992.20	17.11
1-Oct-20	11,642.40	568.95	5.14
1-Jul-20	11,073.45	1,213.55	12.31
1-Apr-20	9,859.90	-2,102.20	-17.57
1-Jan-20	11,962.10	-	-

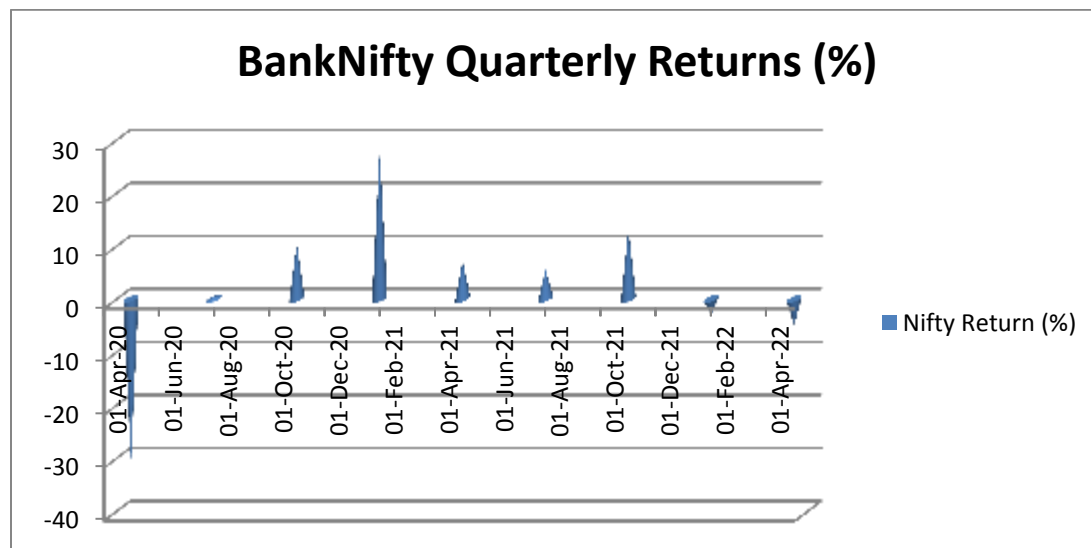
Return of the Nifty index is largely positive barring the last quarter of financial year 2019-20 . However the performance of Nifty if compared to growth is showing diverse picture. GDP growth rate bottomed out in second quarter of 2020 but Nifty bottomed out in the last quarter of financial year 2019-20. And since then it is delivering positive return except last two quarters of Financial year 2021-22. The same is depicted in chart below :



Quarterly Performance of Bank Nifty Index

Bank Nifty			
Date	Close*	Return (Amount)	Return In Percentage
1-Apr-22	36,088.15	-1887.2	-4.96954
1-Jan-22	37,975.35	-1140.25	-2.91508
1-Oct-21	39,115.60	4531.25	13.10202
1-Jul-21	34,584.35	1802.55	5.49863
1-Apr-21	32,781.80	2216.3	7.250986
1-Jan-21	30,565.50	6664.6	27.88431
1-Oct-20	23,900.90	2260.85	10.44753
1-Jul-20	21,640.05	105.55	0.490144
1-Apr-20	21,534.50	-9299.1	-30.159
1-Jan-20	30,833.60	-	-

Bank nifty also follows the same footstep as of Nifty. During the last quarter of financial year 2019-20, Bank nifty fell as low as 30% but at the same time nifty fell only 17%. The recovery in the subsequent month is also ferocious for the bank nifty. The same is depicted in the graph below.



The correlation between Indices performance and GDP is also giving diverse position. The correlation of Nifty's performance with GDP is only 0.011 and in fact Bank nifty's performance with that of GDP is negatively correlated. One such reason could be that GDP is lagged data and indices perform on a real time basis. That is why, indices tend to move much early before even the data of gdp is published.

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