

PERFORMANCE & GROWTH OF INDIAN EQUITY MARKET:A QUANTITATIVE RESEARCH

Ayush Ajmera

Accounts Executive (UK Accounts)

Ascendum KPS

ajmera.aayush23@gmail.com

ABSTRACT

This study focuses on the growth of Indian equity market over past few years and the performance of market for the upcoming years, as the technology has had an intense and irreversible impact on the world as well as Indian equity market. The study is based on quantitative research with the objectives to determine the impact of demographic factors of investors on their investing decisions and their perception towards the equity market. The study also analyzes the impact of equity market on the Indian economy. Primary research is conducted by Questionnaire method. Sample is collected using convenience sampling method with sample size of 224 respondents, consisting investors aged above 30 years, from major cities of Gujarat state. Inferential analysis is used to make conclusions on the objectives of our study. Non-parametric tests are performed using SPSS software. From this study, researcher can easily conclude that performance and growth of equity markets depend on various factors and variables. The expected returns of investors are also affected by factors like investment time horizon and percentage of investments. Also the opinion of investor regarding the growth and performance of equity market is affected by many factors such as their age, gender, occupation, income level, expectations of returns, current performance of market and much more.

Keywords: Equity Market, Growth, Indian economy

INTRODUCTION

From its inception in the 19th century, Indian equity market has come a long way and currently can be considered in a maturity stage, backed by a developed legal system. The development of internet services has made financing and investing easier to access by more people and has eliminated the geographical barriers. People have started realizing the real power of equity market due to its performance during past decades and the growth of equity market has been tremendous in terms of returns but only if the money is invested wisely in right stocks at the right time.

There are many instances where the markets are crashed and there is a financial crisis all over the world, like the Global financial crisis (2008) or the most recent COVID-19 pandemic. The markets have faced downfall to extreme levels and many investors were wiped off. But every time there is a downfall, the investment markets have bounced back even much stronger especially the equity markets all over the world. The recovery after the downfall might take some time but it takes the markets to new record levels and investors can easily make money if they keep their funds invested and wait patiently even in a pandemic or financial crisis.

Equity market has great earning potentials if money is invested wisely with correct information. An individual investor can earn at least more than the FD rates if not more. With more people willing to invest into equity markets and with constant encouragements by SEBI and Government of India for educating people about different available investment options, people have started considering equities as the avenue to earn abnormal returns in the longer term which is the true face of equity market.

LITERATURE REVIEWS

- **Jegadeesh & Titman, (1993)** concluded that it is possible that the market underreacts to information about the short-term prospects of firms but overreacts to information about their long-term prospects. This is plausible given that the nature of the information available about a firm's short-term prospects, such as earnings forecasts,

is different from the nature of the more ambiguous information that is used by investors to assess a firm's longer-term prospects.

- **Atje, Jovanic, (1993)** concluded that stock markets have long-run impacts on economic growth and it was also found that stock markets manipulate economic growth through a number of channels that are liquidity, risk diversifications, acquisition of information about firms, corporate governance and savings mobilization.
- **Levine & Zervos, (1996)** evaluated the relationship between stock market development and long-run growth. The data suggest that stock market development is positively associated with economic growth.
- **Boubakari & Jin, (2010)** suggested that the stock market growth and economic growth have long-run relationship. It reveals that the stock market liquidity do help to improve the future economy. The findings are consistent with existing theoretical framework as illustrated by several authors about the relationship between financial market development and economic growth.
- **Ranjan Dasgupta (2012)**, studied about long run and short run relationship between BSE Sensex and four key macroeconomic variables of Indian economy to conclude that this study has found no short-run relationships between the BSE SENSEX Index and the macroeconomic variables selected under this study.
- **Palamalai, Srinivasan & Chellaswamy, Karthigai Prakasam, (2014)** confirmed a well- defined long-run equilibrium relationship among the stock market development indicators and economic growth in India. The present study also recommends that the capital market regulators should implement effective policy frameworks towards the development of Indian stock market.
- **Y. V. Reddy, (2015)** stated that 'Stock returns' is an area of study which has gained a lot of attention of research scholars from different countries in the past several decades. This shows the importance of stock returns in world economy.
- **Christie Dike, (2016)** investigated whether any links exist between stock market development and economic growth in a selected group of African countries during the years 1989-2011. The study simultaneously takes into account banking development along with stock market development in a unified framework. The equity market is found to be a major contributor of economic growth, as depicted by the presence of significant positive links between the two both in the long-run and the short-run.
- **Chaurasia, (2017)** concluded in her research that the most preferred investment avenue is fixed deposit which reflects conservatism and lack of awareness among the investors of various investment avenues. The least preferred investment avenue is capital market debt instruments. Again, this reflects fear and lack of confidence among investors of the Indian Capital Markets.
- **Salameh Samer & Ahmad Asad, (2020)** stated in their research that the key determinants that have a positive impact on stock market development are economic growth, foreign investment, stock market liquidity, inflation, degree of trade openness and banking sector development. The inflation is supposed to have a negative relationship with stock market development while all the other variables are supposed to have a positive impact on the stock market development.
- **Snehal Shah & Ajmera Ayush, (2022)** in the research paper stated that the traditional investors still have focus on FDs and PPFs but gradually people have started being more aware about the stock market and online trading facilities. The two primary methods used to analyze the risk and the volatility of the market are: Fundamental & Technical Analysis. Fundamental analysis not only focuses on Quantitative Analysis, but also Qualitative, Economic and Financial Analysis.
- **Dr. Nilam Panchal, Ayush Ajmera, (2022)** in the research paper analyzed the preferences of investors in the Indian share market and other investment options available in the market. Many factors including risk awareness, investment time horizon, mode of trading, objectives of investment, usage of fundamental & technical analysis before investment, sources of information, etc. which affect the investment decisions are analyzed through this research.

RESEARCH METHODOLOGY

- **Research Design:** This is a Quantitative Research and Descriptive in Nature.
- **Data Collection Sources: Primary Data** is collected through a survey among the investors from major cities of Gujarat State using a Questionnaire method with close-ended questions framed according to the objectives of

this study and personal interviews method as well. **Secondary Data** is collected from different books, journals, research papers and websites over internet.

- **Data Tools & Techniques:** Various Non-Parametric tests are applied using SPSS software.
- **Sampling Technique:** The Convenience Sampling Method is used for this research.
- **Sampling Area:** The research is based on the respondents of Major cities of Gujarat State.
- **Sample Size:** The sample size is 224 respondents.

SCOPE OF THE STUDY

- In the 20th Century, a big boom has been witnessed in the Indian Equity Market as the market and the world watches the increasing importance of equity market in growth of Indian economy.
- This study focuses on the growth of equity market from the view point of the investors and to analyze the various factors that affect the growth of equity markets. The study also analyses the effects of growth in equity market on the growth of Indian economy.

OBJECTIVES OF THE STUDY

- To check the impact of percentage of investment on the expected returns from equitymarkets.
- To check the relationship between investment time horizon and satisfaction from return earned from equity markets.
- To analyze if growth of Indian economy is linked to Equity markets according to gender of respondents.
- To analyze the viewpoint of respondents regarding performance of equity market in past 10 years if they follow equity market movements on a regular basis.
- To find out the most important factor which affects the growth of equity market depending on the education level of respondents.

LIMITATIONS OF THE STUDY

- The major limitation of this research study was lack of awareness among people regarding investing in stock market. So people who are aware of such things were found in specific for survey purpose.
- It was difficult to conduct survey of some respondents who were not comfortable with the form of survey which is through google form questionnaire.
- The survey is done in major cities of Gujarat and may not represent the opinion of whole country.
- Another limitation was that people were not willing to answer to the survey conducted for primary research considering it as a wastage of time.
- Some respondents hesitated in providing their personal and financial information but due to enough sample size the reliability of data will not be impacted.

DATA ANALYSIS – INFERENCE STATISTICS

1) To check the impact of percentage of investment on the expected returns from equitymarkets.

H₀: There is no significant relationship between Percentage of Investments and Expected returns from equity market

H₁: There is significant relationship between Percentage of Investments and Expected returns from equity market

(Table showing Chi-Square Test)

Test Statistics		
	% of Investments	Expected Returns
Chi-Square	285.955 ^a	64.607 ^b
df	4	3

Asymp. Sig.	.000	.000
-------------	------	------

(Source: SPSS)

INTERPRETATION: The **Chi-Square test** is applied on the two variables to check the association between them. Both the variables have returned the Chi-Square p-values of 0.000 which is less than the significance level (0.05). Both the p-values are highly significant and there is statistically significant relationship between both the variables. So the **Null Hypothesis is Rejected**.

Hence, it can be concluded that there is significant relationship between Percentage of Investments and Expected returns from equity market.

2) To check the relationship between investment time horizon and satisfaction from returns earned from equity markets.

H0: There is no significant relationship between Satisfaction from Returns earned and Investment Time Horizon

H1: There is significant relationship between Satisfaction from Returns earned and Investment Time Horizon

(Table showing Regression Analysis)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.969	1	5.969	5.059	.025 ^b
	Residual	261.959	222	1.180		
	Total	267.929	223			
a. Dependent Variable: Satisfaction from returns earned						
b. Predictors: (Constant), Investment time period						

(Source: SPSS)

INTERPRETATION: The dependent variable Satisfaction from earned returns is regressed on the independent variable which is Investment time horizon. **ANOVA test** is applied to check the **Linear Regression**. The ANOVA table analysis shows that regression significance is 0.025 which is less than the significance level (0.05). There is sufficient statistical evidence to conclude that there is statistically significant relationship between both variables. So the **Null Hypothesis is Rejected**.

Hence, it can be concluded that there is significant relationship between Satisfaction from Returns earned and Investment Time Horizon.

3) To analyse if Growth of Indian economy is linked to Equity markets according to gender of respondent.

H0: There is no significant relationship between Opinion on Growth of Indian economy linked to Equity market and gender of respondent

H1: There is significant relationship between Opinion on Growth of Indian economy linked to Equity market and gender of respondent

(Table showing Mann-Whitney U Test)

Test Statistics ^a	
	Indian Economy linked to Equity Market
Mann-Whitney U	6154.500
Wilcoxon W	12709.500
Z	-.288
Asymp. Sig. (2-tailed)	.773
a. Grouping Variable: Gender	

(Source: SPSS)

INTERPRETATION: To check whether the gender of the respondent affects their opinion on Growth of Indian economy linked to equity markets, **Mann-Whitney U test** is performed.

The test has returned p-value of 0.773 which is very high than the significance level (0.05). This p-value is not significant. So we **Fail to Reject the Null Hypothesis**.

Hence, it can be concluded that Gender of the respondent does not have any significant impact on their opinion on Growth of Indian economy linked to Equity markets.

4) To analyse the viewpoint of respondents regarding performance of equity market in past 10 years if they follow equity market movements on a regular basis.

H0: Following market movements on a regular basis and viewpoint on performances of equity market in past 10 years do not have any significant correlation

H1: Following market movements on a regular basis and viewpoint on performances of equity market in past 10 years have significant correlation

(Table showing Pearson Correlation Test)

Correlations		
		Follow Regularly Equity Growth in past 10
Follow Equity Regularly	Pearson Correlation	1
	Sig. (2-tailed)	.228**
	N	224
Growth in past 10	Pearson Correlation	.228**
	Sig. (2-tailed)	.001
	N	224

(Source: SPSS)

INTERPRETATION: Here the **Pearson correlation test** is applied to check if viewpoint of respondents on performances of equity market in past 10 years is related to following the market movements on a daily basis.

The Correlation co-efficient obtained from the test is 0.228 suggesting that both the variables do not have any relation and there is insufficient statistical evidence that the correlation between the two variables is significant. So we **Fail to Reject the Null Hypothesis**.

Hence, it can be concluded that there is no significant correlation between following market movements on a regular basis and viewpoint on performances of equity market in past 10 years.

5) To analyze the most important factor which affects the growth of equity market depending on the education level of respondents.

H0: Education level of respondents does not have a significant impact on Factors affecting growth of equity market

H1: Education level of respondents have a significant impact on Factors affecting growth of equity market

(Table showing Chi-Square Test)

Test Statistics		
	Education	Factors affecting growth of equity market
Chi-Square	161.491 ^a	23.768 ^a
df	4	4

Asymp. Sig.	.000	.000
a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 44.8.		

(Source: SPSS)

INTERPRETATION: The **Chi-Square test** is applied on the two variables to check the association between them. Both the variables have returned the Chi-Square p-values of 0.000 which is less than the significance level (0.05). Both the p-values are highly significant and there is statistically significant relationship between both the variables. So the **Null Hypothesis is Rejected**.

Hence, it can be concluded that Education level of respondents have a significant impact on Factors affecting growth of equity market.

FINDINGS

- This study focuses on the investors, their returns, equity markets performance and its impact on the Indian economy.
- Using Inferential Analysis, Chi-Square test concluded that there is significant relationship between Percentage of Investments and Expected returns from equity market.
- Regression analysis helped in concluding that there is significant relationship between Satisfaction from Returns earned and Investment Time Horizon.
- Mann-Whitney U test was used to conclude that Gender of the respondent does not have any significant impact on their opinion on Growth of Indian economy linked to Equity markets.
- Pearson Correlation concludes that there is no significant correlation between following market movements on a regular basis and viewpoint on performances of equity market in past 10 years.
- Chi-Square test concluded that Education level of respondents have a significant impact on Factors affecting growth of equity market.
- From this study, researcher can easily conclude that performance and growth of equity markets depend on various factors and variables.
- Also the opinion of investor regarding the growth and performance of equity market is affected by many factors such as their age, gender, occupation, income level, expectations of returns and many more.

CONCLUSION

The data analysis using different Non-parametric tests have concluded that the expected returns of an investor depends on the percent of investment they have made. Another conclusion is that the satisfaction from returns earned depends on the investment time horizon. Researcher also concluded that the gender of respondents does not affect their opinion on performance of equity markets and the opinion of investor on factors affecting growth of equity markets depends on their education level.

However, the study also acknowledges its limitations, such as the focus on a particular geographic region and the use of a specific methodology. Future research could explore these issues further, and investigate the effectiveness of different policy interventions in improving equity market performance. Overall, this research project contributes to a better understanding of equity markets. These key findings have practical implications for investors like if the amount of investment is larger than higher returns can be expected from the equity market. If investors keep their money invested for longer time period than they can get more satisfactory returns. The performance of equity market in past decade has been just above average, but the performance of equity markets in the upcoming years is expected to be very high and full of opportunities for the investors to earn abnormal returns. If the money is invested wisely in equity markets and for a longer time period, one can surely earn high profits by just keeping enough patience.

REFERENCES

- [1] Jegadeesh, N., & Titman, S. (1993). Returns to buying winners and selling losers: Implications for stock market efficiency. *The Journal of Finance*, 48(1), 65-91. doi.org/10.1111/j.1540-6261.1993.tb04702.x
- [2] Atje, R. & Jovanovic, B. (1993), Stock Markets and Development, *European Economic Review*, 37, 632 -640.

- [3] Levine, Ross and Sara Zervos, (1996) “Stock Market Development and Long-Run Growth”, World Bank Economic Review, Oxford University Press, vol. 10(2), pages 323- 339, 1996.
- [4] Boubakari, A. A. & Jin, D. (2010), The Role of Stock Market Development in Economic Growth: Evidence from Some Euro next Countries, International Journal of Financial Research, 1, 14-20.
- [5] RanjanDasgupta (2012), Long run and short run relationship between BSE Sensex and macroeconomic variables, International Research Journal of Finance and Economics ISSN 1450-2887 Issue 95 (2012).
- [6] Palamalai, Srinivasan & Chellaswamy, Karthigai Prakasam. (2014) Stock Market Development and Economic Growth in India. International Journal of Finance & Banking Studies (2147-4486). 3. 30-46. 10.20525/ijfbs.v3i3.187.
- [7] Y. V. Reddy, (2015) “Literature on Stock Returns: A Content Analysis”, Amity Journal of Finance 1(1), (194-207) ©2016 ADMAA.
- [8] Christie Dike, (2016) STOCK MARKET EFFICIENCY PROMOTES ECONOMIC DEVELOPMENT: EMPIRICAL EVIDENCE FROM AFRICA, International Journal of Economics and Financial Issues, 2016, 6(3), 1287-1298.
- [9] Pratibha Chaurasia (2017) A Study of Investment Preferences of Investors, International Journal of Application or Innovation in Engineering & Management (IJAIEM), Volume 6, Issue 7, July 2017, ISSN 2319 – 4847.
- [10] Salameh, Samer & Ahmad, Asad (2020) A critical review of stock market development in India. Journal of Public Affairs. 22. 10.1002/pa.2316.
- [11] Shah S., Ajmera A., (2022) FUNDAMENTAL & TECHNICAL ANALYSIS ON SELECTED SECTORS, International Journal of Management, Public Policy and Research, 2022, 1, 62-67.
- [12] Sharma, K., & Tripathi, S. (2023). PERFORMANCE ANALYSIS AND RISK ASSESSMENT OF INDIAN MUTUAL FUND THROUGH SIPs: A COMPARATIVE STUDY OF SMALL, MID, AND LARGE CAP FUNDS. VIDYA - A JOURNAL OF GUJARAT UNIVERSITY, 2(2), 108–117. <https://doi.org/10.47413/vidya.v2i2.208>
- [13] Tripathi, S., Chaubey, A., & Goel, I. (2022). AN EMPIRICAL ANALYSIS OF POTENTIAL CENTRAL BANK DIGITAL CURRENCY ADOPTION PROCEDURE BY INDIAN GOVERNMENT AND ITS IMPLICATIONS. Sachetas, 1(1), 32-38. <https://doi.org/10.55955/110006>
- [14] Tripathi, S., & Chaubey, A. (2020). Stock Market Crash: A Comparative Analysis between Sub-Prime Crisis and COVID-19. SSRN.
- [15] Panchal, N., & Ajmera, A. (2022). STUDY ON MAJOR INVESTMENT PREFERENCES OF INDIAN INVESTORS. International Journal of Management, Public Policy and Research, 1(3), 35–39.