

ANALYZING THE IMPACT OF INDIAN STOCK MARKET DEVELOPMENTS ON THE BEHAVIORAL PATTERNS OF RETAIL INVESTORS IN THE NORTH COASTAL REGION OF ANDHRA PRADESH - INVESTIGATING THE DYNAMICS OF THE SECONDARY MARKET

Dr. Trinadha Rao Challa

INTRODUCTION:

A stock exchange is a market which facilitates buying and selling of shares, stocks, bonds, securities and debentures. It is not only a market for old securities and shares but also for new issues shares and securities. In fact, the capital market is related to the supply and demand for new capital, and the stock exchange facilitates such transactions.

The liquidity that an exchange provides affords investors the ability to sell securities quickly and easily. It plays a crucial role in the financial system. It is considered as one of the best ways to increase the funds. But before any investor make any investment into stock market; investor should know how to get started. It may turn out to be a profitable affair as long as we know the tricks of the trade.

INDIAN STOCK MARKET

Now concentrating on the stock market of India, most of the trading practices in the Indian Stock Market exercised on two stock exchanges namely National Stock Exchange (NSE) and Bombay Stock Exchange (BSE). The BSE is in being since 1875 and has about 5619 listed firms whereas NSE was established in 1992 and has about 1931 listed firms as on 2017-18.

Corresponding Author: Dr. Trinadha Rao Challa
Associate Professor,
Miracle Educational Society Group of Institutions,
Bhoapuram, Vizianagaram, Andhra Pradesh, India-535216.
E-Mail: mr.challa33@gmail.com.

| STRENGTHS: | WEAKNESS: |
|--|--|
| <ul style="list-style-type: none"> • The indexes scrips of Nifty & Sensex are said to be top performing scrips and these should capture much of India's growth over the next few years. • SEBI a regulatory body of Indian stock market who protects the interest of the investors. • Bigger Population can also help to bring in additional investments. • Large number of Brokers who plays a role of facilitator for investment. | <ul style="list-style-type: none"> • Indian stock market is running with high volatility leads to high risk. • Poor Indian Accounting disclosures may lead to large scale manipulation of figures by publicly traded companies. • Dependency on the foreign markets. |
| OPPORTUNITIES: | THREATS: |
| <ul style="list-style-type: none"> • A large number of facilitators, instruments lead to huge amount of resource mobilization. • More population invites more investments. • Foreign investors find India is a potential market. • Cross-border listing is being considered by NSE. • Rural market is still untapped and if opportunity create in terms of relevant infrastructure and education, inflow of funds towards stock market will increase. | <ul style="list-style-type: none"> • Carry trade unwinding • Global Economic slowdown. • Currency mismanagement. • High global commodity prices, over valuation in Index scrips. • Change in government focus on controlling inflation. • The attitude of government relating to FII's taxation etc. |

TRENDS IN EQUITY CASH SEGMENT OF BSE:

| Period | No. of Companies Listed | No. of Trades (Lakh) | Traded Quantity (Lakh) | Turnover (₹ crore) | Market Capitalisation (₹ crore) |
|---------|-------------------------|----------------------|------------------------|--------------------|---------------------------------|
| 1992-93 | 2861 | 126 | 35031 | 45696 | 188146 |
| 1993-94 | 3585 | 123 | 75834 | 84536 | 368071 |
| 1994-95 | 4702 | 196 | 107248 | 67749 | 468837 |
| 1995-96 | 5603 | 171 | 77185 | 50064 | 563748 |
| 1996-97 | 5832 | 155 | 80926 | 124190 | 505137 |
| 1997-98 | 5853 | 196 | 85877 | 207113 | 630221 |
| 1998-99 | 5849 | 354 | 129272 | 310750 | 619532 |
| 1999-00 | 5815 | 740 | 208635 | 686428 | 912842 |
| 2000-01 | 5869 | 1428 | 258511 | 1000032 | 571553 |
| 2001-02 | 5782 | 1277 | 182196 | 307292 | 612224 |
| 2002-03 | 5650 | 1413 | 221401 | 314073 | 572197 |
| 2003-04 | 5528 | 2028 | 390441 | 503053 | 1201207 |
| 2004-05 | 4731 | 2374 | 477171 | 518715 | 1698428 |
| 2005-06 | 4781 | 2640 | 664455 | 816074 | 3022190 |
| 2006-07 | 4821 | 3462 | 560777 | 956185 | 3545041 |
| 2007-08 | 4887 | 5303 | 986010 | 1578857 | 5138014 |
| 2007-08 | 4887 | 5303 | 986010 | 1578857 | 5138014 |
| 2008-09 | 4929 | 5408 | 739600 | 1100074 | 3086075 |
| 2009-10 | 4975 | 6056 | 1136513 | 1378809 | 6165619 |
| 2010-11 | 5067 | 5285 | 990777 | 1105027 | 6839084 |
| 2011-12 | 5133 | 3944 | 654137 | 667498 | 6214941 |

| | | | | | |
|---------|------|------|--------|---------|----------|
| 2012-13 | 5211 | 3235 | 567220 | 548774 | 6387887 |
| 2013-14 | 5336 | 3632 | 479951 | 521664 | 7415296 |
| 2014-15 | 5624 | 7111 | 856755 | 854845 | 10149290 |
| 2015-16 | 5911 | 4117 | 762545 | 740089 | 9475328 |
| 2016-17 | 5834 | 3919 | 707231 | 998261 | 12154525 |
| 2017-18 | 5619 | 3586 | 771603 | 1082968 | 14224997 |
| Dec-18 | 5232 | 2358 | 385982 | 582625 | 14448466 |

Source: SEBI Hand Book of Statistics.

STATEMENT OF THE RESEARCH PROBLEM:

The process of financial reforms implemented in the country has created remarkable changes in various aspects of Stock market, in particular, has undergone a radical transformation both in terms of size and automation and is now comparable to the developed markets with respect to turn over, market capitalization and efficiency.

India ranked second in terms of number of listed companies (1923 Dec-2018) in NSE, next only to the USA (4,397 for the year 2018). But, the success of the stock market developments practice should not be viewed from the angle of how much amount of money is being turned over or how much portfolio investment flows in. The real test is how much benefit all these developments bring in terms of market growth, including simplification of investment procedure, savings mobilization and capital formation. Successful financial reforms should result in strengthening the ability of authorized body to do what they need to do by helping to generate higher growth, higher revenues and higher productivity.

The present study attempts to find out whether the stock market of the country is just a burgeoning casino or a meaningful institution that influences the real economy. Specifically the study attempts to capture the link between Stock market developments in India in the post-reform period and its influence on behavioral aspects of retail investors. The present study reveals that some basic aspects- the link between stock market development and long term economic growth, the causal relationship between stock prices and major macro economic variables, and how the stock market developments are showing impact on retail investors in terms of decision making, investment preference and risk hedging patterns etc.

OBJECTIVES OF THE STUDY:

The present study is aiming to investigate the investor’s perception towards investment in Equity market in north costal Andhra Pradesh and the objectives are

To examine the impact of secondary market developments on retail investors.

METHODOLOGY:

The study is empirical in nature. A survey has been conducted for the collection of primary data. The survey is confined to Visakhapatnam, Vizianagaram and Srikakulam Districts only. A well structured questionnaire is planned to use and elicit the information from the respondents.

SAMPLE SIZE:

The total retail investor population in three districts (Srikakulam, Vizianagaram and Visakhapatnam) in Coastal Andhra Pradesh is 4180. The researcher have used simple random sampling technique method and collected 418 samples.

| DISTRICT | TOTAL RETAIL INVESTORS POPULATION | RESPONDENTS CONSIDERED FOR THE STUDY (10%) |
|------------|---|---|
| SRIKAKULAM | ANGEL BROKING | 180 |
| | IL&FS LIMITED | 210 |
| | STEEL CITY SECURITIES LTD. | 240 |
| | WAY2WEALTH BROKERS PVT.LTD. | 170 |
| | APOLLO SINDHOORI CAPITAL INVESTMENTS LTD. | 120 |

| | | | |
|-----------------|---|-----|--|
| | KARVY STOCK BROKING LTD. | 250 | 25 |
| TOTAL | | | 117 |
| VIZIANAGARAM | ANGEL BROKING | 100 | 10 |
| | STEEL CITY SECURITIES LTD. | 170 | 17 |
| | KARVY STOCK BROKING LTD. | 250 | 25 |
| | KOTAK SECURITIES LTD. | 220 | 22 |
| | APOLLO SINDHOORI CAPITAL INVESTMENTS LTD. | 240 | 24 |
| TOTAL | | | 98 |
| DISTRICT | TOTAL RETAIL INVESTORS POPULATION | | RESPONDENTS CONSIDERED FOR THE STUDY (10%) |
| VISAKHAPATNAM | SHAREKHAN LTD. | 230 | 23 |
| | RELIANCE SECURITIESLTD. | 300 | 30 |
| | MOTILALOSWAL | 250 | 25 |
| | KARVY STOCK BROKING LTD. | 270 | 27 |
| | KOTAK SECURITIESLTD. | 240 | 24 |
| | BONANZA PORTFOLIO | 250 | 25 |
| | ANGEL BROKING LTD. | 230 | 23 |
| | STEEL CITY SECURITIES LTD. | 260 | 26 |
| TOTAL | | | 203 |

SOURCE: AS PER THE RECORDS OF STOCK BROKING AGENCIES

HYPOTHESIS: The hypothesis were formulated and examined by selecting the certain variables like age, gender, education, occupation and monthly income of the investors for the purpose of the study.

H0₁ - There is no significant difference between secondary market developments

And investment preferences of retail investors.

SECONDARY MARKET DEVELOPMENTS

The secondary market is a market where existing securities are purchased and sold. Stock market represents the secondary market where existing securities (shares & Debentures) are traded, Stock exchanges provides an organized mechanism for purchase and sale of existing securities.

In this chapter, several relevant developments of secondary market related which are initiated by SEBI are discussed with the help of some statistical tests.

1. Commencement of trading in options on individual securities.
2. Commencement of trading in Futures on individual securities.
3. Launch of ETF.
4. Commencement of Retail Debt Market Trading.
5. Commencement of trading in Index Options.

6. Launch of Interest Rate Futures.
7. Launch of F&O in Bank Nifty Index.
8. Introduction of Equity Derivatives with a tenure of 3 years.
9. Introduction of Commodity Derivatives.

STOCK OPTIONS SCENARIO AT NSE

| Period | Stock Options | | | |
|---------------|------------------|-------------------|------------------|-------------------|
| | Call | | Put | |
| | No. of Contracts | Turnover (crore) | No. of Contracts | Turnover (crore) |
| 1 | 2 | 3 | 4 | 5 |
| Jun-00-Mar-01 | NA | NA | NA | NA |
| 2001-02 | 768159 | 18780 | 269370 | 6383 |
| 2002-03 | 2456501 | 69644 | 1066561 | 30490 |
| 2003-04 | 4258595 | 168174 | 1338654 | 49038 |
| 2004-05 | 3946979 | 132066 | 1098133 | 36792 |
| 2005-06 | 4165996 | 143752 | 1074780 | 36518 |
| 2006-07 | 4394292 | 161902 | 889018 | 31909 |
| 2007-08 | 8002713 | 308443 | 1457918 | 50693 |
| 2008-09 | 9762968 | 171843 | 3533002 | 57384 |
| 2009-10 | 1,06,14,147 | 3,89,158 | 34,02,123 | 1,16,907 |
| 2010-11 | 2,42,73,560 | 7,77,109 | 82,34,833 | 2,53,235 |
| 2011-12 | 2,45,65,283 | 6,71,770 | 1,19,29,088 | 3,05,261 |
| 2012-13 | 4,24,99,219 | 13,02,779 | 2,42,78,974 | 6,97,648 |
| 2013-14 | 5,03,00,025 | 15,43,894 | 2,98,74,406 | 8,65,594 |
| 2014-15 | 6,12,04,473 | 22,43,382 | 3,02,74,736 | 10,39,170 |
| 2015-16 | 6,53,22,962 | 23,25,030 | 3,49,76,212 | 11,63,144 |
| 2016-17 | 6,12,05,774 | 41,47,488 | 3,09,00,238 | 19,59,998 |
| 2017-18 | 8,62,82,094 | 67,28,007 | 4,01,29,282 | 29,27,002 |
| 18-Dec | 8,98,86,434 | 64,19,787 | 4,48,47,854 | 29,77,748 |

SOURCE: SEBI HAND BOOK OF STATISTICS

The above table represents trading volume of national stock exchange in terms of stock call option contracts along with its turnover and stock put option contracts along with its turnover. In the year of 2001 the total stock call option contracts were 768159 and it will reached to 8,98,86,434 by the December 2018, it records a growth rate of 117 times.

Several secondary market related developments initiated by SEBI are discussed with the help of some statistical tests.

BELOW MENTIONED SECONDARY MARKET DEVELOPMENTS INSPIRED INVESTOR TOWARDS THEIR INVESTMENT DECISION

Opinion Marked with √ in any one FS–Fully Satisfied, S–Satisfied, NI–No Idea, NS–Not Satisfied, FNS–Fully Not Satisfied.

PERCENTAGE SCORE – WISE LEVEL OF AWARENESS OF SECONDARY MARKET DEVELOPMENTS

| Sl.No. | Secondary Market Developments | % Score | Level of Awareness | | | | |
|--------|---|---------|--------------------|------|------|-----|-----|
| | | | FS | S | NI | NS | FNS |
| 1. | Commencement of trading in options on individual securities | 98.44 | 95.0 | 3.8 | 1.2 | | |
| 2. | Commencement of trading in Futures on individual securities | 86.30 | 47.8 | 49.5 | 2.6 | | |
| 3. | Launch of ETF | 80.38 | 30.4 | 61.2 | 7.9 | 0.5 | |
| 4. | Commencement of Retail Debt Market Trading | 85.35 | 49.3 | 42.8 | 7.9 | | |
| 5. | Commencement of trading in Index Options | 79.43 | 42.6 | 32.5 | 24.9 | | |
| 6. | Launch of Interest Rate Futures | 81.70 | 42.1 | 42.6 | 15.3 | | |

| | | | | | | | |
|----|---|-------|------|------|------|-----|--|
| 7. | Launch of F&O in Bank Nifty Index | 81.58 | 44.5 | 37.6 | 17.7 | 0.2 | |
| 8. | Introduction of Equity Derivatives with a tenure of 3 years | 86.06 | 53.3 | 37.8 | 8.6 | 0.2 | |
| 9. | Introduction of Commodity Derivatives | 90.13 | 63.2 | 34.2 | 2.6 | | |

The above table illustrates on how Secondary market developments inspired people towards investment. Commencement of trading in options on individual securities motivated a very high percentage of people to start investing in stock options actively. A percentage of 98.44 got inspired to start investing in trading because of trading in options on individual securities.

Commencement of trading in Futures in individual securities in the secondary market also inspired 86.30% people to start investment. Launch of ETF is another major factor which encouraged 80.38% people to start share market investment. Commencement of retaildebt market trading in the secondary markets motivated 85.35% people and commencement of trading in index options inspired 79.43% people.

Launch of Interest rate Futures and Launch of F&O in Bank Nifty Index also highly motivated people to join investment trading. It inspired 81.70 and 81.58% people respectively. Introduction of Equity Derivatives with tenure of 3 years in the secondary markets inspired about 86.06% people and finally, Introduction of Commodity derivatives influenced 90.13% of the total people to take up trading as a means of investment.

Regression Analysis: Secondary Market Development versus Age, Gender, Education, Occupation, Monthly Income, Monthly savings, Type of the investor, Type of market operated, Experience in the market and % of savings invested in Stock.

REGRESSION ANALYSIS OF SECONDARY MARKET DEVELOPMENTS

| Predictor | Coef | SE Coef | T | P |
|--------------------------------|-----------|----------|-------|-------|
| Constant | 4.20452 | 0.08556 | 49.14 | 0.000 |
| Age of investor | 0.00705 | 0.01091 | 0.65 | 0.519 |
| Gender of investor | 0.00647 | 0.03272 | 0.20 | 0.843 |
| Educational Qualification | -0.053423 | 0.009479 | -5.64 | 0.000 |
| Occupation | -0.014414 | 0.006541 | -2.20 | 0.028 |
| Monthly Income | 0.01122 | 0.01660 | 0.68 | 0.500 |
| Monthly Saving | 0.073049 | 0.009933 | 7.35 | 0.000 |
| Type of Investor | -0.08291 | 0.02391 | -3.47 | 0.001 |
| Type of Market Operated | 0.11626 | 0.01424 | 8.17 | 0.000 |
| Experience in the Market | 0.02598 | 0.01623 | 1.60 | 0.110 |
| Mention the Percentage of your | 0.01481 | 0.02259 | 0.66 | 0.512 |

R-Sq(adj) = 83.4%, P-value: 0.000

Since the p-value of the R-square(64.1%) is less than 0.05, the level of significance which exemplifies that the variation between independent variables and dependent variable(Secondary Market developments) are statistically significant at 5% level. Further, demographic factors explain 83.4% of variation on this aspect. Educational qualification, occupation, monthly savings, type of investor and type of market operated shows significant impact on the secondary market development at 5% level. For these variables, ANOVA tests and T-test are performed to know the significant difference in the average opinion scores among the different categories of the respondents.

ANOVA ANALYSIS OF SECONDARY MARKET DEVELOPMENTS VS AGE, EDUCATION, MONTHLY INCOME, TYPE OF INVESTOR, TYPE OF MARKET OPERATED AND PERCENTAGE OF SAVINGS INVESTED

| Independent Variables | Category | N | Mean | SD | T/F-Value | P-Value | Decision |
|-----------------------|-----------------------|-----|--------|--------|-----------|---------|----------|
| Education | SSC | 63 | 4.3016 | .07035 | 53.941 | 0.000 | S |
| | Inter | 125 | 4.5964 | .18374 | | | |
| | Graduate | 116 | 4.3180 | .10657 | | | |
| | Post Graduate | 54 | 4.3333 | .23146 | | | |
| | Professional Degree | 60 | 4.4481 | .24968 | | | |
| Occupation | Government Employee | 113 | 4.4179 | .16751 | 10.804 | 0.000 | S |
| | Private Employee | 175 | 4.4775 | .26803 | | | |
| | Business | 33 | 4.3300 | .16074 | | | |
| | Professional Services | 97 | 4.3471 | .09789 | | | |
| Monthly Saving | Up to 2500 | 33 | 4.2458 | .09922 | 14.775 | 0.000 | S |
| | 2501 - 4500 | 67 | 4.3184 | .12063 | | | |

| | | | | | | | |
|-------------------------|-------------------------|-----|--------|--------|--------|-------|---|
| | 4501 - 6500 | 190 | 4.4772 | .23667 | | | |
| | 6501 - 8500 | 73 | 4.4216 | .12417 | | | |
| | Above 8501 | 55 | 4.4444 | .25211 | | | |
| Type of Investor | Hereditary Investor | 103 | 4.5782 | .26005 | 9.676 | 0.000 | S |
| | New generation Investor | 315 | 4.3675 | .16365 | | | |
| Type of market Operated | Primary Market | 180 | 4.3500 | .12345 | 98.879 | 0.000 | S |
| | Secondary Market | 166 | 4.3829 | .18932 | | | |
| | Both | 72 | 4.6775 | .24397 | | | |

The above table explains about the respondents opinion on secondary market development by their Education, Occupation, Monthly savings, type of investor and type of market operated. The average opinion score of the respondents who were from intermediate educational background is given more positive opinion when compare with other four categories of the educational qualification.

The average opinion score of the private employees are given more positive opinion when compare with other occupation groups on secondary market developments i.e., this category occupation category respondents has more awareness on secondary market developments when compare with other categories. The respondents whose monthly savings is in between 4501-6500 are given more positive opinion on the above dimension which reveals that this monthly savings group respondents are having optimistic opinion on secondary market developments when compared with other three savings groups followed by above 8500 savings groups.

With regard to the type of investor, the average opinion score of the respondents who are the hereditary investors is significantly greater than the new generation investor category which explains that the hereditary investors has significantly more positive opinion on secondary market developments when compared with New generation investor at 5% level of significance. Further, the respondents who invested their money in both primary and secondary markets are having more awareness on secondary development market when compared with individual investment categories as per the significant p-value of the ANOVA test mentioned above.

CONCLUSION:

Individual investor perception can influence that of stock market and this in turn can influence the state of the economy. So the players and regulators should endeavor to protect the interests of individual investors and create confidence in their mind.

The task of the regulators has been to establish a vibrant capital market where financial assets are fairly priced on their intrinsic value so that they release the right signals for right investment decisions. The protection of the interests of the investors - especially the individual investors - is an imperative for the development and smooth functioning of the capital market.

BIBLIOGRAPHY

RESEARCH PAPERS:

Bessembinder, H. and Seguin, P.J. (1993), "Price Volatility, Trading Volume and Market Depth: Evidence From Futures Markets", *The Journal of Financial and Quantitative Analysis*, Vol. 28, No.1.

Levine, Ross and Sara Zervos (1996), "Stock Market development and long Run Growth", *The World Bank Economic Review*, Vol. 10, No. 2.

Swarup, K. Santi and Anamika Verma (1998), "Effect of Stock Exchange Reforms (1992-97) on the development of Indian Capital market: Intermediaries Perception", *Finance India*, Vol. XII, No.2.

BOOKS:

Gupta L C (1992), *Stock Exchange Trading in India: Agenda for Reform*, Society for Capital Market Research and Development, Delhi, p. 123.

Ackert, L. F., & Deaves, R. (2011). *Understanding Behavioural Finance*. Delhi: Cengage Learning India Private Limited.

WEBSITES:

<http://www.sebi.in>

<http://www.bseindia.com>

<http://www.nseindia.com>

<http://www.shodhganga.inflibnet.ac.in>

ANNEXURE

Below mentioned Regulatory Developments inspired you towards your investment decision?

Please Mark √ in any one FS—Fully Satisfied, S—Satisfied, NI—No Idea, NS—Not Satisfied, FNS—Fully Not Satisfied

| Sl.No. | Regulatory Market Developments | Level of Awareness | | | | |
|--------|--|--------------------|---|----|----|-----|
| | | FS | S | NI | NS | FNS |
| 1. | Establishment of investor Grievance Cell | | | | | |
| 2. | Establishment of NSCCL, First Clearing Corp. | | | | | |
| 3. | Centralized Insurance Cover for all trading members | | | | | |
| 4. | Establishment of investor protection fund | | | | | |
| 5. | Launch of S&P CNX Nifty | | | | | |
| 6. | Setting up NSDL | | | | | |
| 7. | Launch of CNX Nifty Junior | | | | | |
| 8. | Regional clearing facility initiation | | | | | |
| 9. | Launch of NSE Website | | | | | |
| 10. | Launch of certification Courses on financial markets | | | | | |
| 11. | Establishment of Credit Rating Agencies | | | | | |
| 12. | Commencement of Internet Trading | | | | | |
| 13. | Commencement of WAP Trading | | | | | |
| 14. | Appointment of Ombudsman for investor protection | | | | | |
| 15. | Allowing investor for lending & Borrowing for short-selling without STT | | | | | |
| 16. | Launch of financial literacy initiative “Jagruthi” in Barrackpore, in partnership with India Post. | | | | | |
| 17. | SEBI Makes Dividend Distribution policy must for top 500 listed firms. | | | | | |
| 18. | SEBI Approved REIT (Real Estate Investment Trusts) | | | | | |