Abstract:
The economic liberalization process undertaken by the Indian government during early 1990s has opened up new dimensions for Indian economy. The Indian capital market especially stock market has achieved new heights with the implementation of liberalized reforms. Since then the stock market has grown in leaps and bounds. Despite of such robust growth of stock market, participation of retail investors is minimal. In this paper a survey was undertaken in five cities of India to assess participation of retail investors. Indian retail investors still prefer traditional forms of investment like Bank Fixed Deposits, Post office savings, National Saving Certificates etc. Indian stock market remains to be dominated by Foreign Institutional investors and Domestic Institutional Investors. To counter affect such, it is necessary that domestic retail investors should participate more in the Indian Stock Market.

Keywords: Retail Investors in Kolkata, Indian Stock Market, Chi-square test, ANOVA

Introduction
The purpose of this study is to make an assessment of the incidence of retail participation in the stock market in Kolkata. To be more specific, the study seeks to ascertain the retail investors’ attitude towards stock market investing and to assess their perceptions of the various aspects of the Indian stock market. Most of the retail investors do not have much investment expertise and most of them have but modest investment portfolios. The mode of making investment decisions and developing investment portfolios by retail investors are different in many respects from those by institutional and high-wealth investors. It is the latter category of investors who actually dominate the stock market. But retail investors are also important and they are also able to play a critical role in the growth of the stock market. Retail participation is particularly important for small cap companies. For some obvious reasons, institutional investors are not quite keen to invest in these companies. Retailers can be very important for the survival of small cap companies. Another important role of retail investors lies in providing a stable ownership base for companies. This is because most retail investors’ trade relatively infrequently. However, all this can happen only when retail participation in the stock market is sufficiently large. The present survey provides first-hand information on the contents of retail investors’ investment, and their trading habits and decision making.
This paper is divided into four sections. Section (1) explains the procedures used to conduct the retail investors survey. The section also describes the form and content of the questionnaire used for the purpose. Section (2) describes the profile of the respondents. Section (3) analyzes the responses received from the respondents. Section (4) provides the concluding remarks.

1.10 The Survey Process

The survey was conducted in Kolkata. It started in January 2011 and lasted till July 2011. The total number of respondents surveyed was 200. They consisted of persons of various gender, marital status, age groups, income groups, occupation and percentage of income they saved. Initially, a pilot survey was conducted taking 50 people from the city and the survey of retail investors was random. The result of Chi-square test performed on above showed that qualification and marital status were important factors affecting one’s propensity to invest in stock market. The results were cross checked by an indirect oral interview which was conducted with an expert in this field who at that time was a key official of Mutual Fund - SKP Securities Ltd. It was finally observed that qualification was the most significant factor affecting investment decisions of respondents in the market. Based on this outcome, final population was divided into above mentioned strata and the remaining samples were collected using stratified sampling method. Around 57% Graduates, 26% Higher Secondary, 56% Post-Graduates and above and remaining 10% Secondary and below secondary were selected.

1.20 Respondents’ Profile

As has been mentioned earlier, we have surveyed 200 retail investors in Kolkata. An overview of demographic profile of the respondents is presented in table 1.1 below:

| Demographic Factors          | Male | Female | Kolkata |
|-----------------------------|------|--------|---------|
| Gender                      |      |        |         |
| Male                        | 146  | 54     |         |
| Female                      |      |        |         |
| Marital Status              |      |        |         |
| Married                     | 142  | 58     |         |
| Unmarried                   |      |        |         |
| Age Group                   |      |        |         |
| Under 25                    | 8    |         |         |
| 26 TO 35                    | 89   |         |         |
| 36 TO 45                    | 63   |         |         |
| 46 TO 55                    | 23   |         |         |
| 56 TO 65                    | 7    |         |         |
| 65 & Above                  | 1    |         |         |
| Qualification               |      |        |         |
| Below Secondary             | 22   |         |         |
| Secondary                   | 19   |         |         |
| Higher Secondary            | 49   |         |         |
| Graduates                   | 102  |         |         |
| Post Graduates & Above      | 8    |         |         |
| Occupation                  |      |        |         |
| Business                    | 76   |         |         |
| Professional                | 25   |         |         |
| Salaried                    | 60   |         |         |
| Student                     | 8    |         |         |
| Home Maker                  | 27   |         |         |
| Retired                     | 4    |         |         |
| Income Group                |      |        |         |
| Under 3 Lacs                | 177  |         |         |
| 3 Lacs TO 5 Lacs            | 17   |         |         |
| 5 Lacs TO 10 Lacs           | 6    |         |         |
| 10 Lacs TO 20 Lacs          | -    |         |         |
| Above 20 Lacs               | -    |         |         |
| Savings as a % of Income    |      |        |         |
| Between 10% to 30%          | 181  |         |         |
| Between 30% to 50%          | 19   |         |         |
| Between 50% to 70%          | -    |         |         |
| More than 70%               | -    |         |         |

As observed from above Table 1.1 that male respondents as compared to female are greater. Again, married respondent are larger as compared to unmarried. Majority of respondents belonged to the age group of 26 to 35 years (i.e. 47%). Majority of respondents belonged to the class of graduates (i.e. 57%). Salaried person are highest respondent (44%)
as compared to other professional in Kolkata. People who belong to lower middle class whose income is under 3 Lacs are highest respondent in the survey. People whose saving is in between 10% to 30% are highest in number.

The above result throws light upon low participation of respondents in stock market. The retail participation in selected countries like Australia was 41% of population by end of 2008, 21% by end of 2008 in Hong Kong, 18% by end of 2008 in UK, 10.5% by 2007 in China, 39.5% by end of 2008 in Taiwan, 27.7% by 2009 in US whereas India has only 1.3% of retail participation by end of 2010 (Shah J., 2012).

1.30 Response Analysis

1.31 Propensity to Invest in Stock Market across Different Groups of Demographics

In this section, we try to analyze the propensity to invest in stock market across different groups of demographics. To ascertain which demographic factor affects most on one’s choice of investing or not in the stock market, we performed Pearson’s chi-square test1, the result of which can be summarized as follows:

Here, we want to test the Null Hypothesis (Ho): there is no significant difference in propensity to invest in stock market across different groups of demographic factor like sex, marital status, qualification, age group, income group etc.

Alternative Hypothesis (H1): there is significant difference in propensity to invest in stock market across different groups of demographic factor like sex, marital status, qualification, age group, income group etc.

If the level of significance i.e. p < 0.05, then we reject null hypothesis otherwise accept it.

As observed from table 1.2, gender and occupation were significant factors among respondent’s choice of investing in stock market in Kolkata. Qualification of the respondents seemed to be highly significant factor in Kolkata.

This result is in line with previous studies which showed that demographic factors play an important role in one’s choice of investing in stock market which is a high risk investment avenue. Investor’s risk tolerance positively correlates with the investor’s demographic factors, such as age, level of education, income, marital status, and wealth (Lease, Lewellen, and Schlarbaum, 1974, 1977; Riley and Chow 1992). Investor’s risk tolerance tends to increase with the age. Investors tend to be risk averters when they are approaching retirement. Besides that, the level of investor’s education influences positively investor’s risk behavior (Schooley and Worden, 1999). More
specifically, investors with specific jobs, namely corporate executive, lawyer, doctor, tend to be more risk tolerant (Barnewall, 1987).

Again, Warren et al. (1990) and Rajarajan (2000) predict individual investment choices (e.g., stocks, bonds, real estate) based on lifestyle and demographic attributes. These investors see rewards as contingent upon their own behavior (Rajarajan, 2002).

As pointed out by Evans (2004) those investors less than 30 years old tend to take more risk than do the older ones.

1.32 Purpose of Making Investment

The purpose of making investment varies among investors. Different people invest for different reasons though the basic objective remains same for all i.e. obtaining maximum return out of one’s investment.

From the response of the survey, purpose for making investment by respondents was analyzed. The analysis was based on the mean of ranks obtained in order of preference.

Table 1.3 - Mean of Ranks Obtained

| Options                        | Yes | No |
|-------------------------------|-----|----|
| As a Business/ Profession     | 3.1 | 2.5|
| Retirement Planning           | 2.6 | 2.4|
| Unforeseen Events             | 2.1 | 2.2|
| As an Investor                | 3.2 | 3.7|
| For Children’s Education      | 3.7 | 1.7|

According to their Preference for Investing

It is observed from Table (1.3) that people prefer to invest in stock market for business purposes.

The highest number of respondents who invest as well as don’t invest but prefer to invest in stock market as an investor. People also prefer to invest in stock market for children’s education.

So, it can be said that in Kolkata people prefer to invest in stock market mainly for children’s education, investment and for business purpose.

Table 1.4 - Results from ANOVA Test Showing Propensity to Invest of Respondents across Various Means of Investment *

| Propensity to Invest          | Kolkata |
|-------------------------------|---------|
| As a Business/ Profession     | 0.056   |
| Retirement Planning           | 0.267   |
| Unforeseen Events             | 0.582   |
| As an Investor                | 0.084   |
| For Children’s Education      | < 0.001 |

Table 1.5 - Result from ANOVA Test Showing Allocation of Income by Various Investment Avenues

| Various Investment Avenues | p values |
|----------------------------|----------|
| Gold                       | 0.055    |
| Government Securities      | 0.432    |
| Insurance                  | 0.067    |
| Bank FD                    | 0.276    |
| Post Office SS.            | 0.007    |
| Shares                     | < 0.001  |
| Property                   | 0.002    |
| Others                     | < 0.001  |
As observed from above table, in Kolkata, there was a high significant difference in mean spending of respondents among Post Office S.S., shares, Property and Others.

**1.33 Expectations from One’s Investment**

Expectation from investment varied from person to person. The table below depicts the total number of respondents opting for a particular expectation.

As observed from table (1.6) people in Kolkata considers terms of investment and return on investment as a major factor behind investment, followed by ease of investing. As very few people responded for earning more than inflation rate, this shows poor knowledge of investors related to inflation adjusted return.

**Table 1.6 - Frequency of Respondents Who Considers Following Factors While Making Normal Investment**

| Factors                                | Frequency |
|----------------------------------------|-----------|
| Return on investment                   | 142       |
| Time frame of Investment               | 29        |
| Capital Requirement                    | 6         |
| Knowledge of investment                | 20        |
| To earn more than inflation rate       | 6         |
| Market Sentiments/ security            | 30        |
| Ease of Investing                      | 123       |
| Terms of investment                    | 200       |
| Don’t consider any of the above        | 1         |

**Table 1.7 - Distribution of Respondents about Their Awareness on Equity Yielding Higher Returns than Other Investment in Long Run**

| Center          | Valid | Frequency | Percent |
|-----------------|-------|-----------|---------|
| KOLKATA         | YES   | 180       | 90      |
|                 | NO    | 4         | 2       |
|                 | Total | 184       | 92      |
|                 | Missing | System | 16 | 8 |
|                 | Total | 200       | 100     |

As observed from table (1.7), 90% of respondents in Kolkata are aware of the fact that equity yields higher returns than other investment in long run.

**Table 1.8 - Mean of Ranks Based on the Reasons Why Respondents did not Or Invested Less in Stock Market**

| Preferences                                                                 | Mean of Ranks |
|----------------------------------------------------------------------------|---------------|
| Fear of losing the money/ capital or previous experience of loss             | 1.70          |
| Lack of knowledge of the investment                                        | 1.76          |
| Time constraint to monitor investment                                      | 1.74          |
| Difficulty in documentation & operation in stock market                    | 1.71          |
| Lack of good advisors to advise on stock market                            | 1.74          |
| Lack of stability or absence of fixed returns or security of capital        | 2.02          |
| Any other reasons                                                          | 0.26          |
From the above table, it could be concluded that the main reason for the respondents of or not investing much in stock market is fear of losing the money/capital or previous experience of loss. Secondly, difficulty in documentation and operation in stock market acts against investor’s participation in stock market. Thirdly, time constraint to monitor investment, fourthly, lack of good advisors to advice on stock market, fifthly, lack of knowledge of the investment and lastly lack of stability or absence of fixed returns or security of capital.

Table 1.9 - Factors/ Changes necessary to make Stock Market Investments more User friendly

| Factors to make stock market user friendly | Frequency (n) |
|------------------------------------------|---------------|
| Ease of Trading                          | 11            |
| Good Advisor                             | 28            |
| Stability of the Market                  | 48            |
| More Knowledge of Products in Stock Market| 112           |

As observed from table (1.8), in Kolkata investors have given weight age to more knowledge of products in stock market as compared to rest of the factors. Respondents also considered stability of the market as important factor to invest in stock market.

1.40 Concluding Remarks
In India, participation of retail investors in stock market is comparatively low. India has one of the highest savings rates in the world. But only a small percentage of household savings in India is invested in the stock market. The primary destinations of savings across household categories in India are banks, post offices, insurance products, and metals. Investment experts and capital market researchers have tried to find out the major reasons for Indian household investors’ not choosing the stock market as the primary investment destination. It has been observed that the reasons are many and varied. There is doubt about the safety of stock market investments. Most retail investors find the stock market activities too complex and difficult to comprehend. The continued volatility of the market is considered by many to be a great demotivating factor. The frequent occurrence of scams and frauds is also cited to be an important reason why ordinary household investors try to avoid the stock market route. The results from our survey of retail investors reveal that the fear of losing money is the primary reason why the respondents try to avoid stock market investing. Other reasons that are cited include procedural complexity, inability to monitor investments and absence of stable returns.

Our survey of retail investors was conducted in a metro Politian city Kolkata. The results show that only 38 percent of the respondents have invested in the stock market. Moreover, these investors invest only a small fraction of their savings in the stock market instruments. The investors we surveyed all belong to the middle class community; about 95 of the respondents have income under Rs 6.00 lakh. In our survey, we have tried to ascertain the investment-related behavior of the respondents. The questionnaire required respondents to tell about their saving habits, awareness of investment opportunities, objectives of making investments, and investment preferences. One of the key findings of the survey is that insurance endowment policies are the most
preferred investment instruments among the respondents. This is followed by property, gold and bank deposits. Our questionnaire required respondents to give their views as to the changes that should be effected in order to make stock market investments more user-friendly. About 44 percent of the respondents believe that stock market investing can be made more attractive if the quality of investment advisory services is improved. Bringing about stability in market is considered by many (about 39 percent) to be an important way in which improvements can be brought about. About 32 percent of the respondents opine in favor of easing the trading procedures.

Retail participation in stock market in India is of paramount importance. The development of the capital market is not possible without increasing the base of investors. It is through enhanced retail participation that the investor base can be widened. The current low retail participation is due to many complex issues. The matter should be pursued seriously. Since the problems are very complex, it is not possible to solve them simply by making some policy changes. There are issues like price manipulation, corrupt accounting practices, overpricing and incorrect grading of IPOs which need concerted efforts to resolve. Regulators should take stern action against all sorts of malpractices in the Indian stock market. They should seriously pursue investor protection.

Notes:
1. Pearson’s Chi-square test or Chi-square test is a non-parametric statistical test to determine if the two or more classifications of the sample are independent or not. Chi-square can be used as a ‘test for goodness of fit’ which is generally used to determine how well the assumed theoretical distribution like Binomial, Poisson or Normal distribution fit to the observed data. Secondly, ‘test for independence of attributes’ shows whether two or more attributes are interrelated and thirdly, a ‘test of homogeneity’ to ascertain whether there is a homogeneity among several population in terms of its characteristics and evaluates the equality of several population of categorical data.

The formula for obtaining Chi-square value is as follows:

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where n is the number of cells in the table. The obtained test statistic is compared against a critical value from the chi-square distribution with (r - 1)© - 1) degrees of freedom( Frank et.al., 2012).

2. Analysis of Variance or ANOVA is a statistical technique to analyze variation in a response (continuous random variable) measured under conditions defined by discrete factors (classification variables, often with nominal values). ANOVA is used frequently to test equality among several means by comparing variance among groups relative to variance within groups.

3. Active investors are those who are continuously involved in buying and selling actions in the stock market (www.investopedia.com). They want to overrule market average returns by picking attractive stocks, bonds, mutual funds, time when to move in and out of markets or market sectors and place leveraged bets on the future direction of securities and markets with options, futures and other derivatives. In their bid to outperform market they often take help of various methods like fundamental analysis, technical analysis, and macro-economic analysis to determine profitable future investment trends.

Whereas Passive investors on the other hand are those who are not frequently transacting in stock market activity and are risk averse. They make no attempt to distinguish between attractive and unattractive securities or forecast securities prices, or time markets and market sectors. Though they want to make profit in long term, but accept the average returns. Passive investors will purchase investments with the intention of long-term appreciation and limited maintenance.

For the purpose of our analysis, in context of retail individual investors, passive investors are taken as those investors who participate very less in stock market in comparison to active investors.
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