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INFLUENCE OF RISK TOLERANCE ON ECONOMIC GROWTH OF A COUNTRY

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Abstract

Investment and Savings are two different mandatory factors influencing a nation's economic growth. The possibility and perception of this depends on the income, expenses and the surplus available for saving and investing in several forms. Investment in India is mostly done with less involvement of risk. It is termed as the tolerance of risk which includes the investor's attitude towards risk, willingness to accept investment uncertainties when financial investments are made. The risk tolerance varies with respect to aspects not restricted to age, income, gender, marital status, occupation and education. Risk acceptance level of the investor influences the investing decisions and thereby the performance of the stock market. This study was done with an intention

to study the risk tolerance level of the investors by which the study of investors' behaviour also was studied mandatorily. From the study the factors influencing risk tolerance of the investors could be identified which gives a vivid picture about the investors' behaviour towards stock market in an Indian context that could be applicable to several other Asian countries also that practices similar lifestyle and beliefs.

Keywords: Risk Tolerance, Risk Management, Risk Acceptance, Investment Decisions, Investors' behaviour

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INTRODUCTION

India is considered to be one of the highest globally in household savings up to 30%, according to a recent study. Indian savings pattern falls mostly under the heads of recurring / fixed deposits, Insurance policies, buying gold and Real estate. Hardly 3% of the total population invests in stock market. The potential for saving of remaining 27% goes unutilized or not utilized to the fullest extent. It is mainly due to the lack of risk taking ability among the people in India. India is a largely populated country with 1.32 Billion in population following China with 1.41 Billion in population. According to a source it is said that the Dependency ratio is 54.1% in India. This means that the dependency population is more than the productive population which is 45.9% [1].

The duty to take care of the dependent population lies with this productive population. Hence, the feeling of insecurity dwells within in most of the Indians by nature. Therefore, they rely or believe in savings more than most of the countries in the world. With dominance of insecurity in survival nature, obviously risk taking ability takes the second place. With this nature of aversion or fear towards risk, the Indians opt for safe savings options. Last or the hardly preferred avenue is investing in stocks and shares. In India the 69% of the population lives in rural areas and 31% in urban areas [2].

INDIAN PATTERN OF INCOME DISTRIBUTION

The savings is done in the proportion of quarter from earnings by every average Indian. The Indians' culture is basically tradition driven and they spend largely on weddings. The craze for gold also is hence more which automatically drives the people to invest more on gold which also does not give them an in secured feeling. Rural population is almost bothered with their concern of regular food, clothing and shelter. Hence, they have not the thought of taking risk on investments which they hardly understand. This unravels the challenge of initially creating the basic awareness about the stock market and then comes the act of motivating them to invest in share market. The Indians fear old age and medical emergencies tremendously. Hence beyond routine living they care on saving most of the income and also holding insurance policies. Barely 3% of the household income goes into small savings instruments, stocks or insurance policies.

And of this, almost two-thirds goes to insurance policies [3]. It is said by this source that only 18 million people of the 1.32 billion has demat account and are involved in stock market transactions. The remaining population does not think of this as an avenue of investment [4]. GDP of India represents 3.33 percent of the world economy [5].

In the world of finance, risk management refers to the practice of identifying potential risks in advance, analyzing them and taking precautionary steps to reduce/curb the risk [6]. But nothing great happens without taking risk. Though it's a known and accepted fact that the people's perception towards stock market is still a never to risk area. However, a strong financial market is a symbol of a developing nation which definitely demands the complete participation of its population in return yielding investments. The present Prime Minister Shri. Narendra Modi seems to be showing interest in the growth of the nation through his several initiatives like Start up India, Stand up India, Make in India Campaigns etc. He has also emphasized the significance of investing in stock market as an important aspect that will contribute to the development of a nation.

Review of Literature

Literature is not limited that has studied this area of concern or that has not already contributed its value addition to the society. This study is only a mild value addition that highlights the lack of risk tolerance level that leads to the meager percentage of Indian investments in stock market.

METHODS AND PROCEDURE

The study was conducted to explore the investor's behavior towards stock market with specific focus on Indian stock market. The tool used by Abdallah et al. was used here for the study, for data collection. The same tool was used as this study also intended to study the investors' Trading Behaviour in the market, Financial literacy, Risk tolerance, Confidence in trading and Perception of the trading environment. The data was collected using Likert five point scale.

Demographic data was collected with significance as it may influence the investors' behavior largely irrespective of country. Purposive sampling was done as the intention was to study about the investors in stock market alone. The study was done in the most predominant metropolitan city Chennai in Tamil Nadu. The chosen city comprises the questionnaire was circulated to 750 respondents based on the convenience of the researcher through non-probability method (Table 1). 472 valid responses were received that were usable for the study post cleansing process. The respondents comprised of the investors in shares and stocks in the Indian stock market.

Table 1: Frequency distribution of socio-demographic variables (n=472).

| S.no | Variable | F | % |
|------|---------------------|-----|------|
| 1 | Gender: (1) Male | 179 | 37.5 |

| | | | |
|----------|---------------------------------|------------|----------------|
| | (2) Female | 293 | 62.5 |
| | Total | 472 | 100 (%) |
| 2 | Age: | | |
| | (1) 21-30 | 121 | 25.64 |
| | (2) 31-40 | 118 | 25.00 |
| | (3) 41-50 | 224 | 47.46 |
| | (4) >50 | 9 | 1.91 |
| | Total | 472 | 100 (%) |
| 3 | Marital Status: | | |
| | Single | 102 | 21.2 |
| | Married | 370 | 71.8 |
| | Total | 472 | 100 (%) |
| 4 | Educational level: | | |
| | (1) Graduates | 212 | 44.56 |
| | (2) Postgraduates | 237 | 47.94 |
| | (3) Others | 33 | 7.00 |
| | Total | 472 | 100 (%) |
| 5 | Personal Monthly Income: | | |
| | (1) < 20000 | 89 | 18.9 |
| | (2) 21000-40000 | 188 | 39.8 |
| | (3) 41000-60000 | 144 | 30.5 |
| | (4) >60000 | 51 | 10.8 |
| | Total | 472 | 100 (%) |
| 6 | Occupation | | |
| | (1) Self employed | 109 | 23.1 |
| | (2) private sector | 116 | 24.6 |
| | (3) public sector | 164 | 34.7 |
| | (4) others | 83 | 17.6 |
| | Total | 472 | 100 (%) |
| 7 | Designation: | | |
| | Upper level | 99 | 21.0 |
| | Middle level | 232 | 49.3 |
| | Lower level | 141 | 29.7 |
| | Total | 472 | 100 (%) |
| 8 | Total Experience: | | |
| | < 3 years | 100 | 21.2 |
| | 3-6 years | 142 | 30.1 |
| | 6-9 years | 44 | 9.2 |
| | 9-12 years | 81 | 17.2 |
| | >12years | 105 | 22.3 |
| | Total | 472 | 100 (%) |
| 9 | Job Status: | | |

| | | | |
|--|--------------|------------|----------------|
| | Fulltime | 242 | 51.2 |
| | Part time | 230 | 48.8 |
| | Total | 472 | 100 (%) |

ANALYSIS AND DISCUSSION

Hypothesis: There is influence of demographic factors on the investors' behavior.

Table 2: Influence of demographic factors on investors' behavior towards Indian stock market.

| Factors | Chi square value | P Value | Significance | Hypothesis |
|-------------------|------------------|---------|--------------|------------|
| Age | 8.043* | 0.018 | S | Accepted |
| Income | 7.203* | 0.027 | S | Accepted |
| Occupation | 7.779* | 0.020 | S | Accepted |
| Experience | 17.085** | 0.000 | S | Accepted |
| Education | 6.274* | 0.043 | S | Accepted |
| *P<0.05, **P<0.01 | | | | |

From Table 2 the hypothesis is accepted as there is influence of demographic factors on the investors' behaviour.

Factor Analysis by Principal component method was applied on 20 items of investors' behavior to derive the predominant factors. Exploratory Factor Analysis is appropriate to identify the predominant factors to analyze the investors' behavior toward stock market (Table 3). The results of Exploratory Factor Analysis by Principle Component Method are presented below:

Table 3: Principle component matrix.

| S. No | Component | Initial Eigen values | | | Rotation Sums of Squared Loadings | | |
|-------|-------------------|----------------------|---------------|------------------|-----------------------------------|---------------|------------------|
| | | Total | % of Variance | The Cumulative % | Total | % of Variance | The Cumulative % |
| 1 | Risk Attitude | 15.297 | 38.243 | 38.243 | 10.072 | 40.909 | 40.909 |
| 2 | Over confidence | 8.016 | 20.040 | 58.282 | 9.248 | 23.119 | 64.028 |
| 3 | Market perception | 6.658 | 16.646 | 74.929 | 5.064 | 12.659 | 76.687 |
| 4 | Financial | 3.703 | 15.815 | 90.744 | 4.915 | 12.286 | 88.973 |

| | | | | | | | |
|---|------------------------|-------|-------|--------|-------|--------|--------|
| | literacy | | | | | | |
| 5 | Information perception | 2.572 | 9.256 | 100.00 | 4.411 | 11.027 | 100.00 |
| Extraction Method: Principal Component Analysis | | | | | | | |

The total variance table explains that, among 5 variables Risk Attitude has the highest variance of 40.909%; followed by over confidence with variance of 23.119%; followed by 12.659% variance of market perception; followed by 12.286% variance for financial literacy; and last is information perception with 5.455% of variance. The total variance explained by the 20 items is highly significant with 100%. This shows that the extracted 5 factors significantly represent the 20 items of investors' behaviour (Table 4). The following rotated component matrix decides the factor segmentation through variable loadings.

Table 4: Factors influencing trading of stock and direction of the market.

| | | | | | |
|---|-------|-------|-------|--|--|
| Risk Attitude | | | | | |
| I am prepared to take greater risks in order to earn greater future returns | 0.751 | | | | |
| When a large portion of my portfolio is invested in risky stocks, it usually makes me very worried, and stressed out. | 0.705 | | | | |
| I am least interested in taking risks in stock market | 0.704 | | | | |
| Market perception | | | | | |
| unethical management practices | | 0.715 | | | |
| Increasing competition in the business | | 0.678 | | | |
| General Collapse in the industry | | 0.665 | | | |
| General dip in the economy | | 0.645 | | | |
| Fall in oil prices | | 0.908 | | | |
| Geo-political factors | | 0.880 | | | |
| Over confidence | | | | | |
| I am an experienced investor | | | 0.684 | | |
| I feel that on average my investments perform better than the stock market | | | 0.624 | | |
| When I make a winning investment, I feel that my actions and knowledge affected the result | | | 0.621 | | |
| I expect my investments to perform better than the stock market | | | 0.777 | | |
| I feel more confident in my own investment opinions over opinions of financial analysts | | | 0.707 | | |
| I feel more confident in my own investment opinions over opinions of friends and colleagues | | | 0.601 | | |
| Information perception | | | | | |

| | | | | | |
|--|--|--|--|-------|-------|
| Providing of Sufficient data | | | | 0.920 | |
| Providing of Timely Information | | | | 0.854 | |
| Providing of Reliable data | | | | 0.822 | |
| Financial Literacy | | | | | |
| Influence of fundamental analysis in buying/selling decisions? | | | | | 0.642 |
| Influence of technical analysis in buying/selling decisions? | | | | | 0.621 |
| Extractions Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 13 iterations | | | | | |

CLUSTER ANALYSIS

Factor analysis by principle component method identified 5 factors determining the investors’ behavior towards stock market. At this juncture, it was indispensable to ascertain the existence of heterogeneous groups in the sample unit. This heterogeneity among the respondents possessed different characteristic features and perception of respondents (Table 5). The application of K-Means cluster analysis identified their perceptual differences in the form of five groups as presented below:

Hypothesis: There is difference in the investors’ Risk Tolerance about stock market

Table 5: Perception of Investors - Number of cases in each cluster.

| Groups | Factors | Frequency | Percentage |
|------------------------------|-------------------------|------------------|-------------------|
| Cluster 1 | Moderate Risk tolerance | 189.000 | 40.0 (%) |
| Cluster 2 | High risk Tolerance | 146.000 | 31.0 (%) |
| Cluster 3 | Low risk tolerance | 137.000 | 29.0 (%) |
| Number of Respondents | | 472.000 | |

The above Table 5 clearly illustrates that the maximum i.e., 40% of the investing respondents were willing to undertake moderate risk for stock market investments. 31% respondents were willing to take high risk irrespective of risks involved or prior bitter experiences. And remaining 29% were least interested in taking risk of investing in stock markets amidst various commitments. This is similar to the findings of study done by Suganya et al. [7]. Hence the hypothesis is accepted as there is difference in the risk tolerance of the respondents with respect to stock market.

CONCLUSION

From the above analysis it can be found that the investors’ were moderate risk bearers

in Indian scenario. Although the findings show that there are a following percentage of high risk bearers, the moderate risk bearers lead the role. The people of India and their standard of living are such that they cannot afford to take high risk. There is even still a 29% of population that is least interested in stock market investing. The findings from Table 2 show that there is significant influence of demographic factors on the investors' behavior towards stock market.

The Indian style of living does not provide a broadminded or feeling of security within. They are so tuned or trained to get educated till graduation or post-graduation, and work as soon as possible to support the family. Hence most of the families are salary dependent and does not help to increase the risk bearing capacity from within. The salaried people live with the perception of investing only in reliable and secured sources even if the returns may be little, compared to huge profits that may be possible by investing in stock market. Even beyond this if people are found willing to invest in stock market they tend to do it in very meager amount and also invest the same with an intention that the money may give returns or the principle also may not be recovered. This is a very sad state which leads to mutual loss for the individual as well the country. The individual is affected by not being aware of the benefits of stock market investment and by not being tuned from beginning of their existence as one of the forms of investment. Hence educating individuals on stock market since childhood, along with inculcating of risk taking ability is very essential for the development of the country.

The national development is affected because the contribution of the Indian citizens to the world GDP is restricted to a great extent in spite of being the world's second largest country in population in addition to being a country that has great percentage of household savings. The concern of the researcher is that this fear for investing should be removed and awareness of stock market to be enhanced to exploit the savings potential to the fullest that might indirectly lead to the growth of the nation as well the universe. The interpretation of this study is applicable to most of the similar Asian countries that share similar lifestyle and savings pattern.

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