

## INFLUENCES OF DEMOGRAPHIC FACTORS OF INDIVIDUAL INVESTORS ON MARKETABLE SECURITIES

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### **Abstract**

Investors investment decisions are influenced by different factors, among demographic factors are considered as one of the decisions influencing factor among investors. This study attempts to find out the significance of demographic factors of population such as gender, age, education, occupation, income and savings over several elements of investment decisions. The study was made by conducting a survey in Chennai city of Tamilnadu, South India and the statistical inferences were deduced using statistics tools. The study reveals that the demographic factors have a significant influence over some of the investment decision elements and insignificant in others elements too. The study also discloses a general view of investors perception over various investment avenues and risk and returns.

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### **Keywords:**

demographic factors;  
investors perception;  
investment avenues;  
investment level;  
risk and returns.

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## 1. INTRODUCTION:

Investment decisions in securities are sometimes rational where the investors take decisions by analyzing the information in the market. Some investors take irrational decisions where they ignore certain information that is available. Irrational decisions may also be due to the investor's limited capacity to process the information available. Investors also take decisions matching the risk absorption level. Stock market is said to be peculiar though there are different methods and tools to analyze before taking decisions. Investment decisions are still found to be complicated as there are influenced by socioeconomic, demographic, and attitudinal factors. This paper assesses the impact of demographic factors on Individual Investors' Investment Decisions towards Marketable Securities. The demographic factors are age, gender, marital status, level of income, educational background, etc that affect the assessment of risk and thereby investors' behaviour and decision making.

## 2. Review of Literature

**Brahmabhatt, P.S Raghu Kumari, and Dr. Shamira Malekar (2012)** analyzed the investor behavior and their preferences. The objectives of the study were to understand about various investment avenues available in the market, the pattern of investors while making the investments, & the factors that investors consider before investing. It was revealed that people like to invest in stock market. The percentages of income they make as investment depend on their annual income.

**Arvind Kumar Singh and Karan Veer Singh (2016)** conducted a study to know the investor perception towards mutual funds and the perception towards risk involved in mutual fund in comparison to other investment avenue. It is found that Investors should realize that ignorance is no longer bliss and what they are losing by not investing. Investors should be made aware of the benefits. So the advisors should try to change the investor's mindsets.

**N. Nandhini Devi, Dr. A. Velanganni Joseph (2017)** studied the impact of demographic factors on mutual fund individual investors' investment behavior and also analyzed the presence of investor bias such as overconfidence, myth following and other irrational behaviors. The study

revealed that men behave more rationally than women and novice (inexperienced) investors behave more irrationally than experienced investors.

### 3. Objectives of the study

- To study the demographic factors that influences the investor's decision-making process.
- To examine the relationship between income and the investment portfolio of the investors.
- To analysis the relationship between annual income and the investment level of investors
- To examine the relationship between the occupation and Investment preferred by investors

### 4. Hypothesis of the study

H<sub>0</sub>: Investment decisions of investors are influenced by demographic factors.

H<sub>0</sub>: Annual income and the Investment level of investors are independent.

H<sub>0</sub>: occupation and Investment preferred by investor are independent.

### 5. Research Methodology

**Research Design:** The research design adapted in this study is descriptive study.

**Source of Data:** The data required for this study were collected from the primary sources and the secondary sources. The primary data required for the study were collected through a structured questionnaire from investors. The secondary data were collected from the Journal and Books.

**Sample Size:** The study is confined to Chennai city only. The sample size is fixed as 220. The convenience sampling technique has been applied for selecting the sample.

**Tools used for Data Analysis:** The data collected with the help of primary and secondary sources was analyzed by using statistical tools, whereas Interval Estimation, Chi-Square tests and Correction Analysis.

### 6. Results and Analysis

#### 6.1 Demographic Characteristics of the Respondents

The demographic data presented in the Table 1.1 indicates that 76 percent of respondents were male and 24 percent of respondents were female and it is inferred that most of the investors are male who invest their money in marketable securities. Marital status of the respondents were 16.36 percent fell in unmarried and 83.64 percent were married. 46 percent of respondents fall in the age category of 25-35 years, 17 percent of respondents came under the age group of below 25 years and 36-45 years category, and 13 percent of respondents are belong to age of 50 and above, whereas only 7 percent of respondents are belonged to 46-50 years. It is clearly reveals that 25-35 years age group of respondents were majority investing in Marketable securities.

The information pertaining to occupational categories reveals 16 percent of respondents belonged to Business Class, 29 percent of respondents were in Salaried-Govt/Public Sector, 33 percent of respondents were Salaried-PVT Sector, 20 percent of respondents belonged to professionals and balance 2 percent came under other categories of occupations. It clearly shows that the majority of respondents from Salaried-Govt/Public Sector were highly interested in Marketable Securities. 60 percent of respondents fell in the income category of below Rs.2,50,000, 20 percent of respondents earned between Rs. 2,50,001 to Rs. 5,00,000, 10 percent of respondents had annual income of Rs. 5,00,001 to Rs.7,50,000, 7 percent of respondents earned between Rs. 7,50,001 to Rs. 10,00,00, whereas only 3 percent of respondents fall under above Rs. 10,00,000. It shows that most of the respondents had annual income of below Rs. 2, 50,000. The respondents were mostly from the middle class income group.

Educational profile of the respondents indicates that 46.36 percent were Graduate, 38.64 fell in the category of Post Graduate, 10 percent of respondents possessed other qualifications like Diploma, and 3.18 percent of respondents came under higher secondary school, whereas only 1.82 were belonged to school-level education.

**TABLE 1.1 Demographic Characteristics of the Respondents**

<b>Gender of the Respondents</b>			<b>Marital Status of the Respondents</b>		
<b>Gender</b>	<b>No. of Respondents</b>	<b>Percentage</b>	<b>Marital Status</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Male	168	76	Single	67	16.36
Female	52	24	Married	184	83.64
<b>Total</b>	<b>220</b>	<b>100</b>	<b>Total</b>	<b>220</b>	<b>100</b>
<b>Age of the Respondents</b>			<b>Occupation of the Respondents</b>		
<b>Age</b>	<b>No. of Respondents</b>	<b>Percentage</b>	<b>Occupation</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Below 25	37	17	Business	36	16
25-35	102	46	Salaried-Govt/Public Sector	64	29
36-45	37	17	Salaried-Pvt Sector	72	33
46-50	15	7	Professional	43	20
Above 50	29	13	Others	5	2
<b>Total</b>	<b>220</b>	<b>100</b>	<b>Total</b>	<b>220</b>	<b>100</b>
<b>Annual income of the Respondents</b>			<b>Qualifications of the Respondents</b>		
<b>Annual Income</b>	<b>No. of Respondents</b>	<b>Percentage</b>	<b>Qualifications</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Less than 2,50,000	132	60	SSLC	4	1.82
2,50,001-5,00,000	44	20	HSC	7	3.18
5,00,001-7,50,000	22	10	Under Graduate	102	46.36
7,50,001-	15	7	Post Graduate	85	38.64

10,00,000					
Above 10,00,000	7	3	Other	22	10
<b>Total</b>	<b>220</b>	<b>100</b>	<b>Total</b>	<b>220</b>	<b>100</b>

Source: Primary Data from Survey

## 6.2 Annual Income and Level of Investment

It could be understood from Table 1.2 that among 70 individual investors whose annual income up to Rs. 2,50,000. Annually, majority of investor's (i.e., 36 per cent) are able to invest less than Rs. 50,000 towards marketable securities and nine per cent of investors are investing above Rs. 2,00,000. In the case of individual investors with an annual income between Rs. 2,50,001 - Rs. 5,00,000, the majority of investor's (i.e., 34 per cent) were investing between Rs. 50,001- Rs. 1,00,000 and ten per cent of investors were able to invest above Rs. 2,00,000. Among the individual investors whose annual income were between Rs. 5,00,001- Rs. 7,50,000, majority of investor's (i.e., 32 per cent) were investing less than Rs. 50,000 towards marketable securities and thirteen per cent of investors are investing above Rs. 2,00,000 out their income. Among the individual investors whose annual income were between Rs. 7,50,001- Rs. 10,00,000, majority of investor's (i.e., 26 per cent) were investing less than Rs. 50,000 towards marketable securities and fifteen per cent of investors were able to invest above Rs. 2,00,000 out their income. It clearly shows that above Rs. 10,00,0000 of annual income were 25 per cent individual investors are investing equally in all the investment level.

**Table 1. Investor's Annual Income and Level of Investment.**

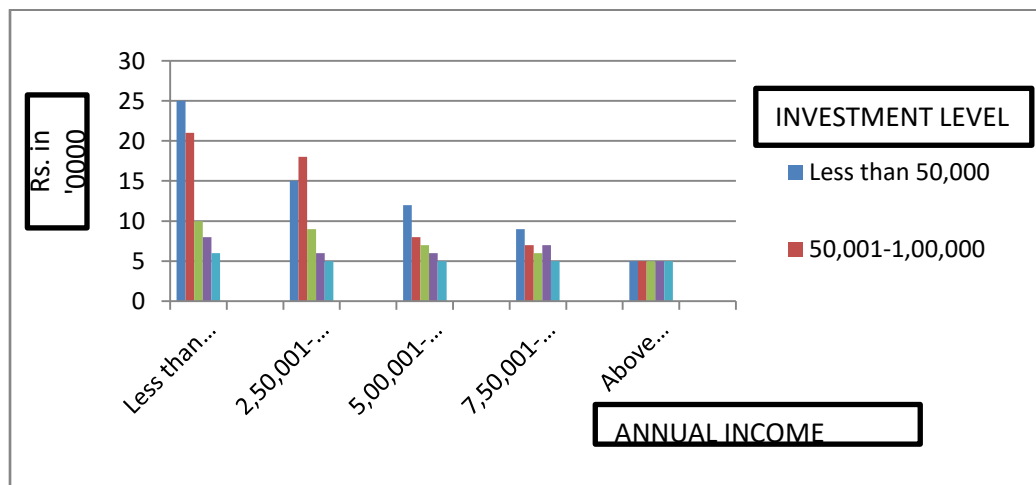
(Amount in Rupees)

Annual income	Investment Level					Total
	Less than 50,000	50,001- 1,00,000	1,00,001- 1,50,000	1,50,001- 2,00,000	Above 2,00,000	
Less than 2,50,000	25 (36)	21 (30)	10 (14)	8 (11)	6 (9)	70 (100)

<b>2,50,001-5,00,000</b>	15 (28)	18 (34)	9 (17)	6 (11)	5 (10)	53 (100)
<b>5,00,001-7,50,000</b>	12 (32)	8 (21)	7 (18)	6 (16)	5 (13)	38 (100)
<b>7,50,001-10,00,000</b>	9 (26)	7 (21)	6 (18)	7 (20)	5 (15)	34 (100)
<b>Above 10,00,000</b>	5 (20)	5 (20)	5 (20)	5 (20)	5 (20)	25 (100)
<b>Total</b>	66 (30)	59 (27)	37 (17)	32 (15)	26 (11)	<b>220</b> (100)

Source: Primary data from Survey

(Figures in parentheses are percentages)

**Figure 1.1 Investor's Annual Income and Level of Investment.**

The chi-square test had been applied to test the relationship between the Investor's Annual Income and their level of Investment. The following hypothesis had been formulated.

### Hypothesis

$H_0$ : Annual income and the Investment level of investors are independent.

$H_1$ : Annual income and the Investment level of investors are dependent.

Calculated value = 9.81

Table value = 26.3

(Degree of freedom = 16)

The calculated value (9.81) is less than table value (26.3) at 5 per cent level of significance. Hence null hypothesis is accepted. Therefore, it shows that annual income and investment level of investors are independent. It reveals that investors are investing in marketable securities are not depend upon their annual income.

### 6.3 Occupations of the Respondents and Investment Alternatives

**TABLE 1.3 Occupations of the Respondents and Investment Alternatives**

Occupation	Investment Alternatives					Total
	Share	Bonds/ Debenture	Mutual fund	Derivatives	Money Market Securities	
Business	15 (37)	8 (19)	6 (15)	7 (17)	5 (12)	41 (100)
Salaried-Govt	25 (36)	21 (30)	10 (14)	8 (11)	6 (8)	70 (100)
Salaried-Private	12 (24)	18 (36)	9 (18)	6 (12)	5 (10)	50 (100)
Professional	9 (26)	7 (21)	7 (20)	6 (18)	5 (15)	34 (100)
Others	5 (20)	5 (20)	5 (20)	5 (20)	5 (20)	25 (100)
Total	66 (30)	59 (27)	37 (17)	32 (15)	26 (11)	220 (100)

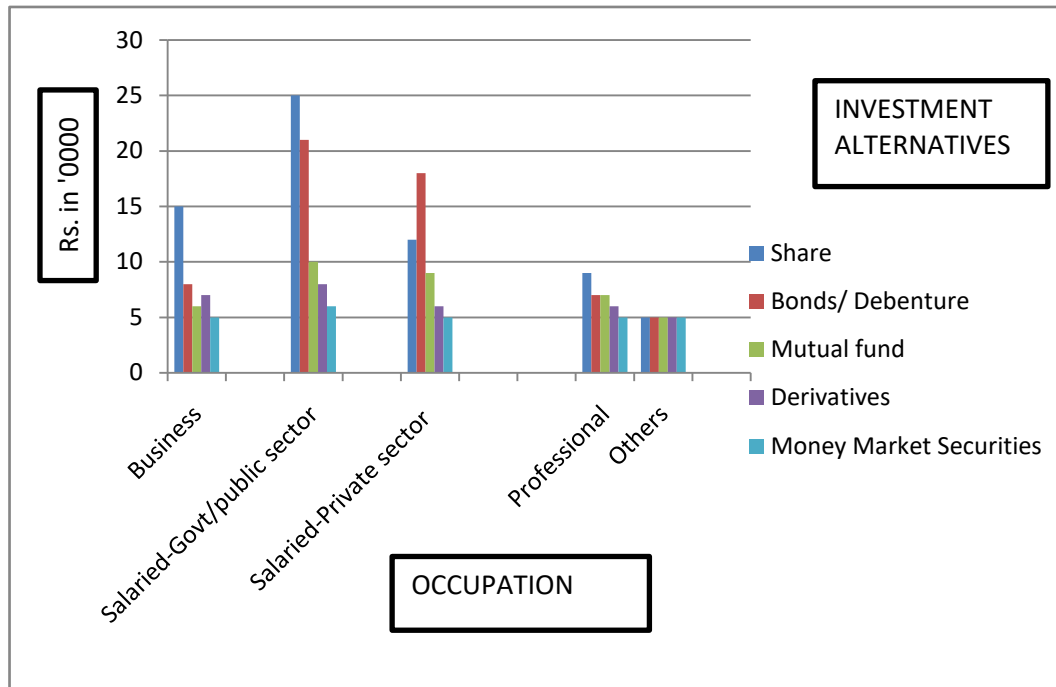
Source: Primary data from Survey (Figures in parentheses are percentages)

It inferred from Table 1.3 that 41 individual investors who belong to business. Out of which thirty seven per cent of investors were prefer to invest in shares and twelve per cent of investor's are investing in Money Market Securities. In the case of Salaried-Govt/public sector out of 70 individual investors, thirty six per cent were belongs to shares, nine per cent of investor's are investing in Money Market Securities. Among the individual investors, 50 are belongs to Salaried-Private sector, out of which thirty six per cent were fell in the Bonds/ Debenture category and ten per cent of investor's are investing in Money Market Securities. In the case of Professional out of 34 individual investors, twenty six were belongs to shares and fifteen investor's are investing in Money Market Securities. In the Others category, it shows that 25



individual investors were fell in others investing equally from the entire Occupation category i.e., five per cent.

**Figure 1.2 Occupations of the Respondents and Investment Alternatives**



The chi-square test had been applied to test the relationship between the Occupation and their investment level of investors. The following hypothesis had been formulated.

### Hypothesis:

$H_0$ : occupation and Investment preferred by investor are independent.

$H_1$ : occupation and Investment preferred by investor are dependent.

Calculated value = 11.41

Table value = 26.3

(Degree of freedom = 16)

The calculated value (11.41) is less than table value (26.3) at 5 per cent level of significance. Hence null hypothesis is accepted. Therefore, it shows that Occupation and investment level of investors are independent. The investors prefer to invest in various marketable securities are not depended upon their occupation.

**6.4: Rate of Return and Risk Level of Investment****TABLE 1.4 Correlation between Rate of Return and Risk Level of Investment**

X	Y	x*y	X <sup>2</sup>	Y <sup>2</sup>
88	104	9152	7744	10816
44	34	1496	1936	1156
59	46	2714	3481	2116
95	126	11970	9025	15876
36	46	1656	1296	2116
ΣX= 322	ΣY=356	ΣXY = 26988	Σ X <sup>2</sup> =23482	Σ Y <sup>2</sup> =32080

$$\text{Correlation Coefficient} = \frac{n\sum xy - \sum x * \sum y}{\sqrt{(n \sum x^2 - (\sum x)^2) * (n \sum y^2 - (\sum y)^2)}}$$

$$= \frac{(5 * 26988) - (322 * 356)}{117.15 * 183.48}$$

$$= 0.94$$

There is positive correlation between high risk and high return. It is inferred that investors feels high risk investment gives high returns.

**7. Conclusion**

This research brings forth certain peculiar characteristics of Indian investors' living in Chennai. The study identifies that investor's investment decisions are based on various demographic factors like age, gender, marital status, level of market knowledge, educational qualification of retail investors and annual income etc. These factors have a major impact on investment decisions and behaviour of retail investor. The null hypothesis that demographic factors have an impact on retail investor's investment decisions is accepted. This conclusion has been drawn on

the basis of analysis between demographic factors and choosing of investment alternatives and level of awareness about various marketable securities.

## 8. References

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