# A comparative study on the investment preferences of retail investors towards risky vs. non risky investment options

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## ABSTRACT

Increasing presence of retail investors, in the Indian financial markets, calls for extensive study on their investment habits and behavior. The current study tries to understand the impact of the demographic characteristics of the individual investor on risk appetite, investment habits and selection of mutual funds as an investment choice. The study also investigates the impact of the demographic characteristics on choice of risky investment options Vs. Non risky options and all the investment options together. Statistical tests used have been used to conclude that the demographic variables age and income have an influence on the investment choice of mutual funds. Based on the results of tests conducted on the data collected it was found that income levels of a respondent have an influence on the selection of the risky investment choices. It has been found that the previous literature has mainly focused on the relation between the demographics and selection of mutual funds alone or only single class of financial instruments. The current paper has categorized the investment into risky and non-risky, to study the association of the categories with the demographics of the sample. However the test was conducted with a sample size of 100. The sample selection method used in the study was convenience sampling. Similar studies can be conducted with a larger sample size. Stratified sample or cluster sampling method or stratified sampling method could be used to have a better representation of the population. It would be interesting to study how the data would behave on a larger scale. Further studies in the same line are very important on many fronts .Considering the importance of the retail investor in a developing economy like India; the current study would help us to understand the retail investor better. A better understanding of the behavior of the end user, will help the finance professionals to design more custom made financial products in the coming future.

Key words: Non risky investment options, risky investment options, Mutual Funds, investor perception

## 1. INTRODUCTION

A purchase decision that, has a capacity to generate wealth or appreciate in value can be called as investment .The definition of investment can be very aptly extended to not just finding the right investment option, but also tracking the movement of the investment on a regular basis and managing it . There is an upward swing in the awareness and interest shown towards investment avenues, due to the higher education levels, availability of information, Investment tools and the increasing ease with which investment can be made. Earlier only the metropolitan cities were the top contributors towards the retail investment made in India. Over the past few years the number of investors from the tier 2 and tier 3 cities has been actively participating in the India growth story. This has led to a huge socio economic transformation. Investor maturity in the metros vs the growing awareness among the tier 2 &3 investors, and their shift from the traditional investment avenues to the ones that are supported largely by the increasing information on the digital platform, can be an interesting study. The CAGR of individual investor in India stands at around 11% (Source: Economic times). I increase numbers of the retail investors can be measured by the increase in the people registering themselves for a D mat account and also the increase in the Assets under management can also be a measure. In the FY 2019, 44% of the cash equity trading was done by the registered retail investors who, age 10 years and above with the stock market. In the derivatives segment 55 % of the investors are registered for over 5 years and the trading done by this group of retail investors accounts to 77 % of the turnover of the derivatives (Source : Economic times). With surging growth rates, there is an increasing willingness shown by the investors to invest in newer investment options.

More study on similar lines should be the order of the day and the need of the hour. The development of India as a country depends a lot on the self-sustenance, in every field, be it production of investment. Nuclear families have evolved over the years in India. Moreover the presence of more than one employed person in the family is now becoming the new normal; leading to a lot of disposable investable income with citizens of India is growing at an average annual rate of 11 % ( Source: RBI) . Gross disposable income with people. This investable income if given a proper direction can bring a lot of stability to the country. The country instead of depending on the foreign inflows can make itself stronger by depending on the internal savings. This backdrop gives a lot of relevance to the current study.

Understanding the Indian retail investor, would help in designing new and better products and creating opportunities for people to invest. The study on investors' preference for risky vs. non risky investment, and the factors on which the preference is dependent, would help in filling products in the gap that exists in the financial products market. More and more product could be designed based on the age wise preference, Income wise preference and gender wise preference, and employment. The main aim should be to mobilize the idle disposable income of people, which can be available for various productive investments.

# 2. LITERATURE REVIEW:

Aarugonda K (2012) Minimum assured returns, transparency and consistency are the top most factors affecting the purchase of a mutual fund. Past performance, stability, consistency play a very important role in the selection of a mutual fund scheme.

Amaraveni P, Archana M (2017), Preference of respondents towards various investment avenues was analysed. It was found that income level has a significant impact on Investment Avenue selected, however the age does not have any impact on the investment avenue.

Bhushan P (2014) financial knowledge, financial behavior, financial attitude was used to study the Financial literacy. The study concluded that there is a relation between the financial literacy and awareness, and investment preferences. Chi square test concluded that there is a significant relation between the income levels and the objective for which the investment was made.

Gakhar & Prakash (2017) the study concludes that level of optimism is not impacted by the personality type, on the other hand the risk taking ability is affected by the personality type.

Geetha, S. N., & Vimala, K. (2014) Impact of demographic variable on investment decision and impact of information technology on financial markets was studied. It was found that there is no impact of Gender age and education levels on the risk taking ability of the investors, but there is an impact of family size on the risk taking ability of investors

Kannadhasan M (2015) the relationship between financial risk tolerance and Financial Risk behavior was studied. It was found that the level of income, education does not have any impact on the financial risk tolerance. High family responsibilities and family size has an impact on the risk taking ability of the respondents .Macro economic variables like exchange rate fluctuation, market volatility, inflation, political instability, and the impact of global crises on the economy have equally long-term implications for younger investors.

Mak, M. K., & Ip, W. (2017). Empherically it was observed the Psycological , Sociological and demographical factors impact the investment decisions Education Income Age, Gender , investment experience , help in predicting the investment preferences in Honkong and MainLand China .

Mishra P& Chhatoi B P (2018), Chi square test concluded that there is no relation between investment and profession, awareness levels and profession, however there exists a relation between time period of investment and the profession of the investor.

Prabhat& Srivani, et.al (2016).Demographic variables gender and age have no impact on the choice of investment options . Income level, occupation and education have an impact on the investment avenues chosen

Rizvi, & Abrar. (2015) language, orientation of education income and age determine the investment style of the investor. Financial literacy is one of the major factors influencing the decision making of retail investors.

Thulasipriya. (2015) it has been found that Age, income levels and number of family members play a significant role in the selection of investment choices of government employees

Veena, & Olekar. (2018) There is a correlation between education and investment into metals. Negative correlation was found between education and postoffice deposits as an investment option. Negative correlation was found between family size and bank deposits. Negative correlation was found between marital status and objective of speculative profits.

Venkataiah G C & Surya Prakasha Rao B K (2018) Mann-Whitney U Test concluded that there is a considerable association between Investment Avenue and gender.

Ul-Hameed et al. (2018) in the study has mentioned that the investor perception is a factor of a number of variables. T test was used to test the hypothesis that demographic variables have an impact on the Mutual fund preferences.

Zanvar, & Bhola. (2016). There is significant difference in the investments made in the riskier vs safe investment avenues. Banks and Insurance were two of the most popular investments. High returns tax benefits and safety were the factors influencing the choice of options.

## **Gap Analysis :**

Most of the study that is done in the area of investment preferences is limited only to wards the association between the demographic characters of the investors on the objective ,investor attitude ,mutual fund investment ,risk taking ability of the investor .Research has been done on each individual investment preference separately. In the current study the researcher has grouped the investments in to 2 groups, Risky Investments and Non Risky investments .The association between the demographic characteristics and difference /similarity in the preferences towards both the groups (Risky Vs Non Risky) is studied. Chi Square test was used to study all the associations'.

## 3. RESEARCH METHODOLOGY

## **Research Questions**

1. Demographic factors, which have an impact on the selection of an investment option

2. Risky Vs Non risky investment options preference of the investors

## **Objectives of the study:**

1. To study the association between demographic characteristics of respondents and mutual funds as an investment choice in particular.

2. To study if there is any association between demographic characteristics and risk appetite of a respondent.

3. To check if there is any association between the ranks assigned to various risky/ non risky investment options by the retail investors.

4. To check if there is a correlation between the ranks associated to various investment options.

## **Hypothesis Framed:**

1 .H<sub>0</sub>: There is no significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the, purchase of mutual fund for investment.

H<sub>1</sub>: There is a significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on, purchase of mutual fund for investment.

2.  $H_0$ : There is no significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the, risk appetite of the investor

H<sub>1</sub>: There is a significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the, risk appetite of the investor.

3. H<sub>0</sub>: There is no significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the, investment habits of the respondent

H<sub>1</sub>: There is a significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the, investment habits of the respondent.

4. H<sub>0</sub>: There is no significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the choice of risky investment options

H<sub>1</sub>: There is a significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the choice of risky investment options

5.  $H_0$ : There is no significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the choice of non - risky investment options

H<sub>1</sub>: There is a significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the choice of non - risky investment options

6. H<sub>0</sub>: There is no significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the choice of investment options

 $H_{1:}$  There is a significant impact of Gender, Age, Educational qualification, Employment Status and Income group of Investor on the choice of investment options

## Sample Design:

Sample unit that was considered for the study were retail investors who have made any kind of investment. Data was collected from respondents residing in Hyderabad and Pune. Convenience sampling method was used to choose the sample units. 113 samples were collected, out of which the 100 samples were appropriate.

## **Research tools**

The data collected is mostly ordinal, hence non parametric tests like Chi square, Mann - Whitney U test, Kruskal - Wallis has been used to test the associations. IBM SPSS was used to conduct the chi square tests. The SPSS version 23 was used to conduct statistical tests.

## Chi square test

Chi square test was used to measure the association between the data units that were categorical in nature. The probability value of the chi square test is compared with 0.05. The null hypothesis is accepted if the probability value is greater than 0.05, else rejected. Phi Value, Cramer's V Statistic, Contingency coefficient are also measured. All the three parameters measure the strength of association between the variables. Cramer's V statistic is used to explain the strength of the association, when the number of rows are not equal to the number of columns. Range lies between 0 and 1. Contingency Coefficient, measures the strength of association between study using min and max value. The minimum value being 0. Max value calculated using the formula Sqrt(r-1)/r. If the calculated Contingency coefficient is closer to the max value, then the association between the variables would be a strong one.

The following is the table which give the strength of relationship for different phi values

Value of Phi	Strength of relationship
> 0.80	strong
0.40 - 0.80	Moderate
0.20 - 0.40	Weak
0.00 - 0.20	Negligible

The group in which the calculated phi falls determines the strength of relation between the variables in the study.

#### Mann Whitney U test, Kruskal Wallis test

The acceptance or the rejection of the test depends on the asymptotic significance value of the test conducted using SPSS. The Null hypothesis is accepted if the asymptotic significance value is greater than 0.05 and rejected if the asymptotic value is less than 0.05

The following analysis has been done on the data collected:

1.Association between the demographic characteristics like gender, age, qualification, employment, income and three variable like, investment made in mutual funds, risk appetite and investment habits of retail investors has been studied.

2. Association between demographic characteristics like gender , age , qualification , employment , income and the investment made in various investment options available, has been studied .

3. The investment options have be categorised into risky investment options and non-risky investment options. For the purpose of research no specific scale has been used to classify the investments into risky and non-risky options. The basis of classification is the regularity of a certain percentage return on the amount invested. The options with a more guaranteed rate of return, have been classified in the Non risky investment option, whereas the investment options where the rate of return could vary from very high to very low have been categorised under risky investment options. Risky investment options for the study include ELSS, Gold, and Mutual Fund, Other commodities, Real estate and share market in the alphabetical order. Non risky investment options for the study include Bank / PO Fixed / Recurring Deposits, Cash in savings account, Insurance / Pension scheme/Provident Fund/ Any other govt. saving schemes.

The preference of the respondents towards the investment option was recorded (Risky, Non risky, Total). The categorical data was converted into metric by assigning points to ranks. i.e Rank 1 was given 5 points, Rank 2 was give 4 points etc. Association between the demographic variables and the preference towards the investment options was studied. Dependent variable, total points assigned to the investment choices of the investor was recorded on metric scale, whereas the demographic variable, which is the independent was categorical in nominal scale. Therefore Mann Whitney U test (independent variable had 2 categories) and Kruskal Wallis (independent variable had 3 categories) test was conducted.

4. Respondents who have invested in the mutual funds have been analysed on the basis of various parameters like time period of investment in mutual funds, preference towards open vs closed ended funds, preference towards dividend vs growth funds, comfort level of the respondent in dealing with the mutual funds.

# 4. DATA ANALYSIS:

# **Demographic understanding of the sample: refer table 1(Cross tabs)**

## Gender wise analysis of the data:

74 % of the female respondents have invested in the mutual funds, which is more than the male respondent investment of 68%. 6 % of the female respondents have mentioned their risk appetite as high versus 15 % of male who mentioned their risk appetite to be high .However more than 50 % of the male and female category of respondents have expressed their risk appetite as medium . 17% of the respondents in the male and female category have made investments for tax saving purpose only.

## Age wise analysis of the data:

35 % of investors in the age group which is less than 26 years of age have invested in mutual funds. This is the age group, where the investor, would just start off with financial independence. An analysis of the sample based on risk appetite versus age category, shows that there are no respondents in the category above 45 years of age who have invested in the risky category of investments. 70% of the respondents below 26 years of age have a risk appetite of medium to high. 67 % of the respondents in the age category of 46-65; have a risk appetite of medium to high.63% of the respondents in the age category of 46-65; have a risk appetite of medium to high risk category. In the age group of greater than 65, only 50 % of the respondents have invested in medium to high risk category. A total 7 % of the population does not feel the need to make an investment.

## Educational Qualification wise analysis of the data:

In the sample population 70 % of the post graduate respondents have made an investment in the mutual funds and 75 % of the graduate respondents have made an investment in the mutual funds.70% of the graduate respondents have a risk appetite of medium to high . 66% of the post graduate respondents have a risk appetite of medium to high.9% of the post graduate respondents do not feel the need to invest. 19 % of the postgraduate respondents have made investments for tax exemption reasons only.

## Employment status wise analysis of the data:

71 % of the employed respondents have made an investment in the mutual funds whereas 63 % of the self-employed respondents have made an investment in the mutual funds.64% of the employed, have a medium to high risk appetite, where as 100 % of the self-employed respondents have medium to high risk appetite .18% of the employed and 13 % of the self-employed have made investments for tax saving purposes only.

#### Income group wise analysis of the data:

Of the respondents earning an income of greater than 8 lakhs, 16 % are women. In the category where the respondents' income is greater than 8 lakhs 79 % of the respondents' risk appetite is medium to high. In the income categories of 4 - 8 lakh, 56 % of the respondents' risk appetite is medium to high. In the income categories of 2 - 4 lakh, 68 % of the respondents' risk appetite is medium to high. 21% of the respondents in the income categories of 4 - 8 lakh, have made investment for tax saving purpose only. In the greater than 8 lakh salary category, 18% of the respondents have made an investment for tax saving purpose only .On an average 4% of the salaried population have made an investment for tax saving purpose only .

	Demogra	ohics Vs. Inves	tment in M	utual funds	s, Risk Appi	itite,Investn	nent Habits		
Category	Investment in Mutual Funds			Risk Appitite		Investment Habits			
g,	No	Yes	High	Low	Medium	Investment & Tax saving	Don't feel the need to Invst.	Investment only	Tax saving only
				Percentages					
Gender									
Female	26	74	6	40	53	62	6	15	17
Male	32	68	15	26	58	51	8	25	17
Total	29	71	11	33	56	56	7	20	17
Age									
<=26	65	35	29	29	41	53	12	18	18
26-45	23	77	8	32	59	75	0	13	13
46-65	13	88	0	38	63	56	7	21	15
> 65	25	75	0	50	50	25	0	25	50
Total	29	71	11	33	56	56	7	20	17
Educational Qualification	1				•				
Graduate	25	75	10	30	60	60	0	30	10
Post Graduate	30	70	11	34	55	55	9	18	19
Total	29	71	11	33	56	56	7	20	17
Employment Status									
Employed	29	71	11	36	53	57	7	19	18
Not Employed	0	100	0	50	50	50	0	50	0
Self employed/ Business	38	63	13	0	88	50	13	25	13
Total	29	71	11	33	56	56	7	20	17
Income Group		-							
<= 2 Lakhs	17	83	0	50	50	67	0	33	0
>2 Lakhs & <=4 Lakhs	50	50	23	32	45	59	14	14	14
>4 Lakhs & <= 8 Lakhs	32	68	3	44	53	50	6	24	21
>8 Lakhs	16	84	13	21	66	58	5	18	18
Total	29	71	11	33	56	56	7	20	17

## 1. Demographics Vs Investment in mutual funds, Risk Appetite, Investment Habits

Table 1

## **Hypothesis 1:**

2. Impact of demographic variables on the purchase of mutual fund for investment.

Demographic variables (independent) Vs Investment in mutul fund (dependent) - Chi square test results							
Independent demographic variable	Chi square Value	P value	Phi	Cramer's V	Contingency Coefficient		
Gender	0.52	0.47	-0.07	0.07	0.07		
Age	13.06	0.05	0.36	0.36	0.34		
Qualification	0.19	0.66	0.04	0.04	0.04		
Employment Status	1.10	0.58	0.11	0.11	0.11		
Income	8.56	0.04	0.29	0.29	0.28		

## 3. Chi square Test result:

Demographic variable(independent) and Investment in mutul fund (dependent) -Hypothesis analysis based on chi square test								
Inde pendent de mographic variable	Null Hypo. accepted./ rejected	Reason	Phi Value	Cramer's V Statistic	Contingency coefficient			
Gender	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association			
Age	Rejected	As the P value is equal to 0.05, the null hypothesis is rejected	Weak Association	Weak Association	Weak Association			
Qualification	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association			
Employment Status	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association			
Income	Rejected	As the P value is les than 0.05 ,the null hypothesis is rejected	Weak Association	Weak Association	Weak Association			

Table 1	3
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The chi square test was conducted to test the association between the demographic variables and the choice of mutual funds as an investment option. It was observed that only in the variables age and income categories, the calculated probability of the chi square value of the test conducted was less than or equal to 0.05 (0.05 - age, 0.04 income), hence the null hypothesis was rejected on in the case of age and income proving that, age and income have an impact on selecting mutual funds as an investment options. On the other hand the probability values of the other demographic variables were observed to be greater than 0.05, for 5 % level of confidence, hence the null hypothesis was accepted. Therefore proving that gender, qualification, employment status does not have any impact on the section of mutual funds as an investment option.

Demographic variable(independent) Vs risk appitite (dependent) - Chi square test results								
Independent demographic variable	Chi s quare Value	P value	Phi	Cramer's V	Contingency Coefficient			
Gender	3.33	0.19	0.11	0.11	0.10			
Age	8.33	0.22	0.29	0.20	0.28			
Qualification	0.16	0.92	0.04	0.04	0.04			
Employment Status	1.10	0.58	0.11	0.11	0.10			
Income	10.21	0.12	0.32	0.23	0.30			

# 4. Impact of demographic variables on the, risk appetite of the investor.

#### Table 4

## 5.Chi square Test result:

Demographic variable(independent) and risk appetite (dependent) - Hypothesis analysis based on chi square test							
	Null Hypo. Accepted./ rejected	Reason	Phi Value	Cramer's V Statistic	Contingency coefficient		
Gender	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association		
Age	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association		
Qualification	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association		
Employment Status	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association		
Income	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Weak Association	Weak Association	Weak Association		

#### Table 5

The chi square test was conducted to test the association between the demographic variables and the risk appetite of the respondent. The chi square test, was analyzed on the basis of the p value of the calculated chi square value. It was observed that none of the p values are significant. The null hypotheses are accepted for all the demographic variables. The P values of the chi square test for gender is 0.19, age is 0.22, and of qualification is 0.92, for employment status is 1.10, for income is 10.21. All the p values are >0.05 hence the result is not significant, therefore the Null hypotheses are accepted. Therefore the demographic variables do not have any impact on the risk appetite of the respondent.

#### 6. Impact of demographic variables on the, investment habits of the respondent.

Demographic variable(independent) Vs Investment habits (dependent) - Chi square test results								
Independent demographic variable	Chi square Value	P value	Phi	Cramer's V	Contingency Coefficient			
Gender	1.72	0.63	0.13	0.13	0.13			
Age	5.75	0.77	0.24	0.14	0.23			
Qualification	0.19	0.66	0.04	0.04	0.04			
Employment Status	2.09	0.91	0.15	0.10	0.14			
Income	5.14	0.82	0.23	0.13	0.22			

#### Table 6

## 7. Chi square Test result:

Demographic variable(independent) and Investment habits (dependent) - Hypothesis analysis based on chi square test								
Independent demographic variable	Null Hypo. Accepted./ rejected		Phi Value	Cramer's V Statistic	Contingency coefficient			
Gender	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association			
Age	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Weak Association	Weak Association	Weak Association			
Qualification	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association			
Employment Status	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association			
Income	Accepted	As the P value is greater than 0.05, null hypothesis is accepted	Negligible	Weak Association	Weak Association			

#### Table 7

Chi square Test result: Chi square test was conducted to test the significance of the impact of the demographic variables of gender, age, qualification, employment status, income on the investment habits of the respondents. In all the cases the p value of the chi square test

conducted was >0.05. Gender 0.63, Age0.77, Qualification 0.19, Employment status, Income 0.82. The results in all the cases are not significant. The null hypotheses are accepted. Therefore as per the result of the chi square tests conducted, the demographic variables do not have any impact of the investment habits of the respondents

Demographic variables Vs Choice of Risky investment options								
Independent demographic variable	Asymp.Sig	Null Hypothesis Accepted/ rejected	Reason	Test conducted				
Gender	0.153	Accepted	Asymp. Sig > 0.05	Mann Whitney U test				
Age	0.159	Accepted	Asymp. Sig > 0.05	Kruskal Wallis				
Qualification	0.782	Accepted	Asymp. Sig > 0.05	Kruskal Wallis				
Employment Status	0.343	Accepted	Asymp. Sig > 0.05	Kruskal Wallis				
Income	0.022	Reject	Asymp. Sig < 0.05	Kruskal Wallis				

## 8. Impact of demographic variables on the choice of risky investment options.

#### Table 8

Gender Vs Choice of risky investment options was studied by conducting Mann Whitney U test. As the Asymptotic significance value (0.153) was > 0.05 the test result was not significant and the null hypothesis was accepted. Kruskal Wallis test was used to test the other demographic variables like age, qualification, employment status, income. For variables age (0.159), qualification (0.782), employment status (0.343), the asymptotic value of the kruskal wallis test was > 0.05, hence the null hypothesis was accepted as the test result was not significant. For the variable Income the asymptotic value was 0.022 which was less than 0.05. The test result was significant and hence the null hypothesis was rejected and the alternate hypothesis was accepted.

9. Impact of demographic variables on the choice of non - 1	risky investment options.
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Demographic variables Vs Choice of Non - Risky investment options								
Independent demographic variable	Asymp.Sig	Null Hypothesis Accepted/ rejected	Reason	Test conducted				
Gender	0.969	Accepted	Asymp. Sig > 0.05	Mann Whitney U test				
Age	0.216	Accepted	Asymp. Sig > 0.05	Kruskal Wallis				
Qualification	0.536	Accepted	Asymp. Sig > 0.05	Kruskal Wallis				
Employment Status	0.162	Accepted	Asymp. Sig > 0.05	Kruskal Wallis				
Income	0.561	Accepted	Asymp. Sig > 0.05	Kruskal Wallis				

## Table 9

Mann Whitney U test was conducted to test the significance of association between gender and its impact on the choice of non - risky investment options .The asymptotic value was 0.969. As the asymptotic value was greater than 0.05, the test result is not significant and the null hypothesis is accepted. Therefore it can be concluded that gender does not have any impact on the choice of non-risky investment options. Kruskal wallis test was conducted to test the association between the other demographic variables and the choice of non-risky investment choices. In all the cases it was observed that the asymptotic value was > 0.05 and hence the null hypothesis, which states that there is no impact of the demographic variables on the choice of non-risky investment options, is accepted.

Demographic variables Vs Choice of Investment options					
Independent demographic variable	Asymp.Sig	Null Hypothesis Accepted/ rejected	Reason	Test conducted	
Gender	0.455	Accepted	Asymp. Sig > 0.05	Mann Whitney U test	
Age	0.078	Accepted	Asymp. Sig > 0.05	Kruskal Wallis	
Qualification	0.743	Accepted	Asymp. Sig > 0.05	Kruskal Wallis	
Employment Status	0.4	Accepted	Asymp. Sig > 0.05	Kruskal Wallis	
Income	0.467	Accepted	Asymp. Sig > 0.05	Kruskal Wallis	

## 10. Impact of demographic variables on the choice of investment options.

## Table 10

Mann Whitney U test (Gender) and Kruskal Wallis test was conducted to test the significance of association between the demographic variables and the choice of various investment options available. The test out comes in all the cases, asymptotic value was greater than 0.05. The test result was not significant in cases. The null hypothesis, was accepted in all the cases.

A cross tabular analysis was also done along a few parameters related to the investment of the retail investors in mutual funds.

## 11. Investment planning of mutual fund

How is the investment in the mutual fund planned					
	Help of Investment		Advice of people	Self	
Gender	Planner	Random	already invested	research	Total
Female	21%	0%	11%	17%	49%
Male	28%	6%	4%	13%	51%
Total	49%	6%	15%	30%	100%

## Table 11

The above table suggests that, out of the total sample. Almost 50% of the population takes the help of an investment planner to make investments in mutual funds. 30 % resort to self-research. 15 % follow the advice of people who have already invested and 6 % make a random choice of investment.

#### 12. Preference for Open ended Vs Close ended mutual fund

Preference - Open ended Vs Close ended mutual fund					
Gender	Close ended	either of the two	Open ended	Total	
Female	14%	30%	6%	49%	
Male	3%	24%	24%	51%	
Total	17%	54%	30%	100%	

30% of the sample prefers to invest in open ended funds. 17 % have invested in closed ended funds, where as 54 % have invested in both open as well as closed ended funds

Preference - Divident Vs growth funds				
Gender	Dividend	Either of the two	Growth	Total
Female	4%	15%	30%	49%
Male	3%	15%	32%	51%
Total	7%	31%	62%	100%

## **13. Preference for Dividend Vs Growth funds**

## Table 13

A majority 62 % of the sample prefers to invest in growth mutual fund schemes to dividend mutual funds.

Comfort level investing in mutual funds					
Gender	Comfortable with the help of a Investment Planner		Very comfortable	Total	
Female	30%	6%	14%	49%	
Male	30%	8%	13%	51%	
Total	59%	14%	27%	100%	

## 14. Investor comfort level in investing in mutual funds

#### Table 14

Almost 60 % of the sample are comfortable to invest in mutual funds, with the help of an investment planner. 27 % of the population is very comfortable with the investing in mutual funds all by themselves. There is 14 % of the sample which shows interest in learning to make the correct choice of mutual fund for the purpose of investment.

## 5. CONCLUSION:

The current study has made an attempt to test the hypothesis of association between the demographic variables and the selection of mutual funds as an investment choice. Five demographic variables are taken for the study i.e. Gender, age, qualification, employment and income. Chi square test was used to test the significance of the association between both the variables. Age and Income are the two variable, which are found to have an association with the choice of selecting mutual funds as an investment option. (Refer table 2). It was found that gender, employment and qualification of the respondent do not have an impact of the choice of mutual funds as an investment option. The study also conducted tests on the association between demographic variables and the preference of the respondents towards Risky investment options and non-risky investment options and investment options in total. The chi square test results were not significant for any of the independent variables, and hence the null hypothesis was accepted in all the cases. For all the variables, gender, age, qualification, employment and income, the P value was greater than 0.05, hence the Null

hypothesis was accepted and the alternate hypothesis was rejected. As the Null hypothesis is accepted it can be said that there is no impact or there is not association between the demographic variables and the risk appetite of the respondents. The next test in the study was conducted to check if there is any association between the demographic variables and the investment habits of the respondents. Chis square test was conducted as the data is categorical in nature. It was observed that in all the cases, where the demographic variable was compared with investment habits of the respondent, the probability value is greater than 0.05. The test results in case of all the variables were insignificant and the Null hypothesis was accepted .Hence it can be stated that there is no association between the demographic variables and the investment habits of respondents. Also it was observed in all the chi square tests conducted, the relation between the dependent and the independent variable was weak / Negligible in all the tests. The conclusion of weak / negligible association is based on the Phi value, Cramer's V and contingency Coefficient. The study also attempted to test the relation between demographic variables and its association on the choice of risky investment options, non-risky investment options and all investment options considered together. The independent variables (demographic) were categorical in nature. Dependent variable being the sum total of points assigned by the respondent to each of non-risky/risky/risky /risky and nonrisky together options; was of metric scale .Mann Whitney U test was used when the demographic categories were two and Kruskal Wallis test was used when the demographic variable categories were more than 2. The tests conducted between demographic variables and the total points assigned to the risky investment options, concludes that, there is no association between the demographic variables and the choice of risky investment options, except for Income levels of the respondent. The income of the respondent has an impact on the investment choice of the various options available. Also the other two association tests also conclude the same that the demographic variables do not have an impact on the investment choice of risky / non risky / all investment options. Various cross Cross tabs were constructed to analyse the data. It was found that 49 % of the sample respondents take the help of an investment planner to make the choice of the mutual fund in which they would want to invest their money. Only 17 % of the population who invested in mutual funds choose, closed ended funds. However 54 % of the respondents who invested in mutual funds invested in both open and closed ended funds. There need to be more investment in the closed ended funds to make the money multiply. Open ended funds have the option of closing the mutual funds midway. Almost 60 % of the respondents who, never invested in mutual funds were open to take the plunge with the help of an investment planner.It can be concluded that only Age and income of the respondent have an impact on the choice of mutual fund as an investment option and income level of the respondent has an impact on the choice/ selection of risky investment choices available.

#### 6. DISCUSSION

As the retail investors become more serious about investment of their disposable income, and make informed decisions, it becomes utmost important, that more research be conducted in the area of understanding the preferences of the retail investor better. The current study is

based on the difference in the preferences of retail investors towards risky and non-risky investment options available, is demographically oriented. The study suggests that there are a good number of people who would like to make an investment, provided the awareness about investment increases and the investment process is made easy. The respondents also seem to be positive as 62 % of the respondents who did not make an investment in mutual fund, showed interest in the learning how to start investing in mutual funds .The study suggests that there is very little association between demographic variables and investment in risky / non risky / both the options taken together. (with the exception of income having an impact on the section of risky investment). Also it was found that there is little association between the demographic variables and selection of mutual funds for investment, risk appetite and investment habits, (with the exception of Age and income having an impact on the selection of mutual funds). As age and income have an impact on the selection of mutual funds, more products may be designed, taking the age and income as the basis. More risky investment products may be designed to cater to each income group. However the sample size was limited to 100 respondents and the sample was based on convenience sampling. It would be interesting to conduct the study on a larger scale, with a different sample selection method, which can focus on a specific geographic location or a comparative analysis between different geographic locations.

# Way Ahead

Further study could be conducted on, whether the investors are ready to plunge into the investment market all by themselves, or take the help of investment companies also if the investors are ready for more financial products based on technology .This could helping in making more technology based products, keeping the investment procedure user friendly and as simple as possible. Study on the gaps in investment education may also be pursued.

# Addition to the body of Knowledge:

As the study suggests that the demographics do have an impact on the choice of risky vs non risky investment option except for Income levels. So it would be advisable to design investment products keeping the different categories of income in mind. Age and Income of the person also have been found to have an impact on the choice of mutual fund as an investment option. Mutual funds could be designed for specific age and Income groups of the investors.

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