

Project Dissertation
**Demographic Pattern and Investment Behavior: A
Study of Retail Investors**

Submitted By:

Anirban Das

2K16/MBA/03

Under the Guidance of:

Dr. Archana Singh

Assistant Professor



DELHI SCHOOL OF MANAGEMENT

Delhi Technological University

Bawana Road Delhi 110042

Jan-May 2018

DECLARATION

I, **Anirban Das**, student of MBA Batch 2016-18 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 declare that the dissertation report on **Demographic Pattern and Investment Behavior: A Study of Retail Investors** submitted in partial fulfilment of Degree of Master of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This Report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship.

Anirban Das

Place: Delhi

Date:

CERTIFICATE

This is to certify that the dissertation report titled “**Demographic Pattern and Investment Behavior: A Study of Retail Investors**”, is a certified bonafide work carried out by Mr. Anirban Das of MBA 2016-2018 batch and submitted to Delhi School of Management, Delhi Technological University in partial fulfilment of the requirement for the award of the Degree of Master of Business Administration.

Signature of Guide

Signature of Head (DSM)

Place: Delhi

Date:

ACKNOWLEDGEMENT

Firstly, I would like to thank Dr. Archana Singh, Assistant Professor, Delhi School of Management, Delhi Technological University who was my guide and mentor during this project, for providing me the opportunity to do my dissertation under her guidance and expertise.

I also convey my regards to my friends and parents, who provided me with their encouragement and support whenever I needed it.

Lastly, I would like to thank god for giving me the skills and patience because of which this project was made possible.

Anirban Das

ABSTRACT

Investment patterns of an investor is dependent broadly on three parameters namely, risk, return and liquidity. These parameters are in turn dependent on a number of socioeconomic factors of the investors in which demographic characteristics play an important role. This study is an attempt to find interrelations between the demographic factors of retail investors with their investment patterns and risk appetite.

Most of the anticipated interrelations between each of the demographic factors with the investment patterns and risk appetite were found relevant.

TABLE OF CONTENTS

1. Introduction	1
2. Objectives of the Study	3
3. Scope of the Study	3
4. Literature Review	4
5. Methodology	5
5.1. Research Design	5
5.2. Sampling Technique	5
5.3. Data Collection	5
5.4. Sample Size	5
5.5. Questionnaire Design	5
5.6. Tools Used for Analysis	5
6. Data Analysis and Interpretation	9
6.1. Demographic Information	9
6.2. Investment Preferences	12
6.3. Investment Risk Appetite	14
6.4. Interrelation between Demographic Characteristics and Risk Appetite	15
6.5. Demographic Characteristics and Investment Preferences	21
7. Findings from the Study	32
8. Conclusions	34
9. Recommendations	34
10. Limitations of the Study	35
11. References	35
12. Annexure	36

1. INTRODUCTION

With the increasing uncertainties, the need for robust investments is ever increasing. Investment decision is one of the most important decisions an individual has to make during his lifetime. This is because investment requires forgoing immediate consumption with the expectation of receiving future benefits. Investments can be broadly categorized into two types, namely, real investments and financial investments. Real investment is the investment in tangible goods such as land, gold, commodities, etc., whereas financial investments involve investments in financial assets such as equity, bonds, deposits, etc. This research aims to understand the investment patterns of retail investors in financial instruments.

There are two categories of investors in the financial markets namely, retail investors and institutional investors. Retail investors are individuals or small groups who invest in the market for short term or long term gains. Institutional investors are banks, financial services firms, mutual funds and other financial institutions that make heavy investments in the market generally for a prolonged period of time. In general it is seen that retail investors have lower risk taking capacity than the institutional investors. Also, the financial planning and management of retail investors is not as efficient as their counterparts.

Investment patterns of an individual reveal the ways he/ she want to allocate surplus financial resources to various instruments available. It primarily involves the purpose of the investment, time horizon for which the investor wants to keep his money investment and the type of investment instruments in which he or she want to keep invested. It is influenced by broadly three factors namely, risk, return and liquidity. Risk is the chance that an investment's actual return will be different than expected. Return is the money made or lost on an investment. Liquidity is the degree to which an asset or a security can be quickly purchased or sold in the market without affecting its price. For some of the major financial instruments, these factors are as follows:

Investment Instruments	Risk	Return	Liquidity
Bank Deposits, Post Office Deposits	Low	Low	High
Debts and Debt Oriented Funds	Moderate	Moderate	Low
Equities and Equity Oriented Funds	High	High	High

Although an ideal investment would expect high returns i.e., earnings from the investment made, low risk i.e., chances of losing the amount invested and high liquidity, giving the investor enough flexibility to enter or exit an investment, it is unlikely to satisfy all the three conditions at the same time. Therefore, investors try to maintain a balance among the three factors by diversifying their money into different types of instruments. Out of the three factors, risk appetite of an investor has a significant impact on the investor while deciding upon the investment instruments such as equities, debts, bonds, fixed deposits, etc.

One of the most important factors that influence the investment patterns and risk appetite of an investor is the demography of the investor i.e., factors such as age, marital status, profession, etc., which influence the future goals, pattern of cash inflows, dependencies, etc., of an individual. This research is an attempt to understand the investment patterns of retail investors and also study the interrelation between the demographic characteristics namely, gender, marital status and education level of retail investors particularly in the Delhi and National Capital Region and their risk appetite while investing.

2. OBJECTIVES OF STUDY

Primary Objective

- To study the interrelation between demographic characteristics of retail investors with their investment behavior with reference to Delhi and National Capital Region.

Secondary Objectives

- To study the interrelation between the gender of the investors with their risk appetite.
- To study the interrelation between the marital status of the investors with their risk appetite.
- To study the interrelation between the level of education of the investors with their risk appetite.
- To study the pattern of investment preferences with respect to the gender of the investors.
- To study the pattern of investment preferences with respect to the marital status of the investors.
- To study the pattern of investment preferences with respect to the level of education of the investors.

3. SCOPE OF THE STUDY

The study is based on the responses of retail investors in Delhi and National Capital Region. Therefore, the findings and conclusions drawn may be applicable to Delhi and National Capital Region. The study can be treated as a pilot study and may be extended to the other states and union territories to understand investment behavior of retail investors in India.

4. LITERATURE REVIEW

4.1 Investment Pattern in India

Dharmaja et al (2012) found out that majority of investors are moderately conservative in their investments and factors such as emotional risk tolerance, financial resource tolerance and financial literacy influence their investment behavior.

Jain (2014) analyzed the income and investment pattern of working women and found out that majority of them preferred to invest in fixed deposits with banks as a 'precautionary' motive i.e., to safeguard themselves from a volatile future. Their main reasons for investing their money with banks were that banks were considered as safest options, they generated regular interest incomes and they helped in saving taxes.

4.2 Interrelation between Financial Risk Tolerance and Demographic Characteristics

Sulatana (2010) made an attempt to discover a interrelation between risk tolerance of Indian individual investors with their age and gender and found out that there was no interrelation between the gender of the investors and their risk tolerance level. However, a strong interrelation between the age of the investors and their risk tolerance level was established. It was also found out that majority of the investors possessed higher education i.e., graduation and above and they preferred fixed income instruments such as PPF and FD over equity and mutual fund.

Sulaiman (2012) studied the association between the risk tolerance of individual investors and their demographic features. The study concluded independence between the gender of the individual investors and financial risk tolerance. However, associations of the financial risk tolerance with the marital status and the level of education of individual investors were found.

A research by Kaur and Kaushik (2016) concluded that better awareness, which is impacted by socioeconomic characteristics such as age, gender, occupation, income and education of investors, will have a positive impact on investment in mutual funds.

5. METHODOLOGY

5.1 Research Design

Descriptive research has been used in this study to identify and study the interrelation between the demographic factors of retail investors with their investment patterns and risk appetite.

5.2 Sampling Technique

The population of this study is the retail investors in Delhi and National Capital Region. The sampling technique that has used is convenience sampling which is a type of non probability sampling technique. The sample is based on judgement of the researcher instead of random selection.

5.3 Data Collection

Primary data has been collected through direct personal interviews and a self administered questionnaire. The respondents were briefed about the purpose of the study and were given reasonable time to answer the questions.

5.4 Sample Size

The sample size for this study is 74 retail investors in Delhi and National Capital Region.

5.5 Questionnaire Design

Proper care has been taken while preparing the questionnaire to ensure that the data collected match the objective. The basic cardinal rules of Questionnaire design like using simple and clear words, the logical and sequential arrangement of questions has been taken care of.

5.6 Tools used for Analysis

5.6.1 Investment Risk Appetite

The investment risk appetites of the respondents have been calculated using standard questions developed by Oxford Risk, a spin-out company of the University of Oxford. The questions have been devised from academic research to measure psychological traits. It uses psychometric questions to evaluate the respondent's willingness to take risk.

The respondent is given a score from 10 to 50 depending on his responses. Using this score, the respondents are categorized according to their willingness to take risk. The categories have been defined as:

- **Lower Risk:** This category includes respondents with score of 10 to 17. They are conservative with their investments and prefer taking small risks to obtain stable returns.
- **Lower to Medium Risk:** This category includes respondents with score of 18 to 25. They are relatively cautious about their investments. Although they are willing to take some risks to try and obtain reasonable returns.
- **Medium Risk:** This category includes respondents with score of 26 to 33. The respondents in this category have a balanced attitude towards risk. They are prepared to accept fluctuations in the value of their investments for better returns.
- **Medium to Higher Risk:** This category includes respondents with score of 34 to 41. They are relatively comfortable with investment risk and aim for higher long term returns. They tolerate significant fluctuations for better long term returns.
- **Higher Risk:** This category includes respondents with score of 42 to 50. Respondents in this category are comfortable with investment risk. They are ready to tolerate short to medium term fluctuations and aim for high long term returns on their investments.

5.6.2 Cross tabulation

Cross tabulation is a quantitative research method used for analyzing the interrelation between two or more variables. It is also known as contingency tables or cross tabs. It is a representation in which two categorical variables are presented simultaneously. Categorical variables or data are the ones that are separated into different categories that are mutually exclusive to one another. The axes of the table may be specified as being one single variable or formed from a number of variables.

In this study, cross tabulations have been done using Microsoft Excel 2007 and IBM SPSS Statistics 23 to represent the raw data obtained from the responses in a organized and simplified manner.

5.6.3 Chi square Test

Chi square test is a non parametric test used to compare two or more than two variables for a randomly selected data. There are two types of chi square tests. Although both use chi statistic but they are used for different purposes as stated.

- A **Chi square goodness of fit test** helps in determining if sample data matches the population i.e., if the sample data represents the data that is expected to be found in the actual population.
- A **Chi square test for independence** helps in comparing two variables in a contingency table to determine if they are related or to see whether distributions of categorical variables differ from each other.

The chi square test for independence has been used in this study to determine if there is a interrelation between demographic factors with the risk appetite of the investors.

Chi square Statistic

A chi square statistic is a measurement that compares expectations to the results.

The chi square statistic is calculated using the following formula:

$$\chi^2 = \sum (O_i - E_i)^2 / E_i$$

Where, χ^2 is the chi square statistic,

c is the degree of freedom,

O_i is observed value,

E_i is the expected value.

The expected value, E_i is calculated using the following formula:

$$E_i = (n_r \times n_c) / n$$

Where, n_r is the total of the row,

n_c is the total of the column,

n is the grand total.

Degree of freedom is calculated using the following formula:

$$c = (r - 1) \times (c - 1)$$

Where, r is the number of rows,

c is the number of columns.

Steps to do the Chi Square Test

1. In the first step, a null hypothesis, H_0 , is stated which states independence between the variables been tested and the alternate hypothesis, H_1 , states that there is a interrelation between the variables being tested.
2. The variables, whose interrelation is to be tested, are represented in cross tabulation form.
3. Then, the expected values are calculated for each row with respect to each column.
4. Using the expected values, chi square statistics are calculated for each row with respect to each column.
5. The total of the chi square statistics is calculated for each row by adding the individual statistics.
6. Then the total chi square statistic is calculated for the whole table by adding the totals for each row.
7. Using the Chi square distribution table, the critical chi square value is calculated according to the degree of freedom and the level of significance for which the test is being done.
8. Finally, the calculated chi square statistic is compared against the critical chi square value from the distribution table. If the calculated value is less than the critical value, the variables being tested are independent from each other. If the calculated value is more than the critical value, a interrelation exists between the variables being tested. Another way is to compare the 'p' value corresponding to the chi statistic to the level of significance. If the 'p' value is more than the level of significance, the null hypothesis is accepted and vice versa.

6. DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis of the data that has been obtained. A total of 74 responses have been considered for the analysis. The data was obtained in three segments i.e., demographic information, investment preferences and investment risk behavior of retail investors.

6.1 Demographic information

6.1.1 Distribution of Gender of the Investors

Table 6.1.1: Distribution of Gender of the Investors

S. No.	Gender	No. of Investors
1.	Female	31
2.	Male	43
	Total	74

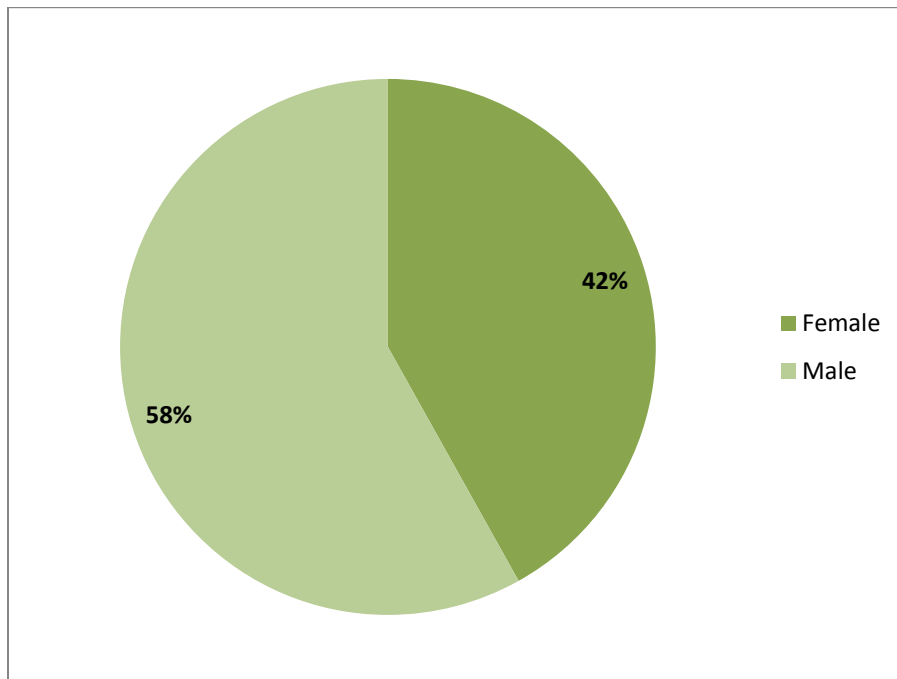


Chart 6.1.1: Distribution of Gender of the Investors

Table 6.1.1 and Chart 6.1.1 indicate that out of total respondents, 58% were males and 42% were females.

6.1.2 Distribution of Marital Status of the Investors

Table 6.1.2: Distribution of Marital Status of the Investors

S. No.	Marital Status	No. of Investors
1.	Married	48
2.	Unmarried	26
	Total	74

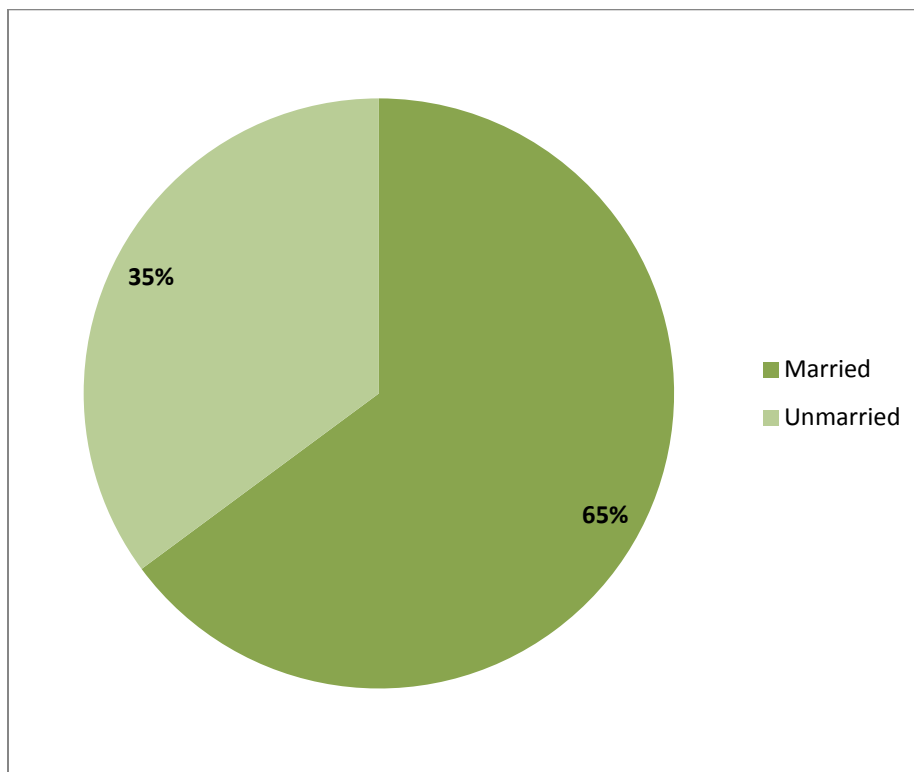


Chart 6.1.2: Distribution of Marital Status of the Investors

Table 6.1.2 and Chart 6.1.2 indicate that out of the total respondents, 65% were married and 35% were unmarried.

6.1.3 Distribution of Level of Education of the Investors

Table 6.1.3: Distribution of Level of Education of the Investors

S. No.	Level of Education	No. of Investors
1.	Under Graduate	12
2.	Graduate	26
3.	Post Graduate	36
	Total	74

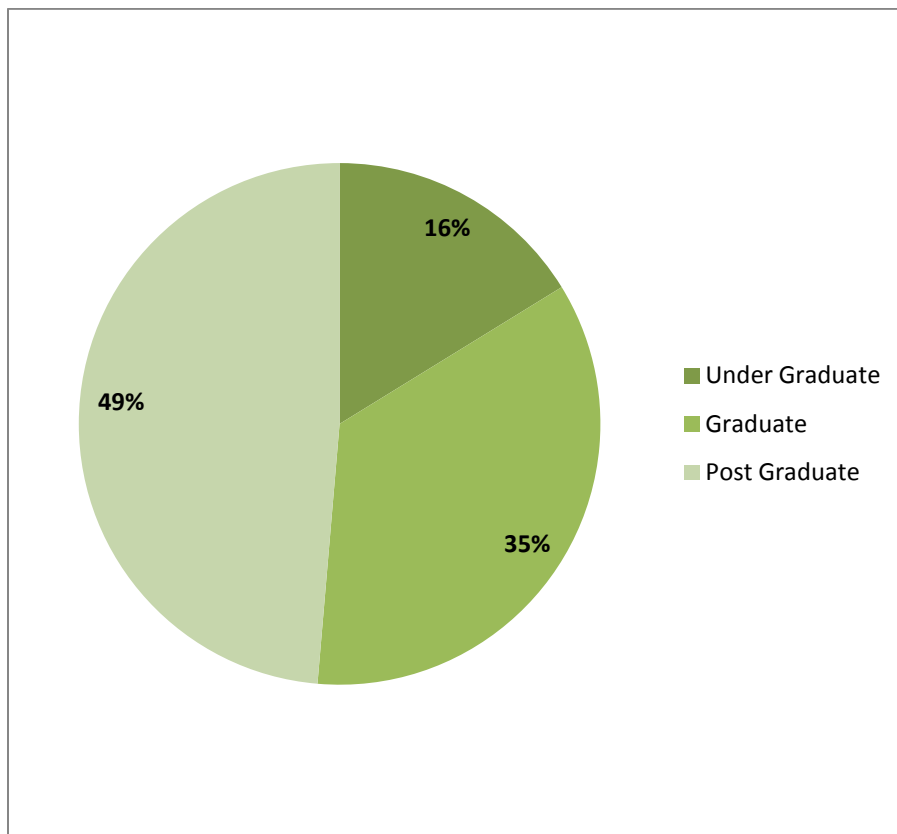


Chart 6.1.3: Distribution of Level of Education of the Investors

Table 6.1.3 and Chart 6.1.3 indicate that out of the total respondents, 16% were under graduate, 35% were graduate and 49% were post graduate.

6.2 Investment Preferences

6.2.1 Distribution of Primary Goal of the Investor

Table 6.2.1: Distribution of Primary Goal of the Investor

S. No.	Primary Goal for Investing	No. of Investors
1.	Preserving the value of investments while minimizing risk	22
2.	Generating regular cash inflows while also building the value of the investments as a secondary objective	13
3.	Building the value of the investments over time while also generating regular cash flows as a secondary objective	22
4.	Building the value of the investments substantially over time without the need of generating regular cash flows	17
	Total	74

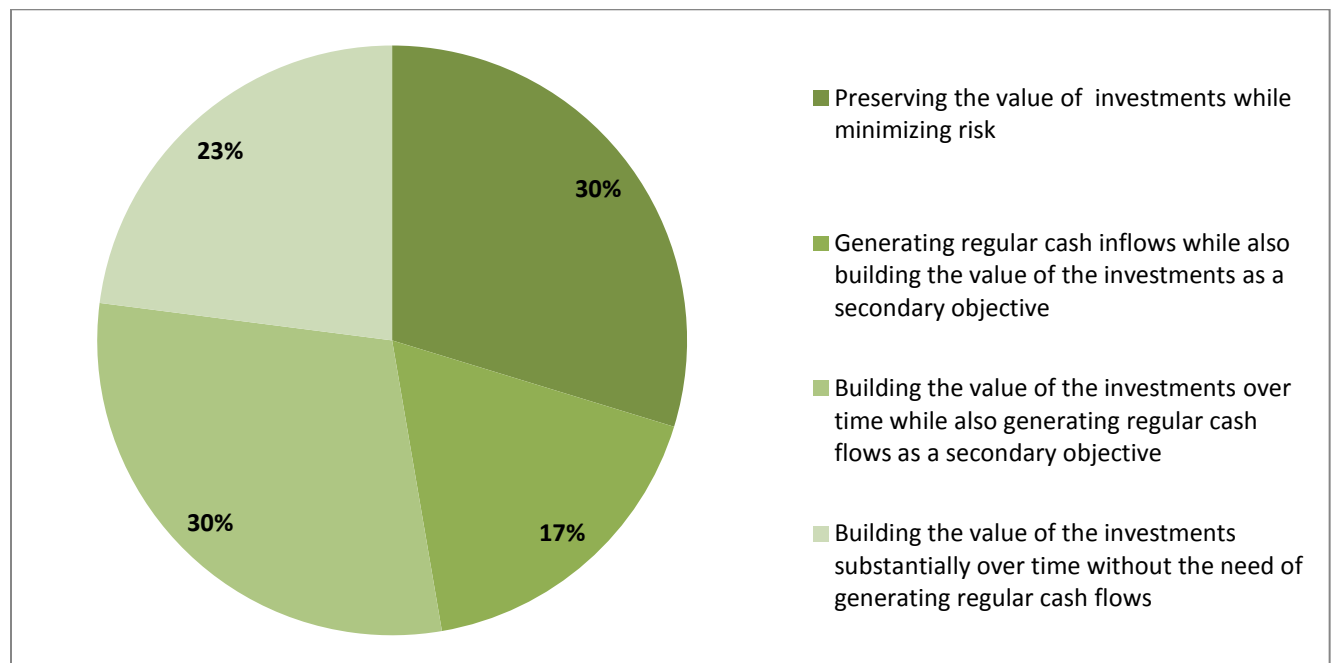


Chart 6.2.1: Distribution of Primary Goal of the Investor

Table 6.2.1 and Chart 6.2.1 indicate that the primary goal of 30% of the total respondents is to preserve the value of their investments while minimizing the risk of losing its value, 17% want their investments to generate regular cash flows while build its value gradually over time as well, 30% want their investment to grow in value over time while generating some regular cash flows as a secondary objective and 23% want their investment to grow in value substantially over time without needing it to generate regular cash flows.

6.2.2 Distribution of Preferred Investment Instruments

Table 6.2.2: Distribution of Preferred Investment Instruments

S. No.	Preferred Investment Instruments	No. of Investors
1.	Bank Deposits, Post Office Deposits	44
2.	Debentures/ Debts and Debt Oriented Funds	7
3.	Equities and Equity Oriented Funds	23
	Total	74

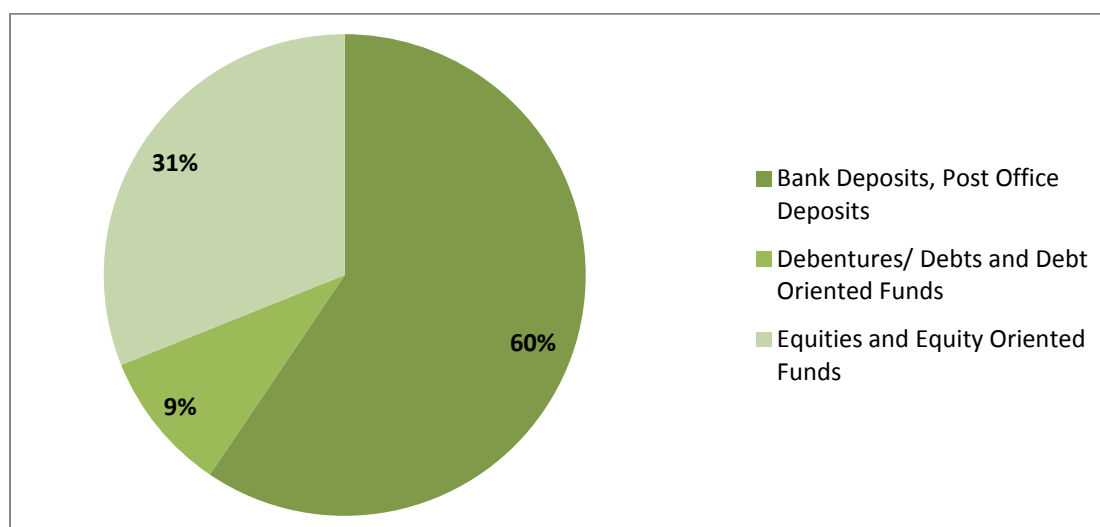


Chart 6.2.2: Distribution of Preferred Investment Instruments

Table 6.2.2 and Chart 6.2.2 indicate that out of the total respondents, 60% prefer to invest in bank deposits and post office deposits, 7% prefer to invest in debts and debt oriented funds and 23% prefer to invest in equities and equity oriented funds.

6.3 Investment Risk Appetite

Table 6.3.1 Distribution of Investment Risk Appetite

S. No.	Investment Risk Appetite	No. of Investors
1.	Lower Risk	11
2.	Lower to Medium Risk	31
3.	Medium Risk	27
4.	Medium to Higher Risk	5
5.	Higher Risk	0
	Total	74

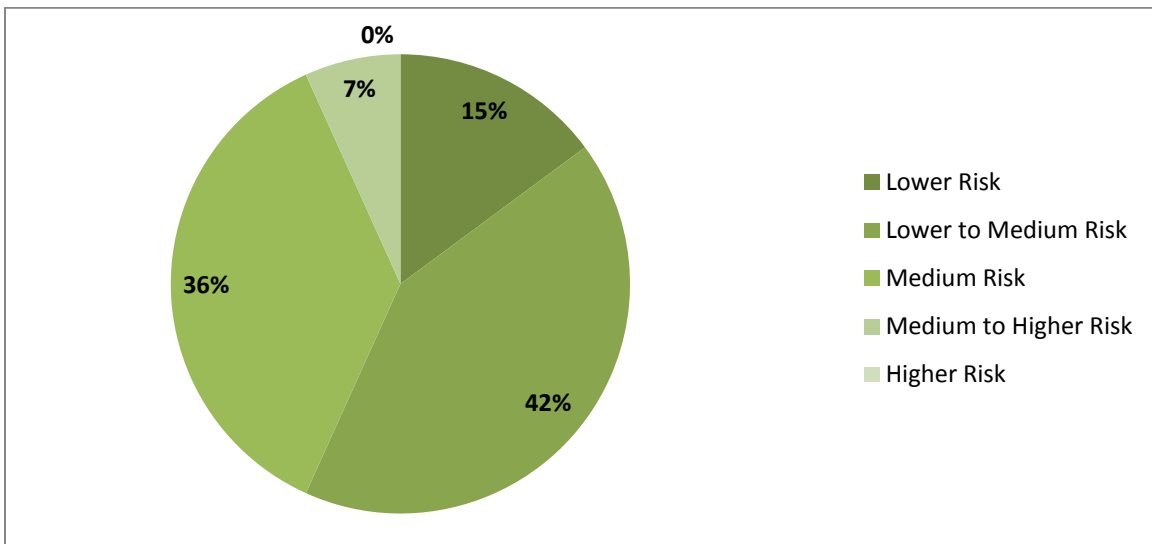


Chart 6.3.1: Distribution of Investment Risk Appetite

Table 6.3.1 and Chart 6.3.1 indicate that out of the total respondents, 15% had a lower risk appetite, 42% had lower to medium risk appetite, 36% had medium risk appetite, 7% had medium to higher risk appetite and no respondent had a higher risk appetite.

6.4 Interrelation between Demographic Characteristics and Risk Appetite

6.4.1 Gender and Risk Appetite

Null Hypothesis (H₀): There is no interrelation between the gender of the investors and their risk appetite.

Table 6.4.1: Gender * Risk Appetite Cross tabulation

			Risk Appetite				Total
			Lower Risk	Lower to Medium	Medium Risk	Medium to Higher	
Gender	Female	Count	4	16	11	0	31
		Expected Count	4.6	13.0	11.3	2.1	31.0
	Male	Count	7	15	16	5	43
		Expected Count	6.4	18.0	15.7	2.9	43.0
Total		Count	11	31	27	5	74
		Expected Count	11.0	31.0	27.0	5.0	74.0

Table 6.4.2: Gender * Risk Appetite Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.961 ^a	3	.175
Likelihood Ratio	6.769	3	.080
N of Valid Cases	74		

Level of significance = 0.05

Critical Value = 7.81

From Table 6.4.2, it can be inferred that p value which is 0.175 is more than the level of significance. Also, the chi square statistic which is 4.961 is less than the critical value. Therefore, the null hypothesis is accepted showing that there is no interrelation between the gender of the investors and their risk appetite.

6.4.2 Marital Status and Risk Appetite

Null Hypothesis (H₀): There is no interrelation between the marital status of the investors and their risk appetite.

Table 6.4.3: Marital Status * Risk Appetite Crosstabulation

			Risk Appetite				Total
			Lower Risk	Lower to Medium	Medium Risk	Medium to Higher	
Marital Status	Married	Count	11	19	16	2	48
		Expected Count	7.1	20.1	17.5	3.2	48.0
	Unmarried	Count	0	12	11	3	26
		Expected Count	3.9	10.9	9.5	1.8	26.0
Total		Count	11	31	27	5	74
		Expected Count	11.0	31.0	27.0	5.0	74.0

Table 6.4.4: Marital Status * Risk Appetite Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.861 ^a	3	.049
Likelihood Ratio	11.336	3	.010
N of Valid Cases	74		

Level of significance = 0.05

Critical Value = 7.81

From Table 6.4.4, it can be inferred that p value which is 0.049 is less than the level of significance. Also, the chi square statistic which is 7.861 is more than the critical value. Therefore, the null hypothesis is rejected showing that there is a interrelation between the marital status of the investors and their risk appetite.

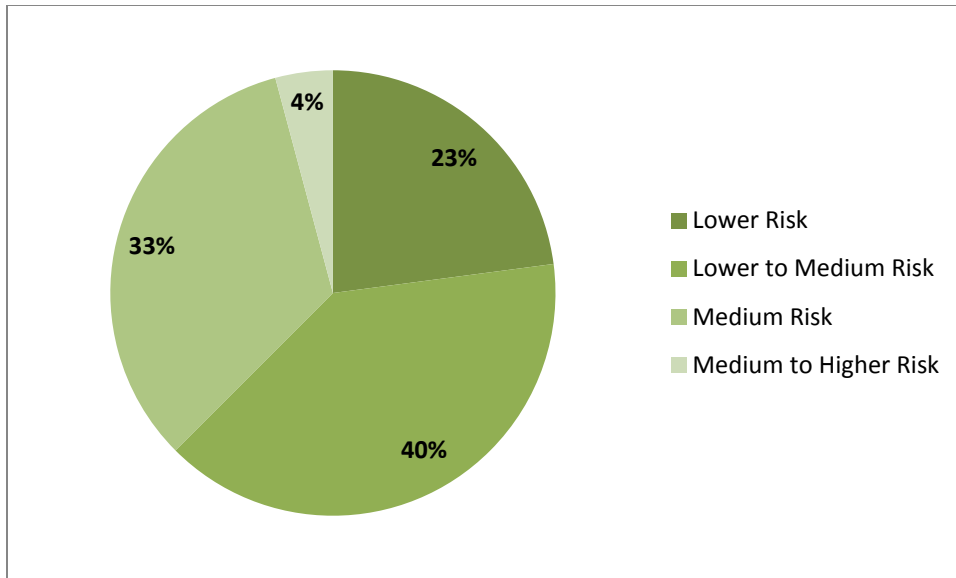


Chart 6.4.1: Distribution of Risk Appetite of Married Investors

Chart 6.4.1 indicates that out of the 48 married respondents, 23% had a lower risk appetite, 40% had lower to medium risk appetite, 33% had medium risk appetite, 4% had medium to higher risk appetite and no respondent had a higher risk appetite.

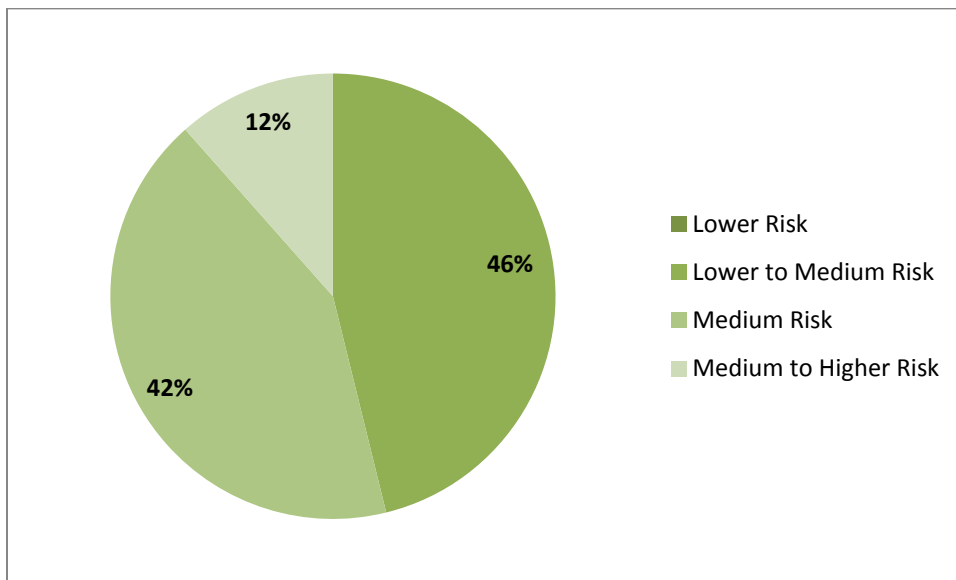


Chart 6.4.2: Distribution of Risk Appetite of Unmarried Investors

Chart 6.4.2 indicates that out of the 48 married respondents, no respondent had a lower risk appetite, 46% had lower to medium risk appetite, 42% had medium risk appetite, 12% had medium to higher risk appetite and no respondent had a higher risk appetite.

6.4.3 Level of Education and Risk Appetite

Null Hypothesis (H₀): There is no interrelation between the level of education of the investors and their risk appetite.

Table 6.4.5: Level of Education * Risk Appetite Crosstabulation

		Risk Appetite				Total
		Lower Risk	Lower to Medium	Medium Risk	Medium to Higher	
Level of Education	Graduate	5	13	7	1	26
	Post Graduate	1	14	17	4	36
	Under Graduate	5	4	3	0	12
Total		11	31	27	5	74

Table 6.4.6: Level of Education * Risk Appetite Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.736 ^a	6	.022
Likelihood Ratio	15.314	6	.018
N of Valid Cases	74		

Level of significance = 0.05

Critical Value = 12.59

From Table 6.4.6, it can be inferred that p value which is 0.022 is less than the level of significance. Also, the chi square statistic which is 14.736 is more than the critical value. Therefore, the null hypothesis is rejected showing that there is a interrelation between the level of education of the investors and their risk appetite.

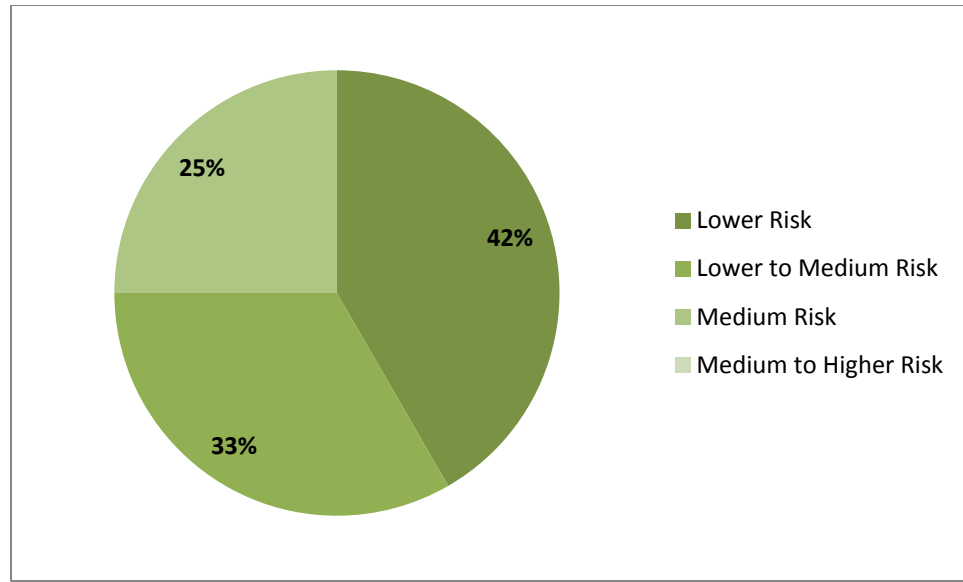


Chart 6.4.3: Distribution of Risk Appetite of Under Graduate Investors

Chart 6.4.3 indicates that out of the 12 under graduate respondents, 42% had a lower risk appetite, 33% had lower to medium risk appetite, 25% had medium risk appetite, no respondent had medium to higher risk appetite or a higher risk appetite.

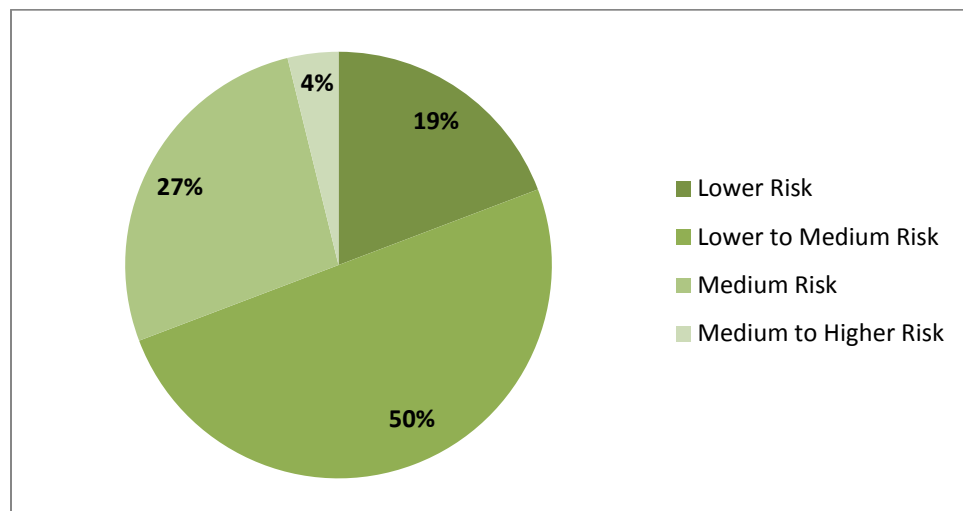


Chart 6.4.4: Distribution of Risk Appetite of Graduate Investors

Chart 6.4.4 indicates that out of the 26 graduate respondents, 19% had a lower risk appetite, 50% had lower to medium risk appetite, 27% had medium risk appetite, 4% had medium to higher risk appetite and no respondent had a higher risk appetite.

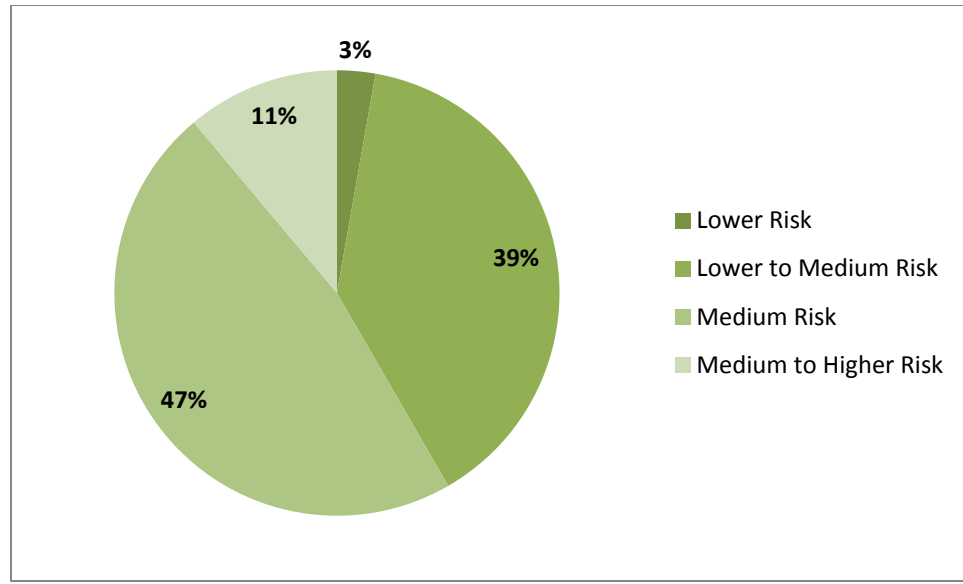


Chart 6.4.5: Distribution of Risk Appetite of Post Graduate Investors

Chart 6.4.5 indicates that out of the 36 graduate respondents, 3% had a lower risk appetite, 39% had lower to medium risk appetite, 47% had medium risk appetite, 11% had medium to higher risk appetite and no respondent had a higher risk appetite.

6.5 Demographic Characteristics and Investment Preferences

6.5.1 Gender and Investment Preferences

Table 6.5.1: Primary Investment Goal of Investors according to Gender

Primary Investment Goal	Female	Male	Grand Total
Preserving the value of investments while minimizing risk	8	14	22
Generating regular cash inflows while also building the value of the investments as a secondary objective	6	7	13
Building the value of the investments over time while also generating regular cash flows as a secondary objective	11	11	22
Building the value of the investments substantially over time without the need of generating regular cash flows	6	11	17
Grand Total	31	43	74

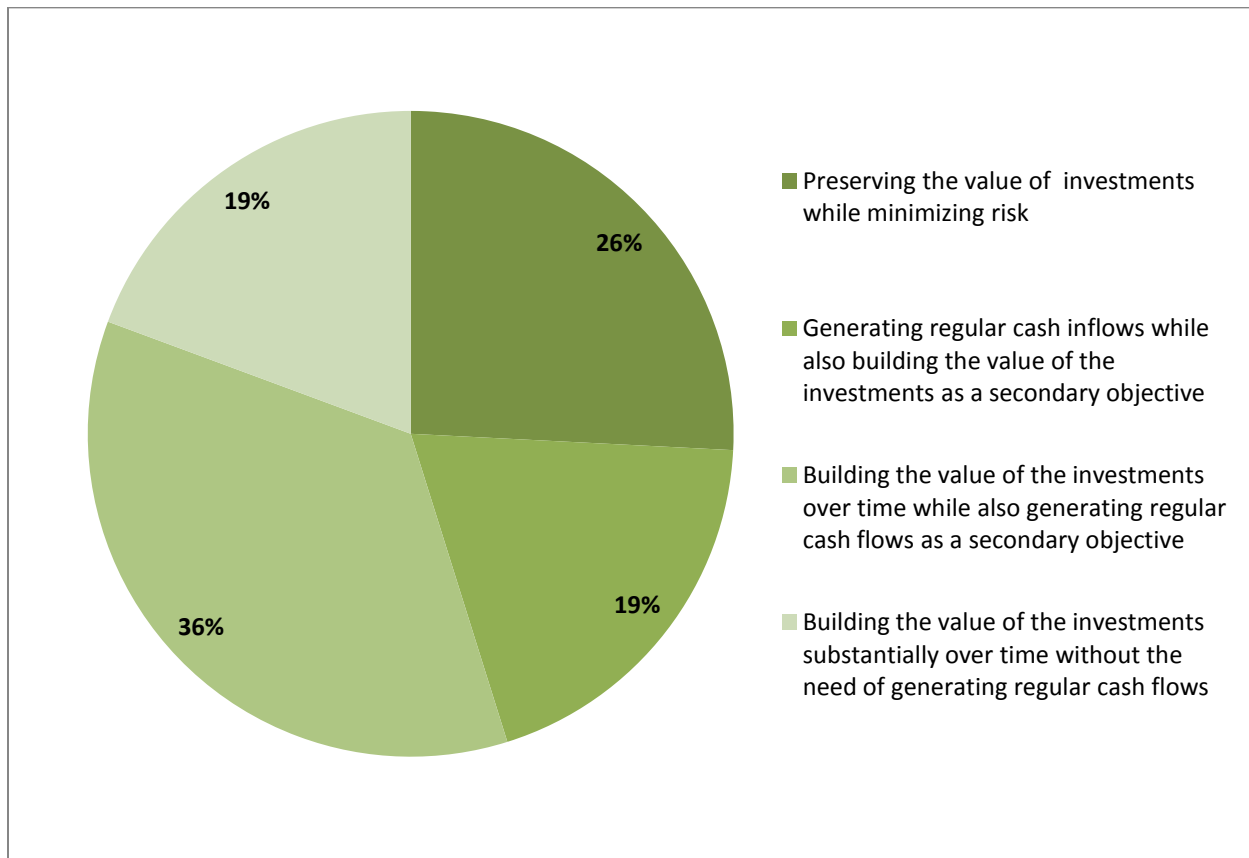


Chart 6.5.1: Primary Investment Goal of Female Investors

Chart 6.5.1 indicates that out of the 31 female respondents, the primary goal of 26% is to preserve the value of their investments while minimizing the risk of losing its value, 19% want their investments to generate regular cash flows while build its value gradually over time as well, 36% want their investment to grow in value over time while generating some regular cash flows as a secondary objective and 19% want their investment to grow in value substantially over time without needing it to generate regular cash flows.

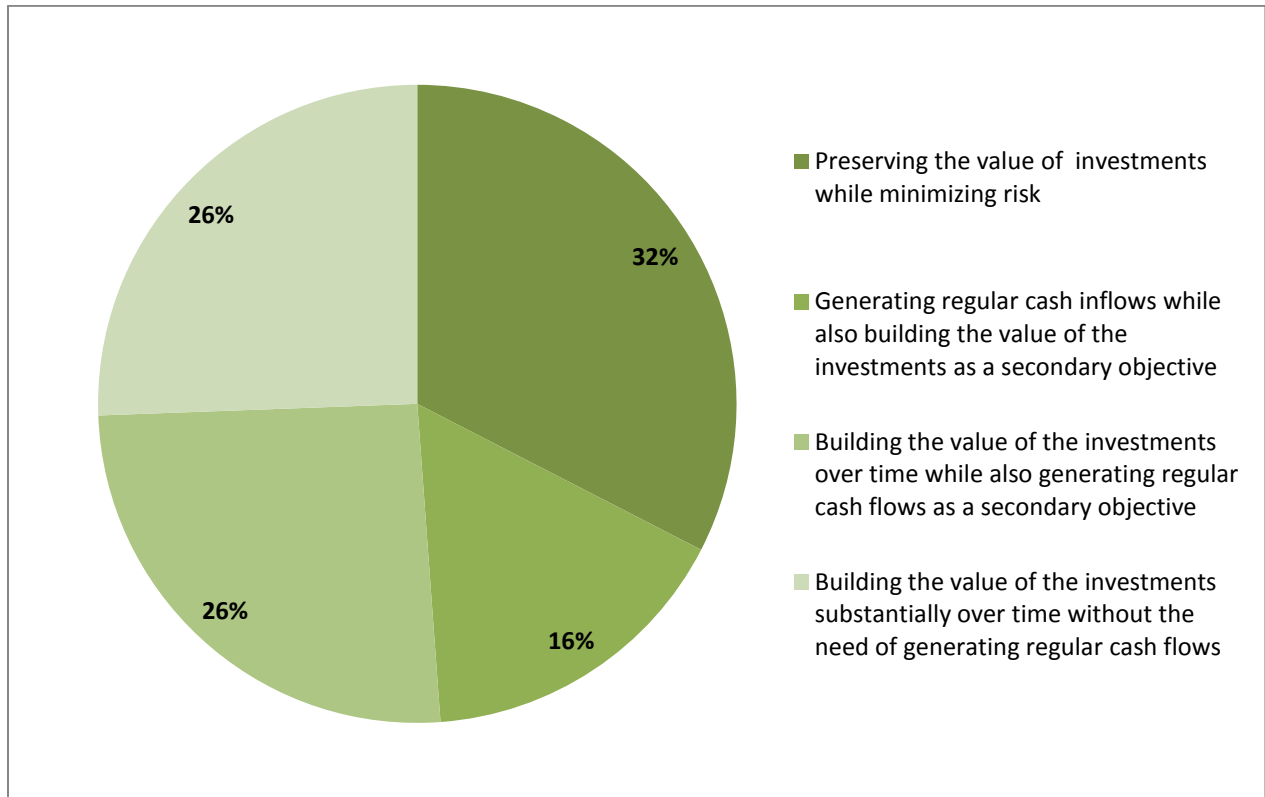


Chart 6.5.2: Primary Investment Goal of Male Investors

Chart 6.5.2 indicates that out of the 43 male respondents, the primary goal of 32% is to preserve the value of their investments while minimizing the risk of losing its value, 16% want their investments to generate regular cash flows while build its value gradually over time as well, 26% want their investment to grow in value over time while generating some regular cash flows as a secondary objective and 26% want their investment to grow in value substantially over time without need it to generate regular cash flows.

Table 6.5.2: Preferred Investment Instrument of Investors according to gender

Preferred Investment Instrument	Female	Male	Grand Total
Bank Deposits, Post Office Deposits	18	26	44
Debentures/ Debts and Debt Oriented Funds	4	3	7
Equities and Equity Oriented Funds	9	14	23
Grand Total	31	43	74

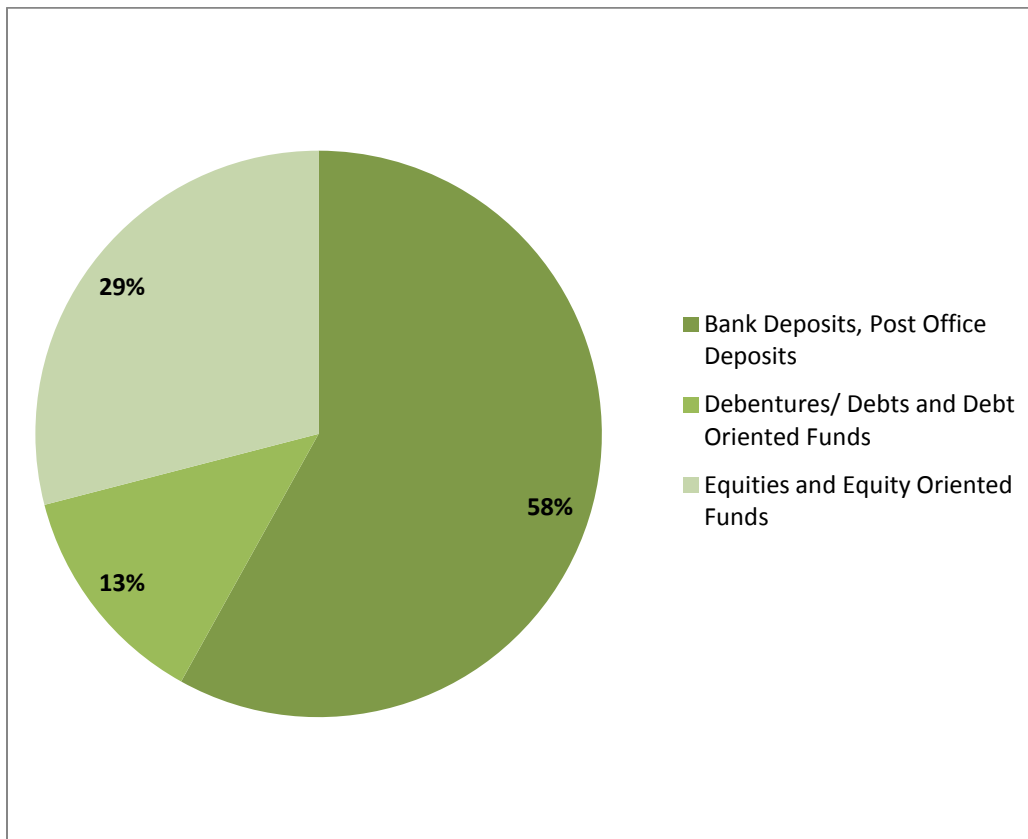


Chart 6.5.3: Preferred Investment Instruments of Female Investors

Chart 6.2.3 indicate that out of the 31 female respondents, 58% prefer to invest in bank deposits and post office deposits, 13% prefer to invest in debts and debt oriented funds and 29% prefer to invest in equities and equity oriented funds.

Chart 6.2.4 indicate that out of the 43 male respondents, 60% prefer to invest in bank deposits and post office deposits, 7% prefer to invest in debts and debt oriented funds and 33% prefer to invest in equities and equity oriented funds.

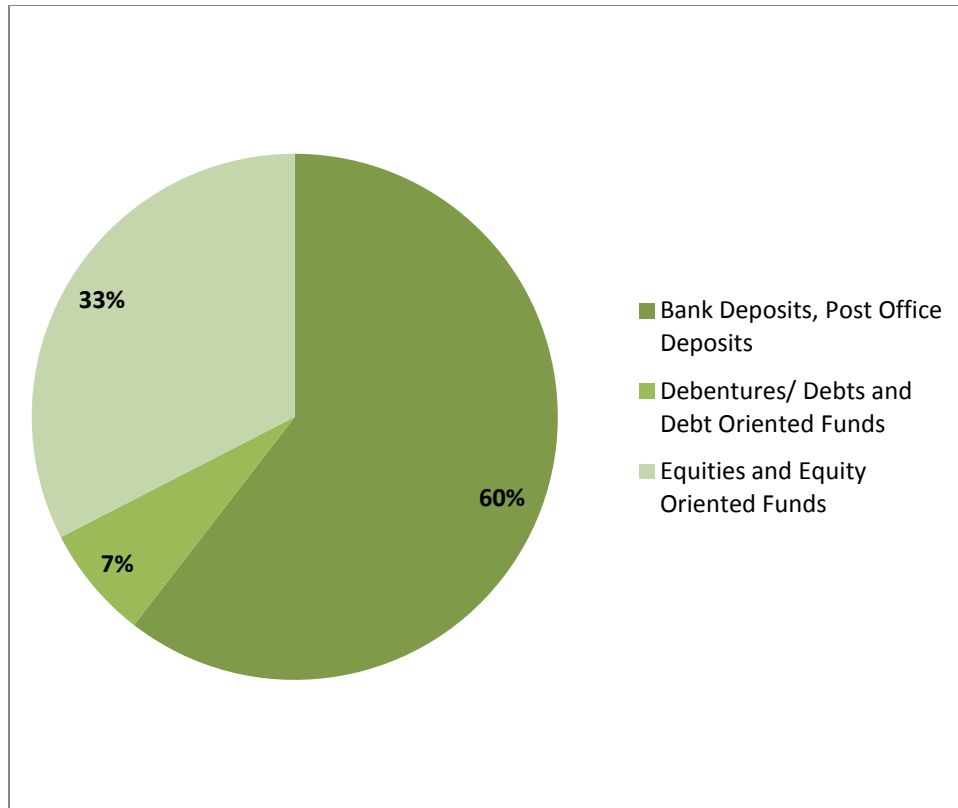


Chart 6.5.4: Preferred Investment Instruments of Male Investors

6.5.2 Marital Status and Investment Preferences

Table 6.5.3: Primary Investment Goal of Investors according to their Marital Status

Marital Status	Married	Unmarried	Grand Total
Preserving the value of investments while minimizing risk	20	2	22
Generating regular cash inflows while also building the value of the investments as a secondary objective	7	6	13
Building the value of the investments over time while also generating regular cash flows as a secondary objective	11	11	22
Building the value of the investments substantially over time without the need of generating regular cash flows	10	7	17
Grand Total	48	26	74

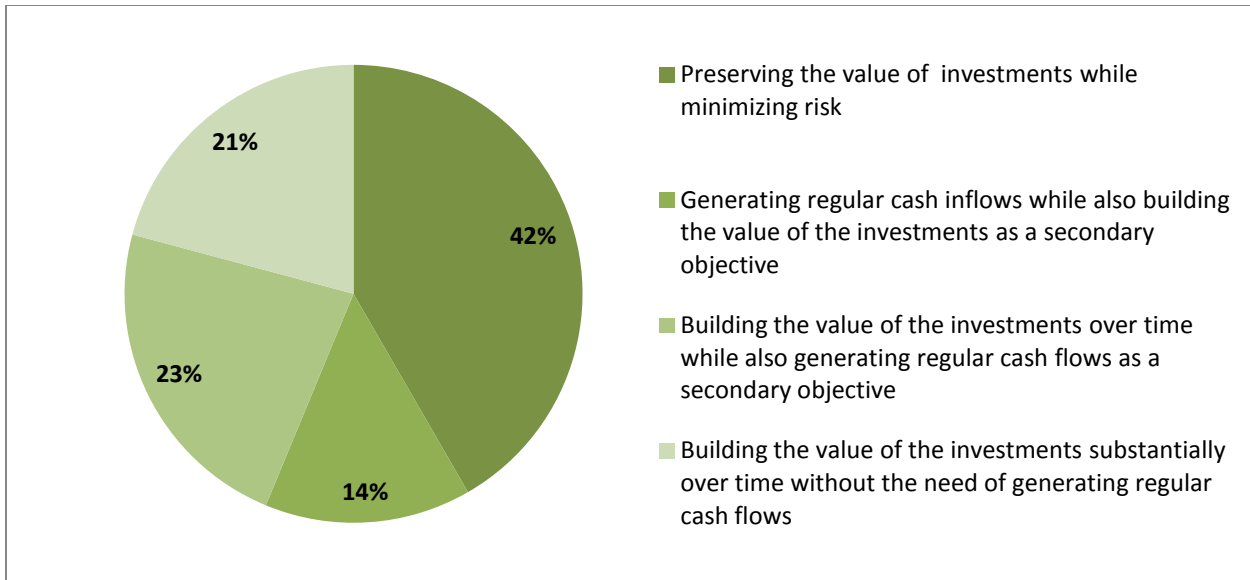


Chart 6.5.5: Primary Investment Goal of Married Investors

Chart 6.5.5 indicates that out of the 48 married respondents, the primary goal of 42% is to preserve the value of their investments while minimizing the risk of losing its value, 14% want their investments to generate regular cash flows while build its value gradually over time as well, 23% want their investment to grow in value over time while generating some regular cash flows as a secondary objective and 21% want their investment to grow in value substantially over time without needing it to generate regular cash flows.

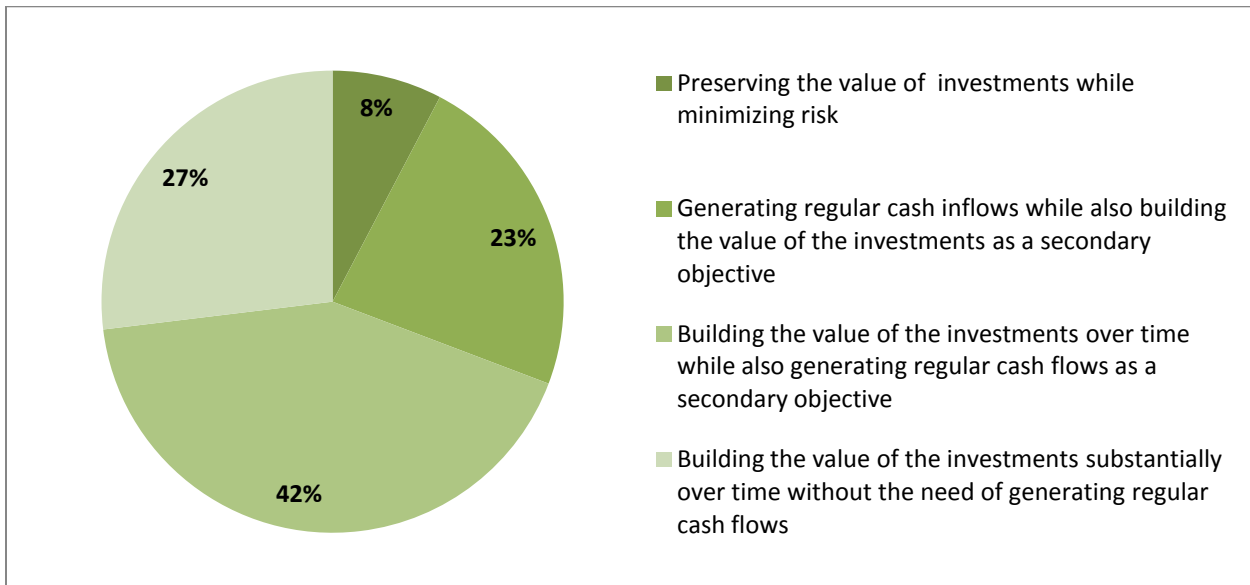


Chart 6.5.6: Primary Investment Goal of Unmarried Investors

Chart 6.5.6 indicates that out of the 26 married respondents, the primary goal of 8% is to preserve the value of their investments while minimizing the risk of losing its value, 23% want their investments to generate regular cash flows while build its value gradually over time as well, 42% want their investment to grow in value over time while generating some regular cash flows as a secondary objective and 27% want their investment to grow in value substantially over time without needing it to generate regular cash flows.

Table 6.5.4: Preferred Investment Instrument of Investors according to Marital Status

Preferred Instrument	Married	Unmarried	Grand Total
Bank Deposits, Post Office Deposits	33	11	44
Debentures/ Debts and Debt Oriented Funds	3	4	7
Equities and Equity Oriented Funds	12	11	23
Grand Total	48	26	74

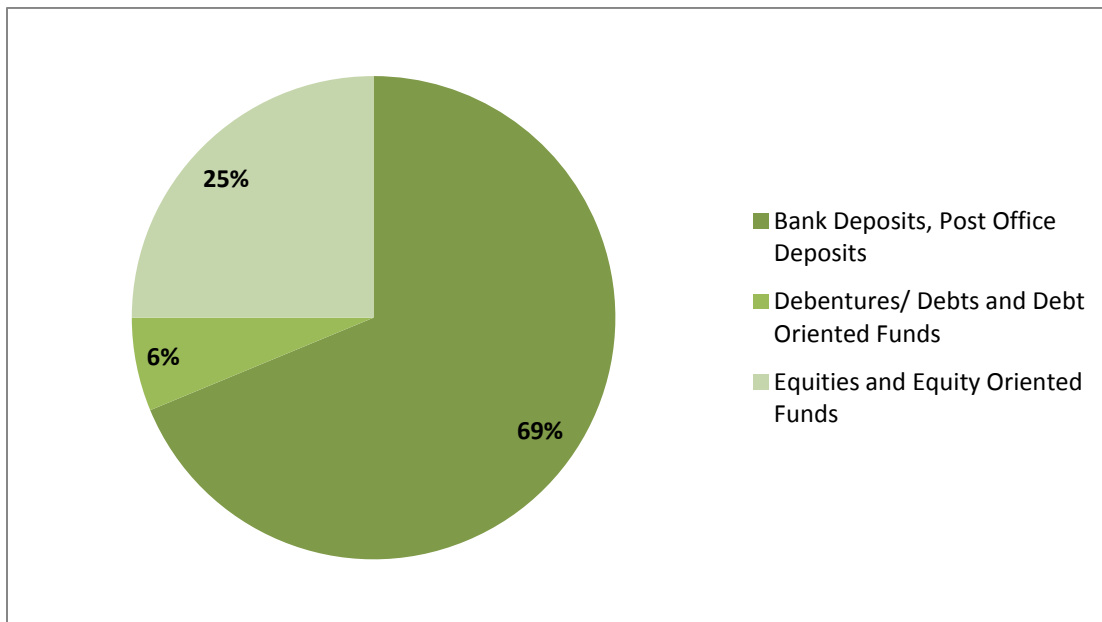


Chart 6.5.7: Preferred Investment Instruments of Married Investors

Chart 6.2.7 indicate that out of the 48 married respondents, 69% prefer to invest in bank deposits and post office deposits, 6% prefer to invest in debts and debt oriented funds and 25% prefer to invest in equities and equity oriented funds.

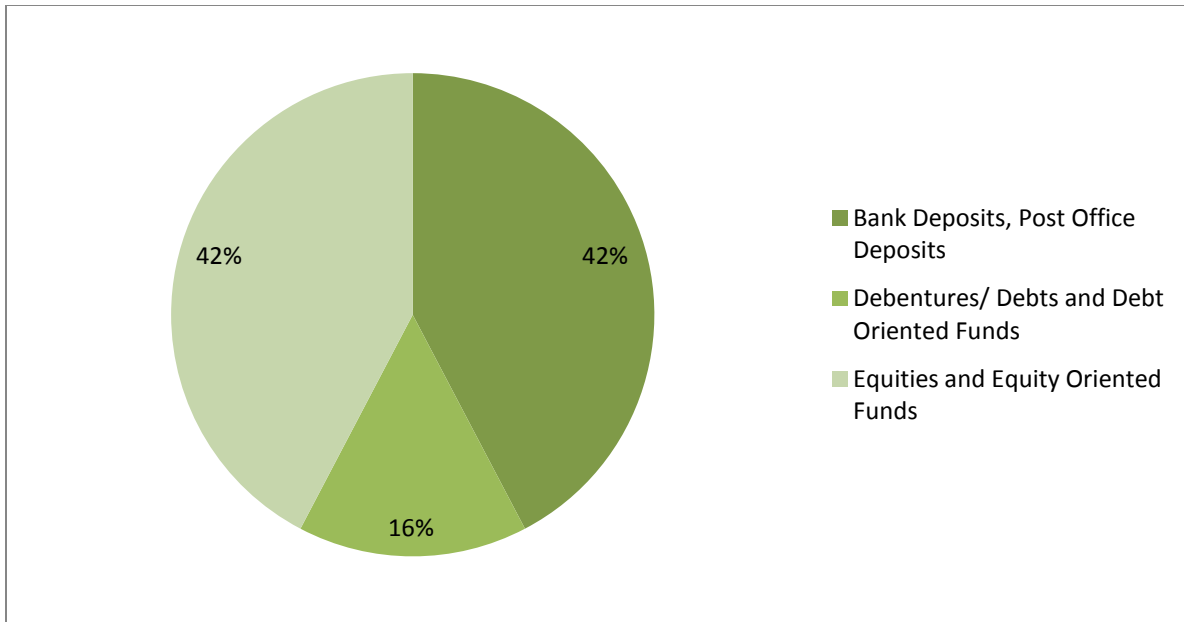


Chart 6.5.8: Preferred Investment Instruments of Unmarried Investors

Chart 6.2.8 indicate that out of the 26 married respondents, 42% prefer to invest in bank deposits and post office deposits, 16% prefer to invest in debts and debt oriented funds and 42% prefer to invest in equities and equity oriented funds.

6.5.3 Level of Education and Investment Preferences

Table 6.5.6: Primary Investment Goal of Investors according to their Level of Education

Primary Investment Goal	Under Graduate	Graduate	Post Graduate	Grand Total
Preserving the value of investments while minimizing risk	7	11	4	22
Generating regular cash inflows while also building the value of the investments as a secondary objective	3	3	7	13
Building the value of the investments over time while also generating regular cash flows as a secondary objective	1	7	14	22
Building the value of the investments substantially over time without the need of generating regular cash flows	1	5	11	17
Grand Total	12	26	36	74

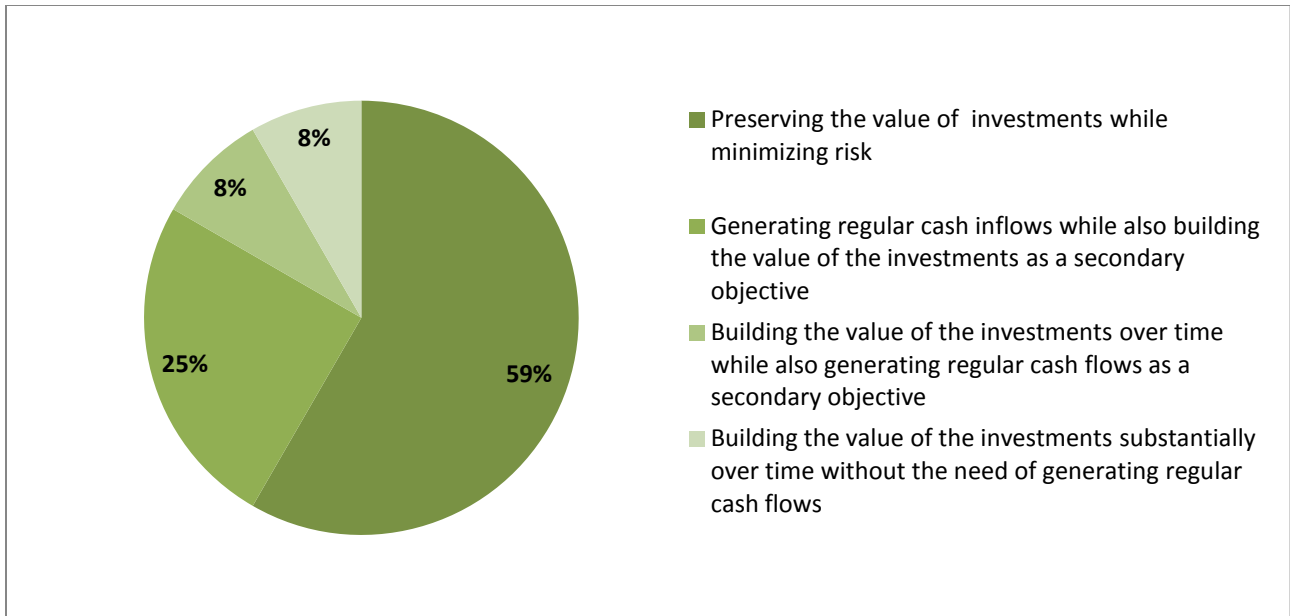


Chart 6.5.9: Primary Investment Goal of Under Graduate Investors

Chart 6.5.9 indicates that out of the 12 under graduate respondents, the primary goal of 59% is to preserve the value of their investments while minimizing the risk of losing its value, 25% want their investments to generate regular cash flows while build its value gradually over time as well, 8% want their investment to grow in value over time while generating some regular cash flows as a secondary objective and 8% want their investment to grow in value substantially over time without needing it to generate regular cash flows.

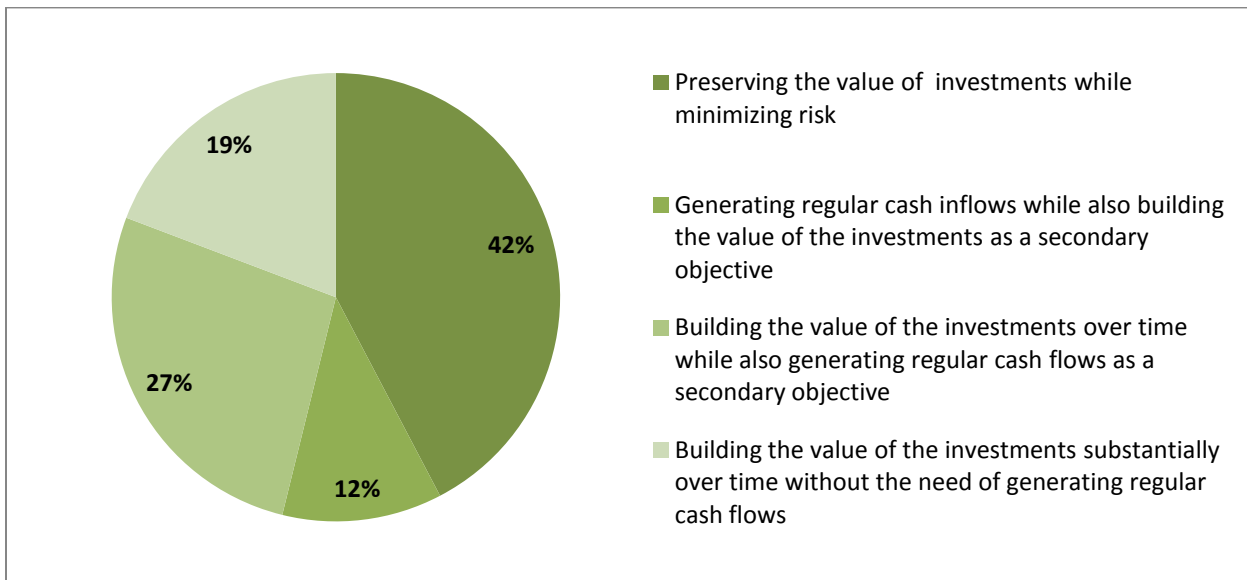


Chart 6.5.10: Primary Investment Goal of Graduate Investors

Chart 6.5.10 indicates that out of the 26 under graduate respondents, the primary goal of 42% is to preserve the value of their investments while minimizing the risk of losing its value, 19% want their investments to generate regular cash flows while build its value gradually over time as well, 39% want their investment to grow in value over time while generating some regular cash flows as a secondary objective and 31% want their investment to grow in value substantially over time without needing it to generate regular cash flows.

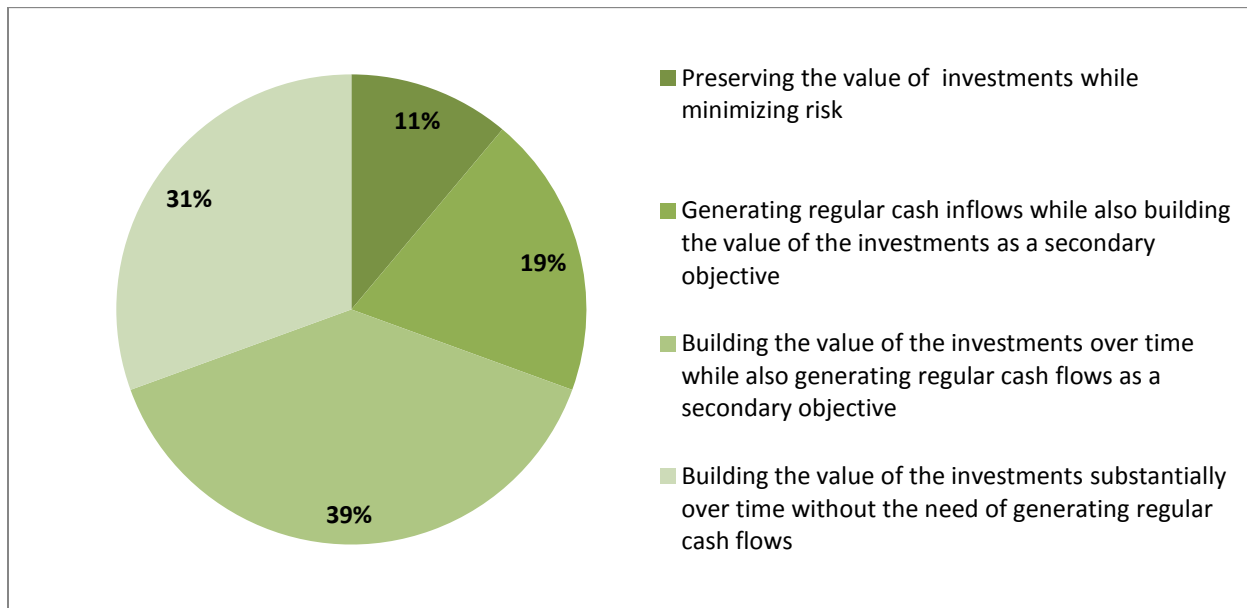


Chart 6.5.11: Primary Investment Goal of Post Graduate Investors

Chart 6.5.11 indicates that out of the 36 under graduate respondents, the primary goal of 11% is to preserve the value of their investments while minimizing the risk of losing its value, 12% want their investments to generate regular cash flows while build its value gradually over time as well, 27% want their investment to grow in value over time while generating some regular cash flows as a secondary objective and 19% want their investment to grow in value substantially over time without needing it to generate regular cash flows.

Table 6.5.6: Preferred Investment Instrument of Investors according to Level of Education

Preferred Investment Instrument	Under Graduate	Graduate	Post Graduate	Grand Total
Bank Deposits, Post Office Deposits	10	17	17	44
Debentures/ Debts and Debt Oriented Funds	1	4	2	7
Equities and Equity Oriented Funds	1	5	17	23
Grand Total	12	26	36	74

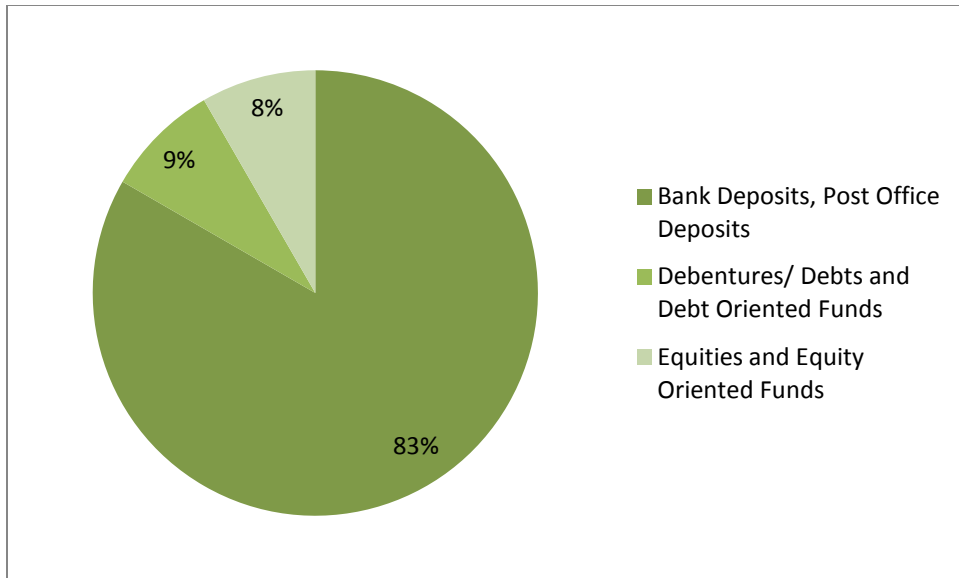


Chart 6.5.12: Preferred Investment Instruments of Under Graduate Investors

Chart 6.2.12 indicate that out of the 12 under graduate respondents, 83% prefer to invest in bank deposits and post office deposits, 9% prefer to invest in debts and debt oriented funds and 8% prefer to invest in equities and equity oriented funds.

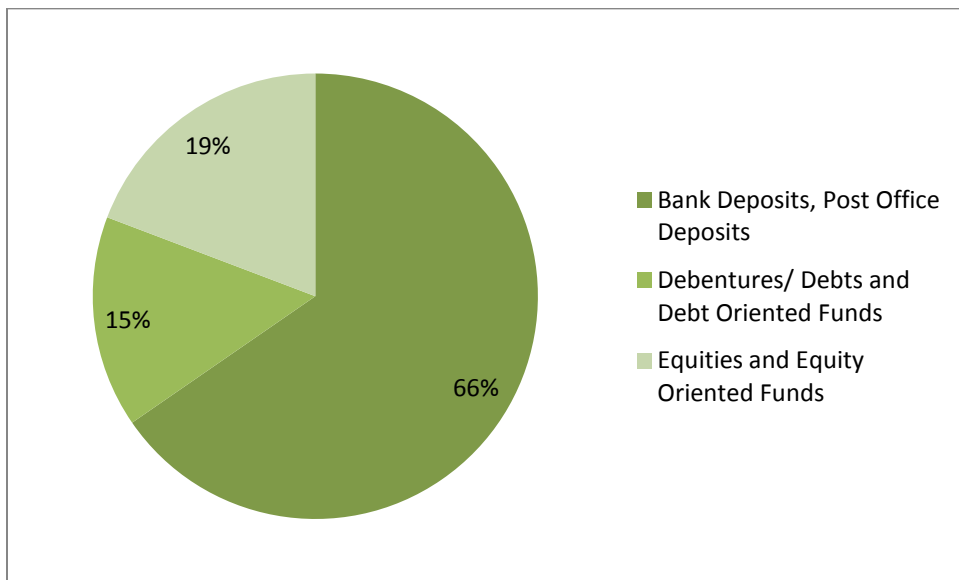


Chart 6.5.13: Preferred Investment Instruments of Graduate Investors

Chart 6.2.13 indicate that out of the 26 graduate respondents, 66% prefer to invest in bank deposits and post office deposits, 15% prefer to invest in debts and debt oriented funds and 19% prefer to invest in equities and equity oriented funds.

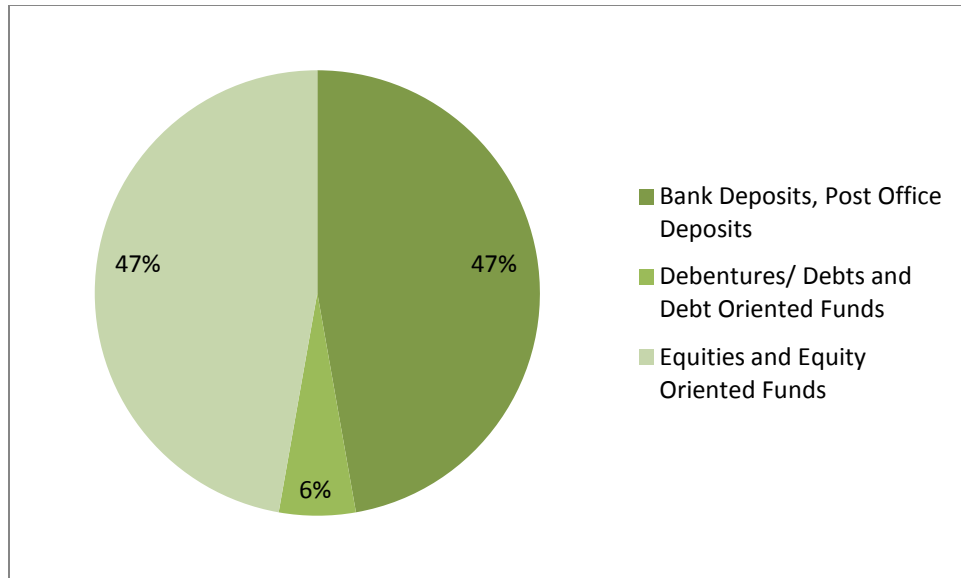


Chart 6.5.14: Preferred Investment Instruments of Post Graduate Investors

Chart 6.2.14 indicate that out of the 36 post graduate respondents, 47% prefer to invest in bank deposits and post office deposits, 6% prefer to invest in debts and debt oriented funds and 47% prefer to invest in equities and equity oriented funds.

7. FINDINGS FROM THE STUDY

- Majority of the retail investors have a lower to medium risk appetite (42%), followed by medium risk appetite (36%) and lower risk appetite (15%). Very few investors have a medium to higher risk appetite (7%) and no investor have a higher risk appetite.
- There is no interrelation between gender of the investor and their investment risk appetite.
- There is a interrelation between the marital status of the investors and their investment risk appetite. Majority of the married investors have a lower to medium risk appetite (40%) followed by medium risk appetite (33%) and lower risk appetite (23%). Very few married investors have a medium to higher risk appetite (4%). Majority of the unmarried investors have a lower to medium risk appetite (46%) followed by medium risk appetite (42%) and medium to higher risk appetite (12%). No unmarried investor has a lower risk appetite. Therefore, it is observed that risk appetite of unmarried investors is more than that of married investors.
- There is a interrelation between the level of education of the investors and their investment risk appetite. Majority of the under graduate investors have a lower risk appetite (42%) followed by lower to medium risk appetite (33%) and medium risk appetite (25%). Majority of the graduate investors have a lower to medium risk appetite (50%) followed by medium risk appetite (27%). Majority of the post graduate investors have a medium risk appetite (47%) followed by lower to medium risk appetite (39%). Therefore, it is observed that risk appetite of post graduate investors is highest followed by that of graduate investors and under graduate investors.
- There is no clear majority in the primary goal of the investors while investing. Although the most preferred primary goal of the investors are to preserve the value of their investment while minimizing risk (30%) and let their investments grow over time while generating regular cash flows (30%).
- The primary goals while investing for majority of the female investors is to let the value of their investment grow over time while generating regular cash flows (36%). The primary goal while investing for majority of the male investors is to preserve the value of their investments while minimizing risk (32%).

- The primary goal while investing for majority of the married investors is to preserve the value of their investments while minimizing risk (42%). The primary goals while investing for majority of the unmarried investors is to let the value of their investment grow over time while generating regular cash flows (42%).
- The primary goal while investing for majority of the under graduate investors is to preserve the value of their investments while minimizing risk (59%). The primary goal while investing for majority of the graduate investors is to preserve the value of their investments while minimizing risk (42%). The primary goal while investing for majority of the married investors is to have their investments generate regular cash inflows while also growing in value over time as a secondary objective (39%).
- The most preferred instruments for investment by the investors are bank deposits and post office deposits (60%) followed by equity and equity oriented funds (31%).
- Bank deposits and post office deposits are the preferred investment instrument of both female (58%) and male (60%) investors.
- For married investors, bank deposits and post office deposits are the most preferred investment instrument (69%). For unmarried investors, bank deposit and post office deposit (42%) as well as equities and equity oriented funds (42%) are the preferred investment instruments.
- Bank deposit and post office deposits are the most preferred investment instruments for under graduate (83%) as well as graduate (66%) investors. For post graduate investors, bank deposit and post office deposit (42%) as well as equities and equity oriented funds (42%) are the preferred investment instruments.

8. CONCLUSIONS

The study confirms the findings of earlier studies with regard to interrelation between demographic characteristics of retail investors namely, gender, marital status and level of education with their risk appetite and investment preferences. The findings show that a retail investor prefers to invest in financial products that offer modest returns while minimizing the risk of losing value. This research will help financial firms and institutions to know more about the factors influencing the investors and therefore help them focus on them to provide better customer service.

9. RECOMMENDATIONS

From the study of interrelations between various demographic characteristics of retail investors with their investment risk appetite and their investment preferences, it is recommended that for better portfolio management of retail investors, asset management companies, financial advisory firms and other financial institutions should devise appropriate allocation strategies based on the investor's marital status and level of education. The findings from this study can help such firms and institutions to segment, target and position their products to the appropriate clients. While relatively low risk investment instruments such as bank and post office deposits should be offered to married investors, high risk investment instruments such as equities and equity oriented funds should be offered to unmarried investors. While relatively low risk investment instruments such as bank and post office deposits should be offered to investors who are under graduates and graduates, high risk investment instruments such as equities and equity oriented funds should be offered to post graduate investors.

Although, there is a interrelation between individual demographic characteristics with the investment behavior of the retail investors, more than one characteristic influences their decision making at the same time and therefore, a further study is recommended to understand the extent to which each characteristic affects the investment behavior in tandem to one another.

10. LIMITATIONS OF THE STUDY

The findings and interpretations in the study are based on the responses of 74 respondents from Delhi and National Capital Region and thus making generalization difficult. It is applicable only to Delhi and National Capital Region and cannot be extended to Tier I, Tier II or Tier III cities in India. As convenience sampling technique has been applied in the study, the sample may not be a true representation of the true population. Demographic characteristics such as age, profession, etc., that may have an influence on the investment behavior, have not been taken into consideration in this study. Therefore, it is suggested that this study may be replicated to a more representative and wider sample considering other factors which may have an influence on the investment behavior for a pan India study for more generalized results.

11. REFERENCES

1. Gnani Dharmaja .V, Ganesh .J and Dr. Santhi .V. (2012). A Study on the Individual Investor Behavior with Special Reference to Geojit BNP Paribas Financial Service Ltd, Coimbatore.
2. Rajeshwari Jain. (2014). An Analysis of Income and Investment Pattern of Working Women in the City of Ahmedabad.
3. Syed Tabassum Sultana. (2010). An Empirical Study of Indian Individual Investor's Behavior.
4. Dr. Ebrahim Kunju Sulaiman. (2012). An Empirical Analysis of Financial Risk Tolerance and Demographic Features of Individual Investors.
5. Inderjit Kaur and K. P. Kaushik. Determinants of investment behavior of investors towards mutual funds.
6. Oxford Risk. Risk Profiling: The Scientific Approach.
<https://www.oxfordrisk.com/investor-risk-profiling/risk-profiling-the-scientific-approach>
7. PhilEquity Management, Inc. Investor Risk Profiling Questionnaire.
8. Standard Life. Risk Questionnaire (2013).
<https://www.standardlife.co.uk/c1/guides-and-calculators/assess-your-attitude-to-risk.page>
9. Focus on Investment Behavior in 2018.
<https://www.livemint.com/Money/38Sfk7MR3I0HOKlrujoZsI/Focus-on-investment-behaviour-in-2018.html>

12. ANNEXURE

Questionnaire Sample

Demographic Information

- Age Group
 - 29 and below
 - 30 – 39
 - 40 – 49
 - 50 – 59
 - 60 and above

- Gender
 - Male
 - Female

- Marital Status
 - Married
 - Unmarried

- Highest Education Qualification
 - Under Graduate
 - Graduate
 - Post Graduate

- Profession
 - Government Employee
 - Private Employee
 - Self Employed
 - Retired

Investment Attributes

- When you invest money, what is your primary goal?
 - Preserve the value of my investments. I want to minimize the risk of investments losing value.
 - Generate regular cash inflows. However, I would also like to build the value of my investments gradually over time, as a secondary objective.
 - Have the value of my investments grow over time. However, I would also like to generate some regular cash inflows, as a secondary objective.
 - Have the value of my investments grow substantially over time. I do not need to generate regular cash flows.

- What is the time frame you want to keep your money invested?
 - 1 Year or less
 - 1 - 3 years
 - 3 - 6 years
 - 6 - 10
 - 10 years or more

- Which type of financial instrument do you prefer most for investments?
 - Bank Deposits, Post Office Deposits
 - Debentures/ Debts and Debt Oriented Funds
 - Equities and Equity Oriented Funds

Investment Risk Profile

- My friends would say that I am cautious
 - Strongly Agree
 - Agree
 - Neither Agree nor Disagree
 - Disagree
 - Strongly Disagree

- I prefer my money to be safe from risk
 - Strongly Agree
 - Agree
 - Neither Agree nor Disagree
 - Disagree
 - Strongly Disagree

- I have put money in risky investment
 - Strongly Agree
 - Agree
 - Neither Agree nor Disagree
 - Disagree
 - Strongly Disagree

- I have experienced considerable gains from a risky investment.
 - Strongly Agree
 - Agree
 - Neither Agree nor Disagree
 - Disagree
 - Strongly Disagree

- I have been extremely risky in my past with financial investments.
 - Strongly Agree
 - Agree
 - Neither Agree nor Disagree
 - Disagree
 - Strongly Disagree

- Even if I could get high returns, I would prefer not to invest my money in something that might decline in value.
 - Strongly Agree
 - Agree
 - Neither Agree nor Disagree
 - Disagree
 - Strongly Disagree

- Being financially cautious is important to me.
 - Strongly Agree
 - Agree
 - Neither Agree nor Disagree
 - Disagree
 - Strongly Disagree

- I would never make a high risk investment.
 - Strongly Agree
 - Agree
 - Neither Agree nor Disagree
 - Disagree
 - Strongly Disagree

- Maximising long term investments is my goal, and I would be willing to accept dramatic, short term drops in value to achieve this.
 - Strongly Agree
 - Agree
 - Neither Agree nor Disagree
 - Disagree
 - Strongly Disagree

- Overall, how likely is it that you would take a significant financial risk?
 - Unlikely
 - Somewhat Unlikely
 - Neither Likely nor Unlikely
 - Somewhat Likely
 - Likely