

# "A STUDY ON THE INFLUENCE OF DEMOGRAPHICAL VARIABLES ON THE FACTORS OF INVESTMENT- A PERSPECTIVE ON THE GUWAHATI REGION"

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# ABSTRACT

The behavioral aspect of investors plays an important role in financial decision making which has attracted a huge financial literature. Among other objectives, demographic variables are one of the important objectives which influence financial decision making of investors. This paper focuses on the relationship between the four demographic variables i.e., age, gender, education and occupation with the four most important objectives of investment such as risk, return, retirement and tax which influences the buying behavior of the investors. A sample of 150respondents was interviewed and analysis was done through SPSS. The study emphasizes the fact that demographic variables indeed play a role on the mindset of the investor community which is driven by age and educational qualification.

KEYWORDS: Investment, Investment Avenues, Demographic Variables, Risk, Return

# **INTRODUCTION**

In the current economic scenario, money is considered as the root cause of all happiness. People start investing for a secure life and a bright future. But the most important dilemma is that investors are confused with various avenues and their risk-return profile. Investment is the sacrifice of current money or other resources for future benefits. In the financial sense, "Investment is the commitment of a person's funds to derive income in the form of interest, dividend, premiums, pension, benefits or appreciation in the value of their capital, purchasing of shares, debentures, post office savings certificates, insurance policies are all investments in the financial sense" (Mishra, 2010). There are large numbers of investment avenues available to the investors to park their funds (Geetha & Ramesh, 2011). But the choice of investment avenues differs from investor to investor based on the level of financial literacy and expectations (Jain & Mandot, 2012). A large number of studies have been conducted to find out the preference of investment avenues among the investors and the factors that influences the investment behaviours (Chambers & Schlagenhauf, 2002; Gomes, et. al., 2004; Kesavan et. al., 2012). Lewellen et. al. (1977) found that age, gender, income and education affects investors' preferences and attitudes towards investment decision based on their investment objectives. Jamshidinavid, Chavoshani & Amiri (2012) found that "The investment prejudices in individual investors has relationship with personal characteristics meaningfully and with some of the demographic variables weakly".

# **OBJECTIVES OF THE STUDY**

The objectives of the study include the following:

- To study the association between various demographic variables and objectives of investment.
- To find the most preferred investment avenues among the investor community in the Guwahati city.

#### Hypothesis of the Study

There is no statistical significance of association between various demographic variables and factors of investment.

#### **RESEARCH METHODOLOGY**

Descriptive research design has been considered for collection of primary data through questionnaires. Secondary data about investment avenues & Indian economy were taken from websites, books, journals, research papers etc. The respondents were investors from among the residents in and around the Guwahati city of Assam. A sample size of 150 customers was personally interviewed and data was collected for this statistical study. The sampling techniques used for the study is Non-Probabilistic Convenience sampling. Data was analyzed using SPSS and statistical tests like Mann-Whitney U test (to test the significance between factors of investment & Gender) and Kruskal-Wallis H test (to test the significance between factors of investment with Age, Educational Qualification & Occupation) have been considered. The statistical conclusions thus drawn have been followed by logical interpretation. The study is individual, investor oriented and the objectives selected are based on literature review.

#### DATA ANALYSIS AND INTERPRETATION

Demographic Variables	Character	Frequency	Percent (%)
Candan	Male	102	68
Gender	Female	48	32
	Below 20	4	3
4 72	21 - 30	82	55
Age	31 - 40	28	19
	Above 40	36	24
	10	5	3
Educational Qualification	10 + 2	7	5
Educational Quantication	Graduate	83	55
	Post Graduate	55	37
	Student	24	16
	Businessman	41	27
Occupation	Housewife	12	8
	Service	72	48
	Retired	1	1

**Table 1: Respondent's Profile** 

Table 1 represents the demographic profile of the respondents. It is observed from the table that 68% of the respondents are Male and rest 32% Female. The distribution of respondents among various categories of Age are as follows : 3% respondents are in age group of below 20, 55% respondents are in age group of 21 - 30, 19% respondents are in age group of 31 - 40 and 24% respondents are in age group of above 40. Hence mostly the respondents are from 21 - 30 age groups.

As Education level of respondents are concerned 3% investors are 10th qualified, 5% of the investors are 10+2 qualified, 55% of the investors are Graduate and 37% of the investors are Post Graduate. Regarding Occupation of the respondents 16% are students, 27% businessmen, 8% housewife, 48% service and 1% retired. Majority of the investors belong to the service sector.

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<b>Investment Avenues</b>	No. of Investors	Percentage	Rank
Bank Deposits	120	23	1
Mutual Fund	49	9	4
Gold	48	9	5
Silver	14	3	10
Stock Market	41	8	6
Public Provident Fund	61	12	3
Insurance	90	17	2
Real Estate	35	7	8
National Saving Certificates	26	5	9
Post Office Savings	36	7	7

**Table 2: Preferences of Investors towards Different Investment Avenues** 

With the objective of finding the most preferred option for investment in general, an enquiry was made to the investor in the survey. Table 2 shows the different investment preferences of the investors among various investment options. It reveals that the most preferred source of investment is Bank Deposits (23%) (Mehta & Shah, 2012; Samudra & Burghate, 2012) followed by relatively preferred Insurance (17%) and PPF (12%)next by Mutual Funds (9%), Gold(9%), Stock Market (8%), Post Office Saving (7%), Real Estate (7%), NSC (5%) and the least preferred is Silver with 3%.

#### Mann-Whitney U Test

The Mann-Whitney U test is used to compare differences between two independent groups when the dependent variable is either ordinal or interval/ratio, but not normally distributed. Unlike the independent-samples t-test, the Mann-Whitney U test allows us to draw different conclusions about the data depending on the assumptions made about the data distribution. These conclusions can range from simply stating whether the two populations differ through to determining if there are differences in medians between groups. Gender is considered here as the Grouping variable to understand its significance on the choice of investment avenues.

#### Table 3: Mann – Whitney U Test othoeie Toet Summa

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	Null Hypothesis	Test	Sig.	Decision	
1	The distribution of Return is the same across categories of Gender.	Independent- Samples Mann- Whitney U Test	.101	Retain the null hypothesis.	
2	The distribution of Risk is the same across categories of Gender.	Independent- Samples Mann- Whitney U Test	.002	Reject the null hypothesis.	
з	The distribution of Retirement is th same across categories of Gender.	Independent- Samples Mann- Whitney U Test	.001	Reject the null hypothesis.	
4	The distribution of Tax is the same across categories of Gender.	Independent- Samples Mann- Whitney U Test	.003	Reject the null hypothesis.	

Asymptotic significances are displayed. The significance level is .05.

From the above table, it is found that the objectives of investment i.e. Risk, Retirement & Tax is influenced by Gender variables, which means male & female have different objectives of investment in mind while choosing investment avenues. Hence the null hypothesis considered for the study i.e. Gender has no association with the Risk, Retirement & Tax objectives investment is rejected. At the same time, Gender has no association with the Return objective of investment which means the need for return is the same for both males & females.

#### Kruskal-Wallis H Test

Kruskal–Wallis one-way analysis of variance by ranks (named after William Kruskal and W. Allen Wallis) is a non-parametric method for testing whether samples originate from the same distribution. It is used for comparing more than two samples that are independent, or not related. It is an extension of the Mann–Whitney U test to 3 or more groups. Age, Educational Qualification and Occupation has been taken has the grouping variable to understand their significance on the choice of investment avenues.

	Null Hypothesis	Test	Sia	Decision
_	Han Hypothesis	Test	oig.	Decratori
1	The distribution of Return is the same across categories of Age.	Independent- Samples Kruskal- Wallis Test	.177	Retain the null hypothesis.
2	The distribution of Risk is the same across categories of Age.	Independent- Samples Kruskal- Wallis Test	.296	Retain the null hypothesis.
з	The distribution of Retirement is th same across categories of Age.	Independent- Gamples Kruskal- Wallis Test	.000	Reject the null hypothesis.
4	The distribution of Tax is the same across categories of Age.	Independent- Samples Kruskal- Wallis Test	.420	Retain the null hypothesis.

Table 4: Kruskal – Wallis H Test

From the above table, it is found that out of the four objectives of investment considered for the study only the retirement objective has association with Age, which means for different age group the choice of investment will vary based on the retirement benefits that investment avenue provides. Hence we reject out null hypothesis i.e. Age has no association with the Retirement objective of investment. At the same time Age of the investors has no association with the Return, Risk& Tax objectives of investment. Hence the other hypothesis i.e. Age has no association with the Return, Risk & Tax objectives of investment is accepted.

#### Table 5: Kruskal - Wallis H Test

	Hypothesis Test Summary					
	Null Hypothesis	Test	Sig.	Decision		
1	The distribution of Return is the same across categories of Education.	Independent- Samples Kruskal- Wallis Test	.037	Reject the null hypothesis.		
2	The distribution of Risk is the same across categories of Education.	Independent- Samples Kruskal- Wallis Test	.240	Retain the null hypothesis.		
3	The distribution of Retirement is th same across categories of Education.	Independent- Samples Kruskal- Wallis Test	.160	Retain the null hypothesis.		
4	The distribution of Tax is the same across categories of Education.	Independent- Samples Kruskal- Wallis Test	.309	Retain the null hypothesis.		

Asymptotic significances are displayed. The significance level is .05.

From the above table, it is found that out of the four objectives of investment considered for the study only the Return objective is influenced by Education variable, which means with different educational qualification the ability to choose the investment will vary based on the return benefits that different investment avenue provides. Hence, we reject our null hypothesis i.e. Education has no association with the Return objective of investment. On the contrary, Education

Asymptotic significances are displayed. The significance level is .05.

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of the investors has no association with the Risk, Retirement & Tax objectives of investment. Hence the other hypothesis i.e. Education has no association with the Return, Risk & Tax objectives of investment is accepted.

_	Hypothesis Test Summary					
	Null Hypothesis	Test	Sig.	Decision		
1	The distribution of Return is the same across categories of Occupation.	Independent- Samples Kruskal- Wallis Test	.004	Reject the null hypothesis.		
2	The distribution of Risk is the same across categories of Occupation.	Independent- Samples Kruskal- Wallis Test	.600	Retain the null hypothesis.		
з	The distribution of Retirement is th same across categories of Occupation.	Independent- Samples Kruskal- Wallis Test	.044	Reject the null hypothesis.		
4	The distribution of Tax is the same across categories of Occupation.	Independent- Samples Kruskal- Wallis Test	.001	Reject the null hypothesis.		

# Table 6: Kruskal - Wallis H Test

Asymptotic significances are displayed. The significance level is .05.

From the above table, it is found that the objectives of investment i.e. Return, Retirement & Tax is influenced by Occupation variable, which means different occupations (in this study occupation considered are Student, Salaried Individuals, Businessman, Housewife and Looking for job) have different objectives of investment in mind while choosing investment avenues. Hence the null hypothesis considered for the study i.e. Occupation has no association with the Return, Retirement & Tax objectives of investment is rejected. At the same time, Occupation has no association with the Risk objective of investment. Hence the null hypothesis i.e. Occupation has no association with the Risk objective of investment is accepted.

Thus the overall result of the study conveys the following:

Demographic Variables/ Objectives of Investment	Return	Risk	Retirement	Tax
Gender	Accept	Reject	Reject	Reject
Age	Accept	Accept	Reject	Accept
Education	Reject	Accept	Accept	Accept
Occupation	Reject	Accept	Reject	Reject

Table 7: Result of Hypothesis Accepted & Rejected

# CONCLUSIONS

Thus, the study reveals that the various demographical variables have an association with the objectives of investment. Among the demographic variables considered for the study, gender and the occupation are the most influential variables on the objectives of investment. Thus, it can be concluded that demographic variables such as age, gender, education, occupation plays a very important role in investment decision (Jain & Mandot, 2012; Jamshidinavid et. al., 2012; Geetha & Ramesh, 2011).

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