

# Study on Financial Risk Tolerance of individual Investors with special reference to Chennai city

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## Abstract

The investors should be aware of their risk profile before taking their investment decisions and adopt investment strategy that is best suited for their investment goals. This study helps to understand the risk profile of the individual investors and how various individual characteristics influence their risk taking behaviour. This study is mainly based on the primary data. Descriptive research is adopted for the study. The data is collected through The Grable And Lytton Risk-Tolerance Scale questionnaire, which was distributed to the respondents through Google forms and their responses were recorded and processed.. Convenience sampling is used for the study. Data obtained from study is analyzed using SPSS. The sample size of study is 104. The statistical tools used for analysis are Chi-square test, Independent sample T-test and ANOVA. It is found that male are more risk tolerant than female. Also it was found that investors whose monthly income is below 25k take more financial risk compared to others and investors who have done HSC or below take more speculative risk compared to others.

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## I. INTRODUCTION:

Financial risk tolerance is usually defined because the maximum amount of variability in returns that an investor is willing to take when he is about to make any investment. Risk tolerance has huge influence and it has can be seen in four aspects - financial, physical, social and ethical. Risk tolerance level of investors also a play a important role when an investor deigns its portfolio. If he is risk averse, he needs to invest in fixed income investment avenues like bank deposits. If the investor is willing to take risk, then he can adopt

for equity schemes and design their portfolio accordingly. Investor's risk tolerance level is influenced by various factors such as their monthly income, marital status, age, numberof dependents etc. This paper attempts to study the risk profile of investors and how individual characteristics influence their risk taking capability.

The field of risk profiling has been researching factors that contribute to investor's financial risk tolerance.From an investment perspective, risk tolerance is nothing but an investor's ability to

require or ‘tolerate’ risks. It’s important for each investor to measure their risk tolerance before choosing their investments. With knowledge of our tolerance for risk, we will have a better idea of which investment types are suitable for you and which investments you should avoid

## II. OBJECTIVES OF THE STUDY:

- To understand the financial risk tolerance level of individual investors.
- To examine the influence of individual characteristics of investors such as gender, income on risk profile
- To provide suggestions if any

## III. REVIEW OF LITERATURE

Grable and Lytton (1999b) used an exhaustive study to assess the role of various factors such as demographic, socio economic, and attitudinal factors on financial risk tolerance of investors. The authors found from the study that education and financial knowledge are the two factors that mainly influence the risk tolerance level of investors and investor's educational qualification has highest amount of variance with respect to risk tolerance.

Fredman 1996 found that an individual’s risk tolerance level has been found to be depend characteristics like age, time horizon on investment, individual income, investor knowledge, and perception on price fluctuation. Though there were many studies to find the impact of individual characteristics on risk tolerance level of investors, there is no consensus on the findings

In the Indian context, Purkayastha (2008) studied the influence of personal characteristics of investors such as age, occupation, income, and number of dependents on risk tolerance. The author found that younger investors and high income investors are more risk tolerant when compared to other groups. He continued the research to understand investment pattern of investors corresponding to particular risk profile.

Surprisingly, the study revealed that customers prefer to invest their money in an averagrisk investment avenues like mutual fund, irrespective of their demographic profile and risk tolerance capability.

## IV. RESEARCH METHODOLOGY

This study is mainly based on the primary data. Descriptive research is adopted for the study. The data is collected through The Grable And Lytton Risk-Tolerance Scale questionnaire, which was distributed to the respondents through Google forms and their responses were recorded and processed.. Convenience sampling is used for the study. Data obtained from study is analyzed using SPSS. The sample size of study is 104. The statistical tools used for analysis are Chi-square test, Independent sample T-test and ANOVA.

## V. RESULTS AND DISCUSSION

**Hypothesis 1:** Risk tolerance of the investors differ with gender

H0: There is no significant difference in the risk tolerance between gender groups

H1: There is significant difference in the risk tolerance between gender groups

Independent Sample T-test was done in order to identify the significant difference between the risk tolerance and the gender.

Gender	Noofobser vations	Mean	Std.Deviatio n
Male	66	27.3485	5.52614
Female	38	22.9737	5.01073

## INDEPENDENTSAMPLETEST

Independent- test	F	df	P-value
	1.313	102	0.000

Interpretation:

Since  $p < 0.05$ , null hypothesis is rejected at 5% level of significance

Thus, there is a significant difference between the risk tolerance and gender. Also, from the above mean values male are more risk tolerant than the female.

### Hypothesis

#### **2: The level of investment risk taken by the investors is influenced by their occupation**

H0: There is no significant difference in the level of investment risk between occupation groups

H1: There is significant difference in the level of investment risk between occupation groups

Occupation	No of observations	Mean	Std. Deviation
Agriculture	1	9	-
Govt employee	10		2.09762
Private employee	52	10.25	2.1772
Business & profession	27	12.4074	2.02407
House wife	7	9.8571	2.34013
Retired	7	8.8571	0.69007
Total	104	10.5769	2.3429

### ANOVA

	Sum of Squares	Df	Mean Square	F	P-value
Between Groups	141.802	5	28.36	6.561	0
Within Groups	423.583	98	4.322		

Total	565.385	103			
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### **Interpretation:**

Since  $p < 0.05$ , null hypothesis is rejected at 5% level of significance

Thus, there is a significant difference in the level of investment risk taken by respondents between occupation groups

Also, from the above mean values investors under the category of below 25k take more financial risk compared to others.

### **Hypothesis 3:**

#### **The level of speculative risk taken by the investors is influenced by their education**

H0: There is no significant difference in the level of speculative risk taken by investors between education groups

H1: There is significant difference in the level of speculative risk taken by investors between education groups

Education qualification	No of observations	Mean	Std. Deviation
H score below	14	5.9286	2.20015
Graduation	52	4.7692	2.05432
Post graduation	29	5.8966	2.43992
Professional degree	9	7.4444	2.50555
Total	104	5.4712	2.33985

### ANOVA

	Sum of Squares	Df	Mean Square	F	P-value

Between Groups	68.842	3	22.947	4.635	0.004
Within Groups	495.071	100	4.951		
Total	563.913	103			

**Interpretation:**

Since  $p < 0.05$ , null hypothesis is rejected at 5% level of significance

Thus, there is a significant difference in the level of speculative risk taken by investors between education groups

Also, from the above mean values investors under the category of HSC or below take more speculative risk compared to others.

**Hypothesis**

**4: The level of financial risk taken by the investors is influenced by their monthly income**

H0: There is no significant difference in the level of financial risk taken by investors between monthly income groups

H1: There is significant difference in the level of financial risk taken by investors between monthly income groups

Monthly income	No of observations	Mean	Std. Deviation
Below 25k	8	11.875	2.53194
25k-50k	33	8.6061	2.09074
50k-1.2L	36	9.8056	2.27809
1.2L-2.4L	20	9.95	1.57196

Above 2.4L	7	11.1429	1.86445
Total	104	9.7019	2.2636

**ANOVA**

	Sum of Squares	df	Mean Square	F	P-Value
Between	93.56	4	23.39	5.33	0.001
Within Groups	434.2	99	4.386		
Total	527.76	103			

**Interpretation:**

Since  $p < 0.05$ , null hypothesis is rejected at 5% level of significance

Thus, there is significant difference in the level of financial risk taken by investors between monthly income groups

Also, from the above mean values investors under the category of below 25k take more financial risk compared to others.

**Hypothesis 5: The total risk tolerance of the investors is influenced by their monthly income**

H0: There is no association between the total risk tolerance and monthly income

H1: There is an association between the total risk tolerance and monthly income

Total risk tolerance	Total
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		LowRiskTolerance	MediumRiskTolerance	HighRiskTolerance	
<b>Monthly income</b>	Below 25K	0	8	0	8
	25K-50K	1	32	0	33
	50K-1.2L	0	34	2	36
	1.2L-2.4L	0	20	0	20
	Above 2.4L	0	5	2	7
<b>Total</b>		1	99	4	104

	Value	Df	P-value
PearsonChi-Square	16.394 <sup>a</sup>	8	0.037

### Interpretation:

Since  $pvalue < 0.05$ , null hypothesis is rejected at 5% level of significance. From the above result we can see that there is an association between the total risk tolerance of the investors and monthly income.

### VI. CONCLUSION

In the investing world, it is imperative to understand risk profile of the investors to guide them to make wise investment decisions. The most effective way to reduce investment risk is by diversification. Though diversification won't ensure gains or guarantee against losses, it do provide a good return based on desired level of risk taking capability. Investors need to find a good balance between the risk and return so that their investment objective will be met. So

understanding the risk profile of the investors become essential and make investment decisions that best suit their risk profile.

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