



## A STUDY OF FINANCIAL RISK TOLERANCE OF WORKING WOMEN

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### **Abstract**

*This empirical research examines the effect of age, marital status, income and education over financial risk tolerance of female employees in the educational institutions at Greater Noida. A structured survey was used to analyse the FRT. Survey was conducted over 140 female employees with the educational qualification of B.Tech. M. tech. and Ph.D. 137 filled questionnaires were found suitable for the analysis.*

*Result of research is also based on the observations during conversations with the respondents. FRT of working female is quite different in comparison to the earlier researches. Working female are found high risk tolerant. Limitations under this study was that the sample taken for the study was limited. Variety of job role in the sample was missing and this study doesn't includes the divorced or single mothers in the study.*

**Keywords:** *Financial Risk Tolerance, Working Female.*

**Introduction-**Investment decision reflects the risk taking behaviour of an investor. But some time investors become victim of over and under confidence. Both conditions are not favourable for an investor as the former leads to a possible loss of asset and later may leads to missing opportunity of getting higher returns.

Men are found more confident and some times over confident in the financial matters(Adhikari & O'Leary, July 2008).

### **Literature Review**

Investor's age is a significantly affects the psyche of an investor while taking investment decision(V, J, & V, 2012; Rui, Sharpe, & Wang, 2011; Moreschi, 2005; Sulaiman, 2012; Hallahan, Faffb, & McKenziea, 2003; Sood & Kaur, 2015; Prabhakaran & Karthika, 2014; Yao & Hanna, 2005). Understanding of adults in context of risk and return characteristics of investment instruments. In the survey nearly half of the adults chose the most risky choice (stock or stock mutual funds) whereas nearly half of the adults chose the less risky choice (bonds or bond mutual funds). On the contrary, many adults may have learned from experiences that stock or stock mutual funds are not necessarily more risky than bonds or bond mutual funds. Being carefully chosen and dealt with, portfolios of stocks or stock mutual funds may even be less risky than some bond mutual funds and may generate a higher return.(Yang, 2004). Risk Tolerance have negative correlation with age (Strydom & Metherell, 2012; Chattopadhyay & Dasgupta, 2015). When an individual approaches towards the retirement he focuses more from assets accumulation to the assets prevention. Retired or near to retirement investors are more concerned about expected loss of assets from the risky investment which can be prevented by investment in less risky investment required to fund the desired future consumption (Rui, Sharpe, & Wang, 2011). Age has a pragmatic relationship with financial risk(Yao & Hanna, 2005). Hallahan, *etal* (2003) proved the negative relationship of age and financial risk tolerance via analyzing a large database of psychometrically derived financial risk tolerance scores (RTS) and associated demographic information. The research survey consists of 25 questions which generate a standardized Risk Tolerance Score (RTS) on a scale of 1 –100, higher scores indicating higher risk tolerance. Kannadhasan (2015) suggested *age* as an important variable in financial risk tolerance but some other factors also affect this variable as time horizon of investment goals, financial stability, market volatility, inflation and global financial crisis. Anbar & Eker (2010) there is no meaningful relationship between financial risk tolerance and age.

Education affects the risk bearing capacity but higher education doesn't affect the risk tolerance (V, J, & V, 2012; Moreschi, 2005; Sultana & Pardharsardhi, 2011; Strydom & Metherell, 2012). Same results were found a research by Sood & Kaur (2015) in the area of Chandigarh and some other areas of Panjab. Sulaiman (2012) opposed this fact and concluded that high formal education increases the risk tolerance. Financial literacy level is affecting the risk tolerance capacity of U.S. citizens. Investors are getting more aware about the products and risk associated with them(Wagner, 2009).Education positively correlated the financial risk tolerance of the investor(Yao & Hanna, 2005). Education is an insignificant factor in terms of the Indian investors (Kannadhasan, 2015). Financial literacy increases aggressiveness in the investment behavior and risk tolerance of an investor increases (Agarwal, Amromin, Ben-David, Chomsisengphet, & Evanoff, 2010) 9677010334

**Objectives of the study:** In the light of above studies following objectives are outlined for the study in the area of Greater Noida-

- a) To study the impact of education, age and marital status on female investor's investment decision in Greater Noida.
- b) To study the self-awareness of the level of risk taking ability of female investor's in Greater Noida.

**Research Design-**

- a) **Data collection:** The data has been collected from a structured survey conducted among the working women in the area of Greater Noida, Uttar Pradesh.
- b) **Sampling design:** To study the financial risk tolerance of the working women we have selected the women employees in the area of Greater Noida, Uttar Pradesh. These women are within the age group of 25-55 and above. All women are working in education sector in the Engineering Institutes. Reason of selecting women employees with the back ground of engineering is there is a verity in the age and education like B.Tech, B.Sc., M.Tech., M.Sc. and Ph.D.  
In the study independent variables are education, age, income and marital status. Dependent variables are self-perception and actual risk tolerance.

**c) Analytical techniques:**

**Analysis-**

**Table 1- Demographic Characteristics of the respondents**

Sr. No.	Characteristics		Number of respondents
1	Marital Status	Single	41
		Married	96
	Total		137
2	Age	Below 25	15
		35-45	64
		45-55	33
		Above 55	25
	Total		137
	Education	B.Tech.	71
		M.Tech., M.Sc. & Ph.D.	66
	Total		137
	Income	20000	20
		35000	4
		40000	70
		70000	24
		100000	19
Total		137	

The impact of various demographic factors over the financial risk tolerance of the female employees in engineering institutes are studied and analysed, results of which are below-

- Difference between actual risk tolerance and self-perception

**Table 2 – Investor's perception about her risk tolerance and actual score**

Investor's self-perception						Actual Risk tolerance				
Conservative	Moderately Conservative	Balanced	Assertive	Aggressive	Total	Conservative	Moderately Conservative	Balanced	Assertive	Total
20	45	45	20	7	137	5	8	104	20	137

Table 2 shows the perception of investors about themselves and their actual risk tolerance. 20 and 45 respondents think that they are conservative and moderately conservative respectively but on actual only 5 and 8 respondents found themselves conservative and moderately conservative.

- Relationship between investor's marital status and risk tolerance

H0- There is no significant relationship between investor's marital status and level of risk talking ability.

H1- There is a significant relationship between investor's marital status and level of risk talking ability.

Table 3- Correlation analysis between marital status and the level of risk taking Ability

		ACTUAL	Marital Status
Risk Tolerance Score	Pearson Correlation	1	.097
	Sig. (2-tailed)		.260
	N	137	137
Marital Status	Pearson Correlation	.097	1
	Sig. (2-tailed)	.260	
	N	137	137

Table 4- ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.451	1	.451	1.280	.260
Within Groups	47.520	135	.352		
Total	47.971	136			

The p value (denoted by “**Sig.**”) is 0.260. This means that if the population mean weights are exactly equal, we only have a 26% chance of finding the differences that we observe in our sample. The null hypothesis is usually accepted because  $p > .05$  so we conclude that there is a no significant relationship between risk taking ability and marital status of the investors. As per correlation test there is not a strong relationship between marital status and investor’s risk tolerance. It means there are various other factors that affect the risk tolerance of the investors.

➤ Relationship between Risk tolerance and age

H0- There is no significant relationship between investor’s age and level of risk talking ability.

H1- There is a significant relationship between investor’s age and level of risk talking ability.

Age	Investor’s self-perception						Actual Score				
	Conservative	Moderately Conservative	Balanced	Assertive	Aggressive	Total	Conservative	Moderately Conservative	Balanced	Assertive	Total
25	5	0	5	5	0	15	0	0	15	0	15
35	5	25	22	5	7	64	5	8	46	5	64
45	5	10	13	5	0	33	0	0	23	10	33
55	5	10	5	5	0	25	0	0	20	5	25
	20	45	45	20	7	137	5	8	104	20	137

Table 6- Correlation between age and risk tolerance

		AGE	ACTUAL
AGE	Pearson Correlation	1	.257**
	Sig. (2-tailed)		.002
	N	137	137
ACTUAL	Pearson Correlation	.257**	1
	Sig. (2-tailed)	.002	
	N	137	137

Table 7- ANOVA of Age and risk tolerance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.642	3	2.214	7.125	.000
Within Groups	41.329	133	.311		
Total	47.971	136			

The p value (denoted by “**Sig.**”) in the table 7 is .000. This means that if the population mean weights are exactly equal, we only have a 0.0% chance of finding the differences that we observe in our sample. The null hypothesis is usually rejected if  $p < .05$  so we conclude that the mean age of the female are not equal. The risk tolerance of female isnot affected by the constraint of age.

➤ Relationship between income and financial risk tolerance

H0- There is no relationship between investor’s income and level of risk talking ability.

H1- There is a relationship between investor’s income and level of risk talking ability.

Table 8-Income and risk tolerance

Income	Investor’s self-perception						Actual Score				
	Conservative	Moderately Conservative	Balanced	Assertive	Aggressive	Total	Conservative	Moderately Conservative	Balanced	Assertive	Total
25000	5	10	5	0	0	20	0	5	10	5	20
35000	0	0	4	0	0	4	0	0	4	0	4
40000	15	25	18	5	7	70	5	3	62	0	70
70000	0	5	14	5	0	24	0	0	14	10	24
100000	0	5	4	10	0	19	0	0	14	5	19
	20	45	45	20	7	137	5	8	104	20	137

Table 9- ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.868	4	1.967	6.474	.000
Within Groups	40.103	132	.304		
Total	47.971	136			

Table 10 – Correlation between Actual risk tolerance and income of respondents

		Risk Tolerance	INCOME
Risk Tolerance Score	Pearson Correlation	1	.290**
	Sig. (2-tailed)		.001
	N	137	137
INCOME	Pearson Correlation	.290**	1
	Sig. (2-tailed)	.001	
	N	137	137

The p value (denoted by “**Sig.**”) in table 9 is .000. This means that if the population’s mean risk tolerance are exactly equal, we only have a 0.000% chance of finding the differences that we observe in our sample. Null hypothesis if  $p < .05$  so we can conclude that the mean risk tolerance of all income groups of investors is not equal. The risk tolerance of female investors is not affected by the income of investors.

Risk tolerance and income or respondents have a positive correlation but correlation is not very strong.

## Conclusion

As mentioned the objectives of this research work is to examine the impact of the demographic constraints such as marital status, age, education and income on the levels of financial risk tolerance on female employees in the area of Greater Noida, Uttar Pradesh. Secondly, are investors aware about their risk tolerance?.

The study was conducted on the female employees in the education sector. The minimum qualification of these employees was B.Tech. Taking consideration into second objective first, most of the female employees think that they are conservative or moderately conservative but in reality they are balanced. This behaviour is found more in employees who have recently joined the job and in the age bracket of less than 30 years.

Now coming to the demographic factors, it has been observed that-marital status dose not effect significantly to the risk tolerance of the respondents. The correlation between marital status and risk tolerance is positive, but relationship between both variables is not very strong. The reason behind this was observed during interaction with the respondents that in India men are meant as the main earner of the family. If a women in the family is working she is considered as a financial support to the family at the hard times.

While analysis of age and financial risk tolerance is was observed that respondents of the age of 25, 45-55 and above 55 think that they are conservative but actually they are balanced in terms of taking risk during investment. It clearly means that respondents above 45 have less financial know how. Age of the respondents and risk tolerance have positive correlation it means that as age will increase risk tolerance of the respondents will also increase. Interestingly all those respondents who think that they are aggressive were found actually assertive investors. While testing relationship of risk tolerance and age it was found that age and risk tolerance don't have any significant relationship. During interaction with the respondents who are in the age of 55 and above don't have sufficient knowledge of investment though they have funds available to invest.

As like the previous results income also don't have the significant relationship with risk tolerance of the respondents.

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