# Changing Risk Perception of Women Investors: An Empirical Study

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## Abstract

**Since time immemorial, women have great propensity to save and invest. If not completely, to a great extent, the socioeconomic status of women has been growing in the positive direction. Obviously, their investment decisions and risk perceptions are also changing positively. Unlike previous studies, the present research aims at understanding the risk perceptions of women exclusively. The main aim of the study is to quantify the risk appetite score of women grouped on various socio-demographic bases. The study is based on the sample survey of 120 women in Mysore city. A questionnaire comprising of a 14-item financial risk-tolerance scale developed by Grable and Lytton (1998) (but slightly modified) was used. Risk appetite score was assigned to each respondent on a 5- point Likert summated scale. The respondents were grouped on the basis of the obtained score. The results show that two-thirds of the respondents were above the average score of risk tolerance. Correlation between investment objective and occupation shows a slightly negative relationship. Correlation between risk appetite score and various independent variables allowed us to have a regression model. The regression model suggests that there is a negative influence of age of women on their risk tolerance levels, a finding which is supported by many studies. Only age and education had a positive influence on the risk appetite of women. The study has great implications for the government and investment industry in framing various policies.**

***Keywords:*** **women investors, investment, risk appetite, determinants, investment portfolio**

**JEL Classification: D14, G02, G11**

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The general opinion is that women cannot bear more risk than men. The debate amongst the think tank concludes it too. In the words of Pandit Jawaharalal Nehru, "when women move forward, the family moves, the village moves and the nation moves" is the central theme in the socioeconomic paradigm of the nation as it is an accepted fact that only when women are in the mainstream of progress can any economic and social development be meaningful. Women constitute half of the world's population. But still, majority of the women do not have equal access to what men can have. Contrary to this, in the marketing arena, one can find more designs and products for women than for men. Do we have the same thing when comes to financial products? Perhaps, the answer would be a no.

Traditionally, women have great propensity to save and invest. This tendency is increasing over the decades on account of women's dynamic role in every economic activity. Today, a great number of women are career women, are employed in jobs, and are earning their livelihood . In education, the enrollment ratio of women is increasing. The government has been implementing divergent policies so as to increase the potential contribution of women to

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society. Women's attitude towards investment avenues has also been changing, and they are open to make financial investments that have greater risk. Hence, the risk appetite of women investors has gradually been increasing. The fund managers and financial institutions now need to relook their diaries of portfolios designed on the basis of various demographic features. It is the time to reassess the ability of women to tolerate risk and re-observe their behavior towards various investment instruments. The present research study is aimed to ascertain the risk profile of women investors towards various financial investments.

## Risk Appetite Defined

Risk appetite is the degree of uncertainty that an individual investor is willing to tolerate in respect of negative dynamics in his/her business or assets. It is well documented that risk is a factor that shapes individuals' decisions, including financial and investment decisions (Lipe,1998 ;Yang & Qiu, 2005). Risk determines the rate of return that the investors are likely to receive. Most economic decisions are driven by the primary individual utility functions, including particular preferences for risk (Doubleday, 2002; Yang & Qiu,2005). Understanding the factors that determine risk attitudes is imperative to understand financial decisions of individuals. Determinants of risk attitudes of individual investors are of great significance and interest in the area of behavioral finance. Behavioral finance assumes that people are normal (Barberis & Thaler, 2003).

## Significance of the Study

Women are rising. Ample examples of women occupying top positions in corporates and administrations can be found nowadays. The chairman of the National Stock Exchange of India is also a woman! Many banks and financial institutions are headed by women. Hence, when women can lead big organizations, their potential decision-making ability and risk bearing attitude cannot be overlooked. It is much relevant to study the risk appetite of women's investment decisions. This study contributes to the literature on the determinants of individual risk, more particularly of women in India, where much dynamism in the policy perspectives of the government has been seen in recent years. To the best of our knowledge, no research studies are found on risk attitude (exclusively) of women investors with special reference to India. Hence, the present study aims to fill this research gap.

## Review of Literature

The last decade has seen plenty of research works on the determinants of investment behavior and risk perception of individual investors. Among them, the most important socioeconomic factors are gender, age, and income. A person's gender is one of the most researched factors that appear to determine the risk perception of individual investors. In the United States, Bruce and Johnson (1994) found that women take fewer investment risks. Jianakoplos and Barnesek (1998) reported results that lend further support to the hypothesis that a far lower percentage of women than men are willing to take any financial risks at all. Bajtelsmit and Bernasek (1996) found that sex is the third most important factor in determining risk attitude. Lewellen, Lease, and Schlarbaum (1997) found that after age and income, sex was the third most important determinant of investor style.

While conducting an analysis of the Federal Reserve Board's Survey of Consumer Finances (SCF), Sunden and Surette (1998) showed that women tend to invest more conservatively, and manage retirement account decisions more conservatively than men. In a study of the Federal Government's Thrift Savings Plan, Hinz, McCarthy, and Turner (1997) concluded that women are less likely to hold risky assets and are more inclined to use fixed-income alternatives (65% women vs. 52% men) rather than equities (28% women vs. 45% men). Kover (1999) found that fewer than half of women were unwilling to take more risks in return of higher than expected returns. Studies from other areas of economics, for example, purchase of life insurance, support the view that women are more risk averse (Halek & Eisenauer, 2001).

Schumell (1996) reported the results of 1992 Investment Marketing Group of America's study that women tend to be less confident in their ability to make the right financial decisions. Barber and Odean (2001) found that men trade 45% more than women. Trading reduces men's net returns by 2.65% points a year as opposed to 1.72% points for women. They proposed that investors who tend to trade excessively take more risk and make poor investment decisions.

Bymes, Miller, and Schafer (1999) summarized 150 studies from psychology literature examining differences in risk taking between men and women, demonstrating that women, on an average, take less risk than men. In this literature, there are two schools of thoughts that explain these differences. According to Felton, Gibson, and Sanbonmatsu (2003), there are (a) biological differences between men and women and (b) socio-cultural reasons for women to take lesser risks than men. Slovic (1966) noted that children are pressurized during childhood into behaving according to their cultural sex roles, which will result in a lower propensity for women to take risks. Additionally, Flynn, Slovic, and Mertz (1994) found that socio-political factors such as power and status favor men, resulting in an increase in their willingness to undertake greater risks. Schubert (2006) described the notion that men are less risk averse than women as a stereotype that leads to discrimination against women in the labour market and keeps women from assuming managerial positions. This is because a firm's value depends on how much risk it takes, which is in the end determined by the choices that firm managers make. Wang, Huang, and Ho (2013) found that females, as opposed to males, were more inclined to loss aversion.

We also found some contradictory evidence on the issue. Johnson and Powell (1994) found that in specific circumstances, women appear as risk loving as men or even more so. Schubert (2006) showed that women appear to be less sensitive to probabilities and are more pessimistic about gains than men. In risk management, women appear to have a comparative advantage with respect to diversification and communication tasks. Most recently, Feng and Seasholes (2007) used data from a brokerage firm to show that Chinese men and women show similar investment behavior. Kaushik, Kamboj, and Kakkar (2013) observed in their study that no significant differences existed in the perception of risk by both the sexes.

## Research Gap

Many research studies have proven the bias in results of risk measurement favoring men. This they attribute to the fact that men show overconfidence initially, and they lack consistency when it comes at a later stage. Studies prove contradictory results of men's risk appetite over women when assessed the results of what they say and what they achieve.

### Objectives of the Study

- To understand the investment behavior of the women respondents,
- To know the determinants of the risk tolerance level of the respondents,
- To offer suggestions for policy decisions.

## Hypotheses Development

The above literature survey shows that women's risk propensity is measured by comparing men. To the best of our knowledge, no research work is found particularly surveying only women. Determinants of risk appetite of women are of great significance for policy decisions since there is a paradigm shift in the perception of women towards investment avenues. Women are rising to the occasion. They are not only buying gold; they are slowly getting acquainted with the male dominated finance world. Their risk perception, obviously, is getting modified. In the light of the existing research gap, a very important question that arises is - Is the risk perception of women changing? Furthermore, the sub-questions are : Is there an agreement among women with respect to investment selection criteria? Are women really risk averse? What are the determinants of risk taking attitude of women? What are the

important factors that determine women's risk propensity?

Independent variables such as age, education, marital status, family type, number of children, occupation, annual income, and educational level are very significant factors that impact women's lifestyle to a great extent. Hence, we proceed to empirically study the changing risk perception of women investors. For these problem statements, the following hypotheses were developed. The null hypotheses of this study are as follows :

- **H01:** There is no agreement among the respondents on the investment selection criteria,
- **H02:** There is no significant relation between investment objective and occupation,
- **H03:** There is no significant relation between risk perception and independent variables.

## Research Methodology

- **Data and Sampling :** We did not have any reliable database to investigate the determinants of risk appetite related to women investors. The choice available to us was the questionnaire method of data collection based on the respondents' perceptions. The research instrument of our study is based on the 13-item financial risk-tolerance scale developed by Grable and Lytton (1998). However, the instrument was slightly modified to fulfill the reliability parameter. These measures are widely used because they are available in the public domain; they are easy to administer, and are relatively easy for the respondents to answer.

- **Pilot Study:** Initially, 30 questionnaires were administered in Hassan city. Investors were consulted in Karvy and Sharekhan stock brokers' offices. Others were consulted in private bank branches. We obtained 24 complete questionnaires, and therefore, the response rate of the pilot study was 80%. Some of the respondents hesitated while answering questions pertaining to income and existing investment information. Hence, we slightly modified some of the questions for the final study.

- **Sample Size and Method:** Data were obtained from respondents who were working in government and private organizations, entrepreneurs, professionals, and pensioners. Offices of various stock brokers and financial agents were consulted initially. Judgment sampling and snowball sampling method were adopted to collect the data for this empirical study. Finally, 120 sample respondents were considered for the study, instruments were administered, and data were collected. Respondents were hesitant to disclose details related to income, savings, existing assets, and so forth. However, we provided the required guidance to the respondents to fill the questionnaires.

- **Location and Time period of the Study :** The study was conducted in Mysore city. The data was collected for the study in the first half of 2013.

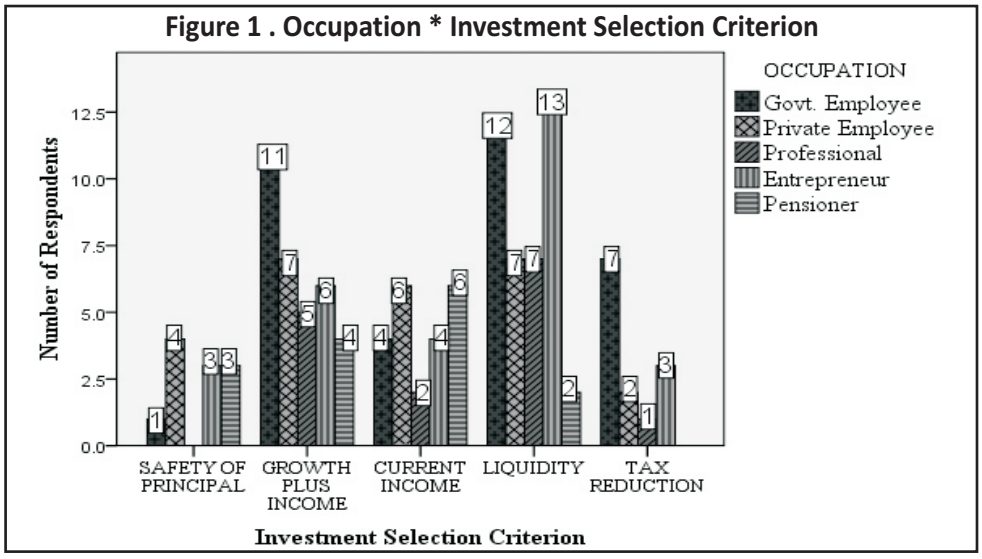
- **Tools of Analysis :** The collected data was edited and coded and Statistical Package for Social Sciences (SPSS) version 16.0 was used to analyze the data to get more accurate results for testing the hypotheses and for drawing unbiased inferences. We used tools like percentage, mean, standard deviation, chi-square test, Kendall's coefficient of concordance, correlation, *F*- test, ANOVA, and regression analysis for analyzing the data and drawing the results.

## Results and Discussion

The data were classified on the basis of the demographic profile. The Table 1 shows data pertaining to the demographic classification of the respondents, and the information in the table is self-explanatory. The Figure 1 represents the investment selection criteria of the respondents. Occupation and investment selection criterion cross tabulation shows that liquidity was the most important factor while choosing an investment portfolio for

**Table 1. Demographic Profile of the Respondents**

| | | Marital Status | | | | |
|---|---|---|---|---|---|---|
| | | Married | Single | Widow/Divorcee | | Total |
| | | Count | Count | Count | Total *N* | Table *N* % |
| Age | 30 & Below | 8 | 9 | 3 | 20 | 16.7% |
| (in years) | 30-39 | 48 | 2 | 0 | 50 | 41.7% |
| | 40-49 | 24 | 0 | 1 | 25 | 20.8% |
| | 50-59 | 10 | 0 | 0 | 10 | 8.3% |
| | 60 & Above | 12 | 0 | 3 | 15 | 12.5% |
| Education | 10th & Below | 13 | 3 | 1 | 17 | 14.2% |
| | Up to graduation | 21 | 8 | 2 | 31 | 25.8% |
| | Up to Post graduation | 33 | 0 | 2 | 35 | 29.2% |
| | Professional Degree | 35 | 0 | 2 | 37 | 30.8% |
| Occupation | Govt. Employee | 35 | 0 | 0 | 35 | 29.2% |
| | Private Employee | 17 | 8 | 1 | 26 | 21.7% |
| | Professional | 15 | 0 | 0 | 15 | 12.5% |
| | Entrepreneur | 23 | 3 | 3 | 29 | 24.2% |
| | Pensioner | 12 | 0 | 3 | 15 | 12.5% |
| Annual Income | Below 1 Lakh | 6 | 0 | 0 | 6 | 5.0% |
| (In ₹) | 1 Lakh to 2 Lakh | 29 | 11 | 5 | 45 | 37.5% |
| | 2 Lakh to 3 Lakh | 40 | 0 | 2 | 42 | 35.0% |
| | 3 Lakh to 4 Lakh | 21 | 0 | 0 | 21 | 17.5% |
| | Above 4 Lakh | 6 | 0 | 0 | 6 | 5.0% |




government employees and entrepreneurs. Private employees and professionals gave equal priority to growth plus income and liquidity over other criteria. Surprisingly, safety of principal was not the first selection criterion for all categories of respondents. Statistics show that women do not select investments on the basis of safety of the principal. It suggests that they would like to invest in portfolios, which grow over years, and they sought liquidity in their investments.

**Table 2. Descriptive Statistics of Investment Selection Criterion**

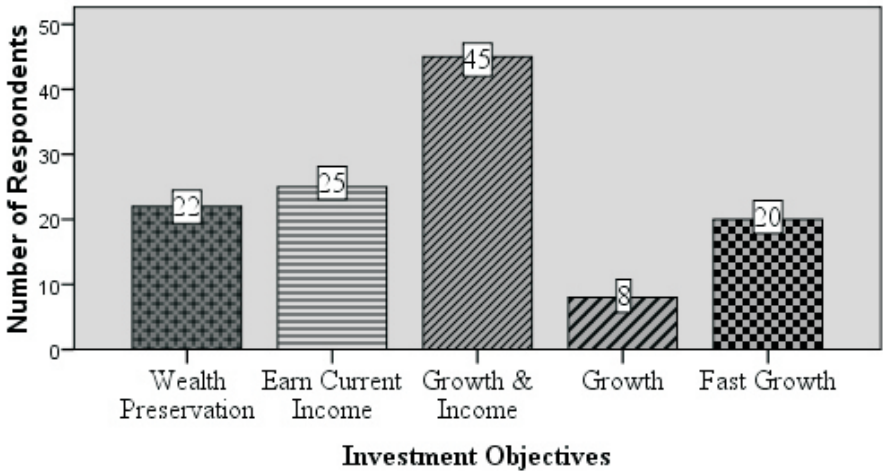
| | *N* | Mean | Std. Deviation | Mean Rank |
|---|---|---|---|---|
| Safety of Principal | 120 | 2.73 | 1.043 | 2.72 |
| Growth Plus Income | 120 | 2.34 | 1.073 | 2.31 |
| Current Return | 120 | 2.73 | 1.295 | 2.74 |
| Liquidity | 120 | 3.40 | 1.514 | 3.41 |
| Tax Reduction | 120 | 3.82 | 1.521 | 3.82 |

**Table 3. Test Statistics: Kendall's W[a]**

| *N* | 120 |
|---|---|
| Kendall's W[a] | **.146** |
| Chi-Square | **70.164** |
| *df* | 4 |
| Asymp. Sig. | **.000** |

[a.] Kendall's Coefficient of Concordance

**Figure 2. Investment Objectives of the Respondents**




The descriptive statistics of investment selection criteria (Table 2) show a low mean value (2.34) for growth plus income, whereas the mean for tax reduction (3.82) is the highest. Liquidity (3.40) has the second highest mean next to tax reduction. The lower mean value of the selection criteria indicates a higher rank by the respondents. Here, safety of principal and current returns both have a similar mean value. The analysis indicates that the respondents did not consider safety of principal as the most preferred criteria while deciding to make an investment. This shows that the risk appetite of the respondents was not quite weak.

To test our hypothesis (H01) whether there is an agreement among the respondents or not, Kendall's coefficient of concordance was applied, and it was found that Kendall's W is much lower than the chi-square value ($\chi^2$ 70.164 >W 0.146) shown in the Table 3, and hence, the null hypothesis is not rejected. From this, it can be inferred that there was no agreement among the respondents with regards to the investment selection criteria. Investment selection criteria were different for different groups of respondents, and their choices were also dependent upon their occupation. However, liquidity and tax reduction were the two important criteria for selection of the investment portfolio.

The Figure 2 exhibits the investment objectives of the respondents. As such, the growth in investment and earning income was the first objective or aim of making an investment for 45 respondents out of 120 ; 25 respondents wanted to earn current income on investments, 22 respondents perceived wealth preservation as their investment objective, and 20 respondents wanted fast growth of their investments. The sole objective of making an investment for 8 respondents was to achieve growth in investments. Out of the total respondents, only 26.4% of the respondents preferred wealth preservation, which indicates risk aversion, while fast growth signifies aggressive risk bearing attitude among the respondents, and 24% of the respondents were aggressive. The remaining respondents had a moderate risk bearing attitude. Statistics of risk appetite score (Table 4 and Figure 3 (histogram)) exhibit the level of risk tolerance of the respondents. Score for risk tolerance was recorded by assigning weights to the responses.

We distributed the 14 item risk tolerance questionnaire that was designed using the 5-point Likert scale. Weights assigned were 1, 2, 3, 4, and 5 for the responses. For instance, if the respondents *strongly agreed* that they were was not willing to take any risk, or were not willing to invest in a risky portfolio, 01 mark was assigned to their responses. On the other hand, if they *were ready* to bear risks in investments, 05 marks were assigned to them. Weights were assigned to the questions related to objectives of investment and investment selection criteria in the same order. For those who said that they were *willing* to bear risk, more marks were assigned to them, and those

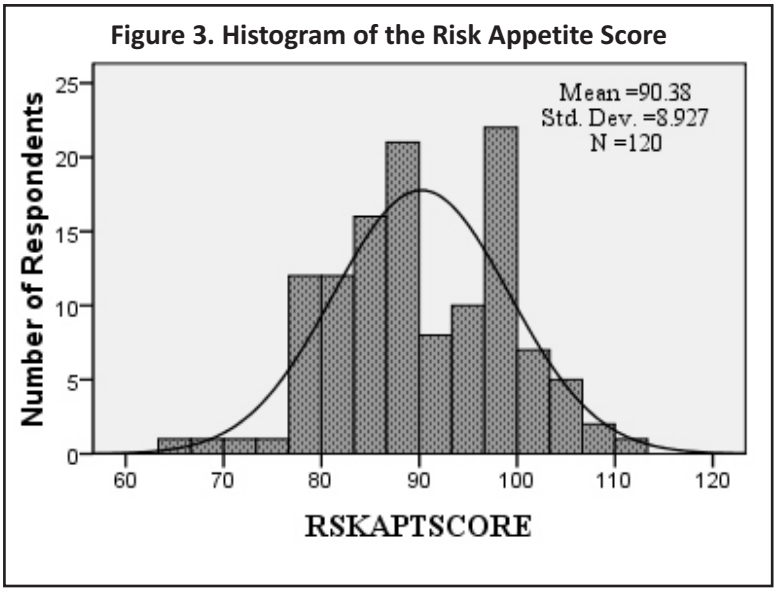
**Table 4. Risk Appetite Score**

| Level | Score | Count | Percent | Rank |
|---|---|---|---|---|
| High | 99 & Above | 26 | 21.66667 | I |
| Moderate | 85-98 | 61 | 50.83333 | II |
| Low | 84 & Below | 33 | 27.5 | III |
| | | 120 | 100 | |

**Table 5. Statistics of the Risk Appetite Score**

| | Valid | 120 |
|---|---|---|
| Mean | | 90.38 |
| Median | | 89.00 |
| Std. Deviation | | 8.927 |
| Variance | | 79.684 |
| Minimum | | 65 |
| Maximum | | 111 |
| Percentiles | 25 | 84.00 |
| | 50 | 89.00 |
| | 75 | 98.00 |

**Figure 3. Histogram of the Risk Appetite Score**



who were *not ready* to investment in risky investments, their responses received less marks. Finally, the total weight points obtained by the respondents were added up, and we considered the total score of each respondent. The Table 4 shows the total points indicating the level of risk aversion, whereas Table 5 highlights the statistics on the risk appetite level. Minimum score achieved by the the respondents was 64, whereas, 111 was the highest score. The mean score is 90.38, with the standard deviation of 8.927. We have grouped the respondents on the basis of their risk tolerance score.

There were 26 respondents who scored 99 and above marks. The score of 61 respondents was between 85 and 98, whereas 33 respondents scored below 84 marks. The Figure 4 shows the percentage of respondents categorized into high risk appetite, moderate risk appetite, and low risk appetite. It can be seen from the Figure 4 that 21 .67% of the respondents had a high risk appetite, 50.83% of the respondents had a moderate risk appetite, and 27.5% of the respondents had a low risk appetite. Contrary to early studies, the results show that women are now ready to bear risks in financial investments. Only one-third of the sample respondents were risk averse. The remaining women respondents showed that they invested in risky stocks and portfolios and desired to earn current income and needed growth based investments rather than only considering the safety of the investments and wealth preservation.

To test our second hypothesis (H02), we calculated the correlation between investment objectives and occupation of the respondents. The null hypothesis states that there is no significant relation between occupation of the respondents and their investment objectives. The Table 6 shows that there is a negative correlation between occupation and investment objectives. The correlation (.207) is significant at the 0.05 significance level, and therefore, the hypothesis 2 (H02) is not rejected. Hence, we can infer that investment objective of the respondents had no relation to their occupation. Even entrepreneurs and private employees made investments with the objective of liquidity and current income as well as growth plus income, whereas respondents with secured

**Figure 4. Perceived Risk Appetite Level**

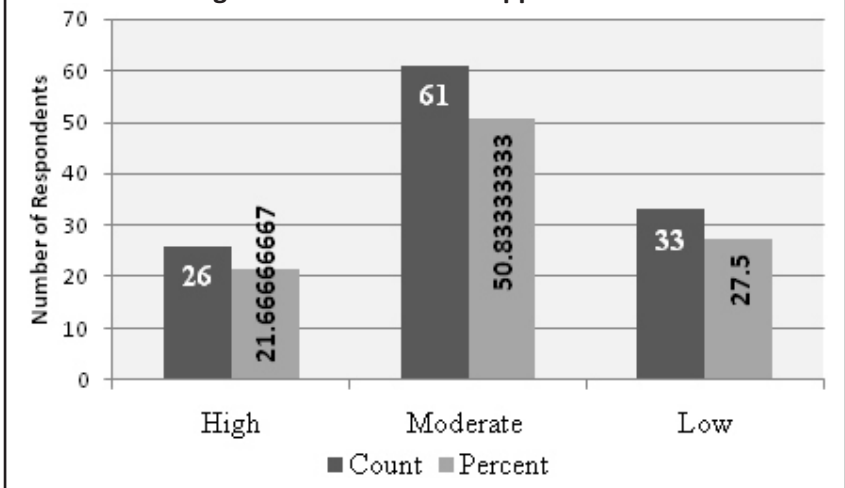



**Table 6. Correlations Between Investment Objective and Occupation**

| | | Investment Objective | Occupation |
|---|---|---|---|
| Investment Objective | Pearson Correlation | 1 | -.207* |
| | Sig. (2-tailed) | | .023 |
| Occupation | Pearson Correlation | -.207* | 1 |
| | Sig. (2-tailed) | .023 | |

*. Correlation is significant at the 0.05 level (2-tailed).

**Table 7. Correlations Between Risk Appetite Score and Independent Variables**

| | Risk Appetite Score | Age | Marital status | Number of Children | Family Type | Occupation | Annual Income | Education |
|---|---|---|---|---|---|---|---|---|
| Risk Appetite Score | 1 | | - | - | - | - | - | - |
| Age | **-.354**** | 1 | - | - | - | - | - | - |
| Marital status | .071 | -.123 | 1 | - | - | - | - | - |
| Number of Children | -.007 | .090 | **-.272**** | 1 | - | - | - | - |
| Family Type | .033 | -.107 | **.384**** | .076 | 1 | - | - | - |
| Occupation | -.093 | **.271**** | **.206*** | **-.183*** | .076 | 1 | - | - |
| Annual Income | .097 | .021 | **-.263**** | -.048 | -.029 | .059 | 1 | - |
| Education | .058 | **.225*** | **-.184*** | **.296**** | -.003 | **.386**** | **.188*** | 1 |

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

**Table 8. Model Summary**

| Model | *R* | *R* Square | Adjusted *R* Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .402[a] | .161 | .109 | 8.427 |

[a].Predictors: (Constant), Education, Family Type, Annual Income, Age, Number of Children, Marital Status, Occupation

occupation and regular income played for safe money and wealth preservation. This shows that the risk taking behavior of women is not decided by their occupation.

To test our third hypothesis (H03), the correlations between risk appetite score and all the potential independent variables are reported in the Table 7. The Table shows the moderate positive correlation between age and occupation, marital status and family type, occupation, number of children and education, occupation and education. A weaker positive correlation is reported between annual income and education. The strongest negative correlation can be observed between risk tolerance score and age. Similarly, negative correlation is reported between marital status and number of children, annual income and education, number of children and occupation. Therefore, the third hypothesis (H03) is not rejected. A crucial finding of this study is that as age increases, the risk tolerance decreases as can be seen from the negative correlation between age and risk appetite score (-.354). The Table 7 provides that multicollinearity is unlikely to affect the estimation of the coefficients in the regression equation.

➲ **Regression Model :** In order to test the determinants of risk tolerance, a number of different demographic factors may be considered. It is possible to quantify the effect of each of these demographic characteristics on the risk tolerance of an individual using statistical analysis. The regression model applied to test the determinants of risk tolerance of the respondents is as follows:

$$R\gamma = \alpha_0 + \alpha_1(Age) + \alpha_2(MS) + \alpha_3(NC) + \alpha_4(FT) + \alpha_5(OCPN) + \alpha 6(ANIC) + \alpha 7(EDU) + \varepsilon \quad \ldots(1)$$

where,
$R\gamma$ = risk appetite level,
MS = marital status,
NC = number of children,
FT = family type,
OCPN = occupation,
ANIC = annual income,
EDU= education.

The value of $R^2$ equals 0.161, indicating that 16% of the variations in the risk tolerance are explained by the

**Table 9: ANOVA[b]**

| | Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 1528.741 | 7 | 218.392 | 3.075 | .005[a] |
| | Residual | 7953.625 | 112 | 71.015 | | |
| | **Total** | **9482.367** | **119** | | | |

[a]Predictors: (Constant), Education, Family Type, Annual Income, Age, Number of Children, Marital Status, Occupation

[b.] Dependent Variable: Risk Appetite Score

**Table 10. Coefficients[a]**

| Model | Unstandardized Coefficients | | Standardized Coefficients | *t* | Sig. |
|---|---|---|---|---|---|
| | Beta | Std. Error | Beta | | |
| (Constant) | 90.227 | 5.799 | | 15.560 | .000 |
| Age | **-2.967*** | .724 | -.408 | -4.098 | **.000** |
| Marital Status | 1.471 | 1.783 | .088 | .825 | .411 |
| Number of Children | .331 | 1.313 | .024 | .252 | .801 |
| Family Type | **-1.013** | 2.034 | -.048 | -.498 | **.619** |
| Occupation | .414 | .670 | .066 | .618 | .538 |
| Annual Income | .864 | .885 | .093 | .977 | .331 |
| Education | 1.432 | .920 | .167 | 1.557 | .122 |

[a.] Dependent Variable: Risk Appetite Score

*significant at 5% level

independent variables shown in the model summary (Table 8). The value of $R^2$ is significant as indicated by the *p* value (0.005) of *F* statistics as given in the ANOVA Table (Table 9).

Of all the demographic characteristics tested in equation (1), the age factor is found to be significant at the 5% level of significance for the sample group. The constant term in this model, 90.227 represents a baseline risk tolerance score which will be up or down according to the characteristics of the individual respondent. The coefficients for the independent variables indicate the direction and magnitude of the effect on risk tolerance. Age is negatively related, showing a decrease of 2.967 points. Education and marital status are positively related, family type also shows negative relation. However, all these variables in the test are found to be insignificant at the 5% level (Table 10). The results also support the view held by many in the investment industry - that investors become more risk averse with increase in age.

## Policy Implications

In spite of the limitations of the study in terms of its small sample size, the results have several important practical implications. First, fund managers would find it easy in designing products and approaches that suit a particular market segment focusing on women investors. Second, pro-women activists, the government, sociologists, and psychologists might use the results to clarify the reasons for women's risk tolerance behavior with particular reference to their age, educational level, as well as family type. Third, the investors might benefit from these insights when they select investment managers, because the risk attitudes of those managers might be a contributing factor in determining their advices and the way they manage female clients' portfolios. Fourth, investors who are inclined to invest in India under the existing or dynamic policies of the government that aims at attracting more foreign investment, especially direct investment, will find the results to be useful in understanding the people they deal with and how they take decisions. Finally, in the era of women's empowerment, for inclusive

financial and growth strategy, the results provide necessary insights to the government for policy decisions. One of the important implications of the results is that the investment industry should not always consider women as risk averse only by comparing women's attitudes with the risk attitude of men. Rather, it should analyze women as a separate segment and formulate portfolio ideas. Women's groups should be treated on the basis of occupation, age and education, and the marketers should design investment programs to respond to the particular needs of women.

## Suggestions and Conclusion

Attitude towards risk, investment choice, and decisions are very important determinants of financial well being of an individual. Investor risk tolerance level of women investors interpreted in various studies is questioned in the present paper. Most of the studies compared women investors with their male counterparts and conclusions were drawn, showing the results that women are less risk tolerant than men. In the present circumstances, where women are rising in every field, are more competent in education, employment, socially as well as politically, it was thought to be prudent to diagnose the determinants of risk tolerance and ascertain the women's appetite for risk (in investments).

The present study has revealed that women were willing to take risks. More than two-thirds of the respondents' risk tolerance score was above average. Their investment objective and investment choices reflect that they were inclined to invest in a risky portfolio, as their goal was to increase the value of their invested funds and earn income as well. In the present study, the risk tolerance score of the respondents was calculated on the basis of their answers to the risk tolerance questionnaire. We calculated the correlation between risk appetite score and various independent variables. The results allowed us to proceed to a regression model that explains the determinants of risk behavior. The results show that among the various independent variables, age of the respondents was found to be an important determinant of risk attitude. As such, the policy implications of the study along with the findings of the study have been highlighted. Finally, the results of the present research paper show that female investors' risk attitude is directional to the investment industry to clearly design a specific package of investment portfolio, considering the demographic dividend that India will have in the future.

## Limitations of the Study and Scope for Further Research

The small sample size and few independent variables considered for the study are an inherent limitation of the study. However, risk perception and tolerance depend on various other factors as well. The results are based on the responses of the respondents, which might be biased, thereby affecting the results of the study. Therefore, future research studies can consider a larger sample size and more advanced statistical tools for carrying out the analysis. Again, a cross sectional comparative study of the same topic can also be made by considering relevant independent variables. Furthermore, by adopting a more suitable model, risk perception of women investors can be studied. An in-depth study of risk perception of women investors on a specific investment choice like mutual fund, equity, derivatives, and so forth can also be made.

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