International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Financial Risk Tolerance across Demographic Segments: A Study on Women in Kolkata

Mr. Debashis Nath[1], Dr. Pijus Kanti Bhuin[2]

[1]Research Scholar, Department of Management, Swami Vivekananda University, Barasat- Barrackpore Road, Bara Kanthalia, West Bengal- 700121
[2]Secretary, Vyasadeva Educational and Charitable Trust, Gunnath, Indpur, Bankura, West Bengal-72121

Abstract:
The focus of the study is to evaluate the financial risk-bearing capacity of women living in Kolkata city with respect to different demographic variables, namely, age, earnings, marital status, working status and educational qualifications. A random sampling survey was conducted among 104 women aged between 19 to 55 using the Grable and Lytton Financial Risk Tolerance Scale. Outcomes of t-test and ANOVA show that age, earnings, and marital status of women have no significant impact on financial risk tolerance, but work position and educational qualifications do have. Working women are more conservative than non-working women in connection to financial risk tolerance. Women who have vocational or technical education are more likely to take financial risks than university-system-educated women. The study brings insight into the financial risk tolerance capacity of women living in Kolkata in determining their financial investment decisions.

Keywords: Financial Risk Management, Financial Risk Tolerance, Financial Risk and Investment - Decision, Risk Management.

1. Introduction

Any financial investment decision is backed by risk tolerance capability. A wide range of investment options is available in the financial market and India is not behind it. The advent of digital communication technology and financial market liberalization in India has opened the global financial market for individual investors. Investors are not confined to traditional modes of investment in banks or post offices in the form of term deposits or provident funds. To name a few, modern financial instruments like unit-linked insurance policies, a wide range of mutual funds, stocks, debentures, preference shares, commodities, forex, futures and options, virtual currencies etc. are gradually becoming popular. Growing financial literacy and a competitive financial market bring new avenues for investors to park their surplus money.

However, apart from the formal and regularised financial market, several illicit Ponzi scheme operators are constantly enticing investors to invest their money with abnormal return policies. The state of West Bengal and its capital city Kolkata have experienced many Ponzi scams in earlier decades. Between 2010 and 2013, a massive Ponzi scheme wreaked havoc affecting an estimated two crore depositors (Sarkar, 2023). Investors are shaky now.

Therefore, the presence of a regularised financial market with different risk-return avenues is not enough to cater to the huge Indian investors. There needs to a strong governance over the financial market so that

investors do not lose their hard-earned money. Assuming that the financial market is regulated, and market information is perfectly competitive, it is important to note that the financial risk tolerance capability of the individual propels investment decisions. Demographic, political and socio-economic environment has a strong impact on individual financial risk tolerance ability.

Let us see how the investors differ in their financial risk tolerance abilities. Investors can be classified into three groups – conservative, moderate and aggressive. Conservative investors are almost risk-free and not linked with the market. They always stay away from risky operations. They invest their money in such government schemes like FDs, PPF, government bonds, and other government projects which are almost the safest. Aggressive investors are well knowledgeable about market sentiments and take more risks. This type of investor keeps an eye on large upliftment and downtime of portfolio daily basis. Usually, they hold large portfolios. Moderate investors are no doubt knowledgeable, but they take less risk compared to aggressive investors. Moderate investor wants to balance their risk between risky and safe asset classes.

Women have a major role in the financial investment decision process of a family whoever is the earner. We aim at investigating how demographic variables play a role in the financial risk tolerance abilities of the women residing in cities. Recent literature on financial risk tolerance depicting the demographic factors as determinants of it are surveyed to understand the nature of influence. However, socio-political-economic conditions as determinants of financial risk tolerance are not considered for the present study and are assumed as control variables.

2. Literature Review

A brief review of recent literature focused on demographic variables as determinants of financial risk tolerance is presented below.

Sivasankaran and Selvakrishnan (2023) analysed the influence of spouses and family members in addition to the crucial role of financial advisers in risk tolerance and investment decisions of working women in the IT sector. Primary data were collected from 442 respondents from respected fields. The study indicated that the role of financial advisers in risk tolerance and investment decisions of women is essential for reliable and safe investments.

Ajabnoor and Faisal (2023) studied on assessment of risk tolerance and investment patterns of working women in a city. A descriptive research design has been applied using frequency distribution, central tendency, and standard deviation. Primary data were collected from 608 women respondents from related fields using a 5-point Likert scale. The result shows that the risk appetite of women depends on age, income, education, financial literacy, and investment goals of individual women. Young women investors take more risks and are willing to invest in securities.

Yuvaraj and Venugopal (2023) are accustomed to determining the factors influencing investment intention and actual investment behaviour in mutual funds. The primary data was collected from 582 retail investors using a convenient sampling method from Coimbatore. Statistical tools like the TPB model, Cronbach's alpha, partial least squares structural equation modeling (PLS-SEM) and TPB model were used. The author indicated that most investors are educated and have sound financial backgrounds and most of men investors are risk-takers.

Faudhillah, Zahwa and Soekarno (2023) studied the influence of financial literacy, risk tolerance, and demographic factors on investment decisions among Generation Z and millennials. The primary data was collected from 100 respondents from greater Jakarta and greater Bandung. Authors found that most of the

investors are youngster-educated men who take more risks than women. They also noticed that most of the investors are private employees, and tutors, and have solid financial backgrounds.

Heena Thanki et. al (2022) examined the determinants of financial risk tolerance varied by gender or whether the same factors influenced the risk-taking capacities of both genders. The primary data was collected from 671 investors using a convenient sampling method from Gujarat. Statistical tools like Cronbach's alpha, ANOVA, multiple regression analysis, and FRT scale were used. The study shows that unmarried youngster entrepreneur men are more efficient in taking more financial risk rather than women.

Burgazoglu, Selcuk and Ulev (2022) evaluated the determinants of overall risk-taking and financial risk tolerance. The primary data was collected from 15041 respondents from Turkey. Statistical tools like measurement of central tendency, linear model analysis and correlation coefficient, were used. The result indicates married people are more risk takers as compared to single people. Education background plays a significant role in investment.

Prashant Kumar, and Sanjeet Kumar, (2021) examined the determinants of the risk appetite of women investors. The primary data was collected from 377 women respondents. Statistical techniques like measurement of central tendency, ANOVA, Pearson correlation, multicollinearity test, Durbin Watson test, and regression analysis were used for analyzing the data. The study indicated that most of the women invest money in risky avenues that are younger in age only after verification of the company return statement. Also notice that most of the women invest as per the suggestion of family or friends. Some women invest money to get tax benefits.

Sanjeev Kumar, and Prashant Kumar (2020) endeavoured to examine the association between risk appetite and demographical factors of women considering 400 women respondents. Statistical techniques like frequency, percentage, bar-diagram, chi-square tests were used for analyzing the data. The findings revealed that financial risk tolerance depends on the age, investment experience, income, and educational qualification of women. Additionally, the risk appetite of middle-aged women is higher as compared to younger age women.

Nosita et. al (2020) examined the role of demographic factors on the willingness to take risks. The primary data was collected from 850 respondents from Indonesia using the cluster sampling method. Statistical techniques like percentage analysis and regression analysis were used for analyzing the data. The authors suggested that men and women have no differences in risk tolerance.

Bayar, Sezgin and Sasmaz (2020) examined the major determinants of risk tolerance. The study is based on primary data. The primary data was collected from 1380 respondents using a random sampling method. Statistical techniques like the multinomial logistic regression approach, and Cronbach's alpha, have been used. The study concluded that financial risk tolerance capacity depends on some factors these are age, sex, and education. This study also reveals that most of the educated unmarried youngster men take more risk as compared to women. Also, risk tolerance helps individuals to accumulate money for the future.

Lawrenson & Dickason-Koekemoer (2020) attempted to build a model for female South African investors' financial risk tolerance. The primary data was collected from 1065 women respondents from respected fields using purposive sampling method. Statistical techniques like t-tests, Cronbach's alpha, measurement of central tendency, structural equation modelling (SEM), and Grable and Lytton risk tolerance and SCF scale were used. The study indicated that male investors are more risk-tolerant than their female counterparts.

Sharma and Kota (2019) examined the behaviour of working women while making investment decisions. The primary data was collected from 84 women investors using a purposive sampling method

from the Delhi-NCR region. The study concluded that most of the women investors are young, educated, and have high-income backgrounds, jointly invested, prefer online advice from consultants, prefer secure investment avenues, and want to get tax benefits.

Fisher and Yao (2017) explored gender differences in financial risk tolerance using a large, nationally representative data set, the survey of consumer finances. Statistical tools like logistic regression and, SCF scale were used. The primary data was collected from 1449 women and 797 men using a random sampling method. The study concluded that a much smaller proportion of women than men reported both some risk tolerance and high-risk tolerance.

Bannier and Neubert (2016) discussed gender differences in financial risk-taking surveying 2047 responders from Germany. Statistical tools like measures of central tendency, linear probability regression model, chi-square test and 7-point scale were used. The study did not find any relation between risk tolerance and women's sophisticated investments.

Kansal and Zaidi (2015) consolidated evidence on investment behaviour of women in India. The primary data was collected from 152 women investors using a convenient sampling method. Statistical tools like the chi-square test and bar diagram were used. The study reveals that most women prefer to invest in different types of assets for a certain time. A very little percentage of women have enough investment experience and want to invest government by back schemes to reduce the risk and maximize the profit.

The above review of literature on financial risk tolerance entails that demographic factors have a significant role in determining financial risk tolerance capabilities. We could not identify any evidence of literature on financial risk tolerance in eastern India or Kolkata where women are making investment decisions to park their savings being driven by their financial risk tolerance capability. The current research will fill the gap and bring new insight into the financial risk tolerance for this region.

3. Methodology

This is an exploratory study. A small sample is considered to evaluate the pattern and magnitude of financial risk tolerance among women living in a metropolitan city in eastern India.

Sampling: A sample of 110 working and non-working women are surveyed using the Grable & Lytton 13-item Risk Tolerance Scale in the city of Kolkata during November-December 2023. A random sampling method was adopted for the study where each respondent was supplied the online Google form describing the response submission technique in detail. A total of 180 women were approached for the survey where contact details are assimilated from the network of friends and relatives. From the survey response of 110 respondents, 6 responses were discarded during scrutinization and the sample size rests at 104. The study covers a wide cohort of demographic characteristics (See Table 1).

Reliability and Validity of the Scale: The Grable & Lytton Risk Tolerance Scale is a 13-item scale developed for measuring financial risk tolerance. Items and scoring guidelines are given in Appendix -A. The reliability of the scale is measured using Cronback's alpha (α =0.69, N=104). The criterion validity of the scale is established by Kuzniaket et. al (2015) and Grable & Lytton (1999). No separate validity test is conducted for this widely accepted scale.

Measurement: Financial Risk Tolerance (FRT) is measured by the summated score of the Risk Tolerance Score of Grable & Lytton 13-item Risk Tolerance Scale. The minimum score on the scale is 13 and the maximum is 47. The respondents are classified into three categories based on the FRT score - Conservative (score between 13 and 24), Moderate (score between 25 and 36) and Aggressive (score between 36 and 47). For demographic variables, we have considered Marital Status, Age, Annual Earnings, Work Status

and Educational Qualifications. Marital Status is classified into two groups – Married and Single. Bachelor, Widowed, Divorced, separated, etc. categories are clubbed into Single groups. We have considered four age groups ranging from 19 to 55. Annual Earnings are defined as the annual disposable income of the individual earned by employment or transferred from the near and dear ones. Women are classified as Working and Non-working groups in terms of work status. For Educational Qualifications we have considered five groups- (i) Secondary or below, (ii) Higher Secondary, (iii) Graduation, (iv) post-graduation and (v) Others which encompasses any qualification related to vocational or technical skills.

Statistical Tools: Mean, Standard Error of Mean, Percentage Distribution and Standard deviation are used for Descriptive statistics. Since the focus of the study is to compare mean FRT scores across different demographic groups, we have applied an Independent Samples t-test for two groups of demographic variables, namely, Marital Status and work status, whereas ANOVA is applied for multiple groups of demographic variables like Age, Annual earnings, and Educational Qualifications. The Levene test is applied to determine the Homogeneity of variance of the sample groups. We have considered Tukey's HSD post hoc test for inter-group comparison where the group difference of the variable is found significant at a 5% level of significance. All the calculations are done with the help of IBM SPSS Version 25.

Hypothesis: The research design entails the following five hypotheses to be tested:

1. $H1_0$: There is no difference in financial risk tolerance between Bachelor and Single marital status group.
   $H1_a$: $H1_0$ is not true.
2. $H2_0$: There is no difference in financial risk tolerance among the different age-groups.
   $H2_a$: $H2_0$ is not true.
3. $H3_0$: There is no difference in financial risk tolerance among the different earnings groups.
   $H3_a$: $H3_0$ is not true.
4. $H4_0$: There is no difference in financial risk tolerance between working and not-working women groups.
   $H4_a$: $H4_0$ is not true.
5. $H5_0$: There is no difference in financial risk tolerance among the different educational qualifications groups.
   $H5_a$: $H5_0$ is not true.

Limitation: The sample size is limited to 104 to explore the nature of financial risk tolerance of women of Kolkata city. The study does not consider the financial risk-taking ability of women above age 55. Women residing outside the metropolitan area and their livelihood patterns are not considered in the study.

4. Results and Discussions

Table 1 represents the number of observation (N), mean, standard error of mean (SE Mean) and Standard deviation (SD) of the Financial Risk Tolerance for each category of all the concerned demographic variables.

Single women are relatively more conservative than married women (mean 29.32 < Mean 29.87) but deviate higher (SD 6.152 > SD 4.485) within the group. The low standard error of the mean for married women reflects that the estimated upper and lower bounds of the population mean for married women are relatively lower than the single women population mean. The reason for this result may be that single

women rely mostly on their own in financial management but married women have family support during their crisis and are more likely to take higher risks.

Likewise, we note that the age group 19-26 lakhs per annum is the most conservative (mean = 27.43) group in terms of risk tolerance and the age group 46-55 takes maximum risk (mean =31.17). The reason is that in the early life of women, they are financially unstable and highly cautious to take any financial risk but at the later stage (age group 46-55) they are financially stable and more prone to higher financial risks. This is interesting to note that SDs for the first two groups (Age 19-25, SD =5.74 and Age 26-35, SD = 5.448) are relatively higher than the other two age groups. The volatility in risk tolerance is higher for these two groups. Lower age encourages women to take the venture of higher risk-return game. The low mean and SE of the mean for the age groups 26-35 and 36-45 reflect that women belonging to these population groups are more stable in thoughts and take a conservative approach toward financial risks.

Similarly, the earning group 2-4 lakhs per annum is the most conservative (mean = 27.04) group in terms of risk tolerance and the most aggressive group (mean = 31.4) belongs to higher income strata (above 6 lakhs). Women of average income (2-4 lakhs and 4-6 lakhs) take less risk in managing their funds whereas the higher income group is more desperate to take risk. Women earning within 2 lakhs per annum also like to take financial risks to grow their funds and earn more money. However, women in income groups 2-4 lakhs and below 1 lakh are deviating more (SD =6.278 and SD = 5.078 respectively) within the group in tolerance of financial risks than the other three groups. Earning group 2-4 lakhs per annum brings an interesting insight. They are conservative with strong deviation in choice of their financial risks. SE of mean for all five groups represent that the estimated upper and lower value of the population mean lie nearer to the sample mean for two lower earning groups (SE of Mean for Below 1 Lakh = 0.757 and SE of Mean for 1 – 2 Lakhs = 0.907) in comparison to the other three groups where SE of Mean is relatively high.

Table 1

Descriptive Statistics for Financial Risk Tolerance w. r. t. Demographic Variables

Demographic Variables			**FRT Score**		
	N	**Percentage**	**Mean**	**SE Mean**	**SD**
Marital Status					
Single	*22*	*21.2%*	*29.32*	*1.312*	*6.152*
Married	*82*	*78.8%*	*29.87*	*0.495*	*4.485*
Age (Years)					
19-26	*7*	*6.7%*	*27.43*	*2.170*	*5.740*
26-35	*47*	*45.2%*	*29.60*	*.795*	*5.448*
36-45	*38*	*36.5%*	*29.92*	*.657*	*4.050*
46-55	*12*	*11.5%*	*31.17*	*1.218*	*4.218*
Annual Earnings (Rs.)					
Below 1 Lakh	*45*	*44.2%*	*29.89*	*0.757*	*5.078*
1-2 Lakh	*22*	*23.1%*	*30.77*	*0.907*	*4.253*
2-4 Lakh	*16*	*16.3%*	*27.88*	*1.136*	*4.544*
4-6 Lakh	*8*	*7.7%*	*28.38*	*2.220*	*6.278*
Above 6 Lakh	*5*	*8.7%*	*31.40*	*1.778*	*3.975*
Work Status					

Working	*57*	*54.8%*	*28.39*	*.639*	*4.825*
Not Working	*47*	*45.2%*	*31.40*	*.642*	*4.402*
Educational Qualifications					
Secondary or below	*33*	*34.4%*	*30.21*	*0.805*	*4.622*
Higher Secondary	*16*	*16.7%*	*28.81*	*0.950*	*3.799*
Graduation	*24*	*25.0%*	*27.04*	*0.949*	*4.648*
Post-Graduation	*18*	*18.8%*	*32.11*	*1.257*	*5.335*
Others	*5*	*5.2%*	*33.40*	*1.166*	*2.608*

Source: *Authors' calculations*

Women who are not working appeared as more risk takers (mean = 31.4) than their counterparts (mean = 28.39) though standard deviations are alike. Non-working women are ready to take more risks since their earnings are transferred from others and like to generate more wealth through higher financial risks. On the other hand, working women are more cautious about taking higher financial risks. The result also proves that income is not a determinant of financial risk-bearing ability. The low standard error of mean value for both the groups reflects that the estimated upper and lower bounds of population means are close to the sample means.

The pattern of financial risk for different educational groups is fascinating. Women with low and very high educational qualifications exhibit higher risk tolerance abilities than graduates and higher secondary groups. Women who are vocationally or technically qualified, termed as the 'Other' group, show the highest financial risk tolerance (mean = 33.4). Postgraduate women deviate most in their opinion on financial risk tolerance (SD =5.335) whereas the 'Other' group takes a most similar view on their risk tolerance (SD =2.608). It appears that education has a strong influence over the risk tolerance capabilities of the city women. Women with higher education can think critically about risk-return consequences and can take higher risks. On the contrary, women with a school education take higher risks for higher financial gain rather than evaluating risk-return consequences.

Let us examine our hypothesis. Hypotheses I and IV are tested by Student's independent samples test and Hypotheses II, III and V are tested by one-way ANOVA (See table 2). Levene test of homogeneity of variance across the study groups shows that except for marital status (Levene Statistic 6.711, p=0.011<0.05) all the demographic variable groups are homogeneous in nature (p> 0.05) at a 5% level of significance. For Marital Status groups, the t-statistic value and corresponding probability are taken from the SPPS-generated tables where homogeneity of variance between the groups is not assumed.

Table 2
T-test and ANOVA Outcomes

	Test of Homogeneity of		**t-test/ANOVA**		
	Levene's Statistic	Sig.	t/F Statistic	Sig.	Result
Marital Status	*6.711*	*0.01*	*-0.391**	*0.699*	Not
Age Groups	*2.543*	*0.06*	*0.902*	*0.443*	Not

Annual Earnings	*1.484*	*0.21*	*1.198*	*0.317*	Not
Work Status	*0.633*	*0.42*	*-3.302**	*0.001*	Significant
Edu.	*1.404*	*0.23*	*4.340*	*0.003*	Significant
Qualification					

**Independent Samples t-test is conducted.*
Dependent Variable: FRT Score

Table 2 depicts that Marital Status has no significant influence over risk tolerance (t = 0.391, $p = 0.699 > 0.05$) at a 5% level of significance, but Work Status has ($p = 0.001 < 0.05$). Therefore, we fail to reject $H1_0$ and there is no significant difference in financial risk tolerance between bachelor and single women groups. On the other hand, we reject $H3_0$ and conclude that there exists a significant difference in financial risk tolerance between working and non-working women groups at a 5% level of significance.

ANOVA results reflect that earnings play no significant role in financial risk tolerance ($p = 0.443 > 0.05$) at a 5% level of significance. Therefore, we fail to reject $H3_0$ and there is no significant difference in financial risk tolerance across the different earning groups.

Our last hypothesis test results show that educational qualifications play a significant role in financial risk tolerance ($p = 0.003 < 0.05$) at a 5% level of significance. We reject $H5_0$ and conclude that there exists a significant difference in financial risk tolerance across the different educational groups at a 5% level of significance.

Let us examine the source of group differences across different educational groups. Post-hoc tests using Tukey's HSD results (Table 3) show that there is a significant difference in FRT scores between Graduate and Post-Graduate women and Graduate and Other Categories of women.

Table 3
Tukey's HSD Post Hoc Test for Educational Qualifications

Multiple Comparisons		**Mean Difference**	**Std. Error**	**Sig.**
(I) Edu. Qualifications	**(J) Edu. Qualifications**	**(I-J)**		
Secondary or below	Higher Secondary	*1.400*	*1.395*	*.853*
Secondary or below	Graduation	*3.170*	*1.228*	*.082*
Secondary or below	Post-Graduation	*-1.899*	*1.342*	*.619*
Secondary or below	Others	*-3.188*	*2.197*	*.597*
Higher Secondary	Graduation	*1.771*	*1.478*	*.752*
Higher Secondary	Post-Graduation	*-3.299*	*1.573*	*.230*
Higher Secondary	Others	*-4.587*	*2.346*	*.296*
Graduation	Post-Graduation	*-5.069**	*1.428*	*.005*
Graduation	Others	*-6.358**	*2.251*	*.045*
Post-Graduation	Others	*-1.289*	*2.315*	*.981*

Dependent Variable: FRT Scores; *The mean difference is significant at the 0.05 level.

This outcome of the post-hoc test can be explained as follows. Women who are vocationally or technically trained take more ventures in their financial investment to reap higher gains than the traditional investment instruments. On the other hand, graduates prefer the traditional way of investing in their financial assets and remain conservative.

5. Conclusion

The objective of the study is to examine the role of demographic variables in determining the financial risk tolerance of women residing in a metropolitan city. A survey using Grable & Lytton's (1999) scale of financial risk tolerance across women of Kolkata and the conduct of ANOVA and t-tests brings new insight into the literature.

A descriptive study reveals that single women are relatively more conservative than married women. This study is supported by Burgazoglu, Selcuk and Ulev (2022) who also found that married women are financially more risk-tolerant. Our findings on the impact of age on risk tolerance are a little surprising. We note that age-group 46-55 take maximum risk which contradicts other studies (Thanki et. al, 2022; P. Kumar & S. Kumar, 2021) which found that young investors are more risk takers.

ANOVA outcomes of the present study entail that age, earnings, and marital status of women have no significant impact on financial risk tolerance, but work position and educational qualifications do have. Working women are more conservative than non-working women in connection to financial risk tolerance. Educational qualifications play a significant role in financial risk tolerance. Women who have higher levels of education or vocational or technical education are more likely to take financial risks than less educated women. The outcome is also supported by many other studies (Yuvaraj and Venugopal, 2023; Ajabnoor and Faisal, 2023; Sharma and Kota, 2019) which found that education has a significant role in financial risk tolerance.

The present study can further be extended to a wider region of eastern India. More socioeconomic variables can be incorporated into the study model and examine their interaction effect on financial risk tolerance. Stakeholders of the financial market can utilize the present study outcomes while designing their financial products.

Reference

1. Bannier. Christina E, Neubert. Milena. Gender differences in financial risk taking: The role of financial literacy and risk tolerance. Economics Letters, Volume 145, Pages 130-135, https://doi.org/10.1016/j.econlet.2016.05.033
2. Bayar. Yilmaz, Funda Sezgin.H, Unsal Sasmaz. Mahmut. Financial literacy and financial risk tolerance of individual investors: Multinomial logistic regression approach. Sage Journals. https://doi.org/10.1177/2158244020945717
3. Brooks. Chris, Sangiorgi. Ivan, Hillenbrand. Carola, Money. Kevin. Experience wears he trousers: Exploring gender and attitude to financial risk. Journal of Economic Behaviour & Organization, Volume 163, Pages 483-515, https://doi.org/10.1016/j.jebo.2019.04.026
4. CATAK. Ciydem, YILMAZ ARSLAN. Sena. Behavioural investor types- Determinants of individual investors financial risk tolerance. Muhasebe ve Finansman Dergisi-Temmuz 2023, ISSN:2146-3042, DOI: 10.25095/mufad.1258343
5. Dr Ajabnoor. Nouran, Dr Faisal. Mohammad. Syed. Assessment of risk tolerance and investment pattern of working women -A pragmatic approach within metropolitan cities. International Journal of Research Publication and Reviews, Vol 4, no 4, pp 2478-2482, ISSN 2582-7421, DOI: https://doi.org/10.55248/gengpi.2023.4.4.35210
6. Fisher. Patti J, Yao. Rui. Gender differences in financial risk tolerance. Journal of Economic Psychology, DOI: 10.1016/j.joep.2017.03.006

7. Grable, J., & Lytton, R. H. (1999). Financial risk tolerance revisited: The development of a risk assessment instrument. Financial Services Review, 8, 163-181.
8. Heena Thanki, Sweety Shah, Vrajlal Sapovadia, Ankit D. Oza and Dumitru Doro Burduhos-Nergis. Role of gender in predicting determinant of financial risk tolerance. https://www.mdpi.com/ journal /sustainability. DOI: 10.3390/SU141710575
9. Hsiao. Betty, Bhalla. Sonal, Mattocks. Kristin, Fraenkel. Liana. Understanding the factors that influence risk tolerance among minority women: A Qualitative study. American College of Rheumatology, Arthritis Care & Research/Volume 70, Issue 11/p.1637-1645, https://doi.org/10.1002/acr.23542
10. Huseyin Burgazoglu, Mervan Selcuk, Salih Ulev. Determinants of overall risk-taking and financial risk tolerance: Experimental evidence from turkey. DOI: 10.58830/ozgur.pub1.c36
11. John E. Gilliam, Joseph W. Goetz, and Vickle L. Hampton. Spousal differences in financial risk tolerance. Financial Counselling and Planning, Volume 19, Issue 1
12. Kansal, Priya & Zaidi, Neha. (2015). Investment Behavior of Women in India. Proceedings of international conference on business innovation and IT organized by College of Applied Education & Health Sciences, November 28th 2015.
13. Kumar Prashant, Kumar Sanjeet. Determinants of risk Appetite of women investors: Evidence from the survey. *Journal of Commerce & Accounting Research*, 10(1),41-51, http://publishingindia.com/ijfm/
14. Kumar Sanjeet, Kumar Prashant. Financial Risk Tolerance Based on Demographic Factors of Women Investors: Indian Perspective. *International Journal of Financial Management*, 10(1) 18-34, http://publishingindia.com/ijfm/
15. Lawrenson. J, Dickason-Koekemoer. Z. A model for female south African investors' financial risk tolerance. *Cogent Economics & Finance*, Volume 8, Issue 1, https://doi.org/10.1080/23322039.2020.1794493
16. Nosita. Frida, Pirzada. Kashan, Lestari. Tina, Cahyono. Rosadiro. Impact of demographic factors on risk tolerance. *Journal of Security and Sustainability Issues*, Volume 9 Number 4, ISSN 2029-7017 print/ISSN 2029-7025 online. http://doi.org/10.9770/jssi.2020.9.4(18).
17. Sarkar, J. (2023, Dec 18). *A Decade After the West Bengal Chit Fund Scam, Victims Await Justice and Suffer in Silence*. Retrieved from The Wire: https://thewire.in/rights/decade-west-bengal-chit-fund-scam
18. Sellappan.R, Jamuna.S, Kavitha.TNR. Investment attitude of women towards different sources of securities- A factor analysis approach. *GLOBAL RESEARCH ANALYSIS*, Volume 2, Issue 2, ISSN No 2277-8160
19. Sharma, Manish and Kota, Hima Bindu, The Role of Working Women in Investment Decision Making in the Family in India, *Australasian Accounting, Business and Finance Journal*, 13(3), 2019, 91-110. doi:10.14453/aabfj.v13i3.6
20. Sivasankaran. Revathy, Selvakrishnan. Family demographics sway with a role of financial advisor in risk tolerance and investment decision of women working in its sector, Chennai. International Journal of Professional Business Review, Vol.8, No.1, https://doi.org/10.26668/businessreview/2023.v8i1.910
21. Zahwa, A. F. N., & Soekarno, S. (2023). The Influence of Financial Literacy, Risk Tolerance, and Demographic Factors on Investment Decision among Generation Z and Millennial in Greater Jakarta

and Greater Bandung. *International Journal of Current Science Research and Review*, *6*(06), 3517-27.