DETERMINANTS OF RISK APPETITE OF WOMEN INVESTORS: EVIDENCE FROM SURVEY

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Abstract   *The paper aimed to examine the determinants of risk appetite of women investors in Haryana. Indian women's risk-taking ability is very vital aspect to recognize their most favorable investment portfolio. A well-structured questionnaire was administered personally to 377 Indian women investors. Besides, identifying the risk-tolerance level is a very complex and difficult task because an individual's risk-taking capacity is multidimensional issue. So, it is very hard to measure it. In simple words, every individual varies in his readiness to take risk. In view of this, it is imperative to investigate the risk-tolerance attitude of women investors to understand their investment behavior. The results stated that risk appetite of women depends on the number of factors such as their perception towards investment, purpose of making investment, preferences for investment options, benefits of investing money and basis of investment selection. These factors play a significant role in determining the risk appetite of women investors. Further, this study corroborates the importance of financial literacy to make women more aware and technically sound with dimensions of investment. This will help in making ideal investment portfolio by accommodating the need of investors effectively.*

Keywords: *Investment Behavior, Determinants, Risk Appetite, Women Investors*

INTRODUCTION

Taking financial risks makes most people nervous. Certain types of people enjoy taking risks, while others prefer stability and are averse to any type of risk. Risk tolerance is an important component in investing which means the degree of variability in investment returns that an investor is willing to withstand. Risk appetite is the risk-taking capacity of investors which signifies how much risk an investor can afford to take and how much risk he can stand to take. However, the risk appetite of women investors mainly depends on their demographics and behavior as behavior determines the way to reach at a particular decision (Sanjeet & Prashant, 2020).

When it comes to taking risk for earning returns, different people have different attitudes. Some are risk lovers, some risk averse and some are neutral towards risk. Generally, investments giving lower returns come with lower risks as well. On the other hand, investments giving higher returns involve higher risks. A risk-averse person would prefer investing in fixed deposits, bonds, etc., as they involve lesser risk, whereas a risk lover would prefer investing his money in stocks as they have the potential to give higher returns than fixed deposits. Women with a low risk tolerance would most likely invest in conservative options where there is little to no fluctuations in the initial investment and earnings. Moreover, lack of knowledge and awareness, insecurity and high volatility in stock market are the concerned issues for women investors that prevent them from taking high risk.

Stock market returns and high votality in return have been interlinked with each other, and profound impact of raising stock return on investment has made the study of the risk appetite of prime importance for all the stackholders (Kumar et. al., 2020).

In this way, to investigate the risk appetite of women, analysis of women behavior is essential. To measure the investment behavior of women, it is indispensable to know why women want to invest, what they opt for, what kind of benefits they seek from investing their money, and what factors they consider while starting to invest. Moreover, how was their experience regarding investment, how and why they select a particular investment avenue, how much capable they are to take risk and how they behave while taking investment decision. Thus, answers of all these questions can be identified by analyzing their investment behavior.

The present study explores the determinants of investment behavior of women, which will answer the following research questions:

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- Do women have positive perception towards investment in stock market?
- For what purpose women are investing their money in stock market?
- What is the preference of women investors for investment decisions?
- Do women consider the benefits of investment while investing their money?
- Are women capable to take risk for investment in stock market?
- On what basis do women select their investment option?

LITERATURE REVIEW

Mittal and Vyas (2011) investigated the risk-taking capacity of women investors. The findings revealed that women are not more engaged in risk taking and are less confident. The authors suggested that awareness program should be introduced to increase the confidence level of women for high-risk investment avenues to generate higher returns.

Vasagadekar (2014) examined the risk-tolerance level of women investors and their preference in stock market. The results indicated that women were less aware about the stock market investments and they were unable to manage their portfolios. The risk bearing capacity of women was found low with low educational level about the stock market. The author concluded that low financial literacy and low risk-bearing capacity were due to lack of adequate financial knowledge.

Caglayan and Abdieva (2014) analyzed the risk tolerance of investors influencing the investment decisions. The findings showed that men are more risk taker than women in Kyrgyzstan. It was discovered that investors become less risk lover as their age increases and having salaried income increases the risk-taking capacity of investors. The study concluded that income of persons has significant impact on the risk-taking attitude.

Hon (2014) examined the dilemma of investment decision for small investors in the Hong Kong stock market. The data were collected from 1,199 respondents by using structured questionnaire. The study analyzed the key factors (determinants) and the dilemma of investment decision that affect Hong Kong small investors. The study concluded possible ways to measure the level of investment decision.

Kulkarni (2014) attempted to examine the significant difference between investment decision and demographics of investors (age, gender, income, education level, occupation, income and number of dependents). The study concluded that there is a significant difference between investment decisions and demographic variables. The present study would assist the investment managers in understanding the context of investment and help the investors in making positive change in their investment.

Chowdhary and Tiwari (2015) The results concluded the most preferred means of buying securities and explored the objectives of investors behind purchasing those securities.

Rahmawati et al. (2015) investigated the determinants of risk tolerance of investors of Pakistan. A survey was conducted on 140 investors in Pakistan. The findings indicated that educated investors are more willing to take risk as compared to uneducated investors. Moreover, less wealthy investors were less risk tolerant as compared to wealthy investors.

Ayuub et al. (2015) examined the risk-taking capability of investors with respect to demographic variables. Random sample of 110 respondents from Pakistan was taken for this study. The findings depicted that marital status, gender and occupations have significant impact on the risk-taking ability of a person but age of investors, educational qualifications and income level have no significant impact on financial risk tolerance.

Muralidhar and Berlik (2017) addressed the risk-tolerance level of investors while selecting investment avenues. The study concluded that young investors are more risk seeking than adults when it pertains to losses, whereas women investors are more conservative and risk averse. The results suggested that corrective measures should be taken to enhance the risk-taking ability of women investors.

Sharma et al. (2017) concluded that this study would be helpful to investment firms in understanding impact of risk tolerances and demographic variables jointly on level of investment of investors, which can be used for designing a strategy or investment product to offer to the investors with different levels of financial risk tolerance and different demographic profiles.

Syal (2018) studied the awareness and risk perception about financial services with special reference to the women investors of Punjab. The study highlighted that financial awareness among the women investors is very important as it has a significant impact on their preferences and choices. The awareness also influences the risk perception. Financial awareness is a huge substantial concern as it dissuades and deforms the investment behavior.

Baruah and Kumar (2018) described that risk tolerance is popularly used in the personal financial planning industry to understand an investor's attitude towards risk. However, financial decisions of an individual not only depend on financial risk-tolerance level, but also upon different factors.

Thus, this study is undertaken to develop a model that helps in understanding impact of risk tolerance and demographic factors jointly on investment decision, especially, a decision related to the level of investment. Also, investor may be having higher risk tolerance for the calculative investment but may be having lower risk tolerance in speculative investment.

Annamalah et al. (2019) investigated the risk-tolerance level of investors. A sample of 200 respondents from Malaysia was selected through structured questionnaire. The results indicated that financial status, risk-taking behavior and sources of information significantly influence the investment behavior of Malaysian investors.

Chaturvedi (2019) analyzed the perception of investors towards mutual funds as an investment avenue. The survey was conducted on 100 educated investors of Delhi or NCR and the findings concluded that the major factors that influence buying behavior of mutual funds investors are fund characteristics, creditability, convenience, success factors and fund family. The study recommended valuable suggestions for academicians, brokers, distributors and other potential investors.

Pandu (2019) identified the relationship between the predictors of investment activities and investor behaviour. A survey was conducted on 125 households in Tamil Nadu and Puducherry. The study concluded a significant relationship between the predictors and investment behavior. The author suggested that investments should be in diverse investment avenues to meet the different commitments.

OBJECTIVES OF THE STUDY

The objective of the study is to examine the determinants of risk appetite of women investors in Haryana.

The following hypotheses were formulated:

H1: The perception of women investors doesn't have a significant influence on the risk appetite of women.

H2: The objectives of investment don't have a significant influence on the risk appetite of women.

H3: Investment benefits don't have a significant influence on the risk appetite of women.

H4: Investment preference of women doesn't have a significant influence on the risk appetite of women.

H5: Basis of investment selection doesn't have a significant influence on the risk appetite of women.

RESEARCH METHODOLOGY

The survey was conducted on 400 women investors of Haryana, India, from March 2019 to December 2019. The data were collected from women investors from the four major cities of Haryana, India, i.e., Ambala, Panipat, Rohtak and Gurugram. Further, simple random and convenient sampling technique was used to select the list of regular women investors that have been obtained from the stock broking firms. Thereafter, well-structured questionnaire was administered personally to respondents. In first section, questionnaire contains six questions about demographics of women. Into the subsequent segment, 33 questions relating to six variables were formulated. Out of 400 questionnaires distributed, 377 complete and usable responses were used for analysis, which represents an effective response rate of around 86% of the total sample. In addition, secondary sources including online research publications, articles, books, working and discussion papers were also used.

Variables of the Study

The determinants of risk appetite of women have been assessed by using six variables. These are the following variables:

- Perception towards investment
- Objectives for investment
- Preferences for investment
- Investment benefits
- Risk appetite of women
- Basis of investment selection

The questionnaire includes 33 questions about six aspects of investment behavior of women—five questions about the perception of women towards investment, five questions about the objectives for they invest, seven questions corresponds to preferences for investment selection, six questions about investment benefits that can be gained by investing money, five questions corresponds to risk-taking capacity of women, and five questions on basis of investment selection.

Reliability of the Variables

To assess the reliability of the variables, Cronbach's alpha was applied. A value greater than or equal to 0.7 is regarded satisfactory and acceptable indicating the strong construct of reliability. The overall Alpha value was observed at 0.811 for all six variables of the study to measure the consistency.

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Table 1: Reliability Analysis

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Variables	Cronbach's Alpha
Perception Towards Investment	.750
Objectives for investment	.779
Preferences for investment decisions	.743
Investment benefits	.730
Risk appetite of women	.742
Basis of investment selection	.713
Overall Cronbach's Alpha	.811

As shown in Table 1, all six variables of the study complied with the acceptable level of reliability. All variables in the table are consistent and achieved the acceptable level, which indicates the sound construct of reliability.

DATA ANALYSIS

The present section depicts the personal information of the women respondents. Table 2 shows that about 17% of women respondents were of age less than 30 years, 32.4% of belonged to age group 30-40 years, whereas 42.7% of women were of age between 40 and 50 years and only 8% of women belong to age of above 50 years.

With regard to the marital status of the respondents, most of the women investors, i.e. 49.3% respondents in the sample were married, while 30.8% were single, 8.8% women were widow and 11.1% were divorced.

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Table 2: Demographic Characteristics of Respondents

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Particulars	Frequency	Percentage (%)
Age		
Less than 30	64	17
31-40	122	32.4
41-50	161	42.7
Above 50	30	8
Total	377	100
Marital status		
Married	186	49.3
Divorced	42	11.1
Single	116	30.8
Widow	33	8.8
Total	**377**	**100**
Educational Qualification		
Under graduate	43	11.4
Graduate	159	42.2
Post-Graduate	129	34.2
Others	46	12.2

Particulars	Frequency	Percentage (%)
Age		
Total	377	100
Occupation		
Salaried	133	35.3
Business	140	37.1
Professionals	80	21.2
Other	24	6.4
Total	**377**	**100**
Family Monthly Income		
Below Rs. 40,000	49	13
40,000-80,000	161	42.7
80,000-1,20,000	126	33.4
Above Rs. 1,20,000	41	10.9
Total	**377**	**100**
Personal Monthly Income		
Below Rs. 40,000	69	18.3
40,000-60,000	193	51.2
60,000-80,000	66	17.5
Above Rs. 80,000	49	13
Total	**377**	**100**

Source: Primary Survey

Table 2 also shows the education level of the sampled respondents. It brings out that 42.2% women were graduates, followed by 34.2% postgraduates. Few of them were under graduate (11.4%), followed by 12.2% had other qualification. With regard to occupation of respondents, majority of women belong to business category (37.1%) followed by service category (35.3%). 21.2% women were professionals and only 6.4% women were engaged in other occupations.

As far as family monthly income is concerned, 13% women belonged to family monthly income category of less than Rs. 40,000, whereas 42.7% women belonged to family monthly income category of Rs. 40,000-80,000 and 33.4% of women having family monthly income Rs. 80,000- 1,20,000. Only 10.9% women respondents belonged to family monthly income category of above Rs. 1,20,000. The personal income categorization shows that 18.3% women respondents were having monthly income less than Rs. 40,000 whereas 51.2% belonged to income category of Rs. 40,000-60,000, and only 17.5% women were having monthly income Rs. 60,000-80,000 and around 13% of women respondents belonged to the income category of above Rs. 80,000.

In order to achieve the objectives of the study, the analysis of the six variables of the study has been presented below:

Perception Level of Women Towards Investment in Stock Market

The questionnaire contains five questions about the perception level of women towards investment in stock market which indicates the viewpoint and approach of women for investing money in stock market.

Table 3: Perception of Women Towards Investment

Sr. No.	Statements	Frequency	Percent	Mean	S.D.
1.	Price fluctuation in Stock Market.	322	85%	3.89	1.03
2.	Regulated stock market	303	80.3%	3.75	1.01
3.	Prominent brokers' services.	341	90.2%	4.29	.662
4.	The DEMAT system is convenient	332	88%	4.31	.777
5.	Adequate and reliable portfolio management services.	343	90.9%	4.35	.775
	Average			4.11	

Source: Survey

Table 3 shows the descriptive statistics for each statement of 'perception of women towards investment' that supports investment behavior of women. The frequency, percentage, mean value and standard deviation of each statement were calculated. It can be observed that most of the women respondents agreed with the statement "adequate and reliable portfolio management services (4.35)", "DEMAT system is convenient (4.31)" and "prominent broker's services (4.29)" as mean values of these statements found higher. Women respondents opined that adequate and reliable portfolio management services are available and broker's services are also prominent. In addition, women found DEMAT system more convenient. Most of the women respondents agreed with price fluctuations in market but they also opined that the stock market is regulated.

The average mean value (4.11) reveals the perception level of women towards investment found positive and ample, as they are aware about the content and functioning of stock market. This result is confirmed by the progressive efforts being taken by women to make investment in stock market.

Objectives of Investment

The questionnaire includes five statements about women's objectives for investing money in stock market, which indicates the motives of women for investing their money in stock market.

Table 4: Objectives of Investment

Sr. No.	Statements	Frequency	Percent	Mean	S.D.
1.	Children's education & marriage	358	94.9%	4.22	.862
2.	Contingencies.	321	85.1%	3.90	1.09
3.	Tax benefits.	326	86.4%	4.16	.940
4.	Capital appreciation	330	87.5%	4.29	1.20
5.	Enhancing Income.	316	83.8%	4.10	.951
	Average			4.13	

Source: Survey

Table 4 indicates the descriptive statistics for each statement of 'women's objectives for investment' that determines the investment behavior of women. The frequency, percentage, mean value and standard deviation of each statement were computed. It can be seen that majority of the women respondents believed that they mostly invest their money for following motives "tax benefits (4.16)", "enhancing income (4.10)", "capital appreciation (4.29)" and "children's education and marriage (4.22)" as these statements recoded higher mean values. Women respondents are of view that they invest their money for enhancing income and capital appreciation. In addition, main purposes of women to invest money are getting tax benefits and children's education whereas most of the women agreed with contingencies and children's marriage as their motives to invest money.

The average mean value (4.13) depicts the acceptable response of women respondents, which reveals that women invest their money in stock market for a strong motive and purpose. Conclusively, it can be consummated that women have strong motives for investing their money in stock market as their motives for investment induce their investment preferences and decisions.

Preferences for Investment Decisions

The questionnaire comprises seven statements regarding preferences of women for taking investment decision, which specify their choice and options for investing their money in stock market.

Table 5: Preferences for Investment Decisions

Sr. No.	Statements	Frequency	Percent	Mean	S.D.
1.	Prefer stocks with high rates assigned by rating agencies	355	94.1%	4.36	1.06
2.	Equities as an investment option are favorable	310	82.2%	4.11	.721

Sr. No.	Statements	Frequency	Percent	Mean	S.D.
3.	Prefer IPOs than secondary market instruments.	252	66.8%	3.59	1.07
4.	Prefer Debentures than Equity shares	247	65.8%	3.32	.788
5.	Responsible for the outcome of investment decision	319	84.6%	3.88	1.00
6.	Full confidence to manage the dimension of investment	291	77.1%	3.89	.890
7.	Prefer investment in companies listed on stock exchange	351	93.1%	4.12	.852
	Average			3.89	

Source: Survey

Table 5 depicts the descriptive statistics for each statement of "preferences of women for investment" that drives the investment behavior of women. The frequency, percentage, mean value and standard deviation were calculated. Table 5 shows that majority of the women respondents agreed with the statement "prefer investment in companies listed on stock exchange (4.12)", "Prefer investment in companies listed on stock exchange (4.12)", "Equities as an investment option are favorable (4.11)", "Prefer Debentures than Equity shares (3.32)" and "Prefer stocks with high rates assigned by rating agencies (4.36)", as these statements recorded higher mean values.

In addition, women found equities as investment option are preferable whereas most of the women prefer stocks with high rates assigned by rating agencies. The average mean value (3.89) suggests the satisfactory response of women respondents, which specify women take investment decision wisely. It can be concluded that women's choice for investment expresses their sound decision making, as they prefer to invest in stock with high ratings. This result is supported by the fact that women prefer to invest their money in stocks of listed companies with good prospects.

Benefits of Investment

The questionnaire consists of six statements about benefits of investment, which reveal the advantages of making investment in stock market.

Table 6: Benefits of Investment

Sr. No.	Statements	Frequency	Percent	Mean	S.D.
1.	High earning rate	304	80.6%	4.00	.725
2.	Marketability	302	80.1%	3.84	1.16
3.	Consistent Income	312	82.7%	4.39	.953
4.	Capital appreciation	321	85.1%	3.97	1.14
5.	Easily convertible	356	94.1%	4.42	.514
6.	Liquidity	346	91.6%	4.29	.506
	Average			4.15	

Source: Survey

Table 6 illustrates the descriptive statistics for each statement of "benefits of investment" that drive the investment behavior of women. The frequency, percentage, mean value and standard deviation were computed. The results demonstrates that majority of the women respondents were of view that while investing their money in stock market they seek following benefits "easily convertible (4.42)", "liquidity (4.29)", "consistent income (4.39)" and "high earning rate (4.00)", as these statements accounted higher mean values. Women respondents opined that they consider consistent income and high earning rate while investing their money whereas most of the women count that their investment option are easily convertible and highly liquid.

In addition, some women consider capital appreciation and marketability as benefits of investment they seek while investing their money. The average mean value (4.15) signified the acceptable response of respondents and reveals that women do consider benefits of investments. It can be concluded that women invest their money in stock market for obtaining numerous benefits as financial and non-financial gains drive their investment behavior.

Risk Appetite of Women

The questionnaire covers five statements regarding women's risk appetite for making investment, which indicates the risk-taking capacity of women for investing their money in stock market. The belief of women respondents demonstrates their capacity to take risk and responses on fifth research question, which is: Are women capable to take risk for investment in stock market?

Table 7: Risk Appetite of Women

Sr. No.	Statements	Frequency	Percent	Mean	S.D.
1.	Investment in risky stocks for high return.	247	65.5%	3.74	1.13
2.	Investment in risk free stocks	341	90.2%	4.17	1.25

Sr. No.	Statements	Frequency	Percent	Mean	S.D.
3.	Invest in stocks with stable expected returns	356	94.4%	4.29	.777
4.	Investment in stocks having low risk	358	94.9%	4.32	.769
5.	Investors tend to reduce risk through portfolio diversifica-tion	294	77.9%	3.88	.829
	Average			4.08	

Source: Survey

Table 7 depicts the descriptive statistics for each statement of "risk appetite of women" that actuates the investment behavior of women. The frequency, percentage, mean value and standard deviation of each statement were calculated. Results shows that most of the women respondents agreed with following statements "investment in risk free stocks (4.17)", "invest in stocks with stable expected returns (4.29)", "investment in stocks having low risk (4.32)" and "investors tend to reduce risk through portfolio diversification (3.88)", as these statements secured higher mean values.

Women respondents are of view that they choose to invest their money in stocks with stable expected returns and in stocks having low risk whereas most of the women opt to invest money in risk-free stocks. In addition, some women prefer investment in risky stocks for earning higher return and they tend to reduce risk through portfolio diversification.

The average mean value (4.08) presents the satisfactory response of women respondents, which highlights that women avoid for taking risk with their money. Conclusively, it can be enunciated that women have low risk appetite while investing their money in stock market. This result is supported by the progressive attempts being taken by women to reduce risk in their investment portfolio.

Basis of Investment Selection by Women

The questionnaire contains five statements about basis of investment selection by women investors, which shows how they select a particular investment option in stock market. The responses of women respondents highlight positive answers on seventh research question, which is: On what basis women select their investment option?

Table 8: Basis of investment selection by women

Sr. No.	Statements	Frequency	Percent	Mean	S.D.
1.	Previous trend of shares	334	88.6%	4.29	.523
2.	Financial data of company	326	86.4%	4.39	.556
3.	Current market inclinations	318	84.3%	4.27	.543
4.	Recommendations of professional advisor	302	80.1%	3.90	.708
5.	Advices of friends/ family/relatives	315	83.5%	4.43	.583
	Average			4.25	

Source: Survey

Table 8 presents the descriptive statistics for each statement of "basis of investment selection by women" that serves as a guide to their investment behavior. The frequency, percentage, mean value and standard deviation of each statement were computed. The results reveal that majority of the women respondents agreed with following statements "previous trend of shares (4.29)", "financial data of company (4.39)", "current market inclinations (4.27)" and "advices of friends/family/relatives (4.43)", as these statements accounted higher mean values.

Women respondents are of view that they select their investment avenue on the basis of previous trend of shares and financial data of company whereas most of the women select their investment tool on the basis of advices given by their family, friends and relatives. In addition, women also check current market inclinations before making investment decision. Moreover, some women respondents make investment decision on the recommendations of financial advisor.

The average mean value (4.25) reflects the satisfactory response of women respondents, which reveals that women make investment decisions after exploring many factors such as advice of family/friends, recommendation of financial advisor, financial information of company, current market trends and price of share, etc. Conclusively, it can be stated that investment selection of women is supported by numerous factors as they choose their investment on the basis of company's information, market trends, financial advisor's suggestions and family/friend's advice.

Table 9: Descriptive Statistics of Variables

Variables	N	Range	Minimum	Maximum	Mean	S.D	Variance
Perception of women	377	4	1	5	4.11	1.37	1.39
Objectives for investment	377	3	2	5	4.13	1.07	2.58
Preferences for investment	377	4	1	5	3.89	1.12	3.91
Investment benefits	377	4	1	5	4.15	1.00	2.29
Risk appetite of women	377	3	2	5	4.08	1.45	3.03
Basis of investment selection	377	4	1	5	4.25	1.40	2.48

Table 9 shows the descriptive statistics (range, minimum, maximum, mean, standard deviation and variance) of six variables namely perception of women towards investment, objectives of investment, preferences for investment decision, investment benefits, risk appetite of women and basis of investment selection.

THEORETICAL RESEARCH MODEL

In order to investigate the relationship between risk appetite and determinant of investment behavior, following research model has been developed. The relationship between dependent and independent variables can be expressed as follows:
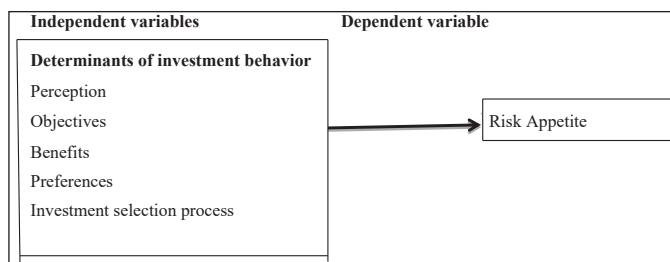
Research model of determinants of investment behavior

The dependent and independent variables in the form of regression model can be stated as follows:

$$Y_i = B_0 + B_1X_1 + B_2X_2 + B_3X_3 \ldots\ldots\ldots\ldots B_NX_N$$

Where,

Y_i = Dependent variable

B_0 = Constant (coefficient of intercept)

$B_1, B_2, B_3 \ldots\ldots\ldots\ldots B_N$ = Regression coefficients

$X_1, X_2, X_3 \ldots\ldots\ldots\ldots X_N$ = Independent variables

The following regression model has been formulated to test the hypotheses of the study:

Risk appetite = F **(**perception of women towards investment, objectives of investment, investment benefits, preferences, and basis of investment selection**)**

Where:

Dependent variable: risk appetite of women

Independent variables: perception of women towards investment, objectives of investment, investment benefits, preferences and basis of investment selection

These are the independent variables of the study and risk appetite of women is measured by the variations in dependent variable due to change in independent variables. Risk appetite is considered as the dependent variables as the risk-taking capacity of women during investment depends on various factors such as perception of women towards investment, objectives of investment, investment benefits, preferences of women and basis of investment selection.

Before using regression for hypothesis testing, to check the relationship among the variables (perception of women towards investment, objectives of investment, investment benefits, preferences of women and basis of investment selection), Pearson's correlation was applied. The multicollinearity test is used to measure the degree of correlation among the independent variables.

As shown in Table 10, the correlation results revealed that among the independent variables, correlation was found less than 0.7, which signifies the non-existence of multicollinearity. Thus, problem of multicollinearity has not been found.

Table 10: Correlation among the Independent Variables

	Perception	Objectives	Investment Benefits	Preferences	Investment Selection
Perception	1				
Objectives	.300*	1			
Investment Benefits	.345*	.462	1		
Preferences	.356	.451*	.164*	1	
Investment Selection	.289	.317	.176*	.486*	1

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

The degree of correlation between perception of women and objectives for investment is .300, which is moderate whereas correlation between investment benefits and objectives is .462, which is also moderate. In addition, degree of relation between preferences and perception is .356, which comparatively shows moderate level. In the same way, the degree of correlation among all independent variables found less than 0.7.

The coefficient depicts the direction of the relationship (positive or negative) between two variables. The absolute value of correlation coefficient highlights the strength means larger the value, stronger the relationship between the variables. The correlation coefficient 1 reflects the perfect positive linear relationship.

REGRESSION ANALYSIS

Regression is the determination of a statistical relationship between two or more variables, which interprets how independent variables can affect the dependent variable. The multiple regression analysis has been employed to examine the impact of independent variables (perception of women towards investment, objectives of investment, investment benefits, preferences of women and basis of investment selection) on the dependent variable (risk appetite of women).

Before applying the regression test, respective assumptions of regression test were checked. The final results of regression have been presented in Table 11, which shows the values of R square, adjusted R square, Durbin-Watson, beta coefficients, standard error around the coefficients, degree of freedom, F value, p values and the values of beta coefficients. Regression analysis was performed with Enter Method.

Table 11: Regression Analysis

Independent Variables	Beta	T	Sig.
(constant)		1.53	.000
Perception	.427	7.05	.000
Objectives	.597	3.80	.001
Investment benefits	.619	3.12	.000
Preferences	.249	4.01	.013
investment selection	.321	2.28	.021
R 0.732			
R square: 0.736			
Adjusted R Square: .528			
Std. error of the estimate: 1.652			
Durbin-Watson: 1.91			

Source: Survey

The overall accuracy of regression model can be investigated by observing the adjusted R square values. The higher value shows greater strength of model. R square is a coefficient of determination show strength of model. R square measures the proportion of the variability in the dependent variable about the origin explained by regression. As seen in Table 11, the value of R square is 0.736, which reflects that the five independent variables explain 73% of the variations in the dependent variable, i.e. risk appetite of women investors. On the other hand, Durbin-Watson value (1.91) indicates that there is no autocorrelation detected in the sample as value lies between 0 and 4.

Table 12: ANOVA

	Sum of Square	Df	Mean Square	F	Sig.
Regression	1167.318	5	194.53	71.226	.000
Residual	1010.644	372	2.731		
Total	2177.962	377			

The computed F value was observed higher than table value and found statistically significant at 1% level. This reveals that the whole model surely anticipates the risk appetite of women investors as dependent variable in the study and five independent variables: perception of women towards investment, objectives of investment, investment benefits, preferences of women and basis of investment selection. In addition, these factors do influence the risk-taking capacity of women investors during investment in stock market.

On investigating the different dimensions of the model, it was observed that "investment benefits" have stronger influence as a factor influencing the risk appetite of women investors (beta = .619) as the beta statistics is the highest in this case. Women are of the view that benefits like high earning rate, consistent income, capital appreciation, high earning rate, easily convertible and liquidity determine their risk-taking capacity for investment decisions.

Further, Table 12 reveals "objectives of investment" as the second most important factor which strongly influences the risk appetite of women investors (beta = .597). Women are of view that they think about motives (tax benefits, capital appreciation, children's education and marriage, contingencies and enhancing income) of investment while determining their risk-taking capacity during investment decisions.

The results show "Perception towards investment" as the third significant factor which has a strong influence on investment behavior of women (beta = .427). Women investors opined that while ascertaining their risk-taking capacity, they consider their point of view towards functioning of stock market and current market conditions.

However, the results of regression show that "basis of investment selection" (beta = .321) like previous trends of shares, financial data of company, current market inclinations, recommendations of family/friends/relatives and advices of professional advisor have impact on women's risk appetite during investment decisions.

Moreover, the fifth factor, "Preferences" is also an important factor (beta = .249), which have strong influence on risk appetite of women. Women investors opined that while taking investment decision they consider their investment choices and pattern of investment.

HYPOTHESES TESTING

The estimated coefficient (.427) of the perception towards investment is positive and statistically significant (.000), which indicates the significant positive influence on risk appetite of women investors. Therefore, following hypothesis (H1) is rejected: H1: The perception of women investors doesn't have positive and significant influence on the risk appetite of women.

The computed coefficient (.597) of the objectives of investment is found positive and statistically significant (.001), which expresses the significant positive influence on risk-taking capacity of women investors. Thus, following hypothesis (H2) is rejected: H2: The objectives of investment don't have positive and significant influence on the risk appetite of women.

The estimated coefficient (.619) of investment benefits is found positive and statistically significant (.000), which reveals the significant positive influence on risk-taking capacity of women investors. Thus, hypothesis (H3) is rejected: H3: Investment benefits don't have positive and significant influence on the risk appetite of women.

The computed coefficient (.249) of preferences of women is found positive and statistically insignificant (.013), which depicts the insignificant positive influence on risk appetite of women investors. Thus, following hypothesis (H4) is accepted: H4: Preferences of women doesn't have significant influence on the risk appetite of women.

The computed coefficient (.321) of the basis of investment selection is found positive and statistically insignificant (.021), which reflects the insignificant positive influence on risk appetite of women investors. Thus, following hypothesis (H5) is accepted: **H5:** Basis of investment selection doesn't have significant influence on the risk-taking capacity of women.

CONCLUSION

The results conclude that the major components that play a significant role in influencing the risk appetite of women investors are perception towards investment, objectives of investment and investment benefits, which have significant influence on risk-taking capacity of women investors. In addition, other component like preferences and basis of investment selection are not significant in influencing risk appetite of women during investment decision.

RECOMMENDATIONS

The study recommends that government and financial regulators should come forward to fortify the regulations and design such policies that can foster the confidence of women and make them comfortable for taking considerable risk while investing their money. This study corroborates the importance of financial literacy to make women more aware and technically sound with dimensions of investment.

It is hoped that the findings will assist financial advisors, investment managers and financial consultant to understand and discover the solution to those factors, which cause variations in risk-tolerance level. For giving a proper and accurate financial advice, it is necessary to identify the risk-tolerance levels of that person appropriately. Thus, these results will provide guidance to financial analysts and advisors that how to predict risk-tolerance levels of women.

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