

INVESTIGATING INVESTMENT BEHAVIOR OF WOMEN INVESTORS IN INDIAN STOCK MARKET: AN EMPIRICAL SURVEY.

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Abstract

Purpose- The paper, an exploratory attempt, aims to investigate the investment behavior of women investors in Indian stock market.

Design/methodology/approach- The research is conducted on women investors of Haryana, India. A modified (Al-tamimi, 2006), (Vohra and Kaur, 2017) and well-structured questionnaire was administered personally to 450 women investors. To analyze the data, descriptive statistics and regression analysis were applied to investigate the investment behavior of women investors. The primary factors considered for the study are perception, objectives and preferences for investment, investment benefits, risk taking capacity of women, past experience and basis of investment selection.

Findings- The outcome of this research stated that investment behavior of women is highly influenced by their perception towards investment, for what purpose they are investing money, investment benefits, risk tolerance level and past investment experiences. In addition, the results brought out that investment behavior of women is not significantly influenced by the basis of investment selection.

Practical Implications- It is hoped that the findings would serve to discover the constraints and significant aspects of investors' behavior while investing in stock market. Moreover, the study will help in improving the level of education and awareness of women towards investment in stock market which would bring a profound change in their attitude and confidence. The results would assist to bring out the importance of financial awareness program directed towards women at all level as a basic requirement.

Originality/Value/- To the best of the author's knowledge, this survey is a first of its kind to empirically investigate the investment behavior of women investors in Indian context using a comprehensive survey and it can provide important insights for policy formulation in the areas of financial education and literacy.

Keywords Investment behavior, Indian stock market, Preferences, women investors.

Introduction

The participation of women in the economy is important in order to enhance and contribute towards raising the economic potential of a country. Due to globalization and advancement, the involvement of women in business and finance has increased rapidly in the past few decades. The growing participation of women in financial market calls for increased attention on investment behavior of women consisting their perception and awareness level towards

investment, problems faced by women in stock market, risk appetite, factors affecting investment decision and impact of demographical factors on women's perception and attitude towards investment. That's why, understanding the women's investment behavior cannot be undervalued.

Women invest their money in stock market for obtaining numerous benefits such as financial and non-financial gain drive their investment behavior (Kaur and vohra 2017).

Moreover, women invest in stock market because of high return, high liquidity, income stability and variety of benefits associated with stock market. As investment decision of women depends upon number of behavioral aspects like their understanding, perception, attitude and preferences which form their behavior. On the basis of these behavioral elements, women arrive at a conclusive decision such as whether to invest or not in a particular investment avenue. The basic factors that form the rational behavior of investors are investor's personal characteristics such as age, occupation, investments experience and income level of investors (Kartosava, 2013).

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, what factors they consider while starting to invest. Moreover, how was their past 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 (Kumar and Kumar, 2021). Thus, answer of all these questions can be identified by analyzing their investment behavior.

In view of this, the present study attempts to investigate the investment behavior of women investors in Indian stock market.

Literature review

Investment behavior of investors in Indian stock market

The main objective of various studies like, Arora and Marwaha (2013), Gakhar (2019), Taparia and Babu (2019) and Gupta and Mokshmar (2018) was to examine the factors influencing investment behavior. The results revealed that most impelling factors on investment decisions of investors are financial requirements, advice and recommendations, share price, firm's image, dividend attraction, stability of income and high returns. Moreover, findings revealed that there are many factors such as government policies, past investment experiences, financial status, tax benefits, risk associated, return on investments, diversification needs, which affect the investment decision of investors. The study concluded that recommendations of financial expert, brokerage fee, stock market formalities influence the investment decision of investors.

Brahmabhatt et.al (2012), Kaur and Vohra (2015), Manikandan (2017) and Maini (2019) described the features of investment avenues are income stability, liquidity, safety of principal amount, appreciation and easy transferability. The authors suggest that choice of investment decision in stock market depends upon the awareness of investors towards the trading of stock market. The information sources such as news channel, newspapers, financial portals, magazines helped the investors for making a rational decision regarding investment in stock market. The results indicated that majority of women investors were well aware about the

nuances of stock market and the risk involved but they are also unaware of many new instrument and regulating acts.

Many studies like Bansal (2017), and Ray (2009) demonstrated that investors have objectives for investing their money such as return on investment, liquidity, capital appreciation and long term benefits. The findings indicated that most of investors invest their money for higher stable return and capital appreciation. On the other hand, tax benefit and children's education are the objectives for some investors for making investment. The authors concluded that investors have different expectations from the investment due to difference in their needs such as savings, safety, higher return and capital appreciation.

Lokhande (2015), Sarkar and Sahu (2018) and Maini (2017) opined that investment behavior is affected by various demographical factors such as income, occupation, age, marital status and qualifications. It was observed that there is significant relationship between objectives for investment and demographic variables such as age, education, occupation and income. The studies concluded that education, age has significant influence on the investment behavior of investors. Education level and occupation of investors found to be statistically significantly related to their objectives for making investment.

Many of the studies like Parihar et.al (2009), Kaur and Vohra (2012), Uma and Packia Raji (2015) and Vohra and Kaur (2016) reported the problems faced by investors and the reasons that restrict investors from investing in stock market. The authors opined that investing money is a very complex task due to prevailing terms and conditions of investment and complex rules and regulations. The findings of these studies indicated that lack of knowledge and lack of awareness are the reasons of lower participation of women in stock market. The authors concluded that insecurity and high volatility in stock market are the concerned issues for investors. In this regard, authors suggested that women need ample guidance to be well versed in choosing the investment avenues for improvement in their investment pattern.

Factors affecting investment behavior in stock market

Investment behavior is influenced by number of factors such as social factors (norms, values, beliefs and culture), behavioral factors (attitude, perception, and risk aversion), demographical factors (age, marital status, gender, income, education and occupation), economic factors (financial status, dividend, regular income and availability of funds), market factors (price movements, market trends, government policies) and investment specific factors (nature of investment, investment tools, terms and condition of investment options) (Lan and Viet, 2018). These factors have significant impact on investment behavior of investors.

Gnani et.al (2012), and Syal and Walia (2017) explored the factors influencing the investment behavior of investors. The results showed that the most influencing factors are expected earnings, past performance, government holdings and need of organized financial market. The least influencing factors are minimizing risk, expected losses, family members' opinion and economic condition. The studies concluded that recommendations of financial expert, brokerage fee, stock market formalities influence the investment decision of investors. It was

discovered that there are behavioral factors like emotional risk tolerance, financial literacy and investor's risk tolerance which influence the investor's behavior.

Sanjeet and Prashant (2022), Mehraj (2021), stated that four major factors that highly influenced the investment decision making of the women investors are social and cultural factors, family factors, operational factors and psychological factors. The studies reported that the factors such as returns, safety of principal amount, progressive amount, tax savings along with other factor like family, friends and expert opinion and motives behind savings influence investment decision. Further, psychological factors such as risk aversion and self reliance are significantly related to the investment process.

Akbar et.al (2016), Aziz and Khan (2016), Barayandama and Ndizeye (2018) explored the factors affecting investment behavior of investors in Pakistan. The findings revealed that economic factors are the most influential factor followed by psychological factors and social factor whereas demographic factors are considered as least influential factors. The study concluded that most influential factors were economic factors (expected corporate earnings and ownership structure) and psychological factors (cognitive bias, irrational thinking). The least influential factors were income, education and age. It was suggested that financial authorities and regulators should reshape the investment policies by focusing attention on the needs of investors. Authors concluded that most of investors in Pakistan are not making rational decision on the basis of accounting information.

Kanojia et.al (2022), Kent Baker et.al (2021), indicated a significant association between traits of extroversion, neuroticism and behavioral biases of individual behavior. The results revealed that there found no impact of herd behavior on stock returns in Indian stock market also highlighted that openness has a significant relation with behavioral biases.

Jain et.al (2022), Mushinada et.al (2019) and Bondia et.al (2019) showed the empirical evidence in support of behavioral biases and observed three building blocks such as identification, rationalization and further validation which culminate into buying decision of investors. The author also investigated that personal features of an investor such as gender, age, occupation, annual income and their experience have an impact on behavioral biases. Moreover, the study concluded that socio-cultural factors have significant influence in inducing investors to enter stock market.

Perera (2016) and Subramaniam and Velnampy (2017) discussed the influence of investors' attitude on investor behavior and examined its impact on the selection of various investment avenues in the Colombo stock exchange in Sri Lanka. Further, findings illustrated that three behavioral factors affect the investment choices of investors such as cognitive factors (anchoring, overconfidence, investor optimism and hindsight bias), herding factors (selling, buying choice, following the habits of other investors and trading of investments) and emotional factors (loss aversion, regret aversion, mental accounting).

Investment behavior of investors across the world

Ullah and Chowdhury (2011) encapsulated the present scenario of women investors in the capital markets in Bangladesh. The findings indicated that lack of awareness, inefficient technical information, complexities of capital market are the challenges faced by women

investors in Bangladesh whereas quality conscious and intuitive behavior are the opportunities. **Kadariya (2012)** examined the investor's behavior in Nepalese stock market. A survey was carried out on 185 investors from Nepal. The results indicated that capital structure and media coverage are the important factors that influence investors' behavior. The findings showed political stability and stock market movements also influence the investment behavior of investors in Nepal. **Velumoni and Rau (2015)** conducted an empirical survey on 150 investors in Greece to analyze the factors which mostly influence investor's behavior in Greek stock exchange. Investment behavior is influenced by factors are dividend, recommendation of family and friends, share price, market trends, diversification needs and religious reasons. **Sochi (2018)** conducted a survey on 203 investors of Dhaka stock exchange to investigate their socio-economic characteristics and investment pattern. The study concluded that most of women respondents choose a particular investment avenue to meet their family needs and second preference is towards availing tax advantages. **Jagongo and Mutswenje (2014)** analyzed factors influencing investment decision at the Nairobi stock exchange. The study was undertaken on the 42 investors. The results stated the factors that influence investment decision are: firm's status in industry, expected earnings, reputation of firm, and market price per share. The study concluded that investors should evaluate all the variables in the environment instead of considering one factor. **Kengatharan and Kengatharan (2014)** explored the behavioral factors influencing investor's decision at the Colombo stock exchange. The study also examined the relationship between investment performance and behavioral factors. It was discovered that four behavioral factors namely herding, prospect, heuristics and market affecting the investment decisions of investors. **Atchyuthan and Yogendrarajah (2017)** aimed to focus on the preferences of working women in Jaffna district, Sri Lanka. Data was collected from 125 working women in Jaffna district, Sri Lanka. The findings showed that women investors emphasized more on liquidity and safety than higher return. The study concluded that awareness level of women is not significantly related to age, occupation and education. Further, 91% women investors invest their money for their future, personal safety and children's education. **Islam Khan et.al (2016)** studied the preferences of various groups of investors for investment in Malaysia. A survey was carried on 520 investors in Malaysia. The findings expressed that women investors show higher preferences for the liquidity of firm, dividend payments, stock price and trading volume of firm during investment decisions. **Assefa and Rao (2018)** examined the investment preferences for various investment avenues. The data were collected from working employees in Wolaita Sodo, Ethiopia. The findings showed that the overall level of awareness of investors in Ethiopia is low, and most of the respondents were not aware about financial concepts related to stocks, bonds, mutual funds, and the compound interest. **Lodhi (2014)** examined the awareness level of investors and its impact on the investment decision of investors living in Karachi city. It was found that short term investments are riskier than long term investments. The findings revealed that financial literacy, use of accounting information, and age have significant impact on the investment decision. **Lan et.al (2018)** examined the behavior of investors in China and explored the impact of demographic characteristics on investment decision. A survey was conducted on 9,000 individual investors across China. It was found that predicting and analyzing behavior of investors is of great importance to financial institutions. **Hon (2013)** investigated the behavior

of investors in Hong Kong stock market and analyzed the key factors that affect investors' behavior. A survey was conducted between 2007 and 2008. The data were collected from 1,199 respondents in Hong Kong. The findings highlighted that investor in Hong Kong wisely select their investment avenues and investors have high risk tolerance while making investment decisions. **Obamuyi (2013)** determined the main factors influencing investment decisions of investors in Nigerian capital market. 297 investors from Nigeria were selected on random basis. The findings exhibited the most influencing factors are expected stock, dividend policy, past performance, and least influencing factors are religious reasons, family member's opinion, expected losses in other investments. **Hue Ton et.al (2014)** explored the impact of demographic variables such as age, education, occupation and income of investors on their investment behavior. The studies concluded that education, age has significant influence on the investment behavior of investors in Vietnam. **Ahmed (2017)** attempted to determine the factors that affect investor behavior in the Pakistani financial market. A sample of 102 investors from Pakistan was taken. The results of the analysis indicated that most influencing factors are dividend, stock marketability, and firm status. Further, the least influencing factors were political party affiliation, family opinion, and ethics of firms. **Al-Tamimi (2006)** explored the factors influencing the investment behavior of investors in UAE. A survey was conducted on 150 investors in UAE. The results showed that the most influencing factors are expected earnings, past performance, government holdings and need of organized financial market. **Venter and Kruger (2017)** conducted a comprehensive survey on women investors in the Nelson Mandela Bay area. To conduct the survey, 2017 women were selected. Some factors namely values, attitudes, risks and returns, and investment knowledge were taken as independent variables and perceived successful investment planning of women taken as dependent variable. **Abul (2019)** investigated the impact of psychological factors on behavior of investors in Kuwait Stock Exchange. A survey of random sample of 398 investors from Kuwait Stock Exchange was selected. The results indicated the herd behavior, optimism and risk appetite have significant impact on investors' behavior. **Zhou (2014)** explored the impact of several factors on behavioral decisions of women investors in the Vietnamese stock market. 472 investors were selected. The study concluded that four psychological factors (overconfidence, psychology of risk, excessive optimism and herd behavior) do have significant impact on the investor's attitude towards investment decisions. **Alquraan et.al (2016)** investigated the factors influencing investment decision of investors in Saudi Arabia. To conduct the survey, 140 investors were selected on random basis. The results indicated that behavioral factors (risk perception, loss averse and overconfidence) have significant impact on the stock investment decision of investors in Saudi stock market. **Queen and Hassan (2019)** determined the factors that affect behavior of Malaysian investors and measured their risk tolerance level towards investment options. It was highlighted that financial risk tolerance decreased with age, higher education qualification investors have high financial risk tolerance than less qualified investors and financial risk tolerance increased with investor's income level. **Areiqat et.al (2019)** explored the impact of behavioral factors affecting the stock investment decision making at Amman stock exchange. The study covered 165 investors who were active at Amman stock exchange. The results stated that behavioral factors namely overconfidence, loss aversion and herding affect the investment decision of investors.

The above studies covered broad literature on investment behavior across the world and revealed variedness in the behavior of investors in the different nations.

Objectives of the study

There has been lot of conceptual and empirical research done in the past, across nations, spanning over disciplines like finance, consumer behavior, economics and others. However, research in the area of behavioral finance has exhibited that investors demonstrate irrational behavior while making investment decisions. It is evident from the literature that investor behavior usually deviates from reason and logic. Consequent upon this, investors reflect various behavioral issues which influence their investment decisions. Thus, the need for the study arises, as in state of Haryana, India, the research focusing on investigating the investment behavior of women in Indian stock market, has not been researched so far. So, the present study aims to fulfill the gap with the following objective:

1. To investigate the investment behavior of women in Indian stock market.

This study assesses the investment behavior of women investors by seeking answers to these pertinent questions:

- I) Do women have positive perception towards investment in stock market?
- II) For what purpose women are investing their money in stock market?
- III) What is the preference of women investors for investment decisions?
- IV) Do women consider the benefits of investment while investing their money?
- V) Are women capable to take risk for investment in stock market?
- VI) Do women consider their past investment experiences while investing their money?
- VII) On what basis women select their investment option?

In order to achieve the above mentioned objectives, following hypotheses are formulated:

H1: The perception of women investors doesn't have positive and significant influence on the investment behavior of women.

H2: The objectives of investment don't have positive and significant influence on the investment behavior of women.

H3: Investment benefits don't have positive and significant influence on the investment behavior of women.

H4: Risk appetite of women doesn't have positive and significant influence on the investment behavior of women.

H5: Past investment experiences of women investors doesn't have positive and significant influence on the investment behavior of women.

H6: Basis of investment selection doesn't have positive and significant influence on the investment behavior of women.

Research methodology

The survey was conducted on 450 women investors of Haryana, India and data were collected from 450 women investors from the NCR areas of Haryana, India. Purposive and convenience

sampling technique have been used to select stock broking firms in four districts of Haryana. Further, simple random sampling technique was used to select the list of regular women investors that have been prepared with the help of Stock broking firms and regular investors were selected from the list. Thereafter, modified (Al-tamimi, 2006), (Vohra and Kaur, 2017) and well-structured questionnaire was administered personally. Online questionnaires were also mailed to the women respondents.

Variables of the study

The following variables will determine the investment behavior of women:

- a. Perception of women towards investment
- b. Objectives for investment
- c. Preferences for investment decisions
- d. Investment benefits
- e. Risk appetite of women
- f. Past investment experiences of women
- g. Basis of investment selection

Forty five statements were retrieved from the review of literature to identify the variables that determine the investment behavior of women in Indian stock market. The responses of women respondents were sought on a five point Likert scale ranging from the 1 (strongly disagree) to 5 (strongly agree). Out of 450 questionnaires distributed, 400 complete and usable responses were used for analysis. The remaining 400 usable questionnaires represent an effective response rate of around 88% of the total sample.

The questionnaire has been divided into two parts: first part consists of demographic profile of women and second part consist 45 questions. Out of 45 questions, the seven questions about the perception of women towards investment, six questions about the objectives for they invest, ten questions correspond to preferences for investment selection, six questions about investment benefits that can be gained by investing money, five questions correspond to risk taking capacity of women, six questions about past investment experiences of women and five questions were on basis of investment selection. Moreover, secondary sources including online research publications, articles, books, working and discussion papers were also used. However, descriptive statistics and regression analysis were applied to analyze the data.

To assess the validity of the scales' content, the questionnaire has been piloted on three academicians and three practitioners. Accordingly, some changes were made to the first draft in terms of eliminating, adding or re-wording some of the questions.

Data analysis

Reliability of the Variables

To assess the reliability of the variables, Cronbach's alpha was applied.

Table I Reliability analysis

Variables	Cronbach's Alpha
Perception of women towards investment	.761

Objectives for investment	.780
Preferences for investment decisions	.750
Investment benefits	.703
Risk appetite of women	.714
Past investment experiences of women	.755
Basis of investment selection	.732
Overall Cronbach's Alpha	.821

The overall Alpha value was observed at 0.821 for all seven variables of the study to measure the consistency. As a general rule, if the coefficient is greater than or equal to 0.7 then it is considered a good indication of construct reliability (Nunnally, 1978). As shown in the table, all seven variables of the study complied with the acceptable level of reliability.

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

(I) Perception level of women towards investment in stock market

The questionnaire contains seven questions about the perception level of women towards investment in stock market which indicates the approach of women for investing money in stock market. The opinion of women respondents depicts the positive responses on first research question which is: Do women have positive perception towards investment in stock market?

Table II: Perception of women towards investment

No.	Statements	Frequenc y	Percent	Mean	S.D.
1.	Price fluctuation in Stock Market.	322	81%	3.89	1.13
2.	Regulated stock market	303	75.7%	3.75	1.24
3.	Corporate mismanagement and frauds.	267	66.7%	3.23	1.12
4.	Prominent brokers' services.	341	85.2%	4.19	1.26
5.	The DEMAT system is convenient	372	93%	4.27	.777
6.	Adequate and reliable portfolio management services.	353	88.2%	4.32	.775
7.	Dividends and bonus announcements.	321	80.2%	3.88	.818
	Average			3.93	

Source: Survey

Table II shows the descriptive statistics for each statement of 'perception of women towards investment that supports investment behavior of women. Most of the women respondents agreed with the statement "adequate and reliable portfolio management services (4.32)", "DEMAT system is convenient (4.27)" and "prominent broker's services (4.19)" as mean value 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 stock market is regulated.

The average mean value (3.93) reveals the satisfactory response of women respondents which reflects women have adequate knowledge about stock market. It can be concluded that perception level of women towards investment found positive and ample as they are aware about the content and functioning of stock market.

(II) Objectives of investment

The questionnaire includes six statements which indicate the motives of women for investing their money. The belief of women respondents reflects their motives and positive responses on second research question which is: For what purpose women are investing their money in stock market?

Table III: Objectives of investment

No.	Statements	Frequenc y	Percen t	Mea n	S.D.
1.	Children's education.	358	89.5%	4.22	.877
2.	Contingencies.	281	71.6%	3.79	1.19
3.	Tax benefits.	328	82.1%	4.16	.941
4.	Children's marriage.	260	65%	3.69	1.13
5.	Capital appreciation	345	86.5%	4.28	1.22
6.	Enhancing Income.	318	79.5%	4.00	.951
	Average			4.02	

Source: Survey

Table III indicates the descriptive statistics for each statement of 'women's objectives for investment' that determines their investment behavior. Majority of the women respondents believed that they mostly invest their money for following motives "tax benefits (4.16)", "enhancing income (4.00)", "capital appreciation (4.28)" and "children's education (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 (4.02) depicts the acceptable response of women respondents that women have strong motives for investing their money in stock market as their motives for investment induce their investment preferences and decision.

(III) Preferences for investment decisions

The questionnaire comprises six statements regarding preferences of women for taking investment decision which specify their choice and options for investing their money in stock market. The opinion of women reflects their strong responses on third research question which is: What is the preference of women investors for investment decisions?

Table IV: Preferences for investment decisions

No.	Statements	Frequenc y	Percen t	Mea n	S.D.
1.	Prefer stocks with high rates assigned by rating agencies	360	90%	4.36	1.26
2.	Investment in stock of new companies with good prospects.	322	80.6%	3.96	1.02
3.	Equities as an investment option are favorable	353	88.2%	4.11	1.07
4.	Prefer IPOs than secondary market instruments.	211	52.8%	3.59	1.17
5.	Prefer Direct Equity than Equity mutual fund	280	70%	3.66	1.14
6.	Prefer Debentures than Equity shares	275	45.8%	3.32	1.35
7.	Responsible for the outcome of investment decision	319	79.8%	3.88	1.07
8.	Full confidence to manage the dimension of investment	283	70.8%	3.89	1.05
9.	Prefer investment in companies listed on stock exchange	330	84.8%	4.12	1.00
10.	Actively observe trade activity and index	287	71.8%	4.04	1.18
	Average			3.89	

Source: Survey

Table IV depicts the descriptive statistics for each statement of ‘preferences of women for investment’ that drives investment behavior of women. Majority of the women respondents agreed with the statement “prefer investment in companies listed on stock exchange (4.12)”, “actively observe trade activity and index (4.04)”, “Equities as an investment option are favorable (4.11)”, “Investment in stock of new companies with good prospects (3.96)”and “Prefer stocks with high rates assigned by rating agencies (4.36)” as these statements recorded higher mean values.

Women respondents expressed that they prefer investment in listed companies and companies with good prospects. In addition, women found equities as investment option are preferable whereas most of the women prefer stocks with high rates assigned by rating agencies. Moreover, women actively observe trade activity and index and they have full confidence to manage the dimension of investment. Apart from that, women don’t much prefer IPOs than secondary market instruments. In comparison of equity mutual funds, women prefer direct equity. The average mean value (3.89) suggests the satisfactory response of women respondents which specify women take investment decision wisely.

(IV) Benefits of Investment

The questionnaire consists of six statements about benefits of investment which reveals the advantages of making investment in stock market. The opinion of women suggest their positive responses on fourth research question which is: Do women consider the benefits of investment while investing their money?

Table V: Benefits of investment

No.	Statements	Frequenc y	Percen t	Mea n	S.D.
1.	High earning rate	304	76%	4.00	.725
2.	Marketability	302	75.5%	3.84	1.16
3.	Consistent Income	362	90.5%	4.39	.953
4.	Capital appreciation	321	80.3%	3.97	1.14
5.	Easily convertible	396	99.1%	4.42	.514
6.	Liquidity	386	96.6%	4.29	.506
	Average			4.15	

Source: Survey

Table V illustrates the descriptive statistics for each statement of ‘benefits of investment’ that drive the investment behavior of women. 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) signifies the acceptable response of women respondents which reveals that women deliberately consider the benefits of investment while making investment in stock market.

(V) 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 VI: Risk appetite of women

No.	Statements	Frequenc y	Percen t	Mea n	S.D.
1.	Investment in risky stocks for high return.	247	61.8%	3.74	1.13
2.	Investment in risk free stocks	341	85.2%	4.17	1.25

3.	Invest in stocks with stable expected returns	356	89.1%	4.29	.777
4.	Investment in stocks having low risk	366	91.5%	4.32	.769
5.	Investors tend to reduce risk through portfolio diversification	294	73.6%	3.88	.829
	Average			4.08	

Source: Survey

Table VI depicts the descriptive statistics for each statement of ‘risk appetite of women’ that actuates the investment behavior of women. 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 taking risk with their money.

(VI) Past investment experience of women

The questionnaire includes six statements regarding past investment experience of women investors which expresses what they experienced in past whenever they invested money in stock market. The opinion of women respondents reflects positive responses on sixth research question which is: Do women consider their past investment experiences while investing their money?

Table VII: Past investment experiences of women

No.	Statements	Frequenc y	Percen t	Mea n	S.D.
1.	Fee/commission charged by broker	374	93.6%	4.32	.778
2.	Information revealed by the company	306	76.5%	3.99	.709
3.	Self-risk management strategy	301	75.3%	3.83	1.16
4.	Portfolio management	261	65.3%	3.88	.968
5.	Previous price movement of shares	319	79.8%	3.97	1.14
6.	Regulatory measures taken by SEBI	391	97.8%	4.39	.565
	Average			4.06	

Source: Survey

Table VII shows the descriptive statistics for each statement of ‘past investment experiences of women’ that guides the behavior of women. majority of the women respondents opined that while investing in stock market they consider their past experiences as women support following statements “regulatory measures taken by SEBI (4.39)”, “fee/commission charged

by broker (4.32)", "previous price movement of shares (3.97)" and "information revealed by company (3.99)" due to higher mean values recorded by these statements.

Women respondents argued that they take their past experience into consideration while investing in stock market. This is confirmed by the fact that women analyze information revealed by company and previous price trends of shares. The average mean value (4.06) highlights the acceptable response of women respondents which proves that women consider their past investment experience while making investment in stock market.

(VII) 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 VIII: Basis of investment selection by women

No.	Statements	Frequenc y	Percen t	Mea n	S.D.
1.	Previous trend of shares	394	98.6%	4.29	.523
2.	Financial data of company	386	96.6%	4.39	.556
3.	Current market inclinations	388	97.1%	4.27	.543
4.	Recommendations of professional advisor	302	75.5%	3.90	.708
5.	Advices of friends/family/relatives	395	98.8%	4.43	.583
	Average			4.25	

Source: Survey

Table VIII presents the descriptive statistics for each statement of 'basis of investment selection by women' that serves as a guide to their investment behavior. 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. 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.

Theoretical research model

In order to investigate the relationship between investment behavior and determinant of investment behavior, following research model has been developed.

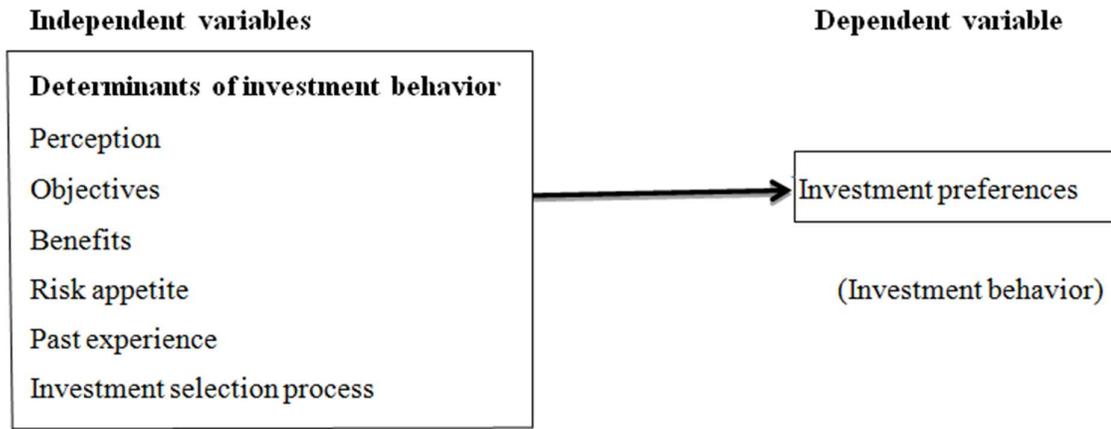


Figure I: Research model of determinants of investment behavior

The dependent and independent variables in the form of regression model can be stated as follows: $Y_i = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + \dots + B_NX_N$

Where,

Y_i = Dependent variable B_0 = Constant (coefficient of intercept)

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

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

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

Investment behavior= F (perception of women towards investment, objectives of investment, investment benefits, risk appetite of women, past investment experiences and basis of investment selection)

Where: Dependent variable: preferences for investment decision

Preferences for investment decision reflects the investment behavior of women which is considered as the dependent variables as the investment behavior of women depends on various factors such as perception of women towards investment, objectives of investment, investment benefits, risk appetite of women, past investment experiences and basis of investment selection.

Before using regression for hypothesis testing, the multicollinearity test is used to measure the degree of correlation among the independent variables. As shown in Table IX the correlation results revealed that among the independent variables, correlation was found less than 0.7 which signifies the non-existence of multicollinearity. The correlation coefficient above 0.7 highlights the problem but it can be observed that correlation coefficients of all independent variables are below 0.7.

Table IX: Correlation among the Independent Variables

	Perception	Objectives	Investment benefits	Risk appetite	Past investment experiences	Investment selection
Perception	1					
Objectives	.300*	1				
Investment benefits	.345*	.462	1			
Risk appetite	.356	.451*	.164*	1		
Past investment experiences	.103	.326	.229**	.570**	1	
investment selection	.289	.317	.176*	.486*	.391**	1

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

Regression Analysis

The multiple regression analysis has been employed to examine the impact of independent variables (perception of women towards investment, objectives of investment, investment benefits, risk appetite of women, past investment experiences and basis of investment selection) on the dependent variable (investment preferences of women).

Before applying regression test, respective assumptions of regression test were checked. The final results of regression have been presented in Table X 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.

Table X: Regression Analysis

Independent Variables	Beta	T	Sig.
(constant)		3.57	.000
Perception	.427	6.69	.000
Objectives	.538	4.80	.005
Investment benefits	.619	3.42	.000
Risk appetite	.549	4.70	.000
Past investment experiences	.585	6.37	.001
investment selection	.321	4.28	.013
R 0.86			
R square: 0.859			
Adjusted R Square: .848			
Std. error of the estimate: 2.0538			
Durbin-Watson: 2.01			

F 340.58	
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Source: Survey

As seen in the table the value of R square is 0.859 which reflects that the six independent variables explain 85.9% of the variations in the dependent variable i.e. investment preferences of women investors. On the other hand, Durbin-Watson value (2.01) indicates that there is no autocorrelation detected in the sample as value lies between 0 and 4. 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 investment behavior (investment preferences) of women investors as dependent variable in the study.

On investigating the different dimensions of the model, it was observed that ‘investment benefits’ have stronger influence as a factor influencing the investment behavior 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 preferences for investment decisions. Further, table reveals ‘past investment experiences’ as the second most important factor which strongly influences the investment behavior of women investors (beta = .585). Women investors opined that factor like previous price movement of shares, regulatory measures taken by SEBI, self-risk management strategy, portfolio management, information revealed by the company and fee charged by broker play significant role in taking investment decisions. The results show ‘Risk appetite’ as the third significant factors which have strong influence on investment behavior of women (beta = .549). Women are of view that their risk taking capacity drives the preferences for investment decisions as most of the women opt to invest in risk free stocks and in stock having low risk.

Hypothesis testing

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

The computed coefficient (.538) of the objectives of investment is found positive and statistically significant (.005) which expresses the significant positive influence on investment preferences of women investors. Thus, following hypothesis (H2) is rejected: **H2:** The objectives of investment don’t have positive and significant influence on the investment behavior of women.

The estimated coefficient (.619) of investment benefits is found positive and statistically significant (.000) which reveals the significant positive influence on investment behavior of women investors. Thus, hypothesis (H3) is rejected: **H3:** Investment benefits don’t have positive and significant influence on the investment behavior of women.

The computed coefficient (.549) of risk appetite of women is found positive and statistically significant (.000) which depicts the significant positive influence on investment preferences of women investors. Thus, following hypothesis (H4) is rejected: **H4:** Risk appetite of women doesn't have positive and significant influence on the investment behavior of women.

The estimated coefficient (.585) of past investment experiences is observed positive and statistically significant (.001) which indicates the significant positive influence on investment preferences of women investors. Therefore, hypothesis (H5) is rejected: **H5:** Past investment experiences of women investors doesn't have positive and significant influence on the investment behavior of women.

The computed coefficient (.321) of basis of investment selection is found positive and statistically insignificant (.013) which reflects the insignificant positive influence on investment behavior of women investors. Thus, following hypothesis (H6) is accepted: **H6:** Basis of investment selection doesn't have positive and significant influence on the investment behavior of women.

Conclusion & Recommendations

On the basis of above results, it can be concluded that the major components that plays significant role in influencing the investment behavior of women investors are perception towards investment, objectives of investment, investment benefits, risk appetite and past investment experiences which have significant influence on investment behavior of women investors. In addition, other component like basis of investment selection is not significant in influencing preferences of women.

The study recommended that investment climate and market environment should be made friendly and conducive to attract investors by developing programs and policies that have impact on investor's decisions in order to maximize the value of their investments. Moreover, market players should reorganize the market and implement accommodating policies which will enhance the wealth of the investors. Apart from that, financial awareness program directed towards women can bring a profound change in their attitude and confidence which may help in clarifying their doubts and fears regarding investment. All these measures will help women in developing a positive and strong attitude towards financial market.

The findings would assist the financial planners and consultants to understand the dynamics of women behavior and explore the requisite measures can be taken to encourage the women's participation in stock market. The present study would be important for regulators and decision makers to innovate the financial avenues in such a way that can accommodate the needs of investors in a better way.

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