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INVESTMENT DECISIONS OF WOMEN IN PUNJAB TOWARDS DIFFERENT INVESTMENT AVENUES – A FACTOR ANALYSIS APPROACH

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ABSTRACT

Investment is made with the expectation of some progressive return in the future. An individual has a wide range of prospects for the utilization and investment of their available funds. It becomes crucial to take the correct decisions where to invest the money in order to obtain maximum returns. The present paper aims at studying various factors that influence the women investors of Punjab while taking their investment decisions. For the purpose of the study, primary data was collected through stratified random sampling technique from 500 women investors of Punjab spread over 10 major cities i.e. Amritsar, Jalandhar, Ludhiana, Patiala, Bathinda, Moga, Fazilka, Mohali, Gurdaspur and Hoshiarpur. Personal interview method was used to collect the primary data. Statistical analysis of data was done by applying Descriptive Statistics and Factor Analysis Technique. The study found that four major factors influenced the investment decision making of the women investors of Punjab.

Keywords*: Women Investors, Investment Decisions, Factors Influencing.*

Introduction:

Investment is done with the aim of making income or capital growth. The two main factors that highly influence the investment decisions of investors are time and risk. The main reason behind investment by investors is wealth maximization. By not using the money today and invest in their savings, investors anticipate increasing their wealth, Bhalla. The emotions have also considerably influenced the investment decisions of the investors as the emotions blocked logic and rationality of investors and it hindered the prospects of generating wealth, caused financial distress and further deteriorated their emotional stability. It was suggested that women must identify risk, develop patience and control their emotions (Prasad, Shollapur, & Patted, 2014). (Wakshull, 2001) explained 'regret' as the hindrance over an act and the consequence is less than anticipated or the failure to perform where an encouraging result would have occurred. It is the situation where the investor has a heavy feeling of hopelessness, which surrounds them powerfully for some time. Regret is often a consequence of imagination concerning evidence that was not obtainable when the decision was taken.

Majority of the women, irrespective of their qualification, have desire to invest in gold whereas the employed women desire to invest in real estate. The educational qualification of employed women bears a relationship with investment in corporate bonds and the self-employed women or who have professional degrees are interested to invest in corporate bonds (Mishra, 2007). In another study, (Glaser & Weber, 2007) explored the biases of individual investors. Nonexperienced investors are not able to self-assess their own past realized stock portfolio performance practically which hinders their learning capability. Nonexperienced investors are barely able to give a correct assessment of their own past realized stock portfolio performance in comparison to the experienced investors who can do it better. The investor experience does minimizes the mathematical error of assessing portfolio returns, but appears not to influence their 'behavioral' inaccuracies concerning how good they are, in taking investment decisions.

Review of Literature:

(Westerfield, 1969)investigated about investment management decisions for which he examined 125 investors on the basis of their portfolio choice in two

investment periods. The study found a significant difference between an amateur investor and a non-investor in their risk preferences. It was further revealed that choice, rationality, perceived risk and risk preference formed a part of the personality and cognitive judgment factors for the investors. (Lewellen Wilbur, Ronald, Lease, & Gary, 1977) analysed the portfolio decision process of individual equity investors. For the purpose of the study, data was collected from 972 individual investors residing in the U.S. The study revealed that age had a strong influence on the portfolio goals of the investors. It was observed that older investors were interested in long term capital gains whereas young investors preferred short-term capital gains. It was further found that women investors were more broker-reliant unlike men.

(Raj, Chauhan, & Patel, 1998), in their article, studied the financial behaviour of an investor. The study found that the investment experience of the respondents was not uniform and the investment decisions were self-made. It was further revealed that the alternative sources contributing to investment decisions such as advice, information are available through friends/relatives, consultants and media were not so significant in comparison to the factors such as safety, liquidity, and convenience and price differences. (Adeline, 2008) aimed at studying the investment pattern of professionals in Aruppukottai. The researcher found that the factors such as marital status, size of the family, number of dependents, monthly income and number of earning members had a significant influence on the level of investments in comparison to factors such as age, sex, type of family and sources of funds which did not influence the investment level.

(Tavakoli, Tanha, & Halid, 2011) examined different factors influencing the decision of the investors. For the purpose of the study, 13 factors were analyzed to determine whether those factors influenced the investment decisions. The study found that some of the factors like financial statement, consultation with anybody, second hand information resources, financial ratios, reputation of the firm and profitability variable are the most common influencers in decision-making. It was further stated that the most important sub variable of profitability was the dividend. (Deuskar, et al., 2012) who studied the effect of regret on future decisions in the context of stock-trading strategies by individual investors. The study found that the investors were more likely to change their trading strategy of being desperate or patient, after experiencing regret over their most recently submitted order. It was also found that the decisions taken on emotional investment because of regret, led to worse outcomes for investors as it resulted in poor returns which lasted for at least few months.

(Parwar, 2014) focused on the factors influencing investor decisions to invest in industries of deprived region. The study highlighted that the economic factors influenced the decisions made by investors in deprived and underdeveloped regions, while political, social and cultural factors did not influenced the investment decisions to a large extent. (Kumari, 2015) examined the impact of financial decision making of independent women for the inclusive growth of the society. The study aimed at analyzing the factors affecting women literacy along with factors hindering their participation in family financial decision and suggested the financial undertaking of women. It was concluded that women were majorly driven by media coverage and advice for financial decision making. It was suggested that there was a need to improve financial literacy for the independence of women in financial decision making.

Decision Paralysis and Influencing Factors:

The decision paralysis and influencing factors are measured by allotting scores to the questions related to decision making. Eighteen questions related to decision paralysis and influencing factors have been incorporated in the questionnaire. The questions that broadly cover the aspects of decision-making are (i) taking advice on investment decisions (ii) confusion and confidence relating to investment decisions and (iii) diversification and justifying wrong decisions. The answers to the questions have been rated on a five-point Likert scale.The scores allotted to the answers of each question ranges from one to five.

Table 1: Decision Paralysis and Factors Influencing

S. No	Factors	N	Mean	Std. Deviation
1.	Own Investment Decisions	500	3.86	1.024
2.	Framing a Formal Financial Plan	500	3.6	1.001
3.	Confusion due to Large Investment Options	500	3.58	0.978
4.	Advice from Analyst	500	3.51	0.955
5.	Following Advice Blindly	500	2.92	1.164
6.	Inability to take Investment Decisions due to Various Options	500	3.26	1.04
7.	Investment Decisions due to complete disclosure practice	500	3.36	0.942
8.	Confidence on Investment Decision Taken	500	3.64	0.96
9.	Preference for Diversification	500	3.31	1.007
10.	Deciding Frequent Diversification	500	3.14	1.072
11.	Deciding Priority for Investment Decisions	500	3.35	0.953
12.	Deciding Investment Choice due to Income Regularity	500	3.63	1.008
13.	Deciding New Investment based on Past Investment	500	3.8	1
14.	Investment Decisions Proved Right	500	3.56	0.936
15.	Justifying Investment Mistakes	500	3.32	1.012
16.	Change in Investment Decision due to Conflict with Advisor's Advice	500	3.18	1.134
17.	Putting off an Investment Decision due to Expected Positive News	500	3.43	0.892
18.	Waiting for Wrong Investment to Prove Right	500	3.12	1.135

Table 1 depicts decision paralysis and the factors influencing the investment decisions of the women investors of Punjab. There are totally 18 factors that have been studied to measure the decision paralysis and influencing factors. From the table above, it can be inferred that majority of the women investors take their own investment decisions as the mean and standard deviation is 3.86 and 1.024, which shows that the women investors don't face decision paralysis while taking their own investment decisions.

The results revealed that the women investors of Punjab predominantly frame a formal financial plan as mean and standard deviation is 3.6 and 1.001. The women investors highly faced confusion due to large investment options as mean and standard deviation is 3.58 and 0.978. The results revealed that the women investors preferred to take advice from analyst as mean and standard deviation is 3.51 and 0.955 but did not follow their advice blindly as mean and standard deviation is 2.92 and 1.164.

From the results it is observed that the women investors are unable to take investment decisions due to various options as the mean and standard deviation is 3.26 and 1.04 but the complete disclosure practice of the investment avenue helps them in finalizing the investment decisions better as mean and standard deviation is 3.36 and 0.942. The women investors are confident about their investment decision once it is finalized as mean and standard deviation is 3.64 and 0.96. Further it is reported that the women investors are in favor of diversification of their investment as mean and standard deviation is 3.31 and 1.007 and prefer to diversify frequently as mean and standard deviation is 3.14 and 1.072.

As per the responses collected, the women investors agree that they are able to frame the priority of their investment decisions clearly in terms of liquidity, risk, cost, return etc. as the mean and standard deviation is 3.35 and 0.953 and also agree that the regularity of their income decides the investment option that they select as the mean and standard deviation is 3.63 and 1.008. As per the results, the women investors also agree that the past experience of investing helped them in making a new investment as the mean and standard deviation is 3.8 and 1 and the results also reported that the women investors agree that their investment decisions proved to be right as the mean and standard deviation is 3.56 and 0.936.

Further the results reveal that the women investors agree that their mind justifies the decisions when they make mistakes while making investment decisions as the mean and standard deviation is 3.32 and 1.012. The women investors also agree that they change their investment decision immediately in case the views of their financial advisor conflicts with their opinion about an investment option as mean and standard deviation is 3.18 and 1.134. The results also reveal that the women investors put off an investment decision expecting new and favorable information release regarding that option as the mean and standard deviation is 3.43 and 0.892 which shows they face decision paralysis in this situation. Lastly the women investors also agree that they have been in situations where they have waited too long for their wrong investment decision to prove right as mean and standard deviation is 3.12 and 1.135. The results reveal that as the women investors are taking their investment decisions and are confident about the same proves that the women investors do not face decision paralysis to a large extent.

Factor Analysis:

Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy:

To understand the underlying dimensions among the variables and to draw a structure for the purpose of model building, it is decided to perform Exploratory Factor Analysis. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy has been used to gauge the appropriateness of factor analysis approach.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.702
Bartlett's Test of Sphericity	Approx. Chi-Square	1168.758
	df	153
	Sig.	.000

KMO Measure of Sampling Adequacy value is 0.702 which means that all the variables are positively correlated. Bartlett's Test of Sphericity significance value is less than 0.05 and hence it is concluded that factor analysis can be performed for these variable.

Communalities:

The communalities of all variables are extracted by following the method of Principal Component Analysis (PCA). The Communalities of all variables are as follows;

Table 3: Communalities

	Initial	Extraction
Own investment decision	1.000	.420
Formal financial plan	1.000	.410
Confusion due to large options	1.000	.485
Taking advice of financial analyst	1.000	.198
Blindly following advice of analyst	1.000	.365
Indecisiveness due to various investment options	1.000	.459
Complete disclosure helpful in investment decisions	1.000	.372
Confidence on decision taken	1.000	.405

	Initial	Extraction
Preference for diversification	1.000	.399
Diversifying frequently	1.000	.397
Ability to frame priority of investment	1.000	.455
Effect of regularity of income on decision making	1.000	.560
Past experience helpful in decision making	1.000	.513
Investment decisions proved to be right	1.000	.442
Justifying decisions in case of mistake	1.000	.295
Changing decision as per advice of analyst	1.000	.561
Postponing decision expecting favorable news	1.000	.305
Waiting for decision to prove right	1.000	.471
Extraction Method: Principal Component Analysis.		

It is visible from the above table that all the variables are retained. Four factors are extracted on the basis of Eigenvalues of more than one. The following table gives a complete picture of factor extraction.

Component Matrix:

After performing factor analysis, the following Component Matrix is obtained.

Table 5: Component Matrix

	Component			
	1	2	3	4
Diversifying frequently	.530			-.331
Complete disclosure helpful in investment decisions	.510			
Preference for diversification	.481			
Formal financial plan	.468	-.349		
Confidence on decision taken	.453		.374	
Postponing decision expecting favorable news	.444			
Ability to frame priority of investment	.438		-.319	-.390
Taking advice of financial analyst	.419			
Investment decisions proved to be right	.417	-.370	.310	
Justifying decisions in case of mistake	.392			
Changing decision as per advice of analyst	.366	.609		
Waiting for decision to prove right	.414	.537		
Own investment decision	.380	-.440		
Blindly following advice of analyst	.372	.418		
Indecisiveness due to various investment options			.570	
Effect of regularity of income on decision making	.475		.552	
Confusion due to large options				.652
Investment decisions proved to be right	.328	-.431		.456

Extraction Method: Principal Component Analysis.
a. 4 components extracted.

The above table gave an indicative list of factor loadings before rotation. All the eighteen variables are loaded on various factors. In order to unearth the underlying structure among the variables, Rotated Component Matrix is attained and the loadings of all the variables on four factors are shown in the following table.

Rotated Component Matrix:

Table 6: Rotated Component Matrix

	Component			
	1	2	3	4
Waiting for decision to prove right	.680			
Changing decision as per advice of analyst	.620			
Blindly following advice of analyst	.595			
Justifying decisions in case of mistake	.511			
Postponing decision expecting favorable news	.504			
Ability to frame priority of investment		.654		
Own investment decision		.591		
Formal financial plan		.585		
Preference for diversification		.584		
Diversifying frequently		.434	.	
Effect of regularity of income on decision making			.742	
Confidence on decision taken			.600	
Investment decisions proved to be right			.555	
Indecisiveness due to various investment options			.552	
Taking advice of financial analyst			.318	
Past experience helpful in decision making				.676
Confusion due to large options				.579
Complete disclosure helpful in investment decisions				.394

From the above table, only those factor loadings which are greater than or equal to 0.3 have been considered. It can be observed in the table above that five factors namely waiting for decision to prove right, changing decision as per advice of analyst, blindly following advice of analyst, justifying decisions in case of mistake and postponing decision expecting favorable news are loaded on First Factor. Based on the underlying relationship among these six variables, this factor is named as "*Hedging"*. Table 6 shows that this factor contains variables related to the of risk. The

investors feel that before making any decision about investments, it is good to take suggestions from experts in that field and always go for large duration investment, since this option gives more time to evaluate investment.

On second factor, four variables namely ability to frame priority of investment, own investment decision, formal financial plan and preference for diversification are loaded. Based on their underlying relationships, this factor is named as '*Judgement*'. The Table 6 shows that this factor contains variables related to thinking in various aspects and then taking an action.

On third factor, four factors namely effect of regularity of income on decision making, confidence on decision taken, investment decisions proved to be right and indecisiveness due to various investment options are loaded. This factor is named as '*Confidence*'. Table 6 shows that this factor contains variables related to the ability of an investor to take decisions and facing the consequences thereof.

On fourth factor, another two variables namely past experience helpful in decision making and confusion due to large options are loaded. This factor is named as ' *Influence*'. Table 6 shows that this factor contains variables related to the impact that the factors have on the decision making of the investor.

There are some factors that have been neglected since they are not reflecting any impact on Investment Decisions. Those factors have not been considered in this analysis.

Limitations of the Study:

- As the study was confined to Punjab, the conclusion cannot be drawn for whole India
- The respondents were only women investors and the perspective of male investors who play a major role as investors has not been taken into consideration

It was observed that majority of women were reluctant in replying to certain questions because of which accurate results cannot be drawn

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Table 4: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.125	17.361	17.361	3.125	17.361	17.361	2.188	12.154	12.154
2	1.800	10.000	27.361	1.800	10.000	27.361	1.969	10.941	23.096
3	1.322	7.343	34.704	1.322	7.343	34.704	1.863	10.350	33.446
4	1.267	7.037	41.741	1.267	7.037	41.741	1.493	8.295	41.741
5	1.136	6.311	48.051						
6	1.098	6.101	54.152						
7	.949	5.273	59.425						
8	.906	5.032	64.457						
9	.838	4.655	69.112						
10	.795	4.417	73.530						
11	.732	4.066	77.596						
12	.716	3.976	81.572						
13	.666	3.698	85.270						
14	.632	3.511	88.781						
15	.595	3.304	92.085						
16	.517	2.870	94.954						
17	.498	2.766	97.720						
18	.410	2.280	100.000						

Extraction Method: Principal Component Analysis

The above table shows that, up to four factors, the Eigenvalue is more than one. Hence four factors are extracted. The total variance explained is 41.741%.

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