# Objectives of Investment: A Ranking Perspective

Veena.S[1], Dr. R. Chitra Sivasubramanian[2]
Research Scholar, Department of Management Studies, School of Management, Pondicherry University
Research Supervisor, Department of Management Studies, School of Management, Pondicherry University

Abstract:

        Investments play a crucial role in everyone's life, particularly for those who earn. Deciding where to invest, how to invest, when to invest, and how much to invest can be perplexing. While conventional understanding suggests investing according to one's capacity, risk tolerance, financial knowledge, literacy, and savings objectives, the decision-making process is often complex and challenging. Women, in particular, are believed to find it harder to make investment choices, often opting for conservative investments with lower returns. Their investment objectives are largely influenced by their perspective and external stimuli. An attempt has been made to understand the objectives for investing in various avenues by women investors and the ranking given by women investors for various objectives. For the purpose of the study, 12 objectives have been identified by reviewing various scholarly articles and responses were collected through a structured questionnaire in Google forms The results have been analysed and it has been proved that their exists a significant difference amongst the mean ranks of investment objectives.

*Key words: women investors, investment objectives, ranking, difference*

Introduction:

        In the words of Jeremiah Say: "Investing is a journey of self-discovery. It reveals your relationship with money, your tolerance for risk, and your ability to stay disciplined in the face of uncertainty".

        Investments have been a decisive matter in every individual's life. It has been playing a vital role in every earning person's lifetime. Where to invest, how to invest, when to invest, and how much to invest are the questions that keep baffling the minds of the individuals. Though the decision to invest is dependent on each individual, when it comes to women, it has been expected that women find it more difficult to make choices in their investments and prefer to invest in conservative investments and with low returns. Their objective depends mainly on their outlook and the stimuluses from the environment surrounding them.

        Recent studies show that as there is surge in increased women labour force and importance attached to financial education among women, it has become imperative of every woman to decide to save based on their outlook. Their outlook has been considerably changed from being conservative to more risk assuming behaviour. Suman Chakraborty & Sabat Digal (2011), in their paper, have found out that in comparison to men, women exhibit features like systematic, attentive and normally conservative as they mainly focus on debt related instruments and bullion.

        The study has been divided into 6 sections: Section 2 deals with the objective of the article; Section 3 deals with the various research articles that deals with objectives of investments; Section 4 describes the methodology; Section 5 analyses the results of the study; and Section 6 concludes the study

## Objective:

Efforts have been made in this paper to analyse more objectives apart from the common objectives, like prestige, transferability, purchase of home and wealth creation (which has been a domain of male investors). The aim of the paper is to analyse the objectives of investment in various investment avenues as perceived by women investors.

## Literature Review:

Thulasipriya, (2015) had found out from her study of investment preference of government employees, using Friedman's test, that safety of money ranks first, followed by tax benefits, regular returns, long term benefits, future security, higher liquidity, and completes with market segment. The author has analysed 12 factors in her study. Hemalatha, (2019), has studied 6 factors namely, capital appreciation, tax benefits, expected returns, financial security, liquidity, and risk minimisation that influence the investment decisions along with various variables such as gender, occupation, internet usage, computer knowledge and online trading.

Chaurasia, (2017), has explored the ways in which demographic variables have been associated with the objectives of investments that are likely to affect the choice of investment avenues of the individual investors. The author has, through the study, derived 6 objectives namely, safety, regular income, capital growth, quick return, tax benefit and liquidity.

Vanishree Sah, (2017), has studied about the investment objectives, and found out that the medical expenses score the top most priority, followed by wealth creation. Then, the other factors follow namely, regular income, children's education, provision for retirement, tax benefits and meeting contingencies.

Nagajeyakumaran and Rathirani, (2017), have stated that the investment objectives differ from one person to another. In their study, they have concluded that future security and personal safety have scored higher ranks, followed by children's education, and their marriage. High returns and tax benefits have scored the least among the working women of Jaffna. Sharma and Kota (2019), have quoted top five reasons (objectives) for making investment includes securing the future, children's education, tax saving, retirement and family emergencies. Other reasons (objectives) quoted by them were higher returns, regular income, improve lifestyle, accumulate wealth, purchasing a home, children's marriage and liquidity.

Sabri et.al.(2020), have delineated the main reasons for saving money. In their study, retirement comes first, followed by emergency as second, keep for children as third, future used as fourth, increase standard of living as fifth and enjoying life as sixth. Singh and Jain,(2021), have observed, in their study, that precise investment goal and safety principle as the prime concerns for investment. The second in line was assets accumulation followed by capital appreciation and tax shelter.

From the analysis of above research studies, it could be understood that the focal point of investments can be narrowed down to the following objectives, namely safety/security, liquidity, returns, children's education, tax benefits, retirement plans, capital appreciation, and meeting contingencies. In this study, an attempt has been made to study the influence of objectives in various investments among women investors.

## Methodology:

The study was conducted through a structured questionnaire and a total of 146 samples were collected from respondents of working women across various sectors in Chennai.12 objectives have been identified by the author and various statistical tools have been used to analyse the objectives of investments of women investors. An attempt has been made to understand the ranking of the objectives and a pair wise comparison have been made.

## Analysis and Discussions:

### a. *Friedman Test:*

The test is a non-parametric test developed by the US Economist Milton Friedman. This test has been considered as an alternative to One-Way ANOVA with repeated measures design. The test has been used to measure variables being measured in Ordinal or Continuous. The test has been used to identify whether there exists a statistically significant difference among the means of three or more groups when the same subject is expected to show up in each group. (Zach,2020). In this study, repeated measures design has been used, where 12 objectives (variables) have been scored by 146 cases (respondents). The objectives have been ranked on a 12-point scale with '1' being the highest and '12' being the lowest.

The Friedman Test was conducted to analyse the ranks of 12 objectives, namely Safety, Income, Wealth creation, Tax benefits, Children education, Retirement Planning, Purchase of home, Medical or other contingencies, Returns, Prestige, Stability, and Transferability.

| Test Statistics | |
|---|---|
| N | 146 |
| Chi-Square | 210.488 |
| df | 11 |
| Asymp. Sig. | .000 |

Source: SPSS Output

The results of Friedman test have been shown in the above table. The test was significant, $\chi2$ (11, N=146) = 210.488, p < 0.05. The Ranks have been assigned based on the mean rank.

Ranking of objectives using Friedman Test.

| Objectives | Mean Rank | Rank |
|---|---|---|
| Safety | 4.63 | 1 |
| Income | 5.45 | 2 |
| Wealth creation | 5.54 | 3 |
| Medical or other contingencies | 6.05 | 4 |
| Children education | 6.13 | 5 |
| Returns | 6.20 | 6 |
| Tax benefits | 6.39 | 7 |
| Retirement Planning | 6.67 | 8 |
| Purchase of home | 7.04 | 9 |
| Stability | 7.15 | 10 |
| Transferability | 7.92 | 11 |
| Prestige | 8.81 | 12 |

### b. *Kendall's W Test*

Kendall's W test is referred to the normalisation of the Friedman Statistic. (www.statisticssolution.com). Kendall's W is used to evaluate the tendency of agreement among the respondents. The test is used to evaluate the agreement among raters and ranges from 0 to 1. In the words of Kendall and Smith (1939), when n objects are ranked by m persons according to some quality/preference of the objects, the set of m rankings of n shows evidence of community of judgement among m individuals. Kendall's W value is equal to 1, then the

respondents are in complete agreement amongst themselves by giving same rankings to each of the objectives. The value 0 is just the opposite when there is no agreement amongst the respondents.

| Test Statistics | |
|---|---|
| N | 146 |
| Kendall's W | 0.139 |
| Chi-Square | 210.488 |
| df | 11 |
| Asymp. Sig. | .000 |
| Kendall's W | |

Source: SPSS output

The Kendall's W has been calculated to measure the agreement amongst the respondents (N=146) and it has been proved that there has been significant difference in ranking amongst the respondents ($p<0.05$). The W statistic (0.139) shows that there is slight association amongst the respondents in the ranking of the objectives.

c. *Wilcoxon Signed Rank Test:*

The Wilcoxon Test is a non-parametric test that makes comparisons among paired groups. It is also referred as either the rank sum test or the signed rank test. The test essentially calculates the variations between sets of pairs and analyse these variations to establish if they are statically significant different from one another (Adam Hayes, 2023). As the assumption of normality of data is not important for the Wilcoxon signed-rank, the test can be successfully used when the data tends to be not normal. (onlinespps.com)

Wilcoxon tests are used as post hoc tests when Friedman's ANOVA Test has been used to determine the significant main outcome. The differences among each observation of the outcome have been determined by Wilcoxon. (www.scalestatistics.com)

An attempt has been made to analyse the differences in ranking amongst the objectives of investment. Bonferroni correction has been used to adjust the significance level to control the overall probability of a Type I error. In this study the significance level is 0.05 and the number of objectives is 12.

Thus, the Bonferroni Correction = 0.05/12 = 0.004. The following table shows the results that have been obtained where comparisons have been made for each objective with every other objective.

| Objectives | Safety | Income | Wealth creation | Tax benefits | Children education | Retirement Planning | Purchase of home | Medical contingencies | Returns | Prestige | Stability |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Income | .002** | | | | | | | | | | |
| Wealth creation | .001** | .671 | | | | | | | | | |
| Tax benefits | .000** | .074 | .042 | | | | | | | | |
| Children education | .001** | .021 | .088 | .676 | | | | | | | |
| Retirement Planning | .000** | .004** | .009 | .592 | .242 | | | | | | |
| Purchase of home | .000** | .001** | .003** | .087 | .016 | .225 | | | | | |
| Medical contingencies | .000** | .066 | .323 | .597 | .949 | .379 | .008 | | | | |
| Returns | .000** | .016 | .069 | .970 | .855 | .476 | .146 | .351 | | | |
| Prestige | .000** | .000** | .000** | .000** | .000** | .000** | .000** | .000** | .000** | | |
| Stability | .000** | .000** | .001** | .094 | .076 | .301 | .405 | .017 | .045 | .000** | |
| Transferability | .000** | .000** | .000** | .002** | .001** | .009 | .043 | .000** | .000** | .000** | .003** |

The values with asterisk mark in the table shows that there are significant differences between the pair of objectives. It is obvious that there is significant difference between safety and other objectives. Likewise, for income, there are significant differences

between income and retirement planning, purchase of home, prestige, stability and transferability. The same description has been extended for other objectives also.

## Implications:

The objectives chosen by the women investors in the study tends to be more conservative and safer haven. Women investors have to be educated on investments, which could be riskier, but earns more returns.

There is a tendency that saving and investment is possible only after all the expenses. They could be made realise that investment is an expense and should be spent as an expense along with other expenses.

Opinion that investment in riskier choices requires more money than what they have is a myth and make them believe that smaller amounts can also be invested.

Apart from Government, financial institutions in private sector should educate the women investors on various options and if possible, can take it up as their CSR to promote women wealth in the nation.

## Conclusion:

The study has been attempted to analyse the objectives of investments by women investors, for which 12 objectives are taken for study. From the results, it could be understood that safety has been the most sought-after objective and certainly it has been significantly different from other objectives. This result has been reinforced by Wilcoxon test, where safety is significantly different from others. The objective prestige has got the last rank, which clearly indicates that objective of investments is for many other purposes and certainly not for prestige. Kendall's W test concludes that the objectives are differing amongst the respondents and there is only slight agreement in ranking of the objectives. For further research, the study can be extended to other investments like alternative investments like hedge funds, private equity, venture capital, managed futures etc.

## Reference:

1. Suman Chakraborty & Sabat Digal, A Study of Saving and Investment Behaviour of Individual Households – An Empirical Evidence from Orissa, *Personal Finance & Investments (PF&I) 2011 Conference*. Retrieved from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2168305 on 6 Sep 2020
2. Thulasipriya, (2015), A Study on the Investment Preference of Government Employees on Various Investment Avenues, International Journal of Management Research and Social Sciences, vol.2, Issue.1, PP.9-16.
3. Hemalatha. S, (2019), Factors influencing Investment Decision of the Individual related to Selected Individual Investors in Chennai City, *International Journal of Innovative Technology and Exploring Engineering,* ISSN:2278-3075, Volume-8, Issue-6S4
4. FCA Pratibha Chaurasia, (2017), A Study of Investment Objectives of Individual Investors, *International Journal of Research in Finance and Marketing,* Vol. 7 Issue 6, June - 2017, pp. 131~142
5. Vanishree Sah.P(2017), A Study on Investment Behaviour Patterns of Women Investors, *CVR Journal of Science and Technology*, Volume 13, December 2017 ISSN 2277 – 3916
6. Atchyuthan, N., & Yogendrarajah, R. (2017). A study of investment awareness and preference of working women in Jaffna district in Sri Lanka. *Asia Pacific Journal of Research*, *1*, 2320-5504.

7. Sharma, M., & Kota, H. B. (2019). The role of working women in investment decision making in the family in India. *Australasian Accounting, Business and Finance Journal*, *13*(3), 91-110.

8. Sabri, M. F., Reza, T. S., & Wijekoon, R. (2020). Financial management, savings behavior, investment behavior and financial well-being of working women in the public sector. *Majalah Ilmiah Bijak*, *17*(2), 135-153.

9. Singh, A., & Jain, R. (2021). Impact of Behavioural Biases on Investment Objective and Expected Rate of Return-A Study of Female Investors. *PalArch's Journal of Archaeology of Egypt/Egyptology*, *18*(4), 2108-2115.

10. Bobbit, Zach (2020), Friedman Test: Definition, Formula and Example. Retrieved from: https://www.statology.org/friedman-test/

11. Friedman Test, Kendall's W, Cochran's Q: Significance Tests for More Than Two Dependent Samples. Retrieved from: https://www.statisticssolutions.com/free-resources/directory-of-statistical-analyses/significance-tests-for-more-than-two-dependent-samples-friedman-test-kendalls-w-cochrans-q/ on 31 Aug 2023.

12. Kendall, M. G., & Smith, B. B. (1939). The problem of *m* rankings. *Annals of Mathematical Statistics, 10,* 275–287. https://doi.org/10.1214/aoms/1177732186

13. Hayes, Adam (2023), Wilcoxon Test: Definition in Statistics, Types and Calculation. Retrieved from: https://www.investopedia.com/terms/w/wilcoxon-test.asp on 05 Sep. 23

14. Wilcoxon; Compare two observations of an ordinal outcome. Retrieved from: https://www.scalestatistics.com/wilcoxon.html on 05 Sep. 23