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Gender Diversity in Factors Influencing Investment Decisions towards Less-Risky Instruments

Kamal Pant [1st] **& Barun Srivastava** [2nd]

1st Head, School of Vocational Studies, Graphic Era Hill University, Dehradun
2nd Assistant Professor, School of Commerce, Graphic Era Hill University, Dehradun

[*] *Corresponding author:* kpant@gehu.ac.in

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Abstract: Due to the Covid-19 pandemic, investors are unsure about the equity-market return because this is directly linked with the high risk. For this purpose, a gender-based study is performed to explore the factors for those investors who invest their maximum savings in less-risky instruments. The study extracted three factors: family member opinion, future security, and return. The Mann-Whitney test shows significant gender differences for two factors, i.e., family member opinion and future security on investing their maximum amount of savings in less-risky instruments. The study shows that their family member's opinions influenced the investment decisions of males towards less-risky instruments. The present study is helpful for banking/financial industry (dealing in less-risky instruments) to expand their outlay and contribute to the development of the economy.

Keywords: Investment decisions, Risk-averse investor, Less-risky instruments, Factor analysis, Gender.
JEL Classification: D14, G11, G20

1. Introduction

In the emerging stage, financial products or instruments were traded by the Indian Government through public banks only in the form of deposit accounts such as Kisan Vikas Patra, Recurring Deposit, and National Saving Certificates, etc. However, with the development of the financial markets, some varied and innovative financial instruments have been introduced in India. Investors park their savings in fixed deposits, sovereign gold bonds, shares, mutual funds, debentures, and derivatives. They can fulfill his need related to capital appreciation, the safety of principal, and liquidity. Even the *brand image* of the companies is an essential factor to attract an equity investor as the investors are least attentive about their *future security* (*Pant & Oberoi, 2020*). So, each instrument has common characteristics, i.e., a rate of return, either fixed or variable, with some amount of risk. But the future is all about uncertainty; therefore, an individual with a lesser risk tolerance limit invest in a less risky instrument or avenue (*Samuelson, 1969*). In selecting the exact

investment instrument, an investor needs to comprehend the characteristics of the instrument. These characteristics based on the risk and return nature of the instrument should match with the present and future needs of the investor. Through the process of financial education (*a base for understanding various financial services*), a financially literate person knows how to earn, direct, and invest money. Saving is a habit specifically embodied in women, but it was shallow or no awareness among women regarding various investment avenues in the past days. However, the scenario has changed with time, and women in the present hour are also equally employed. In India, women contribute around 48% of the total population, which shows them as nearly equally competent to men. With the educational initiatives of *RBI* and *SEBI*, people are much aware of financial education and the pros and cons of various investment avenues like different deposit schemes of banks, mutual funds, shares, etc., according to their requirements.

Affection for gold is no secret for Indians. Even RBI is the largest buyer of sovereign gold (ranked 6th in the world). According to a recent survey (*World Gold Council, 2020*) of more than 2,000 retail investors, 52 percent of Indian retail investors already owned some form of gold. The bond market of India is rested mainly with the banking sector. Still, they are not in an excellent position to provide credit to small enterprises due to the increase of their non-performing assets. According to the urban consumer survey, an Indian investor turned more risk-averse in 2019 than the previous year for their investment choices (*Union Bank of Switzerland, Evidence Lab, 2020*). Most of the prior studies are a combination of high-risk and low-risk securities, irrespective of their gender. So, there was a need for a gender-based survey focused on the investment decisions by a risk-averse investor investing in various less-risky instruments (*bonds/debentures, fixed deposits, debt mutual funds, and sovereign gold bonds*). Hence, the paper aims to determine the factors and the role of gender in the investment decision of a risk-averse investor investing in less-risky instruments.

1.1. Literature Review

Most studies were conducted on investment decisions related to low-risk as well as high-risk. Some studies revealed that among the safest forms of investment, the investors still prefer gold. *Ranganathan, 2006* concluded in his research that an average Indian investor is a novice in the financial market. Because of the absence of opportunity and proper understanding, investors prefer mutual funds instruments due to the professional management of funds and risk diversification. But, there are so many investment options based on the risk and return characteristics of an instrument. So, this article is an attempt to explore the factors for the investment decisions of a risk-averse investor.

Sanjeet Kumar & Prashant Kumar (2020) conducted an exploratory study on 400 women investors in the Haryana region and identified seven factors such as socio-cultural factors, personal factors, market-related factors, economic factors, investment-specific factors, firm-related factors, and accounting-related factors that influence the decision of investment of women investors.

Satish, Sweta & Deepak Verma (2019) studied women's financial planning for their retirement on the socio-demographic factors and psychological constructs. The study was based on 151 articles and concluded that most of the literature shows a need for financial planning and management among women.

Sudindra and Naidu (2019) concluded in their study that investment in the sovereign gold bond is superior to the other gold forms because of their superiority in terms of the purchase price, higher holding period return, the regularity of return, easy exit option, and tax deduction. However, the study also revealed that it is not suitable for all types of investors.

Ninan (2018) revealed through his study that although investment in sovereign gold bonds is preferable in the current scenario, the investors of Kerala still prefer to buy gold in physical form because of low awareness of the scheme in Kerala. The study emphasized that the scheme can be popular by increasing public understanding through efficient selling strategies such as tax benefits.

Mohinder Singh (2018) examined the investor perception towards saving schemes in Himachal Pradesh and revealed that most of the salaried class of society is tending towards the post-office scheme. The reason behind this is the safety and security of return as guaranteed by the government and various tax incentives. The study also revealed that the main investment instruments are recurring deposits, post office saving banks, and monthly-income schemes. Friends and relatives are considered the major source of information for investment.

Sirajuddin & Satish (2017) investigated that understanding of financial products also increases with age. This study was based on primary data of women investors for Hyderabad city. The cross-analysis showed that 88% of the respondents are saving money other than tax saving purposes, and 56% felt that bank fixed deposits are the safest investment. In contrast, only 7% of the respondents purchase shares and bonds.

Sarwar & Afaf (2016) examined the difference between psychological and economic factors influencing an investor's decision. The factor analysis technique is used to realize essential factors that contribute to mental and economic factors. The study shows a substantial connection between mental and economic factors with an investor's decision-making, and mental factors affect the investor's decision more than economic factors. The study exhibited a significant relationship between monthly income level and the investor's investment decision and depicts that male investors invest more than female investors.

Marwaha & Arora (2014) conducted a study on 241 respondents of Punjab to know the variables influencing investment decisions in fixed deposits. The weighted average score method identified investors investing in fixed deposits because of regular income, future security, the safety of principal amount, and taxation benefit. Religious reasons and rumors are the least while investing in stocks by individual investors.

In their study of Karnataka, Rekha & Imtiyaz Ahamed (2013) showed that gold was the most preferred investment option for the investors of Tumkur district like the safety of their investments paralleled with the best possible return. The second-best investment alternative for bank deposit customers is fixed deposit based on safety, low-risk and static return. The study found that while making investment decisions, the investor analyzes every information available to invest his savings.

Kaushal & Kinjal Bhatt (2012) conducted a structured questionnaire-based study to investigate the preferences of the different classes of investors towards their investment avenues and their risk capacity. The study found that maximum investors prefer fixed deposits as an investment avenue because of the lesser risk involved. They also revealed that investors having less income prefer insurance as well because it is easy to understand.

Manoj Kumar Dash (2010) concluded in his study that investors today are mature individuals and prefer investment options based on risk preference. The investor with a low-risk appetite chooses life insurance, fixed deposit in banks/post offices, public provident funds and, a national saving certificate. The study also concluded that investors do not make blind decisions for making investment choices rather, their preferences were based on the information sourced from reference groups and other sources. The investor prefers multiple factors and pursues varied knowledge before making any investment decision.

Kasilingam & Jayabal (2009) investigated that investors' perception was influenced by the risk carrying capacity and the investment range towards investments in secured instruments. The survey for this study

was based on the teachers of government colleges and universities of Tamil Nadu. The discriminated analysis in the study shows that the investor's perception is positive when there is good service and the best return during the investment tenure; otherwise, it is negative. Some of the studies also revealed that investors are risk-averse and prefer the safe and secured form of instruments that provide a regular income. In light of the above studies, regardless of so much voluminous research on investor behavior, the role of gender on the factors influencing the investment decisions on less-risky instruments has not been fully addressed. Therefore, a gender-based attempt has been made to explore the factors influencing investment decisions for a risk-averse investor who invests his maximum savings in less-risky instruments such as fixed deposits, bonds, debt mutual funds, etc.

1.2. Objectives of the Study

In the present era, investors are not sure about the return from the equity market due to the impact of COVID-19. So, this gender-based study can be helpful for financial sector, especially for banking industry (*deals with less-risky instruments*), as they can plan their instruments according to the customers' needs. For this, the following are the objectives of the study -

1. To recognize the factors contributing to investment decisions towards less-risky instruments (*fixed deposits, debentures, bonds, and the debt category of mutual funds*).
2. To find out the difference in the factors affecting the investment decisions towards less-risky instruments based on gender.
3. To recognize the most and least dominant factors that affect investment decisions towards less-risky instruments on a gender basis.

2. Method

The base of this study is the complete responses of 1145 investors from the Uttarakhand state, India, who invested the maximum amount of their savings in less-risky instruments such as bonds/debentures, fixed deposits, debt mutual funds and, sovereign gold bonds. The study depends upon primary as well as secondary sources. The primary data collection is related to socio-economic and demographic characteristics and was done with the help of a pre-tested structured questionnaire using convenience sampling technique. Out of 1562 complete responses from this area, 73.30% (1145) of investors go with less-risky instruments, and only 26.70% (417) of equity investors invested the maximum amount of their savings. The secondary data has been collected from a research survey related to low-risk investments. Out of 1145, nine hundred thirty-four investors preferred fixed deposits, one-hundred forty-two investors chose the debt category of mutual funds, forty-three preferred sovereign gold bonds, and only twenty-six investors selected bonds/debentures for investing their maximum savings in less-risky instruments (figure 1). Likert five-point psychometric response scale was done to know the level of agreement of the investor towards their low-risk investment decisions. This study is limited to the Uttarakhand state of India. Therefore, the findings of the results couldn't be generalized for other locations. Even, the role of gender is remained unclear due to the lack of female responses regarding less-risky instruments (figure 3). Further, this research can be expanded to test other hypotheses based on different demographic/socio-economic variables, which can be more

precise for industry related to financial sector to modify the features of less-risky instruments according to customers' needs.

Figure 1: Distribution of Less-risky Instruments among Total Respondents

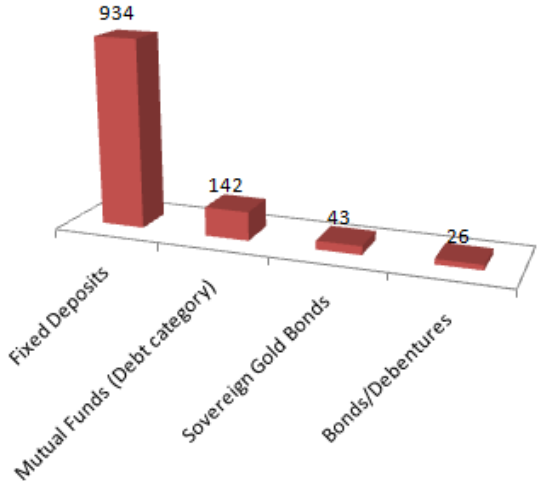


Figure 2: Distribution of Less-risky Instruments among Male Investors

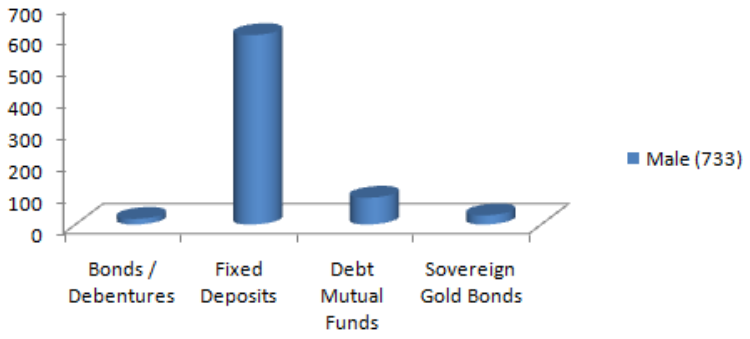
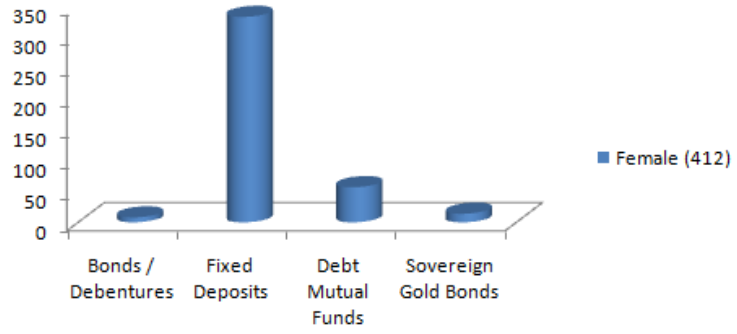


Figure 3: Distribution of Less-risky Instruments among Female Investors



4. Findings and Discussions

Table 1 gives a breakup of bonds/debentures, fixed deposits, debt mutual funds, and sovereign gold bonds based on demographic factors, namely gender, occupation, and marital status of the respondents. The investors gave maximum preference for fixed deposits, i.e., 81.60%. In contrast, the minimum choice of the investors from this area was for bonds/debentures while investing their maximum savings in less-risky instruments. Out of the total sample of 1145, 64.02% of investors are male, and 35.98% constitute female (figure 2 and 3). Study shows that the preference for investing their savings in debt mutual funds is 2.2% more than males. The maximum number of investors, i.e., 535, belongs to the salaried class individual, of which 82.4% prefer their investment on fixed deposits. Married respondents preferred sovereign gold bonds, whereas unmarried respondents preferred the debt category of mutual funds and debentures.

Table 1: Demographic Characteristics of Investors (Risk-averse)

		Bonds / Debentures	Fixed Deposits	Debt Mutual Funds	Sovereign Gold Bonds	Total
Gender	Male	18 (2.5%)	601 (82.0%)	85 (11.6%)	29 (4.0%)	733
	Female	8 (1.9%)	333 (80.8%)	57 (13.8%)	14 (3.4%)	412
Occupation	Salaried	7 (1.1%)	535 (82.4%)	82 (12.6%)	25 (3.9%)	649
	Business	7 (3.7%)	160 (84.7%)	14 (7.4%)	8 (4.2%)	189
	Self-Employed	11 (4.2%)	203 (77.8%)	39 (14.9%)	8 (3.1%)	261
	Retired	1 (2.2%)	36 (78.3%)	7 (15.2%)	2 (4.3%)	46
Marital Status	Married	12 (1.8%)	573 (84.1%)	67 (9.8%)	29 (4.3%)	681
	Unmarried	14 (3.0%)	361 (77.8%)	75 (16.2%)	14 (3.0%)	464
Total		26 (2.3%)	934 (81.6%)	142 (12.4%)	43 (3.8%)	1145

Source: Author's findings.

3.1. Reliability of Measurement Scales

Reliability test was done on sixteen statements related to investment decisions such as return, retirement planning, tax savings, friends or family advice, rating of instruments, etc., for investing the maximum amount of their savings. The researcher has also checked the reliability of the data gathered through the investors. The Cronbach's α is 0.746, which indicates that the data is reliable. For this scale, the KMO measure is 0.818, which means high adequacy (*Kaiser, 1958*). Bartlett's Test of Sphericity showed a significance level. Both tests evidenced that sample was suitable for factor analysis (*Table 2*).

Table 2: Cronbach's Alpha, KMO and Bartlett's Test

Cronbach's alpha coefficient (α)		0.746
Kaiser-Meyer-Olkin(KMO) Measure of Sampling Adequacy		.818
Bartlett's Test of Sphericity	Approx. Chi-Square	2776.602
	Df	36
	Sig.	.000

Source: Author's findings.

3.2 Results of Factor Analysis

The principal component factor analysis using varimax rotation was done to recognize the factors influencing risk-averse investors' investment decisions. Out of the total, seven statements/items were reduced due to low factor loadings (values below 0.5 are unacceptable; *Kaiser, 1974*). The remaining items were summarised to three factors with eigenvalues of more than 1.0 were taken for subsequent analysis. Three factors have been identified by the factor analysis that explains 64.84% of the variation in data. *Factor 1* had the maximum share (22.326% with an eigenvalue of 2.009) of variance, whereas the *third factor* had the least share (20.676% with an eigenvalue of 1.861) of variance for nine statements. Since the eigenvalues of the factors were greater than one and the factor loading of every item was close to one, the factorial validity related to investment decisions in bonds/debentures, fixed deposits, debt mutual funds, and sovereign gold bonds are satisfactory. The three factors and their loadings are -

Table 3: Factor Extraction Results

Component	Factor Loadings	Eigen Values	(%) of Variance	Cumulative (%)
Factor 1				
I always talk about money management with my family members	.808	2.009	22.326	22.326
Parents provide me guidance about what to do with my savings	.726			
I always consider my investment with my family members	.803			
Factor 2				
I invest due to a variety of thoughts	.792	1.965	21.837	44.163
Regularly, I put my savings aside for the future needs	.758			
I have a clear understanding of how to invest my savings	.710			
Factor 3				
I always search for investment options for my financial growth	.621	1.861	20.676	64.839
I always prefer the safety of my principal amount	.829			
I prefer a diversified portfolio of my investment	.807			

Source: Author's findings.

Table 4: Reliability test

S.No.	*Construct*	*Cronbach's Alpha*
1	Family Member's Opinion	0.742
2	Future Security	0.709
3	Return	0.695

Source: Author's findings.

For a reliability check, the resulting Cronbach's alpha values were high and sufficient in *Table 4 (Hulin, Netemeyer & Cudeck, 2001*). Hence, the reliability coefficients for all three factors indicate an acceptable dependency of each factor.

Factor 1, named *Family Member's Opinion (FMO)*, was associated with three items (Cronbach's alpha = 0.742) and explained variance of 22.326 percent. This factor was leading and its loading pattern indicates that the investor discussed his money matters to his family members before investing the maximum amount of his savings. Instead of targeting an individual, this factor highlights family members' role like spouses/parents and children in financial decisions (*Jinhee Kim, Michael & Taylor, 2017*).

Factor 2, incorporated with three items linked to the *Future Security* of the respondent (Cronbach's alpha = 0.709) and accounted for an additional variance of 21.837 percent. The loading pattern of this factor indicates that the investor invests his savings regularly due to the variety of thoughts and feelings (Debra *Grace, Weaven & Ross, 2010*). Here, the factor loading for the understanding of investment decisions is low compared to the other items.

Factor 3 included three items associated with the *respondent's Return* (Cronbach's alpha = 0.695) and explained variance of 20.676 percent. The loading pattern of this factor indicates that the investors don't want to lose their savings. He prefers a diversified portfolio on taking his investment decisions in less-risky instruments. In this regard, an experiment-based study on gender differences for risk-taking capacity was conducted and disclosed that women are not risk-taker (*Charness & Gneezy, 2012*).

3.3 Hypothesis Testing

H1 Gender of respondents has no significant impact on factors influencing investment decisions towards less-risky instruments.

The responses of three factors, namely *Family member's opinions (FMO), Future security, Return* with the gender perspective of the respondents towards the investment in bonds/debentures, fixed deposits, debt mutual funds, and sovereign gold bonds, were tested using the normality test by *Shapiro-Wilk Tests*. The results rejected the null hypothesis of this test means the factors did not fulfill the normality assumption ($p<0.05$). The summarised result are as follows -

Table 5: Tests of Normality

		Shapiro-Wilk Tests		
	Gender	Statistics	Df	P-value
Family Member's Opinions	Male	.933	733	.000
	Female	.908	412	.000
Future Security	Male	.893	733	.000
	Female	.936	412	.000
Return	Male	.959	733	.000
	Female	.964	412	.000
*The above values are calculated at a 5% significance level.				

Source: Author's findings.

Table 6: Gender Differences in Low-risk Investment Decisions

Factors	Gender	N	Mean	SD	Mean rank	Mann-Whitney U	Sig. level
Family Member's Opinion	Male	733	6.4352	2.59049	589.63	138808.50	.022*
	Female	412	6.0388	2.35188	543.41		
Future Security	Male	733	5.7435	2.32231	553.30	136557.50	.006*
	Female	412	5.9806	2.08683	608.05		
Return	Male	733	6.9304	2.56911	564.20	144551.00	.226
	Female	412	7.0995	2.53103	588.65		

Source: Author's findings.

After the normality test, the *Mann-Whitney U-test* was applied to study the gender diversity for investing in less-risky instruments (bonds/debentures, fixed deposits, debt mutual funds, and sovereign gold bonds) in terms of factors affecting a risk-averse investor. As illustrated in *Table 6*, there is a significant gender diversity regarding the *family member's opinion** and *future security** as the p-values are smaller than the 5 percent significance level.

Table 7: Test Statistics for Friedman Test

	Male	*Female*
Mean Rank		
Factor 1	2.01	1.83
Factor 2	1.73	1.83
Factor 3	2.26	2.34
N	733	412
X^2	134.334	91.503
Df	2	2
Asymp. sig.	0	0

Source: Author's findings.

The *Friedman ANOVA test* was applied to examine the significant difference between factor scores on all three factors based on gender. The results show a significant difference in factor scores because the p values were smaller than 0.05. The return is the most for both genders, and *future security* is the least influencing factor affecting the investors' decisions towards less-risky instruments (*Table 7*).

4. Conclusion

The study finds different factors that influence an investor's decisions on investing the maximum amount of savings in less-risky instruments such as bonds/debentures, fixed deposits, debt mutual funds, sovereign gold bonds, etc. The study shows 81% of investors invest their savings in fixed deposits but recently, the interest rate on various deposits scheme are slashed up to 1% by the Indian Government, so there is an immediate need to focus on sovereign gold bonds by banks, especially for a female investor. The data

collected from the survey is analyzed using PCA to extract the underlying factors that influence the decisions of a *risk-averse investor*. Factors that influence their investment decisions were identified as the *Family member's opinions, Future security, and Return*. In this area, *females* are more positive towards debt mutual funds, whereas *males* preferred debentures and sovereign gold bonds as their second-best alternative in less-risky instruments. The *Friedman ANOVA test* was used for ranking factors based on gender and revealed that the *return* is the most influencing factor.

In contrast, *future security* is the least influencing factor for both genders. The study also shows that the investment decisions of males towards *less-risky instruments* are also affected by their family member's opinions. The study also shows that only 2.3% of investors invest in the bond market. The present study is based on the extraction of factors so it can be helpful for marketers dealing with *less-risky instruments*, especially for the banking sector that influence the decisions of a *risk-averse investor* in the present situation of the economy in this Covid-19 pandemic on investing the maximum amount of savings in less risky instruments.

References

Bajtelsmit, V. (1999). Gender differences in defined contribution pension decisions. Financial Services Review, 8(1), 1–10.

Bartlett, M. S. (1950). Tests of significance in factor analysis. British Journal of Psychology, 3, 77–85.

Bhatt, K. A., & Bhatt, K. (2012). Effects of investor occupation and education on choice of investment: An empirical study in India. International Journal of Management, 29(4), 439-453.

Charness, G., & Gneezy, U. (2012). Strong evidence for gender differences in risk-taking. Journal of Economic Behavior and Organization, 83(1), 50–58.

Dash, M.K. (2010). Factors influencing investment decision of generations in India. International Journal of Business Management Economics Reviews, 1(1), 15-26.

Grace, D., Weaven, S., & Ross, M. (2010). Consumer retirement planning: An exploratory study of gender differences. Qualitative Market Research, 13(2), 174–188.

Hulin, C., Netemeyer, R., & Cudeck, R. (2001). Can a reliability coefficient be too high? Journal of Consumer Psychology 10,(1), 55-58.

Kabra, G., Mishra, P., & Dash, M. (2010). Factors influencing investment decision of generations in India: An econometric study. Asian Journal of Management Research, 4, 308-328.

Kasilingam, R., & Jayabal, G. (2009). A study on the perception of investors towards small saving schemes. Paradigm, 13(2), 1-12.

Kim, J., Gutter, M. S., & Spangler, T. (2017). Review of family financial decision making: Suggestions for future research and implications for financial education. Journal of Financial Counseling and Planning, 28(2), 253–267.

Kumar, S., & Kumar, P. (2020). Perception of women towards indian stock market with reference to demographic factors. Researchers World : Journal of Arts, Science and Commerce, 11(1), 9-17.

Kumar, S., Tomar, S., & Verma, D. (2019). Women's financial planning for retirement: Systematic literature review and future research agenda. International Journal of Bank Marketing, 37(1), 120–141.

Marwaha, K., & Arora, S. (2014). Variables influencing preferences for stocks (high-risk investment) vis-à-vis fixed deposits (low-risk investment): A comparative study. International Journal of Law and Management, 56(4), 333–343.

Ninan, A. A. (2018). Sovereign gold bond scheme: An alternative to physical gold investment in Kerala. International Journal of Management Studies, 5(3), 77-83.

Pant, K. & Oberoi, K. (2020). Strategic influence of factors influencing equity investment decisions: Shares and mutual funds. Indian Journal of Economics and Business, 19(2), 203-214.

Ranganathan, K. (2006). A study of fund selection behaviour of individual investors towards mutual funds with reference to Mumbai city. Paper presented at 9th Capital Markets Conference, Indian Institute of Capital Markets, Mumbai, India.

Rekha & Imtiyaz, A. (2013). Perception and behavior of bank deposit investors in Tumkur, Karnataka. Vidyaniketan Journal of Management and Research, 1(1), 28–34.

Samuelson, P. (1969). Lifetime portfolio selection by dynamic stochastic programming. The Review of Economics and Statistics, 51(3), 239-246.

Sarwar, A., & Afaf, G. (2016). A comparison between psychological and economic factors affecting individual investor's decision-making behavior. Cogent Business and Management, 3(1), 1-18.

Singh, M. (2018). Investor's perception towards post office small saving schemes: A case study of Himachal Pradesh. Finance India, 32, 585-606.

Sirajuddin, M., & Kumar, P. (2017). A study on financial literacy of women in Hyderabad City (Telangana). International Journal of Trend in Scientific Research and Development, 2(1), 1100-1108.

Sudindra, V. R., & Naidu, J. G. (2019). Is sovereign gold bond is better than other gold investment? International Journal of Management Studies, 6(2), 101-104.