

Investment Behaviour of Engineers towards Mutual Funds: An Analysis of Gender Differences

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ABSTRACT

There has been theoretical as well as applied evidence about gender differences in investment behaviour and investor perceptions. The present study investigates the important factors for choice of mutual funds and critically analyses the satisfaction level for various mutual fund schemes. Mutual fund is a retail product designed to target small investors, salaried people and others who are intimidated by the mysteries of stock market but like to reap the benefits of stock market investing. At the retail level, investors are unique and a highly heterogeneous group and their fund/scheme selections also widely differ. The study favours Asset Management Companies for designing suitable products to meet the changing financial needs of the investors. Thus, examination of a sample of 200 (83 females and 117 males) investor engineer respondents discerned the differences in the choice of mutual funds and its likely implications on future investment for male and female engineer investors. A higher level of awareness and satisfaction among the male respondents was observed in the study. The results of the study will have some useful implications for the engineers in selecting investment products and for Asset Management Companies for their product designing and marketing.

Keywords: Mutual fund, asset management companies, mutual fund schemes, shares, investors, investment avenues, gender differences

INTRODUCTION

The mutual fund is a vehicle that enables millions of small and large savers spread across the country as well as internationally to participate in and derive the benefits of the capital market growth. It is an alternative

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vehicle of intermediation between the suppliers and users of investible resources (Tripathy, 2006). It is a special type of institutional device or an investment vehicle through which the investors pool their savings which are to be invested under the guidance of a team of experts in a wide variety of portfolios of corporate securities in such a way, so as to minimise risk, while ensuring safety and steady return on investment. It forms an important part of the capital market, providing the benefits of a diversified portfolio and expert fund management to a large number, particularly small investors (Tripathy, 1996).

The capital market's development depends on the willingness of the investing public to invest in capital market instruments. Such willingness of investors, in turn, depends on their satisfactory past investment experience. There was a relatively high level of satisfaction with respect to investment in equity shares (SEBINCAER, 2000; Gupta *et al.*, 2001; Gupta, 2005). The satisfaction level was reported low with regards to investment in mutual funds (SEBI-NCAER, 2000; Singh & Vanita, 2002; Singh, 2003; Gupta *et al.*, 2001; Gupta, 2005). The highest unsatisfactory investment experience was found for private-sector bonds (Gupta *et al.*, 2001; Gupta, 2005). The household investors' selection of investments is based on their judgment about the overall suitability of each investment avenue. A comparison of the responses of all available studies shows a similar pattern; the safety considerations dominated the overall suitability criterion

(SEBINCAER, 2000; Gupta & Choudhury, 2001; Gupta *et al.*, 2001; Singh, 2003; Gupta, 2005).

Market penetration achieved by mutual funds was found to be much lower than equity shares for all age classes (Gupta *et al.*, 2001; Singh, 2003). The service class showed inclination to invest in equity shares (SEBI-NCAER, 2000; Mittal & Vyas, 2008). The incident of investing in real estate and bullion has been the highest among business class (Mittal & Vyas, 2008). Verma (2008) found that mutual funds were popular amongst professionals, students and self employed. Retirees showed risk aversion by not investing in mutual funds and/or in equity shares (Verma, 2008).

In recent years, the financial world has seen a dramatic increase in the number of women in professional investment positions such as institutional investment positions and security analysts (Graham *et al.*, 2002). Psychological research demonstrates that in areas such as financial decision making, women have different outlook and preferences than men (Schumell, 1996). Several studies have confirmed that differences in confidence are greatest for tasks perceived to be in the masculine domain (Deaux & Emswiller, 1974; Lenney, 1977; Beyer & Bowden, 1997). Men are inclined to feel more competent than women do in financial matters (Prince, 1993). Barber and Odean (2001) also concluded that in areas related to finance, men exhibit more confidence than women. Women tend to be less confident in their ability to make the right financial decisions (Schumell,

1996). In fact, a number of studies have shown that the economic well-being and financial behaviours of men and women differ significantly. Women hold lower levels of wealth and have significantly lower earnings than men. In addition, men hold more of their retirement savings in risky assets (Bajtelsmit & Bernasek, 1996).

With regard to mutual funds, both female and male investors are expected to have lower levels of investment in this avenue with increasing age. Female investors tend to display less confidence in their investment decisions and hence have lower satisfaction levels (Davar & Gill, 2007). Lewellen *et al.* (1977) reported that men spend more time and money on security analysis, rely less on their brokers, make more transactions, believe that returns are more highly predictable, and anticipate higher possible returns than do women. In all these ways, men behave more like overconfident investors than women. Barber and Odean (2001) reported that women hold slightly, but not dramatically smaller, common stock portfolios.

The risk differences in the common stock portfolios held by men and women are not surprising. There is considerable evidence that men and women have different attitudes toward risk. Karabenick and Addy (1979), as well as Zinkhan and Karande (1991) observed that men have riskier preferences than women. Certain studies have found that women invest their financial resources more conservatively and are more risk averse than men (Bajtelsmit *et al.*,

1996; Bajtelsmit & Van Derhei, 1997; Hinz *et al.*, 1997; Embrey & Fox, 1997; Grable, 2000; Hallahan *et al.*, 2004; Faff *et al.* 2008; Neelakantan, 2010; Fisher, 2010). A number of studies have found that the investment and retirement saving behaviours of women and men differ (Bajtelsmit *et al.*, 1996; Bajtelsmit & VanDerhei, 1997; Embrey & Fox, 1997; Hinz *et al.*, 1997). A number of researchers have studied differences in income, poverty, and asset accumulation by gender (see Blau & Kahn, 1997; O'Neill, 2003), but only a few researchers have examined the differences in general gender saving behaviours (Sunden & Surette, 1998). Therefore, the present study is an attempt to study gender differences in respect to the factors affecting the choice of mutual funds and satisfaction experienced by investing in different avenues.

MATERIALS AND METHODS

Objectives of the Study

The objectives of the study are:

- To compare the differences in satisfaction regarding investment in different avenues between female and male investors; and
- To analyse the factors affecting the choice of mutual funds by the male and female investors.

Hypotheses

Keeping in view the objectives of the study, an attempt was made to test the following hypotheses:

- H1: There are differences in satisfaction regarding investment in different investment avenues between male and female respondents.
- H2: There is a significant gender difference in the factors affecting the choice of mutual funds.

Research Methodology

Pre-structured questionnaire developed by the researchers after reviewing some previous work (see Sultana, 2010; Davar & Gill, 2009; Al-Tamimi & Hussein, 2005; Singh & Chander, 2004; Singh & Vanita, 2002; Gupta *et al.*, 2001; SEBI-NCEAR, Investor Survey, 2000) was used to determine the perceptions of the engineer respondents regarding mutual funds. The examination of a sample of 200 (83 females and 117 males) investor engineer respondents discerned the differences in the choice of mutual funds. In terms of geographical location, the scope of the current study was restricted to Shimla. It is fairly well-known from the available facets of the residents of Shimla that only certain segments of the population are of direct interest for the present study. As such, the focus for collection of data was on the subjectively but relevant segments of the population. The responses were measured using a six-point scale constructed on the basis of Likert scale anchored by 'Extremely Satisfactory' (1), Reasonably Satisfactory (2), Moderately Satisfactory (3), Unsatisfactory (4), Extremely Satisfactory (5) and Can't Say/Not Applicable (6). The scale was also used to measure the scale ranging from 'Extremely Important' (1)

to Can't Say/Not Applicable (6). Research hypotheses have been tested by invoking one-way analysis of variance (ANOVA). The ANOVA procedure shows statistical differences between female and male investors at 0.05 level of significance.

RESULTS AND DISCUSSION

Preference of Investment in Shares

It can be concluded from Table 1 that 75.49% of the male respondents and 27.55% of the female respondents preferred investing in mutual fund schemes, followed by 26.47% of the male respondents and 4.08% of the female respondents preferred investing in secondary market equity shares, and 25.49% of the male respondents preferred investing directly in initial public offerings of equity shares, whereas no female respondent preferred investing in initial public offerings of equity shares. It could be concluded from analysis of the table that comparatively, the male respondents preferred investing directly in equity shares and also through mutual fund schemes, whereas the females were rather reluctant to invest in shares.

TABLE 1
Preference for Investment in Shares

Schemes	Male	Female
Only Through Mutual Fund Schemes	75.49	27.55
Directly in Equity shares-IPO's	25.49	0
Directly in Equity shares-secondary	26.47	4.08

Note: Figures are in percentages

Level of the Respondents' Satisfaction for Different Investment Avenues

The respondents' satisfaction level for investment in different avenues is shown in Table 2. The results confirm the statistical difference between male and female respondents for the satisfaction after the investment. The results obtained indicated that the male investors enjoyed more satisfaction by investing in different avenues as compared to their female counterparts. Analysis of the table also reveals that investors are not satisfied after investing in a large majority of investment options. Further analysis of the table demonstrates that the male investors were moderately satisfied after investing in shares (M=3.40), but feeling unsatisfied after investing in the mutual fund income schemes (M= 4.16), tax saving mutual fund schemes (M= 4.63), mutual fund indexed schemes (M= 4.74), mutual fund growth schemes (M= 4.81) and government bonds (M= 4.84). In particular, the male investors were found to be highly unsatisfied after investing in equity linked saving schemes (M= 5.46), mutual fund balanced schemes (M= 5.60), money market mutual funds (M= 5.86), industry specific mutual fund schemes (M= 5.92), mutual fund sectoral schemes (M=5.92) and Gilt-edged funds (M= 5.95).

Meanwhile, the female investors were shown to be unsatisfied after investing in the mutual fund income schemes (M= 4.0), shares (M= 4.08), tax saving mutual funds (M= 4.30), equity linked saving schemes (M= 4.33), mutual fund income schemes (M= 4.49), government bonds (M= 4.71),

mutual fund indexed schemes (M= 4.79) and industry specific mutual fund schemes (M= 4.88). These female investors were highly unsatisfied after investing in the mutual fund balanced schemes (M= 5.18), gilt-edged funds (M= 5.77), money market mutual funds (M= 5.81), mutual fund sectoral schemes (M=5.84) and company debentures (M= 5.97). The satisfaction level among the male and female respondents was found to be significantly varied for their investments in shares (F= 8.16; $p < 0.05$), mutual fund growth schemes (F= 8.006; $p < 0.05$), equity linked saving schemes (F= 21.76; $p < 0.05$) and industry specific mutual fund schemes (F= 23.41; $p < 0.05$). Thus, the following hypothesis:

H1: There are differences in satisfaction regarding investment in different investment avenues between the male and female respondents may be accepted.

Investors' Views Regarding Returns Vis-a-Vis Time Duration

Ippolito (1992) says that fund/scheme selection by investors is based on past performance of the funds and money flows into winning funds more rapidly than they flow out of losing funds. Goetzman (1997) states that there is evidence indicating that investor psychology affect fund/scheme selection and switching. From Table 3, it is observed that both the genders have similar views for the statement that equity shares give higher returns than fixed income investments vis-à-vis time duration. The

TABLE 2
Respondents' level of satisfaction after investing in different investment avenues

Variable	Mean		SD		F Statistics	Sig.
	Male	Female	Male	Female		
Shares	3.40	4.08	1.66	1.66	8.16	.005*
Mutual Fund Growth Scheme	4.81	4.00	1.77	2.13	8.006	.005*
Mutual Fund Income scheme	4.16	4.49	2.05	1.95	1.300	.256
Mutual Fund Balanced Scheme	5.60	5.18	0.94	1.66	4.193	.042*
Money Market/Liquid Mutual Fund	5.86	5.81	0.69	0.71	0.298	.586
GILT-edged	5.95	5.77	0.34	0.92	2.695	.102
ELSS	5.46	4.33	1.29	1.93	21.76	.000*
Tax Saving Mutual Fund Scheme	4.63	4.30	2.02	2.06	1.26	.262
Industry Specific Mutual Fund Schemes	5.92	4.88	0.48	1.91	23.41	.000*
Mutual Fund Index Schemes	4.74	4.79	1.82	1.85	0.033	.857
Mutual Fund Sectoral Schemes	5.92	5.84	0.46	0.77	0.757	.392
Government Bond	4.84	4.71	1.90	2.03	0.194	.660
Company Debentures	5.83	5.97	0.89	0.27	2.63	.106

* The differences are significant at 5 percent level

TABLE 3
Investors' views for the belief that equity shares give higher returns than fixed income investments vis-à-vis time duration

Variables	Mean		F Statistics	Significance
	Male	Female		
Short term	1.72	1.53	3.19	0.07
Medium term	1.99	1.86	1.26	0.27
Long term	1.91	1.93	0.05	0.82

* The differences are significant at 5 percent level

mean values for the male (M= 1.72) (M= 1.99) (M= 1.91) and female respondents (M=1.53) (M= 1.86) (M=1.93) signified that the respondents agreed to the view that fixed income securities give them higher returns than equity shares irrespective of the time period, reflecting the risk aversion of the respondents.

TABLE 4
Factors affecting choice of mutual funds

Variable	Mean		SD		F Statistics	Sig.
	Male	Female	Male	Female		
Strong possibility of capital appreciation	2.52	2.55	1.22	1.20	0.019	.890
Better annual dividend income	3.11	2.45	1.31	0.99	14.54	.000*
Your previous experience as a client	3.62	2.40	1.70	1.30	29.81	.000*
Friends suggestion	3.81	3.79	1.04	1.19	.011	.196
Agent's recommendations	2.82	2.65	1.17	0.90	1.21	.271
Advertising	3.21	2.68	1.53	1.02	7.42	.007*
General reputation and popularity	2.60	1.98	1.50	0.96	10.86	.001*
Schemes suiting your needs	3.91	4.22	1.99	1.94	1.22	.269

* The differences are significant at 5 percent level

Respondents' Perceptions of the Factors Affecting the Choice of Mutual Funds

Table 4 demonstrates the mean difference analysis of factors affecting choice of mutual funds with respect to gender. The respondents rated a large number of factors as important while making choice of mutual funds. It is inferred that the male respondents rated strong possibility of capital appreciation (M= 2.52) as the most important factor, followed by general reputation and popularity (M= 2.60) and agents' recommendations (M= 2.82). The male respondents rated the following factors, better annual dividend (M= 3.11), advertising (M= 3.21), past experience (M= 3.62), friends suggestions (M= 3.81) and schemes suiting needs (M= 3.91), as not so important factors while making the choice of mutual funds. On the contrary, the female respondents rated general reputation and popularity (M= 1.98) as very important factors, followed by previous experience as

a client (M= 2.40), better annual dividend income (M= 2.45), strong possibility of capital appreciation (M= 2.55), agents recommendations (M= 2.65) and advertising (M= 2.68). However, friends' suggestions (M= 3.79) and schemes suiting needs (M= 4.22) were rated as unimportant by the female respondents. Based on a further analysis of the table, it can be said that the following factors, past experience as a client (F= 29.81; $p < 0.05$), better annual dividend income (F= 14.54; $p < 0.05$), general reputation and popularity (F= 10.86; $p < 0.05$) and advertising (F= 7.42; $p < 0.05$) affecting the choice of mutual funds, were found to be significantly different between both the genders. Thus, the following hypothesis:

H2: There is a significant gender difference in the factors affecting choice of mutual funds may be accepted.

CONCLUSION

The present study was an attempt done to understand the perceptions of mutual fund investors in relation to schemes preference and selection. In this study, an attempt to analyse the satisfaction level was carried out based on the respondents' perceptions.

Therefore, the study is relevant and timely, given the increasing importance of female investors. In brief, the main highlights of the study are:

- Male investors enjoy more satisfaction by investing in different avenues as compared to their female counterparts.
- There is a consensus between the genders regarding satisfaction in money market mutual funds, indexed mutual funds and government bonds.
- A significant difference was observed for the satisfaction from investments in shares, mutual fund growth schemes, mutual fund balanced schemes, equity-linked saving schemes and industry specific mutual fund schemes, which are perceived to be more risky investments. The female respondents are more risk averse as a response of a large majority of them for these investments was inclined towards can't say/not applicable response.
- Examination of the means between the two genders revealed that investors' selection is based on their judgement about the overall suitability of investment avenues as both have inclined their

responses for a large majority of almost all the factors affecting the choice of mutual funds towards importance scale. However, they differ significantly for the factors such as better annual dividend income, previous experience as a client, advertising and general reputation and popularity. The study also acknowledges that the female respondents based their choice of investment largely on the factors like previous experiences and publicity.

The results of the study have some significant implications to the investors and asset management companies of mutual funds. In particular, mutual fund industry should recognise the wisdom of targeting female investors as a separate market segment. In addition, any future research could replicate this study with a larger sample and wider coverage.

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