



## FINANCIAL BEHAVIOR AND INVESTMENT DECISION: A GENDER PERSPECTIVE STUDY

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### **Abstract**

*Since the last part of the twentieth century, women have become a significant part of our nation's workforce and this has eventually resulted in more socio-economic independence of women in India. With economic empowerment, financial behaviour of women has changed and slowly and gradually they started making their own financial/investment decisions. The present study made an attempt to examine if there was any difference in financial behaviour and investment decision-making across gender. The study was based on a sample of 60 respondents – 30 males and 30 females – residing in Guwahati city. Analysis of data revealed that men tend to differ from women with regard to long-term financial goal setting, active saving, choosing financial products etc. Further, it was found that the investment choice of both the gender groups was more or less similar with majority of the respondents preferring to invest in fixed/recurring deposits, public provident fund, life insurance policies and gold & precious objects.*

**Key words:** Gender; Financial behaviour; Investment decision.

### **Introduction**

Since the last part of the twentieth century, there had been a sharp rise in women participation in the workforce. This has eventually made women not only economically empowered but politically as well as socially. A survey of U.S. Bureau of Labour Statistics (2013) shows that today there are three times as many women acquiring

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college degrees than in 1970, and 71 percent of mothers with children under age 18 are working. Interestingly, this visible change of women participation in the workforce is seen across the globe and in 2010, The Economist wrote that “Women's Economic Empowerment is arguably the biggest social change of our time.”

The term 'women empowerment' essentially means that women have the capability and power to regulate their day-to-day lives in the social, political and economic environment. The topic happens to occupy a prominent place in government as well as private policy initiatives worldwide. Today's women are better educated, more confident and they have moved out of the age-old practice of remaining confined to the four boundaries of their home. In fact, education has played an important role in ushering this change. With increased priority given to higher education by women and also their families, their participation in various activities has increased remarkable. Some of these activities are remunerative while some are not (mostly carried with a service motive). However, in the process of increased participation of women in the workforce, the standard of living of families has improved significantly. But there remains a big question mark on women's ability in money management and financial behaviour due to their poor financial management skills (Hung, Yoong, & Brown, 2012). Research shows that gender differences in principal financial skills may result in differences in financial behaviour between the two genders, which to some extent are evident from their investment decisions and financial portfolio management. Further, it is worth mentioning that research does support the idea that women do not make investment decisions exactly like their male counterparts because they tend to be more risk-averse than men are. Byrnes, Miller, and Schafer (1999) reviewed over 150 papers on gender differences in risk perception and concluded that the literature clearly indicated that male participants are more likely to take risks than female participants. As a result of this, most of the time women remain passive investors and are virtually without any proper retirement plan or concrete future financial goals.

Thus, the present study attempts to access the financial behaviour and investment decision of both the genders and explore whether there exist any significant difference between the two groups.



### **Review of Literature**

Several studies were carried out to assess whether financial behaviour differs across genders and most of the studies have documented that there exist difference in financial behaviour of male and female investors. In a study conducted by Bernasek and Shwiff (2001), it was mentioned that gender differences is a significant factor that explains an individual's decision making. Research also supports that financial socialisation and differences in financial literacy contribute in determining gender financial behaviour. Thus, financial behaviour of an individual and investment decision-making are strongly related.

Interestingly, women are not only found to be risk averse but they also invest their financial resources more conservatively (Fisher, 2010). Today, women around the globe are well-educated, independent and financially sound, but when it come to investment and risk taking, they are found to be more risk averse than their male counterparts. (Croson & Gneezy, 2009). Women normally see risk as a threat, whereas men prefer to see risk as a challenge. In addition to risk-taking, women also exhibit reduced risk adjustment i.e., they do not have active strategy to potentially improve a high-risk situation unlike men (Wehrung, Kam-Hon, Tse, & Vertinsky, 1989). That is why, women tend to make less investment on stocks than men. A few researchers have pointed out that women's tendency for risk aversion is a result of factors such as marital status, self-perception as knowledgeable, and age (Gerrans & Clark-Murphy, 2004). In their study, Gerrans & Clark-Murphy (2004) found that single females in the younger age category are more likely to select lower risk investment options. However, married females in the younger age category had a greater likelihood of choosing the riskier option relative to married males in the older age category.

Apart from age and marital status, Beckmann & Menkhoff (2008) opine that the levels of financial knowledge and financial experiences of women and men could be a possible reason for such disparity. Empirical evidence from research work demonstrates a direct link between an individual's financial knowledge and risk tolerance. The study undertaken by Bokesova (2013) on a sample of undergraduate students highlighted that women were inclined to choose safer options in financial decisions, but these differences were statistically significant only when experience and knowledge were very high. Also in this context, it can be said that due to difference in financial



behaviour, the choice of investment options are also different. According to Barsky, Juster, Kimball & Shapiro (1997) males invest higher fraction of their financial wealth in stocks, while women prefer safer assets such as Treasury bills and saving accounts. Fellner & Maciejovsky (2007) in their study find that women prefer less volatile investments and exhibit lower market activity, e.g. they submit fewer offers and engage less often in trades. In other words, women have more inclination towards riskless investment options like term-deposits, PPF, Insurance policy, NSC etc. No doubt, these investment options are less risky but at the same time carry a low or moderate return. However, studies also point out that education/level of education may have a significant impact on risk-taking and investment decision-making. For example, the study of Johnson & Powell (1994) reveals that in a subpopulation with same level of education, men and women display similar risk propensity. Therefore, it can be said that financial knowledge has an impact on financial behaviour and financial decision-making.

Thus, there are a wide range of factors that could have a possible impact on financial behaviour and the financial decision making of individuals.

### **Objectives of the study**

The objectives of the study are

1. To examine the financial behaviour of respondents.
2. To assess whether there exists any significant difference in financial behavioural score across gender.
3. To study the investment decision of both the genders.

### **Formulation of Hypotheses of the study**

Based on the objectives of the study the following alternative hypotheses were formulated –'there is significant difference in financial behaviour of working professionals across gender in terms of considered purchase ( $H_{1a}$ ), timely bill payment ( $H_{1b}$ ), keeping watch of financial affairs ( $H_{1c}$ ), long term financial goal setting ( $H_{1d}$ ), responsible and has a household budget ( $H_{1e}$ ), active saving ( $H_{1f}$ ), choosing products ( $H_{1g}$ ) and borrowing to make ends meet ( $H_{1h}$ ).'



## Research Methodology

The study was based on primary as well as secondary data. Primary data were collected by using questionnaire and secondary data for the study were collected from various books, journals as well as e-journals.

**Sample and sample size:** The sample of the study consists of men and women working professionals (*elements*) of various organisations (*sampling units*) in Guwahati city (*extent*) between October 2016 and February 2017 (*time*). Convenient sampling technique was adopted in this study and the respondents were selected as per the convenience of the researchers and willingness of the respondents to be a part of the study. A sample of 60 respondents – 30 male and 30 female – was selected for the study.

**Designing of Questionnaire:** The questionnaire was designed by incorporating questions on financial behaviour of the respondents, awareness of various financial instruments and also on preferred investment portfolio decisions. The questions in the questionnaire are in line with the study conducted by A. Atkinson and F. Messy in 2012 for assessing the financial behaviour score. A set of questions are used, weights are assigned to each option (against a question) and finally by using a zero/one approach for answers of each question, the '*Financial Behaviour Score*' was obtained. Further, for assessing investment decisions, a few open-ended questions were used.

Prior to data collection, a pilot test was conducted on a sample of 10 (ten) respondents to ensure comprehensiveness, clarity and reliability of designed questionnaire. Inputs from the pilot survey helped in slight modification in the questionnaire so as to achieve the objectives of the study.

## Scaling techniques for Financial Behaviour Score

Financial Behavioural aspects	Scaling of Responses	Value towards final score
Considered purchase	5-point Likert Scale	1 point for respondents who put themselves at 4 or 5 on the scale. 0 in all other cases.
Timely bill payment	5-point Likert Scale	1 point for respondents who put themselves at 4 or 5 on the scale. 0 in all other cases.
Keeping watch of financial affairs	5-point Likert Scale	1 point for respondents who put themselves at 4 or 5 on the scale. 0 in all other cases.



Long term financial goal setting	5-point Likert Scale	1 point for respondents who put themselves at 4 or 5 on the scale. 0 in all other cases.
Responsible and has a household budget	Derived variable obtained from the response on whether she or her family has a budget and are responsible personally or jointly to adhere to the budget.	1 point if personally or jointly responsible for money management and has a budget. 0 in all other cases.
Active saving	Derived variable obtained from the response on whether a respondent buy any investment other than saving in current/saving account	1 point for any type of active saving (excluding letting money build up in a current account as this is not <i>active</i> ). 0 in all other cases
Choosing products	Derived variable obtained from the response on how she selects an investment opportunity.	1 point for people who had tried to shop around or gather any information. 2 points for those who had shopped around and gathered independent information. 0 in all other cases.
Borrowing to make ends meet	Derived variable obtained from the response on whether she borrows funds from elsewhere to make her ends meet.	0 if the respondent used credit to make ends meet. 1 in all other cases.

*Source: Adapted from A. Atkinson and F. Messy (2012)*

**Statistical tools:** The overall mean and the standard deviation of financial behavioural dimensions are taken into consideration and Independent t-test was carried out to test the hypotheses at 95% confidence level. SPSS 20.0 for Windows was used for this purpose.

### Findings of the study

#### Demographic profile of the Respondents

The study was based on a sample size of 60 respondents – 30 males and 30 females – who belonged to the salaried group. The table below shows the age and gender profile of the respondents





**Table 1: Demographic profile of the respondents**

Age group	Gender		Inference from Independent -t test (at 95% confidence level)
	Men	Women	
25 - 35 years	15	17	t=0.523 and p = 0.603. As p > 0.05, it can be inferred that the difference of mean values of age groups of male and female respondents is not statistically significant.
35 - 45 years	08	07	
45 - 55 years	04	04	
55 year and above	03	02	
<b>TOTAL</b>	<b>30</b>	<b>30</b>	

Source: Survey

Majority of the respondents belonged to the age-group of 25 to 35 years and the difference of mean values of age-groups of male and female respondents was not significant as revealed from Independent t-test. Further, it is worth mentioning that all the respondents were employed and interactions with them revealed that they were financial sound with enough income to make investments in various assets – both financial and real assets.

### **Financial Behaviour of the respondents**

The following financial behavioural dimensions are evaluated in order to know the financial behaviour of the respondents

#### **(a) Considered Purchase**

An individual who is financially disciplined normally evaluates before any purchase whether such a purchase is necessary or can she/he can afford to make such a purchase during that point of time. Thus, considered purchase happens to one of the important aspect of financial behaviour.

#### **(b) Timely bill payment**

Often it is perceived that individuals do not understand the importance of paying bills, especially utility bills, on time.

#### **(c) Keeping watch of financial affairs**

There are various reasons why one needs to keep an eye on financial affairs. It is important for the investor to be aware of anticipated withdrawals from an account and to check statements in order to address mistakes or fraudulent activity, such as



duplicate amounts being withdrawn through computer error or unauthorised use of credit cards. Further, some individuals may not use financial products but still they need to oversee their financial affairs in order to keep their savings safe, smooth their expenditure and pay bills on time.

**(d) Long term financial goal setting**

Long term financial goals may be related to accruing money for specific expenses, such as education fees or a wedding. Alternatively they could relate to investment strategies, saving for retirement, business ideas or career progression.

**(e) Responsible and has a household budget**

Respondents are believed to be financially disciplined if they have either personal or joint responsibility for day-to-day money management decisions in their household or live in a household with a budget.

**(f) Active saving**

Saving behaviour is considered to be an important component of financial literacy, building financial security and reducing the reliance on credit. As the actual amount that a person can save, and the length of time they can keep money to one side varies immensely, the financial literacy measure focuses exclusively on whether or not respondents save money.

**(g) Choosing products**

The way people behave when choosing financial products is also an important aspect of their overall financial literacy. If people attempt to make an informed decision by shopping around or using independent advice they are more likely to choose appropriate products that meet their needs in a cost effective way, less likely to buy something inappropriate, and less likely to be subject to mis-selling or fraud. People

**(h) Borrowing to make ends meet**

It is believed that financially literate people will have strategies to smooth income flows and a tendency to avoid using credit for essentials such as food and utilities. It is understandable that it is difficult to predict future income and expenditure and can one cannot quite often prevent shortfalls in income, but a reliance on credit for basic living can become very dangerous and impossible to escape.

The financial behaviour towards various aspects of both the gender groups are shown in table 2 –





**Table 2: Financial Behaviour**

Financial Behavioural aspects	Financial Behaviour Score of				Inference from t-test		Null Hypothesis Accepted/Rejected
	Men		Women		t-value	p-value	
	Mean	SD	Mean	SD			
Considered purchase	1.2667	0.4498	1.6667	0.4795	-3.333	0.002	Null hypothesis was rejected & Alternative hypothesis was accepted
Timely bill payment	1.4000	0.4987	1.3333	0.4794	0.528	0.599	Null hypothesis was not rejected
Keeping watch of financial affairs	1.3333	0.4794	1.5667	0.5040	-1.837	0.071	Null hypothesis was not rejected
Long term financial goal setting	1.1333	0.3458	1.5000	0.5086	-3.266	0.002	Null hypothesis was rejected & Alternative hypothesis was accepted
Responsible and has a household budget	1.7333	0.4498	1.3000	0.4991	3.664	0.001	Null hypothesis was rejected & Alternative hypothesis was accepted
Active saving	1.3667	0.4901	1.7667	0.4302	-3.360	0.001	Null hypothesis was rejected & Alternative hypothesis was accepted
Choosing products	2.2000	0.8867	2.6333	0.6687	-2.137	0.037	Null hypothesis was rejected & Alternative hypothesis was accepted
Borrowing to make ends meet	1.4000	0.4983	1.7667	0.4302	-3.051	0.003	Null hypothesis was rejected & Alternative hypothesis was accepted

Based on the t-values and p-values obtained from Independent t-test, it can be said that there is a significant difference in financial behaviour of both the gender groups in terms of considered purchase, long term financial goal setting, responsible and has a household budget, active saving, choosing products and borrowing to make ends meet. Therefore, the Null Hypotheses –  $H_{0a}$ ,  $H_{0d}$ ,  $H_{0e}$ ,  $H_{0f}$ ,  $H_{0g}$  and  $H_{0h}$  are rejected and the Alternative Hypotheses –  $H_{1a}$ ,  $H_{1d}$ ,  $H_{1e}$ ,  $H_{1f}$ ,  $H_{1g}$  and  $H_{1h}$  were accepted instead. Thus, we can say that men tend to differ from women with respect to considered purchase decisions, long term financial goal setting, household budget, active saving, choosing products and borrowing to make ends meet.



On the other hand, the Null Hypotheses – timely bill payment ( $H_0b$ ) and keeping watch of financial affairs ( $H_0c$ ) cannot be rejected because in both the cases the p-values were greater the  $\alpha (=0.05)$ .

### Financial Behaviour Score

The financial behaviour score of both the gender groups are shown in the table 3 given below

**Table 3: Financial Behaviour Score of the respondents**

Financial Behavioural aspects	Financial Behaviour Score of	
	Men	Women
Considered purchase	$(22 \times 1) + (8 \times 0) = 22$	$(10 \times 1) + (20 \times 0) = 10$
Timely bill payment	$(18 \times 1) + (12 \times 0) = 18$	$(20 \times 1) + (10 \times 0) = 20$
Keeping watch of financial affairs	$(20 \times 1) + (10 \times 0) = 20$	$(13 \times 1) + (17 \times 0) = 13$
Long term financial goal setting	$(26 \times 1) + (4 \times 0) = 26$	$(16 \times 1) + (14 \times 0) = 16$
Responsible and has a household budget	$(8 \times 1) + (22 \times 0) = 08$	$(21 \times 1) + (9 \times 0) = 21$
Active saving	$(19 \times 1) + (11 \times 0) = 19$	$(7 \times 1) + (23 \times 0) = 07$
Choosing products	$(9 \times 1) + (7 \times 2) + (14 \times 0) = 23$	$(3 \times 1) + (5 \times 2) + (12 \times 0) = 13$
Borrowing to make ends meet	$(12 \times 0) + (18 \times 1) = 18$	$(23 \times 0) + (7 \times 1) = 7$
<b>Average Financial Behaviour Score</b>	<b>5.13</b>	<b>3.57</b>

The average financial behaviour score of male respondents are higher than that of female respondents. However, the average behaviour score of both the gender groups are not too high. This is because, when compared to the maximum possible score of 8, men have scored 64.13% and women have scored just 44.63% of the maximum possible score.

### Investment decision of respondents

Financial decision making can be challenging as we face numerous choices, complex tax considerations and overwhelming amounts of information. Further, investment or financial decision tends to vary from individual to individual and more significantly depends on a number of factors like age, gender, educational qualification, income and



financial goals. An attempt is made through this study to know the preferred investment options of the respondents. Table 4 below shown the preferred investment options of the respondents

**Table 4: Investment options**

Investment options	Preferred by	
	Men	Women
Fixed/Recurring Deposits	27	30
Public Provident Fund	28	27
Life Insurance Policies	30	30
Mutual Funds	18	10
Stocks/Debentures	07	03
Gold & Precious objects	25	28
Real estates	11	07
Money Market instruments	2	0

The study highlights that the preferred choice of investment options for both the gender groups are more or less same with almost all respondents purchase a life insurance policies. This is followed by Fixed/Recurring Deposits, Public Provident Fund and Gold & Precious objects. Interactions with the respondents reveal that most of them invest in different investment options with a motive to save income tax. However, a few are very much interested to ensure their financial wellbeing.

## Conclusion

Conclusively, it can be said that with women joining the workforce, they have become economically, socially and politically empowered. Today, they are much more stable to take their own decisions and also plan for their future. It is worth mentioning that there had been a lot of research carried out to find whether gender plays an important role and the results were mixed. Several studies have showed that there exists some differences in financial behaviour of men and women and this is also reflected in the present study.



However, when it comes to investment choice, both the gender groups' choice is more or less similar. Perhaps this is because we cannot overlook the fact that men and women share a number of fundamental similarities as investors and most importantly, we cannot forget that they are individuals and not types. Thus, as humans are rational beings, their investment choices are more or less similar.

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