CHAPTER-VIII

Gender and the stock market dynamics

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CHAPTER VIII

GENDER AND THE STOCK MARKET DYNAMICS

8.1 Introduction

Gender is a social construct that influences the decisions of an individual throughout the life. From the choice of food to investment decisions, every facet of life is entwined in the gendered socialization that is imparted to an individual by the society.

The stock market has been approached at as a system swayed by the dynamics of the brokers and investors upto this point in the research work. This chapter makes another dissection in this network of brokers and investors to highlight the concept of gender as an important variable.

This study seeks to probe the intricacies of secondary market investment choices made by individuals with reference to one’s gender attributes. There are various factors that influence the individuals’ participation in the stock markets. Some of them include income, age, educational qualification, investment related knowledge. The gender dynamics focused upon is predominantly confined to the group of investors. The component among the brokers has been discussed in previous sections.

This chapter seeks to probe the trading and gender dynamics in lieu with the following objectives and hypothesis:

RO 6 To find out the influence of gender on aspects like risk bearing ability, investment, participation and performance.

H₃: Women rely more on network assistance than men

H₄: Men tend to have more risk bearing attitude than woman


**8.2 Investment aptitude and gender influence dynamics**

Participation in stock markets entails an accepted level of activity. Investment aptitude is a measure that enables a concise summary of the stock market activity. Investment aptitude can be measured as a product of factors like risk and participation levels. This is discussed under the heads of participation and risk aptitude in the following sections.

**8.2.1 Participation**

The analysis of stock market participation is considered here with an intervening variable like gender. This is important because Stock market participation is an important economic outcome. As Cocco and others point out, there can be a substantial welfare loss from not participating in the stock market, as exposure to equities, and hence to premium obtained from it, may be an important determinant of the long-run return to individual savings (Cocco et al. 2005). In spite to such implications, there is substantial variation in stock market participation between individuals, especially between men and women.

A number of studies have pointed out factors for non participation, considering the factor of income and education to be constant between the genders, Benjamin (2006) shows the disparities in participation among the different genders and points out the substantial non-participation even among those who can afford to save. Kezdi and Willis (2006) speak about differences in the cognitive ability, Vissing-Jørgensen (2003), focus on the fixed participation costs, while lack of stock market awareness or social connections are studied by Hong and others.. (2004), Guiso and Jappelli 2005, study the concept of lack of trust and risk aversion

The concept of participation parity among men and women is studies here from the perspective of the stock broker. The significance of using the perspective of the broker is that as an investor, both men and women might feel they are investing in the markets in the best possible manner. As it
frequently happens, a person performing an action, will always feels that they are performing it right. This would in turn be a subjective assessment leading to bias in the information procured.

The perspective of a broker, who occupies a unique vantage point as an outsider, not belonging to the group of investors, yet, a member who has the insider information, would be much more objective. This makes the broker the right authority to speak about the participation rates, the similarities of differences in it. In this regard, the broker was asked to rate their clients in terms of participation parity based on the variable of gender. The results are summarized below.

**TABLE 8.1: WOMEN PARTICIPATION ON PAR WITH MEN (BROKERS PERCEPTION)**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>18</td>
<td>58.1</td>
<td>58.1</td>
<td>58.1</td>
</tr>
<tr>
<td>Yes</td>
<td>13</td>
<td>41.9</td>
<td>41.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

8.2.2 Risk aptitude

H₄: Men tend to have more risk bearing attitude than women

Perceived risk attitude addresses a person’s judgment (belief and opinion) towards taking or avoiding risk when making decisions under uncertain outcomes (Bernd, 2004). The classical theorists argue that differences in attitudes to risk affect the allocation of wealth between safe and risky assets, but not the particular asset selected. However, Elke and Richard (1997), assert that the decision to accept a particular asset and the willingness to pay for the asset depends on the investor’s risk perception. Investors’ perceptions of the riskiness of choice alternatives always differ significantly from individual to individual depending on a person’s beliefs, and reference point (Bottom 1990).
An investor’s perceived risk attitude is usually determined by either affect/emotions or his cognitive ability. And this makes perceived risk attitudes of investors to be more subjective rather than objective to risky situations. According to Zajonc (1980); LeDoux (1996), emotional reactions are predominant at a very early stage and are more basic than cognitive evaluations. Under such circumstances, investors are prone to unjustified beliefs and may resort to ‘rule of thumb’ hence making sub-optimal (irrational) investment decisions (Gary and Uri, 2003). Investors are therefore likely to base on psychological or social and emotional factors to make decisions. And this may affect the trading behaviour of investors in the stock market.

H₄: Men tend to have more risk bearing attitude than women

This hypothesis has two prominent variables – gender and risk. The relationship between these variables as used in this hypothesis can be represented as:

\[ R^m_i > R^w_i \]

Here \( R^m_i \) = risk index for men
And \( R^w_i \) = risk index for women

\( R^g_i \) is a function of [investment objective], [propensity for risk] and [Strategy risk]. This is represented as:

\[ R^g_i \text{ fn } [i \ obj_g, Pr_g, Sr_g] \]

Three different equations can be derived from this as:

\( \{i \ obj_m > i \ obj_f\} \) (1) [investment objective]

\( \{Pr_m > Pr_f\} \) (2) [Propensity for risk]

\( \{Sr_m > Sr_f\} \) (3) [Strategy risk]

For the purpose of computing the risk bearing attitude between the genders a risk index was prepared. The index comprised of parameters like the investment object, source of income, category of investor, borrowing to
trade, strategy for selecting stocks and borrowing to trade. The values for these variables were computed to obtain a score which was an indicator of the risk index of investors. This index is compared between the genders to test the hypothesis.

**Risk and Investment objectives:**

The investment in the stock markets is not always a risky venture. There are relatively safer methods of investing in the stock markets where the returns earned is higher than other sources of investment, yet risk free. One such option is investment in mutual funds. The risk is shared between the group members equally in this option. So the risk is less. The availability of such methods implies that one can choose to invest in such safer option than the stock market.

Therefore the concept of identifying the investment objectives is important. The difference between the investment objectives of the male and female investors shows that there are differences in the risk taken also.

**TABLE 8.2 GENDER AND INVESTMENT OBJECTIVE**

<table>
<thead>
<tr>
<th>Investment objectives</th>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Short term profit seeking</td>
<td>103</td>
<td>6</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>Steady income (dividend)</td>
<td>3</td>
<td>46</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Long term profit</td>
<td>13</td>
<td>33</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>181</td>
<td>89</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The data shows that objectives of men and women differ. While the majority of men sought short term profits, the orientation of the female
investors were towards the long term profit and steady income in the form of dividends. This shows that men tend to take more risk. \( \{ i_{obj_m} > i_{obj_f} \} \) (1)

The data in the table represents only the risk objectives included in the risk index calculation. All the objectives mentioned in the research work are represented in relation to gender in the figure below.

**FIGURE 8.1: INVESTMENT OBJECTIVES AND GENDER**
Propensity for risk was measured as a variable with the data procured from the stock brokers. In their perception, when asked who had more propensity for risk, they opined men had more propensity for risk Vis-à-Vis women. This data was further broken down into gender of the brokers and then tabulated for information. This shows that even female brokers (19.35% of the total) felt that men have more propensity for risk bearing in the stock market context. \(Pr_m > Pr_f\) (2)
Strategy for selecting stock is another indicator of the risk aptitude. It is evident from the table above that men tend to explore stocks and select stock based on gut instinct – two parameter that indicate risk – more than women do. The relatively safer options that are backed by the network assistance like going with the popular belief are chosen by women more than men. Strategy based risk $Sr$ is higher among men than women $\{Sr_m > Sr_f\}$ (3)

Based on the equations above:

$$\{i \text{ obj}_m > i \text{ obj}_f\} \quad (1)$$

$$\{Pr_m > Pr_f\} \quad (2)$$

$$\{Sr_m > Sr_f\} \quad (3)$$
8.2.3 Social Network assistance and gender

The socialization process designs a homosapiens into a social being. This process is in accordance with the norms of the society. The Indian society has emphasized the gender based division of labour which has relegated the task of fending for the family to the male members. This has a further implication in the socialization process where women are generally not taught the skills required in the financial markets.

Advice for trading in stocks is something every investor look forward to. This is because of the ambiguity of the markets. This study proposes to show that the need for assistance is felt more by women than men. As a result of which, women rely more on the networks for information at various stages of investment than men.

H$_3$: Women rely more on network assistance than men

**TABLE 8.3: RELIANCE ON FAMILY**

<table>
<thead>
<tr>
<th>Sources of market information [Family]</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>74</td>
<td>4</td>
</tr>
<tr>
<td>Many times</td>
<td>47</td>
<td>5</td>
</tr>
<tr>
<td>Sometimes</td>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td>Rarely</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Never</td>
<td>29</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>
FIGURE 8.4: WHEN HAVE YOU MADE GOOD PROFITS?

The above figure shows that the female members rely more on networks for trading. The respondents were asked when they were asked when they had made more profits. For which response of the female members for options which indicated network reliance was more when men relied the most on market analysis.

FIGURE 8.5: MEMBERSHIP IN INVESTOR COMMUNITIES

The networks of the investors are built over a period of time. The primary circle is the initial component of the network, which they is built by
including members with common interests. The figure above shows the memberships in investor communities based on gender. The significant observation here is that women rely more on exclusive communities online. This might be because of the ease of access to such communities.

**CONCLUSION:**

This chapter dealt with the dynamics of gender in the stock markets. The influence of gender on aspects like risk bearing ability, investment, participation and performance were identified and the hypothesis on reliance network assistance was proved.

The concept of risk in stock markets and the gender differential are shown. The next chapter speaks about the dynamics of time in stock markets.