The Effect of Knowledge (Especially in the Field of Economic and Commerce) on Iran's Capital Market

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Abstract

To achieve a long run and continuous economic growth, it’s necessary to equip and allocate resources optimally at the national level. On the other hand, it is impossible to achieve this goal easily unless one uses the benefits of financial markets, especially an expanded and efficient capital market. In a healthy economy, an efficient financial system may play an important role in the appropriate distribution of capital and financial resource. Different studies indicate that despite of the importance of capital market, households don’t have strong tendency to maintain stock and, therefore, they ask why most of the households don’t participate in the capital market. Regarding the importance of the topic, the present study considers the effect of individuals’ knowledge and awareness on their participation in the capital market of Iran before their entrance to it and acquiring the first experience of stock purchasing. The study in progress is a descriptive research which provides a survey of work on the investors. To collect data, it is tried to use a cluster Accidental sampling done is two stages. It is worth nothing that 268 questionnaires were completed in Tehran and five other stock exchanges such as Tabriz, Mashhad, Isfahan, Sari and Karaj. The results of a test done based on the spearman Rank-Order correlation coefficient (SRCC) and Analysis of variance (ANOVA) show that individual's education and that of their spouse may influence their participations in the capital market of Iran.
Keywords: Capital market, Participation in the Capital Market, Investor’s Education.

1. Introduction

It is believed that economic development requires accumulation of capital. Most economic trends and schools state that accumulation of capital is the primary condition for economic development. Capital market, as an organized market, has played an effective role in the mobilization of financial and capital facilities for the purpose of economic growth and development of their countries. And now, it is the sponsor of enterprises’ credits in many countries.

The appropriate performance of capital market may improve efficiency (Baier et al, 2003), investment and growth as well as increasing economic growth by reducing the retention of cash assets and increasing physical capital’s growth rate, at least in the long run (Bencivenga and Bruce, 1991).

It is worth noting that outfitting savings resources and directing it towards the economic productive activities, pricing payments and capitals, disseminating and analyzing information and distributing the economic are known as Functions of capital market (Davani, 2005).

At the same time, it is said that capital market extension and growth of its different dimensions may help to curb inflation and to fight against unemployment. All and all, capital market aims at extending employment grounds by preparing the ground for merging firms, developing economic activities- especially productive investment- and distributing investment risks and increasing the supply of new capital resources (Kadkhodāee, 2000).

Considering the role of capital market in the growth and development of countries, it also suffers from many problems in the developing countries, e.g. weak depth, thinness of globality coverage (a very low ratio in comparison with exiting capitals in economy), difficulty of being cashed in and lack of suitable coverage of business section in market, the wary and fluctuating situation of the average of the index, existence of the ground for emergence of speculating and vulnerability to disturbance and violation (Kadkhodāee, 2000).

One of the recent studies indicates that from 1984 to 1999, all households of the country not only have saved but also have suffered from budget deficit. In other words, 70 percent of the country households have suffered from budget deficit. According to the information obtained from the economic situations of these households, it becomes apparent that those little amounts of saving done by these households have not always been invested (Nakhjavani, 2000).

Regarding the ever-increasing importance of financial market (especially capital market) and since the country is in need of it in its route towards economic development, it is necessary to consider this important economic section, The aim of this study is to examine the effect of individuals knowledge and awareness on their participation in the capital market of Iran. And then to present appropriate information in the domain of participation in the capital market of Iran (before the entrance of people to the capital market), and finally to do its share in bridging the gap exists in the domain of scientific researches.

The aim of this study is to examine the effect of individuals’ knowledge and awareness on their participating in the capital market of Iran. Therefore, based on this goal, the main and peripheral questions of the present research are presented as follows:

Do the individuals’ knowledge and awareness influence their participation in the capital market of Iran?

2. Literature Review

Surprisingly, most of the households don’t invest in stock. The results of many studies point out that 51 percent of American households (Hong et al, 2004) and 72 percent of European households (Guiso and Jappelli, 2003) have held no stocks in, 1998.

But the question raised here is why many households don’t participate is the stock exchange? Findings of many researches show that learning and obtaining information about financial market may
affect one’s participation in the stock exchange. It is said that one can achieve this learning formally (through school or university) or informally (through others and previous experiences).

One study states that type and level of households’ education may affect their participation in the stock exchange. It also indicates that those individuals who have economic knowledge will most probably participate in stock exchange, since they know more about investment opportunities and risk-output trade off. In other words, those individuals who have economic knowledge are said to be less risk-averse and more optimistic (Christiansen et al, 2005).

The result of the above study (Christiansen et al, 2005) suggest that between two groups of investors, one with high economic education and the other with high revenue, the first group i.e. those with high economic education will most probably participate. Therefore, regarding this fact that investors with higher economic education participate in the stock exchange more than those with lower economic education. This research discusses the importance of the influence of the economic information rate for participating in stock exchange (Christiansen et al, 2005).

This study also (Christiansen et al, 2005) shows that economic knowledge of investor’s spouse may increase the probability of participation in the capital market. This finding is in compatible with this assumption that information is distributed among family members. On the other hand, it also confirms this assumption that economic information will increase the probability of investment in stock.

One study searching to find out whether financial educations can affect achieving financial goals & decisions or not, argues that financial educations not only increase the savings rate but also cause positive net for any households. In other words, those households who study financial educations at high school have a higher savings rate than others (Bernheim et al, 2001).

The results of another study state that obtaining financial knowledge in the workplace is increasing rapidly. Since weak financial decisions may result in sever damage, individuals are encouraged to obtain financial knowledge voluntarily (Bernheim and Garrett, 2003).

But a question raised here is whether the accessibility to financial educations in the workplace (through newspaper, taking part in seminars, distributing the financial reports of the firm, involving employees in financial activities and using counselors and financial experts) increases the rate of individuals’ savings, both the general and specific savings. Considering this question, the above study (Bernheim and Garrett, 2003) suggests that the amount of the payment stored or saved by people especially for retirement (in the form of stock or cash) is significantly above average when employees are presented with a set of financial plans.

Another research believes that individuals don’t participate in the capital market as a result of some factors such as: Education, wealth, revenue, long run relationships with bank tendency towards social interactions and national newspaper (Guiso and Jappelli, 2003).

The findings of the above (Guiso and Jappelli, 2003) research indicate that ignoring the investment opportunities is the main building block for not participating in stock. It is believed that this ignorance is as a result of the lack of awareness which is influenced by many different factors.

The results of a study researching into the domain of informal education and its effect on participation in the capital market suggest that participation in stock exchange is influenced by social interactions and also believe that social investors participate in the capital market more than others (Hong et al, 2004).

The results of the above research (Hong et al, 2004) indicates that those households who have social interactions with their neighbors or attend church may probably participate in the stock exchange more than those households who are not social. It is said that the findings of this study is compatible with the effect of colleagues on the investment decisions.

Another research argues that those investors who have previously participated in the stock exchange will most probably participate in the capital market, since they have paid costs of participation in the capital market and it seems that they have obtained more information about
investment opportunities (more than those who have not participated in the stock exchange yet) (Christiansen et al, 2005).

The above study (Christiansen et al, 2005) also indicates that those individuals who work in the financial sections (such as banks, finance of insurance companies) and those who are in self-employment and prestigious jobs (such as professor of university, medicine, etc) are more probable to participate in the stock exchange than others.

The findings of another research confirms the effect of colleagues on the individuals’ decisions about their participation in the retirement plans, indicate that individuals may learn from their colleagues or imitate them, because they lack major information for investment decision making or they try to maintain social norms, or ideas relating to the social norms exist in the workplace (Duflo and Saez, 2002).

Another study believes that investment in the retirement plans may affect the households’ financial decisions through collecting financial knowledge, and consequently it may also increase the probability of investment in the stock exchange (Weisbennner, 1999).

Another research studied 40 percent of those individuals who have not participated in the capital market come to this result that they have not had enough information about stock exchange, and therefore, they concluded that there is no particular reason for stock maintenance (King and Leape, 1987).

One question raised in the domain of stock exchange is why some individuals maintain stock but some others don’t. To answer to this question, one study states that stock ownership and the strong probability of stock holding is directly related to the level of individuals expectations (Kezdi and willis, 2003).

The results of the study indicate that the average of the maintained stock and the average of the individuals’ financial assets increase as their educations increase, too (Haliassos and Bertraut, 1995).

Since the goal of this study is to examine the effect of individuals’ knowledge and awareness on their participations in the capital market of Iran before their entrance to the capital market and obtaining the experience of the first purchase, therefore it is different from participation in the capital market after individuals’ entrance to there.

Regarding this fact that most of the researches done in the country is related to the second domain after the investor’s entrance to the capital market and the fact that there is no considerable study in the first domain before individuals entrance to the capital market of Iran, therefore, some of the researches of the country considering the second domain are presented as below:

The results of a study show that information distributed from companies may affect individuals’ investment decisions in stock (Jahankhani and Saffarri, 2003).

Considering the capital market of our country, one can find out that it is not efficient at all. It is worth noting that economic knowledge and information and the previous experiences can help individuals to make appropriate in vestment decisions (Jahankhani and Ebrahim, 2003; Namazi, 2003).

Another research states that different factors such as stock price and fluctuations relating to it, market situation and type of industry can influence the individuals’ investment decisions (Aghaee and Mokhtarian, 2004).

Another study believes that different economic macro variables such as National product and petroleum income caused per. Capita real investment to reduce. It also states that the main reason for reduction of investments in the country is arisen from economic stagnation, if we say that investment is under the influence of National production or assets (Nakhjavani, 2000).

3. Hypotheses

Regarding the available literature and research questions, the research hypotheses are presented such as below:
H1: There is a relationship between investor's education and her/his participation in the capital market of Iran.
H2: There is a relationship between education of investor's spouse and her/his participation in the capital market of Iran.
H3: The investor’s major has an effect on her/his participation in the capital market of Iran.

4. Research Method
Considering the main purpose of the present research which is to identify the factors that affect individuals’ participation in Iran's capital market, the present research, as far as purpose is concerned, is a kind of applied research; on the dimension of attention to time, It is a retrospective research; and in the light of attention to its results, it is result-oriented.

4.1. Participants
For sampling in this research first of all sample size was calculated through Kukran correlation and then sampling was done through the two-stage cluster random sampling. In other words, from among the exchange existing in the country (Tehran exchange and regional capital market), Tehran exchange and five regional exchanges of Tabriz, Mashhad, Isfahan, Karaj and Sari were randomly selected, among which investigators (as the level of analysis) were randomly selected. This research was done on investors in capital market.

To do so, Tehran stock exchange and five regional stock exchanges were randomly selected from the exchange of Tehran and the regional capital markets existing in the country. Then the statistical samples were randomly and during one week selected from those who participated in capital market. For purpose of this research 268 questionnaires were selected and used from the total of 350 questionnaires which were distributed among participants in the capital markets explained before.

4.2. Materials
Data needed for the research were gathered through questionnaire. To do so, a questionnaire containing 30 questions was designed in the form of Likert Scale in which each question had 5 scales, as it is common in the Literature. The results of the Cronbach's $\alpha$ for this questionnaire (0.85) indicate the reliability of the data gathering instrument.

4.3. Procedures
To make sure about the appropriacy of the instrument used in the research, the questionnaire was firstly pilot tested so that its deficiencies could be found. Then the precautions for the improvement of the questionnaire were exerted. The cronbach’s $\alpha$ of 0.85 indicates the ability to trust on the questionnaire.

4.4. Analysis
Since we, in this research, are trying to investigate the effect of individuals’ knowledge and awareness on individuals’ participation in Iran's capital market, the differences among the means of various levels of the independent variable (individuals’ knowledge and awareness), considering the dependent variable (Participation in Iran's capital market), must be researched. The scale for the independent variable was ordinal and in 5 levels. The scale for the dependent variable had an interval scale with 5 levels which were arranged as the following: 500 to 1500 dollars in level 1, 1500 to 4500 dollars in level 2, 4500 to 7500 dollars in level 3, 7500 to 10500 in level 4 and 10500 dollars and more in level 5.
Therefore, in order to investigate the differences among the means of these levels the ANOVA Test was used. Considering that the assumption for using this test is homogeneity of variances, the test of homogeneity variance was also used.

As mentioned before, the questionnaire was designed in the form of Likert Scale in 5 levels (from 1 to 5). The minimal level for each question was considering being 1 and the maximal level, 5.

5. The Results of Hypotheses Testing

Because in this research we are dealing with more than one hypothesis, the results, findings and discussion for each hypothesis are explained separately. Then, in the next part, we will talk about conclusions, limitations of the study and suggestions for future research.

5.1. Results of Testing \( H_1 \)

Regarding the existing literature in the domain of the variable of the investor's education and its relationship to participation in the capital market of Iran, it is believed that education can be divided into two parts i.e. formal and in formal educations and consequently two peripheral hypotheses can be stated as below:

\( H_{1.1} \): There is a relationship between investor's formal education and her/ his participation in the capital market of Iran.

\( H_{1.2} \): The investor's informal education has an effect on her/ his participation in the capital market of Iran.

Regarding the scale of the above-mentioned variables, the SRCC and ANOVA are used respectively to test those hypotheses. The results of these tests (SRCC) indicated there is a direct relationship between investor’s formal education and his/her participation in the capital market of Iran at the significance level of \( \alpha=0.01 \) (table 1).

**Table 1: The Result of Correlation Test**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Number</th>
<th>df₁</th>
<th>df₂</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation People in Iran's Capital Market</td>
<td>0.218</td>
<td>4</td>
<td>203</td>
<td>0.928</td>
</tr>
</tbody>
</table>

To test this hypothesis (1.2), considering the type of scale of variable, the Analysis of variance (ANOVA) test was used; but before using this test, the assumption of "homogeneity of group's variance" (different levels of investor’s informal education) was tested. The results of homogeneity of variances test are in Table 2.

**Table 2: The Result of the Test of Homogeneity of the Variances of Individuals’ Participation in Iran's Capital Market in Terms of the Investor’s Informal Education**

<table>
<thead>
<tr>
<th>Spearman's ρ Formal Education</th>
<th>Correlation Coefficient</th>
<th>Sig</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.466</td>
<td>0.006</td>
<td>268</td>
</tr>
</tbody>
</table>

Considering the significance level of 0.928, we conclude that different group's variances are homogeneous. Thus the assumption for using ANOVA (analysis of variance) is met. Table 3 shows, the results of the ANOVA test (F test) of participation in Iran's capital market based on the investor’s informal education.
Table 3: The Result of ANOVA Test of Individuals’ Participation in Iran's Capital Market in Terms of the Investor’s Informal Education

<table>
<thead>
<tr>
<th>Variable name</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation people in Iran's capital market</td>
<td>Between group</td>
<td>2.36</td>
<td>4</td>
<td>0.591</td>
<td>0.472</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>187.83</td>
<td>230</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>290.19</td>
<td>234</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the analysis of the variance show that this variable (investor’s informal education) has no effect on the individuals' participation in the capital market of Iran.

5.2. The Results of Testing H$_2$

*There is a relationship between education of investor’s spouse and her/ his participation in the capital market of Iran.* To test this hypothesis, SRCC is used. The results of the above test show that there is a direct relationship between the above-mentioned variables at the significance level of $\alpha=5\%$ (table 4).

Table 4: The Result of Correlation Test

<table>
<thead>
<tr>
<th>Spearman's $\rho$</th>
<th>Formal Education</th>
<th>Correlation Coefficient</th>
<th>Sig</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Formal Education</td>
<td></td>
<td>0.466</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig</td>
<td></td>
<td>0.006</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td>268</td>
<td></td>
</tr>
</tbody>
</table>

In other words, as the education level of investor’s spouse increases his/her participation in the capital market of Iran increases, too.

5.3. The Results of Testing H$_3$

*The investor’s major has an effect on her/ his participation in the capital market of Iran.* To test this hypothesis, considering the type of scale of variable, the Analysis of variance (ANOVA) test was used; but before using this test, the assumption of "homogeneity of group's variance" (different levels of investor’s major) was tested. The results of homogeneity of variances test are in Table 5.

Table 5: The Result of the Test of Homogeneity of the Variances of Individuals’ Participation in Iran's Capital Market in Terms of the Investor’s Major

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Number</th>
<th>df$_1$</th>
<th>df$_2$</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation People in Iran's Capital Market</td>
<td>1.031</td>
<td>4</td>
<td>126</td>
<td>0.395</td>
</tr>
</tbody>
</table>

Considering the significance level of 0.395, we conclude that different group's variances are homogeneous. Thus the assumption for using ANOVA (analysis of variance) is met. Table 6 shows, the results of the ANOVA test (F test) of participation in Iran's capital market based on the investor’s informal education.

Table 6: The Result of ANOVA Test of Individuals’ Participation in Iran's Capital Market in Terms of the Investor’s Major

<table>
<thead>
<tr>
<th>Variable name</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation People in Iran's Capital Market</td>
<td>Between Group</td>
<td>14.49</td>
<td>4</td>
<td>3.623</td>
<td>3.324</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>137.29</td>
<td>126</td>
<td>1.09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>151.78</td>
<td>130</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of the analysis of the variance show that the investor’s major will affect his/her participation rate in the capital market of Iran. And it should be noted that this rate is higher than others for those majoring in economic, business and engineering.

6. Summary and Concluding Remarks
Since the aim of this study is to examine the effect of individuals’ knowledge and awareness on their participation in the capital market of Iran, after reviewing the literature regarding the topic of this study, 3 hypotheses were presented to answer the research questions:

According to the first hypothesis, there is a relationship between the variable of investor’s education and her/his participation in the capital market of Iran. The findings of the field study considering the above-mentioned relationship indicate that one can find this type of relationship only at the level of formal education but not at the level of informal education.

Considering this fact that stock exchange is known as a technical market, is necessitates obtaining enough information and skill in the ground of investment and financial issues. Thus, based on the results of the research, it is expected that those individuals with formal education participate in the capital market more than others. This finding is compatible with the results of the other related researches (Guiso and Jappelli, 2003; Christiansen et al, 2005; Bernheim and Garrett, 2003; Bencivenga and Bruce, 1991).

On the other part of the first hypothesis, however, the findings of the research suggest that the investor’s informal education has no effect on her/his participation in the capital market of Iran.

Reading the data collected from those questionnaires and interviews, and in spite of the fact that investors of the capital market of Iran are logical and their investment decisions are not influenced by rumors (compatible with Aghae and Mokhtarian, 2004) most of them believe that the climate of the country’s stock exchange is unhealthy and unreliable and state that they don’t notice the idea of the executants, other investors and their colleagues in making their investment decisions. It is believed that these mentioned factors cause the informal education variable to be weakened.

They also reduce the effect of this variable on the individuals’ participation in the capital market of Iran. The results of this study is incompatible with the researches done is other countries (Christiansen et al, 2005; Duflo and Saez, 2002; Hong et al, 2004; King and Leape, 1987).

Generally speaking, the above-mentioned studies indicate that informal education developed through personal experience or that of others, will affect participation in the capital market.

The second hypothesis considers the relationship between education of investor’s spouse and her/his participation in the capital market of Iran. The findings of the research indicate that there is a direct relationship between education level of investor’s spouse and her/his participation in the capital market of Iran. In other words, as the education of investor’s spouse increases, her/his participation increases, too. This finding is compatible with the results of the other research (Christiansen et al, 2005).

The results of the above study (Christiansen et al, 2005) show that the education of investor’s spouse will affect her/his participation in the capital market. Therefore, it is expected that as the education of investor’s spouse increases, her/his participation in the capital market increases, too. And it is compatible with the literature exists in the domain of informal education and learning from others and their experiences.

The third hypothesis tests to find out whether The investor’s major has an effect on her/his participation in the capital market of Iran, or not the finding of the present study indicate that The investor’s major has an effect on her/his participation in the capital market of Iran.

The results of the study show that those individuals whose education is in Economy, business and engineering participate in the capital market more than others on average. This finding is compatible with the finding of the other research (Christiansen et al, 2005).
Considering the finding of the research, some suggestions are present below to show a way for improving the individuals’ participation in the capital market.

- Teaching financial problem and investment to the investor’s.
- Notification and comprehensive training.
- Loaning to people for stock purchasing or giving them stock.
- Teaching the issues relating to the investment in the workplace.

Regarding the participants of the present study who are investor’s, it should be noted that companies and legal entities that are investors in the stock exchange and non-stockholders are not selected for his study. On the other hand, it is tried to use only real entities that can be considered in the future researches too.

According to the topic of the research, different factors can affect the individuals’ participation in the capital market of Iran. In the present study, after studying the existing theoretical grounds, 3 variables which seem to be more important were selected and considered. Regarding this fact that some of the variables comprise different levels of variants, based on the theoretical framework, some of these variables which were more important than others were selected to test the above variables. This, with regard to the frequency of existing variables which have not examined yet, it would be better for other researchers to study other variables or to consider the present variables with different levels of variables to measure them. It can help them to increase the benefits of the findings of the present research which can be generalized to the other researches.

References


