The Relationship between Financial Flexibility and Investment Risk in Companies with Management Ownership in Iran Capital Market

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ABSTRACT

Financial flexibility means the ability of exploitative unit to provide cash in short term by receiving information about unpredicted financial needs or finding appropriate opportunities for investment. Financial flexibility is as a degree of capacity which can equip its financial resources towards reactive activates to maximize company value. The goal of this research also is to investigate the relationship between financial flexibility and investment risk in companies with management ownership in Iran capital market. For this, 79 companies among accepted companies in Iran Capital Market were selected as sample during 2010 to 2014 in order to investigate the impact of financial flexibility on investment risk in management ownership type. It should be noted that in this research, loan ratio variable is used to measure financial flexibility and finally, this research has one hypothesis. Type of this study is applicable study and research method is correlative in terms of nature and concept. This research is conducted in framework of inductive – deductive arguments. In this study, panel analysis is used to analyze the hypothesis. Finding of research show a negative and significant relationship between financial flexibility with investment risk in management ownership.

KEYWORDS

Flexibility, Financial flexibility, Risk, Investment risk, Management ownership

INTRODUCTION

Investment can be one of the fundamental pillars of economy in country. There is no doubt that increasing in production as one of the first steps in development process, will require increasing investment and therefore, some theories are proposed in economics that underdevelopment causes for some countries is lack of capital and investment and they know that lack of investment is causes to create lack of production in addition to macroeconomic consequences of investment, this is an desirable phenomenon from the perspective of investors, because in addition to maintaining the purchasing power, money against inflation causes to consider temporal value of money and rewards due to delayed consumption. That is why the investment is considered as an essential issue and vital prerequisite for progress both aspects of capital supply and demand [6].

Also in our country, in addition to the expansion and development of the capital market which stock exchange is placed in its peak, a significant portion of investors assets are in the form of stocks of accepted companies in the Stock Exchange. The nature of the commercial activities and investment is like a way that obtaining efficiency requires risk. Risk plays a key role in financial markets, so it should be recognized, measured and predicted.

On the other hand, the importance of investing for economic growth and development is into amount which can be considered as one of the powerful levers to reach to development, but it should be remembered that as much as considering this issue can cause to grow economic by falling in a positive cycle, lack of paying attention to it also can cause to decrease economies and to place in descending path. Therefore, we should say that economic growth and increasing the public welfare in long term is not possible regardless of investment and important factors in the investment environment, which effect on it [1], one of the most important and effective factors on the decision making about the relationship with the investment in a country is its risk amount. Therefore, knowing major factors which effect on investment risk is important so by which investors can plan about their investment by considering its factors and their amount and they can achieve favorable investment risk.

Flexibility plays an important role to enable the managers about investment in the future. Problems of capital market, maintaining flexibility for companies is mandatory in order to use profitable opportunities. Mirz (1977) showed that how the threats due to debt of companies may hinder using profitable opportunities, even when managers and shareholders are interested in using these opportunities [8]. Obtaining optimal resources led to the companies’ success in market, and companies can follow market opportunities
successfully and benefit from the advantages of working in the market. Managers have stated that flexibility plays an important role in enabling them about investment in the future. Based on the conducted discussion by Milër & Modogilianian (1963) and Mirz (1984), capital market issues, maintaining flexibility are mandatory and essential for companies in order to use profitable opportunities[9].

On the other hand, in Iran based on Article 44 of the constitution, major economic activities should be done by three sectors- public, private and corporative sectors. International experiences have shown that in many countries after privatization, organizations have become agile and their financial, economic and accounting performance indicators are improved and stock companies, which are engaged in economic field of countries, are born from individual development process. The process during which different types of collective economic activity patterns have been tested and finally stock company pattern (general) which is a legal framework has emerged as the dominant species. Todays, these companies by attracting more resources and converting them to goods and required services play an important role in the economy.

According to the main purpose of this study, researcher seeks to answer this question that whether financial flexibility influences investment risk with regard to management ownership in Iran capital market or not?

**Research Background**

Rapp and et.al. (2013) investigated the evaluation of financial flexibility and financial policy of companies. They concluded that the companies which have high flexibility in the view of shareholders have less dividends- they preferred stock redemption instead of dividends- and they have less loan ratio. In addition, these companies tend to accumulate cash money.

Aigbe and Anna (2008) examined the impact of disclosure and corporative governance on investment risk. They concluded that in long term increasing disclosure quality and corporative governance cause to reduce total risk and unsystematic risk due to increasing financial reporting transparency[2].

Bayon (2007) investigated the relationship among financial flexibility, leverage and firm size. The results of study show that small firms have lower leverage that this issue arises because small companies provide their sources through increasing domestic capital[3].

Maricha and Mora (2007) investigated the relationship of financial flexibility and investment decisions. The results show that there is a powerful relationship among financial flexibility and investment. On the other words, after one policy period of low leverage, firms with financial flexibility have more ability to carry out their capital costs.

Fatahi and et.al (2012) examined the impact of the stock return and the ownership structure on investment risk. They concluded that two factors- ownership structure and stock return have negative and significant relationship with investment risk[5].

Omidpur (2010) investigated the relation of 4 factors- industries, size, profitability and collateral assets with financial leverage of company. They concluded that there is a significant and inverse relationship among profitability and financial leverage and significant and direct relation with size, but there is not a significant relationship between industry and collateral assets with financial leverage of company.

Namazi and kerman (2007) investigated the effect of ownership structure on the performance of 66 accepted companies in Tehran Stock Exchange during 2003 to 2007. They concluded that there is a negative and significant relation between institutional ownership and firm performance and a positive and significant relationship between corporate ownership and firm performance. Management ownership influences on performance significantly and negatively and in private ownership is also better, corporative investors have major ownership in their hands[11].

**Research Hypotheses**

**Main hypothesis:**
There is significant relationship between financial flexibility and investment risk based on type of ownership in Iran capital market

**Sub-hypothesis:**
There is significant relationship between financial flexibility and investment risk in the companies with management ownership.

**Statistical model of study**
This model is derived from Dr. Mohammad Khodaee vahelzha ghard and et.al (2010) that is estimated as follows[7]:

To test hypothesis of “there is significant relationship between financial flexibility and investment risk in companies with management ownership”, the following model is used:

**Model of hypothesis:**

\[
\text{Investment Risk}_{it} = \beta_0 + \beta_1 \text{Lev} + \beta_2 \text{M.C} + \beta_3 \text{Size} + \varepsilon_i
\]

Components of the model are:

- Investment risk \( R_{it} \): Investment Risk
- Lev: Financial Flexibility
- M.C: Management Ownership
- IN size: Firm Size
- \( \varepsilon_i \): Error of regression model

**The study variables**

**Dependent variables:**
The variable which its changes are influenced by independent variable.

**Investment Risk:**
There are a lot of definitions about concept of investment risk. In a general definition, we can state that volatility of investment is called investment risk. On the other words, whatever the investment return have had more change, so the mentioned investment will have more risk.

In a general definition, veston and Brigam call risk as investment return volatility. Risk is stated by Marquitz (1952) as follows[10]:

\[
\text{Investment Risk} = \sqrt{\frac{\sum (R_i - E(R_i))^2}{n-1}}
\]
In this study, dependent variable is investment risk.
In above formula: $R_i$ is defined as daily actual return of stock $i$, $E(R_i)$ is expected return of stock $i$ and $n$ is defined as number of periods. It should be noted that in above formula, daily information is used to calculate risk.

**Real return of stock:**
The total earnings from investment in given period towards the investment that was spent that period.

**Independent variables:**
Independent variables are variables which affect other variables. Independent variable is a physical or social environment features which after selection and involvement of researcher, accepts some values in order to observe its effect on other variables.

**Financial Flexibility:**
It is the ability of exploitative unit to provide cash shortly after receiving information about unpredicted financial needs or finding an appropriate opportunities to invest.
Financial flexibility is ability for corrective action to remove surplus of cash payment on anticipated cash receipts with minimal impact on current and future revenue or value of stock market.
Financial flexibility is measured by financial ratio [4]:
$$\text{Lev} = \frac{\text{TL}}{\text{TA}}$$

**Control variables:**
In one search, researcher cannot study effect of all variables on each other therefore he should control some variables and neutralize them.

**Firm Size:**
Firm size is calculated by natural logarithm of book value of company’s properties.

**Modifier variables:**
It is a quantitative or qualitative variable that effects on amount or direction of the relationship between independent and dependent variables. In fact, a second variable is the independent variable which the researcher tends to control and manipulate it in order to determine the relationship between the independent and dependent variable. Modifier variables of this research include management ownership.

**Management Ownership:**
It is equal to the percentage of shares held by board members and their family.
It is calculated by sum of the percentage of shares held by executive managers or internal managers’ company.

**RESEARCH METHODOLOGY**
Study method of this research is descriptive correlative in terms of nature and content, it investigates analysis of correlation relationship using second data from financial statement of accepted companies in Iran Capital Market. This research will be done in the form of the analogic – inductive argument. The correlation method is used due to discover the correlation relationship between variables.

Correlation research is one of the descriptive researches. In the present research first, we test the correlation among the variables and if there is correlation among variables, we will estimate multiple regression model.

On the other hand, the current study is past facto (semi-experimental), i.e. it is done based on the analysis of past and historical data (financial statements of companies). Also this research is library and analytical – causality study and it is based on analysis of the panel data. This research is correlation descriptive study in terms of purpose of application and its nature and content.

**RESEARCH TERRITORY**
Research territory is as follows in terms of temporal and spatial and subjective:
This study investigates the effect of the relationship between financial flexibility, management ownership, firm size with the investment risk in the field of financial management.
This research is accepted companies in Tehran Stock Exchange and ultra-exchange (capital market) in terms of spatial.
Temporal territory of research includes a period 5 year from the beginning of 2010 to the end of 2014.

**DESCRIPTIVE STATISTICS AND ITS ANALYSIS**
In general, we can process the collected information and summarize them by some procedures that are called descriptive statistics. This type of data only descriptive sample or community and its purpose is to calculate the parameters of research sample or community.

**Tab. 1. Descriptive Statistics for research variables**

<table>
<thead>
<tr>
<th>Variables And Numbers</th>
<th>Central index</th>
<th>Dispersion index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ma x.</td>
<td>Mi n.</td>
<td>kurtosis</td>
</tr>
<tr>
<td>159</td>
<td>0</td>
<td>0.73</td>
</tr>
<tr>
<td>5.8</td>
<td>1.0</td>
<td>5.99</td>
</tr>
<tr>
<td>0.7</td>
<td>0.0</td>
<td>0.92</td>
</tr>
<tr>
<td>18.0</td>
<td>10.0</td>
<td>0.82</td>
</tr>
<tr>
<td>37.0</td>
<td>10.0</td>
<td>0.82</td>
</tr>
</tbody>
</table>

In table 1, Central indices are calculated including mean, median, dispersion measures such as standard deviation, kurtosis, skewness for different variable. Mean is larger than median and it shows that there is big points in data because mean is influenced by these values, in this cases of data distribution, skew is to the right and vice versa skew will be to the left. In general, if skewness and kurtosis are not in range (-2,2), so data do not have normal distribution.
If amount of mean and median is closed to each other, variable distribution is symmetric, this feature is very important because symmetry is one of the normal
distribution features which will be discussed in the next section( kurtosis and skewness of normal distribution is zero).amount of skewness and kurtosis is 0.65 and 0.73 for dependent variable of Inv.RISK which shows that its distribution does not deviate from normal distribution, i.e., variable of distribution is symmetric and distribution of this variable is similar to normal distribution. Skewness of Lev variable is to the right and distribution of other variables is relatively symmetric.

However, symmetry and overall normality of independent and control variables are not as default of regression or panel model, but the description of these variables is important in this study and other variables are symmetrical.

Amount of standard deviation shows amount of distribution that if two variables have the same unit, so that variable which has less standard deviation, it has less distribution and or more accuracy.

**TEST OF STUDY HYPOTHESIS**

The purpose of study hypothesis is to investigate flexibility and investment risk of company but statistical hypothesis of test is stated as follows:

$$H_0: \beta_1 = \beta_2 = \ldots = \beta_5 = 0$$

$$H_1: \beta_i \neq 0 \quad i = 1,2,3,4,5$$

The t statistics for Lev is 10.21 (positive and sig.) , for Mc is -2.05 (negative and significant) , and for size is -1.94 (insignificant).

Now, with regard to this case that in this study index of financial flexibility measurement is Lev (loan ratio) and according to this case that there is an inverse relation between leverage and financial flexibility , therefore with respect to the outcome of this hypothesis, we can say that there is a negative and significant relation among financial flexibility and investment risk, it means that if financial flexibility increases (decrease), investment risk will decrease (increase).

**CONCLUSION**

With respect to the study hypothesis:

There is significant relationship between flexibility and investment risk in management ownership.

**The result of test:**

According to table2, based on the used model in the study hypothesis, model without impacts (combined) and t statistics is 10.21 for Lev (+ and sig.) and for MC is -2.05 (negative and sig.)And for size is -1.94 (insignificant). T statistics is -7.50 for constant value which this value is in the rejection area of null hypothesis, i.e., intercept is significant and determination coefficient is 23%.

Now, with regard to this case that in this study index of financial flexibility measurement is Lev (loan ratio) and according to this case that there is an inverse relation between leverage and financial flexibility , therefore with respect to the outcome of this hypothesis, we can say that there is a negative and significant relation among financial flexibility and investment risk, it means that if financial flexibility increases (decrease), investment risk will decrease (increase).

**Research Proposals:**

Poroposals from the results of this research

1. According to the study hypothesis test and based on the significant and negative relationship between financial flexibility and investment risk in management ownership in an almost identical cases, and given that investors in an investment have attention to two important case including return and risk and since risk and expected return have direct relationship and whatever risk of stock exchange increases, investors’ expected return increases, therefore it is suggested to the investors that in selecting expected stocks, regardless of the type of ownership , they consider more financial ratios including debt ratio which is representing financial flexibility, which in turn is a mirror of risk.

2. According to the result of hypothesis, based on the negative and significant relation between financial flexibility and investment risk in type of management ownership, and it means an indirect relation between flexibility and risk, so it is suggested to the investors who seek low risk that they should seek companies’ stock which have more flexibility.
3. According to the result of study hypothesis based on the negative and significant relationship between financial flexibility and investment risk in type of management ownership and since financial flexibility influences on investors’ decision in terms of technical and emotional, and it cause to change stock price and then investment risk, and that risk again is considered by shareholders as a cycle, therefore, it is proposed to the managers that they follow changing or modifying flexibility strategies of their company.

REFERENCES


