Studying the Opportunity Investment set and financial analysis of the value of listed companies in Tehran Stock Exchange

Azadeh Afzali*, Khosro FaghaniMakerani

Department of accounting, Sari branch, Islamic Azad University, Sari, Iran

ABSTRACT

The purpose of this study was to evaluate the opportunity investment set and financial analysis of listed companies in Tehran Stock Exchange. The purpose of this research is in the area of applied research and it is a descriptive-survey based on the nature and methods. According to the scope of space and time, statistical population of listed companies in Tehran Stock Exchange were chosen from 2009 to 2013 with 64 companies as study samples. The results of the analysis indicated that there was no significant relationship between the internal financial autonomy and the book value per share as well as between the distribution of dividends and book value per share for listed companies in Tehran Stock Exchange. But there was a significant relationship between long-term and short-term debt with the book value per share as well as between the commercial debt and book value per share for listed companies in Tehran Stock Exchange.

Keywords: Opportunity Investment Set, Financial Structure, Company’s Value.

INTRODUCTION

Companies need financial resources for new investment and to finance their projects and in order to maximize shareholder wealth, they must determine the best combination of resources or the company's financial structure. The way of financing company is important for individuals and institutions and it is also important that companies use how much debt or stock to provide their finance assets, because it could affect the decisions of creditors about that company. Banks on the one hand and individuals on the other hand, seek what the company's financial structure is. In addition, having an optimal financial structure is important for companies, which to take loans or issue new shares on appropriate time.

The financial structure is a combination of debt and shareholders' equity, which companies provide their finance by it. The financial structure is a combination of long-term sources of funds used in the company and changes in this composition can change the company's cost of capital. The main objective of financial structure decisions is to make an appropriate combination of long-term funds in order to minimize the company's cost of capital and thereby maximize the company Value. This composition is called optimal financial structure.

The company's financial structure is the company's permanent finance, which is shown by long-term debt and shareholders' equity. Financial structure includes short-term and long-term...
Studying the Opportunity Investment set and financial analysis of the value of...

debts as well as shareholders' equity. Therefore, the financial structure is a part of the financial structure 3.

The financial structure of a company is its debt to the company’s capital. A company that uses debts is called Leverage Company 4.

Methods of financing for the continuation of activities and implementation of profitable projects are very effective in companies’ growth process and make companies to continue to be in competitive markets. Financing is done in different short-term and long-term ways and companies can provide their financial resources from inside (retained earnings) or outside the company (equity or debt). The main objective of the companies is to increase corporate value and maximize shareholder wealth and for this purpose they use several methods to help them achieve this.

Opportunity Investment set

Growth opportunities reflect the company's investment potential and profitability. Opportunity Investment set do not occur spontaneously but it should be created. Various forms of opportunity investment set may be arising from different levels of management decisions of different parts of the company. Some opportunity investment sets may be provided by the senior management of the organization or the board of directors. Involvement of senior management in providing opportunity investment set usually promises ensure to strategic decisions such as the development of the company’s activity through dividend policy Entering to new markets or developing markets for products (domestic and international) or limiting changes in the exchange rate that leads in the interests of the company. In addition to economic factors, other factors such as social, technology, political and legal processes could have a significant impact on the performance of companies in an industry 5. Investors seek to maximize their wealth. Growth opportunities are the driving force and motivation and they are considered as rewards for investors.

Raising professional awareness in the field of investment along with the development of communication technology has led capital suppliers to invest in companies with the possibility of greater gains. Whatever makes a success in the current situation is the efficient use of available opportunity investment set, which the factors affecting the company's performance should be identify. Timely and rational use of opportunity investment set of business units’ has a significant impact on improvement of companies’ performance.

In the meantime, investors should always consider the risk in their investment decisions, because whatever makes a success is the use of available opportunity investment set, for this purpose, the fiscal policy effective on creating growth opportunities in the business units should be identified.

Today, the accounting information systems provide the available necessary information for users in less time to be used in decision-making.

Investment funds in various assets are only a part of the overall decision-making and financial planning that most individuals do. Before individuals invest on something, they should have an outline. Such a plan should include decisions on the transaction, the ownership, longevity and profitability of assets. The statement of the opportunity investment set requires analysis of the nature of investment decisions. In this case, the activities related to the decision-making process are analyzed and the important factors that affect their decision-making are considered. Thus, investors are looking for higher yields and the relationship between risk and investment yield are examined 5.

Opportunity investment set do not occur spontaneously, but they should be identified or be created and different kinds of opportunity investment set may come from different levels of the company. Some Opportunity Investment set may be presented by senior management or the board members. Involvement of senior management in providing Opportunity Investment set
usually is limited to strategic actions such as the development of the company through financial policies and entry into new markets. Considering that Opportunity Investment set is led to the allocation of financial resources in order to earn money or reduce costs, therefore regular and disciplined fiscal policies for Opportunity Investment set may be implemented by the company.

**Financial structure**

The aim of determining financial structure is to determine the composition of financial resources of a company in order to maximize shareholder wealth since cost of company's capital is considered as a function of financial structure hence Selection of the optimal financial structure would reduce the cost of company’s capital increase its market value.

Not surprisingly, Myers assimilated the company's financial structure like a puzzle and Kamath called it as a secret and The Economist Magazine called it as mystery. Cooper defines the financial structure as the ratio of older securities (with higher rates) to the total investments. Hussy believes that the financial structure is the balance between common stock, preferred stock and related subsidiaries, retained earnings, and company's combined debt, which the business unit uses it to finance its assets.

A company’s financial structure is a combination of short-term and long-term debts as well as rights of shareholders, which the company’s assets is financed that includes left items of balance sheet.

**Company Value**

Determining the company value is one the important factors in the investment process. The value of any company is determined according to its stock value. Therefore, the investor with respect to the company value identifies his/her investment priorities. Financial decisions (financial structure) is one the factors affecting the company's stock value.

There are several concepts to determine the value of financial assets: Nominal value, book value, market value, liquidation value, perpetuity value, and intrinsic value of a company's stock.

Evaluation of companies is the necessity of planning for managers and investors. Evaluation represents how the strategy and financial structure affect the company's stock market value. Company’s value for shareholders, investors, managers, creditors and other stakeholders is important for their evaluation of the company and its impact on estimating risk and investment yield as well as stock prices in the future.

**Study hypothesis**

1. There is a significant relationship between the financial autonomy and book value per share of listed companies in Stock Exchange.
2. There is a significant relationship between the debt and book value per share of listed companies in Stock Exchange.
3. There is a significant relationship between the short-term debt and book value per share of listed companies in Stock Exchange.
4. There is a significant relationship between the commercial debt and book value per share of listed companies in Stock Exchange.
5. There is a significant relationship between the distribution of dividends and book value per share listed of listed companies in Stock Exchange.


**Studying the Opportunity Investment set and financial analysis of the value of ...**

**METHODOLOGY**

In this study, Opportunity Investment set and financial structure including financial autonomy, Long-term debt, short-term debt, commercial debt and distribution of dividends are independent variables.

- \( \frac{\text{Total assets}}{\text{Total equity}} = \text{ratio of financial autonomy} \) \( RAFG \)
- \( \frac{\text{Total assets}}{\text{long-term debt}} = \text{debt ratio} \) \( RIT \)
- \( \frac{\text{Total assets}}{\text{Short-term financial debt ratio}} = \text{short-term debt} \) \( RITS \)
- \( \frac{\text{Total assets}}{\text{commercial debt ratio}} = \text{commercial debt ratio} \) \( RDC \)
- \( \frac{\text{Special dividend}}{\text{payable dividend}} = \text{distribution of dividend} \) \( RDD \)

In this study, the dependent variable is the company value model.

\( \frac{\text{Total equity}}{\text{book value}} = \text{mathematically stocks value} \) \( BVpSh \)

The statistical population of this study is all listed companies in Tehran Stock Exchange, which are not a part of banks, investment companies (financial intermediation) (due to different cash flow) and the end of fiscal period is March as well as the company's financial information is available for the period of investigation.

Companies included in the study are all listed companies in Tehran Stock Exchange which have the following conditions:

1. The end of fiscal year was March.
2. They were not a part of financial intermediation and investment firms and banks.
3. Their data was available.
4. They had a continuum presence in Iran stock since 2009.
5. They did not change the fiscal year during the study period.

<table>
<thead>
<tr>
<th>482</th>
<th>The total number of listed companies in Tehran Stock Exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>(109)</td>
<td>The number of inactive companies in the Tehran Stock Exchange</td>
</tr>
<tr>
<td>(52)</td>
<td>Banks and intermediation and investment firms</td>
</tr>
<tr>
<td>(94)</td>
<td>Companies whose fiscal year did not end to March</td>
</tr>
<tr>
<td>(22)</td>
<td>Companies that had changed the fiscal year</td>
</tr>
<tr>
<td>(15)</td>
<td>Companies that were not available</td>
</tr>
<tr>
<td>190</td>
<td>Adjusted population</td>
</tr>
</tbody>
</table>

According to the mentioned conditions, a total of 190 companies were selected and entered to the kokran-kohiki formula that is used to calculate the sample size:

\[
\frac{N \cdot d^2}{N \cdot d^2 + 2pq} = \frac{N \cdot (d^2 + 2pq)}{N \cdot d^2 + 2pq}
\]

In the above formula, usually the maximum permissible error \( (d) \) is 0.05, reliability coefficient is 0.95, \( t=1.96 \) and values of \( p \) and \( q \) are 0.5 and population size is considered as \( N \). \( P \) values are equal to 0.5. If \( P=0.5 \), then \( n \) gets the maximum possible amount, which leads to a large enough sample. The study is based on this formula, 64 sample companies had been set, which we selected 64 companies in this study.

The purpose of this research is in the area of applied research. Applied research aimed to the development of practical knowledge in a particular field. Studying established relationship between a series of independent variables (factors) and one dependent variable (result) as well as establishing laws which lead these relationships (mathematical relationship estimate), are done using complex linear regression analysis. Relationships between dependent and independent variables can generally be stated by a function of \( y=f(x_1, x_2, \ldots, x_n)+\epsilon_1 \), where \( y \) is the dependent variable and \( x_{i,i}=1...n \) is the independent variable.
According to the data collection methods, the following tools are used in this study:

1. To gather information about literature, results of previous studies, definitions of variables and other Information gathered from documents, the note taking method was used.

2. To gather information and other documents, the tools of books, magazines, articles, and digital libraries as well as Softwares and CDs related to the companies’ financial information that had been released through the Tehran Stock Exchange and also Internet sites were used.

The variables to test the hypothesis of the study were calculated using the expressed models and Spss statistical software was used to analyze data. By examining the expressed working hypotheses based on this method, the estimated regression coefficients are suggested for the following models:

\[ BVpSH = \beta_0 + \beta_1 \text{RAFG} + \beta_2 \text{RIT} + \beta_3 \text{RITS} + \beta_4 \text{RDC} + \beta_5 \ln (\text{RDD}) \]

To achieve the objectives of the study and authenticating the working hypotheses, we can use the assigned data analysis, which the most widely used ones are ratio analysis, complex linear regression analysis (return) and linear regression analysis with alternative independent variables of Ancova. With regard to financial analysis, ratio analysis is a method of analysis that includes independent variables.

Identifying and quantifying the established relationships between a dependent variable and linear combinations of alternative qualitative variables is measured by numeric variables, which is based on the complex linear regression analysis with numerical and alternative independent variables. Whatever is known as Ancova in a private literature, intends to assay the effect of a qualitative variables (in this case, activity field) on the outcome variable (financial, power).

**RESULTS**

**Testing first hypothesis**

H0: There is not a significant relationship between the ratio of financial autonomy and book value per share of listed companies in Stock Exchange.

H1: There is a significant relationship between the ratio of financial autonomy and book value per share of listed companies in Stock Exchange.

The following regression model is used to test the first hypothesis:

\[ BVpSH = \beta_0 + \beta_1 \text{RAFG} + \beta_2 \text{RIT} + \beta_3 \text{RITS} + \beta_4 \text{RDC} + \beta_5 \ln (\text{RDD}) \]

The results of first hypothesis based on the model testing are presented in Table 1.

<table>
<thead>
<tr>
<th>Model 3</th>
<th>Partial Correlation</th>
<th>Tolerance</th>
<th>standard coefficients</th>
<th>T</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
<td>Beta</td>
<td>.363</td>
<td>-.051</td>
<td>-.528</td>
<td>.598</td>
</tr>
<tr>
<td>RAFG</td>
<td>-.032</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The dependent variable: BVpSH
Studying the Opportunity Investment set and financial analysis of the value of ...

Based on the first hypothesis model, if the coefficient $B_1$ is significant, then the first hypothesis is accepted. As it can be seen in Table 1, the significance level ($\text{sig}$) of t-statistic for this variable is equal to 0.598, which is more than the acceptable error level of 0.05. Hence, the significant relationship between the combination of financial autonomy and book value per share of listed companies in Stock Exchange is rejected.

**Testing second hypothesis**

H0: There is not a significant relationship between the debt ratios (long-term) and book value per share of listed companies in Stock Exchange.

H1: There is a significant relationship between the debt ratios (long-term) and book value per share of listed companies in Stock Exchange.

The following regression model is used to test the second hypothesis:

$$\text{BVpSH}=\beta_0 + \beta_1 \text{RAFG} + \beta_2 \text{RIT} + \beta_3 \text{RITS} + \beta_4 \text{RDC} + \beta_5 \ln (\text{RDD})$$

Total equity/book value = mathematical value of stock BVpSh

Total assets / long-term debt ratio = debt RIT

The results of second hypothesis based on the model testing are presented in Table 2.

<table>
<thead>
<tr>
<th>Model 3</th>
<th>Non-standard coefficients</th>
<th>standard coefficients</th>
<th>T</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
<td>B error</td>
<td>Beta</td>
<td>Beta</td>
<td>Beta</td>
</tr>
<tr>
<td>RIT</td>
<td>-114.202 35.741</td>
<td>-.189</td>
<td>-3.195</td>
<td>.002</td>
</tr>
</tbody>
</table>

The dependent variable: BVpSH

Based on the second hypothesis model, if the coefficient $B_2$ is significant, then the second hypothesis is accepted. As it can be seen in Table 2, the significance level ($\text{sig}$) of t-statistic for this variable is equal to 0.002, which is less than the acceptable error level of 0.05. Hence, the significant relationship between the long-term debt ratios and book value per share of listed companies in Stock Exchange is accepted.

**Testing third hypothesis**

H0: There is not a significant relationship between the short-term debt ratios and book value per share of listed companies in Stock Exchange.

H1: There is a significant relationship between the short-term debt ratios and book value per share of listed companies in Stock Exchange.

The following regression model is used to test the third hypothesis:

$$\text{BVpSH}=\beta_0 + \beta_1 \text{RAFG} + \beta_2 \text{RIT} + \beta_3 \text{RITS} + \beta_4 \text{RDC} + \beta_5 \ln (\text{RDD})$$

Total equity / book value = mathematical value of stock BVpSh

Total assets / long-term debt ratio = debt RIT

The results of third hypothesis based on the model testing are presented in Table 3.

<table>
<thead>
<tr>
<th>Model 3</th>
<th>Non-standard coefficients</th>
<th>standard coefficients</th>
<th>T</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
<td>B error</td>
<td>Beta</td>
<td>Beta</td>
<td>Beta</td>
</tr>
<tr>
<td>RITS</td>
<td>-41.356 17.988</td>
<td>-.155</td>
<td>-2.299</td>
<td>.022</td>
</tr>
</tbody>
</table>

The dependent variable: BVpSH

Based on the third hypothesis model, if the coefficient $B_3$ is significant, then the third hypothesis is accepted. As it can be seen in Table 3, the significance level ($\text{sig}$) of t-statistic for
Afzali and FaghamiMakerani., 2015

this variable is equal to 0.022, which is less than the acceptable error level of 0.05. Hence, the significant relationship between the short-term debt ratios and book value per share of listed companies in Stock Exchange is accepted.

**Testing fourth hypothesis**

H0: There is not a significant relationship between the commercial debt ratio and book value per share of listed companies in Stock Exchange.

H1: There is a significant relationship between the commercial debt ratio and book value per share of listed companies in Stock Exchange.

The following regression model is used to test the fourth hypothesis:

\[
B\text{VpSH}=\beta_0+\beta_1\text{RAFG}+\beta_2\text{RIT}+\beta_3\text{RITS}+\beta_4\text{RDC}+\beta_5\ln(\text{RDD})
\]

Total equity / book value = mathematical value of stock BVpSh
Total assets / commercial debt = commercial debt ratio RDC

The results of fourth hypothesis based on the model testing are presented in Table 4.

<table>
<thead>
<tr>
<th>Model 3</th>
<th>Non-standard coefficients</th>
<th>standard coefficients</th>
<th>T</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
<td>B</td>
<td>error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>RDC</td>
<td>128.942</td>
<td>34.039</td>
<td>.252</td>
<td>3.788</td>
</tr>
</tbody>
</table>

The dependent variable: BVpSH

Based on the fourth hypothesis model, if the coefficient \(\beta_4\) is significant, then the fourth hypothesis is accepted. As it can be seen in Table 4, the significance level (sig) of t-statistic for this variable is equal to zero, which is less than the acceptable error level of 0.05. Hence, the significant relationship between the commercial debt ratios and book value per share of listed companies in Stock Exchange is accepted.

**Testing fifth hypothesis**

H0: There is not a significant relationship between the distribution of dividends and book value per share of listed companies in Stock Exchange.

H1: There is a significant relationship between the distribution of dividends and book value per share of listed companies in Stock Exchange.

The following regression model is used to test the fifth hypothesis:

\[
B\text{VpSH}=\beta_0+\beta_1\text{RAFG}+\beta_2\text{RIT}+\beta_3\text{RITS}+\beta_4\text{RDC}+\beta_5\ln(\text{RDD})
\]

Total equity / book value = mathematical value of stock BVpSh
Special dividend / payable dividends = distribution of dividends RDD

The results of Fifth hypothesis based on the model testing are presented in Table 5.

<table>
<thead>
<tr>
<th>Model 3</th>
<th>Non-standard coefficients</th>
<th>standard coefficients</th>
<th>T</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
<td>B</td>
<td>error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Ln RDD</td>
<td>-.058</td>
<td>.971</td>
<td>-.056</td>
<td>-.949</td>
</tr>
</tbody>
</table>

The dependent variable: BVpSH

Based on the fifth hypothesis model, if the coefficient \(\beta_5\) is significant, then the fifth hypothesis is accepted. As it can be seen in Table 5, the significance level (sig) of t-statistic for...
Studying the Opportunity Investment set and financial analysis of the value of ...  

this variable is equal to 0.344, which is more than the acceptable error level of 0.05. Hence, the significant relationship between the distribution of dividends and book value per share of listed companies in Stock Exchange is rejected.

Table 6. Descriptive statistics of variables used in main models.

<table>
<thead>
<tr>
<th>variable</th>
<th>number</th>
<th>mean</th>
<th>median</th>
<th>standard deviation</th>
<th>variance</th>
<th>skewness</th>
<th>elongation</th>
<th>minimum</th>
<th>maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>The mathematical value of shares</td>
<td>320</td>
<td>30.33</td>
<td>.3406</td>
<td>1.41900</td>
<td>2.014</td>
<td>59.73</td>
<td>3.566</td>
<td>-29.42</td>
<td>577.25</td>
</tr>
<tr>
<td>financial autonomy ratio</td>
<td>320</td>
<td>.448</td>
<td>.3406</td>
<td>1.41900</td>
<td>2.014</td>
<td>59.73</td>
<td>3.566</td>
<td>-1.15</td>
<td>298.384</td>
</tr>
<tr>
<td>Long-term debt ratio</td>
<td>320</td>
<td>.1233</td>
<td>.0614</td>
<td>.38767</td>
<td>.09</td>
<td>1.41900</td>
<td>1.11061</td>
<td>.00</td>
<td>220.190</td>
</tr>
<tr>
<td>Short-term debt ratio</td>
<td>320</td>
<td>.6544</td>
<td>.0737</td>
<td>.38767</td>
<td>.09</td>
<td>1.41900</td>
<td>1.11061</td>
<td>.00</td>
<td>160.759</td>
</tr>
<tr>
<td>Commercial debt ratio</td>
<td>320</td>
<td>.4591</td>
<td>.2826</td>
<td>.84806</td>
<td>.09</td>
<td>1.41900</td>
<td>1.11061</td>
<td>.00</td>
<td>47.900</td>
</tr>
</tbody>
</table>

For each of the model variables, parameters such as mean, standard deviation, minimum, maximum, skewness and elongation of variables are shown in table (6).

According to the above table, features of research variables are somewhat identified and all variables can be analyzed from a statistical point of view. The study sample included 64 companies, which the related data were collected for the 5-year study period.

All variables in Table 6 are data related to years 2009 to 2013 and variables were equaled by total assets.

In addition, the results of presented descriptive statistics showed that all study variables had a proper distribution according to mean and median.

Analytical findings

Conclusions based on the first hypothesis
According to the results, the first hypothesis states that there is not a significant relationship between the ratio of financial autonomy (RAFG) and book value per share (BVpSh) of listed companies in Tehran Stock Exchange.

Conclusions based on the second hypothesis
According to the results, the second hypothesis states that there is a significant relationship between the long-term debt ratios (RIT) and book value per share (BVpSh) of listed companies in Tehran Stock Exchange.

Conclusions based on the third hypothesis
According to the results, the third hypothesis states that there is not a significant relationship between the short-term debt ratios (RITS) and book value per share (BVpSh) of listed companies in Tehran Stock Exchange.

Conclusions based on the fourth hypothesis
According to the results, the fourth hypothesis states that there is a significant relationship between the commercial debt ratio (RDC) and book value per share (BVpSh) of listed companies in Tehran Stock Exchange.

Conclusions based on the fifth hypothesis
According to the results, the fifth hypothesis states that there is not a significant relationship between the distribution of dividends (RDD) and book value per share (BVpSh) of listed companies in Tehran Stock Exchange.
CONCLUSION

Based on the conducted analysis, in this research and according to the results of Mironiuc et al16 in Romania, the results of first, second, third, fourth and fifth were.

Opler and Titman17 by examining the relationship between financial structure and the company value not in accordance concluded that financial leverage affects the efficiency and the company value, which is in accordance with results of this study.

Sinayi et al14 in a study titled “the impact of growth opportunities on the relationship between financial structure, dividends and ownership structure with company value” found that there was a significant relationship between the financial structure (leverage) and dividends and is consistent with our results.

Soleimani amiri and Ram18 by studying the Factors affecting the financial structure of small and medium companies found that there was a negative relationship between the liquidity variables and growth opportunities with financial structure of small and medium companies, as well as other variables including systematic risk, share prices and profit volatility had no significant relationship with the financial structure of mentioned companies and is not consistent with our results.

The impact of the ownership structure, financial structure and liquidity on the market value of companies19. Test results of testing hypothesis showed that the stock held by institutional investors had a positive and significant impact on the market value of the company, but stock focusing had a significant negative impact on market value. In addition, a significant relationship between financial structure and the company's market value was not confirmed that is not consistent with our results.

Yahyazadehfar, et al20 investigated the relationship between company's characteristics and the financial structure and found that there was a significant negative relationship between growth opportunities (the ratio of market value to book value) and financial structure and was not in accordance with our results. Hasan pour Bahabadi21 studied the relationship between changes in the financial structure and changes in the value of listed companies in Tehran Stock Exchange. In their study, four automotive and pieces manufacturing industries, non-metallic, pharmaceutical and food mineral were examined. The results indicated that changes in financial structure was only effective on the company value of non-metallic mineral industry and such a relationship was not observed for food, automotive and pieces manufacturing industries as well as asset is consistent with our results.

REFERENCES