Surveying of the Relationship between Investment Level and Corporate Governance Mechanisms with Firm Value

Taha Bahrami 1*, Rasoul Baradaran Hasanzadeh 2, Vahab Cheshminam 1
1. M.A Student in Accounting Department of Islamic Azad University Tabriz Branch, Tabriz-Iran
2. Assistant Professor, Accounting Department of Islamic Azad University Tabriz Branch, Tabriz-Iran
*Corresponding Author: Taha.bahrami20@gmail.com

Abstract

The present study seeks to examine the relationship between investment level and corporate governance mechanisms with corporate value in companies listed at Tehran Stock Exchange. Independent variables include investment level and corporate governance mechanisms which, in turn, comprises in dependent directors, ownership concentration, institutional ownership, auditor type and free floating shares. Firm value is our dependent variable measured by Tobin-Q index. Also, control variables such as firm size, leverage, and growth opportunity are used. The study is an applied research with correlative, post-event methodology. Population of the study includes 104 companies listed at Tehran Stock Exchange during 2003 to 2011 using screening method. Normal least squares regression model is used for testing hypotheses. Results indicate that level of investment has no effects on firm value in general companies in sense. Also, from among corporate governance mechanisms in general companies, independent directors has positive and significant, while auditor type has negative and significant, effects on firm value. And other corporate governance mechanisms have no effect on firm value.

Key words: investment level, corporate governance mechanisms, firm value.

1. Introduction

Emergence of big enterprises, followed by the matter of separating ownership from management with all its pleasant and unpleasant consequences, was a great source of concern in late 19th and early 20th centuries. However, corporate governance in its present form first appeared in 1990s in Britain, the U.S and Canada as a response to problems arising from efficiency of board of directors in big companies. Financial crisis in the recent years made prominent the issue of establishing corporate governance in these, and some other, countries [Jensen and et all (1976)]. Yeganeh and Kheirollahi (2008) found that Corporate governance compels a sort of constraint on major shareholders and facilitates access of minor shareholders, while establishing managerial control. It also leads to greater transparency in information disclosure and more advantageous observation of equity. The concept of transparency is hard to measure, yet is measured by accurate information received and their quality. Corporate governance decreases risks of financial crisis. This gains importance when such risks cause high expenses. It also decreases costs of investment and, consequently, increases corporate value. On the one hand, corporate value is a function of profitability of investments in the company. Thus, in order to maximize wealth of investors, managers need to identify factors affecting level of investment and make expectations of investors meet investment opportunities. This way, they can both boost investment opportunities and achieve satisfaction of investors [Fazary, A(2000)]. On the other hand, investors are considered to be essential elements of capital market. Investors are primarily concerned with operating their capital to maximize and profitability and returns. In order to motivate investors to invest in financial assets, returns on these assets should be higher than other options [Bahramfar, Mehrani(2005)]. Different perspectives have been postulated about effects of investment level on corporate value. Researchers in the field of agency theory state that, in case of extra free cash, managers are likely to invest in risky projects to prevent outflow of this cash [Bushee (1998)]. Some theorists believe managers utilize this cash to develop their business and promote investment level [Tehrani, Hesarzadeh (2009)]. The value created for owners may come as a result of different factors. Here, effects of investment level and corporate governance mechanisms on companies with low or high level of transparency are explored.

2. Theoretical basis of study

2.1. Corporate governance

Corporate governance refers to a set of internal and external control mechanisms that create a balance between equity and the authority of board of directors. These mechanisms ensure shareholders, financial providers, and other interest groups that their investment will bring about reasonable profits. That is, shareholders will obtain considerable earnings through investment. Thus, establishing corporate governance gains importance for them [Baradaran Hassanzadeh and et all (2012)].

2.1.1. Roles of corporate governance mechanisms on corporate value

a. Independent Directors

Level of independence of board of directors is a factor that promotes board efficiency. A great deal of studies on accounting have used rate of independent directors to total number of board members to quantify this
measurement. Members of board of directors are experts at decision-making and controlling. They have no executive responsibilities in the company and receive no salaries [Beasley and Salterio (2001)]. It is confirmed in [Peasnell and et all (2003)] and [Rosenstein and Wyatt (1990)] that the presence of non-executive members in board of directors has positive effects on performance and value creation in companies.

b. Institutional Shareholders

Major shareholders apply their authority to intervene in decisions and influence the structure of board of directors. Therefore, they can be considered as a source of supervision on management [Yeganeh, et all (2008)]. Despite many reliable theories in this regard, results of experimental research on shareholders’ composition and corporate performance seem to be complicated and, in some cases, contradictory. According to Bushee (1998) institutional owners are giant investors like banks, insurance companies, and investment companies. It is generally believed that the presence of institutional shareholders may lead to changes in corporate trends. This initiates from supervisory activities of these investors (Velury & Jenkins, 2006). Maug (1998) concluded that investors’ abilities to control management and corporate performance are functions of their level of investment. The higher the level of institutional ownership, the better supervision on management; and this is a direct relationship. By far, the ratio of number of shares attributed to institutional owners to total number of common shares has been used for quantifying this measurement.

c. Ownership Concentration and Corporate Governance

Disjunction of management and ownership is not the root cause of the concept of agency and its consequent costs for investors and managers. Distribution of ownership is another influential factor in this regard. Roye (1990) states that, in highly distributed concentration of ownership, minor investors have no incentive to supervise corporate activities since they have to pay for its costs, while others will share its benefits without any payments. Empirical research is abundant with different approaches for ownership concentration; for example, Demsetz and Lehn (1985) define ownership concentration as a sum of shares held by 5 or 20 major shareholders. Rock et al. (1989) suggest that ownership concentration is possession of 5% major shares. In the present study, the sum of shares held by major shareholders, who are not going to sell their shares in the near future, is taken as the measure for ownership concentration.

d. Free Floating Shares

Free floating shares refer to shares that are expected to be traded in near future. Morgan Stanley Institute defines free floating shares as tradable entities in the market which are not held by institutional shareholders for managerial purposes. Therefore, free floating shares are total outstanding shares subtracting shares held by institutional shareholders. Here, subtraction of ownership concentration-1 is used for calculating free floating shares.

e. Role of auditing authority on value creation

One major assumption in agency theory is that employers find it difficult to confirm employee functionalities. Independent auditing is an effective and significant way to compromise interests of managers and shareholders. On the other hand, auditing credit and reputation has significant effects on reliability of accounting information and data. In theory, auditing firm size directly influences its reputation and credit. Francis & Simon (1987), Dee (1993) and Jonathan et all (1997) showed that big auditing firms provide qualified audit services, compared to small firms. In the present study, 0 is set for auditing services provided by private sector, while 1 is set for those provided by public sector (auditing organization).

2.2. Investment level

Investment as a financial decision constitutes risk and returns. Low or high levels of risk or returns contribute to make different constitutions of investment. On the one hand, investors seek to maximize their wealth and, on the other, they have to encounter uncertainty of financial markets. The latter obscures certainty of obtaining returns on investment. In other words, all decisions of an investor rely on the interaction between these two factors. Based on level of risk-taking or risk-avoiding attitudes, investors and managers demonstrate different levels of investment through promoting capacity (physical assets) or investment in financial assets (such as shares, bonds and treasury bills) [Abzari, Samadi and Teimouri (2006)]. Analysis of investment and mastery of theories on investment may contribute to improve management and increase investors’ wealth, while leading to informed decisions. Decisions on investment involve three components of expectations, intervals and risk which are hard to be catered for simultaneously since many factors are influential on investment level [Denis and et all (1994)]. Managers can achieve maximum productivity through recognizing these factors and employing them in realizing optimal level of investment [Verdi, R., (2006)]. On the other hand, inefficient markets have deficiencies that can negatively affect optimal level of investment and, consequently, lead to the process of over- or under-investment. Under-investment or over-investment theory indicates that companies using low level of optimal investment suffer from under-investment, while companies using high level optimal investment suffer from over-investment. Thus, recognizing factors affecting investment level is highly demanded for evaluating and determining optimal level of investment in companies [Baradaran Hassanzadeh, et all (2012)]. Different definitions have been proposed for investment level:
Investment level is the ratio of cash for investment in non-current assets, shares and securities to total value of assets of the previous year.[Baradaran Hassan zadeh and bahrami(2013)].

2. Investment level refers to the ratio of annual changes of assets to assets of the previous year [Abbasi, E; Ebrahimzadeh, B (2011)].

3. Investment level is the process of over-investment or under-investment in companies [Tehrani, R; Hesarzadeh, R (2009)].

4. Investment level is surplus free-floating cash and using it for investment activities [Kato, k.H, loewinstein,u., tsay,w. (2002)].

The present study adopts the first definition.

2.3. Firm Value

In the recent years, great attention has been devoted to the issue of corporate value in the form of shareholder wealth (Rapaparit, 1986; Capland, 1994; Jensen, 2000), stakeholder value (Friman, 1984), customer value (Morfi et al., 1996), business ethics (Vallskoz, 1998; Fort, 2001), social responsibilities of companies (Karol, 1999), environmental conservation (Tsidle, 1993; Ten Bronsil et al., 2000) and civil rights (Ulino, 1999). It is generally accepted that corporate value develops based on moral values and standards of managers and the staff. If we assume company as a virtual structure, it is true to say that corporate value stems from values and priorities of stakeholders. That is to say, the value of a business unit is created when stakeholder values are internalized. Determining corporate value is an essential factor in investment (Thomason, 2004). Corporate value is the weight of objectives and goals from the viewpoint of decision-makers. These objectives may include profitability, stock return of business unit, customer value (customer satisfaction), and job-satisfaction among the staff, providers’ satisfaction, and appropriate social performance. After all, corporate value is market value of equity obtained from number of shares multiplied at price per share at the end of fiscal year [Nikoumaram, H; BadavarNahandi, Y (2009)].

Separation of ownership from management, together with development of agency theory, emphasized the importance of evaluating performance of managers as an essential issue in accounting, particularly management accounting. In this regard, many different measures and approaches have been proposed, such as Tobin-Q [Noravesh, I; Hoseini, A (2009)]. In 1969, James Tobin used the ratio of market value to book value of investment to examine investment projects. This is known as Tobin-Q ratio. He claimed that corporate performance could be measured by this ratio, and aimed at establishing a causal relationship between Q and investment level of company. If the measured ratio exceeds 1, it is concluded that the company is highly inspired to invest since returns of investment is greater than costs of capital. Otherwise, if the ratio is smaller than 1, it is concluded that the company is not working favorably and investment will be abolished in it. Tobin’s Q ratio is studied broadly by many researchers; William Brainard (1997), Lidenberg and Ross (1981), Salinger (1984), Birger and Cynthia (1988), Perfect (1994), Berger and Ofek (1995), Leewillen and Bandernat (1977), Darell. E. Lee and Tompking (1999), Demstz and Villalonga (2000). Tobin-Q ratio is a combined measure based on accounting and market information. Many researchers suggest it as the best optimal measure for evaluating performance and corporate value [Leewillen,w.g and s.gbadernat .(1997)]. Higher ratio indicates higher corporate value in the market. In simple words, the more accepted corporate value for shareholders, the greater is the price of share and corporate value. On the contrary, a company with low performance known for shareholders experiences decline in Tobin-Q and corporate value [Salehi, A (2001)]. Tobin-Q is calculated as market value of assets divided by total price of their replacement [Thomas O'Connor,(2012)]. It is used here as the measure for evaluating corporate value.

3. Literature Review

Leng and Stulz (1994) studied the relationship between Tobin-Q and investment opportunities and concluded that when Tobin-Q rate is bigger than 1, investment opportunities increase for the company. Ohlson (1995) found that corporate value is a function of book value, earnings and other related data. Dichow (1997) states that unpredictability of changes in a variable is the measure for evaluating relevancy of that variable to corporate value. Thus, high level of unpredictability of a variable indicates its relevancy to corporate value and makes it an optimal measure for investigating relevancy since corporate value is created through information, and new information can changes corporate value. Shleifer&Vishny (1997) found in their study that big institutional investors as a corporate governance mechanism positively affects corporate value. Bushee&Noe (1999) argued that short-term investment institutes tend to invest in companies with greater quality of disclosure. In addition, they found that higher quality of disclosure (timeliness and reliability) have negative effects on stock returns in the future (reduced variability). That is because higher level of disclosure attracts long-term investors. Kato et al. (2002) demonstrated that cash flow, Tobin-Q rate, earnings growth, dividends, declared dividend, and changes in capital influence investment level. Their results indicated a significant relationship between changes
performance.

Wolf (2003) introduced Tobin-Q as the best and strongest existing index for evaluating and predicting corporate performance. Yung (2004) concluded in his study that improving the quality of corporate governance has positive effects on financial performance and corporate value. It also ensures external investors to trust financial statements of companies.

Chiang (2005) used S&P measures of transparency to estimate level of financial information transparency and found a direct relationship between financial transparency and executive performance. He also found a positive and direct relationship between corporate governance and performance. Interestingly, improving management system leads to promotion of corporate performance and value. Therefore, supervisors can trust information disclosed by managers and adopt them in their decisions.

Based on standard definition of S&P, Aksu (2006) showed that increasing level of information transparency minimizes information asymmetry and possibility of fraud, while it increases corporate value and decreases costs of capital. Also, the author showed that transparency and disclosure lead to decrease political costs and unaccepted costs of tax.

Chiu chi (2009) evaluated effects of financial reporting transparency on corporate value and performance. He realized that transparency of disclosure in financial statements is a mechanism that maximizes corporate value and prevents moral risks between managers and owners.

Bauer et al. (2009) studied effects of corporate governance mechanisms on stock returns and showed that companies with better structure of governance enjoy higher level of corporate value and higher returns, compared to companies with poor structure.

Wiu & Chieen (2011) realized that increase in liquidity leads to enhance corporate governance and, consequently, corporate value.

O’connor (2012) evaluated effects of investment level on corporate value using the parameters of transparency and multiple shareholders. He showed that this effect is stronger in companies with higher transparency and multiple shareholders. O’connor also found that investment level in companies with single shareholder is stranger than those with multiple shareholders.

Salehi (2001) studied correlation between Q and Lidenberg models and confirmed their correlation at confidence level of 99% in evaluating corporate value.

Yahyazadeh et al. (2005) found in their study that book value has increasing role in determining corporate value. Book value per share is used as key factor in determining corporate value in a wide range of studies. In fact, users of earnings per share pay more attention to book value of shares in determining corporate value.

Noravesh & Hoseini (2006) argued that considering information disclosure in companies leads to improving the quality of disclosure, which in turn, decreases opportunistic management of earnings. They used rankings of Stock Exchange Organization to examine the quality of disclosure in terms of timeliness and reliability.

Panahian & Sadeghi (2006) reported that improving financial information transparency increases investor activity and trust.

Haghshenas (2006) found that Tobin-Q helps investors in recognizing attractive markets. It also helps managers to develop corporate capacity through increasing investment or buying existing assets in the market.

Qanbari (2007) evaluated the relationship between corporate governance mechanisms and performance. Results of his study indicated that rate of independent directors has no effects on performance. Also, internal audit has a positive and direct relationship with performance, while institutional investors have positive effect on performance.

Yeganeh & Moradi (2008) demonstrated a direct relationship between institutional investors and corporate value. According to the authors, institutional investors effectively supervise the company and actively manage their portfolio and persuade managers to take optimal decisions. As a result, they contribute to promote corporate value and performance.

Banimahd & Mohseni (2010) studied factors affecting rankings of companies by Stock Exchange in terms of timeliness and reliability and showed that conceding governmental ownership of industries to private sectors is an optimal way for improving disclosure quality. Also, industry type has positive relationship with timely disclosure of information, i.e., greater number of companies in an industry leads to better and timely disclosure of information.

Kordestani & Alavi (2011) concluded in their study that financial reporting through transparent disclosure decreases information asymmetry and increases optimal allocation of resources (adopting accurate choices) and efficiency of corporate performance (managerial efforts to sustain interests of shareholders instead of moral hazards). This accounting functionality contributes to economic development.

Abbas & Ebrahimzadeh (2011) reported that cash flow, dividends paid, declared dividends and changes in liability have positive and significant effects on investment level. However, Tobin-Q has negative and significant effects on it. They also found that earnings growth rate and changes in capital have significant effects on
investment level. In simple words, the authors showed that earnings and return on assets can’t be used solely for determining investment level.

3. Hypotheses

The present study investigates the relationship between investment level and corporate governance mechanisms with firm value. To do this, the following hypotheses are projected:

$H_1$: investment level has effects on firm value.

$H_2$: corporate governance mechanisms have effects on firm value.

4. Methodology

The present study is an applied research using correlative post-event methodology.

5. Population, sampling and duration

Population of the study includes all companies listed at Tehran Stock Exchange. Data are collected from 2003 to 2011. A screening method is used for sampling companies satisfying the following criteria:

1. Companies with available information from 2003 to 2011.
2. Companies listed at Tehran Stock Exchange in 2003, remaining active up to 2011.
3. Companies whose fiscal year ends in Esfand (March).
4. Companies which are not considered as financial, investment, holding or mediatory.

Considering the above criteria, 104 companies were selected.

6. Variables

Independent variables include investment level and corporate governance mechanisms:

6.1. Investment Level (IL)

Investment level is the ratio of cash flow for investment activities in non-current assets, securities and shares to total value of assets in the previous year and is calculated as:

$$IL_{it} = \frac{\text{Cash flow in investment activity}}{TA_{t-1}}$$

Where

$IL_{it}$ = investment level of company $i$ in the year $t$.

$TA_{t-1}$ = total value of assets in the beginning.

Cash flow in investment activities: it is derived from cash flow statements.

6.2. Corporate Governance Mechanisms

Corporate governance mechanisms used in the present study are presented in Table 1.

Table 1. Corporate governance mechanisms

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operational Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent directors (ID)</td>
<td>It is calculated as number of ID divided by total number of board members</td>
</tr>
<tr>
<td>Ownership concentration (OC)</td>
<td>Shares of major shareholders, who are not supposed to sell their shares in the near future, are considered as the level of ownership concentration</td>
</tr>
<tr>
<td>Institutional ownership (IO)</td>
<td>It is calculated as shares of institutional owners divided by total number of common stock at the end of the period</td>
</tr>
<tr>
<td>Audit type (AT)</td>
<td>If financial statements are audited by a governmental agent (Auditing Organization), it is considered to be 1; otherwise, it is taken to be zero.</td>
</tr>
<tr>
<td>Free float (FF)</td>
<td>Subtraction of ownership concentration-1 is used for calculating free floating shares</td>
</tr>
</tbody>
</table>

6.3. Firm Value

Firm value is set as our dependent variable. Here, Tobin-Q is used for determining corporate value. It is calculated as:

$$Tobin\text{'s } q = \frac{\text{Market Value}}{\text{Book Value}}$$

6.4. Control Variables

Firm size, leverage and growth opportunities are used as control variables in the study, which are calculated as follows:

1. Firm size: it is calculated as natural logarithm of total assets at the end of each year (T):

$$\text{Size}_{it} = \ln(TA_{it})$$

2. Leverage
It is calculated as:

\[ \text{Lev}_{it} = \frac{T_L_{it}}{T_A_{it}} \]

\( \text{Lev}_{it} \) = leverage of company i at the end of year t
\( T_L_{it} \) = liabilities of company i at the end of year t
\( T_A_{it} \) = assets of company i at the end of year t

3. Growth opportunity

It is calculated as the difference of sales of previous and current year divided by sales of the previous year:

\[ SG_{it} = \frac{(S_{it} - S_{it-1})}{S_{it-1}} \]

Where

\( SG_{it} \) = growth opportunity of company i at the end of year t
\( S_{it} \) = sales of company i at the end of year t
\( S_{it-1} \) = sales of company i at the end of year t-1

7. Findings

7.1. Statistics description of variables

Results of descriptive analysis of data are presented in Tables 2-5.

Table 2. Descriptive statistics of all variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>IL</th>
<th>ID</th>
<th>OC</th>
<th>EQ</th>
<th>FF</th>
<th>SIZE</th>
<th>LEV</th>
<th>GO</th>
<th>Q-Tobin</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>936</td>
<td>936</td>
<td>936</td>
<td>936</td>
<td>936</td>
<td>936</td>
<td>936</td>
<td>936</td>
<td>936</td>
</tr>
<tr>
<td>Mean</td>
<td>0.03</td>
<td>0.62</td>
<td>0.68</td>
<td>0.45</td>
<td>0.32</td>
<td>26.96</td>
<td>0.1</td>
<td>0.15</td>
<td>1.14</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.05</td>
<td>0.2</td>
<td>0.19</td>
<td>0.18</td>
<td>0.13</td>
<td>1.4</td>
<td>0.11</td>
<td>0.34</td>
<td>1.14</td>
</tr>
<tr>
<td>min</td>
<td>0</td>
<td>0.2</td>
<td>0.07</td>
<td>0.03</td>
<td>0</td>
<td>23.61</td>
<td>0.001</td>
<td>-0.77</td>
<td>0.03</td>
</tr>
<tr>
<td>max</td>
<td>0.49</td>
<td>1</td>
<td>0.99</td>
<td>0.93</td>
<td>32.01</td>
<td>0.92</td>
<td>2.59</td>
<td>6.06</td>
<td></td>
</tr>
<tr>
<td>Coefficient of changes</td>
<td>1.67</td>
<td>0.32</td>
<td>0.28</td>
<td>0.4</td>
<td>0.41</td>
<td>0.05</td>
<td>1.1</td>
<td>2.27</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3. Descriptive statistics of auditor type

<table>
<thead>
<tr>
<th>Auditor type</th>
<th>Number of audited companies</th>
<th>Percentage of audited companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit organization</td>
<td>337</td>
<td>0.36</td>
</tr>
<tr>
<td>Other auditing centers</td>
<td>599</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Results of correlation of variables indicate a positive and significant relationship between independent directors and corporate value (0.130). Interestingly, a negative and significant relationship between independent directors and leverage, and between instructional ownership and leverage was observed.
### Pearson Correlation of Variables at Total Corporate Level

Table 4. Pearson correlation of variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>IL</th>
<th>ID</th>
<th>OC</th>
<th>GQ</th>
<th>IL</th>
<th>SIZE</th>
<th>LEV</th>
<th>GO</th>
<th>Q-Tobin</th>
</tr>
</thead>
<tbody>
<tr>
<td>level of Correlation</td>
<td>1</td>
<td>0.047</td>
<td>-0.029</td>
<td>-0.026</td>
<td>0.029</td>
<td>-0.044</td>
<td>0.123</td>
<td>0.013</td>
<td>0.001</td>
</tr>
</tbody>
</table>

7.2. Results of testing hypotheses

**H1:** investment level has effects on firm value.

\[ \text{Tobin's } q = \beta_0 + \beta_{IL} + \beta_{SIZE} + \beta_{LEV} + \beta_{SG} + \epsilon \]

Table 5. Results of testing hypothesis 1

<table>
<thead>
<tr>
<th>Statistics Variables</th>
<th>Regression coefficient</th>
<th>Standardized coefficient (Beta)</th>
<th>t</th>
<th>Sig. t</th>
</tr>
</thead>
<tbody>
<tr>
<td>C fixed value</td>
<td>5/237</td>
<td>-</td>
<td>7/417</td>
<td>0/000</td>
</tr>
<tr>
<td>IL</td>
<td>0/647</td>
<td>0/030</td>
<td>0/920</td>
<td>0/358</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0/158</td>
<td>-0/192</td>
<td>-6/016</td>
<td>0/000</td>
</tr>
<tr>
<td>LEV</td>
<td>1/579</td>
<td>0/158</td>
<td>4/920</td>
<td>0/000</td>
</tr>
<tr>
<td>GO</td>
<td>0/112</td>
<td>0/033</td>
<td>1/046</td>
<td>0/296</td>
</tr>
<tr>
<td>R²</td>
<td>Adj.R²</td>
<td>F</td>
<td>Sig. F</td>
<td>DW</td>
</tr>
<tr>
<td>0/058</td>
<td>0/054</td>
<td>14/347</td>
<td>0/000</td>
<td>1/559</td>
</tr>
</tbody>
</table>

**H2:** corporate governance mechanisms have effects on firm value.

\[ \text{Tobin's } q = \beta_0 + \beta_{ID} + \beta_{OC} + \beta_{IO} + \beta_{AT} + \beta_{FF} + \beta_{SIZE} + \beta_{LEV} + \beta_{SG} + \epsilon \]

Table 6. Results of testing hypothesis 2

<table>
<thead>
<tr>
<th>Statistics Variables</th>
<th>Regression coefficient</th>
<th>Standardized coefficient (Beta)</th>
<th>t</th>
<th>Sig. t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed value C</td>
<td>5/135</td>
<td>-</td>
<td>6/906</td>
<td>0/000</td>
</tr>
<tr>
<td>ID</td>
<td>0/976</td>
<td>0/167</td>
<td>5/249</td>
<td>0/000</td>
</tr>
<tr>
<td>IO</td>
<td>-0/333</td>
<td>-0/052</td>
<td>-0/975</td>
<td>0/330</td>
</tr>
<tr>
<td>AT</td>
<td>-0/187</td>
<td>-0/077</td>
<td>-2/447</td>
<td>0/015</td>
</tr>
<tr>
<td>FF</td>
<td>-0/538</td>
<td>-0/090</td>
<td>-1/694</td>
<td>0/091</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0/163</td>
<td>-0/199</td>
<td>-6/311</td>
<td>0/000</td>
</tr>
<tr>
<td>LEV</td>
<td>1/771</td>
<td>0/177</td>
<td>5/482</td>
<td>0/000</td>
</tr>
<tr>
<td>GO</td>
<td>0/094</td>
<td>0/028</td>
<td>0/895</td>
<td>0/371</td>
</tr>
<tr>
<td>R²</td>
<td>Adj.R²</td>
<td>F</td>
<td>Sig. F</td>
<td>DW</td>
</tr>
<tr>
<td>0/094</td>
<td>0/087</td>
<td>13/706</td>
<td>0/000</td>
<td>1/590</td>
</tr>
</tbody>
</table>

Results of testing hypotheses indicate that significance level of F-statistics is smaller than accepted error level (5%). Therefore, the regression model is significant. Durbin-Watson lies within the range of 1.5 to 2.5, implying
no correlation between elements of error in the model.

As can be seen in Tables 6, ownership concentration is not influential in regression model of effects on corporate governance on corporate value. That is because free floating shares and ownership concentration are taken as supplementary variables and free floating shares are calculated by subtracting ownership concentration. Considering strong correlation (100%) between free floating shares and to prevent colinearity, the software automatically removes ownership concentration from the model.

8. Conclusion
Results of testing hypotheses 1 demonstrated that investment level has no effects on firm value in total company level. Also, Pearson correlation confirmed no positive and significant relationship between investment level and corporate value. It is concluded that the market is reluctant to react to increases in investment level. That is to say, in these companies, increase in investment level is not regarded as relevant information for investors. Therefore, it doesn’t promote stock price and corporate value. Our results on effects of investment level on corporate value are in disagreement with findings of Mehrani and Bahramfar (2004), Fazary (2000), O’Connor (2012), while they are in line with findings of Hisu (2006), Abbasi&Ebrahimzadeh (2011).

Results of testing hypotheses 2 indicated that from among corporate governance mechanisms in total company level, only independent directors has positive and significant effects on firm value. Also, auditor type has negative and significant effects on firm value, while other mechanisms have no effects. It can be said that changes in corporate value are influenced by percentage of independent directors, i.e., increase of independent directors leads to increase corporate value based on Tobin’s Q measure. This implies that the market responds to changes in independent directors. In other words, any increase in members of independent directors is considered to be an advantage in the market, leading to increase stock price and corporate value for investors. Results of the study on effects of corporate governance mechanisms on firm value are in disagreement with findings of Yung (2004), Chiang (2005), Bauer (2009), Chihi (2009), Aksu (2006) and Smith (2007). However, they are in agreement with findings of Shleifer&Vishny (1986), Baretto (2000), Nicker (2006) and Yeganeh&Moradi (2008).

As regards auditor type, it is concluded that in total company level, firm size may be influential since large companies listed at Tehran Stock Exchange are mostly audited by auditing organization and these large companies have little fluctuations in the market and enjoy a stable market value. These findings are in agreement with Yung (2004), Chiang (2005), while being in disagreement with Nicker (2006).

9. Suggestions of the study
1. Considering positive effects of independent directors on firm value in total company level, it is suggested that potential investors, particularly minor shareholders using financial statements of companies listed at Tehran Stock Exchange, to take this into account to increase their wealth.
2. Considering positive effects of independent directors on firm value in total company level, it is suggested that shareholders of companies listed at Tehran Stock Exchange take this into account when deciding for directors’ structure.
3. Considering positive effects of leverage on corporate value in total company level, it is suggested to financial managers of companies listed at Tehran Stock Exchange to take this into account when deciding for capital structure in their companies.
4. Considering negative effects of firm size on corporate value in total company level, it is suggested that potential investors, particularly minor shareholders using financial statements of companies listed at Tehran Stock Exchange, to take this into account to support their rights.

Resources
No. 7, pp. 51-63.


The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Recent conferences: http://www.iiste.org/conference/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library , NewJour, Google Scholar