The relationship among corporate governance and stock price crash risk in Tehran Security and Exchange Organization TSEO

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Abstract

The current research deals with corporate governance and stock price crash risk in Tehran Security and Exchange Organization (TSEO). To conduct this study, a sample composed of 99 listed enterprises in TSEO Organization was selected by means of sampling technique. The relationship among corporate governance and stock price crash risk in TSEO Organization was determined for period of (2010-2014) in this organization where totally 495 observations were utilized for research period. The multivariate regression method was used as statistical technique in this investigation. The results of this study indicated that there was direct significant relationship among lack of transparency (opacity) in financial reporting as one of the criteria of corporate governance and stock price crash risk but there was also reverse significant relation among ownership structure (institutional ownership) with stock price crash risk.

Keywords: Corporate governance, Stock price crash risk.
Introduction and goal

- Risk nature
Almost all of people are typically familiar with this concept in today community and they acknowledge that all aspects of life are exposed to the risk. In normal language, risk denotes a danger emerges due to uncertainty regarding occurrence an event in the future and as this uncertainty is greater, it is typically said there is higher risk (Raei et al, 2004: 45). Although, risk phenomenon and the methods to cope with it are proposed considered as a comprehensive risk management framework and important for all institutes and organizations, the experiences in two recent decades signify that this group of regulations are deemed vitally important for five groups of institutes. These five groups include banks and non-banking institutes in money market, financial foundation in capital market, and TSEO organization, insurance companies, retirement funds, and Social Security Organization and finally simultaneous payment system for settlement of claims and liabilities. For this reason, world financial organizations such as International Monetary Fund (IMF), World Bank, and International Settlement Bank, and some other related organizations have gathered and codified supervisory regulations in the above fields during recent decades. This group of regulations is in fact related to collection of the best national experiences throughout the world.

- Ownership structure
The composition of different companies varies. Some part of ownership of enterprises is at disposal of retailing investors and natural persons. This group mainly relies on public available information such as the published financial statements to supervise over performance of corporate directors while the other part of corporate ownership is at disposal of major professional investors where unlike shareholder group of first type some valuable internal information about future outlook and commercial strategies and long-term investments will be proposed to corporate directors via direct relationship (Moradzadeh Fard et al, 2008: 86).

Several researches have been executed in this regard including Talaneh et al (2012) explored conservatism and reduction of stock price crash risk. The research findings indicate that conservatism in financial reporting may lead to reduced risk of corporate stock price crash in the future.

Moradi et al (2011) have tested conservatism and stock price crash to determine information asymmetry level where according to the reported results, conservatism has not statistical significant relationship with stock price crash in enterprises with high level of information asymmetry and at the same time information asymmetry could not increase conservative effect in reducing risk of stock price crash.

Forooghi et al (2012) examine the effect of conditional accounting conservatism on future risk of stock price crash. The results of this investigation indicate that the conditional
conservatism in financial reporting reduces future risk of stock price crash. In other words, conservatism obstructs accumulation of such news inside the enterprise by means of requiring of directors to timely disclosure of bad news. Thus, conditional conservatism reduces probability for sudden entry mass of bad news into the market and as a result reduces future risk of stock price crash.

In a study, Forooghi et al (2011) explored the effect of opacity of financial information on future risk of stock price crash. The results of their research show that opacity of financial information (return management) increases future risk of stock price crash. In other words, due to several reasons such as preservation of their own occupations, directors avoid from disclosure of negative news under opaque conditions about financial reporting. Following to trend of disclosure of negative news, this type of information is accumulated inside the company and when it enters suddenly into the market it leads to stock price crash. Thus opacity of financial information increases probability for sudden entry of mass of good news into the market and as a result increases future risk of stock price crash.

In a survey, Campbell et al (2009) examined institutional investors, stock return, and declaration of return. The research findings of these researchers suggest that changes in assets of institutional stocks are sequentially and positively correlated to future stock return.

Hutten et al (2010) explored three different sectional factors in risk of stock prices crash. They implied that all three variables of emerging real crash and two predictor factors for crash risk i.e. accounting opacity and Smirk curve were related together. They expressed that either of smirk choice and accounting opacity independently predicts sectional diversification in crash risk and the given magnitude. Similarly, they mentioned the slop of smirk curve and accounting opacity are correlated at very high level in terms of statistical significance and this indicates that the market is aware of relationship among opacity and risk of stock price crash in the future.

Cornett et al (2010) found when the management power was further monitored through some agents such as institutional owners, presence of institutional stock-holders in board of directors and presence of independent persons outside the commercial unit in board of directors, the return management was reduced more. When the ratio of net return to deduction of discretionary accrual items was examined the estimated financial performance was much related to regulatory variables. The regulatory variables neutralize the negative effects of bonus (of stock option type) on corporate return.

In an investigation, Marchica (2010) explored relationship between institutional investors and liability structure. The result of this research showed that the institutional investors were directly related to short-term debts. Institutional investors prevent from return smoothing as well as creating long-term liabilities by monitoring of director.

Kim et al (2011) indicate that tax avoidance of joint stock companies and stock motives of Chief Financial Officer (CFO) were positively related to risk of stock price crash in Private Joint Stock Company.
In a study titled ‘Operational cash flows opacity in return and risk of stock price crash’, Chang et al (2012) indicated that there was negative relationship among information content of operational cash flows and risk of stock price crash. Namely, as information content is increased in operational cash flows, the future risk is reduced in stock price crash. Similarly, the findings indicate that the operational cash flows may impact on relationship among return opacity and risk of stock price crash. In other words, by rising of information content of operational cash flow the relationship is improved among return opacity and risk of stock price crash in future.

Therefore, the present research is intended to explore the relationship among corporate governance and risk of stock price crash in Tehran Security and Exchange Organization (TSEO).

**Materials and methods**

The statistical population of this study comprises of legal entities as customers of Housing Bank (Maskan) and 99 enterprises were selected as statistical samples. The methodology of this study is of correlation type in terms of nature and content. Initially the needed data were collected from financial statements and appended notes to the financial statements and primary data on Bourse Market Panel (gathered in Tadbirpardaz and Rahavard Novin software and information bank of Bourse Enterprise Statistical Department) and EXCEL software was used to calculate research variables and SPSS statistical software was utilized to analyze hypotheses and their related conclusion.

**Research hypotheses**

1- There is significant relationship among opacity in financial reporting as one of the criteria of corporate governance with risk of stock price crash.
2- There is significant relationship among ownership structure as one of criteria of corporate governance with risk of stock price crash.

**Research variables and method of their calculation**

a) *Measurement of opacity in financial reporting*: The discretionary accrual items are assumed as technique for study on opaque returns (non-transparent profits) and adjusted Jones model is employed of determination of difference among discretionary and ordinary accrual items.

\[ TACC_{i,t} = \alpha_0 \left( 1/A_{i,t-1} \right) + \alpha_1 \Delta SAL_{i,t} + \alpha_2 \Delta REC_{i,t} + \alpha_3 PPE_{i,t} + \delta_{i,t} \]

- \( TACC_{i,t} \): Total accrual items for Company j at year t
- \( A_{i,t-1} \): Total corporate assets j at year t
- \( SAL_{i,t} \): Corporate sale j at year t
- \( REC_{i,t} \): Corporate documents and accounts receivable j at year t
- \( PPE_{i,t} \): Corporate properties and machinerys and equipment j at year t

b) *Measurement of Stock Crash Risk:*
To identify periods in which crash has occurred, the market model-based regression has been utilized in studies done by Hutten et al (2009) and Kimo Zhang (2010).

\[ r_{i,t} = \beta_{it} + \beta_1 r_{m,t-1} + \beta_2 r_{i,t-1} + \beta_3 r_{m,t} + \beta_4 r_{m,t+1} + \beta_5 r_{i,t+1} + \varepsilon_{j,t} \]

Where, in the above formula \( r_{i,t} \) denotes stock return of Company \( i \) in month \( t \); \( r_{m,t} \) will be market return based on (market index).

### Statistical model of research hypotheses

We use following linear regressive model to test the proposed hypotheses:

**First hypothesis**: There is significant relationship among opacity in financial reporting as one of criteria of corporate governance with risk of stock price crash.

\[ CRASH_{it} = \beta_0 + \beta_1 OPAQUE_{it-1} + \beta_2 DTURN_{it-1} + \beta_3 MB_{it-1} + \beta_4 SIZE_{it-1} + \beta_5 LEV_{it-1} + \beta_6 \text{ROE}_{it-1} + \varepsilon_{it} \]

**Second hypothesis**: There is significant relationship among ownership structure as one of criteria of corporate governance with risk of stock price crash.

\[ CRASH_{it} = \beta_0 + \beta_1 INST_{it-1} + \beta_2 DTURN_{it-1} + \beta_3 MB_{it-1} + \beta_4 SIZE_{it-1} + \beta_5 LEV_{it-1} + \beta_6 \text{ROE}_{it-1} + \varepsilon_{it} \]

<table>
<thead>
<tr>
<th>Type of variable</th>
<th>Variables</th>
<th>Symbol</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td>Stock price crash risk</td>
<td>CRASH</td>
<td>Negative skewness of monthly stock return for next year</td>
</tr>
<tr>
<td>Independent</td>
<td>Transparency of financial reporting</td>
<td>OPAQUE</td>
<td>Sum of absolute value of discretionary accruals during three past years</td>
</tr>
<tr>
<td></td>
<td>Ownership structure</td>
<td>INST</td>
<td>Percentage of stocks reserved by institutional investors</td>
</tr>
</tbody>
</table>

### Regression analysis

Whereas research variables are of interval type thus method of this study is of correlation. Regression and Analysis of Variance (ANOVA) with lower standard error than other statistical techniques have been utilized to execute statistical tests.

### Results

The results came from estimation of coefficients:

**Table 2**: Describing parameters of research variables, central tendencies, dispersion indices, and distribution parameters (statistics)

<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>OPAQUE</th>
<th>CRASH</th>
<th>INST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of data</td>
<td>495</td>
<td>495</td>
<td>495</td>
</tr>
<tr>
<td>Mean</td>
<td>2.83E+0.7</td>
<td>-4.320985</td>
<td>13.40723</td>
</tr>
<tr>
<td>Median</td>
<td>6.98E+06</td>
<td>-3.692367</td>
<td>7.15</td>
</tr>
<tr>
<td>Mode</td>
<td>1.13E+06</td>
<td>-3.2656</td>
<td>5.3</td>
</tr>
</tbody>
</table>
- Test of first hypothesis

*There is significant relationship among opacity in financial reporting as one of criteria of corporate governance with risk of stock price crash.*

Null hypothesis and the related confuted hypothesis are defined as follows:

- $H_0$: There is no significant relationship among opacity in financial reporting as one of criteria of corporate governance with risk of stock price crash.
- $H_1$: There is significant relationship among opacity in financial reporting as one of criteria of corporate governance with risk of stock price crash

\[
\begin{align*}
H_0 : & \quad \rho = 0 \\
H_1 : & \quad \rho \neq 0
\end{align*}
\]

**Table 3:** Correlation coefficient, determination coefficient and Durbin- Watson test among opacity in financial reporting as one of criteria of corporate governance with risk of stock price crash

<table>
<thead>
<tr>
<th>Model</th>
<th>Correlation coefficient</th>
<th>Determination coefficient</th>
<th>Adjusted determination coefficient</th>
<th>Standard error of estimation</th>
<th>Durbin-Watson statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.577$^a$</td>
<td>0.333</td>
<td>0.301</td>
<td>0.4764969</td>
<td>1.674</td>
</tr>
</tbody>
</table>

With respect to Table 3, the rate of correlation coefficient is 0.577 among opacity in financial reporting as one criteria of corporate governance and risk of stock price crash that shows good correlation among opacity in financial reporting as one criteria of corporate governance and risk of stock price crash.

Determination coefficient is 0.333; namely, 33.3% of variance of dependent variable (stock price crash risk) may be explained by this model. Value of Durbin- Watson statistic is 1.674 that is placed within range (1.5 to 2.5). Therefore, null hypothesis $H_0$ (lack of correlation between errors) is accepted so one can use regression.

**Table 4:** Analysis of Variance (ANOVA) of regression for variables of opacity in financial reporting as one criteria of corporate governance and risk of stock price crash

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of square</th>
<th>Degree of freedom</th>
<th>Mean square</th>
<th>F-statistic</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>3.604</td>
<td>6</td>
<td>1.601</td>
<td>7.053</td>
</tr>
<tr>
<td></td>
<td>Residue</td>
<td>110.800</td>
<td>488</td>
<td>0.227</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>114.404</td>
<td>494</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The above table indicates ANOVA for significance of multivariate regression. Thus Null Hypothesis $H_0$ is rejected and the presence of significant relationship is verified among opacity in financial reporting as one of the criteria of corporate governance and risk of stock price crash.

**Table 5**: Coefficients of regression equations for variables of opacity in financial reporting as one of the criteria of corporate governance and risk of stock price crash

<table>
<thead>
<tr>
<th>Model</th>
<th>Abbreviation</th>
<th>Non-standardized coefficients</th>
<th>Standardized coefficient</th>
<th>t-statistic</th>
<th>Significance level</th>
<th>Collinearity statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B standard error coefficient column</td>
<td>Beta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.964</td>
<td>0.226</td>
<td>13.131</td>
<td>0.000</td>
<td>0.959 1.318</td>
</tr>
<tr>
<td></td>
<td>OPAQUE</td>
<td>3.242</td>
<td>0.541</td>
<td>0.456</td>
<td>5.993</td>
<td>0.000 0.959 1.318</td>
</tr>
<tr>
<td></td>
<td>DTURN</td>
<td>1.583</td>
<td>0.415</td>
<td>0.270</td>
<td>3.813</td>
<td>0.000 0.995 1.005</td>
</tr>
<tr>
<td></td>
<td>MB</td>
<td>0.002</td>
<td>0.042</td>
<td>0.002</td>
<td>0.047</td>
<td>0.063 0.761 1.314</td>
</tr>
<tr>
<td></td>
<td>SIZE</td>
<td>-0.10</td>
<td>0.017</td>
<td>-0.030</td>
<td>-0.578</td>
<td>0.564 0.749 1.336</td>
</tr>
<tr>
<td></td>
<td>LEV</td>
<td>0.017</td>
<td>0.030</td>
<td>0.029</td>
<td>0.564</td>
<td>0.573 0.775 1.290</td>
</tr>
<tr>
<td></td>
<td>ROE</td>
<td>-0.004</td>
<td>0.043</td>
<td>-0.004</td>
<td>-0.092</td>
<td>0.927 0.960 1.042</td>
</tr>
</tbody>
</table>

With respect to Table 5, t-statistic is significant at confidence level 95% for opacity and as one of criteria of corporate governance and the given P-value rates in the related column represents this issue. Therefore $H_0$ is disproved and this opacity in financial reporting should not be excluded from regressive model as one of the corporate governance. The fixed value and coefficient of independent variables are respectively given in regression equation in column of (B) coefficients. The rate of Variance Inflation Factor (VIF) for all values is smaller than 5 in the related column and this shows non-collinearity among variables. In column of standardized beta coefficients, rate of beta coefficient for opacity of financial reporting is 0.456 as one of criteria of corporate governance that indicates strong and direct relationship in financial reporting and as one of criteria of corporate governance with risk of stock price crash.

The regression equation is as follows:
There is significant relationship among ownership structure as one of criteria of corporate governance with risk of stock price crash.

Null Hypothesis and the given confuted hypothesis are defined as follows:

\[ H_0 : \rho = 0 \]  
\[ H_1 : \rho \neq 0 \]

**Table 6**: Correlation coefficient, determination coefficient and Durbin-Watson test among ownership structure as one of criteria of corporate governance with risk of stock price crash

<table>
<thead>
<tr>
<th>Model</th>
<th>Correlation coefficient</th>
<th>Determination coefficient</th>
<th>Adjusted determination coefficient</th>
<th>Standard error of estimation</th>
<th>Durbin-Watson statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.678^a</td>
<td>0.460</td>
<td>0.432</td>
<td>0.4764831</td>
<td>1.715</td>
</tr>
</tbody>
</table>

With respect to Table 6, the rate of correlation among ownership structure as one of criteria of corporate governance and risk of stock price crash is 0.678 that indicates good correlation among ownership structure as one of criteria of corporate governance and risk of stock price crash.

Value of Durbin-Watson statistic is 1.715 that is placed within range (1.5 to 2.5) therefore Null Hypothesis \( H_0 \) (lack of correlation between errors) is accepted and therefore one can use regression for this purpose.

**Table 7**: Analysis of Variance (ANOVA) of regression for variables of ownership structure as one of the criteria of corporate governance and risk of stock price crash

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of square</th>
<th>Degree of freedom</th>
<th>Mean square</th>
<th>F-statistic</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.610</td>
<td>6</td>
<td>1.754</td>
<td>5.464</td>
<td>0.000^a</td>
</tr>
<tr>
<td>Residue</td>
<td>110.794</td>
<td>488</td>
<td>0.321</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>114.404</td>
<td>494</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table shows ANOVA for significance of multivariate regression. According to this output, total significance level of regression model is tested by (ANOVA) table and through statistical hypothesis as follows:

\[ H_0 : \beta_1 = \beta_2 = \cdots = \beta_k = 0 \]  
\[ H_1 : \beta_j \neq 0 \text{ At least, one of beta values is not zero} \]

\( H_0 \) is rejected and the presence of significant relationship is confirmed among ownership structure as one of criteria of corporate governance with risk of stock price crash.

**Table 8**: Coefficients of regression equations for variables of ownership structure as one of the criteria of corporate governance and risk of stock price crash
<table>
<thead>
<tr>
<th>Model</th>
<th>Abbreviation</th>
<th>Non-standardized coefficients</th>
<th>Standardized coefficients</th>
<th>t-statistic</th>
<th>Significance level</th>
<th>Collinearity statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>B-standard error coefficient column</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.97</td>
<td>0.205</td>
<td>14.49</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INST</td>
<td>-1.15</td>
<td>0.215</td>
<td>-0.461</td>
<td>-5.377</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>DTURN</td>
<td>1.69</td>
<td>0.442</td>
<td>0.271</td>
<td>3.834</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>MB</td>
<td>0.00</td>
<td>0.042</td>
<td>0.002</td>
<td>0.047</td>
<td>0.963</td>
</tr>
<tr>
<td></td>
<td>SIZE</td>
<td>-0.01</td>
<td>0.015</td>
<td>-0.33</td>
<td>-0.727</td>
<td>0.468</td>
</tr>
<tr>
<td></td>
<td>LEV</td>
<td>0.01</td>
<td>0.030</td>
<td>0.029</td>
<td>0.575</td>
<td>0.565</td>
</tr>
<tr>
<td></td>
<td>ROE</td>
<td>-0.00</td>
<td>0.043</td>
<td>-0.005</td>
<td>-0.100</td>
<td>0.920</td>
</tr>
</tbody>
</table>

With respect to Table 8, t-statistic is at confidence level 95% for ownership structure as one of the criteria of corporate governance where rates of P-value given in the related column represent this issue. Therefore, Null Hypothesis $H_0$ is rejected and this ownership structure should not be excluded from regressive model as one of criteria of corporate governance.

The fixed ratio (constant) and coefficient of independent variables are given in regression equation. All values in column of Variance Inflation Factor (VIF) are smaller than 5 that indicate the lack of collinearity among variables. In column of standardized beta coefficients, value of beta coefficient for ownership structure is one of criteria in corporate governance (-0.461) that displays strong and reverse relationship among ownership structure as one of the criteria in corporate governance with risk of stock price crash.

$$CRASH_{it} = 2.972 - 1.156 * INST_{it-1} + 1.694 * DTURN_{it-1}$$

**Discussion and conclusion**

**Test of first hypothesis**

There is significant relationship among opacity in financial reporting as one of the criteria of corporate governance with risk in stock price crash. As it seen in Table 2, we concluded
that there is positive coefficient correlation among opacity in financial reporting as one of the criteria of corporate governance and risk of stock price crash and this value is 0.577. F-statistic is 7.053 and \( \text{Sig.} = 0.000 \) suggests significance of multivariate regression at confidence level 95%. Therefore, \( H_0 \) hypothesis is disproved and there is significant relationship among opacity in financial reporting as one of criteria of corporate governance with risks of stock price crash and in better words the opacity in financial reporting as one of criteria of corporate governance is significantly related to risk of stock price crash. The t-statistic value given for variable of opacity in financial reporting as one of criteria of corporate governance suggests significance of coefficient of this variable at level \( \alpha = 5\% \) with the presence of controlling variables. With respect to the given results, there is direct relationship among opacity in financial reporting as one of criteria of corporate governance with risk of stock price crash. In other words, as opacity in financial reporting is increased as one of criteria of corporate governance, the risk of stock price crash is added and vice versa.

The results came from this hypothesis of research are similar to the findings from study done by Chang et al (2012) who showed in an investigation titled ‘Operational cash flows, opacity in return and risk of stock price crash’ that there was direct relationship among opacity of return and risk of stock price crash and at the same time, the findings of the present research are consistent with the results derived from study of Forooghi et al (2011) who explored effect of opacity of financial data on future risk of stock price crash and result of their study indicated that opacity of financial data (return management) increased future risk of stock price crash. In other words, under conditions of opacity in financial reporting, directors avoid from disclosure of negative news for several reasons including for preservation of their own occupation. Following to trend of non-disclosure of negative news, this type of information is accumulated inside the enterprise and when suddenly enters into market it is led to stock price crash. Therefore, opacity of financial data increases possible suddenly entry mass of bad news into the market and as a result the future risk of stock price crash that is similar finding and presence of similar results in domestic and foreign researches signify accuracy of the results came from hypotheses in this study.

5-2-2- Result of testing second hypothesis

There is significant result among ownership structure (institutional ownership) as one of criteria of corporate governance with risk of stock price crash. With respect to the conducted tests and analyses by regression and correlation and as it observed in Table 6, we concluded that there is positive correlation coefficient among ownership structure (institutional ownership) as one of criteria of corporate governance with risk of stock price crash and this value is 0.678. In Table 7, F-statistic is 5.464 and \( \text{Sig.} = 0.000 \) suggests significance of multivariate regression at confidence level 95%. Therefore, Null Hypothesis \( (H_0) \) is rejected and there is significant relationship among ownership structure (institutional ownership) as one of criteria of corporate governance with risk stock price crash and in more better words the ownership structure (institutional
ownership) as one of criteria of corporate governance significantly impacts on risk of stock price crash.

The value of t-statistic from variable of ownership structure (institutional ownership) as one of criteria of corporate governance denotes significance of coefficient in this variable at level (α = 5%) with presence of controlling variables. **With respect to the given results, there is reverse relationship among ownership structure (institutional ownership) as one of criteria of corporate governance with risk of stock price crash. In other words, as ownership structure (institutional ownership) is increased as one of criteria of corporate governance, the risk of stock price crash is reduced and vice versa.**

The results came from study of Fangocalen (2011) who explored two opposite attitudes about institutional investors in supervision versus ownership regarding this point that the institutional ownership has been positively or negatively related to risk of future risk in corporate stock price crash and they concluded that institutional ownership was negatively related to future risk of stock price crash are similar to findings of this hypothesis of present research. Similarly, the results came from this hypothesis of current research are consistent with the results of study done by Zhang et al (2010) who examined the relationship among taxation escape and phenomenon of stock price crash at corporate level. The results of this study suggest that the possibility for stock price crash might be weakened in enterprises in which there are external strong regulatory mechanisms including high institutional ownership, coverage of high analysts, and or possible usurpation and control by greater companies where these findings are similar to each other.
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