The role of Chief Executive Officer (CEO) in Corporate Governance and Earnings Management

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Abstract. This research was conducted to provide evidence on the effect of CEO change and CEO’s tenure along on earnings management. Hence, a sample composed of 108 companies listed on Tehran Stock Exchange was selected and evaluated during a period of 9 years (2004-2012). To test hypotheses, the approach of combined data was used. In this research, using the modified Jones model, discretionary accruals were estimated. The results indicated that there was a positive and significant relationship between the CEO change and earnings management. They are also indicative of a negative and significant relationship between the CEO’s tenure and earnings management.

Keywords: Earnings management, corporate governance, CEO change, the modified Jones model.

1. INTRODUCTION

The corporate form of an organization has many advantages including risk sharing and management allocation. However, this is done by agency costs, which results in what Berle and Means (1932) called the separation of ownership and control. In principle, corporate internal control has directed managers towards emphasis on value creation. But are these controls practical? (11)

The agency theory refers to this topic that a part of corporate operations is related to agency relationships between relevant shareholders and managers. In fact, the separation between the ownership of shares and management control over company operations can lead to conflict of interests and the agency costs due to this conflict of interest between managers and shareholders. Apart from the case of agency, the quality of reporting will have no certain issue, because managers are not motivated to falsify financial reports or keep the information secret. Corporate governance is one of the mechanisms to reduce the agency problem. Corporate governance mechanisms can decrease earnings management opportunities and, as a result, increase the quality of earnings. This means that if attitudes of corporate governance prevail in the company, they will prevent personal and self-minded activities. Therefore, corporate value and shareholders’ rights will be maintained.
Earnings management is a form of earnings manipulation which is likely to reduce the reliability of the latter. The less the reliability of earnings, the less will be their useful information. Corporate governance alleviates the motivation of managers for management. It improves the reliability of accounting earnings which leads to a more effective notification of the latter (9).

The change of senior management is one of the factors that enhance earnings management incentives. CEO’s tenure also can influence management incentives. Hence, this research evaluates the effects of CEO change and their tenure period along on earnings management.

2. RESEARCH LITERATURE AND BACKGROUND

Accrual accounting provides managers with a considerable choice to determine earnings in different periods. In fact, managers, under this accounting system, will have a significant control over the time to detect some items of expenditure including promotion and R & D expenses. On the other hand, managers are faced with different options in accrual accounting system regarding the time to detect earnings, including faster detection of earnings through credit sales. Such a performance, in simple words, is known by managers as earnings management (10).

Belkouei (2004) considers earnings management as a part of designed accounting, i.e. to create a predefined objective and picture to transfer information by the use of accounting information. Earnings smoothing and management, fictitious accounting, and shortcomings of the accounting system are various aspects of the designed accounting. One of the initial objectives of the earnings management is to preserve corporate credit, because credit makes a company effective and dynamic. Obtaining an appropriate position among competitors and the capital market make investors and creditors have a more favorable opinion about the company and the latter will not need to spend more in competition with similar companies and will receive credit and loan at lower cost (4). Earnings management can also consciously reduce the fluctuation of earnings so that the company is considered as normal (17).

There are many motivations for earnings management such as the pressures applied on managers by the capital market. Further, obtaining personal credit and reputation for managers, bonus contracts for managers, earnings smoothing, reduction of political expenditures and tax savings, incentives to provide a desirable picture of company performance and, finally, raising the price of the stock are among the factors that will lead managers to manage earnings (14).

To overcome the distrust of the concept of moral hazard regarding information asymmetry, the concept of corporate governance was introduced in global markets. It is assumed that the corporate governance targets the enterprise healthy life more than anything in the long-term and protects the interests of shareholders (3). Corporate governance is a set of procedures or actions through which companies are run and respond to shareholders, employees and society (20). Corporate governance refers to the method of guiding, running and controlling companies. It deals with monitoring, attention to responsibility, guidance and control of the management. It is generally believed that corporate governance leads to an appropriate and desired management, goodwill and trust of the investor.
Gompers et al (2003) believe that a proper and appropriate management in a company will increase value for the latter and enhance its credit rating (19). Managers' tendency to apply earnings management and take unfair advantage of it and, consequently, provide false information to shareholders will bring serious damage to the confidence of the latter and thousands of them will be affected and flee from the stock market. Ultimately, this will be followed by dire economic consequences. Thus, because of the importance of maintaining the trust of shareholders and, then, the economic health of the nation and the atmosphere looming over it, corporate governance is seeking ways by which financiers ensure that they will receive an adequate return on their investment in the company. Therefore, corporate governance seeks to promote fairness, transparency and accountability in the company. Through extra-organizational mechanisms, which most include laws and regulations, and inter-organizational mechanisms, which are mostly discretionary, corporate governance can lead to application of a good management, reduction of problems related to information asymmetry, increased trust of shareholders and, finally, earnings management (6).

Asadi and Manti Monjog Tapeh (2011) investigated the relationship between the change of senior management of the company before and after change and earnings management. The variables used were the company size, type of industry, management change and management change year. The modified Jones model was used to estimate earnings management from discretionary accruals. The results of this research confirmed the positive earnings management in the year before the change of management; however, they do not show any evidence of negative earnings management in the year of change of management and the positive earnings management in the year following the change of management. Also, the results indicate that earnings management does not depend on the size and the type of industry in which companies operate.

Nikoumaram and Mohammadzadeh Salteh (2010) conducted a research entitled “The relationship between corporate governance and earnings management” in which they investigated different impacts of corporate governance on earnings management of the companies listed on the Tehran Stock Exchange. Standards of corporate governance include the proportion of outside board members, shares of institutional investors, whether or not the company under study is a parent (main) company, whether or not its property is public or private, percentage of free float shares, and the type of auditor. Their research results indicate that adequacy of corporate governance is significantly related with the ability of corporate governance with earnings management. In this way, the adequacy of corporate governance is one of the decisive factors influencing the earnings management.

Marrakchi et al (2001) investigated the relationship between some standards of corporate governance and earnings management in the US. In this research, they used both the high and low levels of discretionary accruals to evaluate the relationship between earnings management and characteristics of corporate governance including the number of outside board members, size of the board, external auditors and audit committee (internal auditor). The results indicated a significant negative correlation between the variables of corporate governance and earnings management.
In a research, Choi et al (2012) examined the relationship between compulsory and optional replacement of CEO and earnings management in Korean companies. Their sample was composed of 634 companies in the period between 2001 and 2008. Companies in which a forced and optional replacement of the CEO had taken place were divided into two groups. Also the impact of replacing the current CEO of the company with an internal employee or an independent person (outside the company) was measured. The results indicated that earnings management has a direct and significant relationship with the forced dismissal of CEO.

Wels (2002) investigated the replacement of CEO and earnings management in three periods before, during and after the change. The results indicated that the earnings management before and after the change was ascending, but it was significantly descending during the change.

Hazarika et al (2012) investigated the relationship between the forced and optional replacement of the CEO with earnings management. In this study, the absolute value of discretionary accruals was used as an indicator of earnings management. Corporate governance variables included: replacement of the CEO (forced and optional), CEO’s tenure, and control variables such as independence of the Board, CEO stock ownership and the CEO role duality. Cox regression model was used to test the research hypotheses. The results showed a relationship between the CEO’s forced replacement and earnings management. There was also a significant inverse relationship between CEO’s tenure and earnings management.

Godfrey et al (2003) examined the relationship between earnings management and the replacement of the CEO in the period after and during the change in Australian companies. The results of their study indicated the reduction of earnings management in the period during the change and the increase of earnings management after the change by the CEO.

3. RESEARCH HYPOTHESES

In this research, the following hypotheses were formulated in order to evaluate the impact of corporate governance’s standards including the CEO’s replacement and their tenure on earnings management:

**Hypothesis 1:** There is a significant relationship between the possibilities of replacing the CEO with earnings management.

**Hypothesis 2:** There is a significant relationship between the CEO’s replacement with earnings management.

4. RESEARCH METHODOLOGY

4.1 Model

Model (1) was evaluated using the combined data approach in order to test the research hypotheses.
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\[ ACC_{it} = \alpha + \beta_1 CEOC_{it} + \beta_2 TIME_{it} + \beta_3 CEOO_{it} + \beta_4 DUAL_{it} + \beta_5 DEBTR_{it} + \beta_6 SIZE_{it} + \varepsilon_{it} \] (1)

In this model, variable \(ACC_{it}\) is an accrual. In this research, discretionary accruals were used as earnings management variable modified through Jones model presented by Kothari et al (2005). The independent variables with which the research hypotheses were tested includes \(CEOC_{it}\) for CEO’s replacement so that number 1 was allocated to years during which the CEO’s replacement had taken place and number 0 which was allocated to years in which the CEO was not replaced. \(TIME_{it}\) for the CEO’s tenure includes the logarithm of the number of years that the CEO is working and remaining in their positions. Other variables that control the variables in the model include the management property variable \(CEOO_{it}\) for the CEO ownership represents the percentage of shares of the CEO and or companies in which the CEO is appointed as a representative of the company. Variable \(DUAL_{it}\) which represents the CEO duality is assigned number 1 whenever only one person acts as CEO and Board Chairman; otherwise, this variable is assigned 0. Variable \(DEBTR_{it}\) which represents debt ratio indicates the ratio of total liabilities to total assets of the company; and variable \(SIZE_{it}\) which represents the company size is equivalent to the natural logarithm of the company's assets. \(\varepsilon_{it}\) is the value of the error term the regression model. In the above model \(i\) represents a company and \(t\) represents a year. If the coefficient of each of the independent variables of the model is significant, the hypothesis related to that variable will not be rejected.

4.2 Statistical population and sample

Statistical population of this research was all companies listed on the Tehran Stock Exchange during a period of 9 years since March 21, 2004 to March 20, 2013. The systematic elimination method was used to determine the statistical sample where companies with fiscal year not ending March 20 and 21 were first excluded and, then, banks and investing companies were excluded due to the different nature of their activity. At the end, outliers (percentile 1 and percentile 99 of all observations) were excluded. Also in this stage, companies about which no information was available during the period under review were excluded to select the sample. By applying these conditions, 108 companies (about 695 year – company) were selected to estimate the model and test the research hypotheses.

4.3 Data collection method

This study’s data include combined data. Necessary data to test the hypotheses were extracted from Tadbir Pardaz and Rahavard Novin software v. 3 and also by using companies’ financial statements. After preparing data in Excel, analysis and test of the hypotheses were carried out by statistical software Eviews 7.

4.4 Data analysis method

4.4.1 Calculation of discretionary accruals
To calculate discretionary accruals, the modified Jones model by Kothari et al. (2005) was estimated using combined data.

\[
ACC_{it} = \alpha + \beta_1 \frac{1}{A_{it-1}} + \beta_2 \frac{\Delta \text{REV}_{it} - \Delta \text{REC}_{it}}{A_{it-1}} + \beta_3 \frac{\text{PPE}_{it}}{A_{it-1}} + \beta_4 \text{ROA}_{it} + \epsilon_{it} \tag{2}
\]

Where the variables are:

\(ACC_{it}\) = Accruals

\(A_{it-1}\) = Total assets of the company at the beginning of year \(t\)

\(\Delta \text{REV}_{it}\) = Difference in sales between current year and the last year

\(\Delta \text{REC}_{it}\) = Change in net accounts receivable current year compared to the last year

\(\text{PPE}_{it}\) = Gross property, machinery and equipment

\(\text{ROA}_{it}\) = Return on assets (ROA)

\(\beta_1, \beta_2, \beta_3\) = Company-specific parameters.

As the Leymer statistic is not significant (1.11), model (2) is estimated through bound approach and the results are shown in Table (1):

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Student's t-statistic</th>
<th>Significance</th>
<th>VIF Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\gamma)-Intercept</td>
<td>0.02***</td>
<td>3.02</td>
<td>0.00</td>
<td>---</td>
</tr>
<tr>
<td>(\Delta \text{REV}<em>{it} - \Delta \text{REC}</em>{it})/(A_{it-1})</td>
<td>0.60</td>
<td>1.17</td>
<td>0.24</td>
<td>1.05</td>
</tr>
<tr>
<td>(\text{PPE}<em>{it}/A</em>{it})</td>
<td>-0.03***</td>
<td>-3.49</td>
<td>0.00</td>
<td>1.04</td>
</tr>
<tr>
<td>(\text{ROA}_{it})</td>
<td>-0.08***</td>
<td>-5.08</td>
<td>0.00</td>
<td>1.03</td>
</tr>
<tr>
<td>Modified coefficient of determination</td>
<td>24.35%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's exact test (significance)</td>
<td>(0.00)35.44***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leymer test (significance)</td>
<td>(0.35)1.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin–Watson statistic</td>
<td>1.78</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** Significance at a level of 1%

The results indicate that \(\gamma\)-intercept (0.02) and the coefficient of variables \((\Delta \text{REV}_{it} - \Delta \text{REC}_{it})/A_{it}\) (-0.03), \(\text{PPE}_{it}/A_{it}\) (-0.08) and \(\text{ROA}_{it}\) (0.37) are significant at 1%. Variance Inflation Factor (VIF) also shows that independent variables of model (2) do not cause a multicollinearity problem.\(^1\)

Further, the value of Durbin–Watson statistic (1.78) suggests a lack of serial autocorrelation problem in the estimated disturbing components of the model; therefore, the results of the estimated model are not false and are reliable for estimating discretionary accruals. Significance

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1. When VIF is less than 5 (or 10 in other sources), there will not any multicollinearity problem among independent variables of the model (Katner, 2004).

2. As a rule of the thumb, when the Durbin-Watson statistic is between 5.1 and 5.2, there will not any serial autocorrelation problem among in the estimated disturbing components of the model (Afatouni & Nikbakht).
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of Fisher’s exact test (35.44) at 1% indicates the overall significance of the research model. The modified coefficient of determination also indicates that independent variables explain near 24% of variations of the dependent variable. After estimating the model (2), its residuals are extracted and taken into account as the measure of earnings management.

4.3 Descriptive statistics

Descriptive statistics for the research variables are presented in Table (2):

Table 2. Research Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>0.05</td>
<td>0.04</td>
<td>0.70</td>
<td>-0.39</td>
<td>0.14</td>
</tr>
<tr>
<td>DAC</td>
<td>0.00</td>
<td>0.00</td>
<td>0.69</td>
<td>-0.59</td>
<td>0.14</td>
</tr>
<tr>
<td>REV</td>
<td>1.00</td>
<td>0.91</td>
<td>3.75</td>
<td>0.05</td>
<td>0.54</td>
</tr>
<tr>
<td>REC</td>
<td>0.26</td>
<td>0.26</td>
<td>0.96</td>
<td>0.00</td>
<td>0.18</td>
</tr>
<tr>
<td>PPE</td>
<td>0.29</td>
<td>0.26</td>
<td>1.09</td>
<td>0.00</td>
<td>0.20</td>
</tr>
<tr>
<td>ROA</td>
<td>0.12</td>
<td>0.11</td>
<td>0.75</td>
<td>-0.32</td>
<td>0.15</td>
</tr>
<tr>
<td>TIME</td>
<td>3.20</td>
<td>3.00</td>
<td>10.00</td>
<td>1.00</td>
<td>2.08</td>
</tr>
<tr>
<td>CEOO</td>
<td>0.12</td>
<td>0.00</td>
<td>1.00</td>
<td>0.00</td>
<td>0.22</td>
</tr>
<tr>
<td>DEBTR</td>
<td>0.72</td>
<td>0.71</td>
<td>1.98</td>
<td>0.20</td>
<td>0.23</td>
</tr>
<tr>
<td>SIZE</td>
<td>12.94</td>
<td>12.89</td>
<td>15.86</td>
<td>9.59</td>
<td>1.38</td>
</tr>
</tbody>
</table>

Definition of variables:
ACC: Accounting accruals
DAC: Discretionary accruals
REV: Revenue
REC: Accounts receivable
PPE: Fixed assets
ROA: Return on assets
TIME: CEO’s tenure
CEOO: CEO ownership which is the percentage of shares owned by the company's board members.
DEBTR: The debt ratio which is the ratio of total liabilities to total assets of the company
SIZE: The size of the company which is the natural logarithm of company assets

The presented results show the following statistics: Mean (median) accruals (0.04) 0.05, discretionary accruals (0.00) 0.00, revenue (0.91) 1.00, accounts receivable (0.26) 0.26, fixed assets (0.29) 0.29, return on assets (0.11) 0.12, CEO’s tenure (3.00) 3.20, CEO ownership (0.00) 0.12, ratio of liabilities (0.71) 0.72 and size of the company (12.89) 12.94.

And also: Maximum (minimum) accruals 0.70 (-0.39), discretionary accruals 0.69 (-0.59), sales revenue 3.75 (0.05), accounts receivable 0.96 (0.00), fixed assets 1.09 (0.00), return on assets 0.75 (0.32), CEO’s tenure 10.00 (1.00), CEO ownership 1.00 (0.00), debt ratio 1.98 (0.20) and company size 15.86 (9.59).
The amount of distribution of observations related to the research variables is shown in the last column of Table (2).

### 4.4 Table of correlation coefficients

To evaluate the existence and direction of the linear correlation between the research variables, the correlation coefficients were tested and the results are as depicted in Table (3):

#### Table 3. Table of correlation coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>ACC</th>
<th>DAC</th>
<th>REV</th>
<th>REC</th>
<th>PPE</th>
<th>ROA</th>
<th>TIME</th>
<th>CEOO</th>
<th>DEBTR</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAC</td>
<td>0.92</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REV</td>
<td>0.17</td>
<td>0.11</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REC</td>
<td>0.26</td>
<td>0.23</td>
<td>0.17</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPE</td>
<td>-0.11</td>
<td>-0.04</td>
<td>0.04</td>
<td>-0.18</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.26</td>
<td>-0.10</td>
<td>0.22</td>
<td>0.05</td>
<td>0.12</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIME</td>
<td>-0.09</td>
<td>-0.12</td>
<td>-0.05</td>
<td>0.04</td>
<td>0.03</td>
<td>0.06</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEOO</td>
<td>0.05</td>
<td>0.07</td>
<td>0.07</td>
<td>0.05</td>
<td>-0.07</td>
<td>-0.09</td>
<td>-0.14</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEBTR</td>
<td>-0.10</td>
<td>0.08</td>
<td>-0.01</td>
<td>0.03</td>
<td>-0.13</td>
<td>-0.52</td>
<td>-0.08</td>
<td>-0.01</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.06</td>
<td>-0.10</td>
<td>-0.19</td>
<td>-0.07</td>
<td>0.19</td>
<td>0.22</td>
<td>0.05</td>
<td>-0.11</td>
<td>-0.23</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Correlation coefficients significant at 10% or less are presented in the colored cells.

The results indicate that there is a significant correlation between the following variables: Accruals and discretionary accruals (0.92), sales revenue (0.17), accounts receivable (0.26), fixed assets (-0.11), return on assets (0.26), CEO’s tenure (-0.09), and debt ratio (-0.10). Correlation coefficients are also significantly correlated with the following variables: Discretionary accruals and sales revenue (0.11), accounts receivable (0.23), return on assets (-0.10), CEO’s tenure (-0.12), and company size (-0.10). Sales revenue is significantly correlated with accounts receivable (0.17), return on assets (0.22), and company size (-0.19). There is also a significant correlation between the variables of fixed assets and accounts receivable (-0.18), return on assets (0.12), debt ratio (-0.13) and company size (0.19).

Return on assets are significantly correlated with the variables of CEO ownership (-0.09), debt ratio (-0.52) and company size (0.22). There is a significant and inverse correlation between the CEO’s tenure and CEO ownership (-0.14). There is also a significant and negative correlation between the company size and the two variables of CEO ownership (-0.11) and debt ratio (-0.23).

### 4.5 Evaluation of the reliability of variables
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Unit-root tests conducted by Pessaran et al, Dickey–Fuller generalized test (Fisher-type) and Phillips-Perron test (Fisher-type) were used to evaluate the reliability of the research variables. The results of these tests are as illustrated in Table (4).

Table 4. Results of Data Reliability Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dickey-Fuller generalized test</th>
<th>Phillips - Perron test</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>206.14</td>
<td>288.99</td>
</tr>
<tr>
<td>DAC</td>
<td>36.08</td>
<td>70.51</td>
</tr>
<tr>
<td>REV</td>
<td>126.93</td>
<td>192.91</td>
</tr>
<tr>
<td>REC</td>
<td>141.11</td>
<td>186.36</td>
</tr>
<tr>
<td>PPE</td>
<td>144.99</td>
<td>213.97</td>
</tr>
<tr>
<td>ROA</td>
<td>137.91</td>
<td>230.20</td>
</tr>
<tr>
<td>TIME</td>
<td>156.87*</td>
<td>242.14</td>
</tr>
<tr>
<td>DEBTR</td>
<td>171.69</td>
<td>226.91</td>
</tr>
<tr>
<td>SIZE</td>
<td>164.96</td>
<td>314.24</td>
</tr>
</tbody>
</table>

* Apart from the statistic marked with asterisk which is significant at 10%, other statistics are significant at 1%.

The results of the tests are presented in Table (4). The results of combined data unit root tests all indicate that the null hypothesis of a unit root would be rejected at 10% or less. The results show that all variables are reliable; therefore, there is no problem to use them for regression analysis.

5. ESTIMATION RESULTS OF THE RESEARCH MODELS

5.1 Testing of the First Hypothesis

To test the first hypothesis of the research, model (3) is estimated through combined data approach.

\[ ACC_{it} = \alpha + \beta_1 CEO_{it} + \beta_2 CEOO_{it} + \beta_3 DUAL_{it} + \beta_4 DEBTR_{it} + \beta_5 SIZE_{it} + \varepsilon_{it} \] (3)

The non-significance of the Leymer statistic (0.37) shows that model (3) should be estimated through bound method. Estimation results of model (3) by the said method are as shown in Table (5). The results suggest that the coefficient of CEO change (0.03), CEO ownership (0.05), CEO duality (0.06), and debt ratio (0.03) variables are significant at 1% and the company size variable (-0.01) is significant at 5%.

Table 5. Estimation Results of Model (3)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Student's t-statistic</th>
<th>Significance</th>
<th>VIF Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Intercept</td>
<td>0.05</td>
<td>1.30</td>
<td>0.19</td>
<td>---</td>
</tr>
</tbody>
</table>

29
The index value of the variance inflation factor also shows that there is no multicolinearity among independent variables of model (2-3). Durbin-Watson statistic (1.95) implies a lack of serial autocorrelation among disturbing components of the estimated model. So the results of the latter are not false and are reliable to test the research first hypothesis. The significant Fisher statistic (26.28) at 1% indicates the overall significance of the model. Further, the modified coefficient of determination shows that independent variables explain near 24% of variations of the dependent variable.

The significance of the coefficient of the CEO change (0.03) indicates that the level of management changes is positively and significantly correlated with earnings management. This shows that the first hypothesis is not rejected.

5.2 Testing of the second hypothesis

To test the second hypothesis of the research, model (4) is estimated through combined data approach.

\[
ACC_{it} = \alpha + \beta_1 TIME_{it} + \beta_2 CEOO_{it} + \beta_3 DUAL_{it} + \beta_4 DEBTR_{it} + \beta_5 SIZE_{it} + \epsilon_{it} (4)
\]

The non-significance of the Leymer statistic (0.21) shows that model (4) should be estimated by the bound method.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Student's t-statistic</th>
<th>Significance</th>
<th>VIF Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>y-Intercept</td>
<td>0.10***</td>
<td>2.86</td>
<td>0.00</td>
<td>---</td>
</tr>
<tr>
<td>TIME</td>
<td>-0.07***</td>
<td>-6.36</td>
<td>0.00</td>
<td>1.03</td>
</tr>
<tr>
<td>CEOO</td>
<td>0.03*</td>
<td>1.85</td>
<td>0.07</td>
<td>1.04</td>
</tr>
<tr>
<td>DUAL</td>
<td>0.16***</td>
<td>6.58</td>
<td>0.00</td>
<td>1.02</td>
</tr>
<tr>
<td>DEBTR</td>
<td>0.03***</td>
<td>2.22</td>
<td>0.03</td>
<td>1.07</td>
</tr>
</tbody>
</table>
The role of Chief Executive Officer (CEO) in Corporate Governance and Earnings Management

<table>
<thead>
<tr>
<th>SIZE</th>
<th>-0.01**</th>
<th>3.18</th>
<th>0.00</th>
<th>1.09</th>
</tr>
</thead>
</table>

Modified coefficient of determination 23.90%
Fisher statistic (significance) (0.00) 26.06***
Leymer statistic (significance) (0.97) 0.21
Durbin-Watson statistic 1.90

***, ** and * are significance at 10%, 5% and 1% respectively

Estimation results of model (4) by the said method are reported in Table (6-4). The results suggest that the y-intercept (0.10) and the coefficient of the CEO’s tenure (-0.07), CEO’s dual role (0.16), and company size (-0.01) variables are significant at 1%, the CEO ownership variable (0.03) is significant at 10%, and the debt ratio variable (0.03) is significant at 5%.

The index value of the variance inflation factor also shows that there is no multicollinearity among the independent variables of model (4). Durbin-Watson statistic (1.90) implies a lack of serial autocorrelation in disturbing components of the estimated model. So the results of the latter are not false and are reliable to test the research second hypothesis. The significant Fisher statistic (26.06) at 1% indicates the overall significance of the model. Further, the modified coefficient of determination shows that independent variables explain near 24% of variations of the dependent variable.

The significance of the coefficient of the CEO’s tenure (-0.07) indicates that the CEO’s tenure period in his position is negatively and significantly correlated with earnings management. This shows that the second hypothesis is not rejected.

6. CONCLUSION

In the first hypothesis, the relationship between the variable of CEO change with earnings management was investigated. Estimation results indicate that there is a positive and significant relationship between CEO replacement and earnings management. This implies that companies with a higher rate of senior management replacement are more susceptible to earnings management. Thus, the first hypothesis is confirmed. In the second research hypothesis, the results of examining the relationship between CEO’s tenure and earnings management show that there is a significant negative relationship between CEO’s tenure and earnings management. This means that the longer a CEO plays his role in his post, the possibility of the earnings management will be decreased on his side. So, the second hypothesis is also supported.

REFERENCES


[6] Hassas, Yeganeh, Y. (2005), "The role of the audit committee in corporate governance" conference on corporate governance and internal audit system, Association of Chartered Accountants, 21 November and 22 December;


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