The study of the effect of dividend earnings on the quality of earnings with emphasis on the industry type

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Abstract

The purpose of this study was to investigate the effect of dividend earnings on the quality of earnings with emphasis on the type of industry. In the study earnings quality have been analyzed in four dimensions including net value of discretionary accruals, accruals quality (quality of financial reporting), income smoothing and association of earnings to the stock value. Also, two models of Eckel and TZ were used for separation of smoothers from non-smoothers companies. The present study has applied aim and in terms of methodology refers to scientific-correlation research type. The statistical population of this study were the accepted companies in Tehran Stock Exchange in 5 industries including food, automotive, chemical, pharmaceutical and cement that 100 companies have been located in statistical sample of study by systematic elimination sampling method. The time period of study was among 2005 to 2011 but the data of year 2004 were also used to calculate some research variables. In this study, the ordinary least squares regression and also specific regression of each company were used in time series and annual cross-sectional to calculate the some of the research variables. Multiple regression and logistic regression were used to test the hypotheses of this study. The research results indicated that dividend earnings had positive impact on the net value of discretionary accruals and income smoothing in both models (TZ and Eckel) and a significant inverse impact on accruals quality (quality of financial reporting). Also, no significant relation was observed between dividend earnings and association of earnings to the stock value.

Keywords: dividend earning, earnings quality, accruals, income smoothing

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the profit of cash stock. Unless, they believe that they can maintain a new level of the cash stock’s profit in the future. Therefore, the regular distribution of cash stock’s profit reports from the sustainability of future profits and it is assumed that the dividend earning contains information about earnings quality. The profit of cash stock may also contain information about future earnings changes and when cash stock’s profit changes, this change inform from the future earnings changes. Since, companies undertake to pay cash stock’s profit, particularly, since this profit has economic content help investors to convince about the quality of reported profits. So, even if cash profit changes don’t inform about the future profits changes in reliable form assist investors to convince that the reported earnings will be maintained in future periods. This study is in line with study of Mojtahedzadeh et al. (2009) and Tang & Bin Miao (2010) intends to answer this question that how the impact of dividend earning on earnings quality is.

**Literature review**

**Internal research**

Khajouian and Nazemi (2005) in a study entitled “The investigation of the relation between earnings quality and stock returns, with emphasis on the role of accrual accounting in Tehran Stock Exchange reached to this conclusion that the average stock returns of companies are not influenced by the accrual rate and its related components. In other words, it can note that there is a significant difference between the average returns of companies that their accrual are reported to the minimum and maximum rate.

Tehraniand Zakeri (2009) in a study entitled “Surveying the relationship between the earnings quality and dividend earning of accepted companies in Tehran Stock Exchange” concluded that companies which pay profit have more profit stability in future periods and also this impact is more specified for companies with higher distribution ratio. Thus, dividend earning contains information about the quality of reported earnings.

Mojtahedzadeh et al. (2009), in another study, examined the relationship between the earning quality and dividend earning of companies. The statistical population and time period consisted of 85 companies during the 2002 to 2006. The results showed that, with regard to the criterion of the revised providing of profit and loss statement, companies with higher earnings quality do not pay the dividend earning on time and by taking into account the criterion of existence of exceptional items, companies with higher earning quality pay higher dividend earnings. Also, results of this research showed that the applied criteria to measure earning quality have no significant relationship with dividend earning changes.

Nourvash et al (2009) in a study entitled “Examining the effects of accruals on earning quality of accepted companies in Tehran Stock Exchange” concluded that, in Tehran Stock Exchange, earning quality reduced by reducing the accruals quality and consequently increasing the estimating error of accruals, earning stability coefficient and so on.

**External research**

Dechow and Dichev (2002) investigated the relationship between the accruals quality and earning persistence. Their empirical criterion from the accrual quality was the regressions of changes in working capital of past and present, and the future cash flows. They finally came to the conclusion that there is a direct correlation between the quality of accruals and earning persistence.

Chan et al (2006) in a research entitled “The quality of earnings and stock returns” concluded that stock returns of companies with high accrual figures reduce in the period after the financial information reporting. One interpretation of these results is that the returns of companies with low earnings quality (i.e. companies with high accrual figures) decline in period after the reporting because investors realize the companies lower earnings quality and adjust stock prices accordingly. This subject was done by separating the components of accrual and also classifying based on the discretionary and non-discretionary accruals and similar results were obtained.

Markarion (2008) conducted a research on the relationship between stock returns fluctuations and income smoothing and concluded that the fluctuations risk has strong and inverse correlation with income smoothing. Also, this negative relationship is stronger in high operational risk companies, small companies and bankrupt companies.

Tong and Bin Miao (2010) in a study entitled “Is dividend earning associated with earnings quality?” concluded that when the size of the dividend earning payment is larger, the relationship between the paying status of dividend earning and earning quality is very strong. Generally, the results show that the paying status of dividend earning indicates companies’ reporting quality.
Research hypotheses

The main hypothesis
The dividend earning has an impact on earning quality.

Sub-hypotheses
1. The dividend earning has an impact on the net value of discretionary accruals.
2. The dividend earning has an impact on accruals quality (quality of financial reporting).
3. The dividend earning has an impact on income smoothing.
4. The dividend earning has an impact on the relevance of earning value.

Methodology

The selection of method depends on the research objectives and the nature of research subject and its executive facilities. So, when we can decide about the investigating and conducting a study that the nature of the study subject, its objectives and scope and extent are determined. Therefore, it is necessary to define the research method clearly and by describing and expressing, we can specify and limit the implementation scope of the study. This study has an applied purpose and correlational-scientific nature.

The statistical sample of this research consists of two groups including those companies that pay dividend earning and those that do not pay dividend earning and service companies because their dividend earnings are not comparable to other companies and hence, they were removed from sample. Thus, the statistical sample includes all companies of the 5 industries of food, automotive, chemical, pharmaceutical and cement accepted in Tehran Stock Exchange, which have the following conditions:
1. Until the end of March 2004 are accepted in Tehran Stock Exchange.
2. For 8 consecutive years (2004 to 2011) the basic data required for this research have been provided to the Stock Exchange.
3. Their fiscal period terminates to the end of March to remove the effects of seasonal fluctuations.
4. Companies should not include the banks and financial institutions (investment companies, financial intermediation, holdings and leasing), because they have different structures of the strategic principles and financial disclosures.

By applying the above conditions, 100 companies were included in the statistical sample of this research.

The dependent variable: in this study, earning quality will be examined in four dimensions as following:

1. In this study, the net value of discretionary accruals is measured by the modified Jones model, discretionary accruals is annually calculated by following cross-sectional regression coefficients estimating:

\[ \text{TACC}_{i,t} = \beta_0 + \beta_1 \frac{\Delta \text{SALE}_{i,t}}{\text{ASSET}_{i,t}} + \beta_2 (\Delta \text{AR}_{i,t} - \Delta \text{PPE}_{i,t}) + \epsilon_{i,t} \]

TACC: total accruals divided by average of the total assets
ASSET: average of the total assets
∆SALE: sale changes
∆AR: receivable accounts changes
PPE: is the gross asset of the property and equipment that all be the same scaled by average of total assets.

2. Also, the criterion of Dechow and Dichev (2002) is used to assess the quality of accruals (financial reporting quality), provided the model is also consistent with the idea that the accrual accounting improves the detection of cash flows over time. So, the adjusted numbers (e.g., profit) better reflect the current operating performance and offers good indicator of future performance.

Reporting quality is estimated by the following model:

\[ \text{CACC}_{i,t} = \beta_0 + \beta_1 \text{CFO}_{i,t-1} + \beta_2 \text{CFO}_{i,t} + \beta_3 \text{CFO}_{i,t+1} + \beta_4 \Delta \text{SALE}_{i,t} + \beta_5 \text{PPE}_{i,t} + \epsilon_{i,t} \]

CACC: Current accruals
CFO: Cash Flows
∆SALE: changes in sale
PPE: is the gross asset of the property and equipment
All variables become same scaled by average total assets at the end of period.

The criterion of accruals quality was the standard deviation of the residual error of this regression model and when it is lower, it expresses the higher earning quality. For coordination of calculations with the title of variable, the calculated number is multiplied in - 1.

3. Income smoothing: in this study, income smoothing has been measured by two models: (1) Eckelindex (2) TZ criterion and the smoothing and non-smoothing companies are separated.
A. Eckel index

First, this model was introduced by Eckel and then was used by Albrecht & Richardson (1990), Michelson et al. (1995) and Carlson and Batala (1997) to identify artificial smoothing. In this model, if the ratio of coefficient of variation for change in time series of profit (gross profit, operating profit and net profit) to the coefficient of variation for the change in time series of sales become smaller than one, income smoothing company is considered artificial (Allamah Haeri, 2000) or if the smoothing index becomes smaller than one, income smoothing is occurred. Eckel index that is used to determine the artificial income smoothing is as follows:

\[
\frac{CV_{I1}}{CV_{S1}} < 1 = \text{Income smoothing index}
\]

\[
CV_{I1} = \frac{\sum (\Delta I_i - \Delta I)^2}{n-1} \frac{\sum (\Delta S_i - \Delta S)^2}{n-1}
\]

\[
CV_{S1} = \frac{\Delta I}{\Delta S}
\]

\[CV_{I1}: \text{The coefficient of variation for variation in time-series of profit} \]
\[\Delta I: \text{Profit changes over a period} \]
\[\Delta S: \text{Sales changes over a period} \]

Eckel model compares the sales variability with earning variability. The main utilized logic in this model refers to the behavior of the fixed costs. In other words, the existence of fixed costs causes in the normal state (a condition that any kind of manipulation has not been deliberately occurred in earning) earning variability become greater than the variability of sales.

Companies that have moved to smoothing, but for any reason were not able to extend the ratio of variation coefficient of fluctuation in time series of profit to sale to a number equal to one or less than it, have not been identified as an artificial income smoothing. So, we can say that by application of Eckel index to recognize artificial smoother companies in a statistical sample, in fact, companies have been recognized that were completely successful in this action. If the above ratio is equal to one or greater than it, the company is not considered as the artificial income smoother but it may become a real income smoother (Badri, 1999).

\[\frac{CV_{I1}}{CV_{S1}} \geq 1 \text{ Company is not smoother.} \]

B. TZ criterion

In present study, TZ criterion is used to separate companies to the high and low income smoothing companies. The separation of companies is as follows:

Correlation between changes of discretionary accruals, net income changes minus discretionary accruals (TZ = Corr[ΔDA & Δ(NI-DA)]) are calculated for each sample companies of study.

If the correlation between two variables tends to be -1, the income smoothing of company is higher.

If the correlation between two variables tends to be +1, the income smoothing of company is lower.

Relevance of earning to stock value

Relevance of earning to stock value is also measured through the company-specific regression which is presented below:

\[RET_{i,t} = \beta_0 + \beta_1EARN_{i,t} + \beta_2\Delta EARN_{i,t} + \epsilon_{i,t} \]

\[RET_{i,t}: 15\text{-month return ending, three months after the fiscal year } t \]
\[EARN_{i,t} & \Delta EARN_{i,t}: \text{are the level and change of earning before the extraordinary items in year } t \]
\[\text{which are measured by the market value at the end of year } t-1. \]

Coefficient determination of the company-specific regression in each year is considered as the relevance of earning to the stock value.

Regression model to test the research hypotheses

The following regression model is used to investigate the effect of payment status of the dividend earning to earning quality:

\[EQ_{i,t} = \alpha + \beta DIV_{i,t} + \sum_{e=1}^{N} \lambda^e Z_{i,t} + IND_{i,t} + \epsilon_{i,t} \]

\[EQ: \text{is the earning quality criterion by ADA, AQ, AAQ, SMOOTH and VR.} \]
\[DIV: \text{payment status of dividend earning which is the ratio of dividend earning of per share to the earning of per share is operational by the following formula:} \]
\[
\text{DIV} = \frac{\text{DPS}}{\text{EPS}}
\]

\(Z\): is the vector of control variables that are associated with earnings quality and may also relate to the payment status of dividend earning. First, the variables are used that are associated with the likelihood of paying dividend earning.

**Control variables**

- **SIZE**: company size which is the natural logarithm of book value of the company’s total assets (log \(BVA\))
- **B/M**: The ratio of stock book value to the market value of stock (BVS / MVS)
- **GROWTH**: sale growth which is the ratio of current sale to the sale of previous year.
- **ROA**: asset returns which is calculated through the ratio of net income on the average total assets (NI / TA)
- **IND**: virtual variable that shows the classification of studied companies based on the activity in the homogeneous groups. In this study, five industries of food (code 1), automotive (code 2), chemical (code 3), pharmaceutical (code 4) and cement (Code 5) were studied.

In addition to this, time series and cross-sectional dependence is controlled by calculating the standard error based on the year and company clustering.

**Results**

*The first hypothesis testing results*

The first hypothesis states that the dividend earning has an impact on the net value of discretionary accruals.

Table 1. Results of the first hypothesis testing

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Symbol</th>
<th>Coefficient (Beta)</th>
<th>Statistics t</th>
<th>P-Value</th>
<th>Eigenvalues</th>
<th>Status Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed value</td>
<td>(\alpha)</td>
<td>-</td>
<td>-0.732</td>
<td>0.465</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend earning</td>
<td>DIV ((\beta_1))</td>
<td>0.125</td>
<td>3.198</td>
<td>0.000</td>
<td>0.885</td>
<td>1.129</td>
</tr>
<tr>
<td>Company Size</td>
<td>Size (\beta_2)</td>
<td>-0.016</td>
<td>-0.435</td>
<td>0.664</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Book value to market value</td>
<td>B/M ((\beta_3))</td>
<td>0.063</td>
<td>1.602</td>
<td>0.110</td>
<td>0.877</td>
<td>1.140</td>
</tr>
<tr>
<td>Sales Growth</td>
<td>Growth (\beta_4)</td>
<td>0.084</td>
<td>2.262</td>
<td>0.024</td>
<td>0.972</td>
<td>1.029</td>
</tr>
<tr>
<td>Rate of assets returns</td>
<td>ROA ((\beta_5))</td>
<td>0.180</td>
<td>4.283</td>
<td>0.000</td>
<td>0.759</td>
<td>1.317</td>
</tr>
<tr>
<td>Classification of Industry (virtual variable)</td>
<td>IND ((\beta_6))</td>
<td>-0.012</td>
<td>-0.276</td>
<td>0.783</td>
<td>0.751</td>
<td>1.332</td>
</tr>
<tr>
<td>Total regression model</td>
<td></td>
<td></td>
<td>8.600</td>
<td>0.000</td>
<td>1.909</td>
<td>R²=0.069 Adj R²=0.061</td>
</tr>
</tbody>
</table>

According to the results of first hypothesis testing which is presented in Table 1, the significance level of statistical F (000/0) was less than the acceptable error level (5%) and the total regression model is significant. Durbin–Watson statistic (1.909) is located in the interval between 1/5 and 2/5. Therefore, there is no correlation between the error components model. Investigating the correlation between the independent variables indicates that the eigenvalue and status indicator is less than 15. Whatever the status indicator be lower, and whatever the eigenvalue be larger and closer to 1, regression is suitable for predicting. The results of the above table show the eigenvalue and status indicator are in situation that confirms the utilization of regression. Due to the low (P-Value) of the t-statistic of the acceptable error level for the coefficient \(\beta_1\), the test results show that the dividend earning has positive and significant impact on the net value of discretionary accruals in reliability level of 95%. The results of study also show that among the control variables, sales growth and rate of assets return has positive and significant effect on the amount of discretionary accruals. The coefficient of determination and
the adjusted coefficient of determination indicate that the independent and control variables entered into the regression can explain 6.9% of the dependent variable variability.

**The second hypothesis test results**

The second hypothesis states that the dividend earning has an impact on accruals quality (quality of financial reporting).

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Symbol</th>
<th>Coefficient (Beta)</th>
<th>Statistics t</th>
<th>P-Value</th>
<th>Same line study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed value</td>
<td>$\alpha$</td>
<td>-</td>
<td>2.034</td>
<td>0.042</td>
<td>-</td>
</tr>
<tr>
<td>Dividend earning</td>
<td>DIV ($\beta_1$)</td>
<td>-0.097</td>
<td>-2.567</td>
<td>0.011</td>
<td>0.896</td>
</tr>
<tr>
<td>Company Size</td>
<td>Size ($\beta_2$)</td>
<td>0.045</td>
<td>1.224</td>
<td>0.222</td>
<td>0.937</td>
</tr>
<tr>
<td>Book value to market value</td>
<td>B/M ($\beta_3$)</td>
<td>-0.077</td>
<td>-1.988</td>
<td>0.047</td>
<td>0.858</td>
</tr>
<tr>
<td>Sales Growth</td>
<td>Growth ($\beta_4$)</td>
<td>0.095</td>
<td>2.620</td>
<td>0.009</td>
<td>0.966</td>
</tr>
<tr>
<td>Rate of assets returns</td>
<td>ROA ($\beta_5$)</td>
<td>-0.393</td>
<td>-9.527</td>
<td>0.000</td>
<td>0.754</td>
</tr>
<tr>
<td>Classification of Industry (virtual variable)</td>
<td>IND($\beta_6$)</td>
<td>-0.138</td>
<td>-3.316</td>
<td>0.001</td>
<td>0.737</td>
</tr>
</tbody>
</table>

According to the results of second hypothesis testing which is presented in Table 2, the significance level of statistical F (000/0) was less than the acceptable error level (5%) and the total regression model is significant. Durbin–Watson statistic (1.505) is located in the interval between 1/5 and 2/5. Therefore, there is no correlation between the error components model. So, correlation survey between the independent variables indicates the eigenvalue and status index is less than 15. Whatever the status index be lower, and whatever the eigenvalue be greater and closer to 1, regression is suitable for forecasting. The results of the above table indicate the eigenvalue and status index are in situation that confirms the utilization of regression. Due to the low (P-Value) of the t-statistic of the acceptable error level for the coefficient $\beta_1$, the test results show that the dividend earning has negative and significant impact on the accruals quality in reliability level of 95%. Also, results of study show that among the control variables, sales growth has positive and significant effect on the quality of accruals and in contrast, the ratio of book value to market value, rate of assets return and industry class has negative and significant impact on the quality of accounting information. Also, the coefficient of determination and the adjusted coefficient of determination indicate that the independent and control variables entered to the regression can explain 24.1% of the dependent variable variability.

**The third hypothesis test results**

The third hypothesis states: The dividend earning has impact on income smoothing.

This hypothesis was tested in two approaches. In the first case, the Eckel income smoothing model and in the second case, TIZ income smoothing model was entered into the logit model as the dependent variable. Following the provided model of company that is identified smoothing according to the definition, number one and otherwise number zero has been considered.

According to the results of the third hypothesis testing, in first case, which is presented in Table 3, the significance level of statistical chi square (0.000) was less than the acceptable error level (5%) and the total regression model was significant and is indicator of a good fit of the model. Due to the low (P-Value) of the Wald statistic of the acceptable error level for the coefficient $\beta_1$, the test results showed that the dividend earning has a positive and significant impact on income smoothing of Eckel model in reliability level of 95%. Also, the results of study showed that, among the control variables, company size has a positive and significant effect on income smoothing of Eckel
model and in contrast, the ratio of assets return and industry class has a negative and significant impact on income smoothing of Eckel model. Also, the Pseudo coefficient of determination shows that the independent variables entered into the regression can explain 17.8% to 24% of the dependent variable variability.

### Table 3. Results of the third hypothesis testing in the first case (Eckel model)

<table>
<thead>
<tr>
<th>Variable name</th>
<th>β</th>
<th>Coefficient (β)</th>
<th>Wald statistic</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed value</td>
<td>α</td>
<td>-0.078</td>
<td>0.010</td>
<td>0.920</td>
</tr>
<tr>
<td>Dividend earning</td>
<td>DIV (β₁)</td>
<td>0.392</td>
<td>4.070</td>
<td>0.044</td>
</tr>
<tr>
<td>Company Size</td>
<td>Size (β₂)</td>
<td>0.119</td>
<td>4.193</td>
<td>0.041</td>
</tr>
<tr>
<td>Book value to market value</td>
<td>B/M (β₃)</td>
<td>-0.077</td>
<td>0.207</td>
<td>0.649</td>
</tr>
<tr>
<td>Sales Growth</td>
<td>Growth (β₄)</td>
<td>0.145</td>
<td>0.507</td>
<td>0.476</td>
</tr>
<tr>
<td>Rate of assets returns</td>
<td>ROA (β₅)</td>
<td>-3.103</td>
<td>13.046</td>
<td>0.000</td>
</tr>
<tr>
<td>Classification of Industry (virtual variable)</td>
<td>IND (β₆)</td>
<td>-0.635</td>
<td>63.663</td>
<td>0.000</td>
</tr>
<tr>
<td>All model of Logistic Regression</td>
<td>statistic x²</td>
<td>137.131</td>
<td>P-Value</td>
<td>0.000</td>
</tr>
</tbody>
</table>

According to the results of the third hypothesis testing, in second case, which is presented in Table 4, the significance level of statistical chi square (0.000) was less than the acceptable error level (5%) and the total regression model was significant and is indicator of a good fit of the model. Due to the low (P-Value) of the Wald statistic of the acceptable error level for the coefficient β₁, the test results show that the dividend earning has positive and significant impact on income smoothing of TZ model in reliability level of 95%. Also, results of study show that among the control variables, industry class sales has negative and significant effect on income smoothing of Eckel model. Further, results indicated that, by increasing the acceptable error level to 10%, the ratio of book value to market value has also a negative and significant impact on income smoothing of TZ model. Also, the Pseudo coefficient of determination shows that the independent variables entered into the regression can explain 9.8% to 17% of the dependent variable variability.

### Table 4. Results of the third hypothesis testing in the second case (model TZ)

<table>
<thead>
<tr>
<th>Variable name</th>
<th>β</th>
<th>Coefficient (β)</th>
<th>Wald statistic</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed value</td>
<td>α</td>
<td>1.445</td>
<td>3.822</td>
<td>0.051</td>
</tr>
<tr>
<td>Dividend earning</td>
<td>DIV (β₁)</td>
<td>0.583</td>
<td>10.083</td>
<td>0.001</td>
</tr>
<tr>
<td>Company Size</td>
<td>Size (β₂)</td>
<td>-0.078</td>
<td>1.968</td>
<td>0.161</td>
</tr>
<tr>
<td>Book value to market value</td>
<td>B/M (β₃)</td>
<td>-0.309</td>
<td>3.590</td>
<td>0.058</td>
</tr>
<tr>
<td>Sales Growth</td>
<td>Growth (β₄)</td>
<td>0.153</td>
<td>0.839</td>
<td>0.260</td>
</tr>
<tr>
<td>Rate of assets returns</td>
<td>ROA (β₅)</td>
<td>0.294</td>
<td>0.161</td>
<td>0.688</td>
</tr>
<tr>
<td>Classification of Industry (virtual variable)</td>
<td>IND (β₆)</td>
<td>-0.335</td>
<td>22.276</td>
<td>0.000</td>
</tr>
<tr>
<td>All model of Logistic Regression</td>
<td>statistic x²</td>
<td>35.680</td>
<td>P-Value</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Cox&Snell= 0.178 NagelKerke= 0.240
nation shows that the independent variables entered into the regression can explain 5% to 6.7% of the dependent variable variability.

Results of the fourth hypothesis testing

The fourth hypothesis stated the dividend earning has an impact on the relevance of earning value.

Table 5. Results of the fourth hypothesis testing

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Symbol</th>
<th>Coefficient (Beta)</th>
<th>Statistics t</th>
<th>P-Value</th>
<th>Same line study</th>
<th>Same line study</th>
<th>Status Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed value</td>
<td>α</td>
<td>-</td>
<td>8.261</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend earning</td>
<td>DIV (β1)</td>
<td>-0.056</td>
<td>-1.427</td>
<td>0.154</td>
<td>0.885</td>
<td>1.129</td>
<td></td>
</tr>
<tr>
<td>Company Size</td>
<td>Size (β2)</td>
<td>0.026</td>
<td>0.952</td>
<td>0.342</td>
<td>0.939</td>
<td>1.065</td>
<td></td>
</tr>
<tr>
<td>Book value to market value</td>
<td>B/M (β3)</td>
<td>0.147</td>
<td>3.721</td>
<td>0.000</td>
<td>0.877</td>
<td>1.140</td>
<td></td>
</tr>
<tr>
<td>Sales Growth</td>
<td>Growth (β4)</td>
<td>-0.004</td>
<td>-0.112</td>
<td>0.911</td>
<td>0.972</td>
<td>1.029</td>
<td></td>
</tr>
<tr>
<td>Rate of assets returns</td>
<td>ROA (β5)</td>
<td>0.205</td>
<td>4.841</td>
<td>0.000</td>
<td>0.759</td>
<td>1.317</td>
<td></td>
</tr>
<tr>
<td>Classification of Industry (virtual variable)</td>
<td>IND (β6)</td>
<td>-0.020</td>
<td>-0.480</td>
<td>0.632</td>
<td>0.751</td>
<td>1.332</td>
<td></td>
</tr>
<tr>
<td>Total regression model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the results of the fourth hypothesis testing which is presented in Table 5, the significance level of statistical F (000/0) was less than the acceptable error level (5%) and the total regression model is significant. Durbin Watson statistic (1.720) is located in the interval between 1.5 and 2.5. Therefore, there is no correlation between the error components model. So, investigating the correlation between the independent variables indicates the eigenvalue and status index is less than 15. Whatever the status index is lower, and whatever the eigenvalue be greater and closer to 1, regression is suitable for forecasting. The results of the above table indicate the eigenvalue and status index are in situation that confirms the utilization of regression. Due to the high P-value of the t-statistic of the acceptable error level for the coefficient β1, the test results show that the dividend earning has no significant impact on the relevance of earning value in reliability level of 95%. Therefore, the fourth research hypothesis cannot be accepted at the error level of 95%. Also, results of study showed that among the control variables, the ratio of market value to book value and the rate of assets return has positive and significant impact on the relevance of earning value. Also, the coefficient of determination and the adjusted coefficient of determination indicate that the independent and control variables entered to the regression can explain 5.4% of the dependent variable variability.

Discussion and Conclusion

According to Aschiper (1989), targeted intervention earning management at the financial reporting process of the company’s outside of the organization is to gain personal benefits. Balkoei (2004) believes that earnings management is designed as a part of the accounting. Namely, creating prefabricated image and purpose for transmitting information is by using of accounting information. Income smoothing, earnings management, prefabricated accounting and the shortcomings of accounting systems are different aspects of the designed accounting. According to the Dijourj studies et al. (1999), investors and managers of companies accurately pay attention to the company’s profit reporting. Management is aware of the importance of profit for stakeholders and considers his reward as a natural consequence of accounting profit. Results of Ball and Brown (1968) showed that changes of accounting earnings and stock price are relevant and in same line. It means that information of accounting earning contains factors that effect on stock price and can be beneficial. Overall, research results for the entire sample show that, dividend earning on the net value of discretionary accruals and income smoothing in both models: (Eckel and TZ) has positive impact and the quality of financial reporting has a significant and inverse impact. Also, no
significant relation was observed between the dividend earning and relevance of earning to the stock value. It can be inferred from the results that distribution of more profits among shareholders may provide evidence of earnings management and in this situation, managers try to attract shareholders’ interest to the approval of more earning distribution among themselves by providing an appropriate expression of company profitability. During the progress of every research, the new aspect/s proposed that were either covered to researcher or there is no possibility to survey them due to the limitations of research. The following topics are no exception from this principle. It is suggested that accounting and financial management scholars and researchers investigate the relationship of following parameters with earning quality in their future:

- The impact of accounting standards on earnings quality.
- The relationship of reporting type and audit quality with earning quality
- The effect of earning quality on the accuracy of earning predicting
- The effect of the balance sheet on reduction of earning management conducting
- The relation of the fixed assets’ sale and change in policies to grant credit with earning quality
- The impact of company’s age and other features of company on earning quality
- The relationship of awards based on the accounting profit with earnings quality
- The relationship of choice of companies’ accounting methods with earnings quality

Reference


