The Effects of Transparency of Financial Information and Board Composition on Forecast Accuracy of Corporate Earnings

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ABSTRACT

The aim of the present research is to determine the effects of financial information transparency and composition of board of directors on forecast accuracy of corporate earnings in companies. A corporation's key for success is hidden in its optimal direction. So it can be claimed that the secret of the eternal reputation of popular corporations lies in their efficient board of directors. One of the significant components of important economic decisions of investors and of the optimal features of competitive markets is better and further information disclosure, especially the one which is specific to a certain corporation. Essential information disclosure facilitates quick transactions which are the principle determinant of a corporation's capacity. Earning forecast by managers and its characteristics is a sign of presenting managers' private information or confirming their claims. This sign helps investors to realize the relationship between managers' forecast and future earnings better and predict stock price more accurately. Therefore, the main objective of the present study is probing into the effect of transparency of financial information and board composition on forecast accuracy of corporate earnings in companies in Tehran Stock Exchange by examining a sample of 498 firm-year data over the period between 2006 and 2011. In order to test each of the research hypotheses, multivariate regressions were conducted using SPSS18. Testing the hypotheses showed that financial information transparency is not effective on forecast accuracy of corporate earnings. However, the composition of board of directors had a meaningful negative impact on forecast accuracy of corporate earnings. Besides, the research findings showed that among control variables tested in the research model, financial leverage had a negative significant relationship and company size did not have a significant and positive relationship with forecast accuracy of corporate earnings.

Keywords:
Financial Transparency, Corporate Earnings, Tehran Stock Exchange
1. Introduction

Nowadays, financial information transparency is considered a big concern for activists of the market of capital in various countries. In capital market of Iran, due to the emergence of financial crisis in 2004, financial transparency of companies listed on TTSE drew the attention of investors [5]. In this regard, in addition to relative convergence of national accounting standards with international accounting standards, the TSE has attempted in order to improve other kinds of disclosure among which preparing action plans of information disclosure and a ranking system of disclosure can be mentioned [1]. According to accounting standards, the primary goal of preparing financial forms and financial information disclosure is to provide useful information of financial status and the results of business unit operations for decision making of users [2]. Financial statements are transparent when they have features such as availability, reliability, comprehensiveness, relevance and timeliness [2]. Managers can use their information of commercial activities of the company to improve the efficiency of financial forms, which functions as a tool for transferring information to potential investors and creditors [1]. One of the methods of transferring information is disclosing it through financial forms.

According to the statement of theoretical concepts of financial reporting of Iran, the objective of financial forms is defined to summarize and classify information about the financial position, financial performance and financial flexibility of the commercial unit which can be used when making economic decisions by a wide range of users of financial forms [4]. In this regard, disclosure is considered as a prominent feature of financial reporting [3]. Information transparency is an index of management performance in presenting necessary information in a clear, accurate, timely and accessible manner [4]. This index reflects whether investors have a real image of what happens inside a company or not [1]. The composition of board of directors as a control tool in the company determines the power of board [4]. As a result, the composition of board of directors is a significant factor in explaining the ability of members to do their tasks and help with the functioning of company [4].

The composition of board of directors is related to the number of different members of board as bound/non-bound, male/female, foreign/local and the degree of dependence of members of the company. The features of board include the background characteristics such as experience, tenure length, record of functions, independency, ownership of shares and other variables that affect the interests of members [5]. The structure of board also includes the organization of board of directors, the role of affiliated boards in Holding companies, the board committees, formal independence of one rank and extended tenure boards, leadership of the board and information flow between structures of board [4]. A company with good corporate governing mechanisms such as separating the functions or optimum balance between bound and non-bound members proves to be more effective in monitoring and controlling management [5]. Besides, the amount of disclosed information for participants in investment market affects analysts’ forecast accuracy of earnings. Such findings are developed to disclose the information about analyzing accounting procedure management and similar fields [6]. In general, these findings denote that companies which publish more information for external users have higher forecast accuracy of earning [6].

According to the laws of some countries, declared forecasted earning must have adequate accuracy. One of the main goals of accounting is preparing and presenting information which helps to forecast future events and operations. Thus, the presented information and the earning from each share must have a specific amount of profit [7]. According to the qualitative features of information, profitability in forecasting is one of the features of relevancy of information, which means that financial information must be provided in a way that is useful for forecasting the results of current and future activities [3].

Authors in one of the previous studies maintained that when managers publish earning forecast with low accuracy, investors would not be able to interpret the information related to the forecasting and realize the meanings related to the future earnings. Thus, lack of reliance on the earnings forecasts of managers will increase. The increase of investors’ distrust leads to the reduction of reaction to this disclosure and reaction coefficient of future earnings [8]. Commercial markets and users of commercial information are in need of some measures and conditions to increase the transparency of reporting procedure. Today’s business reports deal with a number of problems such as performance inappropriate analysis and improper
release of business information among users of financial information [9]. The significant point here is that improvement of financial information transparency in Tehran Stock market can increase public trust and investor activities [10]. One of the most important factors which helps to control the agency relationship is the board of directors and its composition. Hence, investigating the factors related to this composition is of considerable importance [11].

The composition of board of directors is a proportion of unbounded members of board from total number of members. As the composition of board of directors includes more independent members, the agency issues decrease more. Typically, the bounded board of directors is equal to chairman. Chairman is the top executive officer of the company and has full authority in selecting executive (bound) managers. Thus, due to the implicit relationship between boards of directors with chairman, bound managers may not be able to do their supervisory tasks in an effective manner. Moreover, they may abuse their position and power by controlling the plans of privileges and salaries and job security. Unlike bound managers, unbound managers are independent of company's management; as a result, they act better in doing their supervisory tasks [12].

Corporate governance procedures influence the quality of information disclosed by corporations such as the information related to forecasting earnings. Transparent financial information disclosure reduces problems and agency issues to minimum through decreasing the information imbalance between management and shareholders. The previous research indicates that procedures of corporate governance such as characteristics of board of directors, ownership structures, and audit quality affect the processes of information disclosure. Hence, it can be said that the composition of board of directors is a factor which can improve the quality of information presented by management. Forecast accuracy of earning by management is a vital factor in building trust on such disclosures in the investors [13]. The findings of the present research increase the knowledge about the effects of financial information transparency and composition of board of directors on the forecast accuracy of corporate earnings; and also provide more evidence of the related procedures in reducing the conflict of interest among management and shareholders. As a result, regarding what was mentioned above, the necessity and significance of present research is revealed. Thus, the present research attempts to answer this question: what is the effect of financial information transparency and composition of board of directors on forecast accuracy of companies listed in Tehran Stock Exchange organization?

2. Literature Review

The literature of research is examined in three sections; namely, financial information transparency, composition of board of directors and forecast accuracy of corporate's earning.

- **Financial information transparency**

  The degree of transparency in theoretical terms, in fact, is defined as the degree of accuracy and exactitude of received information, their perfection and total quality.

  Transparency and adequate disclosure which reduce the information asymmetry is regarded as an inseparable part of strategic system of companies; and those companies which have more transparency are more highly-valued than other companies in market [2].

  Transparent information can be considered as one of the instruments of accountability duty of managers. As the distribution of information increases in societies, the possibility of conscious decision making and accountability of private and public sectors on acquiring and consuming resources increases and the chance of growing corruption decreases [10].

  The main role of financial reporting is effective in transferring information to external individuals in an accredited timely manner. However, if managers intend to mislead the users of financial forms and use their power in the field of accounting selections and have incentives for financial reports, the chance of earning management increases [14]. In order to identify the incentives of manager to disclose information in financial reports, not only optional incentives but also obligatory incentives such as the threshold of importance must be considered as well. Accordingly, the process of information disclosure can be classified into three sections:

  a) Optional disclosure under the condition where no obligation for disclosure, including transparency, exists;
b) Obligatory disclosure with the assumption of obligation to respect transparency;

c) Disclosure with simultaneous respect to both optional and obligatory incentives due to transparency [3].

Accounting information plays an important role for its users, especially in decision-making. Information of accounting in financial statements represents the financial effects of past events and transactions, which can be used to support decision making in the future. In addition, the non-financial information also supports decision-making for users of financial statements. According to Barth and Schipper[34], financial reporting transparency is identified as, on the one hand, disclosure for information in the financial statements are underlying economics; on the other hand, information disclosure in the financial statements are readily understandable by internal and external information users. Florini[35] defines transparency as the degree of information is available to outsiders, allowing them to make decision and/or to assess the decision of insiders. Furthermore, transparency is related to quality of information such that information needed should be easily understood, factually accurate by the intended audience and presented in a feature that promotes adoption of the desired behaviors[36]. Further definition of financial transparency is comprehensibility, clarity, and clearness, and excellent corporate governance[37],[38]. Accurate, clear, and disclosed information can be considered to hold a strong degree of transparency[39].

- The composition of board of directors

Board of directors is an important pillar in organizational structure of any company which is considered as the communication filed between shareholders and managers. So, board of directors has a very significant role in Leading Corporation at the level of corporation. The majority of discussions in this field involve achievement of an optimal composition of board. Size, composition and the number of independent members of board of directors are among the variables which have been studied and tested as evaluative factors of a company in various studies [11]. In literature of corporate governance, it is believed that in order to support the rights of shareholders, board of directors must be smaller in size and contain a higher percentage of unbound members. Moreover, the role of CEO and board chairman must be distinct from each other and one of the unbound members hold responsibility of board chairman. In other words, the board of a company must be controlled by unbound (independent) managers [15]. The rights of shareholders are manifest in their capacity of adequate controlling of company's economy, changing jobber, inefficient and opportunist managers, supervision of company's managers and guiding them with changing ownership in such a way that these measures increase the value of company [16]. Hence it is possible that shareholders prefer board counselor role to supervisory role. And, in order to encourage the CEO to disclose private information, a board of directors with less independency than on CEO should be selected. Larger board can be more useful due to the congregation of expertise and resources for organizing. However, excessive increase in number of managers neutralizes these advantages because of increasing the expenses related to longer decision making periods and weaker communication of managers, thus it has a reverse effect [17]. The dichotomous function of CEO refers to the point that CEO is someone who is the chairman of board of directors too. In this case, CEO has a powerful position in the board which prevents him from presenting any unqualified information to external people. When CEO has both of these responsibilities, he supervises his own decisions and activities; as a result, the activities of company may not be in line with the interests of shareholders [18]. The composition of board which is measured by the number of unbound members has a meaningful relationship with disclosure. The presence of unbound members in board leads to better regulation of activities and prevents opportunist managers [19]. The performance of board directors can be considered as a means of internal control in decision making process of company in line with shareholders' interests and also to guarantee that such decisions are in line with shareholders' interests [20]. In the discussion of composition of board of directors, the question which attracts the attention of many researchers is whether the presence of unbound members in the board increases corporate performance or not? From the perspective of agency theory, the presence of independent unbound managers in board of company contributes to a decrease in conflict of interests.
between shareholders and company's management because they have a supervisory role by giving independent votes to board of directors [5]. In a related study, believes that obeying people like administrative managers of company which have legal power unconsciously is inherent in human beings. This automatic reaction makes board members to obey CEO and since it is in relation with moral concepts such as loyalty, trust and commitment it is hard to overcome [4].

- Forecast accuracy of earning

Managers can benefit from our paper by becoming more knowledgeable about scholarly research findings regarding these forecasts. This information should improve their ability to make informed decisions about whether and when to issue a forecast and what characteristics it should possess. For example, from our review, managers can better distinguish between the changes they might make to their earnings forecasts to achieve immediate responses from market participants and the changes that would not be quickly appreciated. Managers also can gain insight into the forecast characteristics that increase the credibility of good-news forecasts, e.g., verifiable information and the characteristics that do not [40]. The stock exchanges provide forms to standardize forecast releases, and require firms to update a previously issued earnings forecast if the reason for the forecast has changed or if the new estimate differs by 50% or more from the previous estimate. The requirement for updating obsolete forecasts applies to both mandatory and voluntary forecasts. Regulators may punish firms that omit or delay mandatory forecasts or issue inaccurate mandatory or voluntary forecasts, often by publicly denouncing a violating company along with its executives and directors. To restore investors’ trust, the company typically issues an apology in a national newspaper [41]. Prior research finds, however, that the enforcement of forecast rules is weak: only a small percentage of violations have been sanctioned, mostly for failure to forecast bad news [41].

The existence of transparent and comparable financial information is the main element in accountability and wise economic decisions. Capital owners, creditors and other users of financial information need understandable pertinent information for decision making regarding the sale, purchase, and holding of shares, granting loan, evaluating the performance of managers, and other important economic decisions. Short-term planning for surviving and durability of economic units along with making effective decisions of investment and financial security by managers, investors, creditors and others is necessary. Planning makes appropriate usage of available opportunities possible which helps to prepare suitable reactions before getting involved in undesirable economic events. For increasing the effectiveness of planning, the ability of accurate continuous forecasting as a necessity must be improved [21]. There are various methods to forecast earning of each share including forecast by managers and analysts using time series. The stock exchange commission (SEC) of the United States permitted the companies listed in US stock market, for the first time, to disclose their forecasts of earnings in 1973; and two years later obliged companies to disclose such information. In April 1976, this obligation was removed due to some objections and the investors had no other choice but relying on analysts. Managers forecast of earnings can have effects on the value of company and lead to an increase or decrease in share value in stock market [22]. Among the most effective factors of forecast accuracy of earning are the following:

1) **Forecasted earnings per share**: The earnings of each share that is announced by the company according to the rules of Tehran Stock Exchange (according to the budget) in certain times.

2) **Actual earnings per share**: The actual earnings that are approved at the end of the fiscal year by the general assembly and are a company's actual earnings divided according to the number of common shares.

3) **Company size**: Based on a research conducted in 2003, the writers argued that company size including total assets, total sells, and market value of equity and company value have direct relationships with each other. It is obvious that company size is the size and scope of the activities of a company. Large companies represent a lower risk due to more relations with stockholders and more monitoring mechanisms [23]. In another work, researchers argued that large companies in comparison with small ones are able to react to environmental impacts better because they are more diverse. Hence, it is expected that the predictions of large companies be more accurate according to a study done in 1979. Extrapolations show that there is a positive relationship between the size and the earnings.
forecast accuracy. Large companies have more fluctuations and higher forecast capability and finally are more accurate [24].

4) Temporal perspective of forecast: Another key factor that can affect the earnings forecast accuracy is temporal perspective of earnings forecast. The relationship between temporal perspective earnings forecast and earnings forecast accuracy has been addressed in several former studies in different countries some of which are mentioned below:

The results of a study confirmed this idea and pointed out that management forecasts, over mid-term earnings, compared to annual earnings forecasts will result in more reactions in stock price. Lee & et al state that the longer and higher temporal perspective of forecast, the less accurate earning forecast will be [25].

5) Company history: Robins and Berliner see company history as a key variable in the accuracy of earning forecast. In a research about this parameter the authors expressed that earnings forecast of companies with no or little history is very difficult. Therefore, history is considered as a significant variable in earning forecast [26]. Based on a study conducted in Hong Kong capital market. They argue that as the older companies with high track records have lower risk they are more experienced and more accurate in their forecasts [27].

6) The superiority of a company: Tehran Stock Exchange, according to the rules and regulations, announces the first 50 top companies every three months. Being top means that a company is announced among the tops at least once in a fiscal year.

7) Financial ratios: Eddy & Seifert showed that since the higher leverage will result in a more volatility in earning, earning forecast will become more difficult. They argue that companies which have relatively more debt (higher financial leverage) get more earning fluctuations. So the higher Financial Leverage, the less accurate earning forecast will be [29].

8) Adjustment rates: It shows the number of times a company made revisions in forecasts in the previous year [23].

9) Auditor (of accounts) assessments: Audited financial statements (by independent auditors) are very good means for transferring information. Earnings forecast are one of the most important pieces of information which is highly noticed by interest owners. It is clear that if the auditors confirm the forecast, besides giving validity to the forecast, the decisions made by users of these financial statements can be influenced.

10) Forecast period: It demonstrates the distance between the company and stock and the end of the fiscal year. It is expected that there be a negative relationship between forecast course and earning forecast accuracy [23].

Research Background

In a study conducted in 2010 the author used a sample of 235 Malaysian companies in the period between 1999 and 2006 and investigated the relationship between corporate governance and forecast accuracy of earnings. Their findings showed that audit committees, which have unbound members, and also the size of audit committee, have a negative relationship with the absolute error of forecast. In other words, the size of audit committee has a positive relationship with forecast accuracy of earnings. Their findings demonstrated that as the number of audit committee members without an administrative position and the size of audit committee increases, the forecast accuracy of earnings by management increase. They didn’t identify any significant relationship between board characteristics and forecast accuracy of earnings. Moreover, the result of their research indicated a positive relationship between company size and forecast accuracy of earnings. These findings indicate that earnings’ forecast has more credit in larger companies [29]. In another work, researchers investigated a sample of 212 banks with 1534 observations over 1997 to 2004. They found that extending and diversifying bank activities leads to an increase in board size, the percentage of unbound members and composition of CEO and board chairman roles [30]. In a study titled "the effect of threshold of importance and optional incentives of managers on information disclosure in companies listed in TSE", investigated the optional and obligatory incentives, and disclosure in financial forms. In order to test the hypotheses, they used a sample of 98 active companies listed in stock market and audited by national organization of audit. The examined period is 2000 and 2001, i.e. one year before and one year after obligation to observe the audit action plan with a view on audit risk management and as an index of determining threshold of importance. Their findings demonstrated the effects of disclosure variables except...
for the volume of capital provided by the company including the materiality threshold, earning coefficient sensitivity, ownership costs, on financial forms disclosure [3]. In a research, the writers investigated the relationship between corporate governance procedures and forecast accuracy of earnings. The objective of their research was to investigate the relationship between corporate governance structures (the percentage of unbound board members, institutional ownership, dichotomous CEO responsibility and audit quality) with forecast accuracy of earnings. The sample included 96 companies listed in TSE during the period between 2005 and 2010. Research findings indicate a positive significant relationship between the percentage of unbound board members and not significant relationship between other elements of corporate governance such as institutional ownership, dichotomous CEO responsibility and audit quality with forecast accuracy of earnings [13].

- **Research Hypothesis**

  1st H: Transparency of financial information has impact on the forecast accuracy of earning of companies listed in Tehran stock exchange organization.

  2nd H: The composition of board of directors has impact on the forecast accuracy of earning of companies listed in Tehran stock exchange organization.

3. Methodology

This study is an applied one and uses correlation method of analysis. However, it is considered as a descriptive study in the field of accounting. Moreover, regarding the epistemology of research, the present research is experimental since it uses a deductive system of argumentation and field-library information.

It is an ex post facto research (i.e. using past information). The research population includes all companies listed in TSE, which all classes of Stock market companies are 37 classes.

In the present research no special formula was used to estimate the volume of sample. To determine the sample instead, the exclusion method was used. In other words, the companies which had the following conditions were selected as participants and the rest were excluded. The conditions are as follows:

1) To observe the comparability, the company's fiscal year should end in March every year.
2) Over the scope of study, there should be no activity halt and no change of fiscal year.
3) All information required for the research be available.
4) It is not a member of banks and financial institutions (investment companies, brokers, holding companies, leasing and insurances).

After conducting the above mentioned limitations, 498 company-years constituted the sample of this research.

4. Results

After data collection, the obtained information was summarized and classified; then for data analysis referential statistic methods were run including Kolmogorov-Smirnov test for examining the normality of data, Pearson correlation coefficient for determining the correlation between quantitative variables, and multivariate regression for testing each research hypothesis, using SPSS18 software.

- **Descriptive analysis**

  In descriptive analysis, researcher uses tables and indices of descriptive statistics including central tendency and dispersion parameters to describe the collected data of the research.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sign</th>
<th>Number of Observations</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition of board</td>
<td>IND</td>
<td>498</td>
<td>1.00</td>
<td>0.21831</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Transparency of financial info.</td>
<td>TRANCE</td>
<td>498</td>
<td>59.8835</td>
<td>24.42873</td>
<td>-13.00</td>
<td>99.00</td>
</tr>
<tr>
<td>Error of earning forecast</td>
<td>EFA</td>
<td>498</td>
<td>0.63</td>
<td>0.12856</td>
<td>-0.65</td>
<td>0.63</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>LEV</td>
<td>498</td>
<td>0.6150</td>
<td>0.18451</td>
<td>0.1</td>
<td>0.93</td>
</tr>
<tr>
<td>Firm size</td>
<td>SIZE</td>
<td>498</td>
<td>13.59</td>
<td>1.40743</td>
<td>9.82</td>
<td>18.44</td>
</tr>
</tbody>
</table>

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**Data distribution**

The result of (K-S) test shows that the distribution of dependent variable of research (forecast accuracy of earning) and some of the independent and control variables including board composition, transparency of financial information, financial leverage and company size follow a normal distribution.

**Correlation test among research variables**

The result of correlation matrix shows that forecast accuracy of earning has a negative non-significant correlation with board composition at the level of 99% confidence, and a positive non-significant relationship with transparency of financial information at the level of 95% confidence and a positive significant relationship with company size at the level of 99% confidence. It also demonstrates that the board composition has a positive non-significant relationship with transparency of financial information. Board composition has a negative significant relationship with financial leverage and company size. The transparency of financial information has a negative non-significant relationship with company size and financial leverage at the level of 99% confidence. Other results are presented in the correlation matrix of research variables.

### Table 2: the result of Kolmogorov–Smirnov test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sign</th>
<th>Z-statistic</th>
<th>P-value of Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition of board</td>
<td>IND</td>
<td>4.629</td>
<td>0.6</td>
</tr>
<tr>
<td>Transparency of financial information</td>
<td>TRANCE</td>
<td>2.108</td>
<td>0.108</td>
</tr>
<tr>
<td>Error of earning forecast</td>
<td>EFA</td>
<td>1.173</td>
<td>0.127</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>LEV</td>
<td>0.753</td>
<td>0.623</td>
</tr>
<tr>
<td>Firm size</td>
<td>SIZE</td>
<td>1.21</td>
<td>0.107</td>
</tr>
</tbody>
</table>

### Table 3: Pearson correlation matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sign</th>
<th>IND</th>
<th>TRANCE</th>
<th>EFA</th>
<th>LEV</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board composition</td>
<td>IND</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial information transparency</td>
<td>TRANCE</td>
<td>+0.131**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error of forecast</td>
<td>EFA</td>
<td>0.2**</td>
<td>-0.29*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial leverage</td>
<td>LEV</td>
<td>-0.004</td>
<td>-0.212**</td>
<td>0.097**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Company size</td>
<td>SIZE</td>
<td>-0.007</td>
<td>-0.153**</td>
<td>-0.008**</td>
<td>0.218</td>
<td>1</td>
</tr>
</tbody>
</table>

*and ** indicates significance at the level of 95% and 99% confidence, respectively.

### The results of testing hypotheses

- **Results of applying first hypothesis**

  The 1<sup>st</sup> hypothesis states that transparency of financial information has impact on the forecast accuracy of earning of companies listed in Tehran stock exchange organization.

  In order to test the 1<sup>st</sup> hypothesis, the following multivariate regression model is used:

  \[ EFA_i = \alpha + \beta_1(\text{TRANCE}_i) + \beta_2(\text{LEV}_i) + \beta_3(\text{SIZE}_i) \]

  Regarding the results of testing the 1<sup>st</sup> hypothesis, the level of significance of F-statistic (0.000) is below the acceptable value of error (5percent), and the total regression model is significant. Durbin-Watson statistic (1.830) is located at the distance of 1.5-2.5. So, there is no correlation between error components of the model. Examining the correlation between independent variables shows that eigenvalue and condition index is below 15. As the condition index is smaller, and eigenvalue is larger and close to one, the regression is more suitable for prediction. The results of the above table show this point and condition index is in a condition that confirms using regression. Regarding the high value of (p-value) t-statistics from level of accepted error for \( \beta \)-coefficient, the test findings show that there is a positive non-significant relationship between financial information transparency and forecast accuracy of corporate.
earnings. Thus, the first research hypothesis cannot be accepted at the 5% level of error. Besides, the results of finding shows that among the control variable applied in the model, financial leverage has a significant negative relationship with forecast accuracy of corporate’s earnings and company size has a positive non-significant relationship with forecast accuracy of corporate’s earnings. \( R^2 \) and adjusted \( R^2 \) also explain independent and control variables. Finally, it can be said that the transparency of financial information has no effect on earnings forecast.

Table 4: the results of testing the 1st hypothesis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sign</th>
<th>(Beta) coefficient</th>
<th>t-statistics</th>
<th>P-value</th>
<th>Multicolinearity eigenvalue</th>
<th>The condition index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed value</td>
<td>( \alpha )</td>
<td>-</td>
<td>-0.473</td>
<td>0.636</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transparency of financial information</td>
<td>TRANCE</td>
<td>-0.01</td>
<td>-0.225</td>
<td>0.822</td>
<td>0.943</td>
<td>1.06</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>LEV</td>
<td>0.98</td>
<td>2.099</td>
<td>0.036</td>
<td>0.92</td>
<td>1.087</td>
</tr>
<tr>
<td>Company size</td>
<td>SIZE</td>
<td>-0.015</td>
<td>-0.324</td>
<td>0.724</td>
<td>0.94</td>
<td>1.063</td>
</tr>
<tr>
<td>Total regression model</td>
<td>F-statistics</td>
<td>P-value</td>
<td>(D-W) statistic</td>
<td>( R^2 ) and adjusted ( R^2 )</td>
<td>1.609</td>
<td>0.000</td>
</tr>
</tbody>
</table>

• Results of applying the first hypothesis

This hypothesis states that the composition of board of directors has impact on the forecast accuracy of earning of companies listed in Tehran stock exchange organization.

In order to test the 2nd hypothesis, the following multivariate regression model is used

\[
EFA_{t+} = \alpha + \beta_1 (IND_{t-}) + \beta_2 (LEV_{t-}) + \beta_3 (SIZE_{t-})
\]

Regarding the results of the second hypothesis, the significant level of F-Statistics (0.000) is lower than the level of the accepted error (5%) and the whole regression model is significant. Durbin–Watson statistic (1.859) is located at the distance of 1.5 to 2.5. Therefore; there is no regression between the parameters of the error model. Studying the regression of the independent variables shows that the specific amount and index of the situation is less than 15. The less the amount of situation index and the bigger the amount of special amount (closer to 1), the more suitable is the regression for forecast.

The results of the Table 5 show that special amount and situation index are in a form that confirms the use of regression. Considering the fact that the p-value of T statistic is lower than the accepted error for \( \beta_1 \) coefficient. The results of the test show that the management board composition has a significant and negative effect on the accuracy of forecasts.

Table 5: The results of testing the 2nd hypothesis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sign</th>
<th>(Beta) coefficient</th>
<th>t-statistics</th>
<th>P-value</th>
<th>Multicolinearity eigenvalue</th>
<th>The condition index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed value</td>
<td>( \alpha )</td>
<td>-</td>
<td>0.699</td>
<td>0.485</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Composition of board of directors</td>
<td>IND</td>
<td>0.2</td>
<td>4.549</td>
<td>0.0</td>
<td>1.00</td>
<td>1.050</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>LEV</td>
<td>0.099</td>
<td>2.212</td>
<td>0.027</td>
<td>0.952</td>
<td>1.050</td>
</tr>
<tr>
<td>Company size</td>
<td>SIZE</td>
<td>-0.015</td>
<td>-0.336</td>
<td>0.737</td>
<td>0.952</td>
<td>1.050</td>
</tr>
<tr>
<td>Total regression model</td>
<td>F-statistics</td>
<td>P-value</td>
<td>(D-W) statistic</td>
<td>( R^2 ) and adjusted ( R^2 )</td>
<td>8.556</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Therefore, we can accept the second hypothesis of the research at the error level of 5%. The results also indicate that the input control variables in financial leverage model has a significant and negative relationship with prediction accuracy and company size has also the insignificant and positive relationship with prediction accuracy of companies. Determination coefficient and adjusted determination coefficient also show that the dependent variables and input control variables in regression have been able to explain 10.4% of dependent variables changes. After studying the above hypothesis, we finally come to this conclusion that management board composition affects the earning forecast accuracy.

5. Discussions and Conclusions

- The first hypothesis states that:
  Transparency of financial information has an impact on the earning forecast accuracy of companies accepted in Tehran Stock Exchange. In this study, it is assumed that financial information disclosure obligations and observations of companies can raise the accuracy of earning forecast and this can increase profitability of the company by its own. According to the observations, companies which disclose their financial information transparency have high forecast accuracy compared to other companies which do not represent their information transparently or with delay within the legal deadlines. Lack of transparency of financial information is the main reason for the financial crises in market and companies. Companies can minimize these crises by transparent disclosure of information and increase the investor’s confidence level. It is the increase in confidence of investors that can lead to an increase in profitability of the companies and thus earning forecast accuracy will increase consequently. But, in the current research, all the results from the sample indicate that transparency of financial information does not influence earning forecast accuracy of the companies accepted in Tehran Stock Exchange.

- The second hypothesis states that:
  Management board composition has impact on earnings forecast accuracy of companies accepted in Tehran Stock Exchange. Management board composition area and its effects on earning forecast accuracy is one of the substantial research issues in the area of corporate governance that has been of great interest for many researchers for many decades. Considering all these studies and testing the hypothesis of the research prove that companies need to pay more attention to the involvement of outside director (Non-executive director) in the company since through their professional and impartial discretion over the managers(directors) decisions and with their judgments they can decrease the conflict of interest between stakeholders and directors. The companies can also take the control of financial performance of the company through using high proficiency, experienced and independent managers with the necessary legal power as a potentially powerful mechanism and to be a cause of improvement in earnings forecast accuracy of the company. Involvement of the benefit (interest) owners in management board can influence the performance of the company. Literature reviews of the proposal also represent the effect of management board composition on the earning forecast accuracy and state that Transparency of financial information has no impact on the earning forecast accuracy of the companies accepted in Tehran Stock Exchange. These variables on their own, are of the most important financial issues in companies and if these variables are managed well and can result in a huge earning for the companies. Many factors can affect earnings forecast accuracy. If companies can identify and utilize these factors effectively it can be helpful in improving profitability. In the study done in 2006 the role of outside director (non-executive) members in decision-making process addressed and concluded that from the financial managers’ perspective outside director play a very significant role in the corporate governance. Disclosure of information and financial transparency are the other dimensions of corporate governance. Proper disclosure of financial information, including presentation of timely and accurate earnings forecasts can modulate representation problem by filling the information asymmetry gap between managers and stockholders. Proper forecast leads to the improvement of decision making of the accounting report users. Weak financial disclosure results in misleading the stockholders and has destructive impact on their wealth [31]. In another work the importance of outside (non-executive) directors in serving the task of controlling the decisions made by management board
was investigated. Given that outside (non-executive) directors being independent of management influence, they can be more helpful in terms of protecting the stockholders’ interests against managerial opportunism compared to the other inside directors. And, also according to Fama and French arguments, when outside (non-executive) members are given the right to control the decisions related to publishing or repurchasing shares, stockholders earn more profits. Besides, the possibility of dismissal of senior executives and official managers with weak performance will be raised by the increase in the percentage of the outside director members in management board [32]. In a different study, the results of 12 studies conducted on the relationship between profitability and financial information disclosure rate. But, the findings of Ashbach & et al unlike the already-mentioned results showed that the relationship between profitability and financial information disclosure is of little importance. Tariq Ismail studied factors influencing the disclosure of financial information via Internet in 128 companies of the Persian Gulf countries including 24 companies from Qatar Stock Market (in Doha), 36 companies from Bahrain Stock Market and 68 companies from Saudi Arabia market [33].

The results of this survey show that there is a significant relationship between disclosure of financial information via the internet and independent variables of the research such as profitability, company size and company leverage.

References


