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The Effect of Changes in Board Characteristics on the Accruals' Quality in Firms Restating the Financial Statements

Hassan Zalaghi*, Mohammadali Aghaei**

Abstract

The present paper tries to examine whether the improvement in the board structure in firms restating the financial statements leads to improved earnings quality during the next restatement period. Previous empirical researches show that corporate governance attributes, especially those of the board (of directors) are more beneficial in reducing the financial statements distortion. Thus, the present paper has selected the board attributes as an indicator of internal corporate governance. In order to measure the board attributes, a composite index of six characteristics including board independence, CEO's tenure, differentiation between the position of the CEO and that of the chairman, board size, independent chairman and board with a specialization in finance has been used.Also, given the multi-dimensional nature of the earnings' quality, the accruals' quality has been used to represent it.

The sample includes 62 manufacturing firms enlisted in Tehran Stock Exchange which have had only one significant restatement between 2001 and 2011, and which have not had a significant restatement within three years before and three years after the restatement. Findings indicate that by improving the composite index of the board attributes, the accruals' quality has significantly increased between the misstatement period and the post-restatement period.

Keywords: Board attributes, accrual quality, Financial Statements Restatement
Jel: M41

Introduction

As shown by previous empirical research, board attributes such as the board independence, differentiation of the responsibilities of CEO and chairman, independent audit committee, employing large audit firms, and large board size, may be useful in reducing the financial reporting misstatements (e.g., Beasley, 1996; Dechow *et al.*, 1996; Agrawal and *Chadha, 2005 and Farber, 2005).*

In these studies, both deceitful firms intended by SEC and restating ones are considered as having poor corporate governance mechanisms. The association between corporate governance quality and financial reporting validity is considered as a stimulus for establishing corporate governance regulations during the recent years.

Specifically, the SOX Act of 2002 established a number of standards for board members and public companies in the U.S.A. through requiring the approval of financial reports by senior management and also by devising legal fines for distortion and manipulation of the documents.

There has been an increased interest in the board structure of restating firms during the recent years (Abbot, 2004). As reported by GAO, the number of restatements has increased from 92 cases in 1997 to 370 cases in 2004. Previous researches have not taken into account the differences in restating firms' attributes such as firm size, profitability, growth rate and debt ratio, restatement materiality and audit quality, not controlling the results for these items. For example, Desai *et al.*, (2006) did not consider the differences in restatement as raised by

* BU-Ali Sina University, Department of Economic and Social Sciences, Accounting Group, Hmedan، I.R.IRAN.
** Assistant Professor of Accounting, Tarbiat Modarres University, Tehran, Iran.

restatement causes and their relative effects on financial statements.

The present paper aims at examining whether changes in board attributes could be considered as an effort to enhance the validity of financial reporting measured by the earnings' accruals' quality improvement in the firms which have restated their previous years' financial statements.

The validity of financial reporting, weakened during the misstatement period (years before the restatement year) might change through various possible reactions to financial reporting issues such as board changes, audit quality, and firm characteristics. Previous surveys have studied various aspects of corporate governance changes in the post-restatement period such as CEO and board replacement (Desai *et al.*, 2006; *Srinivasan*, 2005) and reduced management rewards payments (Colin *et al.*,2008).

The present paper tries to have a contribution in restatement literature. First it examines the board structure as part of internal corporate governance in restating firms; then it reviews earnings quality literature, examining the earnings quality within three years pre-and post- restatement; and finally, studies the impact the changes in board attributes have on accruals' quality changes. Also, the impacts of other control variables such as audit quality, firms' attributes, and restatement's materiality have been taken into account by presenting a modelthat will demonstrate whichattributes have a stronger link with accruals' quality changes.

Literature Review

All cases of financial statement restatement do not occur due to weak managerial view and fully fraudmental activities.On the contrary, over-confident and possibly domineering managers are often considered as individuals involved in aggressive accounting activities which might lead to restatement. Managers have more authority in performing accounting estimations such as doubtful accounts reserve estimation, accruals,repairs of fixed assets, non-operating profits and losses identification and various timing-related issues.. Also, in some cases restatement may occur only to correct mistakes in order to strengthen the internal controls. In 2008, one of the largest domestic (Iranian) auto manufacturing companies reduced the allocable profit by annual adjustments and did not allocate any dividend to its shareholders in spite of profitability during the fiscal year of 2008.The market value of that firm's shares in that period was 10% of total value of TSE which raised serious questions for the shareholders (Taherkhani, 2008).

In restating firms, it is expected that changes occur in board attributes following deception-induced restatements. However, the firms' responses to various non-deceitful restatements and other relatively technical restatements are vague, raising investigative questions. One thing that makes such questions important for the stakeholders, especially for the investors, is the impact the changes in corporate governance attributes in such firms might have on financial reporting quality because changes in board structure, without any corresponding improvements in financial reporting quality, is useless and may even entail some costs. Also, in other more technical varieties of restatements, perhaps changes in the board of directors were needed in smaller measures and thus have occurred less.

In general, it is expected that internalcorporate governance's responses to restatements be associated with the financial reporting quality after the restatement year. In order to evaluate the board attributes and any changes after the restatement, the present paper uses a composite index comprising an array of board attributes which might change as a result of restatement. This index is similar to the governance index (G Index) developed by Gompers *et al.,* (2003) which indicated the equities' strength. But our index is different from that of Gompers *et al.,* (2003) because our primary emphasis is on a combination of the power of board attributes.

One single index with a combination of board attributes provides an appropriate image of the collaboration between various internal corporate governance'sattributes towards the consistency of an enterprise'scorporate governance. In measuring the composite index, a composite score is calculated for three years before the restatement year and three years after that.

The composite index provides for a helpful research tool by which any changes in the composite index may be considered as a determinant in examining the changes in financial reporting quality. Similar to G Index, the board attributes composite index (hereafter referred to as composite index) may not reflect the relative impacts of all components of board structure properly. However, this index has a transparent and concrete advantage and is easily measured. Moreover, as with the G Index, it is a more efficient tool as compared with individual variables.

Board Attributes

Corporate governance mechanisms may be classified into internal and external ones. Internal mechanisms refer to the process of senior supervision over other managerial levels and mutual supervision among managerial levels, as well as the supervisory tasks of the board of directors. External mechanisms, on the other hand, include the capital market supervision by institutional shareholders, financial analysts, major shareholders and the firm's control market (Hay *et al*., 2010).Previous empirical researches indicate that desirable board structure is more beneficial in reducing the probability of financial statements misstatement.

Beasley (1996) and Dechow *et al.,* (1996) provided evidence that existing unpaid directors leads to reduced misstatement. Dechow *et al.,* (1996) also indicated that the role of CEO and the chairman and the audit committee existence leads to decreased rate of fraud in the firms. Also, Farber (2005) believes that the use of large audit firms reduces the probability of deceit. Some corporate governance studies (*Larcker, Richardson, and Tuna,* 2007; Day, 2005) used compositecorporate governance indices in order to find the relationship with other factors such as performance, earnings' information content, earning management, restatement, etc. For instance, Day (2005) studied a set of twelve corporate governanceattributes to measure various dimensions of corporate governance, demonstrating that the board members composition and functions, audit committee's efficiency and CEO's dual position had a significant relationship with financial reporting validity in the firms with high delegation costs.

According to previous empirical research on corporate governance and financial statement restatement, board attributes have been detected as the more relevant corporate governance structure in fraud and restatement issues compared with other corporate governance mechanisms *(*Sandeep Naber *et al*., 2006).

In this paper we have to use that part of board attributes which is related to incidence or non-incidence of financial statement restatement (the role such mechanisms could have in restatement and at the same time, the earnings quality)and be able to change in order to compensate for the low earnings quality during the pre-restatement period.

To determine the intended variables, the number of the board attributes has been limited to six attributes including board independency, CEO's dual position, board size, independent chairman of board, CEO's tenure and board members with a *specialization* in *finance,* since variables such as audit committee existence, rewards committee and risk management committee were not formed during the research time interval,thus ignoredin this research.Similar to previous research (Gompers *et al.*, 2003) a composite index was used to measure the corporate governance. This index comprises an array of board attributes (internal corporate governance) which may change in the case of financial statement restatement incidence.

Accruals Quality

Empirical research literature devisedvariousproxies for earnings quality determination and evaluation. Dechow *et al.,* (2010), in their study of accruals' qualityproxies using 350 articles demonstrated that accruals' quality had the highest application rate in earnings quality measurement, being considered as a reliability proxy.

Various approaches in earnings quality evaluation tend to the view that earnings drawn more accurately as cash are more desirable. Accruals' quality refers to the liquidity of the earnings' accruals. Francis *et al.,* (2004)used the model developed by Dichevand Dechow (2002) which illustrates the current accruals in the form of operating cash flows for the previous, current and next years. This model has been developed assuming that the time of realization and incidence of revenues and expenses of the firm is often different from the time of cash receipts and payments and the accruals are created and reported as a result of this difference.

This model focuses on two figures of working capital and operating cash flows due to their ease of tracking because these accruals are going to be liquidated at most until the next year. The earnings quality proxy in this model equals the standard deviation of residuals from the regression of changes in cash flows produced by operating activities of the last year, current year and next year, and the total accruals.

This paper uses the accruals model developed by Dichevand Dechow(2002) as the earnings quality proxy. This proxy includes the fact whether accounting figures reflect the economic structures of the firms by considering the process of accruals and its relationship with past, present and future cash flows.

Thus, this criterion is consistent with Cohen's (2003) definition of earnings quality. Also, among the accruals' quality proxies, models other than that of Dichevand Dechow (2002), such as Jones' (1991) and *Mc Nichols* (2002) emphasize the measurement of optional accruals as a construct of earnings management rather than the earnings quality.

In order to examine the changes in accruals' quality, first we measured this earnings qualityproxy for two 3-year periods (before and after restatement) and substituted it in the research hypothesis testing model. Since the restating firms have stronger incentives than others for earnings quality improvement, we expect them to improve their earnings'accruals' quality during the post-restatement year. Thus, it is expected that the standard deviation of the regression residuals of the above model be smaller during the post-restatement years compared to pre-restatement years (misstatement period),that is, the earnings' accruals' quality will be increased.

Research Background

In a research study, Garcia Lara (2007) found that firms with stronger corporate governance had a higher degree of accounting conservatism. This paper measures the corporate governance level using a composite index comprising several attributes of internal (including board attributes) and external corporate governance.*Lobo et al.*, (2006) provided primary evidence of increased conservatism as a result of regulations established by *Sarbanes–Oxley* Act of 2002. Beekes *et al.,* (2004) examined the relationship between accounting quality - measured through earnings timeliness and earning conservatism - and the Independent board members ratio in the board of directors composition in England.

They found that firms with higher ratios of independent-board members in their board (of directors)composition are informed of bad earnings news sooner. Their results were similar to those of Ahmed and Duellman (2007) who replicated the same study in the U.S., finding a negative relationship between the Independent board members percentage and the conservatism.

Bushman *et al.*, (2004) found that when the earnings' timeliness was low, the board of directors accepted stronger corporate governance as a substitute for the *high-quality accounting information.Wan Abidah*(2009), in an examination of the relationship between corporate governanceattributes and earnings quality after enforcement of corporate governance directive in Malaysia using 1625 firm-year observations during the period 2003-2007, tested whether corporate governance variables were significant earnings quality determinants. They tested eleven corporate governance variables and mainly the board attributesestimated with earnings quality proxies using the modified Jones (1991) and Dasnik (1999) models. Their results showed that 1) size of the board of directors, and 2) size of the audit committee had a positive relationship with the earnings quality.These findings indicate that larger size of the board of directors and the audit committee is more effective in performing their governance role than smaller ones.

Michael et al.(2010) believe that more desirable internal corporate governance (board attributes) is a way to increase conservatism. They have used three variables: size of the board of directors, board's autonomy and the paid directors' percentage share.Theirresults show that after the restatement year, following the improved internal corporate governance, increased conservatism occurs.

*Ahmed*and Dulleman (2007) indicated that firms with stronger boards are more conservative. Dechow, Sloan and Sweeney (1995) found that one incentive to manipulate the earnings was the external financial resources with the lowest costs. Firms manipulating the earnings have board of directors whose board members lack autonomy and the CEO has the dual position of the chairman of the board and the founder of the firm at the same time. Robert Romanus (2007) used the accruals and the tax differences as the earnings quality proxy in his study titled "The Impact of Earnings Quality on Investors' and Analysts' Reactions to Restatement Announcements"demonstrating that these two proxies were significantly and negatively linked to the market's response to the restatement.

Christian and Kevin (2008), using the accruals as an earnings quality proxy, demonstrated that the quality of financial reporting had enhanced from the misstatement period (pre-restatement) until the post restatement period.

Agrawal and Chadha (2005) found that the presence of independent board members with a *specialization* in *finance* or accounting reduces the likelihood of restatement incidence. However, they found that there was no relationship between the restatement incidence probability, the board independence and the audit committee's autonomy.

Abbott *et al.,* (2004) demonstrated that the restatement likelihood increased with the board size. Judy (2010) examined whether the CEO turnover occurs within a year after the restatement year. The results suggest that there is a significant relationship between the materiality, the accounting restatements duration and the CEO replacement likelihood.

Dechow (2010) believes that the managers/directors in restating firms would experience more changes than control firms. Desai *et al.,* (2006) found that finding the next job for the dismissed directors/managers of the restating firms was more difficult than for those of control firms. *Srinivasan* (2005) found that the likelihood of changes in the board was higher for the cases of more intensive restatements.

Some studies (Kinney and McDaniel, 1989; Ashbough *et al.*, 2007) demonstrated that small firms with the highest degrees of internal control weaknesses were more inclined to correct the previously reported earnings.

Larcker *et al*., (2007) found complex and infirm evidence on the relationship among 14 corporate governance factors and the earnings quality measured through the Discretionary accruals and restatements, using 39 corporate governance variables and the main factor analysis.Larcker and*Richardson*(2004) believe that strong corporate governance undermines the negative relationship between the audit fee and accruals. Anyhow, restatement evidences the faulty management through poor corporate governance (GAO, 2002). Previous empirical research on corporate governance attributes show that such attributes are useful in reducing the financial distortions (Beasley, 1996; Dechow, Sloan and Sweeney, 1996; Agrawal and *Chadha*, 2005; *Farber, 2005*; Baber *et al.*, 2009). In these studies, the financial statement restatement has been related to the weakness in the corporate governance system and poor internal controls. In an examination of corporate governance changes following restatements (one year before and two years after restatement),Alisa Rotenstein (2011) found that the composite index (G Index) (formed of 12corporate governanceattributes including: board independence, CEO's dual position, board size, auditor's size, auditor replacement, CEO replacement, board members' share, number of Independentboard members in audit committee, number of unpaid board members in reward committee, number of Independentboard members in corporate governance committee) had improved after restatement announcements.

Alisa Rotenstein (2011) believes that certainly the increased number of earnings restatements during the recent years and also the consequences the disclosure of such restatements has for the firms and the decision of restating firms to embark on the intended changes in order to improve the corporate governance mechanisms is important for directors, auditors and board members. In addition, the relationship between restatement attributes and further changes in the corporate governance has new implications for investors and regulators. First, the investors make sure that the earnings reducing restatements and decreases in firms' performances before the restatement year forces them to correct the financial reporting problems through changes in the board's structure. Such conditions indicate that firms have understood the role of the board of directors. Beasley (1996) and Dechow *et al.,* (1996) provided evidence that presence of independent directors reduces the likelihood of fraud.

Sandeep Naber (2007), examining the relationship between the corporate governance and restatement (between the pre- and the post-restatement periods), used six variables including: *differentiation* between the *position* of the *CEO* and that of the *chairman*, CEO's dual position, board independence, audit committee, board of directors with a *specialization* in *Finance*, directors' shares percentage, and auditor's size. The results indicated that corporate governance had improved after the restatement.

Research Hypothesis

Improved corporate governance in financial statement restating firms within the post-restatement year leads to increased earnings' accruals' quality.

Research Method

This is a semi-empirical and causal-comparative or post-event study, which is based on past realistic information. The subject falls in the domain of confirmatory research in accounting that examines the effect of board attributes change as an internal corporate governance construct, during the pre- and post- restatement periods on the quality of earnings accruals by using several independent and control variables. This is an applied research in terms of purpose, and the spatial domain of the research consists of the firms enlisted in Tehran Stock Exchange (TSE). To test the hypothesis, the multiple regression model with the Difference in Difference approach, dummy variables and panel data have been applied.

Sample

The population included all firms enlisted in TSE and the sample includes manufacturing firms which restate their financial statements.Among all manufacturing firms restating their financial statements during the study period (2001-2011) 62 firms were included in the sample. They are those firms which had only one significant restatement between 2003 and 2008 and didn't have a significant one at least three years before and three years after the restatement year.

Research Hypothesis Testing Model

To test the research hypothesis, first we use the D*ichevand Dechowmodel* (Dichev and *Dechow, 2002*)which is based on past, present and future cash flows; and measure the accruals' quality for any of the pre- and post-restatement years. To estimate this model, given the research design and the study period (three years before the restatement and three years after that) the pooled data have been used.

In this model, CFO is the operating cash flow and ACC, the accruals. The latter is obtained by subtracting the CFO from the net profit. The CFO has been calculated according to Iranian Accounting Standards and by modifying the operating activities section by income tax payment, *Return on Investment (ROI)*, and the interest paid for the financing, and by adding the paid dividends. All of the said variables are homogenized using the book value of assets at the beginning of period. After estimating the accruals' quality basic model for the previous and next restatement years by using the multiple regression models and with a comparative approach, the hypothesis is tested as follows:

$$AQ_{it}=\beta_0+\beta_1\text{manage-attrib}+\beta_2\partial SAles_{it}+\beta_3\partial CFO_{it}+\beta_4 ROA_{it}+\beta_5 MAT_{it}+\beta_6 LEV_{it}+\beta_7 B/M+\beta_8 SIZE_{it}+\beta_9\text{AUD-Size}+\beta_{10}\text{Post-rest}+\beta_{11}\text{Post-rest*manage-attrib}+\beta_{12}\text{Post-rest*}\partial SAles_{it}+\beta_{13}\text{Post-rest*}\partial CFO_{it}+\beta_{14}\text{Post-rest*}ROA_{it}+\beta_{15}\text{Post-rest*}LEV_{it}+\beta_{16}\text{Post-rest*}B/M+\beta_{17}\text{Post-rest*}SIZE_{it}+\beta_{18}\text{Post-rest*AUD-Size}+e_{it}$$

Post-rest:A dummy variable for when the data refers to the post-restatement year;

Manage-attribute: A composite index of board attributes including the board independence, the size of the board of directors, CEO's tenure, *differentiation* between the *position*of the *CEO*and that of the *chairman*, independent board chairman, and board members with a *specialization* in *Finance*. To measure the composite index (Manage-attribute), first the board independence takes the related score through the ratio of Independent to total number of board members.

Firm in which the CEO does not also serve as the chairman of the board at the same time, are given a score of 1, and others of 0; and firms in which CEO has had a tenure less than 24 months, a score of 1 and others of 0; and firms in which the number of board members are more than 5, a score of 1, and others of 0; and firms with at least one director with a *specialization* in *Finance,* a score of 1, and others of 0. Also, independent Board chairmen are given a score of 1, otherwise of 0.If the variable coefficient post-rest*manage-attribute is significantly negative, then changes in board attributes is directly related to the changes in earnings accruals' quality, thus improved board structure leads to higher earnings accruals' quality, which supports the hypothesis.

Research Variables and Their Measurement

Dependent Variable

Earnings Accruals' Quality (AQ_i) : is calculated using the standard deviation of regression residuals in the accruals model of Dichevand Dechow (2002)

Independent and Control Variables

Operating cash flow variations (∂CFO): has been measured by using the standard deviation of operating cash flows during pre- and post-restatement three-year periods. Operating cash flows can be directly determined from the cash flow statements of the sample firms.

Sales variations (*∂Sales*): measured using the standard deviation of net sales during pre- and post-restatement three-year periods.

Firm size (*SIZE*): equals the total assets' book value in any of pre- and post-restatement periods.

Debt ratio (*LEV*): is the sum of debts divided by total assets during pre- and post-restatement three-year periods.

Firms' performance (*ROA*): the ROA rate during pre- and post-restatement three-year periods.

Growth rate and investment (*B/M*): book-to-market (*B/M*) value of the equities during pre- and post-restatement three-year periods.

Board attributes (*manage-attrib)*: A composite index, similar to that of Gompers (2003) to measure the board's attributes, including board independence, CEO's tenure, CEO's dual position, *board size*, Independent *Board chairman* and board members with a *specialization* in *Finance*.

Audit quality (*AUD-Size*): Audit quality has been measured through the size of audit firms. The Audit Organization is the larger (of higher quality), receiving a scoreof 1; and other audit institutes (members of Iranian Association of Certified Public *Accountants*-IACPA), as smaller ones, receiving a score of 0.

Materiality (*MAT*): indicates the effect of restatement on net profit, which is obtained by dividing the difference of restated earnings and original earnings by the net profit in the distortion year.

Findings

The accruals' quality has been estimated through the accruals' quality basic regression model (Dichevand Dechow, 2002) and by using the panel data from 62 sample firms for the pre-restatement three-year period. The value of F-statistic calculated for each model in the previous and the restatement periods as well as the t-statistics of each explanatory variable have been significant and are related to the dependent variable.

Thus, the entire regression model is significant. The average standard deviation of residual items in pre- and post- restatement periods are 0.553 and 0.446, respectively, which indicates the reduced standard deviation of the models' residual items and indeed, increased earnings accruals' quality in the next restatement period compared with the previous one.

The panel data model estimation requires the use and state of y-intercept (fixed effects). According to the accruals' quality basic regression model estimation in both periods, the results of *F-Limer test* indicate that the significance level of the above model's estimation is higher than 5%, Therefore, there has been pooled approach for estimation. Since the model estimation was performed by using *Eviews* software, the *Jarque–Bera test*has been used to determine the normality of residuals distribution. Results showed that the residuals have a normal distribution.

Also, in order to verify the observations independence and lack of autocorrelation between independent variables *the Durbin-Watson statistic* has been used the results of which indicate lack of autocorrelation between independent variables. Control variables of the above model were selected following Francis *et al*. (2004), Patrick Dechow *et al.*, (2010), and other academic studies on earnings quality were included in the model. According to results mentioned above, as the value of the calculated F-statistic is 17.1034, and the least t-statistic of one of the explanatory variables is significant and related to the dependent variable, the above regression model is significant. Also, the coefficient of POST-REST variable was negative which indicates the increased accruals' quality in the post restatement period compared to the pre-restatement. This variable is significant at<5% level. Thus, the research hypothesis is supported.The variables:*∂CFO*, book to market value ratio (*B/M*), *ROA*, percentage of restatement, *manage-attribute* and *AUD-Size* are significantly related to increased earnings accruals' quality while other variables lack such an association.

Although there is no other studies similar to the present one in local and overseas literature, the findings are similar to those of Elisa Rothstein (2011) in terms of improved board structure in the post-restatement period. Also, the results are similar to those of Christian *et al.*, (2008) in terms of improved earnings accruals' quality in the post-restatement period.

Conclusion and Discussion

Our sample includes 62 firms restating financial statement with only one annual announcement of restatement

Table 1: Regression(DD) analysis of changes in Acrual quality

Dependent Variable: AQ
Method: Panel EGLS (Cross-section weights)

Variable	coefficient	t-Statistic	Prob
C	0/5609	3/8765	0/0001
POST_REST	-0/3436	-2/013	0/0475
POST_REST*SIZE	-0/0097	-0/3582	0/7206
POST_REST*∂SAles	0/1486	0/5649	0/5728
POST_REST*∂CFO	-0/5164	-1/9847	0/0486
POST_REST*ROA	0/5708	2/4101	0/0169
POST_REST*LEV	0.6565	4.4090	0/0000
POST_REST*B/M	-0/0727	-2/0371	0/0430
POST_REST*MANAGE*ATTRIB	-0/0357	-2/6497	0/0087
POST_REST*AUD-SIZE	-0/0933	-3/0916	0/0023

R-squared	0/6086	Mean dependent var	0/8167
Adjusted R-squared	0/5730	S.D. dependent var	1/2511
F-statistic	17/1034		
Prob(F-statistic)	0/0000		

between 2001 and 2010, lacking any material correction in the three-year pre- and post-restatement periods. Such a classification differs from academic restatement studies and allows the dependent variable to be compared and examined in a population and a sample within the misstatement and post restatement periods in a more appropriate manner.

The independent variable consists of a composite index formed of six main board attributes similar to that of Gompers *et al.*, (2003), designating a score for any of internal corporate governancestrengtheners. Use of the above mentioned index allows the examination of the relationship between earnings accruals' quality in financial statement restating firms and the actions taken by the firms in order to improve the boardstructure in the post-restatement period. This index was calculated based on a composite score based on an array of board attributes such as percentage of board independence, CEO's and chairman's dual position, board size, CEO's tenure, independent chairman, and board members with a *specialization* in *finance*. The index was calculated separately for each three-year period (pre- and post-restatement periods).

The results of regression model estimation support the hypothesis, indicating an increase in the accruals' quality within the post-restatement period compared to the pre-restatement period. Also, there is a statistically significant relationship between correction of material mistakes and changes in the board attributes (which help the strengthening of corporate governance structures after restatement) with increased earnings accruals' quality).

Considering the incidence and continuation of earnings restatements during the recent years in the TSE-enlisted firms, the results of the present paper are of extreme importance. Although it cannot be explicitly stated that corporate governance changes necessarily occur following the restatement, attention to the applications and benefits of this research and similar ones for the stakeholders indicate the increasing importance of corporate governance mechanisms, particularly the internal part of it (board attributes). The results of the present paper will have various applications for investors and other stakeholders. For instance, investors may ensure that after financial statement restatement, firms are somehow forced to correct their mistakes and compensate the low quality of financial reporting through making changes in corporate governance mechanisms.

Also, consideration of the extent and the nature of the restatement and the impact of material mistakes on the quality of financial data are very important for the regulators. One of the major limitations of the present paper was the lack of a database of the financial statement restating firms, their reasons for restatements, as well as a differentiation of influential individuals and entities in discovery of financial statements misstatement and suggesting the financial statement restatement (firm managers, TSE organization and/or independent auditors).

For a more desirable application of study results and helping the clarification of the effects the changes in corporate governance have on the changes in earnings quality, and by considering the fundamental factors affecting the earnings quality in the future, the following subjects are suggested for future research:

1. The impact of corporate governance changes on earnings quality in financial statement restating firms;
2. The response of the capital market to the management changes after financial statement restatement announcements;
3. Examination of the impact of corporate governance changes after financial statement restatement emphasizing the role of the causes of restatement;
4. Examination of the board structure in the firms with repeated financial statement restatements;
5. The relationship between the incidence of financial statement restatement and the board attributes;
6. The impact of changes in the external corporate governance on the earnings accruals' quality in financial statement restating firms;
7. The impact of the board attributes on the accruals' quality in financial statement restating firms using separate indices for each attribute.

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