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EVALUATION OF THE RELATIONSHIP BETWEEN READABILITY OF BOARD'S REPORT TO GENERAL ASSEMBLY OF SHAREHOLDERS AND EARNINGS MANAGEMENT IN THE LISTED COMPANIES IN TEHRAN STOCK EXCHANGE

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ABSTRACT

It is clear that the goal of financial statements or financial reports is representing summarized and classified information on the financial status, financial performance and financial flexibility of the business unit, in a way that it is useful for a wide range of users of financial statements in adopting the economic decisions. These reports are necessary for each investment. They are helpful for companies in reviewing their performance, being aware of the managers' activities and plans and the process of investment. For this reason, non-realization of the managers' demands and failure in improving the company's financial performance might result in manipulation and misuse of the capabilities inherent in earnings management. In such situations, managers have no way but hide this misuse in presenting their financial reports to the general assembly, while they provide transparent financial reports in cases where they are willing to represent their achievements by using fluent and comprehensible literature. Hence, the objective of this research is to evaluate the relationship between earnings management and the readability of the board's report to the assembly. To measure the readability of the report, Fog model was used, and to calculate earnings management, discretionary accruals based on the Jones adjusted model was used. For this purpose, 110 listed companies in Tehran Stock Exchange during the years 2012-2016 were reviewed and the research hypotheses were examined using panel data model. The research indicated a significant relationship between the readability (transparency) of board's annual report to the assembly and earnings management.

Keywords: *Board's Report Readability, Earnings Management, General Assembly of Shareholders.*

INTRODUCTION

Managers can affect the quality of earnings by making decisions on the company's operational projects. More efficient and capable managers can gain knowledge on the conditions of economic unit and industry and take steps to select the projects with higher quality and lower risk. Hence, the managers' performance in profitability area can affect the decisions of users of financial statements, since when the earnings of the company are more stable, better prospect would be predicted for that company and it will be more attractive to investors. In contrast, managers of economic units might manipulate earnings to achieve more benefits. Their main motivation is increasing their present rewards by increasing the earnings (Zakeri, 2015).

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Opportunistic behavior of managers requires interfering in financial reports of managers so that investors to have a false positive evaluation of the performance of the company by deviating from the real performance of the company. One of the most important ways for interfering is presenting complex reports in order to avoid investors to have a real performance in this regard. However, it is clear that receiving reliable and transparent financial reports is very important for each investor, shareholder, creditor, and, in general, stockholders. The present research used this approach to evaluate the relationship between readability of board's report to the general assembly of shareholders and earnings management in listed companies in Tehran Stock Exchange.

Problem statement

Some studies have been conducted in recent decades on earnings management and many of them have been on the motivations of managers, their goals and tools. In simple words, earnings management is defined as the capability to select a practice of accounting to achieve a particular goal". In companies reporting the earnings consistently, investors are interested to know to what extent the earnings are real and to what extent they have been managed. Thus, earnings management is interpreted as attempts by management to respond to economic conditions. However, false earnings management is a kind of manipulation of accounting and the use of accounting principles by management to control the earnings based on its desired way and it manages the changes in earnings flow artificially. Evidence suggests that managers have motivations to achieve a certain level of earnings (target earnings) or above it, while it is still unknown that to what extent it can rely on the earnings management (Mashayekhi, 2011).

Readability or transparency financial reports: While transparency has been described as a desirable characteristic of financial reports, no comprehensive definition has provided on it which can be accepted by all people. Bushman et al (2004) have defined the transparency of financial reporting as a "wide access to reliable and relevant information on the performance of period, financial position, investment opportunities, leadership, value and risk of companies traded by public". Moreover, (2008), Barth, & Schipper argue that the transparency of financial reporting means that "the financial statements of a business unit present the economic realities of the business unit in a way that is comprehensible for users of financial statements".

Earnings management: Digeorge (1999) has defined earnings management as a kind of artificial manipulation of earnings by management to achieve the expected level of earnings for some particular decisions, such as predictions of analysts or estimations of previous trends of earnings to predict future earnings. Earnings management in this study means the earnings management of listed companies in Tehran Stock Exchange calculated using the Jones adjusted model (1995). One of the mechanisms, used by each company for exchange of its financial and operational information with shareholders and stakeholders, is the board's annual report to assembly. This report, containing important reports such as company actions, financial statements, suggestions and future planning, is crucial for investors and creditors. Having knowable on the position and performance of a company is effective in making decision to invest or not invest in it. Hence, the board tries to represent the annual reports of its company at desirable level. Hence, this research was conducted to find an answer for the question of what is the impact of managers' motivation for earnings management on the readability or transparency of the annual reports of the board to the assembly.

Research importance

The net earnings of a profit unit, as a criterion for evaluation of performance and profitability of the profit unit, are affected by accounting estimates and methods. The managers' authority in using the principles of realization and conforming, estimation and prediction and using the methods such as changing the method evaluation of inventory, goodwill amortization, considering the research and development costs as current or capital costs, and determining the costs of suspicious claims are among the cases which can managers use to manipulate the earnings. Given the high knowledge of managers of the company's position, it is expected that the information to be prepared and presented to reflect the company's position and performance at desirable level. Moreover, owing to reasons such as survival in company, receiving rewards and so on, profit unit management, intentionally or unintentionally, may represent the company position at desirable level by manipulating the earnings. In such situations, real earnings are inconsistent with earnings reported in financial statements, leading to phenomenon called as earnings management (Khajuvi et al., 2011). As the earnings predicted by managers are less diverted from the realized earnings, the trust of the shareholders in management predictions would be greater. Managers might also use opportunistic behavior in order to decrease the distortion in earnings prediction or use the internal information of the company for their own benefit (Vakilifard et al., 2014). One of these tools is the use of written and literary techniques in diversion from reality. Thus, accuracy in the literature of reports presented by board and knowing its relationship with earnings management will be very important for stakeholders.

Theoretical principles of research

Financial reports: readability and transparency

Goldberg (1965) stated that "it is not an exaggeration to state that the problem of establishing communication is a basic problem in accounting." The text accounting documents, including generally-accepted principles of accounting, annual financial statements of companies, along with other accounting reports, are considered tools for transfer of accounting information. These documents are prepared and published in accordance with accepted accounting standards, and different groups uses this written information for making the right financial decisions. However, the accounting language used with regard to these information resources is constantly changing. It has caused non-specialists hardly to come up with recent reforms in vocabulary and concepts of accounting. Hence, the American Official Association of Accountants has put much pressure on development of accounting standards (Burke, 1997). Moreover, the Internet is nowadays an important source of electronic documents for computer-aided analyses. Each great company has a website, which includes documents in addition to the annual reports, booklets for public offering of press reports. These documents (including research and development reports, employment opportunities posts, investor relations documents, and so on) can include valuable information for economic decision-makers. Information economics researchers can use textual analyses and information retrieval techniques to study the economic events such as fraud, bankruptcy, integration, and ownership. Other textual documents available electronically for textual analysis and economic studies for accounting researchers include accounting statements, stock exchange rules, tax laws, tax-judicial cases, letters submitted to stock exchange, research papers and applied accounting papers and accounting materials (Yousefi Asl et al., 2014).

Accessibility and comprehensibility

A historical review of studies suggests specific growth of text analysis and information retrieval in business studies compared to past decades. These studies have increased from two papers to 32 papers in 1990's and 68 papers in 2000's. Accordingly, the developments in computer technology (both hardware and software) and increasing application of different methods of providing accounting information have justified developments made in this sector (Jons & Shomakher, 1994). It is expected computational linguistic technologies to be used more than before in text-based accounting. Accessibility and comprehensibility are still the main focus of text information retrieval studies. Research on accounting text retrieval and text-based financial reports accounting values examines the accounting issue in the readability studies. The comprehensibility of different accounting reports has been investigated in readability studies.

content analysis studies in accounting

Content analysis studies in accounting area have been conducted in three forms, including 1) manual content analysis, 2) semi-computer content analysis, and 3) computer content analysis (Hosseini et al., 2015).

- ***Manual content analysis***

The text-based past studies are mainly based on content analysis. To derive their inferences, researchers examine the textual documents. In the first studies conducted in this area, the researchers manually performed content analysis of annual reports to examine the company strategies and scientific logic. Similarly, accounting and financial studies use the content analysis for inferring the discretionary disclosures and information released by press, predictions and views derived from management, journal papers, ethical codes of professional accounting, notes along with financial statements, brochures, management discussions and analyses, and other parts of the annual report. Management tends to attribute the negative outcomes to non-controllable factors, while it tends to attribute the positive outcomes to internal factors and companies mainly release more information on their achievements.

- ***Semi-computer content analysis***

Manual content analysis can reflect the researcher's mind. Moreover, the high costs of manual processing have restricted the tests power and reduced the generalizability of the results. Miller (2006) argues that a larger sample can be helpful in strengthening the power of statistical tests and reducing the effect of the disturbing information, but disclosure data collected manually from text documents impose high costs on larger samples. Computer content analysis can overcome the limitations of manual content analysis using the software for processing the electronic text documents and counting the frequency of words. Systematic inference of lexical frequencies has been supported by computer linguistics literature. The statistical analysis of lexical frequencies is used for resolving the compilation disputes on the important historical writings. For example, they attribute the word frequency evidence to 12 papers of James Madison, written in 1788 to persuade New York citizens to pass United States Constitution.

- ***Computer content analysis***

Accounting researchers have used computer content analysis since 2000 for a wide range of texts, including different parts of annual report, press reports, and news articles. Smith & Tafller (2000) indicated that key words and themes, such as earnings, dividends, and so on in discretionary disclosure reports of managers' statements contain important information and they are closely related to the financial performance. Back et al. (2001) converted the words into numerical values before more processing. They introduced the intelligent coding to convert the words to numerical values and used self-organizing maps and document histograms for analyzing the quantitative financial data and qualitative reports of CEO reports. Their approach was based on a computer and can be used to compare textual documents and to complete the task of retrieving the text of search engines. Klapchencow et al. (2004) used data mining and text mining methods to retrieve future financial performance indicators from quantitative and qualitative parts of financial reporting. They adopted a computerized approach, which converts each word to a number.

Second section: earnings management and its concepts

Before addressing the earnings management, it is necessary to provide information with regard to earnings, goals of its reporting, and the use of earnings for users, earnings prediction and its benefits for investors.

- ***Earnings concept***

Humans have inherently looked for profit since the beginning of their birth. With development of economics and accounting, the concept of profit has emerged, so that two-way accounting started with ownership theory and personality separation theory was introduced later.

In this theory, the business unit personality was separate from its owners' personality and the goal of the institution was to create accounting earnings for shareholders and creditors. Then, theories of the institution, remaining salaries, and funds were proposed, which each of them provides newer classification of accounting information, especially earnings. In funds theory, accounting earning has no meaning. In institute theory, a business unit is considered as social enterprise, generating benefits for public and its benefits are not accounting earnings, but value added. Nowadays, economists argue that earnings are not just a motivation for establishment of the institutions. They argue that institutions can be also established for welfare, social and economic goals. However, there is a theory that most of the business units are established for profitability (Zhang, 2014)

- ***Earnings prediction and users of earnings prediction***

Prediction is considered a key element in the economic decisions. Investors and creditors of management and other people rely on predictions and expectations in making their economic decisions. For example, an investor is willing to obtain knowledge on time and the rate of dividends and risks in making decisions about purchasing, selling, or holding stocks. In order to obtain knowledge of these characteristics of future dividend earnings, there is no way just prediction. Creditors are also interested in future earnings of the company. As the predicted earnings of the company increases, creditors would more likely receive the credit and its interest in due time. The most important source of information for investors, creditors and other users of companies' information are predictions of earnings provided by companies at certain time intervals. However, it is possible for creditors to receive specific information from company for examining the credibility of companies or in accordance with the contracts signed with the company.

However, the most important sources of information for investors, creditors, and other users of companies' information (in the stock exchange) is the earnings predictions provided by the company management at a specified time interval. Earnings prediction should provide reasonable and timely information in order to be able to adequately resolve the information needs of users (Heshi et al., 2009).

- ***Earnings smoothing in report***

Earnings smoothing is a kind of earnings manipulation performed with the aim of representing stable and increasing flow of earnings in financial reports. In other words, earnings smoothing will reduce the fluctuations in earnings. It should be also stated that only earnings variations are reduced and nothing is added to reported earnings in the long term. It requires availability of adequate reserves in the accounts to compensate deficits in earnings in a specific period of time. Smoothing can be considered as a kind of conscious action with the aim of representing the earnings normal, through which management aims to achieve at a desirable level of earnings. Observations of Hopeworth (1953) suggest that diverse methods should be used to smooth the net earnings of a period and eliminate fluctuations in earnings and companies thereby try to allocate net earnings to successive accounting periods. "

- ***Earnings smoothing methods***

As stated before, earnings smoothing is performed through three methods:

1) Smoothing through the occurrence of an event or recognizing and recording it
2) Smoothing through allocation to time periods
3) Smoothing through classification

Recent studies show that earnings smoothing does not merely relate to higher level management and providing the external financial reports, but it is assumed that the smoothing is in lower level of management and internal accounting (Noroush et al., 2006).

Research objective

Based on the research conducted by Lo et al. (2016) and using the Jones adjusted model for managing earnings and the Fog's technique for the transparency of a text, this research was conducted to explain the relationship between readability or transparency of the annual reports of the board to the general assembly and the earnings management.

Research question

Given the stated objective, we are looking for finding an answer to the following question in this study:

- Is there a significant relationship between the readability (transparency) of the board's annual report to general assembly and earnings management?

Research hypothesis

Based on the research conducted by Lo et al. (2016), the conceptual model of research is as follows:

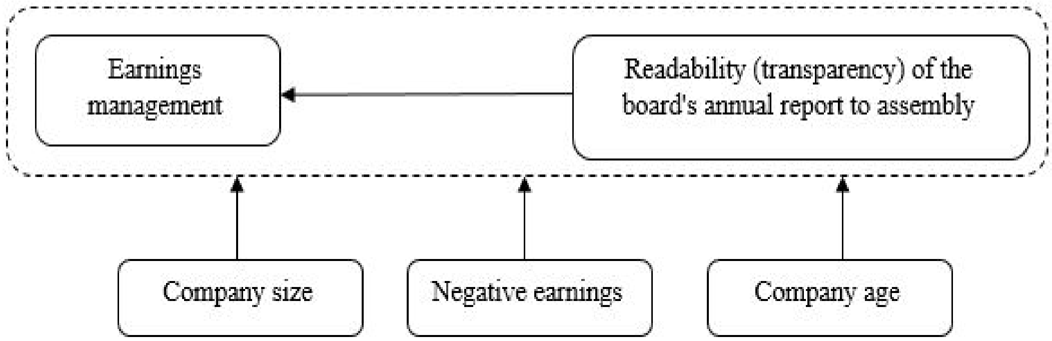

Diagram 1: Conceptual model of research (Lo et al., 2016)

Research domain

Subject domain

The subject area should be described in general and in detail in the research project. This research aims to evaluate the relationship between earnings management and the readability of the board's report to assembly in the listed companies in Tehran Stock Exchange.

Spatial domain

The research environment is a place, where research is carried out. The research environment should be carefully described. The research area of this research is the Tehran Stock Exchange.

Temporal domain

Given the importance of time in collection of data and presenting research findings in the research project, the temporal domain should be stated clearly. The temporal domain of this research is years between 2011 and 2015.

Review of litrature

Domestic studies

- In a research entitled "evaluation of the effect of accounting complexity and transparency of financial reporting of company on delay in presenting the auditor's report", Izadi Nia et al (2012) evaluated the effect of accounting complexity and transparency of financial reporting on delay in presenting the auditor's report. The research results revealed a positive and significant relationship between the preparation of integrated financial statements by the parent company and the low transparency of financial reporting and delay in the auditor's report. In other words, the results suggest that the preparation of integrated financial statements by the parent company and the low transparency of company financial reporting would increase delay in presenting the auditor's report.
- In a study entitled "Analyzing the role of transparency and disclosure of financial information in reporting the financial statements", Zabih Zadeh et al (2012) stated that investors require valid, timely and comprehensible information, which can be easily analyzed. Thus, providing the useful and reliable information plays major role in evaluation of accounting and financial reporting systems. Their research results suggest a direct relationship between transparency of financial information and financial reporting. Hence, it can be concluded that financial reporting would increase by increasing the transparency of financial information.

- Yousefi Asl et al. (2014) explained the financial reporting transparency model. In this study, a more comprehensive model was proposed for evaluating the level of transparency of companies and quality of their disclosure by reviewing the theoretical principles and research litrature and taking environmental characteristics of Iran into account. The proposed model was based on the Boshman et al financial reporting transparency model (Boshman et al., 2004).

In order to evaluate the validity of the model, a questionnaire was developed. Fuzzy Delphi technique was used for screening and final confirming of indicators from the point of view of academic and professional experts. The confirmatory factor analysis was used to assess the relationship between latent variables and their items. The results suggest that the gap between the current status and desired status in each of the dimensions affecting the information transparency at the company level is statistically significant from the experts' point of view.

Foreign studies

- Gibson et al (1990) examined the readability of the disclosure reported by 40 companies and concluded that reading financial statements and footnotes were much more difficult than readings of managers.
- in his studies on the readability and transparency of financial reports, Kurtis (1998) found that the first paragraph of the annual reports was the easiest part for reading, and the second paragraph was the most difficult part for reading and he suggested for managers to include undesirable information in the second paragraph.
- Lee (2008) used a software package for determining the readability of annual reports and found that readability was associated with revenues. He found that annual reports of companies with low revenue were less readable, and companies with high and stable revenues have more readable reports.
- Goul and Gangoli (2009) used GNU software for examining the readability of annual reports of fraudulent and non-fraudulent companies. They indicated that the readability indicator can be used as a characteristic for making distinction between fraudulent and non-fraudulent annual reports.
- Jones et al. (2010) reviewed previous studies conducted on readability of the annual report and found that they have used a small sample of 18 to 120 documents. They revealed that costly manual encoding prevents the use of large samples.
- Lo et al. (2016) examined the relationship between the readability of the board's financial reports and earnings management. They revealed that the board of companies would use more difficult literature, if they want to represent the report on realized earnings complex, while they would use more readable litrature, if they want to highlight the achievements.

Conceptual and regression model of research

To test the research hypothesis, the following model is used:

$$\text{Readability}_{it} = \beta_0 + \beta_1 EM_{it} + \beta_2\, Size_{it} + \beta_4\, Loss_{it} + \beta_5 Age_{it} + \varepsilon$$

Operational and theoretical definition of variables and their measurement

Dependent variable

$Readability_{it}$ (readability or transparency of report): To calculate this variable, the Fog Index is used as follows:

Fog = 0.4 * (The number of complex words + the ratio of words to sentences)

For this purpose, three paragraphs are selected as sample from the beginning, the middle, and the end of the board's report to the assembly, which includes more than one hundred words. The mentioned index is calculated separately for each of them, and finally, the mean of them is taken. Moreover, complex words are the words which have more than three parts. This index is a comparative ratio, which the readability of a text would be better as its value is smaller.
This index was developed by Robert Guning Fog in 1951 to evaluate and determine the readability of textbook content based on formal education classes. The process and the way of determining the level of readability of the texts in this index are as follows:

1) Selecting a sample of one hundred words from the beginning, selecting a sample of one hundred words from the middle, and selecting a sample of one hundred words from the end of text randomly
2) Specifying the average length of sentences by dividing the number of words by the number of complete sentences of each 100-word sample
3) Counting the number of three-syllable words and more than three-syllable words (difficult words) in each of the hundred-word texts
4) Summing up the number of difficult words with the average number of words in the sentences
5) Multiplying the sum of the number of difficult and average words in sentences with a constant number of 0.4
6) Performing the calculations of items 4.5, 6 for two other one-hundred-word samples
7) Calculating the mean of results of all three samples by summing up and dividing by number (Lo et al., 2016).

Independent variable

EM_{it} (earnings management): In this research, based on the results of the research conducted by Decho et al. (2002), the discretionary accruals based on the Jones adjusted model was used for representing the earnings management. To calculate it, the following formula was used. This model has been used in several studies such as Niku Maram et al. (2009), Zakeri (2015), Ebrahim et al. (2015) and Lo et al. (2016).

$EM_{it} = (TAC_{it} / TA_{i,t-1}) - NDAC_{it}$
EM = (sum of discretionary accruals divided by sum of assets) – non-discretionary accruals
TAC =earnings before deducting the interest and tax–operational cash flows
TA =total assets
NDAC = non-discretionary accruals
In order to calculate the non-discretionary accruals, the jones adjusted model was also used:
$NDACit = \alpha 1\ (1 / TAi, t-1) + \alpha 2\ [(\Delta REVit - \Delta RECit) / TAi, t-1] + \alpha 3\ (PPEit / TAi, t-1)$
Where:
NDAt: non-discretionary accruals in year t

TAt-1 :total assets at the end of year t-1

$\Delta REVt$ = revenue of year t-revenue of year t-1

PPEt= properties, machinery, and equipment (gross) at the end of yea t

$\Delta RECt$: received accounts at the year t minus received accounts of year t-1

To obtain the coefficients $\alpha_1, \alpha_2, \alpha_3$, we used the regression in this way:

(TACit / TAi, t-1) = α1 (1 / TAi, t-1) + α2 [(ΔREVit – ΔRECit) / TAi, t-1] + α3 (PPEit / TAi, t-1) + ε

control variables

$SIZE_{it}$ (company size): To calculate the company size, the natural logarithm of assets will be used (Fakhari et al., 2015).

AGE_{it} (company age): it represents the company's history, which is equal to the logarithm of the age of the company (Dastjerdi and Baharvand, 2015).

$Loss_{it}$: (loss): it is a dummy variable which, if the company i earnings in year t are negative, it would be equal to one, otherwise, it would be zero.

Descriptive statistics

Data were analyzed using central indicators such as mean and median and the standard deviation in the descriptive statistics section. The value of mean represents the average of the data. The median represents that 50% of the data are lower than the middle number of the set and 50% of the data are higher than the middle number of the set. When the mean and median are close to each other, the data would be more symmetric. Finally, the standard deviation represents the dispersion.

Table 1: Descriptive statistics of the preliminary model

variable	mean	median	min	max	SD
Accrual to total assets of the previous period	0/067	0/037	-0/97	0/98	0/24
Reverse of total assets	0/00000219	0/00000114	0/00000743	0/00000404	0/00000402
Difference of revenue minus difference of received accounts divided by total assets of the previous period	0/23	0/16	-2/08	2/72	0/45
Properties and equipment divided by total assets of previous period	0/26	0/22	0	0/98	0/21

testing the stationary of data

A random process is generally called reliable, when the mean and its variance remain fixed over time, and the covariance between two periods of time depends only on the distance or lag between these two periods and it is not related to real time of covariance calculation (Gajrati, 1999).

When variables are non-reliable, the conventional econometrics process may not be appropriate, since estimation of the regression leads to biased and misleading estimations (Engel and Granjer, 1987).

Before estimating of the model, it is necessary to determine the reliability of the variable. To distinguish the reliable and non-reliable data, different tests, such as stationary tests, Q test, Ljung-Box test and unit root tests, are used. In this study, Levine, Lin and Chu (LLC) test was used to identify the static data. The results of this test are presented in Table 2.

Table 2: results of the stationary test of the preliminary model variables

variable	Test statistic	Probability of statistic	Test result
Accrual to total assets of the previous period	-406/981	0/0000	Variable is static
Reverse of total assets	-16/5526	0/0000	Variable is static
Difference of revenue minus difference of received accounts divided by total assets of the previous period	-127/373	0/0000	Variable is static
Properties and equipment divided by total assets of previous period	-7/9942	0/0000	Variable is static

Accordingly, all relevant variables are static

regression estimation of model and relevant tests

As stated before, to explain the NADC variable, we should determine the coefficients from regression.

$$(TACit / TAi, t-1) = \alpha 1\ (1 / TAi, t-1) + \alpha 2\ [(\Delta REVit - \Delta RECit) / TAi, t-1] + \alpha 3\ (PPEit / TAi, t-1) + \varepsilon$$

As data are panel, in order to determine the required coefficients, we should use Limmer test to determine which of the random or shared effects method to be used. The hypotheses of test are as follows:

H_0= shared effects method (pooled data)
H_1= random effects method (panel data)
Results of this test are presented in the following table.

Table 3. results of the Limmer test for the model

Test statistic	df	p-value	Test result
4.046	(453.113)	0.00000	Null hypothesis is rejected

Due to rejecting the null hypothesis, the Hausman test is required to select one of two fixed effects and random fixed effects methods. The hypotheses of this test are as follows:

H_0= random fixed effects method
H_1= fixed effects method
The test result is presented in Table 4.

Table 4. Hausman test for the model used

Test statistic	df	p-value	Test result
18.58	3	0.0003	Null hypothesis is rejected

As seen, given the rejection of the null hypothesis of the Hausman test, the fixed effect method is selected as optimal method for estimating the model. LM-ARCH test was also used to assess the heterogeneity of variance. The results are shown in the following table.

Table 5: The results of the variance analysis

Test name	Test statistic	Prob	result
Chi-square	0.69	0.4061	Non-heterogeneity of variance

Given the rejection of null hypothesis on heterogeneity of variance, OLS estimation method is selected as the optimal model for estimating the model. Its results are presented in Table 6.

Table 6: Regression results of the mode

Variables	Coefficients	Statistic T	P value	
intercept	0/02	0/84	0/3959	VIF
Reverse of total assets	0/006	3/43	0/0019	1/02
Revenue minus received accounts divided by total asset	0/091	4/32	0/0000	1/01
Properties and equipment divided by asset	0/037	3/93	0/0030	1/03
Adjusted coefficient of determination	0/31			
F-Statistic	3/16			
Prob(F-Statistic)	0/00000			
Durbin-Watson	2/21			

The values of F statistic and the probability (3.16 and 0.0000, respectively) represent the general adequacy of the model. The Durbin-Watson test value in the range of 1.5 to 2.5 also represents lack of auto-correlation in the model. Given the VIF criterion, the existence of co-linearity between independent variables is also rejected.

By inserting the obtained coefficients in Equation 4-2, the variable of non-discretionary accruals was calculated and by inserting it in Equation 4.1, the variable of discretionary accruals (as earnings management indicator) was calculated and used as the dependent variable in the main model.

After making the necessary estimates of the preliminary model and calculating the dependent variable, the main model of the research is estimated. However, before doing it, descriptive statistics of the main variables of the research should be examined. The results are presented in Tables 7 and 8.

Owing to lack of a similar domestic research in this regard, it is not possible to compare the results accurately. However, the results of this research are in line with those of research conducted by Izidinia et al. (2012) and Yousefi Eslami et al (2014) in terms of the negative impacts of the complexity of financial reports on the company's performance. With regard to foreign studies, the results of research conducted by Lee et al. (2008) and Lo et al. (2016), in line with results of the present study, confirm the fact that managers use financial reports as tool to divert shareholder opinions. Table 5 presents a summary of the research results.

DISCUSSION AND CONCLUSION

Given the reverse and significant relationship between the readability of the annual report of board to assembly and earnings management, it is concluded that as transparency and readability of the annual report of the board is higher, the earnings management would decrease and earnings reliability would increase.

Recommendations

Recommendations are presented in two sections as follows:

Recommendations based on the research results

1) It is recommended for investors to pay attention to quality of the reports accurately in evaluating the listed companies in the stock exchange, which major part of its information is obtained in the form of financial reports, especially the letter of the board submitted to the assembly, since it might contain influent and misleading literature.
2) It is recommended for Tehran Stock Exchange to force the companies to use more fluent literature in preparing different financial reports in order to protect the interests of investors.

Recommendations for future research

The following items are recommended in this regard:

1) As Jones adjusted model was used in this research to calculate discretionary accruals and non- discretionary accruals, it is suggested that other models to be used in future studies for estimating discretionary accruals and non-discretionary accruals, such as Leuz model (2001) and Bhettacharya model (2001).
2) It is recommended that other methods to be used to measure the readability of financial reports, such as Flesch index (1948) and Klose model (1953) to have a better understanding of the issue.

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