



## Investigating the relationship between earnings management, information disclosure and information asymmetry in the listed companies in Tehran Stock Exchange

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### ABSTRACT

*Today's companies' competitive environment in order to attract market capital is forcing managers to provide managed financial statements and this is the cause of information asymmetry in the companies. On the other hand, the disclosure of profit, which takes place as a result the type of attitude and estimating managers, corporate profits and is done in order to attract resources, somehow is led to the creation of asymmetry in the companies information. In this study was to investigating the relationship between these factors with the companies' information asymmetry in a different approach by using the spearman correlation coefficient. The results showed that the both factors of disclose and earnings management have had a significant relationship with the companies' information asymmetry.*

### Keyword:

*Earnings Management,  
Disclosure, Information  
Asymmetry*

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## INTRODUCTION

Events and crises come into existence in exchanges of the world and especially black September 1997, and then the 11 September 2000 incident, revealing the story of WorldCom, Enron, Xerox, and then Parmalat in the world, and the fall of stock indices in Tehran 2004, led to the issue of transparency of financial reporting is concerned more than before. Moreover, in today's turbulent environment, many investors emphasize on the importance of information transparency and lack of information or uncertainty about them has become a major problem in financial markets (Sinai & Davoudi, 2009). One of the factors that lead to lack of transparency of financial information is management or manipulates earnings (Demski & Feltman, 1992). In economic terms with the premise of people's behavior, it is assumed that all in the first place are to maximize their own interests. Managers are not exempt from this rule. They are interested in order to maximize personal benefits, social welfare and the positioning of their job provide a good image of the entity's financial position to shareholders and other stakeholders, but in some cases, necessarily increase wealth managers is not in order to increase the wealth of other groups, including shareholders. With that in mind, the theory of conflict of interest between managers and owners, business units management have the necessary incentives to manipulate earnings, in order to maximize their own interests (Healy and Whalen, 1999).

Based on previous studies, the motivation of earnings management is includes debt contracts, political costs, bonus plans and ownership structure (Noroush et al., 2005). In the absence of full transparency in financial reporting provided an opportunity for managers to keep a job and your professional reputation conceal negative information within the company. Therefore, this negative information accumulates inside the company. When, accumulated negative information reaches its climax is impossible and costly maintaining it for a longer duration. As a result, accumulated negative information, at one time, entered to the market leading to falling stock prices (Ahmadpour Kasgari & Ajam, 2010). Earnings management by the company management since it would place affected the information content of earnings anticipated by investors is considered one of the most important factors of information to users of financial information, and can be effective on the stock market value and amount of return on it, and abnormal returns of stocks as measured by such criteria is considered in order to assess the information content of profit forecast for the company due to earnings management will result in incorrect information. Therefore, it is plausible the impact of earnings management on abnormal stock returns. However, the earnings management by the corporate executives and the lack of disclose full information about incomes and expenses of the company is causes information asymmetry among investors. So that the company's major investors, according to the information with the company's financial statements action to dampen their capital, while foreign investors step on the ends in order to increase their capital. In fact, disclosure of a company can be considered as a mechanism in support of the rights of foreign investors and makes it, there is less information asymmetry and reduce agency costs. When, it is increasing information

asymmetry in conjunction with a company's stock will be different its intrinsic worth with value that investors are placed in the capital market for desired stock. As a result, the real value of corporate shares will be differences with the value expected by shareholders and will lead to abnormal stock returns of companies. Hence, this study is to answer this question: "Is there a relationship between earnings management, information disclosure and information asymmetry in the companies listed on the Tehran Stock Exchange?"

### *Theoretical and research background*

Separating management from ownership in joint stock companies will increase the importance of financial reporting, because the management use of financial reporting in order to build relationships with capital providers. Regulations and accounting standards are to managers the necessary flexibility for financial reporting. Interpretation and application of accounting policies in many cases be subject to judgment and apply to the managers and the opportunity was to provide for them to manage by using the variety of methods, including accrual accounting earnings. The performance of some managers, who opportunism of this flexibility, they use to achieve their goals be remembered as earnings management. As a result, earnings management, it will always be possible (Haley & Palepu, 2001). Therefore, it may be declared profit does not reflect the actual performance of the company.

DeGeorge et al, defined earnings management as a type of artificial manipulation of profit by management to achieve the expected level of interest for some specific decisions (including analysts predict or estimate the trend previous earnings to predict future earnings). In his opinion, actually main motivation of earnings management is supposed investors management about the business unit (DeGeorge et al., 1999). For investors, always are review and assess in view of the financial position and economic, which has invested in it or are planning to invest in it. Profits as one of the most important items of the financial statements provide basic information for it to assess themselves. Because in this way can also be compared the status of company with other companies, as well as the status of the company in the past and anticipate future earnings trends. Thus, according to the importance of information for the public benefit investors, managers are very vigilant in favor of disclosure. They primarily are looking for this, in addition to showing profit growth and reducing uncertainty with respect to future earnings, as well as access to the forecasts of analysts (Hellstrom, 2006).

Profit can be a tool for facts; also can be used as a means of fraud and misleading statement. Managers should assume responsibility for the preparation and reporting of profits, and in fact, daily decision making delegating to managers. As managers probably are tend to increase their personal interests, thus more potential earnings to increase in these benefits. Use personal judgment in financial reporting and management structure of exchanges called earnings management (Healy and Whalen, 1999). "Earnings management, which occurs when managers use judgment in financial reporting and structured transactions to manipulate financial reports and misleading some stakeholders about

the company's business activities or impact on the contracts results based on accounting figures have been reported."

In 1970, three scientists named Michael Spence, George Akerlof and Joseph Stiglitz (Nobel Prize winners in 2001) in the field of information economics founded theory, which was called the theory of information asymmetry. Akerlof showed that informational asymmetries can cause increased selectivity contrary in the market, which caused this before the deal for persons. Spence noted that informed brokers can earn more than their market by transferring confidential information to mediators low. Akerlof portrays a market in which the seller holds more information than the buyer. Of course, Accountants to minimize the problem of contrast selection have adopted a policy of full disclosure to increase the amount of information available to the public (Spence, Akerlof & Stiglitz, 1970).

Information asymmetry exists, if managers and market have the same information about the company. So managers and the market, they bear the same uncertainty about the company. But if there is information asymmetry, managers due to private information about the company, they have more and better than the market. That is access to company information and before inform the market. Firm-specific information over time through events disclosure of information transmitted to the market. Market prior to the disclosure has the amount of uncertainty about the company. Company information asymmetry is equal to the total uncertainty about the company, because it is likely managers and the market to an extent is aware of the impact of the market on the value of the company. Market reaction to earnings announcements may be the first criterion information asymmetry company through information disclosure. Information asymmetry can be determined based on the information environment, diversity announcements and the number of corporate transactions, as well, to be under the influence of managers' behavior or market. For example, when a public announcement is news about the company assuming constant other factors may be more aware of the market, real-time status information and reduce information asymmetry.

The principle of disclosure is one of the principles of accounting, which has an impact on all aspects of financial reporting. The principle of disclosure requires that all important facts related to the events and financial activities of the entity, as appropriate and the full report. According to this principle, the basic financial statements must contain all important information relevant and timely and this type of information to be provided in a manner understandable and complete as far as possible to provide the possibility of taking informed decisions for users. On the other hand, the information is presented should not in terms of quantity and quality in a manner that causes confusion to provide users of financial statements (Alivar, 2002).

#### Research hypotheses

1. There is a relationship between earnings management and information disclosure in the listed companies in Tehran Stock Exchange.
2. There is a relationship between earnings management and information asymmetry in the listed companies in Tehran Stock Exchange.
3. There is a relationship between information disclosure and information asymmetry in the listed companies in Tehran Stock Exchange.

#### Research Methodology

This research in terms of purpose is applied research. Research design is ex post facto (using past data). For data collection is used the library method and use of data website of stock exchange organization, Rahavard Novin and Tadbir Pardaz software. In this study, according to data type and methods of statistical analysis, we used from panel data method.

#### Population and statistical sample

The population is inclusive of all listed companies in Tehran Stock Exchange in the period from 2007 to 2012, which final sample size determined by screening method then the following restrictions:

1. Their name until the end of fiscal year 2012 is listed in the list rates of Tehran Stock Exchange.
2. For five consecutive years provided information and required basic data for this study to the Stock Exchange.
3. In terms of removing the effects of seasonal fluctuations, the financial period end to end of March.
4. In order to enhance the activities comparability is produce.

#### Data gathering tool

In this study, to gather data and information used by the library. Also, the theoretical research has been collected from books and Persian and Latin professional journals.

#### Research variables

Research variables are including independent and dependent variables.

#### Dependent variable

- \* Information asymmetry ( $RTN_{it}$ ): This variable measured by the index of abnormal returns and is calculated as follows:

$$RTN_{it} = R_{it} - E[R_{it}] \quad (1)$$

$RTN_{it}$ : It is equal to abnormal returns the company i, in year t.

$R_{it}$ : It is equal to actual returns i, in year t.

$E[R_{it}]$ : It is equal to the expected return the company i, in year t.

#### Independent variables

- \* Earnings management ( $EM_{it}$ ): This variable is measured on the basis of Jones's research (1995), and is calculated as follows:

$$EM_{it} = \frac{WCA_{it}}{Sales_{it}} \quad (2)$$

$WCA_{it}$ : It is equal to working capital Accruals Company in year t, and is calculated as follows:

$$WCA_{it} = \Delta AL_{it} - \Delta HL_{it} - \Delta Cash_{it} \quad (3)$$

$\Delta AL_{it}$ : Changes in company's profits in the year t.

$\Delta HL_{it}$ : Changes in company's debt in the year t.

$\Delta Cash_{it}$ : Changes in the company's cash in the year t.

$Sales_{it}$ : Amount of proceeds from the sale of the company in the year t.

- \* Disclosure ( $DSCOR_{it}$ ): In this study, the level of disclosure has been measure according to the index used by Jensen (2002), and how to measure the level of disclosure is as follows:

$$DSCOR_{it} = \frac{DiS_{it}}{DiS_j} \quad (4)$$

$DSCOR_{it}$ : Disclosure level company i, in the year t.

$DiS_{it}$ : Total disclosure of company i, in the year t, based on Jensen model.

$DiS_{it}$ : Total points in the Jensen index (full disclosure) 62 points.

#### Research model

Theoretical models, according to research hypothesis and is as follows:

$$RTN_{it} = \beta_0 + \beta_1 EM_{it} + \beta_2 DSCOR_{it} + \varepsilon_{it}$$

**Table1. Measures of concentration and distribution of research variables**

Variable	Average	Middle	Standard deviation	Minimum	Maximum
The level of disclosure	0.295	0.282	0.301	-0.53	1.15
Earnings management	0.020	0.018	0.063	-0.17	0.21
Asymmetry of information	0.601	0.611	0.514	-1.13	1.93

#### Results and analysis of results

To investigate simultaneous relation between variables, we have estimated paired correlations them, using Spearman correlation coefficients that its results have been as table 2.

**First hypothesis:** There is a relationship between earnings management and information disclosure in the listed companies in Tehran Stock Exchange.

**Table2. Correlation test between earnings management and disclosure of information**

	Earnings management	Information disclosure
Spearman correlation coefficients	1	-0.244
Significantly		0.000

According to table 2, we see that there is a significant linear correlation between earnings management and disclosure. According to the estimated correlations observed that the level of disclosure, there is a significant inverse linear relationship in the error level 0.05 with earnings management.

**Second hypothesis:** There is a relationship between earnings management and information asymmetry in the listed companies in Tehran Stock Exchange.

**Table3. Correlation test between earnings management and disclosure of information**

	Information asymmetry	Earnings management
Spearman correlation coefficients	1	0.699
Significantly		0.000

According to table 3, we see that there is a significant linear correlation between earnings management and information asymmetry. According to the estimated correlations observed that information asymmetry has a direct and significant linear relationship in the error level 0.05 with earnings management.

That in this model: RTN is information asymmetry, EM is earnings management, and DSCOR is disclosure of company information.

#### Research findings

##### Descriptive Statistics

Status summary of descriptive statistics related to the variables in the model are presented in table 1. According to the findings of table 1, the average disclosure level was equal to  $0.301 \pm 0.295$ , which is indicative of the lack of stability of the level of disclosure among the surveyed companies. Also, the measure of earnings management was an average of  $0.063 \pm 0.02$ , while, the amount of asymmetry of information between companies, it is estimated with an average of  $0.514 \pm 0.601$ , and positive this criterion shows that on average, there is asymmetry of information in the reported financial statements.

**Third hypothesis:** There is a relationship between information disclosure and information asymmetry in the listed companies in Tehran Stock Exchange.

**Table4. Correlation test between information asymmetry and information disclosure**

	Information disclosure	Information asymmetry
Spearman correlation coefficients	1	-0.270
Significantly		0.000

According to table 4, it is observed which there is a significant linear relationship between information asymmetry and information disclose. According to the estimated correlations observed that the level of disclosure, there is a significant inverse linear relationship in the error level 0.05 with information asymmetry.

#### Suggestions for using the results of research

- Investors and financial analysts, it is suggested that in their investment decisions in terms of their level of corporate information disclosure, as well as, one of the affecting factors on the quality of their profits.
- In order to reduce information asymmetry in the capital market, it is suggested to exchange officials, which is a standard level for the disclosure of financial reports, so that the least number of disclosures be in control of the exchange.
- Since the political and economic developments can have a direct impact on corporate profits and as a result, profit management actions and therefore, information asymmetry, it is suggested that, if there is disclosure financial statements in the period before and after of enormous political and economic developments.

#### Recommendations for future research

Every study, however, be considered comprehensively in terms of substantive and procedural limitations, including

what and when unable looked to all sides of the issues and deal with to it, from various aspects. This research also has not been exempted from this rule; therefore, to do some research in line with this theme, as well as its development, presented the following recommendations for future work, and future researchers:

- ❖ It is recommended, if it is considered the influence of industry on the relationship between disclosure profits and enterprise information asymmetry.
- ❖ Examine the ownership structures (such as corporate, private, and foreign) in determining the level of company disclosure.
- ❖ Given the relatively high volatility in economic, cultural and political, governing the company in our country, it is suggested that in future research, the use of non-linear regression design in determining the relationship between disclosure level, earnings management and information asymmetry of companies.

### **Summary and conclusion**

According to the results, it is evident that there is a significant linear correlation between the level of disclosure, earnings management and information asymmetry. According to the estimated correlations observed that the level of disclosure, there is a significant inverse linear relationship in the error level 0.05 with earnings management and information asymmetry, while the relationship between earnings management and information asymmetry at this level has a direct and significant error. As a result, been approved all the hypotheses.

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