The Impact of Earnings management and the effect of earnings quality in relation to bankruptcy level (Firms listed at the tehran stock exchange)

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ABSTRACT

This paper investigates the variability of real business activities in the form of discretionary expenditures (accounts receivable, selling, general and administrative expenses, and net change in accruals), and the firm's stock price performance concerning the frequency of meeting or beating analysts' earnings forecast. Also, the study investigated the relationship between the firm's stock price performance and the variability of these financial statement accounts. The objective was to examine if these selected financial statements of accounts could be used by management to manipulate earnings in order to meet and/or beat analysts' earnings forecasts so as to enhance the firm's stock performance. The study found that there is a significant difference between the variance of SG&A, NCA and stock returns of the firms that meet and/or beat the analysts' forecast and those that do not. It was also found that there is a significant difference in stock returns based on meeting and/or beating the analysts' estimate.

1. Introduction

At the beginning of the 21th century, the world witnessed a number of accounting scandals, the most critical scandals focused on the use of corporate management to exploit the means that would show the unreal image of financial statements, where these companies utilizing the flexibility found in Accounting standards- and what these standards allow, to move between accounting policies, the use of estimates and personal judgment to name a few-in making extra improvements of financial statements that would show a better image of companies than in reality.

The global crisis spillover and the resulting collapse of a large number of global companies such as Enron, World Com and Xerox in the United States, Parmalat and HIH in Italy, One. Tel and Harris Scarfe in Australia and so many others lead to undermining the parties confidence in the published financial statements, in which the relevant parties rely on devising necessary information for administrative and investment decision-making. As a result of these collapses, professional organizations and academic studies have tried to shed a light of understanding the real causes of these failures more accurately, most studies have found that

some companies have followed the practice of fraudulent accounting, and it's called earning management. By reducing its profits with the aim of tax evasion, or increasing its earnings to improve the rewards of board members or reduce the sharp fluctuations in the profit level to stabilize the stock prices listed in the stock exchange, and other motives that drive the administration to adopt earnings management (Issa, 2008).

The most prominent who spoke about earning management is Arthur Levitt, former chairman of the United States Securities Exchange Commission in 1998, he delivered a speech at NewYork University Center for Law and Business, titled (Game of Numbers), where he disapproved the practice of earning management used by American companies that were still going on , and he raised several questions regarding to companies' ability to control the manipulation of administrations in the financial reporting process, he also called for increasing administrations awareness about that practice and to be aware of misleading financial reporting processes, even the need for more significant presence of oversight (Abu Ajelh and Hamdan, 2009).

1.1 The Importance of the Study

Earning management is a very important issue, because it is considered the subject of our era, and it has a significant impact on the continuity of companies and maintaining their presence, where the global crisis revealed massive scandals of substantial companies around the world, leading these companies whom practiced earning management to leave the market, the practice of earning management may have a short-term benefit to the company and control, but it may also lead to serious long-term problems, which reflects on the company's operational and economic efficiency, which may affect its

future and threaten its consistency (Issa, 2008), in addition, stockholders have doubt on the relationship between earnings management and the returns of invested shares, where stockholders wondering this relationship.

The industry sector was selected to be the study of society, due to the critical importance of this sector to the national economy support and prosperity, where al-Khatib and Al-Saaed (1996) pointed out that the industrial area derives its importance in general from being the central pillar of the nation's economy and prosperity, and considered as a guarantee for the economic progress continuity. Based on the foregoing, the importance of the study lies in trying to find out is there any impact of earning management in the industrial companies listed in Tehran stock market on stocks returns, taking into account, both the company's size as well as the operating cash flows as control variables because of their importance on the profitability companies, which reflects on earnings management.

1.2. The Problem of the Study

The issue of this study, based on the findings of most studies conducted on Iran environment, in which, they discovered that Iran public shareholding companies practice earning management, showing the existence of statistical indicators on the use of Iran public shareholding companies listed in Iran market exchange for earning management with a variation in the usage between years (Shahsavari and Ahmadpour, 2014) in an attempt to measure the impact of earning management practice on stock returns for the industrial companies listed in Tehran stock market, by answering the following questions:

1. *Is there any earning management impact on stocks returns in the industrial companies, listed in the Tehran stock market?*

2. Is there an impact of some control variables (company size and operating cash flows) on stock returns in the industrial companies, listed in the Tehran stock market?

3. Are the models used in this study appropriate to examine the impact of independent and control variables (earning management, company size and operating cash flow), on stock returns in the industrial companies, listed in Tehran stock market during the study period?

1.3 Study Objectives

The purpose of this study is to identify if there is an impact of earning management used by Iran industrial companies listed in Tehran stock market on stock returns, where these companies often manage and own significant investments and try to achieve the highest performance or Expected returns in order to ensure their continuity, also to preserve the rights of their owners, the main objectives of this study represented in the following:

•	Identify the concepts of earning management, motivations, techniques, and methods
	used by the management, in addition to earning management risks and results.

•	Identify the relationship between stock returns and some of the control variables,
	namely the size of the company and operating cash flows.

•	Identify the impact of earning management on stock returns in the industrial companies, listed in the Tehran stock market during the study period, and identify the industrial sector in Iran.

1.4 Study Hypotheses

According to the problem of this study and desired objectives, the alternative study hypotheses were formulated, that will be tested in the case of using the model (Jones, 1991 and Modified Jones, 1995), when measuring earning management, in addition to drawing conclusions and recommendations through, as follows:

H_1: There is a statistically significant relationship between earnings management and stock returns in the industrial companies, listed in the Tehran stock market.

H_2: There are statistically significant indicators of the proposed model's suitability for the study of the impact (earning management, company size and operating cash flows) on the stock returns of the industrial companies, listed in Tehran stock market.

H_3: There is a statistically significant relationship between operating cash flows and stock returns in the industrial companies, listed in the Tehran stock market.

H_4: There is a statistically significant relationship between the size of the company and stock returns in the industrial companies listed in Tehran stock market.

2. Theoretical Framework

Many researchers in accounting thought discussed topics related to the current study, including the concept of accrual basis, agency theory, stock returns, earning management and industrial sectors, and this chapter of the study to highlight these topics.

2.1 Accrual Basis

According to the accrual basis of accounting, transactions are recognized when they occur, through the entries in accounting records and then to be shown in the financial statements for the fiscal period to which they relate, and expenses are recognized in the income state-

ment, under the direct relationship between the costs incurred by the company and the income achieved through a certain income component based on the principle of offsetting salaries and expenses, in other words the idea of accrual basis based on the financial statements for a particular fiscal period that must contain all costs related to that period, regardless of whether those expenses were paid or not, the same applies to incomes whether collected or not, and there is another basis called the cash basis and under this basis, the incomes are not considered to be realized once the sale is completed, but at the time when sales are collected, and the same for the expenses, they are only considered to be realized when they are paid (Lotfi, 2007).

One of the most important benefits of the accrual basis is that it links the periodic earning measurement process to the change in the company's net assets and not only restricted to the shift in the cash line as in the cash basis. Therefore, when using accrual basis in earning measurement, this provides logical results commensurate with the company's actual level of activity during accounting period, which would weight the use of accrual basis on the cash basis, which does not achieve the principle of equity in the distribution of incomes and expenses between accounting periods, However, information taken from receivables about future benefits and liabilities are less reliable, compared to the actual cash receipts or payments due to personal judgments entry, and thus, it can be said that accrual-based accounting is sacrificing part of the reliability in order to provide More convenient information. Accordingly, accounting earnings are made of two sections: Cash section, which is characterized by security and a lower level of suitability, and Receivables section that is appropriate with a lower level of reliability (Matar, 2007).

Ronen and Yaari (2008) noted that Accruals are a set of incomes and recorded expenses in the income statement that did not result in cash flows during activity period, and the main reason of accruals arose the discrepancy between the timing of cash flows and the recognition of operations and events carried out by the company during a given period.

Total Accruals consist of two types, discretionary accruals and non- discretionary accruals, represented in the following equation:

$$TA_{i,t} = NDA_{i,t} + DA_{i,t}$$

Where:

$TA_{i,t}$: total accruals of the company i during a period t

$NDA_{i,t}$: non- discretionary accruals i during a period t

$DA_{i,t}$: discretionary accruals i during a period t

Ronen and Yaari (2008) defined the discretionary and non- discretionary accruals as following:

* Non- discretionary accruals: The accruals arising from the transactions and events carried out by the company during the current period, and it's normal for the company according to its performance level, strategies, industrial agreements, events at the macroeconomic level and other economic factors.

* Discretionary accruals: accruals that arise as a result of the management choice between the address and available accounting options. Furthermore, total accruals are determined in two ways:

Model 1: The general budget approach where the total accruals are calculated according to this method in the following equation:

$$TA_{i,t} = \Delta CA_{i,t} - \Delta Cash_{i,t} - \Delta CL_{i,t} - DEP_{i,t}$$

Where:

$TA_{i,t}$: Total accruals of the company i during the period t.

$\Delta CA_{i,t}$: Change in the company's current assets i during the period t.

$\Delta Cash_{i,t}$: Change in cash and cash rewards in the company i during the period t.

$\Delta CL_{i,t}$: Change in the company's current liabilities i during the period t.

$DEP_{i,t}$ **:** Depreciation expenses and extinguishing the intangible assets of the Company i during the period t.

Model 2: *method of Cash flow, total accruals represents the difference between net earnings and operating cash flows of the company in the following equation:*

$$TA_{i,t} = ONI_{i,t} - OCF_{i,t}$$

Where:

$TA_{i,t}$: Total accruals of the company i during the period t.

$ONI_{i,t}$: Net operating of earning of the company i during the period t.

$OCF_{i,t}$: Net cash flow from the company's operations i during the period t.

These models were developed by DeAngelo, and it was considered as one of the most common models used by many previous studies, such as (Abed *et al.,* 2012) study.

2.2 Stock Returns

The investor performs sale and purchases in the stock exchange based on comparing expected returns with desired returns, in case the desired rate of return is equal or less than the expected rate of return the investor buys the share and vice versa, in fact the desired rate of return is higher than the anticipated rate of return the investor resorts for sale, as stock returns can be considered as compensation, as a result of the investor postponing the current consumption and investment in a company (Dagger, 2004). Yusuf (2008) pointed out that many economic

factors affect the stock returns, including inflation, Interest rate, currency exchange rate, cash (liquidity), and economic cycle. Also, the size of the company's capital amount. Stock returns can be measured through several measurements including the following: Market return on a share (return of acquisition periods) It is considered as one of the most accurate and realistic standards because it takes into account capital gains and dividends, which measures the return on the investor's stock ownership he bought for a specified amount and then sells it afterward and is calculated as the following:

$$R_{i,t} = P_{i,t} - P_{i,t-1} + DPS_{i,t} / P_{i,t-1}$$

$R_{i,t}$: Share return in the company i during the period t.

$DPS_{i,t}$: The share's equity in the company i of distributions in the period t, calculated by dividing earnings distribution on the number of shares.

$P_{i,t}$ **:** The closing price of share closing in the company i during the period t.

$P_{i,t-1}$ **:** The price of share closing in the company i during the period t.

2.3 Agency Theory

The process of ownership separation from the administration, and this led to the creation of shareholding companies that had a definite role in the emergence of economic theories regarding to the relations existing in the company between the parties involved, and at that Bosnia and the Upliftment (2012) indicated that the company represents a group of parties with different relationship, consisting of shareholders, management, workers and others, and the party's related multiplicity to the company, also the diversity of its interests is one of the main reasons of the conflict of interests, which may push the company's management to disclosure information that satisfies its interests

in the first place, the company's Management interest means to disclose information that indicates the company's success and its high earnings for several reasons, most notably that management rewards are often linked to the results of its performance and depends on a specific standers, including earnings, and in return the interest of current shareholders, prospective investors and other interested parties in obtaining Reliable information about the company, whether it is positive or negative information to know the actual situation and this is known as the agency Theory (Noor and Aoudeh).

2.4 Earning Management

The subject of earning management is currently an active research topic, with several titles being called: Aggressive Accounting, Creative Accounting, Cosmetic Accounting, and others. In the absence of a specific definition of earning management concept, we will try to provide some of the descriptions presented at accounting researches, which would help to understand this topic in the following:

Hammad (2005) refer to earnings management as the ability to increase or decrease net income in financial reports in a reliable manner, and occurs when managers use their available flexibility to choose between methods and accounting policies, as well as the cases of recognition and personal judgment of some items appearing in the financial reports Whether to mislead stakeholders about the actual economic performance of the enterprise or to influence the contractual results based on the accounting figures contained in the financial statements. In the same line Shaheen (2011) definition defined earnings as a concept concerning the intentional distortion of profits to reach accounting figures fundamentally different from what might be the case in the absence of such misuse, and this effect may be related to the content integri-

ty through the management choice of accounting rules and methods, that leads to an increase or decrease of earnings quality, in accordance with the strategy they aim to influence the users of financial statements, furthermore, this effect may also extend in formal terms by manipulating the presentation of financial statements elements that have an impact on The ability of the user of the financial statements to understand the reality of the enterprise's financial performance. The researcher defines earning management as: The process of converting financial accounting values from their real image to a desired image, so that the new values give a definite advantage to the company through the flexibility provided by accounting standards, but without violating these standards, and highlights the distinguishes of earning management practitioners, That they have a highly professional accounting capability, which enables them to manipulate values and transform them the way they wish.

2.5 Earning Management Measurement Models

There are several models that have been used to measure earning management, and perhaps the most prominent models have focused on the total Accruals to influence the stated income, and accruals refer to the sum of income and expenses recorded in the income statement that did not result in cash flows During activity period, where accruals arise from the discrepancy between the timing of the accounting recognition of transaction and the timing of the cash flow (Ronen & Yaari, 2008).

These models are focus on the separation of total accruals into discretionary and nondiscretionary accruals, and the effect of discretionary accruals is verified to examine the existence of earning management practice, and the main reason of modals multiplicity is the criticism of

each model and the attempt to address this criticize in the other model, and in this part of the study, we will discuss the most common models:

2.5.1 Jones Model 1991

Jones model disclosure earning management by using the total accruals, especially the discretionary component, which in turn allows more parts of earning management taking into account that the non-discretionary accruals are not fixed from one period to another, and taking into consideration the change in the company's economic situation, so he created a model suggesting the relationship between non-discretionary accruals and fixed interpretative variables:

$$\frac{TA_{i,t}}{A_{i,t-1}} = \alpha_1\left(\frac{1}{A_{i,t-1}}\right) + \alpha_2\left(\frac{\Delta REV_{i,t}}{A_{i,t-1}}\right) + \alpha_3\left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) + \xi_{i,t}$$

Where:

$TA_{i,t}$: Total accruals (i) during the period (t).

$\Delta REV_{i,t}$: change in the company's earning (i) during the period (t).

$PPE_{i,t}$: the company's property plant equipment (i) during the period (t).

$A_{i,t-1}$: the company's total assets (i) during the period (t).

$\xi_{i,t}$: a random error

This model is criticized for not taking into account the impact of sales manipulation that has a biased effect on the measurement of nondiscretionary accruals, which in turn affect discretionary accruals.

2.5.2 Modified Jones 1995

The Modified Jones 1995 model came to remove the problems that occurred in Jones 1991 model, to test the discretionary accrual when managers exercise discretion over incomes in financial statements. So the only difference between the Jones model and the Modified Jones model is that Modified Jones assumes that all

changes in the sales of the term during the study period are the result of earning management, as this assumption is based on the logic that it is easy to practice earning management by controlling the income recognition of future sales More than the earning management practice by managing the acceptance of cash sales income, where Jones included the term future sales between the total incomes

To calculate non-discretionary accrual, use the following form:

$$\frac{TA_{i,t}}{A_{i,t-1}} = \alpha_1\left(\frac{1}{A_{i,t-1}}\right) + \alpha_2\left(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}}\right) + \alpha_3\left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) + \xi_{i,t}$$

Where:

$TA_{i,t}$: the compay's total accrual (i) during the period(t).

$\Delta REV_{i,t}$: change in the company's earning (i) during the period(t).

$\Delta REC_{i,t}$: change in the company's under collection accounts (i) during the period(t).

$PPE_{i,t}$: the company's property plant equipment (i) during the period (t).

$A_{i,t-1}$: the company's total assets (i) during the period (t).

$\xi_{i,t}$: a random error

This model was criticized for not taking into account the company's performance in the past when measuring the discretionary accruals and other variables, and this weakens the measurement result.

2.6 Iran Industrial Sector

The industrial Iran industry mainly consists of "Manufacturing industries" sector, "Extractive industries " sector and "Electricity and Oil " sector, and the industrial area is one of the main pillars of the Iran economy, due to its numerous contributions and outstanding in achieving the process of social and economic development, we will highlight two types of industries that, the current study interested in

(website of the Iran Chamber of Industry, 2018):

2.6.1 Metallurgical Industries

The mining sector is considered one of the most critical strategic sectors where mineral wealth forms the basis of the economic and social development of any country as it contributes primarily, the operation of local labor and to cover the market need of primary, intermediate and final products related to the sector as well to supplement national income in hard currency.

Copper and iron are the most critical natural resources of Jordan, and the sector consists mainly of large industries in terms of investments value, and many companies have started the investment in this promising sector, which is considered as the third largest industrial sector in terms of the capital value of industrial companies, (According to industry data rooms of 2016). The exports value of this sector is also relatively large and stable also considered as the fourth largest export value in 2014, Food, Catering, agricultural and animals Husbandry industries.

And this sector of industries considered as one of the most critical local industrial areas and has a daily use in the Iran citizen life in terms of the multiplicity and variety of products offered in the local markets, as well as their permanent association with the consumer's Health and safety, in addition, food products are the primary sources of construction and energy to humans, as they contain proteins, fats, sugars, and carbohydrates, as well as vitamins and minerals, this sector has many advantages, as it interlinked with several other industrial areas to form an integrated associative loop, and food industry considered as one of the most critical pillars of food security and increase the value added to the agricultural sector.

2.7 Previous Studies and the Current Research Distinguishes

The following is a presentation of some earlier studies on the topic of managing earnings and returns:

Lawzi Study (2013) titled "The Impact of the earning management practice on stock prices": A test study on the industrial shareholding companies listed in Berlin stock exchange" This study aimed to learn the impact of earning management on stock prices, as well as the effects of some other variables on stock prices such as the company size, the size of audit Office, debt ratio, the study sample was selected by Lawzi consisted of 77 public shareholding companies listed in Berlin stock exchange for the period 2008-2011. In this study, Lawzi used the descriptive, analytical approach, and earning management was measured through discretionary accruals by Jones Modified model. Lawzi's findings indicate a positive statistically significant relationship between earnings management and stock prices and between the size of the company and stock prices. Also, he pointed out that there is a statistically significant correlation between both the size of the audit office and the size of debt with stock prices. Sayari study et al., (2013) titled "The Impact of Earnings Management on stock Returns the Case of Tunisian firms": The study aimed to learn about the relationship between earnings management and stock returns of the companies in Tunisian stock exchange and to compare four models to measure earning management DeAngelo, 1986 ", "Jones, 1991 ", Modified Jones, 1995 " and Bedard and Courteau (2001) and the attempt to predict the behavior of managers, the sample of the selected study included 33 companies listed in Tunisian stock exchange during the period 1999-2008, and the financial sector companies were excluded because they need a particular method

in the study.

Sayari *et al.* (2013) assessed the discretionary accrual to a high and low level, He also analyzed the impact on returns and compared the four earning management models, and the role of the company size was also highlighted. The most important conclusion of Sayari et al., (2013) in this study, is that there is a statistical connotation between the discretionary accruals and stock returns according to the four models used in this study.

Also, earning management allows the increase in of positive stock returns of large Tunisian companies and a reduction in of negative stock returns of small Tunisian companies.

Nuryaman (2013) examined the impact of earning management on stock returns with the quality of audit as an intermediary variable, and the study sample was 149 of the manufacturing companies listed in Indonesia Stock Exchange in 2010.

Nuryaman (2013) represented earning management by measuring discretionary accruals using the Modified Jones model. The quality of the audit was measured through the auditor's reputation. Is he/she from the big four audit firms or not, study hypotheses suggest that earning management adversely affects stock returns, and the impact of earning management on stock returns is higher for companies audited by big 4 audit firms compared to the other Companies. After using the analysis model, Nuryaman has found that earning management adversely affects stock returns, and the quality of auditing can enhance the inverse relationship between earning management and stock returns. Also, the inverse relationship between earning management with stock returns is more significant for the companies audited by Big 4 auditing firms compared to other audit firms.

Al Kharshqah (2014) , a study of industrial and service companies case listed in Tehran stock exchange, aimed to verify the extent of the practice of industrial and service sector companies listed in Tehran stock exchange to manage earnings , and to identify the impact of managing earning on stock returns of these companies, in addition to, recognizing the effects of some company's economic characteristics on stock returns , and the study sample consisted of 34 industrial companies and 31 Service companies during the period 2010-2013. Al Kharshqah used Jones Modified to measure the extent to which companies are practicing earning management, While relying on the absolute value of discretionary accruals as an evidence of earning management practice , the study found several results, the most important of which was that the companies of both the industrial and service sectors had practiced earning management, and the results of the analysis showed an inverse relationship between the control of the industrial companies earnings and their stock returns, and founded there is no relationship between earning management and stock returns in service companies, and the results indicate a statistically significant association between stock earnings of industrial companies and each of (company size, leverage ratio, rate of return on assets and net flows of Operational process), while the ratio of debt coverage to the stock of industrial companies was not reflected.

After a reference to the previous studies and review a part of them, the current study "The impact of earning management on stock returns for the industrial companies listed in Tehran stock exchange" is characterized by the following aspects: firstly, the study used more than one model to study the nature of the relationship between earnings management and stock performance for companies listed on Oman financial market, as an aim to see what models

are used (Jones, 1991 or Modified Jones, 1995) and what is more appropriate to measure this relationship. Secondly, application Environment in previous studies noted the diversity of application environments, including what has been applied to the Arab environment also to the foreign situation, and also have been used to various sectors, including the industrial, service or other areas, in addition to different periods. In the current study, it will be applied to Iran industrial companies listed in Tehran stock exchange, especially extractive and mining companies also food and beverage companies for the period 2014-2018, which there was no previous study specialized in.

3. Study Methodology and Procedures

The methodology of this study includes sources of data collection, procedural definitions, the measurement of study variables, statistical methods used, as well as the study's community and sample.

3.1 Data Collection Sources

Two types of resources are relied upon to obtain the necessary information for this study, which are primary sources of data collection through the annual financial reports issued by Securities commission, and stock prices from Tehran stock exchange, and some financial ratios from the dispositions of securities Center. Secondary sources, data collection based on previous studies, books, scientific references, periodicals and researches of the Arab and foreign courts relevant to study subject.

3.2 Procedural Definitions

For this study, procedural definitions of all variables used have been defined, as indicated by each term, like the following:

•　　Earning management: an informed plan by the administration to take advantage of the flexibility provided by accounting standards through alternatives, policies and accounting methods that can be applied to reach a certain level of whether current or future earnings, to achieve a set of different objectives related to the administration, and can be expressed and measured through discretionary accruals.

•　　Discretionary accruals: non-mandatory accruals that have been registered within the accounting system that has not yet materialized such as (deductive allocations, management remuneration).

•　　Non- Discretionary accruals: mandatory accruals that have been registered within the accounting system that has not yet materialized, such as (Invoice expenses for next month).

•　　Stock returns: This is a compensation to the investor as a result of postponing the current consumption and the investment in the company, in which consists of capital earnings obtained by the investor through the spreads as well as the stock of cash distributions and called the market return on the stock.

•　　Operating cash flows a measurement of cash amount generated by the company's normal business operations, which indicates whether the company can create sufficient liquidity for the maintenance and development of the company or may need external financing.

•　　Company size: There are many measurements used to express the size of the company, including the number of employees, total deposits, total sales, or total book value. For this study, and total assets considered as a measure of the size of the company.

3.3 Study Variables and Models

The study variables are independent, dependent, and controllable variables, where Earning management represents independent variables, some economic characteristics (company size

and operating cash flows) represent control-lable variables and stock returns represent the dependent variable, and the following is a review of the models used to measure variables. The dependent variable is the stock returns (R), and it is indicated by applying the market. It is calculated through the relationship:

$$R_{i,t} = P_{i,t} - P_{i,t-1} + DPS_{i,t} / P_{i,t-1}$$

Where:

$R_{i,t}$: stock return in the company (i) during the period (t).

$DPS_{i,t}$: earning per share (i) of dividend in the period (t), calculated by dividing the dividends per share on the number of stocks.

$P_{i,t}$: closing stock price in a company (i) during the period (t).

$P_{i,t-1}$: closing stock price in a company (i) during the period (t).

The independent variables, earning management (EM) had indicated by:

- First earning Management model: Jones model (Jones, 1991).Earning management is measured by using the Non- discretionary accruals:

$$EM\,1_{i,t} = \alpha_1(\frac{1}{A_{i,t-1}}) + \alpha_2(\frac{\Delta REV_{i,t}}{A_{i,t-1}}) + \alpha_3(\frac{PPE_{i,t}}{A_{i,t-1}}) + \xi_{i,t}$$

Where:

$EM\,1_{i,t}$: earning management of the company (i) during the period(t).

$\Delta REV_{i,t}$: change in the revenue of the company (i) during the period(t).

$PPE_{i,t}$: property plan equipment of the company (i) during the period(t).

- Second earning management model: Jones Modified Dechow et al., (1995).Earning management is measured by using discretionary accruals:

$$EM\,2_{i,t} = \alpha_1(\frac{1}{A_{i,t-1}}) + \alpha_2(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}}) + \alpha_3(\frac{PPE_{i,t}}{A_{i,t-1}}) + \xi_{i,t}$$

$EM\,2_{i,t}$: earning management of the company

(i) during the period(t).

$\Delta REV_{i,t}$: change in the revenue of the company (i) during the period(t).

$\Delta REC_{i,t}$: change in under collection accounts of the company(i) during the period(t). $PPE_{i,t}$: property plan equipment of the company (i) during the period(t).

$A_{i,t-1}$: total assets of the company (i) during the period(t).

$\xi_{i,t}$: a random error.

3.4 Variable Company Size and Operating Cash Flows

- the size of the company F.size was extracted from the financial statements taken from the Tehran stock exchange website and reflects the total assets.

- Operating cash flow (OCF) is calculated as the following :

$$OCF_{i,t} = EBIT_{i,t} + DEP_{i,t} - TAX_{i,t} \pm \Delta WC_{i,t}$$

$OCF_{i,t}$: operating cash flow of the company (i) during the period(t).

$EBIT_{i,t}$: earnings before interest and tax of the company (i) during the period(t).

$DEP_{i,t}$: depreciation of the company (i) during the period(t).

$TAX_{i,t}$: tax of the company (i) during the period(t).

$\Delta WC_{i,t}$: change in working capital (i) during the period(t).

3.4.1 Statistical Methods Used

Statistical package program is used to process the data collected from financial statements, and multiple regression is used to study the relationship between study variables and testing hypothesis in addition to the following statistical methods; Adjusted R^2, Pearson correlation, t-test, and ANOVA.

3.4.2 Study Community and Sample

The study community consists of the 24 companies of the extractive industries, mining, food and beverage companies listed in Tehran stock exchange for the period 2014-2018.

3.4.3 Hypothesis Test

This chapter reviews the descriptive statistics of the study sample, and the examination and interpretation of the study hypotheses, where each hypothesis is divided into several hypotheses of the different models used, and statistical analysis was carried out using the statistical package of Social Sciences (SPSS) to reach the results and prove or deny Hypotheses.

The descriptive statistic is used to measure centralization and dispersion, it is also useful for providing an overview of collected data, and perhaps the most salient results of the descriptive statistics of the variables of this study appear in the table (1). The findings indicate that the industrial companies listed in the Tehran Stock Exchange study have done The practice of managing earnings during the study period, according to the Jones model, because the closer the absolute value of earning management is from scratch, the higher the likelihood that the management of the company will practice earning management, also because the subject of managing earnings considered as one of the sensitive issues, that are not disclosed without prior permission we will not be able to mention the companies names, The probability of each company to practice earning management, suffice it to say the average of the companies involved in the study to practice earning management, in addition to the numbers that obtained the highest and lowest value, where the average earning management practice during the study period (0.0001) is very close to zero, and the highest value for this practice (4.17), the lowest value (-3.43), the standard deviation (0.99680) and the results were close to the Modified Jones model, where the average earning management practice (0.000), the standard deviation (0.99720), while the highest value of the practice (4.08), was the lowest value (-3.53) We note the high degree of compatibility between the results of two models. The table also shows that stock returns by market return on the stock has reached its arithmetic mean (-0.3347) and is an indicator of the lower capital gains earned by the investor through price differentials between the sizes of the companies concerned, where the highest value reached (1223269000) by the Arab Potash company APOT during 2015, and the lowest value (1886703) refers to the general company for Mining Gem during the year 2018. The research also addressed operating cash flows of the companies concerned and the average arithmetic value (906283), an indication of the average ability of companies to generate sufficient cash flow to maintain and develop the company, and there was a significant standard deviation of (4203632) and the reason of the differences between the highest and lowest value, where the highest cash flow from the operations of the Jordan Cement Factories company JOCM (18677440) during the year 2014, and the lowest operating cash flow of Jordan cement factories company JOCM value (-23812436) during 2016, and note the fluctuation in the same company.

Table 1. Statistical descriptive of the variables of the study during the period 2014 - 2018

Variables	mean	Standard deviation	The highest value	The lowest value
Earning management model Jones	0.0001	0.99680	4.17	-3.43
Earning management model Modified Jones	0.0000	0.99720	4.08	-3.53
Shares returns	-0.3347	2.44390	8.54	-16.96
The company›s size	144635005	316929926	1223269000	1886703
Operating cash flows	906283	4203632	18677440	-23812436

4. Hypotheses Examination and Discussion

4.1 First Hypothesis Test

H1: There is a statistically significant correlation between earning management and stock returns in the industrial companies listed in Tehran stock exchange.

T-test, Pearson and Correlation have been used to test and verify this hypothesis, and due to the use of two models in this study to measure earning management the hypothesis is divided into two branches:

H1A: There is a statistically significant correlation between earning management by model (Jones, 1991) and stock returns.

H1B: There is a statistically significant correlation between earning management by model Modified Jones, 1995) and stock returns.

The test results for the two branches as shown in table 2-test results of the first section of first hypothesis H1A, the figures of table 2 By significance level values indicate that the profit management by Jones model and its value (0.562) is greater than 0.05, which means that the dividends are not linked to the equity returns and that Pearson Correlation agreed that there was no statistically significant correlation between profit management by Jones model and returns The arrows at the significance level of 0.05, and this leads to rejection of the alternative

hypothesis and acceptance of the hypothesis nihilism.

4.1.1 Test Results of the Second Section of the First Hypothesis

The figures of table 2 By significance level values indicate that earning management by the Modified Jones model and its value (0.472) is greater than 0.05, which means that stock returns are not statistically correlated, and Pearson Correlation agreed upon that, there was no statistically significant correlation between both variables at the significance level of 0.05, and this leads to the rejection of alternative hypothesis and the acceptance of nihilism hypothesis.

Table 2. First hypothesis test results

t-test				Coefficient of correlation Pearson Correlation	
The independent variable	Calculated t	Significant level	Shares returns (R)	Coefficient of correlation	Significant level
Earning management Jones	0.581	0.562		Earning management Jones	
				0.553	0.0741
Earning management Modified Jones	0.721	0.472		Earning management Modified Jones	
				0.055	0.467

The depending variable: shares retunes

4.2 Second Hypothesis Test

H2: There are statistically significant indicators of model appropriateness proposed for the study of variables impact (earning management, company size and operating cash flows) on stock returns of the industrial companies listed in Tehran stock exchange.

H2: There are statistically significant indicators of the appropriateness of proposed models to examine variables impact (earning management, company size and operating cash flows) on stock returns in the industrial companies' listed Tehran stock exchange.

ANOVA and Adjusted R2 have been used in this hypnosis test, with two models in this study to measure earning management, the hypothesis is divided into two branches:

H2A: There are statistically significant indicators on the appropriateness of the model containing the model (Jones, 1991) to measure earning management and other variables (company size and operating cash flows) and the dependent variable of stock returns.

H2B: There are statistically significant indicators of the appropriateness of the model including Jones, 1995 Modified to measure earning management and other variables (company size and operating cash flows) and the dependent variable of stock returns.

The test results as shown in table 3:

Test results of the first section of the second hypothesis H2A.The numbers in table (3) indicate that the value F Calculated and grown (2.948) in the model is a statistically functioning value because the accompanying significancelevel value has reached (0.037) and is smaller than 0.05, thus accepting the alternative hypothesis.

Clarify the linear regression of multi-valued relationship R between Dependent variable and independent variables reached (0.305), While the value of R2 Adjusted (0.062) which means that independent variables explain the change in the dependent variable returns of stocks at the value of the stated percentage.

Test results of the second section of second hypothesis H2B, figures in table (3) indicate that the value of F Calculated (6.263) in the form is a statistically functioning value, because the accompanying significance level value

has reached (0.000) and its smaller than 0.05, therefore accepts the alternative hypothesis.

The value of the relationship of R reached between the dependent variable and the independent variables (0.311) as shown in table (3), while the value of R2 Adjusted (0.081) this means that independent variables explain the change in the dependent variable return, on stock return at the value stated.

Table 3. Results of the second hypothesis test

ANOVA				Model Summary	
The depending .variable	DF degree of freedom	Calculated f	Sig significant level	R) regres-) sion	R2) correlation) regression
shares (retunes(R	3*	2.948*	0.037*	0.305*	0.062*
	3**	6.263**	0.000**	0.311**	0.081**

The study model:

$$R_{i.t} = \alpha + \beta_1 EM\,1_{i.t} + \beta_2 OCF_{i.t} + \beta_3 F\,SIZE_{i.t} + \xi_{i.t}$$

; Where independent variables and controls are : earning management by model jones $EM\,1_{i.t}$, operating cash flows $OCF_{i.t}$, the company's size $F\,SIZE_{i.t}$, and the depending variable shares return $R_{i.t}$, It is statistically significant at significance level 0.05

4.3 Third Hypothesis Test

H3: There is a statistically significant correlation between operating cash flows and stock returns in industrial companies listed in the Tehran stock exchange.

To test and verify this hypothesis, t-test and Pearson Correlation were used

Test results, as shown in table (4), indicate the figures in table (4.4) through the values of the indication level t operating cash flows and their value (0.619) are greater than 0.05, and Pearson Correlation results as shown in the table indicates that there is no statistically significant correlation between operating cash flows and stock returns at the indication level 0.05, this leads to the rejection of alternative

hypothesis and acceptance of the nihilism hypothesis.

Table 4. Results of the third hypothesis test

t-test				Coefficiet of correlation Pearson Correlation		
Independent variable	T calculated	significant level	Shares returns (R)	Operating cash flows ((OCF		
					Coefficient of correlation	Signifi-cant level
Operating cash flows (OCF)	0.499	0.619			0.044	0.561

The depending variable: shares retunes

4.4 Fourth Hypothesis Test

H4: There is a statistically significant correlation between the company size and stock returns in the industrial companies listed in Tehran stock exchange.

To test and verify this hypothesis, t-test, Gradient coefficient b, and Pearson Correlation were sed. The test results as shown in table (5), the figures in table (5) through the significance level values indicate that the size and value of the company (0.007) is less than 0.05, and Pearson Correlation results as shown in the table indicate a statistically significant correlation between the size of the company and stock returns at the level of 0.01, thus accepting the alternative hypothesis.

When looking at the gradient beta in table (5), we note that the beta value is equal to (0.287), which means the increase of the company size by one degree leads to an increase in stock returns of value (0.287).

Table 5. Results of the fourth hypothesis test

Regression coefficient				Coefficient of correlation		
Inde-pendent variable	Regression coefficient	T calculated	Signifi-cant level	Shares returns (R)	The firm size F size		
					Coefficient of correla-tion	Significant level
The firm size F size	0.287	2.781	0.007			
	0.274**		0.009		**0.274	0.009

5. Study Findings and Recommendations

The results of the analysis and hypothesis testing can be summarized as the following: This study corresponds to the most previous studies findings of the industrial companies practice listed in Tehran stock exchange to manage earnings, and this was concluded based on the average earning management for the study sample, and from Studies that correspond to this result This result can be explained by companies attempt to maintain their investors and attracting new investors through the creation of a mock improvement in their profitability or the financial center. The study found that there was no relationship between earning management and stock returns in the industrial companies listed in Tehran stock exchange at the level of the Industrial significance listed in Tehran stock exchange at the level of importance 0.05. The study found that there was a statistically significant correlation at the level of 0.01 between the size of the company and the shares of the industrial companies listed in Tehran change exchange.

In light of the results achieved, the researcher recommends the following:

To increase the awareness of the parties concerned about the non-reliability of the financial statements issued by the industrial companies listed Tehran stock exchange, in the presence of earning management practice and the lack of information reflection contained in these financial statements on the prices and returns of stocks through the holding seminars, conferences, and meetings.

Urge stakeholders to strive to increase the efficiency of the Tehran stock exchange for being more reliable, and an authoritative reference for decision makers.

You are activating the role of audit committees to become more capable of discovering and reducing the practice of managing earnings.

You are activating the regulatory role of the securities authority in the field of developing more conservative regulations and instructions to reduce the degree of earning management practice.

Encouraging accountants to abide profession ethics, when preparing financial statements, especially those related to earnings, in particular, information about earning management, to be accurate information, in which investors rely onwhen making their investment decisions.

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