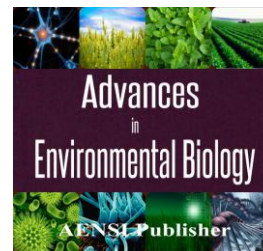




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# The Comparative Comparison Between The Effective Factors on The Real Earning Management and Accrual-Based Earning Management in Tehran Stock Exchange Accepted Companies

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### ABSTRACT

The purpose of this study is finding the reasons which cause the managers to use the real earning management and accrual-based earnings management to change the reported earnings. In this study, the factors such as the market share, financial health, institutional ownership, Marginal tax rate, the greater scrutiny from auditors and regulators and the accounting flexibility on the real earning management accrual-based earnings management have been studied on 148 accepted companies in Tehran Stock Exchange by regression multiple way from 1387 to 1391 (solar years). The results of this test show that using of real earning management is expensive for companies with weak financial health and is considered as the limiting factor of the earning management. The Change optional auditors, as one of the criteria increasing scrutiny of auditors by using more level of real earning management of the latest year before the change auditor has been happened. Increasing the more level the stocks of the institutional investors' possessors has been effective in more using of accrual-based earning management. The high rate of tax causes to use more and less cost of accrual-based earning management. Also by increasing unexpected effects of real earning management the use of accrual-based earning management will be increased. Other results show that, unlike the predictions of hypotheses, decreased market share causes more usage of the earning management by managers with real activities operations. And increase the length of operating cycle as one of the criteria increasing the flexibility of accounting led to a lower level of earnings management is based on accruals.

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## INTRODUCTION

On one hand the increasing spread of economic activities and their complexities and on the other hand considering the accurate accounting information and the financial reports cause the main principle changes in accounting the theories and ideas and producing analytic ways of modern management in accounting too one of the main important change is consideration of attention to the income statement, while before it, the balance sheet bill has been confirmed of this cause to produce subject which is called earning management. Healy and Wahlen [30] explain the earning management when the managers act by according to justify the financial reports of transaction structure to change the financial reports of pervert the beneficent ones about the company commercial activities in changes the contract results base on the reported accounting numbers, the earning management will be occurred. Today's, the investors have pay attention to the earning amount as one of main factor of decision; the earning management is interesting of attracting one in the accounting research. The studies show that the low Volatility and Stability earning show its quality. So the investors invest with more assurance of security in companies which have the stable earning process. Therefore, the earning management is the way to arrange the desirable financial situation data of the companies that is done by through management intervention in the process of determining the earning to be [43].

The information source of the majority of the invest market actives persons are the publication financial reports of the companies which are given to the public people periodically and it is the base for deciding the potential investors to buy and sell in the stock market. By increasing the sources of the managers, the amount of

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beneficent ones of the relationship with company will be increased that the results of this situation causes the Conflicts of interest. The manager whom is the center of this conflicts of interest, try's to decrease the contrast interest by providing company financial information. The managers have motive potentially to pretend good situation of the company of due to this power, the managers have this motive to provide the financial reports [27]. The current accounting system gives some authority to the managers of permit the managers to manage the earning to gain their purposes. The managers manage the earning to prevent from decreasing earning or loss by change the real activities or accrual items [7]. Totally the earning management has been done by two ways of real earning management and accrual-based earning management.

The accrual-based earnings management has been called to the suitable usage of the managers to the flexibility of the accepted accounting principles to change the reported earnings, without any change in the cash current of the company [9].

The real earning management is called to the time of structure of the operational transactions, financial provide of investing by the commercial unit managers to effect the reported earning in special direction that company will be encountered to the future economic consequences [9]. The real earning management consists of real investing and producing decision, Also this kind of earning management is called the earning management by Manipulation. Indeed, the manipulation the real activities is deviation of operational way of the manager's motive is misinform some Beneficiary persons as they believe that the financial reports purposes have been done by usual activities.

The purpose of this study is finding reasons to use the managers from real earning management and accrual-based earnings management to change the reported earnings. In other words, the situations which force the managers change the real activities under what limiting factors of the earning by changing the accrual items have been studied of discussed here. Also whether the limiting factors of the earning management way will be caused to use the substituted way or not will be studied. So the subject of this study is the comparative comparison between the effective factors on the real earning management and accrual-based earning management.

## II. Related Literature:

The earning management subject will be studied by different point of views of everyone will provide the different expansions of definitions. Some definitions are Schipper [47] definition: "the intentional interference in reported process of outside financial reporting in order to gaining some personal advantages of the managers or stockholders." The comprehensive definition of the earning management must consist of the real earning management by time of the investing decision or financial decisions to change the reported earnings of some elements of it. Degeorge *et al* [15] defined "the earning management as the artificial change of earning by the managers to gain the expected level of the earning by some special decisions (such as analysts prospect or previous earning process estimation to prospect the future earning). According to their idea, the main motivation for earnings management is the management investor's image. Beatty [5] has defined it is the conscious decision process by accepting the accounting principles to reach the reported level of the earning to the expected amount. Jones and Sharma [34] earnings management is a deliberate action aimed at showing the earning to a normal level is desired. Earnings management occurs when the managers use their judgments in the financial reports of the record way of transactions reports which cause to change the financial reports context, or misinform some stockholders toward company economic performance, or contract criteria of consequences which are dependent on the accounting numbers are effective [30]. Fama and Jensen [23] and Beatty *et al* [4] believe that the companies with public stocks have more motives to execute the earning management rather than the companies with private stocks.

Several researches Darroug *et al* [15]; Dechow & Skinner [18]; Schipper [47]; Fields *et al* [25], Nelson *et al* [41] show that the main important motive of the earning management are the reward delivery, loan contract , investing market, earning smoothing of the political parameters.

The managers may effect on the reported earnings by different ways and manage it .these different ways of techniques are called earning management tools. The earning management tools are derided in two groups [16]:

### 1- Real Earning Management:

The real earning management consists of the manager's operation which are deviated from usual commerce operation and are done to gain special purpose of the special accounting number [45]. In other words, "earning management base on the real activities manipulation" is way which manager decides some real decisions to get his expected earnings, for example to increase earning, he decreases the advertising costs.it can be considered that in this kind of earning management has the main changes in economic situation. Therefore, this kind of earning management causes to have real economic costs for the company [2].

### 2- Accrual-Based Earnings Management:

The Accrual items are created from difference between operational earning of cash amount of the operations that consists of the depreciation costs, changes of the current debts of possession. The accrual-based earning

management is the way that the manager does it only in the accounting book without affecting the cash amount of without real economic decision.

*The Real Earning Management vis-a-vis The Accrual-Based Earnings Management:*

The main difference between the discretionary accruals management and real activities manipulation is the time of earning management. Every real activities manipulation must be done in special period of the year. The change of the real activity will be occurred when the managers prospect show that the earning have failure to gain their purposes unless they act some which result from company usual ways or it will be occurred when the manager encounters some factors discretionary accruals with limitation [40].

To provide the goals related to the earning, the managers can wait until the end of year of use from discretionary accruals to manage reported earnings. This way has the risk which the earning amount which is needed to the manipulation is larger than the discretionary accruals, because the existed relation with accrual items has been limited by the public accounting principles Barton & Simko, [3]. The main economic events of one company, encounter the manager ability with limitation to report the earning base in the accounting numbers, it may not access to the related earning purpose. These considerations of cause that the discretionary accruals management encounters to limitation. In comparison, the manipulation of the real activities encounter to limitation slightly. Chen *et al* [10] Shows that the corporates do the earning management to prevent from the consequences of failing to meet estimates and also the market can not differ between the real earning management of the accrual-based earnings management.

Therefore, the managers try to change the reported earning two real earning management and accrual-based earnings management that sometimes are used simultaneous Partowi & Abshirini, [44] and sometimes are used substitutive [52,1].

*III. Hypotheses Development:*

As explained, the present study sought to investigate comparative between factors affecting real earnings management and accruals-based earning management in companies listed on the Tehran Stock Exchange. According to the introduction, this study has the following hypotheses:

Both real activities manipulation and accrual-based earnings management are costly activities. Firms are likely to face different levels of constraints for each strategy, which will lead to varying abilities to use them. A manager's trade-off decision, therefore, depends on the relative costliness of the two earnings management methods, which is, in turn, determined by the firm's operational and accounting environment. That is, given the desired level of earnings, when discretion is more constrained for one earnings management tool, the manager will make more use of the other. This expectation can be expressed as the following hypothesis:

H1: Other things being equal, the relative degree of accrual-based earnings management vis-a-vis real activities manipulation depends on the relative costs of each action.

Accrual-based earnings management is constrained by scrutiny from outsiders and the available accounting flexibility. For example, a manager might find it harder to convince a high-quality auditor of his/her aggressive accounting estimates than a low-quality auditor. A manager might also feel that accrual-based earnings management is more likely to be detected when regulators heighten scrutiny of firms' accounting practice. Other than scrutiny from outsiders, accrual-based earnings management is constrained by the flexibility within firms' accounting systems. Firms that are running out of such flexibility due to, for example, having made aggressive accounting assumptions in the previous periods face an increasingly high risk of being detected by auditors and violating accounting standards with more accrual-based earnings management. Hence, we formulate the following four subsidiary hypotheses to H1:

H1-1: Other things being equal, firms facing greater scrutiny from auditors and regulators have a lower level of level of accrual-based earnings management.

H1-2: Other things being equal, firms facing greater scrutiny from auditors and regulators have a higher level of real activities manipulation.

H1-3: Other things being equal, firms with lower accounting flexibility have a lower level of accrual-based earnings management.

H1-4: Other things being equal, firms with lower accounting flexibility have a higher level of real activities manipulation.

Real activities manipulation, as a departure from optimal operational decisions, is unlikely to increase firms' long-term value. Some managers might find it particularly costly because their firms face intense competition in the industry. Within an industry, firms are likely to face various levels of competition and, therefore, are under different amounts of pressure when deviating from optimal business strategies. Management research as reviewed by Woo [50] shows that market leaders enjoy more competitive advantages than do followers, due to their greater cumulative experience, ability to benefit from economies of scale, bargaining power with suppliers and customers, attention from investors, and influence on their competitors. Therefore, managers in market-leader

firms may perceive real activities manipulation as less costly because the erosion to their competitive advantage is relatively small. Hence, we predict the following:

H1-5: Other things being equal, firms without market-leader status have a higher level of accrual-based earnings management.

H1-6: Other things being equal, firms without market-leader status have a lower level of real activities manipulation.

For a firm in poor financial health, the marginal cost of deviating from optimal business strategies is likely to be high. In this case, managers might perceive real activities manipulation as relatively costly because their primary goal is to improve operations. This view is supported by the survey evidence documented by Graham *et al* [28], who find that CFOs admit that if the company is in a “negative tailspin,” then managers’ efforts to survive will dominate their reporting concerns. This reasoning leads to the following subsidiary hypothesis to H1: H1-7: Other things being equal, firms with poor financial health have a higher level of accrual-based earnings management.

H1-8: Other things being equal, firms with poor financial health have a lower level of real activities manipulation.

Managers might find it difficult to manipulate real activities when their operation is being monitored closely by institutional investors. Prior studies suggest that institutional investors play a monitoring role in reducing real activities manipulation. Bushee [8] finds that, when institutional ownership is high, firms are less likely to cut R&D expenditure to avoid a decline in earnings. Roychowdhury [45] also finds a negative relation between institutional ownership and real activities manipulation to avoid losses. Unlike accrual-based earnings management, real activities manipulation has real economic consequences for firms’ long-term value. Institutional investors, being more sophisticated and informed than other investors, are likely to have a better understanding of the long-term implication of firms’ operating decisions, leading to more effort to monitor and curtail real activities manipulation than accrual-based earnings management, as predicted in the following subsidiary hypothesis:

H1-9: Other things being equal, firms with higher institutional ownership have a higher level of accrual-based earnings management.

H1-10: Other things being equal, firms with higher institutional ownership have lower level of real activities manipulation.

Real activities manipulation is also costly due to tax incentives. It might be subject to a higher level of book-tax conformity than accrual-based earnings management, because the former has a direct cash flow effect in the current period, while the latter does not. Specifically, when firms increase book income by cutting discretionary expenditures or by overproducing inventory, they also increase taxable income and incur higher tax costs in the current period. In contrast, management of many accrual accounts increases book income without current-period tax consequences. For example, increasing the estimated useful lives of long-term assets, decreasing write-downs for impaired assets, recognizing unearned revenue aggressively, and decreasing bad debt expense all can increase book income without necessarily increasing current-year taxable income. Therefore, for firms with higher marginal tax rates, the net present value of the tax costs associated with real activities manipulation is likely to be higher than that of accrual-based earnings management, leading to the following prediction:

H1-11: Other things being equal, firms with higher marginal tax rates have a higher level of accrual-based earnings management.

H1-12: Other things being equal, firms with higher marginal tax rates have a lower level of real activities manipulation.

Another difference between the two earnings management strategies that will influence managers’ trade-off decisions is their different timing. H1 predicts that the two earnings management strategies are jointly determined and the trade-off depends on their relative costliness. However, a joint decision does not imply a simultaneous decision. Because real activities manipulation changes the timing and/or structuring of business transactions, such decisions and activities have to take place during the fiscal year. Shortly after the year-end, the outcome of the real activities manipulation is revealed, and managers can no longer engage in it. Note that, when a manager alters real business decisions to manage earnings, s/he does not have perfect control over the exact amount of the real activities manipulation attained. For example, a pharmaceutical company cuts current-period R&D expenditure by postponing or canceling development of a certain drug. This real decision can include a hiring freeze and shutting down the research site. The manager may be able to make a rough estimate of the dollar amount of the impact on R&D expenditure from these decisions, but s/he does not have perfect information about it. Therefore, when managers observe the impact of real activities manipulation on earnings at the fiscal year-end, they can offset an unexpectedly by using accrual management. This prediction, which is my next hypothesis, is based on the premise that managers will use the two earnings management as substitutes:

H2: Managers adjust the amount of accrual-based earnings management after real activities manipulation is realized; the level of accrual-based earnings management is negatively related to the unexpected amount of real activities manipulation.

#### IV. Research Design:

##### Real Activities Manipulation:

Following Roychowdhury [45], we examine the following manipulation of real activities: increasing earnings by reducing the cost of goods sold by overproducing inventory, and cutting discretionary expenditures, including R&D, advertising, and selling, general, and administrative (SG&A) expenditures. The former is measured by the abnormal level of production costs, the latter by the abnormal level of discretionary expenditures. Subsequent studies using the same metrics Cohen *et al.* [12]; Cohen and Zarowin [13] provide further evidence that these measures capture real activities manipulation. We estimate the normal level of production costs following Roychowdhury [45]:

$$Prod_t/A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \alpha_2(S_t/A_{t-1}) + \alpha_3(\Delta S_t/A_{t-1}) + \alpha_4(\Delta S_{t-1}/A_{t-1}) + \kappa_t$$

Where PROD<sub>t</sub> is the sum of the cost of goods sold in year *t* and the change in inventory from *t*-1 to *t*; A<sub>t-1</sub> is the total assets in year *t*-1; S<sub>t</sub> is the net sales in year *t*; and ΔS<sub>t</sub> is the change in net sales from year *t*-1 to *t*. Equation (1) is estimated cross-sectionally for each industry-year with at least 15 observations, where industry is defined following Fama and French [22], such that the estimated coefficients vary over time and reflect the impact on production costs from industry-wide economic conditions during the year. The abnormal level of production costs (RMPROD) is measured as the estimated residual from Equation (1). The higher the residual, the larger is the amount of inventory overproduction, and the greater is the increase in reported earnings through reducing the cost of goods sold. Also following Roychowdhury [45] we estimate the normal level of discretionary expenditures using the following equation:

$$DiscE_t/A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \alpha_2(S_{t-1}/A_{t-1}) + \omega_t$$

Where DiscE<sub>t</sub> is the discretionary expenditures (i.e., the sum of SG&A expenditures) in year *t*. We estimate the above regression cross-sectionally for industry-years with at least 15 observations. The abnormal level of discretionary expenditures is measured as the estimated residual from the regression. We multiply the residuals by -1 (denoted as RMDiscE) such that higher values indicate greater amounts of discretionary expenditures cut by firms to increase reported earnings. Following Zang [52], we absolute value of aggregate the two real activities manipulation measures into one proxy, RM, by taking their sum.

##### Accrual-Based Earnings Management:

Following prior literature, we use absolute value of discretionary accruals to proxy for accrual-based earnings management. Discretionary accruals are the difference between firms' actual accruals and the normal level of accruals. I estimate the latter using the following modified Jones [34] model:

$$TACC_t/A_{t-1} = \beta_0 + \beta_1(1/A_{t-1}) + \beta_2(\Delta S_t/A_{t-1}) + \beta_3(PPE_t/A_{t-1}) + \varepsilon_t$$

Where TACC<sub>t</sub> is the earnings before extraordinary items and discontinued operations minus the operating cash flows reported in the statement of cash flows in year *t* see Collins and Hribar [14]; and PPE<sub>t</sub> is the gross property, plant, and equipment. We estimate the above regression cross-sectionally for industry-years with at least 15 observations. The estimated residuals (AM), capturing discretionary accruals, are our proxy for accrual-based earnings management.

##### The Trade-Off between Real Activities Manipulation and Accrual-Based Earnings Management

To investigate how managers trade off real versus accrual-based earnings management, I estimate the following equations using zang's model [52]:

$$RM_t = \beta_0 + \sum_k \beta_{1,k} CostofRM_{k,t} + \sum_l \beta_{2,l} CostofAM_{l,t} + \sum_m \beta_{3,m} control_{m,t} + u_t$$

$$AM_t = \gamma_0 + \sum_k \gamma_{1,k} CostofRM_{k,t} + \sum_l \gamma_{2,l} CostofAM_{l,t} + \gamma_3 Unexpected RM_t + \sum_m \gamma_{4,m} control_{m,t} + v_t$$

H1 predicts that the trade-off between the two earnings management approaches is determined by their relative costliness. That is, when the costs associated with accrual-based earnings management are high, firms use real activities manipulation more, and vice versa. Therefore, β<sub>2</sub> in Equation (4) and γ<sub>2</sub> in Equation (5) are both expected to be positive. Because each earnings management approach is constrained by its own costs, β<sub>1</sub> in Equation (4) and γ<sub>1</sub> in Equation (5) are expected to be negative. As discussed above, real activities manipulation has to be executed and realized by the fiscal year-end, after which managers can still adjust the extent of accrual-based earnings management based on the observed impact of real manipulation on earnings (i.e., H2). Therefore, we use a recursive equation system to capture this sequence of decisions. That is, the extent of real activities manipulation is determined by the costs of both earnings management tools and other predetermined firm characteristics, but not by the realized outcome of accrual-based earnings management. The extent of accrual-based earnings management is determined not only by the costs of earnings management activities, but also by the unexpected amount of real activities manipulation realized. H2 predicts that managers increase (decrease) the extent of accrual-based earnings management when real activities manipulation turns out to be unexpectedly low (high). The hypothesized direct and substitutive relation between the two earnings management methods implies a negative sign on γ<sub>3</sub> in the accrual management equation. Because the dependency between the two types of earnings management is unidirectional, both regressions in the recursive equation system can be estimated

consistently using GLS estimation. In the accrual-based earnings management equation, Unexpected  $RM_t$  is measured as the estimated residual from Equation (4).

Costs Associated with Real Earning Management

Following Zang [52], we use four types of costs associated with real earning management.

Market Share<sub>t-1</sub> is the percentage of the company's sales to the total sales of its industry at the beginning of year t.

ZSCORE<sub>t-1</sub> is the z-score at the beginning of year t, where ZSCORE<sub>t</sub> is:

$0.3 (NI_t/Asset_t) + 1.0 (Sales_t/Asset_t) + 1.4 (Retained\ Earnings_t/Asset_t) + 1.2 (Working\ Capital_t/Asset_t) + 0.6 ([Stock\ Price * Shares\ Outstanding_t] / Total\ Liabilities_t)$

INST<sub>t-1</sub> is the percentage of institutional ownership at the beginning of year t.

MTR<sub>t</sub> is the marginal tax rate of the changes in tax to the change in sale at ending of year t.

Costs Associated with Accrual-Based Earnings Management

Following Zang [52], we use four types of costs associated with accrual-based earning management.

BIG<sub>t</sub> is an indicator variable that equals 1 if the firm's auditor is one of the Auditing Organization and 0 otherwise.

Prior research shows that Audit Organization constrain earnings management through discretionary accruals e.g., DeFond and Jiambalvo [19, 20]; Becker *et al.* [6]; Francis *et al.* [26]. This is because they are likely to be more experienced, to invest more resources in auditing, and to have more reputation at risk than smaller audit firms.

Change auditors is an indicator variable that equals 1 if the audit tenure is less than four years is assumed that led to the change of auditor is the auditor's scrutiny and 0 otherwise.

NOA<sub>t-1</sub> is an indicator variable that equals 1 if the net operating assets (i.e., shareholders' equity less cash and marketable securities and plus total debt) at the beginning of the year divided by lagged sales is above the median of the corresponding industry-year, and 0 otherwise.

We use Barton and Simko's [3] balance sheet measure of previous accounting choices—net operating assets at the beginning of the year (NOA<sub>t-1</sub>)—as a proxy for the extent of accrual management in previous periods. The rationale for this measure is that, because of the articulation between the income statement and the balance sheet, abnormal accruals reflected in past earnings are also reflected in net assets; hence, the latter are overstated when firms engage in accrual manipulation in previous periods. I predict that the cost of accrual management in the current period is positively related to the extent of overstated net operating assets at the beginning of the year.

Cycle<sub>t-1</sub> is the day's receivable plus the day's inventory less the day's payable at the beginning of the year.

Firms with longer operating cycles have greater flexibility for accrual management because they have larger accrual accounts and a longer period for accruals to reverse.

#### Control Variables:

In both equations, the four types of variables were used to control the effect of independent variables on the dependent.

Size<sub>t</sub> is natural logarithm of total assets.

LEV<sub>t</sub> is leverage ratio of total debt to total assets ratio the industry-adjusted log value of total assets.

ROA<sub>t</sub> is the return on assets, computed using net income for the rolling four quarters ending with the third quarter of year t.

MTB<sub>t</sub> is the market-to-book ratio.

#### V. Sample Selection and Results:

The research Statistical sample of society is collected firm the financial data of the financial bills of explanatory records related to the examined corporates with cd of Tehran Stock Exchange organization and Internet site of Exchange organization and Tadbir Software. Due to the high spread of the statistical society of some inconsistency between the society members, the below conditions have been considered for selection the statistical society;

- 1) They must present in Exchange from 1385 to 1391.
- 2) They must not be the investing, dealer companies or banks or insurance companies.
- 3) The end of financial year must be Esfand month (the last month, a solar year) of they do not change their financial year during this period.
- 4) Their transaction brand must be active of they do not have stop more them 4 months in every year.
- 5) At the end of financial year, all the financial data of information must be available.

Therefore, as the time data from 1385 to 1386 has been used only for some variables of the research, the research period of the study contain 5 years from 1387 to 1391 of the sampling is systematic deletion way that regarding the mentioned conditions, some corporates have been selected and their data has been used in hypothesis test. Regarding above criteria, 149 companies have been recognized.

*Explanatory Statistic:*

The explanatory results have been presented in Table 1. The explanatory results have been presented in Table 1. The explanatory results show that the average data of real earning management, abnormal level of production costs, abnormal level of discretionary expenditures and accrual-based earnings management respectively equal to 0/099, 0/000, 0/000, and 0/119 and also the median of mean in these variables respectively equal to 0/072, 0/003, -0/001 and 0/085.

**Table 1:** Descriptive Statistics.

	RM	RMPROD	RMDISCE	AM	MARKET SHARE	ZSCORE	INST	MTR	BIG	CHANGE AUDITOR	NOA	CYCLE	SIZE	LEV	ROA	MTB
Observations	740	740	740	740	740	740	740	740	740	740	740	740	740	740	740	740
Mean	0.098884	-1.35E-09	-1.32E-07	0.119126	0.047670	1.935597	0.418089	0.073007	0.244595	0.154054	0.336486	238.2548	27.45112	0.658208	0.157505	1.296630
Median	0.072285	-0.002530	-0.000750	0.085465	0.028927	1.636370	0.350000	0.006850	0.000000	0.000000	0.000000	223.8408	27.27872	0.652020	0.136583	1.167731
Maximum	1.733470	1.711870	0.147340	1.826540	0.487727	11.46785	1.000000	10.66402	1.000000	1.000000	1.000000	966.6567	32.36518	2.077506	0.701606	7.708719
Minimum	3.00E-05	0.600520	0.131310	0.000190	4.58E-05	2.078067	0.000000	6.243624	0.000000	0.000000	0.000000	41.65870	23.90182	0.156877	0.337373	0.541978

Correlation analysis between research variables the correlation results between research variables are presented in table 2. The correlation results show that there is direct of meaningful correlation 0/26 between the real earning management bases on the product activities manipulation with total real earning management. There is converse and meaningless correlation between real earning management base on the discretionary expenditures manipulation with total real earning management which is 0/05, Relation to the independent of control, only the return on assets has meaningful relationship with real earning management that this relation is converse of equals to -0.15.

**Table 2:** Pearson Correlations.

Probability	RM	AM	MARKET SHARE	ZSCORE	INST	MTR	BIG	CHANGE AUDITOR	NOA	CYCLE	SIZE	LEV	ROA	MTB
RM	1.000000													
AM	0.074157	1.000000												
MARKETSHARE	0.032643	0.074509	1.000000											
ZSCORE	0.094772	0.000480	0.020541	1.000000										
INST	0.005097	0.048485	0.077247	0.188796	1.000000									
MTR	0.002372	0.018315	0.021262	0.103724	0.020330	1.000000								
BIG	0.010715	0.019892	0.240925	0.003738	0.033479	0.047879	1.000000							
CHANGE AUDITOR	0.033340	0.063502	0.040184	0.040402	0.092293	0.002066	0.155742	1.000000						
NOA	0.015839	0.007839	0.066267	0.375502	0.085644	0.034961	0.112470	0.082071	1.000000					
CYCLE	0.005864	0.069947	0.056947	0.187969	0.000158	0.033976	0.063032	0.439645	1.000000					
SIZE	0.056201	0.021068	0.597680	0.073921	0.155668	0.003509	0.255080	0.022109	0.100496	1.000000				
	0.1267	0.5672	0.0000	0.0444	0.0000	0.9241	0.0000	0.5482	0.0062	0.0008	-----			

LEV	0.0364 77	0.0459 48	- 0.0230 93	- 0.6528 36	- 0.2442 02	- 0.0871 47	- 0.0282 01	- 0.0044 83	0.1705 57	0.0749 48	0.0410 96	1.0000 00		
	0.3217	0.2119	0.5305	0.0000	0.0000	0.0177	0.4437	0.9031	0.0000	0.0415	0.2642	-----		
ROA	0.0213 58	- 0.0286 40	0.0614 92	0.6161 93	0.2427 22	0.0969 76	0.0652 70	0.0855 00	- 0.2611 65	- 0.0854 37	0.0990 99	- 0.5990 11	1.0000 00	
	0.5619	0.4366	0.0946	0.0000	0.0000	0.0083	0.0760	0.0200	0.0000	0.0201	0.0070	0.0000	-----	
MTB	0.0572 80	0.0077 15	- 0.0796 71	0.4388 30	0.1225 83	0.0468 90	- 0.0984 76	0.0297 62	- 0.1054 72	- 0.0323 73	- 0.0540 10	- 0.1518 70	0.4507 94	1.0000 00
	0.1195	0.8340	0.0302	0.0000	0.0008	0.2026	0.0073	0.4188	0.0041	0.3792	0.1422	0.0000	0.0000	-----

Also, the variables of financial health, change auditor, leverage and return on assets have meaningful relationship with accrual-based earnings management 0.14 direct relations, -0.08 converse relation, 0.23 converse of direct 0.20 respectively.

#### Model test:

Table 3, presents the results of the trade-off between real activities manipulation and accrual-based earnings management by estimated coefficients of the regression models by Generalized Least Squares method.

**Table 3:** The Trade-Off between Real Activities Manipulation and Accrual-Based Earnings Management.

		RM Equation (n=740)			AM Equation (n=740)	
		Pred. Sign	Coefficient		Pred. Sign	Coefficient
C			-0.577*			0.690*
Unexpected Rmt			0.070**			
Costs Associated with Real Earning Management						
MARKETSHARE		+	-0.368**		-	-0.122
ZSCORE		+	0.011*		-	0.003
INST		-	0.076		+	0.073 ***
MTR		-	-0.002		+	0.010 *
Costs Associated with Accrual-Based Earnings Management						
BIG		+	0.011		-	-0.017
CHANGE AUDITOR		+	0.011**		-	0.007
NOA		+	0.006		-	0.010
CYCLE		-	-2.04E-05		+	-8.44E-05*
Control Variables						
SIZE			-0.019*			-0.023 *
LEV			0.112*			0.071**
ROA			0.62***			0.176*
MTB			-0.032*			-0.022 **
R-squared			0.417			0.510
Adjusted R-squared			0.257			0.374
F-statistic			2.610			3.769
Prob(F-statistic)			0.000			0.000
Durbin-Watson stat			2.295			2.307
Jarque-Bera			4.931			1.711
Prob (Jarque-Bera)			0.072			0.425
*, **, *** Represent significance at the level of 10 percent, 5 percent, and 1 percent levels, respectively.						

The result of time regression is creditable and the processed regression is meaningful totally. For meaningful regression, variance analysis (F-test) has been used. According to the table data and regarding the meaningful level of F-statistic in both models are lower than 0.05, so it can be mentioned that F-statistic is meaningful of therefore the regression is meaningful.

In both models the amount of Durbin-Watson statistics is between 1/5 to 2/5. these number shows that the errors are independent form each other of there is no correlation between the errors and the hypothesis of correlation between the error and the been rejected of regression can be used also as the Jarque-Bera statistics probability level which is upper then 0/05 , shows that residuals is normal.

The determination coefficient shows that %25 (38) of real earning management (accrual-based earnings management) is effected by the related casts of real earning management of accrual-based earnings management of other variables.

#### First hypothesis:

For confirming this hypothesis, tow conditions must be provided: firstly, for all variables coefficient costs associated with real earning management ( $\beta_{1.1}, \beta_{1.2}, \beta_{1.3}, \beta_{1.4}$ ) and costs associated with accrual-based earning



management ( $\gamma_{2.1}, \gamma_{2.2}, \gamma_{2.3}, \gamma_{2.4}$ ). Must be accordance with expectations, secondly, their relationship with real earning management and accrual-based earnings management must be meaningful statistically. regarding results of 3 table and upper level of t-statistic possibility amount of accepted error level (%5) for cost coefficients related with real earning management of related costs of related costs of accrual-based earnings management, the results show that above conditions are not represented of obliged items with real earning management to the rational costs of every activity doesn't have dependent.

And the first hypothesis of the research has not be confirmed .these results have not be compatible with results of zang study [52] and aghaee *et al* study [1].

#### 1-1- Subsidiary hypothesis consequence:

For examining this hypothesis is, tow proxies of Big and change auditor have been used as the scrutiny of auditors and regulators index.

Firstly, this hypothesis has been examined by big proxy for scrutiny of auditors and regulators.

The results show that this variable coefficient has conserver meaningless relationship with accrual-based earnings management that is opposite with expected hypothesis .this result means that big does not have relationship with earning management level by the manager with discretionary accruals. this result is opposite with the image that presenting upper quality accounting by the Audit Organizations causes to decrease the earning management by the discretionary accruals the reason may be explained that Tehran Stock Exchange organization has the severe regulations for selecting the creditable audit firms activity which are trusted y the stock exchange organization. in other words the reliable stock exchange organization are the best audit firms members iran official accounting society here the better quality then other audit firms and we can conclude that the audit organization does not have any better action rather them the reliable stock exchange organizations and doesn't use from its potential capacity as the accounting reference in the country properly the results have complicity with results sale its Nonahal *et al* [42] Namazi *et al* [39] but they have contrast with results Becker *et al* [6] Francis *et al* [26].

Also the results this hypothesis is with change auditor show that the variable of this coefficient has direct meaningless relationship with accrual-based earning management which are opposite the expected prospected hypothesis. Therefore, the hypothesis that the change auditor is due to the greater scrutiny from auditors and regulators doesn't effected on the level of earnings management using discretionary accruals conducted by management. Therefore we can conclude that the change auditor before the end permitted period the continuous auditor one corporate doesn't resulted by the continues accounting are corporate does not resulted by the disagreement analysis change auditor rotation. In other words if the above change is due the greater scrutiny from auditors and regulators will lead to other cases except manipulation discretionary accruals.

#### 2-1 Subsidiary hypothesis consequence:

For examine this hypothesis is two proxies Big and audit rotation manipulation real activities so regarding the results 1\_1 hypothesis is which show that Big does not effected on the accrual-based earning management

It can be concluded that the the corporates have knowledge experimentally that by increasing fame and big more limitations are not be used to conduct the accrual-based earning management so there isn't need to use more real earning management and do not try do increase it this result is accordance with results Zang *et al* [52].

Also the results this hypothesis is with change auditor proxy has direct relationship but meaningful with real earning management which agrees with hypothesis prospect this result means that the change auditor before end the permitted period audit continuous one corporate by one audit organization (according to Tehran Stock exchange regulation maximum 4 years) by using more level real earning management in the latest years is without the change auditor. in other words the company prospect in one years before 4 years that they may have problems limitations in accrual-based earning management due the greater scrutiny so that they will use more level earning real management.

#### 3-1 Subsidiary hypothesis consequence:

For examining this hypothesis, two proxies of net operating assets and operating cycle have been used as the accounting flexibility. Firstly this hypothesis is examined by the net operating assets proxy. The results show that the coefficient of this variable has direct relationship but meaningless accrual-based earning management that is opposite to the prospects. In other words, the net operating assets bigger than Industry and less the flexibility within firms' accounting systems doesn't relation with level of earnings management using discretionary accruals conducted by management. This result means that the return of accrual of the previous periods does not have the limited effect on the managers usage of discretionary accruals. This result disagrees with finding Zang [52].

Also the result of this hypothesis with operating cycle proxy shows that the coefficient of this variable has the converse of meaningless relation with accrual-based earning management that is opposite with prospect direction. In other words, the operating cycle does not have relation with the level of earnings management using discretionary accruals conducted by management. This finding is opposite to the results Zang [52].

*4-1 Subsidiary hypothesis consequence:*

For examining this hypothesis, two proxies of net operating assets and operating cycle have been used as the accounting flexibility. Firstly this hypothesis is examined by the operational assets net criteria the results show that there is direct of meaningless relationship between this variable with real earning management which is opposite to the prospect. In other words, the net operating assets do not have relationship with level of earnings management using real activities manipulation conducted by management.

Also, the results of this hypothesis with operating cycle proxy show the converse of meaningful relationship with real earning management variable that agree with prospect of the hypothesis. This result means that the less flexibility of accounting (decreasing operational cycle) Causes to more level of earning management by manipulating real activities this results agrees with Zang finding [52].

*5-1 Subsidiary hypothesis consequence:*

The results show that the market share variable coefficient has converse of meaningless relationship with accrual-based earning management which is opposite to the prospect. In other words, the decrease of market share does not have relationship with earning management by the managers discretionary accruals. This finding is not agree able with Zang finding [52].

*6-1 Subsidiary hypothesis consequence:*

The results show that there is converse of meaningful relationship between market share with real earning management which is opposite to the prospect in other words, market share decrease causes to more level of earning management by the manager by manipulating the real activities .this means that proscription of complete advantage to other companies does not have limited of expensive effect on the manipulating real activities to manage the earning. It seems that the results of this are that the companies with more share of market have more sensibility of risk to the real activities manipulation rather the companies with less market share of every mistake decision about manipulating real activities may have many effect on the market share .this finding is not compatible with Zang finding [52].

*7-1 Subsidiary hypothesis consequence:*

The results show that the coefficient of financial health variable has the direct of meaningless relationship with earning management base on the obliged items that does not confirm this hypothesis. The poor financial health (decrease of financial health) does not have any meaningful relationship with earning management level by manage with discretionary accruals. This result is not compatible with finding of Zang [52] and Valipoor *et al* [49].

*8-1 Subsidiary hypothesis consequence:*

The results show that there is direct of meaningful relationship between financial health variable of real earning management which agrees with hypothesis prospect. In other words , the poor financial health (decreasing financial health ) causes to do less level of earning management by the manager by real activities manipulation.

This result means that in company with poor financial health the results of manipulating real activities are expensive of with decreasing financial health, its limiting effect for the manages is compatible with Zang's finding [52] but it is not compatible with Valipoor *et al* [49].

*9-1 Subsidiary hypothesis consequence:*

The results show that the variable coefficient of stock the institutional ownership has direct and meaningless relationship with accrual-based earning management that means that this hypothesis does not confirmed. In other words, the principle possession level does not have related with earning management level by the manager with discretionary accruals. This finding is not be compatible with result of Siregar and Utama [48], Moradzadeh *et al* [37, 38] of Valipoor *et al* [49].

*10-1 Subsidiary hypothesis consequence:*

The result shows that there is direct of meaningless relationship between stock percent of the principle possessors with real earning management which is opposite to the hypothesis prospect. In other words, the principle possession level does not have relationship with earning management by the manager manipulation real activities.

It may decrease the control of supervisory by the institutional ownership of decreasing concentration on the company affairs and this cause the lack of relationship between institutional ownership with earning management level by manipulating real activities .this result is not be compatible with finding of Zang [52] and Roychowdhury [45].

*11-1 Subsidiary hypothesis consequence:*

The results show that the variable coefficient of tax final rate has converse of meaningful relationship with earning management base on the obliged item that agrees with prospect. In other words, the upper tax final rate cause more level of earning management by the manager with voluntary obliged item. This means that due to less tax consequences of earning management by voluntary obliged items, the manager uses of this earning management to change the reported earnings. This finding is compatible with Zang finding [52].

*12-1 Subsidiary hypothesis consequence:*

The results show that there is direct of meaningless relationship between marginal tax rate variable with real earning management which is opposite to the prospect. This result shows that the marginal tax rate does not have any relationship with earning management by manager by manipulating a real activities. Therefore it can be mentioned that the consequences of real earning management tax have not effected the calculation of management to change the reported earnings. This result is not compatible with Zang finding [52].

*2- Second hypothesis:*

The result of second hypothesis the result show that the unexpected effects of real earning management have direct of meaningful relationship with accrual-based earning management so that the above hypothesis is confirmed in other words, the unexpected effects cause to more level of earning management by the manager with discretionary accruals. This means that whatever that unexpected effects of the real earning by the manager will be more far of the manager increases the accrual-based earning management to decrease the unexpected effects of the real earning management.

*Discussion of conclusion:*

As it is mentioned before, the purpose of this study is finding reasons that cause the managers use the real earning management of earning management base on the obliged items to change the reported earnings. in this research, the effects of factors such as market share, financial health, principle stock holders tax final rate, server analysis of accountant with two criteria of fame of accountant size of accountant cycle of accounting flexibility with two net criteria of operational of these hypotheses show that usage from real earning management for corporates with poor financial health will be expensive of are consider as the limited factors of this king of earning management. The accountant cycle leads to use of real earning management which are less expensive. The upper tax rate leads to more usage of accrual-based earning management. Also, by increasing unexpected effects of the real earning management, usage accrual-based earning management will be increase.

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