



# The Impact of Audit Quality on Earnings Management: An Experimental Study with Evidence from IPO

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## ABSTRACT

According to a method of earnings management activities that administrators can manage reported earnings from the definition of real activity. Conservative attitudes of auditors in presenting their views about the independence of the auditor can be considered as a remarkable point in the audit function. Therefore, the present study seeks to investigate the effect of audit quality on earnings management real time IPO companies. For this purpose, the data of 128 companies listed on the TSE during the years 2007 to 2017 were evaluated. The results indicated that the audit quality increases in the year of initial public offerings. Also results show that the type of auditor, the Audit Tuner, and the concentration of ownership on the audit quality have a positive and significant effect; while the size of the company has a negative and significant impact on the audit quality. Also findings of the research show that earnings management through accrual items has a positive and significant relationship with initial stock offerings. In addition, this study reveals that Discretionary Accruals are positively related to size firm and return on assets and sales growth, while financial leverage has a negative and significant impact on earnings management through accruals.

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## 1 Introduction

The agency problems associated with the separation of ownership and control create the demand for external audit. Initially, the agency problems arise from the asymmetric information in the Principal agent contracts. Asymmetric information refers to a situation where one party to a transaction has more information than the other party. Analytical models have demonstrated that the existence of information asymmetry between firm management and firm shareholders is a necessary condition for the practice of earnings management. When information asymmetry exists, shareholders have insufficient resources, incentives, or access to relevant information to monitor manager's actions, earnings management can also occur [24]. Healy and Wahlen [13] define earnings management as an activity where managers use

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judgment to alter financial reports, either to mislead stakeholders or to influence contractual outcomes. Compared to bad accounting or simple randomness, the distinguishing feature of earnings management is the presence of intent. Before a typical initial public offering (IPO), managers possess a combination of incentives and possibilities to manage earnings. More and more literature has documented the presence of earnings management in IPO firms. It suggests that the differences that are remarked in opportunistic behavior are the result of managers' incentives for managing earnings and their possibilities to do it without detection. They report show that IPO issuers make income-increasing discretionary accruals in the financial statements released before the offering [13]. The companies during initial public offering (IPO) abuse negligence of investors to the temporary nature of increase in profits through earnings management by accruals or manipulation in actual activities and trade stock in price more than its real value [2]. On the other hand, considering the fact that managers are forced to return accruals in the next periods, probability for profit reduction in these companies (which perform earnings management because of poor performance) in the next periods is increased. Because for the companies with poor performance which do earnings management, probably cash flows for hiding effect of returned accruals is not adequate [2]. Thus, it is expected discovery of managers' earnings management at the time of initial public offering cause that investors review their perception of the future earnings quality and adjust their evaluation of these companies which do earnings management, which may finally lead to price reduction and reduction in the company's stock return [18].

Independent auditing quality affects accuracy and validity of the financial statements and financial data. Titman and Truman define auditing quality as accuracy of the information which is provided for investors after auditing. In the other definition, auditing quality is considered as ability of the auditor in discovering and reporting important distortions and discovering manipulations in the net profit. Because of two reasons, there is a direct relationship between optional accrual items and the inherent audit. First, assuming managerial opportunism, accruals are a tool in the hands of management to manipulate reported earnings, and managers manipulate accruals in their favor, and second, accruals are considered as a challenge for auditors, which is associated with high-risk accounts, such as accounts receivable and inventories. Conservatism and precaution is a mechanism through which auditors can achieve the desired level of audit risk for clients with high accruals. In other words, auditors can compensate inherent uncertainty associated with high accruals by reducing the threshold of issuing adjusted reports [5]. Therefore, the important question that has involved the private sector thought during Initial public offerings is whether the capital market, has tried to minimize information risk (information asymmetry) through more supervision, or not? Further monitoring of the Stock Exchanges on Initial public offerings can increase the risk of auditing (litigation against the auditor). Therefore, auditors may react by adjusting their reports to disagreements with the directors of the Initial Public Offerings firms [6]. The auditors' conservative attitudes to provide an opinion on the subject of auditor's independence can be a significant part of the audit function. Several factors affect the issuance of auditors' valid reports that one of them is initial public offerings, because it is a potential effort for auditing marketing, and illustrating the utility of audit services toward the goals such as accreditation and confidence-making [3]. But there is an important question: is there any behavioral stability in the field of effective oversight of the audit services market other than the initial public offerings? What is the reaction of the "auditors" in the years after the initial audit? Is this constant behavior in the formulation of auditors' reports due to effective oversight, or is this only a conservative behavior that the market sees it obscurely? What is the relationship between "earnings management" and "auditor's opinion" in private sector audit firms? Given the high information

asymmetry in the initial public offerings, it is expected that in the process of initial offerings the capital market pays more attention to the firms that are involved in “IPO”, and as a result, trusted auditing firms are also struggling with an effective monitoring of the reporting process for stock companies. The purpose of this paper is to inform financial analysts, users of “financial statements”, the public accountants' community, and the Stock Exchange about the effectiveness of high-quality audit role. Moreover, it is looking for the answer to this question that how the auditors react to their high risk in the firms that are involved with initial public offerings. As well as, this research tries to find the answer to this question that whether earning management is an effective factor in modifying the audit report or not? This issue, as a scientific achievement, can provide useful information to legislators in the field of developing auditing standards and capital markets, as well as users of financial statements and audit reports. And also, the research results could suggest new ideas to conduct new research in the field of auditing.

## 2 Literature Review

Most earnings management studies examine whether companies manage earnings in response to some economic incentive. One setting where management has an incentive to manipulate earnings is at the time of an IPO, since greater earnings may be reflected in a higher offering price and greater proceeds to the company and offering shareholders. Whether a company benefits from earnings management depends upon whether the market can see through the earnings manipulation. The IPO environment is characterized by information asymmetry between management and investors and between informed and uninformed investors [7]. Earnings management is a pervasive corporate phenomenon under the current market regulation and condition [19]. Information asymmetry between managers and shareholders is a necessary condition for “earnings management”. IPOs provide a powerful setting to investigate the relation between “earnings management” and firm fundamental (and hence delisting risk) for several reasons. First, the direction of earnings management is clear in the IPO process. IPO firms have incentives to engage in income-increasing activities to sure that the issues are fully subscribed and are priced sufficiently high to garner adequate proceeds. Second, the IPO process is characterized by information asymmetry between managers and investors [24].

Managers of the financial institutions must be responsible for the senior authorities and other stakeholders in connection with the use of resources. The accountability process is performed using a variety of reports, including the evaluation of performance audit or operational audit reports. Operational audit includes three sections; efficiency, effectiveness and economy that evaluation of the performance is one of the most important parts of it [21]. Testing the earnings management requires to measure management's discretion over earnings. Hence, the discretionary accrual model helps the researcher to split total accruals into discretionary accruals and nondiscretionary components. The discretionary accruals can raise/reduce the net income, without any link to any operational activity of the company. They are positive or negative exclusively at the discretion of the management. When the manager raises/reduces accruals at his discretion, he has to reverse the effect; this fact is explained by the double-entry bookkeeping [2]. So, assuming that cash flows are not manipulated, the only way to manipulate earnings is to increase or decrease accrual items. When information asymmetry increases in relation to a company's stock, the intrinsic value of those shares will be different from those that investors place in the

capital market. Given the hypothesis of dividend signaling, managers who have more internal information about future growth of the company will transfer this information to foreign investors through paying dividends [16]. Auditing aims to ensure the credibility of the financial statements. According to the definition by De Angelo [9], audit quality is the joint probability of auditors finding and reporting frauds in the financial statements. It is relevant to the professional ability and independence of auditors [9]. In such a case, the capital market has more and wider control over these companies in order to increase efficiency. As a result of high information asymmetry in IPO's companies, and more supervision of the capital market, the risk of litigation against the auditor in such a situation dramatically increases. Therefore, auditors to avoid the risk of litigation may react by modifying their report due to disagreements with IPO's companies and limitations on the scope of the proceedings [7]. Companies are also found to gain the accepted opinion of audit and try in this way to agree with their own audit or even change him. Therefore, it can be mentioned that the kind of auditor's opinion depends on himself and the client can have a little effect on it. Consequently, issuing the qualified report by the auditor can be a sign of exact investigation and his resistance against the client's attempts to effect on his opinion. According to the different conditions, there are numerous options related to the auditors' opinions. The most current kind of audit opinion is the standard accepted one. But the auditors also issue the adjusted reports such as the accepted ones with the explanatory paragraphs which they are supposed any report except the accepted one [14]. One of the most important mitigating roles to constrain the use of accrual earnings management is found to be played by high quality audit firms. He argues that Big4 auditors provide better quality audits than non-Big4 auditors, which is supported by extensive subsequent empirical research. In addition to auditor size, auditors' industry specialization is considered to be another proxy for audit quality. Several prior studies show that client firms with industry specialists are associated with higher quality of financial reporting [17]. Therefore, the use of an auditor with industry specialization will help curb earnings management. Also, Prior studies contend that high fees paid by a company to its external auditor increase the economic bond between the auditor and the client and thus the fees may impair the auditor's independence. The impaired independence results in poor audit quality and allows for greater earnings management (resulting in lower earnings quality) [15].

Mandatory audit firm rotation, over time, may actually preclude selection of the most qualified audit firm. On the other hand, successor auditors can offer a fresh perspective to the audit of a company. Audit firm rotation offers two advantages over partner rotation: first, a new partner from a new audit firm may be more willing to contradict judgments made by the predecessor partner; second, in a mandatory audit firm rotation environment, each partner is aware that his/her judgments will be reviewed by another audit firm in a predetermined period of time. Presumably, either of these circumstances could lead to improved audit quality [17]. As higher risk clients are also more likely to have higher earnings management (abnormal working capital accruals), the above literature supports including an audit fees control variable when modeling earnings management. Both the audit firm and the company invest significant effort and time (cost) following a change in audit firms. This impact will be even larger for consolidated entities that require statutory audits in many countries. In a mandatory audit firm rotation environment, these startup costs are more likely to be spread over fewer years, increasing the overall cost of the audit function for both the audit firm and the audit client [7]. According to this hypothesis, the greater quality of information through the audit process, decrease the cost of capital, information asymmetry, and agency costs. Investors on the basis of this hypothesis are asking for audited financial statements. Because, according to investors, the audited financial statements provide useful information for their decision-

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making models. This means that the audit process will increase the financial statements value to investors, which finally follow by the promoting the dignity and the value of the audit profession to them [26]. Based on this hypothesis, it can be argued that, whatever the audit process can reduce earning management, the quality of the audit is also higher. It is expected the higher earning management increases 3 paragraph of the auditor's opinion [26].

Our study revisits the potential link between earnings management and the likelihood of receiving a qualified opinion. Audit quality may play two roles in pricing less than the initial public offerings. First, high-quality auditors may have an informative role, and communicate more accurate information to users of financial statements, which results in a reduction in future uncertainty for unaware investors and, as a result, lowering pricing less than real. Secondly, audit quality may signal on the value of the company in the initial offerings market, and have a positive relationship with the value after the company's offering; in other words, it will increase less pricing of the stock. Auditors play an important role in controlling the manager's performance and limiting of his opportunistic behaviors [6]. To the extent that, academic associations and professional believe audit task is accreditation and reassurance of financial reports, and, finally improvement of the quality of accounting information. Thus, prior research has intensively examined the role of audit firms and mainly focused on the use of audit firms' size as a proxy of audit quality. Despite the extensive line of research, a very few studies have examined other proxies of audit quality such as audit report. This paper therefore attempts to contribute to this strand of research by examining the relationship between audit quality and earnings management, but by using a new proxy of audit quality (audit report) and a new proxy of earnings management (accrual earnings management activities) that both have received very limited attention in prior literature. Van Tendeloo and Vansteraelen [25] found that the auditors of the four large companies have the incentive to restrict their profit management only in countries adjacent to the high tax, where financial statements are further investigated by tax authorities [25]. Zhou and Elder [28] investigated the relationship between audit quality and audit firm size and industry expertise, and earning management, given the current status of current items, for companies that offer seasoned equity offerings (SEOs). Earnings management is due to the lack of performance of stock companies in the SEO process. They received evidence that the auditors of the five major earning management companies were linked in previous years, during, and after to the SEO. An expert accountant with lower income management is related only in the year of SEO. Their study shows that audit quality reduces the earning management of SEO companies, and industry expertise, as a criterion of quality, also hinders earning management [28].

Rusmin [22] found evidence of the negative relationship between the auditor's quality and the profit management index was profitable. Also his research results Shows the amount of earning management amongst firms engaging the services of a specialist is significantly lower than firms purchasing audit services from a non-specialist auditor. In addition, his study reveals that the magnitude of earnings management is significantly lower amongst companies engaging a Big 4 specialist audit firm relative to companies using the audit services of a Non-Big 4 specialist [22]. Waresul Karim et al [27] prospectus revealed that the magnitude of earnings forecast bias is significantly explained by issuer, auditor reputation, proportions of capital raised from domestic as well as foreign investors, and whether the IPO firm is a start-up venture. Underwriter prestige, length of the issuing firms' operating history, leverage,

whether the firm went public during a stock market boom, and forecast horizon do not appear to be statistically significant in explaining the degree of forecast bias [27].

Maheshwari and Agrawal [20] investigated whether earnings management significantly differs in the pre-IPO grading regime and post-IPO grading regime. Further, they examined whether earnings management significantly differs between high-graded and low-graded IPOs. They found that Earnings management is significantly lower in graded IPOs as compared to the ones that are not graded. Further, among the graded IPOs, the high-graded IPOs exhibit lower earnings management as compared to the low-graded IPOs. Their findings were robust to the use of an alternative measure for discretionary accruals [20]. Hasan et al [12] found that the mean (average) the forecast error is 19 percent (9 percent) over the entire sample period. Multivariate analysis shows that management optimism among the explanatory variables used in this study is the most important determinants of forecast error in Indonesia. Seckler et al [23] investigated an error management perspective on audit quality. Drawing on 18 months of participant observations and 38 interviews conducted in a Big 4 accounting firm, they develop a multi-level model of error management. With their model, they propose how organizational structures, team procedures and practices, and individual cognitions and emotions interact to manage errors.

The multi-level model of error management allows them to conceptually integrate previous behavioral and social research on audit quality, contributes to the rising accounting firm error management literature, and explains how and why two general approaches from the broader error management literature to errors that are usually considered as opposing each other, i.e., error prevention and error resilience, may interact and actually entail each other in accounting firms. Alzoubi [3] suggested that audit quality (auditor tenure, size, specialization, and independence) and debt financing (low debt) diminish the potential of earnings management, and, in turn, enhance the financial reporting quality. Invariably, high debt would raise earnings management risk. His research raises probable implications for policy-makers in Jordan and other countries to consider in formulating a more comprehensive and reliable audit system [3]. Alhadab [2], found association between non-audit services and accruals income management that occurs during the IPO. The findings of his paper found evidence for clients of low quality audit firms that nonaudit service fees are positively associated with accrual earnings management during the IPO year, suggested that nonaudit service fees compromise auditor independence [2]. Alhadab [1], provided new evidence to the literature that IPO firms in Jordan utilize real activities and accruals accounting to inflate net income that was reported during the offering year. In particular, the findings of current study show that IPO firms report a higher level of earnings manipulation during the offering year that conducted via accrual-based earning [1].

### 3 Methodology

Research Hypotheses used in this study can be stated as follows:

**H 1:** The quality of the audit increases in the year of the initial public offerings,

**H 2:** The quality of the audit is reduced during the year after initial public offerings,

**H 3:** The earning management through accruals has a significant relationship with initial public offerings,

**H 4:** earnings management through accruals in the year before initial public offerings is higher than the year of initial public offerings.

This research, in terms of purpose, is an applied one and a quasi-experimental, post-event research and carry out based on historical information. To data collection of research theoretical foundations publications, books, and also available databases have been used. As well as, the data required to analyze, have been extracted by Tadbirpardaz, Rahavardenovin software, and audited financial statements data, and also the company's explanatory notes. The required data are generally obtained from library method and referring to Tehran stock exchange and studying financial statements of the listed companies in Tehran stock exchange during 2007 to 2017. In addition to studying the financial statements, the required information has been collected from the website of Tehran stock exchange. The study population of the research includes all listed companies in Tehran stock exchange during 2007 to 2017 which need to have all the following conditions:

- 1) They should be listed in Tehran stock exchange before 2007.
- 2) They have shouldn't suffered from operational loss during recent year.
- 3) They shouldn't be included in financial and investment firms.
- 4) Their necessary financial information should be available.

According to previous research [10] and taking into account the characteristics of Iran's environmental conditions, the following regression models have been used to test the research hypotheses.

$$\text{AuditOpinion}_{it} = \beta_0 + \beta_1 \text{IPO}_{it} + \beta_2 \text{Aud}_{it} \text{ Tuner}_{it} + \beta_3 \text{LogAge}_{it} + \beta_4 \text{Conown}_{it} + \beta_5 \text{Sub}_{it} + \beta_6 \text{ROA}_{it} + \beta_7 \text{Salegrowth} + \beta_8 \text{Lev}_{it} + \beta_9 \text{FirmSize}_{it} + \beta_{10} \text{AudType} + \varepsilon_{it} \quad (\text{model of first hypothesis})$$

$$\text{AuditOpinion}_{it+1} = \beta_0 + \beta_1 \text{IPO}_{it} + \beta_2 \text{Audit Tuner}_{it} + \beta_3 \text{LogAge}_{it} + \beta_4 \text{Conown}_{it} + \beta_5 \text{Sub}_{it} + \beta_6 \text{ROA}_{it} + \beta_7 \text{Salegrowth} + \beta_8 \text{Lev}_{it} + \beta_9 \text{FirmSize}_{it} + \beta_{10} \text{AudType} + \varepsilon_{it} \quad (\text{model of second hypothesis})$$

$$\text{ACCRual}_{it} = \beta_0 + \beta_1 \text{IPO}_{it} + \beta_2 \text{LogAge}_{it} + \beta_3 \text{Sub}_{it} + \beta_4 \text{ROA}_{it} + \beta_5 \text{Salegrowth}_{it} + \beta_6 \text{Lev}_{it} + \beta_7 \text{FirmSize}_{it} + \varepsilon_{it} \quad (\text{model of third hypothesis})$$

$$\text{ACCRual IPO}_{it} = \beta_0 + \beta_1 \text{ACCRual}_{it-1} + \beta_2 \text{LogAge}_{it-1} + \beta_3 \text{Sub}_{it-1} + \beta_4 \text{ROA}_{it-1} + \beta_5 \text{Salegrowth}_{it-1} + \beta_6 \text{Lev}_{it-1} + \beta_7 \text{FirmSize}_{it-1} + \varepsilon_{it} \quad (\text{model of fourth hypothesis})$$

The variables used in the models are defined as follows:

*IPO* = Dummy variable to show the first year of the company's entry into a stock exchange with a value of one, and otherwise, its value is zero.

*Log Age* = Natural logarithm of the client's age

*Sub* = Dummy variable is 1 if the client has a subsidiary, otherwise, it is zero.

*ROA* = return ratio on assets, earning divided by total assets

*Sale growth* = Percentage change of sales, the difference between sales in this year and the previous year divided by last year sales.

$Lev$  = financial leverage, total debt divided by total assets

$Size Firm$  = the size of the client, the natural logarithm of the of the client's total assets

The following model has been used to measure earnings management through accruals:

The dependent variable of this research is the accruals quality index. This index is derived from the following model.

$TCA$ : Total current corporate accruals, calculated by the following formula:

$CFO$ : Cash Flow Operating, obtained through net profit, before unexpected accruals items minus the total accruals (TAs).

$\Delta REV$ : Change of sales revenue

$PPE$ : property, machinery and equipment

$\Delta CA$ : Changes in Current Assets

$\Delta CL$ : Changes in current liabilities

$\Delta Cash$ : Change in cash

$\Delta STDEBT$ : Change in tax savings, interest payable and payable dividends

$\Delta TP$ : Change in tax payable

$Dep$ : depreciation

All variables are homogeneous by the average of the total assets at the beginning of the period. The standard deviation of the model error, separately for each industry indicates the accruals quality index.

## 4 Results

Table 1 indicates some concepts of variables descriptive statistics such as mean, median, minimum observations, maximum observations, and standard deviations.

**Table 1:** Descriptive statistics of the research's variables

Variable	Median	Mean	Max	Min	SD
AuditOpinion	0.428	0	1	0	0495
AuditFees	5.742	5.672	9.263	3.169	1.284
ACCRual	0.093	0.073	0.319	0.002	0.073
IPO	0.091	0	1	0	0.288
AudType	0.245	0	1	0	0.430
AuditTuner	3.219	3	11	1	2.169
LogAge	3.537	3.664	4.174	2.079	0.408
Conown	50.855	51	99	4	22.036
Sub	0.332	0	1	0	0.471
ROA	0.104	0.089	0.355	-0.102	0.115
Salegrowth	0.163	0.142	0.798	-0.328	0.283
Lev	0.614	0.629	0.952	0.259	0.192
FirmSize	13.809	13.671	19.066	9.879	1.373



The results show that in the studied companies the average financial leverage is 0.614, which indicates that approximately 61.4% of corporate finance is financed through debt. The average return on assets in these companies is 10.4%, which its volatility is relatively high due to the standard deviation (11.5%). The average auditor type is 0.245, which suggest in 24.5% of companies, the independent auditor of the company is auditing organization.

**Hypothesis 1:** The quality of the audit increases in the year of the initial public offerings.

In order to test this hypothesis, the results of the model estimation presented in Table 2 are used. The results show that, the statistics value of the right ratio (LR statistic) that is 176.719 at 95% confidence level, indicates the general significance of the research model; the results of McFadden determination coefficient show that approximately 9.19% of the dependent variable variations can be explained by model's independent and control variables.

**Table 2:** The regression test of the first hypothesis

Variable	Estimated coefficient	SD	z-statistics	Significance level
C	-1.656005	0.949853	-1.743432	0.0813
IPOit	0.528404	0.209358	2.523922	0.0120
AudTypeit	0.450545	0.222320	2.026562	0.0433
AuditTunerit	0.379393	0.176991	2.143572	0.0326
LogAgeit	0.161588	0.153665	1.051560	0.2930
Conownit	0.023969	0.002835	8.453638	0.0000
Subit	-0.055704	0.124876	-0.446077	0.6555
ROAit	0.079434	0.805933	0.098562	0.9215
Salegrowthit	0.290751	0.226597	1.283117	0.1995
Levit	0.409128	0.465243	0.879386	0.3792
FirmSizeit	-0.110207	0.053053	-2.077316	0.0378
coefficient of determination			9.19%	
LR-statistics			176.719	
LR- Significance level			0.0000	

In general, according to Table 2, the results indicate that the coefficient of initial public offering is 0.528404, which refer to the positive impact of the initial public offering on the quality of the audit (the auditor's opinion), which according to the z statistic, the coefficient initial public offering is significant at 95% confidence level, in other words, it can be said that the initial public offering has a positive and significant impact on audit quality. In other words, the quality of the audit increases in the year of initial public offering.

According to the abovementioned items, the first hypothesis can be confirmed at 95% confidence level. These findings are consistent with the research results of Chen et al. [10]. The results of the control variables indicate that, at the 95% confidence level, the type of auditor, the auditor's work life, and the concentration of ownership on the audit quality have a positive and significant effect; while the size of the company has a negative and significant impact on the quality of audit.

**Hypothesis 2:** The quality of the audit is reduced during the year after initial public offerings.

In order to test this hypothesis, the results of the model estimation presented in Table 3 are used. The results show that, the statistics value of the right ratio (LR statistic) that is 169.640 at 95% confidence level, indicates the general significance of the research model; the results of McFadden determination coefficient show that approximately 9.73% of the dependent variable variations can be explained by model's independent and control variables. In general, according to Table 3, the results indicate that the coefficient of the initial public offering is 0.475846, which refer to the positive impact of the initial public offering on the quality of the audit (the auditor's opinion), in the year after the initial public offering, but according to the z statistic, the coefficient initial public offering is insignificant at 95% confidence level, in other words, it can be said that the initial public offering has no significant impact on audit quality in the year after the initial public offering.

According to the abovementioned items, the second hypothesis can be confirmed at 95% confidence level. These findings are consistent with the research results of Chan [7]. The results of the control variables indicate that, at the 95% confidence level, the type of auditor, the concentration of ownership, subsidiary, and financial leverage on the audit quality have a positive and significant effect in the year after the initial public offerings; while the size of the company has a negative and significant impact on the quality of audit.

**Table 3:** The regression test of the second hypothesis

Variable	Estimated coefficient	SD	z-statistics	Significance level
C	-1.655133	1.011268	-1.636690	0.1017
IPOit	0.475846	0.333557	1.426580	0.1537
AudTypeit	0.213249	0.077663	2.745813	0.0063
AuditTunerit	0.070503	0.039653	1.778005	0.0754
LogAgeit	0.217343	0.161873	1.342676	0.1794
Conownit	0.023055	0.003013	7.652165	0.0000
Subit	0.604562	0.240433	2.514476	0.0123
ROAit	-0.048385	0.855036	-0.056589	0.9549
Salegrowthit	0.128879	0.241990	0.532579	0.5943
Levit	0.830683	0.230471	3.604281	0.0003
FirmSizeit	-0.130096	0.056328	-2.309609	0.0209
coefficient of determination			9.73%	
LR-statistics			169.640	
LR- Significance level			0.0000	

**Hypothesis 3.** The earning management through accruals has a significant relationship with initial public offerings

The results presented to test the fifth hypothesis in Table 4 show that the probability of F statistic (significance level) is 0.0000, and since this value is less than 0.05, the null hypothesis is rejected at the 95% confidence level, i.e. the model is significant. That is, the model is meaningful. The value of Durbin–Watson statistic is 1.822 that indicates the lack of errors' self-correlation. The results of the adjusted Coefficient of Determination show that approximately 21.69% of the dependent variable variables are explained by the model independent and control variables. In general, the results show that the variable coefficient of initial public offerings has been 0.040927, which refer to the positive impact of

initial public offerings on earning management through accruals that according to t-statistic of variable coefficient of initial public offerings, is significant at the 95% confidence level, in other words, there is a positive and significant relationship between the earning management through accruals and initial public offering. The results of the control variables indicate that, at the 95% confidence level, return on assets, sales growth and size of the company have a positive and significant effect on earning management through accruals; while financial leverage has a negative and significant impact on earning management through accruals.

**Table 4:** The regression model of the fifth hypothesis

Variable	Estimated coefficient	SD	t-statistics	Significance level
C	0.107415	0.025143	4.272221	0.0000
IPOit	0.040927	0.008006	5.111988	0.0000
LogAgeit	0.004599	0.003451	1.332507	0.1834
Subit	-0.004466	0.003095	-1.442920	0.1493
ROAit	0.057328	0.019988	2.868048	0.0042
Salegrowthit	0.018370	0.006014	3.054453	0.0023
Levit	-0.044554	0.010979	-4.058147	0.0001
FirmSizeit	0.008384	0.004093	2.048586	0.0411
The adjusted coefficient of determination			21.69%	
Durbin-Watson			1.822	
F-statistics			14.446	
Significance level			0.0000	

**Hypothesis 4.** Earnings management through accruals in the year before initial public offerings is higher than the year of initial public offerings.

In order to test the sixth hypothesis, the results of the model estimation presented in Table 5 are used. The results show that the probability of F statistic (significance level) is 0.0000, and since this value is less than 0.05, the null hypothesis is rejected at the 95% confidence level, i.e. the model is significant. The value of Durbin–Watson statistic is 2.014 that indicate the lack of errors' self-correlation. The results of the adjusted Coefficient of Determination show that approximately 25.82% of the dependent variable variables are explained by the model independent and control variables.

In general, the results show that the variable coefficient of accruals, in the year before initial public offerings has been 0.288155, which refer to the positive impact of accruals in the year before initial public offerings on accruals in the year of initial public offerings that according to t-statistic, the variable coefficient of accruals in the year before initial public offerings at the 95% confidence level is significant, in other words, it can be said that earnings management through accruals in the year before initial public offerings is higher than the year of initial public offerings. According to the above-mentioned items, the sixth hypothesis can be confirmed at 95% confidence level. The results of the control variables indicate that, at the 95% confidence level, sales growth and size of the company have a positive and significant effect on earnings management through accruals; while financial leverage has a negative and significant impact on earnings management through accruals.

**Table 5:** The regression model of the sixth hypothesis

Variable	Estimated coefficient	SD	t-statistics	Significance level
C	0.113055	0.025042	4.514551	0.0000
ACCRualit-1	0.218718	0.026141	8.367003	0.0000
LogAgeit-1	0.005698	0.003699	1.540414	0.1237
Subit-1	-0.003009	0.003288	-0.915170	0.3603
ROAit-1	0.031410	0.020122	1.560969	0.1188
Salegrowthit-1	0.020981	0.007013	2.991589	0.0029
Levit-1	-0.034591	0.011236	-3.078592	0.0021
FirmSizeit-1	0.005740	0.002007	2.860584	0.0044
The adjusted coefficient of determination			25.82%	
Durbin-Watson			2.014	
F-statistics			16.352	
Significance level			0.0000	

## 5 Discussions and Conclusion

The primary objective of this study is to investigate auditor reporting, which is measured by the auditor's propensity to issue a qualified audit opinion, and its association with earnings management, which is measured by discretionary accruals. Also we examine whether IPO firms in TSE use accrual-based earnings management to manipulate income during the offering year. In the examination of whether discretionary accruals increase a firm's likelihood of receiving a qualified audit opinion, we utilize a sample of firms listed on the TSE for the period from 2007 to 2017, The type of audit opinion issued in the previous year is the only useful decision tool in predicting the current year's opinion, both in the full and the distressed samples. The main objective of this study is to explore the relationship between receiving qualified audit report and manipulating the reported income via the use of accrual earnings management activities.

While prior research has focused on the examining the impact of audit quality (peroxide by the presence of high quality audit firm [Big N]) on accrual earnings management [4], and a very few research has investigated the relationship between audit report (qualified vs. un-qualified) and accrual earnings management. The results indicated that the audit quality increases in the year of initial public offerings. The results also demonstrated that there is a significant and positive relationship between the audit fees in the year of initial public offerings and the audit fees in the year after the initial public offerings. However, there is not a significant difference between the audit quality in the year following the initial public offerings. In addition, more findings of the research show that earnings management through accrual items has a positive and significant relationship with initial stock offerings. Further analysis shows that earnings management through accrual items is more than the year before the initial stock offerings. The study adds to current research by providing the following evidence. First, this paper provides the first evidence on the relationship between audit report and accrual earnings management based on TSE sample for the period (2007-2017). It shows that firms who received qualified audit report exhibit a lower level of accrual earnings management. Second, the findings of this paper show as well that the level of accrual earnings management is negatively associated with receiving qualified audit report, confirming prior research. Third, this paper shows that firms with qualified audit report share different characteristics as compared to firms received un-qualified audit report. These findings are consistent with the results of

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research by Chen et al. [10]. Also, the study finds that Auditor size is positively associated with the audit quality, thus indicating that firms which use big 4 auditors will engage in less earnings management than firms with non-big 4.

Our results are consistent with those of Zhou and Elder [27] and Chen et al [10] that suggest, the big-5 auditors are associated with reduced management discretion over earnings. Moreover, the results show that a longer tenure of the auditor increases the audit quality, thus it can be concluded that doing audit practice of the client by an audit firm, over the years, can increase auditor's knowledge and expertise on the client industry. In addition, our results reveal that increasing the concentration of ownership and stocks of institutional owners will increase the probability of a high-quality audit selection. However, the firm size has a negative and significant impact on audit quality. This suggests that large firms, in comparison with smaller ones, and despite this fact that involve more attention and monitoring, have less motivation to increase their audit quality in IPO and removing available information asymmetry. Their informing role reduce the information asymmetry in the initial public offers. Moreover, audit quality, due to the acceptable reports of big auditors on the company's financial statements leads to more trust of stockholders toward the company and also increased investment through buying stock in the initial public offerings. In addition, since companies for a while after initial offering are looking to consolidate their company value, need big and credible firms. The research results show that increasing asset returns and sales growth, and as a result, reducing corporate debt, earnings management will increase by managers. This suggests that big firms, which are mostly subject to further attention and control, have probably more motivation than smaller ones to earning management. The results also indicate that financial leverage, has a negative impact on earnings management in new companies listed on TSE, and this may be partly due to the governing mechanism of paying the loan and the banking system credibility through emphasizing taking collateral instead of emphasizing the analysis of financial statements. As well as the company, due to increasing financial leverage and rising their financial risk have to over financed through indebtedness, and this financing will more be controlled by paying agencies, therefore, managers probably pay less attention to earning management.

The research findings show that there is a positive and significant relationship between earnings management through accrual items and initial public offerings. Like any other research, the present research has also some limitations which seem necessary to be mentioned. First of all, the sample only covers 11 years of Iranian data and an external validity problem exists that the results may not be so generalizable to cover different periods of time and different locations. Secondly, in the study, the effect of inflation and other economic conditions on the figures related to financial statements and the calculation of discretionary accruals were ignored. Future research should include other factors that may affect the occurrence of earnings management in the firms such as corporate governance mechanisms. In general, given that the earning management is one of the key variables in investor decisions, the results of this research can help investors to make effective and efficient decisions; and, as a result, will increase the level of market efficiency in the long run. The earning has always been the focus of attention for regulatory agencies and legislators. The findings of this study can provide necessary guidelines for the formulation of rules and standards. The research results can also help auditors to gather evidence and evaluate them.

## References

- [1] Alhadab, M.M., *Real and Accrual Earnings Management around Initial Public Offerings in Jordan*, International Business Research, 2017, **11**(1), P. 204-216. Doi:10.5539/ibr.v11n1p204
- [2] Alhadab, M.M., *Do Nonaudit Service Fees Associate with Accrual Earnings Management during The IPO?*, Corporate Ownership and Control, 2015, **12**(3), P. 441-453. Doi:10.22495/cocv12i3c4p5
- [3] Alzoubi, E.S.S., *Audit quality, debt financing, and earnings management: Evidence from Jordan*, Journal of International Accounting, Auditing and Taxation, 2018, **30**(C), P. 69-84. Doi:10.1016/j.intaccaudtax.2017.12.001
- [4] Balsam, S., Krishnan, G.V., Yang, J.S., *Auditor industry specialization and earnings quality*, Auditing: a Journal of Practice & Theory, 2003, **22**(2), P. 71-97. Doi:10.2308/aud.2003.22.2.71
- [5] Bartov, E., Gul, F., Tsui, J.S.L., *Discretionary-accruals models and audit qualifications*, Journal of Accounting and Economics, 2000, **30**(3), P. 421-452 . Doi:10.1177/0148558X11409162
- [6] Barizah ,N., baker, A., Rahim, A., Rahman, A ., Rashid, A, Factors influencing – auditor independence, Managerial Auditing Journal, 2005, **20**(8), 356–273. Doi: 10.11648/j.jfa.20150303.12
- [7] Beatty, R., Ritter, J., *Investment banking, reputation, and the underpricing of initial public offerings*, Journal of Financial Economics, 1986, **55**, P. 213-232 . Doi:10.1016/0304-405X(86)90055-3
- [8] Cameran, M., Francis, J. R., Marra, A., Pettinicchio, A. K., *Are there adverse consequences of mandatory auditor rotation? Evidence from the Italian experience*, Auditing: A Journal of Practice and Theory, 2015, **34**(1), P. 1–24. Doi:10.2308/ajpt-50663
- [9] Chu, B., Hsu, Y., *Non-audit services and audit quality-the effect of Sarbanes-Oxley Act*, Asia Pacific Management Review, 2018, **23**(3), P. 201-208. Doi:10.1016/j.apmr.2017.07.004
- [10] Chen, K.Y., Lin, K., Zhou, J., *Audit quality and earnings management for Taiwan IPO firms*, Managerial Auditing Journal, 2005, **20**(1), P. 86-104. Doi:10.1108/02686900510570722
- [11] Dechow, P., Hutton, A., Kim, J., Sloan, R., *Detecting earnings management: A new approach*, Journal of Accounting Research banner, 2012, **50**(2), P. 275-334 . Doi:10.1111/j.1475-679X.2012.00449.x
- [12] Hasan, T., Hadad, M., Ahmed, K., *The accuracy of management profit forecasts in IPO prospectuses Evidence from Indonesia*, Journal of Accounting in Emerging Economies, 2016, **6**(1), P.2-12. Doi:10.1108/JAEE-02-2013-0010
- [13] Healy, P., Wahlen, J. M., *A review of the earnings management literature and its implications for standard setting*, Accounting Horizons, 1999, **13**, P. 365-383. Doi:10.2308/acch.1999.13.4.365
- [14] Hemaifar, K., Soheili, H., *An Investigation of Financing Costs Factors on the Auditor's Qualified Report in the Companies Listed in Tehran Stock Exchange*, 2017, **2**(2), P. 19-28. Doi:10.22034/amfa.2017.531314
- [15] Izadikhah, M., Saen, R.F., Roostae, R., *How to assess sustainability of suppliers in the presence of volume discount and negative data in data envelopment analysis?*, Annals of Operations Research, 2018, **269** (1-2), 241-267. Doi: 10.1016/j.eswa.2014.08.019
- [16] Khakbazar Foomani, M., Sarlak, A., *Investigating the Relationship among Information Asymmetry, Dividend Policy and Ownership Structure*, 2018, **3**(2), P.69-80. Doi:10.22034/amfa.2018.540832

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- [17] Krishnan, G.V., *Audit quality and the pricing of discretionary accruals*, Auditing: A Journal of Practice & Theory, 2003, **22**(1), P. 26-109. Doi:10.2308/aud.2003.22.1.109
- [18] Lee, P.J., Taylor, S.J., Taylor, S.L., *Auditor Conservatism and Audit Quality: Evidence from IPO Earnings Forecasts*, International Journal of Auditing banner, 2002, **10**(3), P.183-199. Doi:10.1111/j.1099-1123.2006.0349.x
- [19] Leuz, C., Nanda, D., Wysocki, P.D., *Earnings management and investor protection: An international comparison*, Journal of Financial Economics, 2013, **69**, P. 505-527. Doi:10.1016/S0304-405X(03)00121-1
- [20] Maheshwari, Y., Agrawal, K., *Impact of IPO grading on earnings management*, Journal of Financial Reporting and Accounting, 2015, **13**(2), P. 142-158. Doi:10.1108/JFRA-05-2013-0036
- [21] Parsamehr, H., Kasravi, A., Fazeli, M., *Impact of the Management Performance Evaluation Methods on the Data Quality in Accounting*, 2017, **2**(1), P. 41-53. Doi:10.22034/amfa.2017.529060
- [22] Rusmin, R., *Auditor quality and earnings management: Singaporean evidence*, Managerial Auditing Journal, 2010, **25**(7), P. 618-638. Doi:10.1108/02686901011061324
- [23] Seckler, C., Gronewold, U., Reihlen, M., *An error management perspective on audit quality: Toward a multi-level model*, Accounting, Organizations and Society, 2017, **62**, P. 21-42. Doi:10.1016/j.aos.2017.08.004
- [24] Trueman, B., Titman, S., *An explanation for accounting income smoothing*, Journal of Accounting Research, 1988, **26**, P. 127-132. Doi:10.2307/2491184
- [25] Van Tendeloo, B., Vanstraelen, A., *Earnings Management and Audit Quality in Europe: Evidence from the Private Client Segment Market*, European Accounting Review, 2008, **17**(3), P. 447-469. Doi:10.1080/09638180802016684
- [26] Wallace, W.A., *The economic role of the audit in free and regulated markets: a look back and a look forward*, Research in Accounting Regulation, 2004, **17**, P. 267– 298. Doi:10.1016/S1052-0457(04)17012-4
- [27] Waresul Karim, A.K.M., Ahmed, K., Hasan, T., *Impact of audit quality and ownership structure on the bias and accuracy of earnings forecasts issued in IPO prospectuses Evidence from a frontier market*, Studies in Economics and Finance, 2013, **30**(4), P. 288-316. Doi:10.1108/SEF-10-2012-0113
- [28] Zhou, J., Elder, R., *Audit quality and earnings management by seasoned equity offering firms*, Asia-Pacific Journal of Accounting & Economics, 2004, **11**(2), P. 95-120. Doi:10.1080/16081625.2004.10510638