



THE EFFECT OF EARNINGS MANAGEMENT TO ISSUANCE OF AUDIT QUALIFICATION: EVIDENCE FROM INDONESIA

Toto Rusmanto, Binus Business School, Bina Nusantara University, Jakarta
Ari Barkah Djamil, Binus International University, Jakarta
Yashinta Salim, Binus International University, Jakarta

Abstract

*This paper examines whether the presence of earnings management trigger the level of issuance of qualified or modified audit opinion. The ultimate purpose of this research is to gain better understanding on the issuance level of qualified opinion and the reliability of audit opinion rendered by auditors in Indonesia. First, we estimated earnings management through cross-sectional modified Jones (Becker et al, 1998) model in our sample. Then, we performed a linear regression model (Johl et al, 2007) in order to analyze the relation between the earnings management measure and the independent and control variables influencing it. There are two hypotheses in this research. For the first hypothesis results, there is a negative relationship between (ABDA) and (QUAL). This surprisingly means when the company practices (EM) it does not necessarily mean they are likely to receive qualified opinion from their auditors. For the second hypothesis results, there is a positive relationship between (ABDA*AQ) and (QUAL). This means when the company practices (EM) and being audited by the Big 4 and industry specialist auditors, they are likely to render a qualified opinion. However, the results for both hypotheses are insignificant due to extremely low evidence of only 4.76% companies with qualified opinion. There is still low probability of issuance of audit qualification in Indonesia as indicated with only 4.76% of total 672 firm years from 2008-2010 receive audit qualification. We do not know whether the rest 95.24% (100% - 4.76%) truly deserve a clean unqualified audit report or perhaps the auditors have failed to detect earnings management practices within these audited companies.*

Keywords: *Earnings Management, Audit Qualification, Audit Opinion, Big 4 auditors, Indonesia*

Introduction

The ultimate objective of auditors is to ensure soundness and fairness of a financial report of a company and issue a reliably high-quality audit opinion as a reflection of the company's true financial performance based on the audited financial report. The issue of earnings management

has also been raised lately due to the many highly publicized cases of financial frauds throughout the world such as Enron, HIH Insurance Ltd, WorldCom, Tyco International, American International Group (AIG), Poly Peck, Maxwell, London & Commonwealth, and many more (Akers, Giacomino & Bellovary, 2007). Lehman Brothers, with 158 years of business history, received a 'clean' *unqualified opinion* in 2006, but suddenly declared their bankruptcy in 2008 partly due to the impact of global economic crisis (Detik finance, 2008). The 1998 Asian crisis also exhibited the similar pattern. The World Bank questioned the quality of audits by Big 5 auditors at that time, considering many East Asian corporations received 'clean' audit reports from Big 5 auditors, however indeed those opinions might not have been appropriate.

Apart from current US scandals and past East Asian crisis, Kimia Farma, as Indonesia's leading pharmaceuticals tycoon, exhibited the same pattern. Robinson Simbolon, Head of Law of BAPEPAM-LK reported that Kimia Farma's "accounting errors" could be classified as financial scandals as this manipulated financial report may mislead the public. Kimia Farma managed to mark up their net earnings from 99 billion IDR to 132 billion IDR. It was surprising to reckon these accounting scandals with all these years' seemingly good and convincing auditors work. (Tempointeraktif, 2002). According to PPAJP (*Pusat Pembinaan Akuntan dan Jasa Penilai*) in the ROSC 2011, only few out of 400 accounting firms in Indonesia appear to have high level of compliance with the applicable auditing standards. The author eventually posits that audit qualification in most companies in Indonesia is seen inadequate regarding the presence of earnings management.

Based on these arguments, the author notices that it is indispensably important to examine the reliability of the audit opinion since audit opinion serves as an indicative tool for both investors (shareholders) and managers (stakeholders) to evaluate the real company performance. Auditors serve as communicators between investors and the internal management in eliminating asymmetric information problem as investors can rely on auditors' opinion for making financial decisions. Therefore, auditors are highly accountable in providing relevant information for the investors (Coffee, 2001).

The objective of financial reporting, and one that has become a commonly accepted goal of financial reporting is to assist in report users' economic decision making. FASB notes in SFAC 1 stated that the major objective of financial reporting is that it should provide information that is useful to present potential investors and creditors and other users in making rational investment, credit and similar decisions. (Deegan, 2010). Prior studies (Francis & Krishnan, 1999; Bartov et al., 2001; and Bradshaw et al., 2001) examine the likelihood of a company receiving a qualified audit report in association with the level of accruals or abnormal accruals. These studies, based on US data, find a positive association between abnormal accruals (the presence of Earnings Management) and qualifications. Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or influence contractual outcomes that depend on reported accounting numbers (Healy & Wahlen, 1999). Opportunistic earnings management can be detected using modified (m) Jones (1991) (Dechow et al., 1995) model by decomposing total accruals into non-discretionary (expected) and discretionary (unexpected or abnormal) accruals as proxy to earnings management.

Recalling from the current cases, we cannot deny the fact that the financial scandals that WorldCom, Enron and Tyco have are strongly intrigued with the presence of earnings management and reliability of audit quality. In the 3rd quarter 2001, Andy Fastow, the CEO of Enron, manipulated the use of special purpose entities (SPEs) for his own enrichment, however

this particularly ‘shady’ SPEs were approved by the auditor Arthur Andersen, Big 5 at that time, and no obvious oversight was even taken by the U.S. Security Exchange Commissions (SEC). In June 2002, WorldCom announced \$3.8 billion in accounting errors as the new auditor KPMG reviewed the books and the previous auditor, Arthur Andersen, was fired. WorldCom filed for bankruptcy in July 2002, replacing Enron as the largest bankruptcy in US history. Based on prior evidence, the author believes it is necessary to examine auditor reporting behaviour in the presence of aggressive earnings management (EM).

This study utilizes two models – the qualification (QUAL) model with audit opinion as the dependent variable, and the EM model with absolute abnormal accruals as the dependent variable, to test the relationship between each of audit opinion and abnormal accruals with audit quality (AQ). Finally, the author decides to entitle this paper: *“The Effect of Earnings Management to Issuance of Audit Qualification: Evidence from Indonesia”*.

2. Review of Earnings Management

The nature of accrual accounting gives managers a great discretion in determining the actual earnings reported by a firm. Managers can alter the timing of recognition of revenues and expenses (by e.g. advancing recognition of sales through credit sales). In this sense, managers have huge propensity to possibly engage in earnings management since they have power to control the financial statements. Earnings management (called EM hereafter) occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or influence contractual outcomes that depend on reported accounting numbers (Healy & Wahlen, 1999). Healy and Wahlen (1999) examined various amount of incentives for earnings management which include: Capital Market Motivations, Contracting Motivations and Regulatory Motivations.

2.1. Earnings Management Model

Pre-requisite to hypotheses testing is the determination of the variable “earnings management”. In this study, the author utilizes the cross-sectional modified Jones model in decomposing total accruals into non-discretionary (expected) and discretionary (abnormal or unexpected) accrual as proxy to detect EM. There are also evidence from prior studies suggests that discretionary (abnormal) accruals are the accepted proxy for earnings management; Becker et al. (1998), Healy and Wahlen (1999), Chin, Lin, and Huang (2000), Bartov et al. (2001), Chang (2001), Chang, Chou, and Lin (2001), Chen and Huang (2001) and Lin, Shiue, and Su (2002). Because total accrual is a function of both actual (non-discretionary) and abnormal (discretionary) accruals, it can be inferred that high-total accruals should be associated with high abnormal accruals – an indirect inference to EM. The problem exists in the presence of high level of discretionary abnormal accruals. Thus, if discretionary accruals indicate earnings manipulations, they should be associated with the likelihood of auditors’ issuing qualified reports (Gul & Tsui, 2000).

There are some popular EM models like DeAngelo (1986) model, Healy (1985) model, the modified Jones Model (Dechow, Sloan & Sweeney 1995), the Industry Model (Dechow, Sloan & Sweeney 1995) and the Cross-Sectional Jones Model (DeFond & Jiambalvo 1994). The author decided to use the cross-sectional modified Jones Model by Becker et al. (1998). The advantage of using the cross-sectional rather than time-series approach is that the model is estimated

separately for all firms in each same industry and re-estimated each year so that changes in firm and macroeconomic condition is filtered out. Many recent studies in earnings management like Bartov (2001) and Johl (2007) also utilizes this model because when compared to the time-series Jones model, the cross-sectional modified Jones model perform better in detecting earnings management. This is important for future earnings management research since the cross-sectional model should result in a larger sample size that and allow examining samples of firms with short history.

2.2. Audit Opinion

The standard agency cost model portrays auditors as agents to reduce information asymmetry on accounting figures, and to minimize the agency cost resulting from manager's opportunism in financial reporting (Hsieh, 2004). Agency costs include managers' incentives to manage earnings. Hirst (1994) demonstrated that auditors are sensitive to earnings manipulation and that they are able to detect management incentives to manipulate earnings. Dopuch, Holthausen and Leftwich (1986), Choi and Jeter (1992), and Loudder, Khurana and Sawyers (1992) all reported negative stock price reactions to audit qualifications (e.g. qualified opinion, adverse, disclaimer). These studies illustrate that investors perceive audit report as informative for decision-making.

The objectives of the auditor are to form an opinion on the financial statements based on an evaluation of the conclusions drawn from the audit evidence obtained; and to express clearly that opinion through a written report that also describes the basis for that opinion. Audit opinion serves as the auditors' evaluation on the company performance based on the financial statement. The quality of audit opinion may be intrigued with the level of performance, competence, objectivity and professional scepticism of the auditors themselves. Past investigations (Murtanto & Gudono, 1999; Mayangsari, 2003; Budi, 2005; Renyowijoyo, 2005; Hery, 2006; Mutmainah, 2007; Noviyanti, 2008; Dwicahyaningtyas, 2010) indicate that the higher professional scepticism *ceteris paribus* auditors have, the more reliable audit opinion they will likely to render.

2.3. Audit Qualification

The opinion expressed in the audit report should be either:

- a) Unqualified; or
- b) Qualified ("Except for" opinion, adverse opinion, and disclaimer of opinion)

A standard unqualified audit report is used when the audit took place with satisfactory results and the auditor obtains reasonable assurance that the financial statements are free of material misstatement. Nevertheless, if the auditor reckons that it is not possible to issue a clean unqualified opinion, then the auditor should issue audit qualification or raise modification to audit report. The auditor shall modify the opinion in the auditor's report when:

- a) The auditor concludes that, based on the audit evidence obtained, the financial statements as a whole are free from material misstatement
- b) The auditor is unable to obtain sufficient appropriate audit evidence to determine whether the financial statements are free from material misstatement.

The decision which type of modified opinion is appropriate depends upon:

- a) The nature of the matter, that is whether the financial statements are materially misstated or, in the case of an inability to obtain sufficient appropriate audit evidence
- b) The auditor's judgment about the pervasiveness of the effects or possible effects of the matter

on the financial statements.

2.4. Inability to Obtain Sufficient Appropriate Audit Evidence

a) Circumstances beyond the control of the entity

The entity's accounting records have been destroyed, accounting records of a significant component have been seized indefinitely by governmental authorities

b) Circumstances relating to the nature or timing of the auditor's work

The entity is required to use the equity method but auditors unable to obtain appropriate audit evidence, auditors unable to observe the counting of the physical inventories.

c) Limitations imposed by management

Management prevents the auditor from observing the counting of the physical inventory, or from requesting external confirmation of specific account balances.

Based on the audit evidence and its materiality and pervasiveness effect of the financial statements, the auditors can then assess their professional judgment on whether the opinion should be qualified (except for, adverse, disclaimer) or unqualified (unqualified, unqualified with explanatory). These two contributing factors; audit evidence and auditors professional judgment play vital role in the probability of issuance of audit qualification. This thesis is intended to examine whether the audit opinion rendered by the auditors is truly reflected the elements of EM.

3. Audit Environment in Indonesia

3.1. Audit Compliance

The Indonesian Institute of Public Accountants (IAPI) represents the auditing profession in Indonesia. IAPI is an association member IAI. Since its establishment in 2007, IAPI has been responsible for setting a code of ethics as well as auditing standards. Auditors are required to comply with Indonesian Public Accountant Professional Standards (SPAP) set by the Audit Standards Committee (DSP) of IAPI. As standard-setters, IAI and IAPI are responsible to move toward convergence with International Financial Reporting Standards (IFRS) and adoption of International Standards of Auditing (ISA). BAPEPAM-LK is the Capital Market and Financial Institution Supervisory Agency whereas PPAJP is the Center for Supervision of Accountants and Appraiser Services in Ministry of Finance in Indonesia. According to PPAJP, only few out of 400 accounting firms in Indonesia appear to have high level of compliance with the applicable auditing standards.

3.2. Auditors Quality

Literature mostly related to the present study includes Becket et al. (1998), Francis, Maydew and Sparks (1999), Francis and Krishnan (1999), Chang (2001), Vander Bauwhede et al. (2003) who argue that lower levels of discretionary accruals are associated with higher quality audits. Chang (2001) concluded that higher quality auditors reduce more opportunistic accruals. To date, there are 4 largest international professional audit firms, which are commonly called as Big 4, they are; KPMG, Ernst and Young, Deloitte and PricewaterhouseCoopers. Fernando et al (2010) argue that Big 4 auditors will be able to provide a better quality than non-Big4 audit firms. Up to 2011, around 81,11% listed companies in Indonesia (420 firms) is dominated by the Big 4 auditors. (Khakim, 2011)

For measuring auditor industry specialization, each company is classified by Indonesia Stock Exchange (IDX) into one of the eight (excluding finance) industry sectors; agriculture,

mining, chemicals, miscellaneous, consumer goods, property, infrastructure and trade. Krishnan (2003) excogitates that industry specialist auditors mitigate accruals-based earnings management more than non-specialist auditors.

4. Hypothesis Development

Many prior studies in the last ten years scrutinize the relationship between audit quality (e.g. Big 4 / non Big 4, audit committee independence) and the quality of financial reporting by listed companies, however, only few studies remark the relevance between audit qualification and earnings management, these are; Francis & Krishnan (1999); Bradshaw et al., (2000); Bartov et al., (2001); Johl et al., (2007). Because total accrual is a function of both actual and abnormal accruals, it can be inferred that high total accruals should be associated with high abnormal accruals – an indirect reference to EM. Francis and Krishnan (1999) affirm, using US data, that high accruals auditees are more likely to receive audit qualification than low accruals auditees. This is based on their notion that accounting accruals are manager's subjective estimates of future outcomes and therefore inherit audit risk as audit of high accrual auditees have greater uncertainty than audit of low accrual auditees. Due to this audit risk, auditors are more likely to issue qualification for high accrual auditees.

On the other hand, Bradshaw et al. (2000) find support that auditors are poor users of accruals information and they are not likely to issue qualification for high accrual auditees. They find strong evidence that auditors fail to communicate to investors' problems arising from high accruals reporting and therefore auditors are expected to more frequently render qualified audit opinion for those high accrual auditees. Bartov et al. (2001) also excogitate the ability of various accruals models to detect EM by examining the relationship between abnormal accruals and audit qualifications. As the result, qualified reports are issued because of scope limitation and departures from GAAP and therefore are likely to be associated with EM. Consistent with their argument, they find a positive relationship between audit qualification and abnormal accruals. With respect to these prior studies, the author will examine the following hypothesis:

H1: There is a positive relationship between the presence of abnormal accruals and issuance of audit qualification in Indonesia.

To fairly extend the study of probability of issuance of audit qualification in Indonesia, it is also important to consider the audit quality (AQ hereafter), in context of Big 4 / non Big 4 and industry specialist, who are mostly the service provider for the audit products itself. Several studies from Becker et al. (1998), Chang (2001), Vander Bauwhede et al. (2003) and Johl et al. (2007) will contribute strong rationale and discussion about the relevance of audit quality and audit qualification. In 2007, Johl et al. examine the interaction between abnormal discretionary accruals and audit quality, as indicated by auditor size and industry specialization in the context of Asian Economic Crisis. Findings are Big 5 auditors appear to qualify more frequently than non-Big 5 when high abnormal accruals (EM) are present, but results are insignificant between auditor industry specialization and abnormal accruals (EM).

The finding of Becker et al. (1998) may be interpreted as saying that clients with a lower level of discretionary accruals may select a higher quality auditor (Big 6), and clients with a higher level of discretionary accruals may select a lower quality (non-Big 6) auditor, based on their own interest. Chang (2001) proposed two hypotheses, the information signaling and the opportunistic accrual management hypothesis, to examine the effect of auditor's quality on earnings management. She concluded that higher quality auditors, as indicated by the Big 5

auditors at that time reduce more opportunistic accruals. More recently, Vander Bauwhede et al. (2003) utilized Belgium companies as a sample to examine the relations of audit firm size, public ownership, and firms' accruals management, and reported that Big 6 auditors can only constrain income-decreasing earnings management more than non-Big 6 auditors in private client sector of the audit market, but they make no difference in public sector. With respect to these prior studies, the author will examine the following hypothesis:

H2: There is a positive relationship between the presence of abnormal accruals and issuance of audit qualification in interaction with the higher quality auditor as indicated with the Big 4 and industry specialist in Indonesia.

4.1. Variables

4.1.1. Dependent Variable

Dependent variable acts as a function of independent variables. The magnitude of dependent variable is predicted by the significances of independent variables. The dependent variable used in this study is *Audit Qualification (QUAL)*. Receipt of an audit QUAL by a firm is the dependent variable in testing hypotheses H1 and H2. QUAL is given a value of 1 if the firm receives an audit qualification of any type (QUAL = 1 for qualified, adverse, disclaimer of opinion) in the current year and 0 otherwise (QUAL = 0 for unqualified opinion, unqualified with explanatory language).

4.1.2. Independent Variables

Independent variables act as a predictor of dependent variable. These independent variables should not correlate with each other or in other words, influence other variables. The independent variables used in this study are: *Absolute Abnormal Accruals (ABDA)*, *Audit Quality (AQ)* and *Absolute Abnormal Accruals interaction with Audit Quality (ABDA*AQ)*. Absolute Abnormal Accruals (ABDA) is examined as the main factor to influence QUAL because it is expected that higher level of absolute abnormal accruals are associated with an increased tendency for auditors to render a qualified audit opinion. This idea is consistent with prior abnormal accruals studies (Becket et al., 1998; Francis, Maydew & Sparks 1999; Francis & Krishnan, 1999; Chang, 2001; Vander Bauwhede et al., 2003; and Johl et al., 2007). Thus, it is expected that there is a positive relationship between ABDA and QUAL.

Audit Quality (AQ) is also examined as a factor to influence QUAL because the ability to detect and willingness to report material manipulation / misstatements giving rise to material uncertainties or / and going concern problems is dependent on auditor quality. This idea is supported with previous audit qualification studies (Mayangsari, 2003; Budi, 2005; Renyowijoyo, 2005; Hery, 2006; Mutmainah, 2007; Noviyanti, 2008; and Dwicahyaningtyas, 2010). They agree that higher quality auditors; Big 4 and Industry Specialist have more power to issue qualified opinion than the non Big-4 auditors in the presence of earnings management practice. Thus, it is expected to have positive relationship between AQ and QUAL. However, AQ itself cannot stand alone in predicting the QUAL model without the presence of ABDA, therefore we examine their interaction in the next variable described below.

Absolute Abnormal Accruals interaction with Audit Quality (ABDA*AQ) is examined as a stronger factor to influence QUAL model because as previously stated, Big-4 auditors have more power to issue qualified opinion in the presence of earnings management. This argument is supported with some prior literature (Monroe & Teh, 1993; Mutchler et al., 1997; Lennox, 1999;

Bartov et al., 2001). Thus, it is expected that there is a positive relationship between ABDA*AQ and QUAL.

4.1.3. Control Variables

Control variables are another variable that influence the dependent variable. Control variables do not significantly affect the core of the hypothesis yet they still contribute some impacts for the hypothesis. The reason to include control variables in this study is to ensure the hypothesis test will provide relevant statistical results. Controlling for earnings performance is important because results in Dechow, Sloan and Sweeney (1995) imply that a failure to control for this variable may lead to erroneous inferences. The test result can somehow be biased if control variables are excluded in this study. The control variables used in this study are: *Current year Loss (LOSS)*, *Leverage (DE)*, *Size (LASSET)*, *Prior Year Opinion (QUALAG)*, *Time Listed (TIME)*, *Proportion Receivables (RECTA)* and *Proportion Inventory (INVTA)*.

Leverage (DE) is included in the QUAL model as indicators of the firm's financial health. (Mutchler, 1985; Levitan & Knoblett, 1985; and Carcello et al., 2000). These prior researches found DE as significant models in predicting audit qualification. Thus, it is expected that there is a positive relationship between DE and QUAL.

Current Year Loss (LOSS) is included in the QUAL model to indicate a poor financial health. LOSS is given as value of 1 if the firm experiences a negative profit in the current year. Prior studies (Monroe & Teh, 1993; Dopuch et al., 1987) indicate there is a positive relationship between LOSS and QUAL.

Size (LASSET) is included in the QUAL model for two possible convicting reasons. Lys and Watts (1994) argues that larger firms mean more complexity and less control, therefore should trigger more QUAL. On the other side, Monroe and Teh (1993) argues that larger firms mean more control and healthier, therefore should trigger less QUAL. For these reasons, the direction of LASSET and QUAL is not predicted.

Prior Year Opinion (QUALAG) is included in the QUAL model because prior year's audit opinion is a useful decision tool in predicting current year opinion. (Mutchler, 1985; Bell & Tabor, 1991; Monroe & Teh, 1993; and Lennox, 1999). Thus, it is expected to have a positive relationship between QUALAG and QUAL.

Time Listed (TIME) is included in the QUAL model because younger firms are more likely to experience financial distress and may struggle to survive, thus more propensity to indulge in EM. (Mutchler, 1985; and Dopuch et al., 1987).

Proportion Receivables (RECTA) and Proportion Inventory (INVTA) are included in the QUAL model to control for audit effort and risk. Bell and Tabor (1991), Dopuch et al. (1987) and Monroe and Teh (1987) studied that receivable as a proportion of total assets (RECTA) and inventory as proportion of total assets as control for audit difficulty. Thus, the author expects the positive relationship between RECTA, INVTA and QUAL.

5. Methodology

5.1 Research Hypotheses

H1: There is a positive relationship between the presence of abnormal accruals and issuance of audit qualification in Indonesia. H2: There is a positive relationship between the presence of abnormal accruals and issuance of audit qualification in interaction with the higher quality auditor as indicated with the Big 4 and industry specialist in Indonesia.

5.2 Research Design

5.2.1 Research Data

The author uses purposive sampling method to collect secondary data obtained from audited financial reports of listed companies from Indonesia Stock Exchange (IDX) website for period 2008 - 2010. The samples used for this research must match the following criteria; reported in Indonesian Rupiah, be audited by Indonesian-based companies, in an industry other than finance (because finance sector has different framework and required additional BI supervision which are not applicable to other sectors). The matching is performed first on year, second on industry, third on auditor size (Big 4/non-Big 4).

Table 1: Final Sample Derivation (in Firm Years)

Selection Criteria	2008	2009	2010
Approximate no. Of IDX listed companies	399	413	428
Less: Finance Industry	-68	-70	-71
Less: IPO	-18	-16	-30
Less: Change in financial year end	-3	-2	-11
Less: Incomplete data	-49	-28	-7
Less: Incomplete auditor data	-129	-27	-39
TOTAL SAMPLE	132	270	270

5.2.2 Time Horizon

The cross-sectional study collects data once over a specific time period whereas the longitudinal study collects data from different time frame. The time horizon used in this research is cross-sectional from year 2008, 2009 and 2010.

5.2.3 Data Collection Method

The data is collected from retrieving from the IDX databases and downloading from the company's website. The author also reviews textbooks and journal articles to obtain further information related to the study and support the research process.

5.2.4 Data Interpretation Software

The author uses Statistical Packages for the Social Sciences (SPSS) 20.0 software for Macintosh to conduct analysis in determining the relationship between the independent variables and dependent variable in this research.

5.3 Research Method

5.3.1 Descriptive Statistics

The descriptive statistics include the process of organizing, summarizing and presenting data in informative way that presented the analysis formally to give the reader an overall sense of data being analyzed.

5.3.2 Inferential Statistics

5.3.2.1 Kolmogorov-Smirnov Test

Kolmogorov-Smirnov (K-S) test is used for probability distribution; whether the data is normally distributed or not. Data with normal distribution will have p-value higher than the significance level (5%) and can be analyzed with Pearson correlation. Data with abnormal distribution will have p-value lower than the significance level (5%) and analyzed with Spearman correlation.

5.3.2.2 Pearson Correlation Coefficient

Pearson correlation coefficient is the bivariate correlation analysis that the coefficient estimate of linear association based on sampling data. The direction in the coefficient shows the relationship among variables whether it has positive or negative associations.

5.3.2.3 Spearman's Rank Order

The non-parametric test is also conducted in this study to provide the more accurate and effective outcome of the proposed hypotheses. This non-parametric technique used in order to determine the relationship of earnings management with audit qualification whether it has positive relationship or not.

5.3.3 Cross - Sectional modified Jones model

The author decided to use the cross-sectional modified Jones Model by Becker et al. (1998). The main concern in this study is to find the abnormal discretionary accruals (ABDA) not the non-discretionary accruals. The problem of earnings management lies on the detection of (ABDA) since they are managerial decisions accruals and voluntarily disclosed unlike the non-discretionary accruals, which needs to be disclosed by the management. Auditors are able to reckon the practice of earnings management in a company simply examining whether the financial statements reporting is aligned with the GAAP (e.g. *change in accounting method, change in accounting estimate, shifting the cost/income period*). However, the auditors must also assure the amount, magnitude and significance of the ABDA using statistical tool, one of which is the cross-sectional modified Jones model. The following is the ordinary least square (OLS) regression model:

$$TA_{ijt} / A_{ijt-1} = (\alpha_1 / A_{ijt-1}) + \beta_{1jt} ((\Delta REV_{ijt} - \Delta REC_{ijt}) / A_{ijt-1}) + \beta_{2jt} (PPE_{ijt} / A_{ijt-1}) + v_{ijt}$$

TA_{ijt}	= total accruals (IncBEI _{ijt} – OCF _{ijt})*
A_{ijt-1}	= total assets* (t-1)
ΔREV_{ijt}	= change in net operating revenues*
ΔREC_{ijt}	= change in net receivables*
PPE_{ijt}	= gross property, plant and equipment*
α	= constant
β_{1jt}, β_{2jt}	= industry-specific estimates of the coefficients*
v_{ijt}	= error term (also known as discretionary/abnormal accruals)*
IncBEI _{ijt}	= income before extraordinary items and discontinued operations*
OCF _{ijt}	= operating cash flows*

*For sample, where: (i= firm), (j=industry), (t=year)

In this model, the abnormal discretionary accruals (ABDA) are defined as the error term (v_{ijt}). To get the error term, we need to conduct a linear regression analysis in SPSS and tick the ‘standardized’ option to get the ‘error term’ as the results. Once we get the error term, we can detect whether a company has a positive or negative magnitude of the earnings management as indicated with the value of (ABDA). A positive (ABDA) means the company is likely to engage in earnings management in one of these 3 patterns; ‘*income minimizing, income maximizing and income smoothing*’. A negative (ABDA) means the company is likely to engage in earnings management in the form of ‘*taking a bath*’ patterns.

5.3.4 Logistic Regressions

Since the dependent variable (QUAL) is a dummy variable, 1 if the audit opinion is qualified, 0 otherwise, therefore the author utilizes a logistic regression as the model. The main purpose of a regression model is to excogitate the relationship between independent variables and the dependant variable. Logistic regression is a statistical technique that belongs to General Linear Models (GLM) that predicts the probability of occurrence of an event (dependent variables) by fitting data (independent variables) to a legit function logistic curve (DeFusco, 2007). The following is the logistic regression equation of this research:

$$QUAL = \alpha + \beta_1 AQ_i + \beta_2 ABDA_i + \beta_3 ABDA * AQ_i + \beta_4 LOSS_i + \beta_5 DE_i + \beta_6 QUALG_i + \beta_7 LASSET_i + \beta_8 TIME_i + \beta_9 INVTA_i + \beta_{10} RECTA_i + \epsilon_i$$

Where:

QUAL	= dummy variable, 1 if audit opinion is qualified, 0 otherwise
AQ	= dummy variable, 1 if auditors are big 4 and industry specialized
ABDA	= abnormal accruals obtained from the m-Jones (1991) model
ABDA* AQ	= represent the interaction with AQ to support H2 testing
LOSS	= dummy variable, 1 if there is current year loss
DE	= long term debt to total assets
QUALG	= dummy variable, 1 if prior year’s opinion is qualified
LASSET	= log of total assets
TIME	= number of years listed on the IDX

INVTA = inventory to total assets
 RECTA = receivables to total assets
 ϵ = error term

The regression model is adapted from Johl et al. (2007) except the author dismissed the two variables MKTCAP (market capitalization) and BKMT (book to market ratio) as they have the similar function as LASSET (log of total assets) and DE (leverage) in representing the company size and growth for the model. The analysis has been performed through the following steps. First, we estimated earnings management through modified Jones model in our sample. Then, we performed a linear regression model in order to analyze the relation between the EM measure and the independent and control variables influencing it.

5.4 Data Validity and Reliability

A model summary and validation is performed in order to assure the reliability of the model to predict the audit qualification probability in Indonesia, so that the result is valid and acceptable. For data validity and reliability, the author will conduct -2 Log Likelihood, Chi-square, Cox & Snell R Square and Nagelkerke R Square test. -2 Log Likelihood is similar to the goodness of fit model in linear regression that is to predict how good the independent variables in predicting the dependent. The Chi-square is similar to the F-test or ANOVA in linear regression that is for the validity of the regression model by examining the relationship between the dependent variable with all the independent variable used in the study. Cox & Snell R Square and Nagelkerke R Square are similar to R-square and adjusted R-square in linear regression model that is to calculate how strong the model is in predicting the dependent variable. A high value in Cox & Snell R Square and Nagelkerke R Square indicate that the variables are strong enough to predict the model (DeFusco, 2007).

6. Empirical Results

Table 2 presents the descriptive statistics of all variables (both dummy and non-dummy), while Table 3 presents a further descriptive statistics of those dummy variables.

Table 2: Descriptive Statistics for All Variables

	N	Minimum	Maximum	Mean	Std. Deviation
(QUAL)	672	.0000	1.0000	.047619	.2131175
(AQ)	672	.0000	1.0000	.200893	.4009665
(ABDA)	672	-19.6379	6.1011	-.000002	.9985087
(ABDA*AQ)	672	-10.8151	1.4093	-.010556	.4542453
(LOSS)	672	.0000	1.0000	.183036	.3869838
(DE)	672	.0000	3.2222	.566899	.4176642
(QUALG)	672	.0000	1.0000	.029762	.1700564
(LASSET)	672	7.2591	18.4183	14.006955	1.8134591
(TIME)	672	1.0000	33.0000	12.148810	6.8365110
(INVTA)	672	.0000	5.6559	.176050	.2663939
(RECTA)	672	.0000	1.4240	.130789	.1424388
Valid N (listwise)	672				

Table 3: Further Descriptive Statistics for Dummy Variables

	Proportion (Dummy =1)	Proportion (Dummy =0)
Qualified Opinion (QUAL)	4.76%	95.24%
Audit Quality (AQ)	20.08%	79.91%
Loss during the year (LOSS)	18.30%	81.70%
Prior year qualified opinion (QUALG)	2.98%	97.02%

From table 3, (QUAL) or audit qualification has a mean of 0.047, which indicates that only 4.76% (37 companies out of 672 samples) have qualified opinion. This is supported with the proportion result in table 4.3 where only few companies in BEJ have qualified opinion (4.76%) while the majority earns clean unqualified opinion (95.24%). For audit quality (AQ), the dummy variable is equal to 1 only if the auditors are the big 4 and also the industry specialist. If the auditors are the big 4 but not an industry specialist, then the dummy variable will be equal to 0. The mean for (AQ) is 0.20 or in other words only 20.08% companies are being audited by the big 4 auditors who are also the industry specialists. The other 79.91% explains that the rest of the companies are audited either by the big 4 auditors but non-industry specialists or the non-big 4 auditors.

For abnormal discretionary accruals (ABDA), the mean is -.000002, which indicates there is very low evidence that shows most companies in Indonesia from year 2008-2010 perform earnings management. The minimum ABDA is -19.6379, which comes from PT. Abdi Bangsa Tbk (ABBA – trade industry) in 2009 indicating possible “big-bath” activity that is most likely to be financial distress / performance related. In 2009, the company booked net income amounted IDR 75.78 billion, tumbling down from IDR 398 billion recorded last year. Since January until April 2009, there is no trading transaction where the company suffers an extremely low share price of IDR 140 per share. For the maximum ABDA of 6.1011, it appears that PT. Merck Tbk. (MERK – consumer industry) exhibits positive total accruals of IDR 65,437 million in 2009. This can indicate a presence of earnings management practice in the company. However it is unclear that this EM practice may fall into opportunistic or efficient EM. If it is opportunistic, it will also take further investigation of whether the EM is the result of change in accounting method or managerial decisions (Zang, 2005). PT. Merck Tbk is audited by KPMG in 2009 and receives clean unqualified opinion audit report. The company stock has been traded since 23 July 1981 (2009 - 1981= 28 years, at the time of calculation). If we compare ABBA (as the minimum ABDA) and MERK (as the maximum ABDA) stock price, we can see the decreasing trend in stock price for ABBA and increasing stock price for MERK within time period of 2009 and 2010. This fact supports the prior literature studies by Healy and Wahlen (1999) for examining various amounts of incentives for earnings management, one of which includes: capital market motivations – that is to influence stock price. The following table presents the comparison of the share prices between the two companies.

Table 4: Decreasing Trend - PT. ABDI BANGSA TBK (Minimum ABDA)

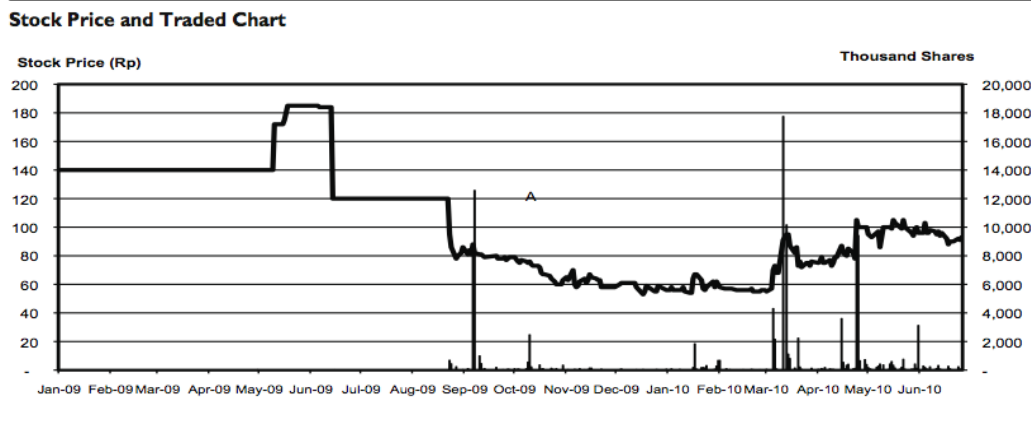
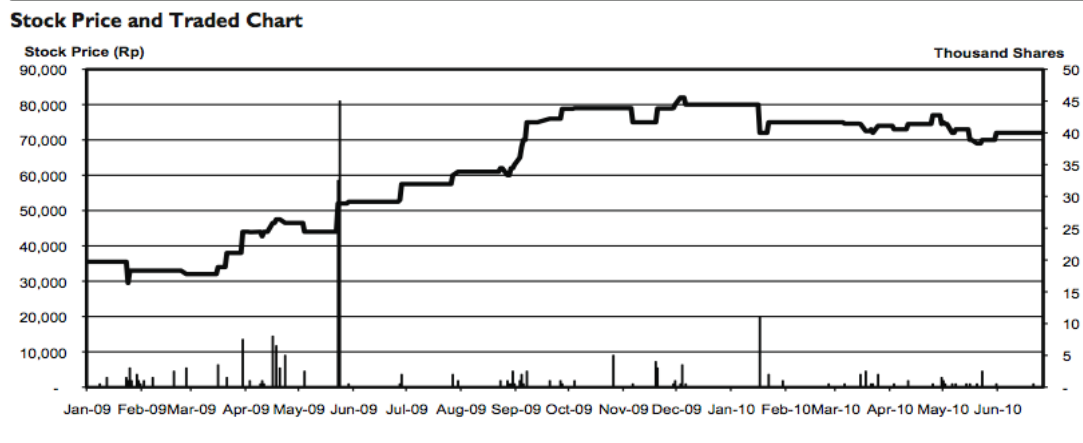


Figure 5: Increasing Trend - PT. MERCK TBK (Maximum ABDA)



Source: Indonesia Capital Market Directory (2010)

The rest variables are the control variables for the model; (LOSS), (DE), (QUALG), (TIME), (INVTA) and (RECTA). An interesting statistic can be derived from the proportion of dummy variable (LOSS), which results in only 18,70% samples (123 out of 672 companies) states they face loss during the year, where the rest 81.70% states they have positive net income. The range of the number of years the company being listed in this research is from 1 to 33 years. Similar to (QUAL) results, (QUALG) or last year qualified opinion also exhibits a very low proportion of 2.98%. This indicates that very few companies have qualified opinion in the prior year.

6.1 Normality Test

Logistic regression is more robust compared to the classic regression assumptions of equal variances, since it can be used to extrapolate non-linear relationships and abnormally distributed data among predictor and criterion variables (Hair et al., 1984). This study conduct a normality test in order to determine the correct type of statistical analysis to be employed in further examining the relationship of the variables. The author uses Kolmogorov-Smirnov test for performing data normality test.

Table 6: One-Sample Kolmogorov-Smirnov Test

		(QUAL)	(AQ)	(ABDA)	(ABDA*AQ)	(LOSS)	(DE)
N		672	672	672	672	672	672
Normal Parameters ^{a,b}	Mean	.047619	.200893	-.000002	-.010556	.183036	.566899
	Std. Deviation	.2131175	.4009665	.9985087	.4542453	.3869838	.4176642
Most Extreme Differences	Absolute	.541	.491	.311	.426	.499	.168
	Positive	.541	.491	.291	.376	.499	.168
	Negative	-.412	-.308	-.311	-.426	-.318	-.087
Kolmogorov-Smirnov Z		14.019	12.726	8.056	11.048	12.932	4.353
Asymp. Sig. (2-tailed)		.000	.000	.000	.000	.000	.000

Table 7: (continuation) One-Sample Kolmogorov-Smirnov Test

		(QUALG)	(LASSET)	(TIME)	(INVTA)	(RECTA)
N		672	672	672	672	672
Normal Parameters ^{a,b}	Mean	.029762	14.006955	12.148810	.176050	.130789
	Std. Deviation	.1700564	1.8134591	6.8365110	.2663939	.1424388
Most Extreme Differences	Absolute	.540	.033	.101	.254	.179
	Positive	.540	.013	.096	.151	.108
	Negative	-.431	-.033	-.101	-.254	-.179
Kolmogorov-Smirnov Z		13.991	.855	2.612	6.593	4.647
Asymp. Sig. (2-tailed)		.000	.458	.000	.000	.000

A normal distribution exists when the significance / p-value is above 0.05 (Sekaran, 2003). From the table above, only (LASSET) has a normal distribution with Kolmogorov Smirnov Z of 0.458. The rest variables are not normally distributed since their significance value is 0.000 which is lower than 0.05. This is consistent with the previous descriptive statistics that these abnormal variables have standard deviation higher than the mean indicating high variability of data. The normally distributed data will be analyzed with Pearson correlation and the abnormally distributed data will be analyzed with Spearman correlation.

Table 8: Pearson Correlation

		(QUAL)	(AQ)	(ABDA)	(ABDA*AQ)	(LOSS)	(DE)	(QUALG)	(LASSET)
(QUAL)	Pearson Correlation	1	-.060	.017	.004	.201**	.392**	.413**	-.129**
	Sig. (2-tailed)		.121	.655	.909	.000	.000	.000	.001
	N	672	672	672	672	672	672	672	672
(AQ)	Pearson Correlation	-.060	1	-.026	-.046	-.141**	-.078*	-.066	.258**
	Sig. (2-tailed)	.121		.494	.230	.000	.044	.088	.000
	N	672	672	672	672	672	672	672	672
(ABDA)	Pearson Correlation	.017	-.026	1	.455**	-.076*	.022	.046	-.036
	Sig. (2-tailed)	.655	.494		.000	.048	.565	.229	.354
	N	672	672	672	672	672	672	672	672
(ABDA*AQ)	Pearson Correlation	.004	-.046	.455**	1	-.082*	-.007	.000	-.033
	Sig. (2-tailed)	.909	.230	.000		.034	.855	.992	.392
	N	672	672	672	672	672	672	672	672
(LOSS)	Pearson Correlation	.201**	-.141**	-.076*	-.082*	1	.263**	.030	-.109**
	Sig. (2-tailed)	.000	.000	.048	.034		.000	.432	.005
	N	672	672	672	672	672	672	672	672
(DE)	Pearson Correlation	.392**	-.078*	.022	-.007	.263**	1	.328**	-.111**
	Sig. (2-tailed)	.000	.044	.565	.855	.000		.000	.004
	N	672	672	672	672	672	672	672	672
(QUALG)	Pearson Correlation	.413**	-.066	.046	.000	.030	.328**	1	-.130**
	Sig. (2-tailed)	.000	.088	.229	.992	.432	.000		.001
	N	672	672	672	672	672	672	672	672
(LASSET)	Pearson Correlation	-.129**	.258**	-.036	-.033	-.109**	-.111**	-.130**	1
	Sig. (2-tailed)	.001	.000	.354	.392	.005	.004	.001	
	N	672	672	672	672	672	672	672	672
(TIME)	Pearson Correlation	.013	.110**	.063	.027	-.076*	.031	-.003	.119**
	Sig. (2-tailed)	.746	.004	.103	.492	.050	.420	.948	.002
	N	672	672	672	672	672	672	672	672
(INVTA)	Pearson Correlation	-.062	-.013	.050	.032	.004	-.007	-.057	-.168**
	Sig. (2-tailed)	.108	.735	.193	.404	.912	.854	.142	.000
	N	672	672	672	672	672	672	672	672
(RECTA)	Pearson Correlation	-.022	-.022	.004	.022	-.122**	.019	.028	-.216**
	Sig. (2-tailed)	.561	.573	.922	.567	.002	.622	.472	.000
	N	672	672	672	672	672	672	672	672

		(TIME)	(INVTA)	(RECTA)
(QUAL)	Pearson Correlation	.013	-.062	-.022
	Sig. (2-tailed)	.746	.108	.561
	N	672	672	672
(AQ)	Pearson Correlation	.110	-.013	-.022
	Sig. (2-tailed)	.004	.735	.573
	N	672	672	672

(ABDA)	Pearson Correlation		.063	.050	.004
	Sig. (2-tailed)		.103	.193	.922
	N		672	672	672
(ABDA*AQ)	Pearson Correlation		.027	.032	.022**
	Sig. (2-tailed)		.492	.404	.567
	N		672	672	672
(LOSS)	Pearson Correlation		-.076**	.004**	-.122*
	Sig. (2-tailed)		.050	.912	.002
	N		672	672	672
(DE)	Pearson Correlation		.031**	-.007*	.019
	Sig. (2-tailed)		.420	.854	.622
	N		672	672	672
(QUALG)	Pearson Correlation		-.003**	-.057	.028
	Sig. (2-tailed)		.948	.142	.472
	N		672	672	672
(LASSET)	Pearson Correlation		.119**	-.168**	-.216
	Sig. (2-tailed)		.002	.000	.000
	N		672	672	672
(TIME)	Pearson Correlation		1	.088**	.016
	Sig. (2-tailed)			.022	.669
	N		672	672	672
(INVTA)	Pearson Correlation		.088	1	.061
	Sig. (2-tailed)		.022		.114
	N		672	672	672
(RECTA)	Pearson Correlation		.016	.061	1
	Sig. (2-tailed)		.669	.114	
	N		672	672	672

Table 9: Spearman Correlation

		(QUAL)	(AQ)	(ABDA)	(ABDA*AQ)	(LOSS)	(DE)
(QUAL)	Correlation Coefficient	1.000	-.060	-.058	-.030	.201**	.218**
	Sig. (2-tailed)	.	.121	.131	.430	.000	.000
	N	672	672	672	672	672	672
(AQ)	Correlation Coefficient	-.060	1.000	-.063	.147**	-.141**	-.051
	Sig. (2-tailed)	.121	.	.104	.000	.000	.189
	N	672	672	672	672	672	672
(ABDA)	Correlation Coefficient	-.058	-.063	1.000	.362**	-.119**	-.106**
	Sig. (2-tailed)	.131	.104	.	.000	.002	.006
	N	672	672	672	672	672	672
(ABDA*AQ)	Correlation Coefficient	-.030	.147**	.362**	1.000	-.019	-.042
	Sig. (2-tailed)	.430	.000	.000	.	.617	.272
	N	672	672	672	672	672	672
(LOSS)	Correlation Coefficient	.201**	-.141**	-.119**	-.019	1.000	.255**
	Sig. (2-tailed)	.000	.000	.002	.617	.	.000
	N	672	672	672	672	672	672
(DE)	Correlation Coefficient	.218**	-.051	-.106**	-.042	.255**	1.000
	Sig. (2-tailed)	.000	.189	.006	.272	.000	.
	N	672	672	672	672	672	672
(QUALG)	Correlation Coefficient	.413**	-.066	-.015	-.033	.030	.197**
	Sig. (2-tailed)	.000	.088	.697	.389	.432	.000
	N	672	672	672	672	672	672
(LASSET)	Correlation Coefficient	-.105**	.271**	-.099*	.011	-.082*	.065
	Sig. (2-tailed)	.006	.000	.010	.771	.033	.094

	N	672	672	672	672	672	672
(TIME)	Correlation Coefficient	.003	.102**	-.061	-.019	-.078*	.016
	Sig. (2-tailed)	.935	.008	.112	.625	.044	.683
	N	672	672	672	672	672	672
(INVTA)	Correlation Coefficient	-.102**	.045	.110**	.092*	-.106**	.006
	Sig. (2-tailed)	.008	.240	.004	.018	.006	.871
	N	672	672	672	672	672	672
(RECTA)	Correlation Coefficient	-.059	.020	.018	.046	-.196**	.015
	Sig. (2-tailed)	.124	.612	.649	.235	.000	.707
	N	672	672	672	672	672	672

		(QUALG)	(LASSET)	(TIME)	(INVTA)	(RECTA)
(QUAL)	Correlation Coefficient	.413	-.105	.003	-.102	-.059**
	Sig. (2-tailed)	.000	.006	.935	.008	.124
	N	672	672	672	672	672
(AQ)	Correlation Coefficient	-.066	.271	.102	.045**	.020**
	Sig. (2-tailed)	.088	.000	.008	.240	.612
	N	672	672	672	672	672
(ABDA)	Correlation Coefficient	-.015	-.099	-.061	.110**	.018**
	Sig. (2-tailed)	.697	.010	.112	.004	.649
	N	672	672	672	672	672
(ABDA*AQ)	Correlation Coefficient	-.033	.011**	-.019**	.092	.046
	Sig. (2-tailed)	.389	.771	.625	.018	.235
	N	672	672	672	672	672
(LOSS)	Correlation Coefficient	.030**	-.082**	-.078**	-.106	-.196
	Sig. (2-tailed)	.432	.033	.044	.006	.000
	N	672	672	672	672	672
Spearman's rho (DE)	Correlation Coefficient	.197**	.065	.016**	.006	.015**
	Sig. (2-tailed)	.000	.094	.683	.871	.707
	N	672	672	672	672	672
(QUALG)	Correlation Coefficient	1.000**	-.083	-.004	-.078	.006
	Sig. (2-tailed)	.	.031	.918	.042	.871
	N	672	672	672	672	672
(LASSET)	Correlation Coefficient	-.083**	1.000**	.100*	-.089	-.205*
	Sig. (2-tailed)	.031	.	.010	.021	.000
	N	672	672	672	672	672
(TIME)	Correlation Coefficient	-.004	.100**	1.000	.191	.041*
	Sig. (2-tailed)	.918	.010	.	.000	.284
	N	672	672	672	672	672
(INVTA)	Correlation Coefficient	-.078**	-.089	.191**	1.000*	.225**
	Sig. (2-tailed)	.042	.021	.000	.	.000
	N	672	672	672	672	672
(RECTA)	Correlation Coefficient	.006	-.205	.041	.225	1.000**
	Sig. (2-tailed)	.871	.000	.284	.000	.
	N	672	672	672	672	672

6.2 Correlation and Multicollinearity Diagnostics

The author uses a two-way step to interpret the findings. First, the author checks the significance level (significant if > 0.05), then the correlation effect (collinearity if >0.8 or < -0.08). The normally distributed data (LASSET) will be analyzed in table 8 Pearson Correlation, where the data that are not normally distributed (variables other than LASSET) will be analyzed in table 9 Spearman Correlation. As illustrated in both table 8 and table 9, none of the variables correlates above 0.8, which indicates there is no problem with multi-collinearity.

6.3 Logistic Regression Analysis

6.3.1 Model Summary and Validation

A model summary and validation is performed in order to assure the reliability of the model to predict the audit qualification probability in Indonesia, so that the result is valid and acceptable. We can determine the validity of the model by examining the Chi-square, -2 LL (Log Likelihood) and the Significance level.

Table 10: Model Summary and Validation

	Chi-square	df	Sig.
Model	93.116	10	.000

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
164.185 ^a	.129	.407

Chi-square represents the goodness of fit model as those in linear regression model where it determines how good is the model in predicting the dependent variable, as in this case, the possibility of issuance of qualified audit report. Higher value of Chi-square represents better predicting tools of a model. A Chi-square value of 93.116 represents a good indicator value that the model used in this research is well predicted. -2 Log Likelihood performs as an anti measurement of the probability of observing the particular set of dependent variable values that occur within the sample (Hair et al., 1984). Therefore, smaller values of 2 Log Likelihood means a better fit of the model. A -2Log Likelihood value of 164.185, rather low results (value below 300 is still low) indicates a better fit of the model. A rather low result of -2LL is expected since this represents a low 'deviance' or residual differences (not deviation) of the model. By combining the -2 Log Likelihood value of 164.185 and the Chi-square value of 93.116, the significance p-value is 0.000, the model is then said to be a valid and reliable one to predict the probability of issuance of audit qualification as the dependent variable in the logistic regression model. Cox & Snell R Square and Nagelkerke R Square are similar to R-square and adjusted R-square in linear regression model that is to calculate how strong the model is in predicting the dependent variable, as in this case the audit qualification in Indonesia. From table 11, it can be deduced that by Nagelkerke R Square values of 0.407, the independent variables can explain 40.7% of the model, while the rest 59.3% of the model is explainable with other external factors.

Table 11: Classification Matrix

Observed		Predicted			
		(QUAL)		Percentage Correct	
		.0000	1.0000		
Step 1	(QUAL)	.0000	635	5	99.2
		1.0000	24	8	25.0
Overall Percentage					95.7

From the table above, it can be seen that 640 (635 + 5) pooled sample observations do not receive audit qualification or qualified opinion. Among 640 pooled sample observations that do not receive qualified opinion, 5 of them are actually able to receive qualified opinion. Thus it can be said that the accuracy between the observed and predicted values of non-qualified opinion is 99.2%. On the other hand, among 32 (24 + 8) pooled sample observations that receive audit qualifications, 24 of them are more aligned towards the observed characteristics of non-qualified opinion. Thus it leads to 25.0% accuracy in predicting the values. The overall model accuracy of 95.7% indicates an above average accuracy of disseminating between characteristics of qualified and non-qualified opinion.

6.3.2 Hypothesis Testing and Result Analysis & Discussion

The regression equation for testing the hypothesis is as follows:

$$QUAL = \alpha + \beta_1AQ_i + \beta_2ABDA_i + \beta_3ABDA*AQ_i + \beta_4LOSS_i + \beta_5DE_i + \beta_6QUALG_i + \beta_7LASSET_i + \beta_8TIME_i + \beta_9INVTA_i + \beta_{10}RECTA_i + \epsilon_i$$

Where:

- QUAL = dummy variable, 1 if audit opinion is qualified, 0 otherwise
- AQ = dummy variable, 1 if auditors are big 4 and industry specialized
- ABDA = abnormal accruals obtained from the m-Jones (1991) model
- ABDA*AQ = represent the interaction with AQ to support H2 testing
- LOSS = dummy variable, 1 if there is current year loss
- DE = long term debt to total assets
- QUALG = dummy variable, 1 if prior year's opinion is qualified
- LASSET = log of total assets
- TIME = number of years listed on the IDX
- INVTA = inventory to total assets
- RECTA = receivables to total assets
- ϵ = error term

Table 12: Logistic Regression Results

	Expected Sign	B	S.E.	Wald	df	Sig.	Exp(B)	
Step 1 ^a	AQ	+	.038	.712	.003	1	.957	1.039
	ABDA	+	-.058	.231	.063	1	.802	.944
	ABDA*	+	.684	2.520	.074	1	.786	1.981
	AQ							
	LOSS	+	1.272	.485	6.863	1	.009	3.568
	DE	+	1.648	.388	18.070	1	.000	5.199
	QUALG	+	2.728	.654	17.401	1	.000	15.309
	LASSET	+ / -	-.100	.114	.782	1	.376	.904
	TIME	-	.034	.038	.782	1	.376	1.034
	INVTA	+	-4.449	2.046	4.726	1	.030	.012
	RECTA	+	-2.036	1.785	1.301	1	.254	.131
	Constant	N.A	-3.313	1.650	4.030	1	.045	.036

For each variable, the author first compares the expected sign with their B value whether they are in line with the expected sign. Next, the author looks at the significance value whether the variable has significant impact to predict the model (QUAL). If the significance value is below 0.05 confidence level, the hypothesis is accepted, otherwise reject. For the findings, the author would analyze and discuss it to answer the two main hypothesis followed by the results of the control variables.

6.3.2.1. Earnings Management

H1: There is a positive relationship between the presence of abnormal accruals and issuance of audit qualification in Indonesia.

From table 12, we can see the expected sign is positive however the B value is -0.58. This indicates that the presence of earnings management in Indonesia context does not assure the issuance of audit qualification since they are negatively related. However, ABDA has p-value of 0.957 (higher than 0.05 level of confidence), therefore the author rejects the hypothesis H1. Since the result is insignificant, it can be deduced from the fact that the presence of earnings management within a company does not necessarily affect the level of audit qualification in Indonesia. This contradicts previous studies of prior abnormal accruals studies (Becket et al., 1998; Francis, Maydew & Sparks 1999; Francis & Krishnan, 1999; Chang, 2001; Vander Bauwhede et al., 2003; and Johl et al., 2007) that affirm the presence of earnings management as an indicator to issue qualified opinion. Although the findings contradict these studies, but this is aligned with the fact that many large companies (some are collapsed) earn clean unqualified opinion instead of qualified opinion even in the presence of earnings management. These are the cases of Enron, Worldcom, Lehman Brothers and Kimia Farma in 2008. Also recalled, the World Bank questioning the reliability of 'clean' unqualified opinion rendered by the Big 5 auditors at that time for the companies after the Asian Crisis 1998.

6.3.2.2. Audit Quality and Earnings Management

H2: There is a positive relationship between the presence of abnormal accruals and issuance of audit qualification in interaction with the higher quality auditor as indicated with the Big 4 and industry specialist in Indonesia.

As resulted from table 12, variable ABDA*AQ has positive B value of 0.684 which means in line with expected sign. However the result is insignificant since the p-value is not less than 0.05 level of confidence. Since the result is insignificant, the author rejects the hypothesis H2. This means even when a company performs opportunistic earnings management and being audited by the big-4 industry specialist auditors, it does not necessarily mean big-4 industry specialist auditors are likely to render qualified opinion. This is consistent with prior studies by Monroe & Teh, 1993; Mutchler et al., 1997; Lennox, 1999; Bartov et al., 2001; that affirms higher quality auditors as seen in Big-4 auditors and industry specialist should issue more qualified opinion in terms of earnings management practices. But the findings of these studies are significant when using U.S. context. In this thesis, based on Indonesia context, the author is able to interpret the relationship between ABDA*AQ and QUAL, which is positive, but has not yet proved the significance of this result. This means very few Big-4 auditors who are also the industry specialist will issue qualified opinion for the audited companies in the presence of earnings management.

These research's findings for hypothesis H2 may seem to be insignificant for the relationship between earnings management and the audit qualification in interaction with the Big 4 and industry specialist as the proxy for a higher audit quality in Indonesia. However, the similar findings also exhibited in Malaysia context and U.S. context. Based on Malaysia data, Johl et al. (2007) confirmed insignificant association between abnormal accruals and audit qualification in interaction with the Big-5 industry specialist auditors. One of the concrete reasons is owing to insufficient opinion data variability in the pre-crisis period (only few has qualified opinion). In U.S. context, Bartov et al. (2000) examines Big 5 differential quality by including an interaction between Big 5 and abnormal accruals. The interaction variable is found not significant and the authors attribute the result to the small number of sample companies with non-Big 5 auditors. Based on these findings using Indonesia, Malaysia and U.S. context up to date, there is still low support of evidence of whether there is a significant relationship for high quality auditors (AQ) to issue qualified audit opinion (QUAL) in the presence of abnormal accruals as proxy for earnings management (ABDA). Further researchers are welcome to scrutinize this 'insignificance' issue.

6.4.2.3. Control Variables

For the rest are the results of the control variables, some of them have significant effect and some are not. The author will only emphasize on those control variables that have significant effect to the model building. The significantly effecting variables are (LOSS), (DE), (QUALG) and (INVTA). They are all significant since the p-value is less than 0.05. (LOSS) has a positive B value and p-value of 0.009 (less than 0.05). This means variable (LOSS) has a significant positive relationship with the issuance level of audit qualification by the auditors in Indonesia. If a company experiences a loss within the current year, then it is likely to receive qualified opinion from their auditors. This is consistent with the prior studies; Monroe & Teh, 1993; Dopuch et al., 1987; that exhibits positive relationship between LOSS and QUAL.

(DE) has a positive B value and p-value of 0.000 (less than 0.05). This means variable (DE) has a significant positive relationship with the issuance level of audit qualification by the auditors in Indonesia. If a company has high leverage ratio, as indicated by the debt value ratio (interest bearing liabilities / interest bearing liabilities + equity), then it is likely to receive qualified opinion from their auditors. This is consistent with the prior studies; Mutchler, 1985; Levitan & Knoblett, 1985; and Carcello et al., 2000; that exhibits positive relationship between DE and QUAL. (QUALG) has a positive B value and p-value of 0.000 (less than 0.05). This means variable (QUALG) has a significant positive relationship with the issuance level of audit qualification by the auditors in Indonesia. If a company receive qualified audit opinion in the prior year, then it is likely to receive qualified opinion from their auditors. This is consistent with prior studies; Mutchler, 1985; Bell & Tabor, 1991; Monroe & Teh, 1993; and Lennox, 1999; that exhibits positive relationship between QUALG and QUAL.

(INVTA) has a negative B value and p-value of 0.030 (less than 0.05). This means variable (INVTA) has a significant negative relationship with the issuance level of audit qualification by the auditors in Indonesia. (INVTA) represents inventory to total asset ratio as an indicator of audit difficulty. This result contradicts with the previous findings from Bell and Tabor (1991), Dopuch et al. (1987) and Monroe and Teh (1987); that state audit difficulty can be represented with INVTA and RECTA. In this thesis, the author finds positive results only for RECTA but not in INVTA. This means when assessing audit difficulty to find earnings management in Indonesia, more areas can be checked in the RECTA rather in INVTA, if the auditors are being skeptic. However, the positive relationship in RECTA to QUAL is not significant as described in the next paragraph. The negative relationship between INVTA and QUAL can be interpreted as the fact that low audit difficulty can also contribute as a factor to give qualified opinion rendered by the auditors. The rest control variables; LASSET, TIME, RECTA exhibits insignificant effect to the model. LASSET shows negative relationship to QUAL, which means smaller size companies are also possible to receive qualified opinion. This is also hypothesized from previous study by Lys and Watts (1994). TIME also shows negative relationship to QUAL, which means younger firms also prone to receive qualified opinion from the auditors. This is also hypothesized from previous studies; (Mutchler, 1985; and Dopuch et al., 1987). RECTA shows positive relationship to QUAL, which means higher audit difficulty give more chance for auditors to fail to detect the practice of earnings management within a company. This is also hypothesized from previous studies; Bell and Tabor (1991) and Monroe and Teh (1987). However all these results for LASSET, TIME and RECTA are insignificant.

7. Conclusion

The two main objectives of this study are first to understand the level of audit qualification as indicated by auditor size and auditor industry specification in Indonesia and second to find evidence whether there is a positive correlation between earnings management (EM) and audit qualification (QUAL) in Indonesian companies. For the first objective, the author finds the answer to be surprising since only 4.76% (37 companies out of 672 samples) receive qualified opinion from the auditors. Out of 37 companies that receive qualified opinion, only 0.24%, or 9 companies are audited by the Big-4 whereas the rest 28 companies are audited by the non Big-4. The 9 companies receiving qualified opinion from the Big-4 auditors are PT. Mulia Industri Tbk. (3 times), PT. Arpeni Pratama Ocean Line Tbk. (2 times), PT. Humpuss Intermoda Transportasi Tbk. (2 times), PT. Asahimas Flat Glass (1 time), and PT. Sumalindo Lestari Jaya Tbk (1 time). This deduced the fact that there is an extremely low level of audit qualification in

Indonesia, meaning not many auditors, both Big-4 and non Big-4 are willing to give qualified opinion for the auditees.

For the second objective, the author does not find a positive relationship between EM and QUAL in the context of Indonesia. Instead, a negative sign of B value of -0.58 is seen from Table 12 Logistic Regression results. At first glance, the result seems strange, as one would have expected otherwise. These results also contradict with the previous positive accounting theories by (Becket et al., 1998; Francis, Maydew & Sparks 1999; Francis & Krishnan, 1999; Chang, 2001; Vander Bauwhede et al., 2003) that state when company has earnings management, they should receive qualified opinion. However these thesis' findings are truly proven with the real life evidence as in case of Lehman Brothers, WorldCom and others where EM (or ABDA) has a negative relationship with QUAL. So, answering the research question of whether the presence of earnings management affects the probability of issuance of audit qualification, it can be deduced from the fact that the presence of earnings management within a company does not necessarily affect the level of audit qualification in Indonesia.

After doing the analysis in this study, there are some suggestions that can be used as an input for the investors, issuers, and other researchers especially in the audit field who will review or investigate the level of audit qualification in the presence of earnings management in Indonesia: (i) The sample used should be larger in order to better present the population (find another 50% incomplete audited financial report from year 2008-2010). (ii) Lengthen the observation period (from 3 years data analysis to 5 years data analysis, further researchers can also compare the difference between pre and post global economic crisis impact to Indonesia listed companies performance). (iii) Expand the sample to both pre and audited financial reports to examine the changes (Derive the accounting figures from the pre-audited report and the audit opinion from the audited financial report).

8. Bibliography

- Arens, A., Beasley. M., and Elder. R. (2009). *Auditing and Assurance Services: An Integrated Approach*. (13th ed). Pearson.
- Akers, M. D., Giacomino, D.E., and Bellovary, J. L. (2007). "Earnings Management and its Implications", *The CPA Journal*, 77 (8), 64-67.
- Bartov, E., F.A. Gul, and J.S.L. Tsui. (2001). "Discretionary accruals models and audit qualifications", *Journal of Accounting and Economics*, 30 (4), pp. 421-452.
- Becker, C. L., M. L. Deond, J. Jiambalvo, and K. R. Subramanyam. (1998). "The effect of audit quality on earnings management", *Contemporary Accounting Research* 15 (Spring): 1-24.
- Bell, T.B. and Tabor, R.H. (1991). "Empirical analysis of audit uncertainty Qualifications", *Journal of Accounting Research*, Vol. 29, pp. 350-70.
- Bradbury, M.E. (1980). The incentives for voluntary audit committee formation. *Journal of Accounting and Public Policy*, 9 (1), 19-36.
- Bradshaw, M.T., Richardson, S.A. and Sloan, R.G. (2001). "Do analysts and auditors use information in accruals?", *Journal of Accounting Research*, 39 (1), 45-73.
- Budi, Sasongko. (2005). "Internal Auditor dan Dilema Etika", *Jurnal Akuntansi*, 8 (1).

- Bushee, B. (1998). "The influence of institutional investors on myopic R&D investment behavior", *The Accounting Review*, 73 (3), 305-333.
- Carcello, J.V., Hermanson, R.H. and Huss, H.F. (2000). "Going-concern opinions: the effects of partner compensation plans and client size", *Auditing: A Journal of Practice & Theory*, 19 (1), 67-77.
- Chang, W. J. (2001). "The effect of auditor's quality on earnings management", *Journal of Contemporary Accounting*, 2 (November): 195-214. Taiwan.
- Choi, S. K., and D.C. Jeter. (1992). "The Effect of Qualified Audit Opinion on Earnings Response Coefficients" *Journal of Accounting and Economics* 14, 229-247.
- Coffee, J. (2001). "The acquiescent gatekeeper: reputational intermediaries, auditor independence and the governance of accounting". Columbia Law and Economics Working Paper n.191. Available at: SSRN.com/abstract=270944.
- Deangelo, L. (1986). "Accounting Numbers as Market Valuation Substitutes: A Study of Management Buyouts of Public Shareholders", *The Accounting Review*, 61: 400-420.
- Dechow, P., R. Sloan, and A. Sweeney. (1995). "Detecting earnings management". *The Accounting Review* 70: 193-225.
- Deegan, C. (2010). "Financial Accounting Theory" (3rd ed). Australia: McGraw-Hill Pty Ltd.
- Defond, M.L., and Jiambalvo, J. (1994). "Debt covenant effects and the manipulation of accruals", *Journal of Accounting and Economics*, 17, 145-176.
- Defusco, R.A., McLeavey, D.W., Pinto, J.E., Runkle, D.E. (2007). *Quantitative Investment Analysis 2nd ed*. New Jersey: John Wiley & Sons.
- Dopuch, N., Holthausen, R.W. and Leftwich, R.W. (1986). "Abnormal Stock Returns Associated with Media Disclosures of 'Subject to' Qualified Audit Opinions", *Journal of Accounting and Economics* 8, 93-118.
- Dopuch, N., Holthausen, R.W. and Leftwich, R.W. (1987). "Predicting audit qualifications with financial and market variables", *The Accounting Review*, 62 (3), 431-54.
- Dwicahyaningtyas, Putri. (2010). Analisis factor-faktor yang mempengaruhi ketepatan opini auditor di kantor akuntan publik di DKI Jakarta. Journal of Accounting. BINA NUSANTARA University: Jakarta.
- Elitzur R. & H. Falk. (1996). "Planned audit quality", *Journal of Accounting and Public Policy* 15: 247-269.
- Francis, J.R. and Krishnan, J. (1999). "Accounting accruals and auditor reporting conservatism", *Contemporary Accounting Research*, 16 (1), 35-66.
- Francis, J.R., Maydew, E. L., and Sparks, H. C. (1999). "The role of Big 6 auditors in the credible reporting of accruals", *Auditing: A Journal of Practice and Theory*, 18 (2). 17-34.
- Guidry, F., Leone, A., Rock, S. (1999). "Earnings-based bonus plans and earnings management by business unit managers", *Journal of Accounting and Economics*, 26, 113-142.
- Gul, F. A., and Tsui. J. S. L. (2000). *Discretionary-Accruals Models and Audit Qualifications*. University of Rochester.

- Hair, J.F., Anderson, R.E., Tatham, R.L., Black, W.C. (1984). *Multivariate Data Analysis*. United States: Prentice Hall.
- Healy, P. M. (1985). "The Effect of Bonus Schemes on Accounting Decisions", *Journal of Accounting and Economics* 7: 85-107.
- Healy, P.M. and J. A. Wahlen. (1999). "A review of the earning management literature and its implication for standard setting", *Accounting Horizons* (December). p. 365-383
- Herbohn, K., V. Ragunathan & R. Garsden. (2007), "The horse has bolted: revisiting the market reaction to going concern modifications of audit reports" *Accounting and Finance*, 47(3), pp.473-93.
- Hery. (2006). "Pengaruh Pelaksanaan Etika Profesi terhadap Pengambilan Keputusan Akuntan Publik (Auditor)", *Media Riset Akuntansi, Auditing dan Informasi*, 6 (2). August.
- Hirst, E. (1994). "Auditors' sensitivity to earnings management", *Contemporary Accounting Research* 11(Fall): 405-422.
- Indonesia Capital Market Directory. (2010). Retrieved from: <http://icmd2010.wordpress.com/category/icmd-2010/>
- Hsieh, Y. M., and Tsai. Y. C. (2004). "Aggregate Audit Adjustments and Discretionary Accruals: Further Evidence on the Relation between Audit Quality and Earnings Management", *National Taiwan University*. Taiwan.
- Johl, S., Jubb, C. A., and Houghton., K. A. (2007). "Earnings management and the audit opinion: evidence from Malaysia", *Managerial Auditing Journal*, 22 (7), 668- 715. Emerald Group Publishing Limited. DOI:10.1108/02686900710772591.
- Kasznik, R. (1999). "On the association between voluntary disclosure and earnings management", *Journal of Accounting Research*, 37, 57-82.
- Khakim, Lutfil. (2011). "Pasar Jasa Audit Belum Akan Berubah. Majalah Manajemen Risiko STABILITAS" December, 16. Retrieved from: http://www.stabilitas.co.id/view_articles.php?article_id=311&article_type=0&article_category=6&md=ad8d8af7a7d561e9e3411c62ed92c813
- Krishnan, G. V. (2003). "Does Big 6 Auditor Industry Expertise Constrain Earnings Management?", *Journal of Accounting Horizons*, pp. 1-16.
- Lennox, C.S. (1999) "The accuracy and incremental information content of audit reports in predicting Bankruptcy", *Journal of Business Finance & Accounting*, Vol. 26, pp. 757-78.
- Levitan, A.S. and Knoblett, J.A. (1985). "Indicators of exceptions to the going concern assumptions", *Auditing: A Journal of Practice & Theory*, 5 (1), 26-39.

- Levine, DM., Stephan, D., Krehbiel, TC., Berenson, ML. (2007). *Statistics for Managers*. 4th edition, pp. 632-633. Prentice Hall.
- Loudder, M. L., I. K. Khurana, R. B. Sawyers, C. Cordery, C. Johnson, J. Lowe, and R. Wunderle. (1992), "The Information Content of Audit Qualifications", *Auditing: A Journal of Practice & Theory*. 11, 69-82.
- Lys, T. and Watts, R.L. (1994) "Lawsuits against auditors", *Journal of Accounting Research*, 32, pp. 65-93.
- Mayangsari, M. (2003), "Pengaruh Keahlian Audit dan Independensi terhadap Pendapat Audit: Sebuah Kuasi eksperimen", *Jurnal Riset Akuntansi Indonesia*, 6 (1), January.
- Monroe, G.S. and Teh, S.T. (1993). "Predicting uncertainty audit qualifications in Australia using publicly available information". *Accounting and Finance*, Vol.32, pp. 79-106.
- Moyer, S. (1990). "Capital adequacy ratio regulations and accounting choices in commercial Banks", *Journal of Accounting and Economics*, 12, 123-154.
- Murtanto, G. (1999). "Identifikasi Karakteristik-karakteristik Keahlian Audit: Profesi Akuntan Publik di Indonesia", *Jurnal Riset Akuntansi Indonesia*. 2 (1). January.
- Mutchler, J. (1985). "A multivariate analysis of the auditor's going-concern opinion decision", *Journal of Accounting Research*, 23 (2), 668-82.
- Mutchler, J., Hopwood, W. and McKeown, J. C. (1997). "The influence of contrary information and mitigating factors on audit opinion decisions on bankrupt companies", *Journal of Accounting Research*, pp. 295-310, Autumn.
- Mutmainah, Siti. (2007). "Studi tentang perbedaan Evaluasi Etis, Intensi Etis dan Orientasi Etis dilihat dari Gender dan Disiplin Ilmu: Potensi rekrutmen Staf Profesional pada kantor Akuntan Publik", *Media Riset Akuntansi, Auditing dan Informasi*, 10 (1). January.
- Nerissa, Sheila. (2010). *The Impact of Corporate Governance Variables on Earnings Management*. Working Paper. BINUS INTERNATIONAL UNIVERSITY: Indonesia.
- Novianti, Suzy. (2008). "Skeptisme Profesional Auditor Dalam Mendeteksi Kecurangan", *Jurnal Akuntansi dan Keuangan Indonesia*, 5 (1). June.
- Renyowijoyo, Muindro. (2005). "Persepsi masyarakat dan Akuntan terhadap Etika Profesi Akuntan", *Jurnal Bisnis dan Akuntansi*, 7 (1). April.
- Report on The Observance of Standards and Codes. (2011, April). Indonesia. http://www.worldbank.org/ifa/rosc_aa_indonesia.pdf
- Scott, W. R. (2000). *Financial Accounting Theory*. (2nd edition). Canada: Prentice Hall.
- Scott, W. R. (2006). *Financial Accounting Theory*. United States of America: Pearson Prentice Hall.
- Sekaran, U, Roger, B. (2009). *Research Methods for Business: A Skill Building Approach* (5th ed). United Kingdom: John Wiley & Sons, Ltd.
- Syahrul, Y. (2002). *Bapepam: Kasus Kimia Farma Merupakan Tindak Pidana*. <http://www.tempointeraktif.com/hg/ekbis/2002/11/04/brk,2002110436,id.html>

- Vander Bauwhede, H., M. Willekens, and A. Gaeremynck. (2003). "Audit firm size, public ownership, and firms' discretionary accruals management", *The International Journal of Accounting*, 38 (1), 1-22.
- Watts, R. L., and Zimmerman, J. L. (1978). "Towards a positive theory of the determination of accounting standards", *The Accounting Review*, 53, 112-134.
- Zang, A. Y. (2005). *Evidence on the tradeoff between real manipulation and accrual manipulation*. Working Paper. Fuqua School of Business.