AN EMPIRICAL ANALYSIS OF AUDITOR LITIGATION

SEKAR MAYANGSARI
Università Trisakti

BAMBANG SUDIBYO
Univesritas Gadjah Mada

Abstract

This study investigates the influence of several factors on probability of litigation against auditor. The factors derived from a theoretical and empirical analyses and economic incentives to bring lawsuit. This study identifies three factors into which cause litigation against auditor can be classified and are as follows: auditee characteristics, auditor characteristics and auditor-auditee relationship characteristics. This study uses logit regression to test the hypotheses. Samples are audit engagement for manufacture public company during 1996-2003. We use purposive sampling and get 171 audit engagements as samples. 78 audit engagement whose auditors are sued and 93 audit engagement whose auditors are not sued during 1996-2003.

The results show that client size, management ownership and institutional ownership not significantly influence on probability of litigation against auditors. Other factors, such as: audit committee, independence commissioner, earnings management, conservatism, financial difficulties, firm risk, industry risk, audit quality, the length of auditor engagement and service spectrum significantly influence on probability that auditor will be sued.

Keywords: Auditor litigation, client characteristics, auditor characteristics, auditee-auditor relationship characteristics

A. Introduction

The legal cases involving the accounting manipulation have been increased recently. The accounting scandal involve the leading companies in the United State of America and Indonesia, such as Enron, Xerox in USA, and Kimia Farma in Indonesia. The case of Enron, for example, involved CEO and external auditor as well.

Financial scandals negatively impact on public trust in financial reporting and auditing and impose sanction to auditors. There are numbers of cases, which ended with imposing the sanction against auditors in Indonesia, for example the case of Kimia Farma, Lippo, and Telkom.

Recently in Indonesia, the numbers of audit firms that is threatened by sanction increase in recent years even not as high as in USA. For example, in 2002, the numbers of audit firms that have got sanction are ten and among others the audit firm that is perceived has high audit quality. The Public Accountant Act that will release soon, make the auditors as a susceptible profession to sue. The Act permits everyone to sue auditor if he fail to appropriately modify his opinion on financial statements that are materially misstated.

The auditor litigation risk in the future has explained in SPAP SA section 312 at footnote. The regulation states that beside audit risk, an auditor also faces the risk of professional practice due to the court indictment, or other events that are related to the audited financial statement. This condition subsequently raises the specific attention for practitioners and academics.

Problem of research is related with inconsistency the results of prior research. For example, probability of litigation against auditor, which is theoretically influenced by audit quality, cannot be proved empirically. The failure of prior research to prove the
significance impact of audit quality on auditor litigation may be caused by inaccuracy measurement. The previous researches have used brand name (big 8 and Non-big 8 or big 5 and non-big 5) to measure audit quality that in recent years is doubt as a valid measurement for audit quality. Simunic (2004) suggests finding other measurement for audit quality beside brand name measurement.

Lys and Watts (1994) investigate the several factors influence on auditor litigation. They predict some factors have impact on auditor litigation. Lys and Watts (1994) found that financial condition, auditor independence, client size and total accrual have significantly influenced on auditor litigation. This research, however, fails supporting the impact of audit quality on auditor litigation.

The limitations of Lys and Watts’ study are the use of total accrual to measure earnings management. The use of total accrual to detect earnings management is questionable because the prior researches showed that the robust model used to detect the earnings management is Jones’ model (Jones 1991). The inaccuracy of accrual abnormal measurement makes the result of Lys and Watts’ study is inconsistent. Based on univariate analysis, they found total accruals influence on auditor litigation significantly negative. Then in multivariate analysis the influence changed into positive. Furthermore, they conduct sensitivity analysis by using different sample period. And they do not find the significant influence of the total accrual on auditor litigation. The researcher does not explain about the inconsistency results.

Heninger (2001) extend Lys and Watts’ study by using Jones’ (1991) model to measure earnings management. He investigates the effect of accrual abnormal on auditor litigation. The result shows that earnings management significantly influence on auditor litigation. However, Hribar and Collins (2002) suggested that Jones model contained bias because of the unusual events, such as merger or acquisition. Hribar and Collins (2002) suggested using cash flow data to measure abnormal accruals.

Lys and Watts (1994) also found that the client characteristics significantly influence on auditor litigation. Pratt and Stice (1994) also found that the clients characteristics influence on audit fee and the numbers of audit evidence. In Indonesia, the empirical evidence about litigation against auditors has never done before.

The Motivations of this research are as follow: First, the release of many regulation for auditors in Indonesia makes auditors in the future susceptible to sue so they need empirical research that can give guidance to decrease auditor litigation risk. The available empirical evidence in the United States of America cannot be taken for granted in Indonesia because the regulation and legal environment are difference. The United States of America is a common law’s country and with this system, any parties can sue the auditor if they suffer loss from misleading financial statement. In other hand Indonesia is a code law’s country, which any law action must be based on legal act. In Indonesia usually, regulator sues auditor. In such condition, it is uncertain that factors significantly influence auditor litigation by using USA sample also significant by using Indonesia sample.

Second, the prior empirical results of auditor litigation still inconsistency. Third, the previous researches have not considered the mechanism of corporate governance and conservatism of financial statement as factors that can influence on auditor litigation. We predict corporate governance mechanism can decrease the probability of litigation against auditors because this mechanism makes management more honest and fair. For instance, the establishment of audit committee will support companies to disclose the financial statements fairly.

Conservatism also can influence the probability of auditor litigation because conservatism makes assets or earnings more understated. With this condition, the conservatism can reduce the risk of auditor litigation because usually lawsuits are more likely to award damages for accruals that overstate than underestimate.

This study differs with prior study in several respects. First, the prior research has not used any theories to support the argument. This study uses some theories to give reasonable argument about the factors that effect on probability of litigation against
auditor. **Second**, prior study did not give any comprehensive models. Those factors are classified as follows: auditee characteristics, auditor characteristics, and auditor-auditee relationship characteristics.

**Third**, using other measurement other than prior study has used. For example, using the number of years audit firm tenure to replace dummy variable, or industry specialization industry for measure audit quality, as suggested by Craswell et al. (1995). **Fourth**, this study also uses heckman’s lambda for correction the improper variable’s measurement.

We find that audit committee, independent commissioner, financial difficulties, conservatism, business risk, accrual abnormal, audit quality, the length of audit firm tenure, non-audit service significantly influence on probability of litigation against auditor.

The paper is organized as follow. The next section reviews theories, prior research and develop hypotheses. Section 3 outlines the research method and describes samples. Section 4 shows and discusses the findings. The end section presents conclusion, limitation and contribution.

2. **Framework of Theory and Hypotheses Development**

The factors cause of litigation against auditor can be explained by attribution theory. This theory is proposed by Fritz Heider (1958). In the early period, this theory is used to explain the cause of individual’s behaviour that is partitioned on internal and external factors. Recently, this theory is also used to explain various phenomena.

Based on attribution theory, the cause of litigation against auditor can be classified as internal and external factors. The internal factors, also called as internal attribution, suggest that the source of an event comes from internal individual. In the case of auditor litigation, the internal factors are the inherent factors on auditors, such as competence and the independent attitude of auditors. Whereas, the external factor, also called as external attribution, suggests that the source of an event comes from external individual. In the case of auditor litigation, the external factors come from auditee. The high-risk auditee is auditee who has high motivation and opportunity to manipulate a financial statement. The motivation of auditee can be triggered by the various internal problems, such as financial difficulties or the intention of management to decrease tax payment. While, the opportunity to disclose unfair financial statement emerges if the controlling or monitoring systems in company is powerless.

The lawsuits against auditor can be also explained by using economic analysis of law as suggested by Kaplow and Shavell (1999). The analysis answers two important questions. First, what are the effects of legal rules on the individual behaviour? Second, are these effects of legal rules socially desirable? The economic analysis of law was originally stated by Bentham (1789, 1827, 1830) (as written in *Handbook of Public Economics, by Kaplow and Shavell (1999)*). They said that the individual against the law because of utilitarianism (social welfare). Bentham’s writings contain significant and extended analysis of criminal law and law enforcement. Moreover, Kaplow and Shavell (1999) developed the Benthams’ by extend to find the cause and consequence of the emergence of legal liability. They stated that the legal liability for accidents is a means by which society can reduce the risk of harm by threatening potential injurers with having to pay for the harms they cause. Liability is also frequently viewed as a device for compensating victims of harm. Moreover, Kaplow and Shavell said that the primary social function of the liability system as the provision of incentives to prevent harm.

The legal liability can explain with the economics theory. As the economics theory is suggested that a choice is based on benefit-cost analysis. Based on the economics, it can be explained that in performing their functions, auditor is faced at two choices: accept an audit engagement or reject it. The consideration of accepting or rejecting an engagement is based on the cost and benefit analysis. According to the assumption that individual is a rationale human and want to maximize his utility so the
SNA VIII Solo, 15 – 16 September 2005

consideration of auditor to accept or reject the audit engagement is also based on rational expectation and to maximize his utility. The audit engagement risk is that probability auditor cannot detect and/or report the existence of misstatement material in financial statement. The enforcement theory mentions that an individual (or a firm) chooses whether to commit an act that causes harm with certainty. If he commits the act, he obtains some gain and also faces the risk of being caught, found liable and sanctioned. Whether an individual commits a harmful act is determined by an expected utility calculation. He will commit the act if that would raise his expected utility, taking into account the gain he would derive and the probability, form, and level of sanction that he would then face. The law enforcement itself can be distinguished into strict liability or negligence liability.

The lawsuit against auditor is more relied on negligence. Auditor is sued because they are considered negligent in performing their duty as suggested by SPAP. The consequence of that negligence emerges the litigation process done by regulators, such as BAPEPAM, IAI or Finance Department.

The agency problem, which happens in company, may also indirectly influence on auditor litigation. The previous researches showed that agency theory is often used to explain about the demand of audit quality. The greater agency cost, the higher audit quality is demanded (Chow, 1982; Roy, 1996; and Piot, 2001). They argue that the quality of audit can reduce the agency cost because the qualified of auditors give assurance about the fairness of management’s report.

Agency theory is suggested that the financial statements play important role in the arrangement of contract and doing the monitoring. The audited financial statements are also frequently used as the basis of arranging the various contracts, such as, obligation contract, compensation plan, and etc.

Chow and Rice (1982) showed that company voluntarily uses auditor service in 1926-1927 is that has the high agency cost. The company with high agency cost has certain characteristics, such as the ownership structure is spread out, the debt ratio is high, or the company size is large.

Auditor in this matter hopefully gives the independent view about the fairness of financial report that has been presented by the management. Auditors can perform correctly if they have adequate competence and independent.

Clearly, the function of auditor in agency theory is as the one who gives assurance on integrity of financial statements generated by accountancy technology of management and then the statements are used as basis to make contract between agency and principal (DeFond 1992; Francis and Wilson 1988; Palmrose 1984). Auditor also plays important role in monitoring contract and reporting the breach of contract that is done by anyone, such as the breach of debt contract by debtor. Beside that the audited earnings are also used as a basis for bonus plan.

By relying on the agency theory, the auditor litigation risk comes from client who has high agency cost. The manager from company who has agency problem incline manipulating the financial statement for their self-interest and this condition probably because the existence of information asymmetry between principal and agency. Thus, the higher the agency problem of a client, the higher the risk of auditor litigation because of unfairness in financial statements. The detection of unfairness in financial statement is something difficult although this become the mandate of SPAP. This statement is supported by the result of research conducted by Carcello and Palmrose (1994). They suggested that 80% audit failure because of unsuccessfully auditor detect the materially misstated of the financial statement. Bonner et al. (1998) suggested that more than 50% auditor imposed by sanction during 1982-1995 because they cannot detect material misstatements in financial report.

Lawsuits against auditor can explain with the agency theory. Auditor in this matter serves as an agent from the interest parties such as, investors, shareholder or government, because those parties use audited financial statement as a means to make decision. Actually auditors are shareholders agent because the appointment of auditor is
based on general meeting of shareholders. On the other side, during their engagement, auditor always meets with management. In such condition, it often occurs the conflict at auditor between performing his/her function to verify the fairness of financial statement presented by company management and the pressure from management side to take action align with management interest by giving certain offers. Based on economics theory, if the auditors feel that the benefit from management is higher than from shareholders, auditors tend to support management hopes and give opinion clean.

The description above indicates that the cause of lawsuits against auditor is the capability of auditors to act independently. There are factors that influence on auditor independence, such as the non-audit service for the same client or the length of auditor tenure.

A. The Influence of corporate governance mechanism on auditor litigation

Empirical evidence related to the function and several previous researchers have ever done consequence of audit committee establishment in company. Park, Choi and Jeon (2003) and Xie et al. (2002) indicate that the existence of audit committee can avoid manager-doing manipulation of earnings. Beasley (1996) and Dechow, Sloan and Sweeney (1996) also stated the similar result that the existence of independent commissioners can reduce the occurrence of fraud in financial statement.

Pincas, Rusbarsky and Wong (1989) and Menon and Williams (1994) studied 100 companies listed in NASDAQ between 1986 and 1987. They found that company that had audit committee prefer quality audit (Big Eight) and mostly had directors from outside company to the company that didn’t have audit committee. Wild (1994) by using data from 260 public companies in the United States of America which established audit committee between 1966 – 1980 found that earnings was more informative after the establishment of audit committee. This result is indicated with the increasing of earnings response coefficient (ERC) from 0.15 to 0.28. DeFond and Jiambalvo (1991) using data from 41 companies finds that the company, which has formed audit committee, do not perform the overstatement.

Carcello and Neal (2003) investigate the relationship between the independent of audit committee and the behaviour of auditor reporting. Specifically, they consider the existence of the “grey” audit committee member\(^1\) and the probability of auditor to issue modified opinion (beside unqualified) for company that face financial difficulties. The result indicates that the composition of audit committee relates to audit opinion. Company, which the audit committee member is not independent, get unqualified opinion even they have financial difficulties. Klein (2002) examined the influence of the existence of audit committee on earnings quality. This earnings quality in this research is measured with earnings response coefficient (ERC). The result indicates that audit committee has significantly positive influence on ERC. Thus, the existence of audit committee can increase the earnings quality.

The audit committee and independent commissioner also can prevent management to manipulate earnings or to disclose unfair financial statement. So, indirectly they can reduce the audit risk. The lower audit risk, the lower auditor litigation risk. Based on the above argument, the following hypothesis stated as follow:

H1: Audit committee affects probability of litigation against the auditor negatively

H2: Independent commissioner affects probability of litigation against the auditor negatively.

---

\(^1\) The grey committee member is committee member who is still questioned about his/her independence because he/she has indirect relation to company. The grey committee member is individual who has ever worked in that company, or has relation with management, or consultant of company or the key consumer of company (Vicknair et al. (1993)).
The other mechanism of corporate governance that presumably can reduce the auditor litigation risk is the ownership structure. Barnhart and Rosenstein (1998) stated that the ownership structure could influence the manager’s behaviour. Warfield et al. (1995) shows that management ownership influence on earnings management negatively. This result supports Jensen and Meckling (1976) stating that the management ownership can harmonize the interest of management and shareholders. The opposite result is gave by Gabrielsen et al. (1999). They investigate the relation between managerial ownership and earnings management in Denmark. They found statistically significant positive relation between managerial ownership and discretionary accrual. The opposite result with prior research is influenced by the ownership structure in Denmark. Management company in Denmark has shareholding more than 50%. In this condition, the managers only concern with short-term goal, namely current earnings. The more attention toward current earnings, the greater likelihood of financial statement is stated unfairly. So, the effect of ownership structure on financial statements quality depend on the number of shareholding. Based on prior research, the following hypothesis is stated as follow:

H3: The more shareholdings of management, the lower probability of litigation against the auditor

Midiaastuty (2002) finds the significance relationship between corporate governance, earnings quality and earnings management. The sample is Manufacture Company. The result indicates that institutional ownership has negative influence on earnings management. The other way, the institutional ownership has positive influence on earnings quality. Referring to the result in Indonesia, it can conclude that the higher institutional ownership, the lower incidence manager to manipulate earnings. The lower probability of earnings manipulation in financial statement will reduce the probability lawsuits against auditor. Based on this argument, hypothesis 4 is stated as follows:

H4: The more shareholdings of institution, the lower probability of litigation against the auditor

B. The influence of financial statement integrity on auditor litigation

A number of researchers also stated that auditor prefer the conservative to aggressive financial report (DeFond and Subramanyam, 1998). Kellog (1979), St.Pierre and Andersen (1984), and Carcello and Palmrose (1994) show that the cause of litigation against auditor is the earnings and asset overstatements.

H5: The higher conservatism in client’s financial report, the lower probability of litigation against the auditor

Auditor litigation can also derive from the existence of earnings management. Research carried out by Krishnan (2002) correlated between the characteristics of auditor distinguished into specialist auditor and non-specialist and the level of earnings management. The result of that research indicates that client from specialist auditor has the lower level of earnings management compared to non-specialist auditor. In more detail, it shows that the value of absolute discretionary accrual of non-specialist auditor client is higher compared to specialist auditor client.

H6: The higher earnings management, the higher probability of litigation against the auditor

C. The influence of financial condition of client on auditor litigation

A number of prior researches indicate that financial difficulties drive management to manipulate earnings to avoid sanction from creditor (Sweeney 1994; DeFond and Jiambalvo 1994). This condition increases probability lawsuits against auditors because manipulated earnings are difficult to detect.

H7: The higher financial difficulties, the higher probability of litigation against the auditor
D. The influence of company risk, industry risk on auditor litigation

The company and industry risks can increase the high earnings variability. Collins and Kothari (1989) and Easton and Zmijewski (1989) find that company risk has significant negative influence on earnings quality. Therefore, the higher company or industry risks, the lower earnings quality. This condition increase audits risk because earnings quality influences the fairness of financial report. The lower fairness of financial report, the more susceptible lawsuits against auditors.

H8: The higher company risk, the higher probability of litigation against the auditor

H9: The higher industry risk, the higher probability of litigation against the auditor

E. The influence of company size on auditor litigation

Saputro and Setiawati (2004) examined the relation between political cost and earnings management by using listed company in Indonesia. The political cost is measured with the growth and earnings management is measured by using Jones’ (1991) model. The period of research is from 1998 to 2002. The results indicated that the high growth company would tend to disclose earnings lower than the low one. Therefore, the researcher concludes that there is significant negative relation between the earnings management and political cost. However, the contrary result can also occur because the management of big company pay more attention to the financial statement quality. The higher financial statement quality, the lower auditor litigation risk. However, the previous researchers find that size influence on auditor litigation positively (Carcello and Palmrose 1994; Lys and Watts 1994, and Heninger 2001). Based on the argument, the following hypothesis is stated as follow:

H10: Size will influence on probability of litigation against the auditor

F. The influence of audit quality on auditor litigation

Palmrose (1984) find that the lawsuits against Big-Eight more less than Non-Big Eight. Lennox (1999) finds that auditor from the Big Eight is more accurate than auditors from the non-Big Eight. So, the hypothesis is stated as below:

H11: The higher quality of audit, the lower probability of litigation against the auditor

G. The influence of auditor-auditee relation on auditor litigation

The influence of characteristics of auditor and auditee relation influences the auditor independence. The threat of auditor independence cause auditor cannot any more maintain the objective attitude. Knapp (1991) indicated that the length of relation between auditee and auditor could impede the independence and accuracy of auditor to perform the task of auditing. The result of his research indicates that auditor who has tenure of more than 20 and less than 5 years cannot find the material misstatement. St. Pierre and Anderson (1984) found that the audit failure occur frequently at the early period of audit engagement (less than 3 years). The hypothesis is:

H12: Audit firm tenure affects probability of litigation against the auditor

The non-audit service will effect on probability of litigation against auditor. Levitt (2000) stated that the non-audit service impact on the auditor independence. The presence of audit and non-audit service simultaneously for a client cause the occurrence of interest conflict. The interest conflict occurs because the non-audit service fee is higher than audit service. So, auditor prefer to management interest than shareholders. On the contrary, the presence of audit service compel them side with shareholder. Simunic (1984) indicated that auditor who gives audit and non-audit services tend to conceal the bad things from client. Frankel (2002) and Asbaugh et al. (2003) examined the influence of non-audit fee on the level of earnings management on financial statement auditing. The results showed that non-audit fee had significant positive influence on the level of
earnings management. In the same words, the higher the non-audit fee, the higher the level of earnings management in audited financial statement.

**H13**: Non-audit service affects probability of litigation against the auditor positively

### 3. Research Method

1. **Operational Definitions and the Measurement of Variable**

   **a. Auditor litigation**
   
   Auditor litigation in this research has operational definition as the audit engagement and can cause auditor become subject to investigation by the regulators, such as BPKP, Bapepam, IAI, Financial Department and Court. The extension of definition coverage not only restricts the court because of law enforcement in Indonesia also performed by the other parties, such as Bapepam or Financial Department. Bapepam, for example, have authority to do investigation toward the violation cases, which occur in stock exchange. This variable is measured by using nominal scale, 1 for audit engagement causing auditor become subject to litigation; 0 otherwise

   **b. Conservatism**
   
   One of conservatism definition is recognize loss more quickly than gain (Basu, 1997). This variable measure as follows:
   
   \[ \frac{LO_i}{P_{i-1}} = \beta_0 + \beta_1 \text{DUM}_i + \beta_2 \text{RET}_i + \beta_3 \text{DUM}_i \times \text{RET} + \epsilon_i \]  
   
   Where:
   
   \( \text{LO}_i \) is operational income at t period
   
   \( \text{RET}_i \) is stock returns at t period
   
   \( \text{DUM}_i \) is dummy. 1 if returns at j period are negative and 0 otherwise
   
   \( P \) is price at prior period
   
   \( \epsilon_i \) is error term
   
   Slope coefficient of \( \beta_2 \) and \( \beta_3 \) show the responses of market on earnings announcement. \( \beta_1 \) shows the respond of earnings when is down (bad news). According to conservatism, \( \beta_2 + \beta_3 > 0 \). So, coefficient slope ratio is \( \frac{\beta_2 + \beta_3}{\beta_2} \). The ratio measure financial reports conservatism. Ratio more than 1 indicates that accounts in financial report more sensitive to bad news than good news.

   **c. Accrual abnormal**
   
   Accrual abnormal is unusual accrual to detect earnings management. Estimation accrual abnormal use formula as follows:
   
   \[ \frac{\text{AT}_i}{A_{i-1}} = \kappa_0 + \kappa_1 \left( (1+k)\text{PENJ}_i \times \text{PIUT}_i / A_{i-1} \right) + \kappa_2 \text{AT}_{i-1} / A_{i-1} + \kappa_3 \text{GR}_\text{PENJ}_i / A_{i-1} + \epsilon_i \]  
   
   Where:
   
   \( \text{AT}_i \) = accrual total of company i at t period
   
   \( \text{AT}_{i-1} \) = accrual total of company i at t-1 period
   
   \( \text{PENJ}_i \) = revenue at t period minus revenue at t-1 for auditee i
   
   \( \text{PIUT}_i \) = account receivable at t period minus account receivable at t-1 for auditee i
   
   \( \text{GR}_\text{PENJ}_i \) = the rate of revenue growth of client from t to t+1
   
   \( A_{i-1} \) = total auditee’s asset in the end of t-1
   
   \( \epsilon_i \) = error term

   **d. Financial difficulties level**
   
   Financial difficulties is measured by the level of auditee’s financial difficulties. This study uses ZFC score to measure financial difficulties. The formula is as below:

\[ \]
ZFC = -2.99 – 1.02 (ROA) + 3.01 (LEV) + 0.09 (LIK)……………… (3)

Explanation:
ROA is operational earnings ratio divided by total asset
LEV is total debt ratio divided by total asset
LIK is current asset ratio divided by current debt
e. Company Risk of Auditee

Company risk indicates the volatility of share price, which is caused by macro factors, such as the change of exchange rate, the existence of changed macro policy. This risk is commonly called systematic risk. There are two measurements:
a. Beta of Share, measured by using market model, with formulation:

\[ R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \] 

Where:
- \( R_{it} \) is return of company i at period t
- \( R_{mt} \) is market return at period t

b. Beta of industry is measured with formulation:

\[ R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \] 

Where:
- \( R_{it} \) is industry return i at period t
- \( R_{mt} \) is market return at period t

f. Corporate Governance Mechanism is measured by ownership structure and the existence of functional committee.

1. The institution ownership is total share owned by institution. The formula is as follows:

\[ INST = \frac{SHM_{it}}{TOTSHM_{it}} \] 

Where:
- \( SHM_{it} \) = total shareholdings of institution
- \( TOTSHM_{it} \) = auditee’s outstanding share

2. Management ownership is total share owned by management. The formula is as follows:

\[ MANJ = \frac{SHM_{it}}{TOTSHM_{it}} \] 

Where:
- \( SHM_{it} \) = total shareholdings by auditee’s management
- \( TOTSHM_{it} \) = auditee’s outstanding share

3. Audit committee (KM). Dummy. 1 if auditee has audit committee in line with Kep- 41/PM/2003; and 0 otherwise.
4. Independent commissioner (KI). Dummy. 1 if auditee has independent commissioner in line with Kep-315/BEJ/2000; and 0 otherwise.
g. Size is the company’s size. This variable is measured by log of share price times auditee’s outstanding share.
h. Audit quality is the ability of auditor to find overstatement and then disclose it.
\[ SPESLS = \frac{\sum_{j=1}^{J} PEND_{ijk}}{\sum_{k=1}^{K} \sum_{j=1}^{J} PEND_{ijk}} \] .............................(8)

PEND is client revenue for firm at period.

**j. Service Spectrum of Audit Firm.** Service spectrum is that given to an auditee. This variable is measured with nominal scale; 1 if audit firm gives non-audit services beside audit service, and 0 otherwise.

This study use logit *regression* to examine the hypotheses 1 to 13. The model regression is as follows:

\[ LITIG_i = \beta_0 + \beta_1 KM_i + \beta_2 KI_i + \beta_3 MANJ_i + \beta_4 INST_i + \beta_5 KONSR_i + \beta_6 MAKR_i + \beta_7 ZFC_i + \beta_8 BSHM_i + \beta_9 BIND_i + \beta_{10} LMV_i + \beta_{11} SPESLS_i + \beta_{12} LAMA_i + \beta_{13} SJ_i + \beta_{14} THN_i + \beta_{15} CG_i + \epsilon_i \] .............................(9)

Where:

- **LITIG** = Litigation. 1 if audit assignment cause lawsuits against auditors; and 0 otherwise
- **KM** = Audit committee. 1 if auditee has audit committee; and 0 otherwise
- **KI** = Independent commissioner. 1 if auditee has independent commissioner, and 0 otherwise
- **MANJ** = Auditee’s share ownership by management
- **INST** = Auditee’s share ownership by institution
- **KONSR** = Conservatism
- **MAKR** = Accrual abnormal. See equation 3
- **ZFC** = zmijewski score. See equation 6
- **BSHM** = Auditee’s beta share. See equation 7
- **BIND** = Auditee’s beta industry. See equation 12
- **LMV** = Log of auditee’s market value
- **SPESLS** = Audit quality. 1 if auditor has industry Specialization and 0 otherwise
- **LAMA** = the length of auditee – auditor relationship
- **SJ** = service spectrum. 1 if KAP gives audit and non-audit Services to a client, and 0 if KAP only gives audit service
- **THN** = Dummy. 1 if in crisis period; 0 otherwise
- **CG** = Dummy. 1 for period before the mandatory of corporate Governance mechanism; 0 otherwise
- **\(\epsilon\)** = Error term

Based on theoretical and prior research, the research model is as follow:
4. Results

1. Descriptive Statistics

The total of audit assignment sample used in this research is 171, consisting of 93 audit assignments did not cause auditor become subject to litigation (subsequently, it is called non-litigation group), and 78 audit assignments caused auditor become subject to litigation (subsequently, it is called auditor litigation group). Dependent variable used in this research is auditor litigation, which is measured with nominal scale, 1 if audit engagement causes lawsuits against auditors and 0 otherwise.

2. Diagnostic Test

Diagnostic test to detect the existence of multicolinearity, heteroskedasticity, autocorrelation problems, specification error and the fit of logit model.

Diagnostic test is firstly done to detect autocorrelation. The test uses Durbin Watson Test (D-W test). The results show Durbin-Watson value (d_{test}) is 1.93. This value is subsequently compared to that of D-W table. D-W table value is based on the total of research variables used and the total of sample. The model of this research entirely used 15 variables of research. Therefore, the value of D-W at Table Durbin-Watson for k=15 and n=171 is d_{u}= 1.86. the Data didn’t have autocorrelation if d_{u} \leq d_{test} \leq 4-d_{u}. Therefore, for the value of d_{test} = 1.93 it can conclude that research model is free from autocorrelation problem.

The next testing of assumption is heteroskedasticity problem. It used white heteroskedasticity test. This test is stated that if NR^{2} value (total sample times R^{2}) has probability value of more than 5%, so, hypothesis \alpha_{1}=\alpha_{2}=\alpha_{3}=...=\alpha_{n}=0 cannot be rejected. Therefore, the variance of homeskedasticity error the significance value of white test indicates insignificant results (F-stat = 0.87 and p= 0.63). Therefore, Ho cannot be rejected or the heteroskedasticity does not exist.

The specification error test use Ramsey reset-test. The result indicates that F= 1.71 and p = 0.19. Therefore, there is specification error in the research model. The last diagnostic test is multicolinearity test. The results show that the score of tolerance (TOL)
and VIF less than the rule of thumb (for TOL=1, VIF=5). Therefore, the multicollinearity doesn’t exist.

Table 1.
Descriptive statistics of auditee characteristics, auditor characteristics, and the relationship of auditor-auditee characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total sample (n=171)</th>
<th>Non-litigation sample (n=93)</th>
<th>Auditor litigation sample (n=78)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Median</td>
</tr>
<tr>
<td>LAMA</td>
<td>7.28</td>
<td>3.93</td>
<td>8</td>
</tr>
<tr>
<td>KONS R</td>
<td>12.04</td>
<td>1.74</td>
<td>9.85</td>
</tr>
<tr>
<td>ZFC</td>
<td>5.24</td>
<td>1.83</td>
<td>1.93</td>
</tr>
<tr>
<td>LMV</td>
<td>13.83</td>
<td>1.57</td>
<td>13.85</td>
</tr>
<tr>
<td>BSHM</td>
<td>1.31</td>
<td>0.33</td>
<td>1.31</td>
</tr>
<tr>
<td>BIND</td>
<td>0.9</td>
<td>0.36</td>
<td>0.88</td>
</tr>
<tr>
<td>MAN J</td>
<td>0.04</td>
<td>0.11</td>
<td>0.88</td>
</tr>
<tr>
<td>INST</td>
<td>0.63</td>
<td>0.21</td>
<td>0.64</td>
</tr>
<tr>
<td>MAK R</td>
<td>2.24</td>
<td>1.2</td>
<td>2.61</td>
</tr>
<tr>
<td>SJ</td>
<td>0.43</td>
<td>0.5</td>
<td>0</td>
</tr>
<tr>
<td>SPESLS</td>
<td>0.42</td>
<td>0.5</td>
<td>0.00</td>
</tr>
<tr>
<td>KM</td>
<td>0.61</td>
<td>0.49</td>
<td>1.00</td>
</tr>
<tr>
<td>KI</td>
<td>0.52</td>
<td>0.46</td>
<td>1</td>
</tr>
</tbody>
</table>

Where:

KM = Audit committee. 1 if client has formed audit committee and 0 otherwise
KI = Independent commissioner. 1 if auditee has formed independent commissioner, and 0 otherwise
3. The Result of Hypotheses Testing

Table 2. Hypotheses Test Result

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Koefisien</th>
<th>Wald-test</th>
<th>Signifikansi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersep</td>
<td>-3.449</td>
<td>0.606</td>
<td>0.436</td>
</tr>
<tr>
<td>KM</td>
<td>-2.785</td>
<td>4.687</td>
<td>0.05**</td>
</tr>
<tr>
<td>KI</td>
<td>-2.984</td>
<td>10.207</td>
<td>0.000***</td>
</tr>
<tr>
<td>MANJ</td>
<td>-0.016</td>
<td>0.084</td>
<td>0.689</td>
</tr>
<tr>
<td>INST</td>
<td>0.05</td>
<td>0.262</td>
<td>0.772</td>
</tr>
<tr>
<td>KONSR</td>
<td>-7.549</td>
<td>8.999</td>
<td>0.003***</td>
</tr>
<tr>
<td>MAKR</td>
<td>1.34</td>
<td>10.595</td>
<td>0.001***</td>
</tr>
<tr>
<td>ZFC</td>
<td>0.085</td>
<td>7.971</td>
<td>0.005***</td>
</tr>
<tr>
<td>BSHM</td>
<td>2.088</td>
<td>9.134</td>
<td>0.003***</td>
</tr>
<tr>
<td>BIND</td>
<td>2.208</td>
<td>10.330</td>
<td>0.001**</td>
</tr>
<tr>
<td>LMV</td>
<td>0.109</td>
<td>0.258</td>
<td>0.611</td>
</tr>
<tr>
<td>SPESLS</td>
<td>-3.907</td>
<td>9.065</td>
<td>0.003***</td>
</tr>
<tr>
<td>LAMA</td>
<td>0.018</td>
<td>7.016</td>
<td>0.008***</td>
</tr>
<tr>
<td>SJ</td>
<td>5.522</td>
<td>27.243</td>
<td>0.000***</td>
</tr>
<tr>
<td>THN</td>
<td>0.107</td>
<td>0.026</td>
<td>0.873</td>
</tr>
<tr>
<td>GC</td>
<td>-0.788</td>
<td>1.423</td>
<td>0.233</td>
</tr>
<tr>
<td>IMR</td>
<td>0.172</td>
<td>0.257</td>
<td>0.612</td>
</tr>
</tbody>
</table>

| Cox & Snell $R^2$ | 0.606 | Chi-square | 159.156 |

Where:

*** significant at 1%  **significant at 5%   *significant at 10%

The result of testing indicates that $H_0.1$ is rejected at the significance level of 5%. Therefore, the hypothesis of research stating that audit committee owned by auditee has negative influence on probability of auditor become subject to litigation is supported. This result indicates that the existence of audit committee of auditee makes auditor more careful to perform his task especially in giving audit opinion.

Hypothesis 2 states that the existence of independent commissioner has negative influence on auditor litigation. The result of this testing indicates that $H_0.2$ is
rejected at significance level of 1%. Therefore, it can conclude that the existence of independent commissioner actually can reduce probability lawsuits against auditors. The result of this research indicates that the existence of independent commissioner in public company gives the significant influence on the level of auditor litigation. This matter relates to the independent task of commissioner to monitor all management activities including the management policy in financial statement.

The result of testing of hypothesis 3 indicates that $H_0.3$ cannot be rejected. Therefore, hypothesis of research stating that share ownership by management has negative influence on probability lawsuits against auditors cannot supported.

This hypothesis states that share ownership of auditee owned by institution has negative influence on auditor litigation. The result of testing of hypothesis 4 indicates that $H_0.4$ cannot be rejected because institution (INST) coefficient is statistically not significant (P>10%). Therefore, the hypothesis of research stating that share ownership of auditee by institution has negative influence on probability lawsuits against auditors.

Hypothesis 5 is tested by using the equation of logit regression. The results indicate that coefficient of conservatism (KONSR) is negative and statistically significant (p<1%). Therefore, $H_0.5$ is rejected. The result of this analysis indicates that conservatism has negative influence on probability of lawsuits against auditors. This result supports the previous research stating that conservatism of financial statement is used to anticipate the risk litigation (Gul et al. 2002).

Hypothesis 6 is developed based on the existence of positive influence of accrual abnormal on probability of lawsuits against auditors. This means, the higher the accrual abnormal, the higher the probability that auditor will be sued. The result is consistent with H6. Therefore, $H_0.6$ is rejected. The result indicates that the influence of accrual abnormal (MAKR) is statistically significant (p<5%). The result also supports the previous research (Heninger 2001).

Hypothesis 7 stated that financial difficulties level has positive influence on probability of lawsuits against auditors. The result of hypothesis testing generates coefficient of score zmijweski (ZFC) is positive ($\beta_7=0.08$) with the probability value of 0.014. Therefore, at significance level of 5%, $H_0.7$ is rejected. This empirical evidence support hypothesis of research stating that the higher the level of financial difficulties, the higher the probability of lawsuits against auditors.

The result of logit regression to examine hypothesis 8 generates coefficient of company risk (BSHM) of 2.519 with significance rate of 0.001. With this result, the hypothesis of research stating that company risk of auditee has positive influence on probability lawsuits against auditors is supported at significance level of 1%. Therefore, $H_0.8$ stating that company risk of auditee does not have influence on probability of lawsuits against auditors is rejected.

The result of analysis at this hypothesis indicates that $H_0.9$ is rejected. Therefore, the hypothesis of research stating that industry risk of auditee has positive influence on probability lawsuits against auditor is supported. This conclusion based on the result of analysis that result in the coefficient of industry risk (BIND) is positive and statistically significant (p=0.001). With this result, the higher the industry risk, the higher the probability of litigation against auditor.

This hypothesis states that company size has positive influence on auditor litigation. The result of hypothesis testing indicates that coefficient of company size (LMV) indicates insignificant (p=0.362). Therefore, $H_0.10$ cannot be rejected.

The result of testing of hypothesis 11 is statistically significant and supported. Coefficient of audit quality (SPESLS) indicates the positive and significant (p=0.007). With this result, $H_0.11$ is rejected. The result of this research supports Heninger (2001). Beside that, this research also supports Pamrose (1984) that is suggested that lawsuits case nonbig audit firms more than big audit firms.

The analysis of hypothesis 12 shows that the audit firm tenure statistically significant affects probability of lawsuits against auditors ($\beta_{12}=0.037$, p=0.001). Therefore, $H_0.12$ stating the audit firm tenure does not affect the probability of lawsuits
against auditors is rejected. The result of this research indirectly supports the previous research that there is significant correlation between the length of auditor relation and earnings quality reported (Chi, 2004).

The result of testing hypothesis 13 indicates that the signal of coefficient of non-audit service (SJ) is positive and statistically significant ($\beta_{13}=5.299$, $p=0.000$). This result indicates that $H_{0.13}$ is rejected. Therefore, the hypothesis of research stating that the non-audit services affect probability of lawsuits against auditors, is supported. This result indicates that the probability of lawsuits against auditors is higher for auditor who gives non-audit service.

Classification power of the research model shows in Table 3 below.

**Table 3. The Classification Power of Research model**

|                        | LITIG it = $\beta_0 + \beta_1$KM it + $\beta_2$KL it + $\beta_3$MANJ it + $\beta_4$INST it + $\beta_5$KONSR it + $\beta_6$MAKR it + $\beta_7$ZFC it + $\beta_8$BSHM it + $\beta_9$BIND it + $\beta_{10}$LMOV it + $\beta_{11}$SPESLS it + $\beta_{12}$LAMA it + $\beta_{13}$SJ it + $\beta_{14}$THN it + $\beta_{15}$CG it + $\epsilon_i$ **
<table>
<thead>
<tr>
<th></th>
<th><strong>Detailed variable see Table 1.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number correct prediction</td>
<td>Correct percentage</td>
</tr>
<tr>
<td>Nonlitigation classification power</td>
<td>89 of 93</td>
</tr>
<tr>
<td>Auditor litigation classification power</td>
<td>70 of 78</td>
</tr>
<tr>
<td>Classification power</td>
<td>159 of 171</td>
</tr>
</tbody>
</table>

As shown in Table 3, the classification power of research model is 93%. This power is more than prior research such as Lys and Watts (1994) or Palmrose (1987). This result suggests that the research model can predict probability lawsuits against auditor better than prior research.

5. Conclusion, Limitation and Contribution

This study investigates the influence of several factors on auditor litigation. Several factors are partitioned as client characteristics, auditor characteristics and the relationship between auditee-auditor characteristics. The results suggest that three characteristics significantly influence on auditor litigation except for firm size and the ownership structure.

There are some limitations in this study. First, this study only use audit engagement for public manufacture firms. Second, the period observation is limited from 1996 until 2003. The two limitations may be effect on generalization of the results.

This research is hopefully useful for regulator, such as Accountant Public Compartment (KAP). We hope the results can use as a guide to predict auditor litigation risk for accepting an audit engagement and then can anticipate it to decrease the risk. As Pratt and Stice (1994) suggested that auditor litigation risk prediction would influence on audit program, fee audit and audit evidence. Seetharaman, Gul and Lynn (2002) also show that the prediction risk of auditor litigation influence on fee audit to anticipate litigation cost.

REFERENCES


Undang-Undang Pasar Modal nomor 8 tahun 1995


