Conference Paper

Audit Specialization and Audit Quality: The Role of Client’s Business Strategy

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Abstract

This study examines how client business strategies moderate the relationship between specialist industry auditors and audit quality. The results show that auditor specialization negatively affects the audit quality, and client’s business strategy negatively affects (weakens) the negative relationship between auditor specialization with auditor quality. These test results support the hypothesis of reduced knowledge gap.

Keywords: audit specialization, audit quality, business strategy

1. Introduction

Several studies have documented that industry-specific audit can provide higher quality audit services (see [26, 30, 36]). However, there is little evidence that show how client characteristics moderate the effects of industry specialization on audit quality.

Previous research has found that business strategy is an important determinant of audit quality. For example, a survey conducted by Dichev et al. (2013) of 169 CFOs of public companies and in-depth interviews to 12 CFOs, found that business strategy (business model) is the most affecting factor of earnings quality. The better the profit quality, the better the audit quality. Hence it can be said Dichev et al. (2013) suggests that business strategy is the most influencing factor on audit quality.

Bentley et al. (2013) using the typology of business strategy Miles et al. (1978), found that the type of prospector business strategy more frequently involved in the financial reporting irregularities, so that generally require greater audit effort. Several other studies have also proposed that strategic risk is an important component in the business risk audit model [9] and the main purpose of analytical procedures performed by the auditor is to understand the client’s business [15]. The linkage between this strategy and audit, resulting in international and Indonesia audit standards requires the
auditor to gain an understanding of the client’s strategy and audit risk when conducting
the audit plan (International Standards on Audit (ISA) 315 and Standards Audit (SA) 315).

According to SA 315, the identification and assessment of risk of material misstatement
errors through an understanding of the entity and its environment, it is necessary to identify
and assess whether the risks of material misstatement in financial statements and assertions
are due to fraud or errors. Included in the understanding of the entity and its environment
is, an understanding of the goals and strategies of the entity, as well as related business
risks that may pose a risk of material misstatement.

This research objective is to examine how client business strategies moderate the
relationship between specialist industry and audit quality. The client’s business strategy
will be measured by two constructs, the strategy typology of Miles et al. (1978),
and client’s deviate strategy (deviant strategy).

Miles et al. (1978) divides the client strategies into four types, defender, analyzer,
prospector and reactor. Each type has different characteristics, affecting the way a
company can compete with its competitors. Bentley et al. (2013) found that prospector
types firm tend to be oriented to the things that are at risk, so it requires a greater audit
effort. Meanwhile, defender type company requires audit effort is lower because the
characteristics of companies that have a low complexity and risk.

Deviant strategy represents the extent to which different client business
strategies or deviate from the strategy of the industry in general [12, 33]. According to neo-
institutional theory, companies following normal industry strategy will gain legitimacy,
gain access to external sources, reduce performance uncertainty, and improve survival
[22, 33]. However, if the manager ambitious or too confident, it is possible for the firm
to not the same as the trend of the industry in general, and adopted deviant strategy
to achieve the desired performance, that is, getting a big win [34]. This gives rise to
the diversity of the company’s business strategy in the same industry (intra-industry).

Deviant strategy that was implemented by client can influence positively or nega-
tively on the auditor’s knowledge of specialists. Is said to be negative if the deviant
strategy that was applied by client reduces the advantages of specialization of knowl-
edge possessed by the auditor, this is because the auditors’ specialist industry knowl-
edge and experience only accumulated by the company’s normal strategy (not a
deviate strategy or deviant). Hence, this causes both auditors specialists and non-
specialists do not have specific knowledge related to extreme industrial strategy
(support the hypothesis of reduction in the knowledge gap – the reduced knowledge
gap hypothesis) (Yuan, Cheng, and Ye, 2012).
However deviant strategy can also be said to be a positive influence, if deviant strategy that was implemented by clients improve industry specialist auditors advantage compared to non-specialists. This is because, the auditor’s specialty has audited numerous clients from the same industry, so when faced with clients with extreme strategies, specialist auditors will be more aware of the extreme strategies that clients implement than non-specialist auditors. Solomon, et al. (1999) also found that auditor specializations may better assess business or risk-related strategies than non-specialist auditors. Low (2004) found that auditor specializations would be better at understanding the risk of high-risk audit contracts than non-specialist auditors. And when a client has an extreme strategy, specialist auditors will be easy to find or use industry benchmark (industry benchmark) in assessing the appropriateness of accounting policies and procedures applied to the client. From these reasons, the deviant strategy that was applied to the client will relatively increase the advantage or knowledge gaps auditor specialization compared to a non-specialist (to support the hypothesis enlarge the knowledge gap – the enlarged knowledge gap hypothesis).

Chi and Chin (2011) proposed that the influence of the industrial auditor’s expert was primarily due to the level of partners not the industry specialization at the level of the public accounting firm. Regulation of the Minister of Finance No. 17 of 2008, Article 36, has required all public accounting firms to submit reports on business activities. In the report of business activities can be known the number and type of client industry handled each partner. Therefore, in this study, the constructs of auditor specializations are viewed from the audit firm level and partner level.

DeAngelo (1981) defines audit quality as the ability to detect and report material mismanagement of financial statements, which depends on the independence of the auditor. The higher the quality of audit then reflects the higher ability of auditors in detecting the existence of earnings management action. This indicates that the audit quality will decrease the company’s tendency in earnings management. Earnings management activities can be measured using discretionary accruals. Because of the level of earnings management reflects the quality of the audit, thereafter audit quality in this study will be measured using discretionary accruals. Measuring the quality of audits using discretionary accruals have been carried out by other researchers [3, 5, 6, 18, 20, 38].

Research conducted by Yuan, Cheng, and Ye (2016) found that specialization auditor at partner level was significantly negatively associated with upward earnings management conducted by client (earnings management is proxied by discretionary accruals).
And specialist industry influence is greater when the client’s business strategy deviates from the normal strategy of the industry, this is consistent with the enlarged knowledge gap hypothesis.

As far as the author’s knowledge, research related to auditor specialization has been widely performed in Indonesia [1, 14, 17, 27, 28]. And the auditor specialization relationship with audit quality (as measured by discretionary accruals) has been investigated by Setiawan and Fitriany (2011), Novianti, Sutrisno and Irianto (2012), and Wahyuni and Fitriany (2012). However, no one has examined the role of client strategy moderation toward the relationship between auditor specialization and audit quality.

This study examines the role of moderation of client’s business strategy toward the influence of auditor specialization on audit quality in Indonesia with reference to research conducted by Yuan, Cheng, and Ye (2016), and then adds strategy typology Miles et al. (1978) in the process of testing and analysis. So, this study has three main contributions. First, this study provides evidence of the role of client strategy moderation to the auditor’s specialist relationship with audit quality, and this will certainly enrich the literature in accounting management research as well as audit quality research in Indonesia. Second, this study analyzes the role of client strategy moderation seen from the typology of Miles et al. (1978), which is the type of defender and prospector. And thirdly, in measuring the specialization of this research auditor uses data from the Center for Professional Finance Development, Secretariat General – Ministry of Finance of the Republic of Indonesia. Hence, the number of clients for each public accounting firm and partner reflects the true state of affairs, not just public companies.

2. Hypothesis Development

2.1. Agency theory

Jensen and Meckling (1976) argued that the agency relationship (agency relationship) is a contract in which one or more persons (the principal) conduct the engagement/contract with another person (the agent) that the agent will act in the interests of the principal by giving authority to the agent in decision-making. If each party wants to maximize its own utility, then it is possible the agent will act to maximize his utility, not the best utility for the principal. To limit the possibility of the occurrence of this deviation, the principals create an incentive for agents and also incurred costs for surveillance (monitoring) to limit the actions of the agent.
If a company is considered as collection of contracts (‘nexus of contracts’), then there is a need to exercise oversight over the entire contract. In this case, accounting and auditing play a role in contract supervision. For example, the company’s external auditor engages with the creditor to report a breach of the debt agreement, and often audited earnings figures serve as the basis for bonus calculations [37].

2.2. Audit quality

DeAngelo (1981) defines audit quality as the ability to detect and report material misrepresentation of financial statements. The auditor’s ability to find this error depends on the auditor’s technological capabilities, the procedures applied in the audit process, the number of samples taken, etc. While the conditions under which the auditor will report an error, are a measure of the auditor’s independence of the client being audited. Implementing the audit engagement and the likelihood of the auditor expressing the error is difficult for external observers to observe. Therefore, an indicator is needed that reflects the quality of the audit. The proxy used to measure audit quality varies. DeAngelo (1981) proposed size of the auditors (auditor size) as a measure of audit quality. While Carey and Simnet (2006) proposed the possibility of the auditor stated in the company going concern issues that threatened bankruptcy, the number of abnormal working capital accruals, missing earnings as a measure of audit quality benchmarks.

Measuring the quality of audit the most used is *discretionary accruals* [3, 6, 13, 30, 38]. Discretionary accruals can be a measurement of the quality of audits, because the higher the auditor’s ability to find deviations (auditor competence of high-quality high audit) the lower the tendency of clients to conduct discretionary accruals. The lower value of discretionary accruals showed good quality of earnings.

2.3. Auditor specialization

Specialization has an important role in improving effectiveness and efficiency. Industrial specialization refers to the accumulation of specific knowledge gained from serving many clients in the same industry [13]. Solomon, Shields and Whittington (1999) define the auditor’s specialty as the person assigned to his company and obtain training and experience of audit practices in a particular industry. Industrial specialization auditors also tend to invest more in staff training and technology related areas of their specialty, such investments will improve the quality of the resulting audit [35]. Due to
his experience and expertise, the auditor’s specialization is more understanding of the client’s business.

According to Arens et al. (2011: 237), a specialist auditor is an auditor who has a deep understanding (knowledge) and long experience of the client’s specific business and industry, knows the operations of the company, and knows the specific rules on accounting and auditing for that specific industry. Because the business and industry conditions of the client can affect the client’s business risk and the risk of misrepresentation of financial statements.

2.4. Auditor specialization and audit quality

Previous research has examined a great deal about the relationship between auditor specialization and audit quality. Solomon et al. (1999) conducted an experiment to find out the knowledge of the specialist auditors of health and financial industry clients. Knowledge is the knowledge of error information and non-error in the financial statements. Solomon et al. (1999) indicates that specialist auditors have more accurate knowledge of non-error information than errors in financial statements. Low (2004) found that the knowledge that auditor specialization has on the client industry can improve the ability of risk assessment and directly influence the quality of decisions in audit planning.

Audit quality performed by auditor specializations is also better than non-specialist auditors because they are capable of detecting errors and irregularities, and this difference is more noticeable in the early years of engagement [13]. Chi and Chin (2011) find that auditor specialization affects audit quality, and the influence of individual-level specialist auditors within the same Firm, is variable. Recently, research that uses surveys and interviews conducted by Sarwoko and Agoes (2014) to 163 public accountants in Indonesia, found that specialization auditors have a significant impact on the implementation of audit procedures used to detect fraud, and it can improve the quality of audits. Therefore, we propose the hypothesis in the alternative format as follows:

H1: specialization auditor positive effect on audit quality.

2.5. Business strategy

Simons (2000) defines business strategy as a way that companies use to compete in a particular product market. In developing its business strategy, managers must analyze
and understand (1) the dynamics of competition in the industry, and (2) the capabilities and resources of the company. After understanding the capabilities and internal resources, then the next manager should be able to control the various dimensions of the strategy, which is reflected in the 4P (perspective, position, plans and patterns of actions taken).

Various management-related literatures have cited several classifications of business strategies used in explaining how firms compete in their business. Langfield-Smith (1997) has grouped its business strategy into three dimensions: the typology of strategy (strategic typology), the strategic mission (strategic mission) and strategic positioning (strategic positioning). Typology of strategy in question is typology Miles et al. (1978), namely defenders, prospectors, analyzers, and reactors. Strategic mission refers to the strategy proposed by Gupta and Govindarajan (1984), namely the type of build, hold, harvest and Divest. And strategic positioning refers to the strategy proposed by Porter (1980, 1985) cost leadership, differentiation and focus.

Several recent studies [11, 12, 24, 33] have proposed one way to conceptualize corporate strategy is to see how far different corporate strategy with similar industry firm strategy on generally. Finkelstein and Hambrick (1990) called dimensional conformity strategy (strategic conformity).

Geletkanycz and Hambrick (1997) in examining the effect of the external environment on the organization and performance of the company’s strategy, measure the strategic conformity applied by the company using the method that was developed and has been validated by Finkelstein and Hambrick (1990). It will first identify the pattern of the company’s actions in allocating its resources. Pattern or indicators that used are advertising intensity, capital intensity, plant and equipment newness, R & D intensity, overhead efficiency, and financial leverage. Advertising intensity, capital intensity, plant and equipment newness, and R & D intensity are indicator of the allocation and control of resources companies through marketing activities, innovation and capacity expansion. Overhead efficiency describes the company’s cost structure and financial leverage reflects capital management approach of the company. From all these indicators will then be calculated composite value. If the composite value of a company differs significantly from the industry in general, then it can be said that the company is implementing a different business strategy or deviating from the industry strategy in general. Deviate strategy that applied by the company is called deviant strategy [12, 33].

According to neo-institutional theory, companies following normal industry strategy will gain legitimacy, gain access to external sources, reduce performance uncertainty,
and improve survival [22, 33]. However, if the manager ambitious or too confident, it is possible for company to not the same as the trend of the industry in general, and adopted deviant strategy to achieve the desired performance, that is, getting a big win [34]. This gives rise to the diversity of the company’s business strategy in the same industry (intra-industry).

2.6. Specialization auditors, audit quality and client business strategy

Dichev et al. (2013) surveyed 169 CFOs of public companies and in-depth interviews to 12 CFOs in the United States to determine what factors affect the quality of earnings. Of the 14 factors asked in the survey, the study found that the business strategy (business model) of the company is the most affecting factor of earnings quality. The better the quality of profit, the better the audit quality. Hence, it can be said research Dichev et al. (2013) suggests that business strategy is the most influencing factor on audit quality.

Bentley et al. (2013) has been conducting research on the effect of business strategies on the occurrence of financial reporting irregularities, as well as to test whether the company’s business strategy is a determinant of audits (audit effort). Using the business strategy typology proposed by Miles et al. (1978), this study found that the more often a prospector-type strategy involved in the financial reporting irregularities, so that generally require greater audit effort.

Several other studies have also suggested that strategic risk is an important component in the business risk audit model. As the study conducted by Eilifsen et al. (2001) suggesting that the auditor should now be able to analyze the client’s business risk more comprehensively. The auditor should be able to link knowledge of client strategy, competitive advantage, and client business risk in order to be able to assess the fairness of the client’s financial statements. Survey conducted by Hirst and Koonce (1996) on 36 professional auditors at Big-6 Public Accounting Firm in America also stated that the main purpose of the auditor’s analysis procedure is to understand the client’s business. This linkage between the strategy and the audit, resulting in international audit standards and Indonesia requires the auditor to gain an understanding of the client’s strategy and audit risk when conducting the audit plan (International Standards on Audit (ISA) 315 and Standards Audit (SA) 315).

In its operations, the client can apply the appropriate or normal business strategy applicable in the industry. But sometimes clients apply different business strategies (deviate) from the prevailing common strategy in its industry, this is certainly done in
order to gain more benefits than competitors in the industry. When clients implement strategies that deviate, then the client is said to apply deviant strategy.

In theory, the influence of deviant strategy on the relationship between specialization auditors with audit quality is ambiguous. Deviant applied strategy may adversely affect the client if the strategy is not to reduce the gap of knowledge possessed by the auditor specialization. This is because the auditor’s specialty can only accumulate knowledge and experience for companies that perform normal industry strategies. This leads to both auditors’ specialists and non-specialists do not have specific knowledge related to extreme industrial strategy [38]. Hence, we propose the hypothesis in the alternative format as follows:

H2a (*the reduced knowledge gap hypothesis*): A positive relationship between specialization auditor to audit quality will be weakened by the deviant strategy that was applied to the client.

On the other hand, deviant strategy can be a positive influence, with the following reasons. First, since auditor specializations audit clients from the same industry, when faced with clients with extreme strategies, auditor specializations will gain more understanding than non-specialist auditors. Second, the existing literature finds that auditor specializations can better assess business or risk-related strategies than non-specialist auditors [32]. Thirdly, Low (2004) found that auditor specializations would be better at understanding the risk of high-risk audit contracts than non-specialist auditors. Clients with deviant strategies tend to experience extreme performance [34], so in analyzing corporate risk with deviant strategies, auditor specializations will work better than non-specialist auditors.

The fourth reason, when a client has a strategy to the extreme, non-specialist auditors will have difficulty in finding or using benchmark industry (*industry benchmark*) in assessing the appropriateness of accounting policies and procedures applied to the client. Unlike non-specialist auditors, the auditor specialization will easily understand the client’s strategy because it can search for industry references based on prior audit experience. And the fifth reason, clients with deviant strategies also tend to be exposed to information asymmetry problems because outsiders find it difficult to understand the business strategy and business model. From these reasons, the deviant strategy that was applied to the client will be relatively enlarge the gap of knowledge and specialization of auditors and non-specialists.

Yuan, Cheng and Ye (2016) have examined the relationship between client’s business strategy and audit quality from auditor specializations. By using a public company...
listed in China during the period 2000 to 2010, the study found that the auditors at the level of partner specialization significantly negatively related to the profit improvement management (upward earnings management) that do client (earnings management is proxied by discretionary accruals). And specialist industry influence is greater when the client’s business strategy deviates from the normal strategy of the industry, this is consistent with the enlarged knowledge gap hypothesis. So we propose the hypothesis in the alternative format as follows:

H2b (the enlarged knowledge gap hypothesis): A positive relationship between specialization auditor to audit quality will be reinforced by a deviant strategy that is applied to the client.

In order to correctly identify a company’s entry into which strategy category, a study should conduct a personal interview and survey to the company’s management. But research Ittner et al. (1997) and Bentley et al. (2013) has proven the typology of Miles et al. (1978) can be operated using archive/secondary data. Therefore, the results of research can be generalized to many companies and industries.

Miles et al. (1978) classifies the business strategy into four types, namely defenders, prospectors, analyzer, and reactor. Grouping these business strategies based on the level of changes in a company’s product or market. Type defenders, is a business strategy that has not varied types of products and has few products in the market (the market is still growing). Critical functionality that can support the company’s success is the financial, production and engineering with a low emphasis on marketing and research and development (research and development – R & D). The functional organizational structure reflects product, market and technology specialization. Meanwhile, prospectors type described the firm who continuously look for opportunities in the market and have become the creators of change and uncertainty for competitors. Marketing and R & D functions dominate the financial and production function, so efficiency and profit performance are not overly concerned. The company focuses on innovating to remain a leader in the industry. And the type of analyzer combines the strength characteristics that exist in this type of defenders and prospectors. For the type of reactor, this type is not widely studied in the research, because it is a type of organization that is not a successful strategy, and his character is difficult to identify.

Bentley et al. (2013) in researching the influence of business strategy on the occurrence of financial reporting irregularities, and test whether the company’s business strategy is a determinant of audits (audit effort) use business strategy typology proposed by Miles et al. (1978). Type tested strategy is the type prospector, defender
and analyzer. The third strategy is positioned as a continuum, where both types of prospector is located at one end and the type of defender at the other end, whereas the type of analyzer is in the middle. In his research, Bentley et al. (2013) proposed type of clientele prospector require audit effort is greater, this is due to the type of prospector oriented to things at risk, tend to have lower profitability, and the company of this type also have some risk characteristics (such as rapid growth, instability organization, and complexity). On the other hand, Bentley et al. (2013) proposed the type of clientele defender require audit effort is lower, this is because the companies of this type have characteristics fewer risks (such as less risk-oriented focus, tend to have profitability, be careful and have a pattern of growth, and complexity lower) compared with the type of prospectors. And the results of research Bentley et al. (2013) found that prospectors type strategy requires greater audit effort.

Bentley et al. (2013) construct a composite value to measure strategy. If the value of the composite shows a high value then the company is categorized types of strategies prospectors, whereas if the value of the composite shows a low value then the company is categorized types of strategies defenders. Because the types of strategies prospector were more likely to take risks, then we propose strategies client (type prospector) strengthen the positive relationship between specialization auditor to audit quality. Types of strategies prospector can strengthen the relationship, because specialization auditor has the advantage of knowledge that can help in analyzing the client’s risk strategy undertaken. Therefore, we proposed a hypothesis in the alternative form as follows:

\[ H_3a \text{ (the enlarged knowledge gap hypothesis): A positive relationship between specialization auditor to audit quality would be enhanced by strategies prospector applied to client} \]

Conversely, since the type of defender strategy is less likely to take risks, we propose that the client strategy (defender type) weakens the positive relationship between auditor specialization and audit quality. This type of defender strategy can weaken the relationship, because the auditor’s specialty has no knowledge advantage that can help him in analyzing the strategies the client performs. The knowledge that auditor specialization possesses is just a knowledge of the normal strategies that apply in the industry. For this argument, we propose the hypothesis in the following alternative form:
H3b (the reduced knowledge gap hypothesis): A positive relationship between auditor specialization and audit quality will be weakened by the client’s defender strategy.

3. Research Methodology

3.1. Research framework

The research model underlying this research can be seen in Figure III.1.

From Figure III.1. It is seen that this study would like to examine the relationship between auditor specialization and audit quality. And want to test how the client’s business strategy moderate the relationship between auditor specialization with audit quality.

3.2. Empirical model and research variables

The purpose of the empirical model to be elaborated below is to test the research hypotheses described in the previous section. Where in the empirical model, all independent variables and control variables allegedly affect the dependent variable are
included together to see the influence of each independent variable to the dependent variable. Here is an empirical model tested:

$$DA_{it} = \alpha_0 + \alpha_1 FIS_{it} + \alpha_2 PIS_{it} + \alpha_3 DS_{it} + \alpha_4 DS * FIS_{it} + \alpha_5 DS * PIS_{it} + \alpha_6 STRAT_{it} + \alpha_7 STRAT * FIS_{it} + \alpha_8 STRAT * PIS_{it} + \alpha_9 IND_{it} + \alpha_{10} SIZE_{it} + \alpha_{11} LEV_{it} + \alpha_{12} ROA_{it} + \alpha_{13} AGE_{it} + \alpha_{14} BIG_{it} + \epsilon_{it}$$

Description:

$$DA_{it} =$$ discretionary accruals company i in year t  
$$FIS =$$ spesialisasi auditor level industry company – firm industry specialist  
$$PIS =$$ spesialisasi auditor level industry company – partner industry specialist  
$$DS =$$ deviant strategy applied to the client  
$$STRAT =$$ the type of strategy that applied the client  
$$IND =$$ type of client industry (more Participatory = 1, and mining = 0)  
$$SIZE =$$ the size of the client  
$$LEV =$$ leverage clients  
$$ROA =$$ return on assets  
$$AGE =$$ age of client company  
$$BIG =$$ audited by a public accountant Big property (yes = 1 no = 0)

3.3. Variable measurement

3.3.1. Dependent variables

Qualified auditors have the competence to be able to detect financial statement errors and do not hesitate to report these errors because they have high independence. Therefore, the company (client) will tend to avoid the action of earnings management. This indicates that the audit quality will decrease the company’s tendency in earnings management. Many studies have found that high levels of discretionary accruals indicate a profit manipulation. Therefore, the level of discretionary accruals is related to audit quality [3]. Audit quality measurements using discretionary accruals have been largely undertaken by other researchers [3, 5, 6, 18, 20, 38].
The discretionary accrual used in this study was measured using the Kaznik (1999) model. The choice of this model is because, Siregar and Utama (2008) have found that the adjusted value of Kaznik (1999) model is better than Jones (1991) model, Dechow et al. (1995) and Kothari (2005).

3.3.2. Independent variable

Auditor specialization

Chi and Chin (2011) suggested that the effect of specialization auditor to audit quality, it can be seen from a public accounting firm (‘KAP’) and partner level. Minister of Finance Regulation No. 17 of 2008, Article 36, has required all public accounting firms to submit reports on business activity. In the report, those activities can know the number and type of industry clients handled by each of the firm as well as the audit partner for the entire engagement (not only public companies). Therefore, in this study, the construct of the auditor’s specialist industry seen from the level of the company – KAP (FIS) and partner level (PIS). Variable FIS and PIS is a variable dummy, which is worth 1 if an auditor specialization, and 0 otherwise.

Specialization auditor measured using two ways. First, follow the Yuan, Cheng, and Ye (2016) categorize as industry specialists, if the firm or partner has the largest market share in a particular industry. Secondly, categorize as specialization auditor, if the firm or the partner in charge of the particular market share. Market share is calculated based on the number of clients who owned the firm or partner divided by the total client in a particular industry. Setiawan and Fitriany (2011) categorize a specialist if the firm controls 10% of market share. While Herusetya (2009) followed Krishnan (2003), categorize the firm as a specialist if it controls 15% of market share.

From the data analysis, it appears that during the observation period, the five highest category of audit firm in industrial agriculture has a market share which ranged between 4.62% and 18.45%. And in level partner, the five highest partner category in industrial agriculture has a market share which ranged between 2.41% and 6.91%. And for industrial mining, the five highest audit firm has a market share which ranged between 4.56% and 24.25%. And the five highest partner has a market share which ranged between 3.17% and 10.43%. Therefore, this study takes the discretion to take the 10% threshold for categorizing level of specialization auditor firm (FIS) and the 5% threshold for categorizing the level of partner specialization auditor (PIS).
Client business strategy

Following Tang, Crossan and Rowe (2011), we define deviant strategy (DS) as the deviation strategy adopted by the company compared to other companies in the same industry. Consistent with previous studies [34, 38], we measure corporate strategy by looking at the pattern of allocation of available resources (from the report the company’s financial position). Specifically, the company’s strategy is measured by using six indicators, namely (1) advertising intensity (load sales/sales), (2) R&D intensity (intangible assets/sales), (3) capital intensity fixed assets/number of employees), (4) plant and equipment newness (net of plant and equipment/gross plant and equipment), (5) overhead efficiency (load administration/sales), and (6) financial leverage (total liabilities/book value of equity).

To construct the measurement of deviant strategy, we will standardize each indicator strategy for all companies in the industry and the same year (each value indicators of the strategy will be reduced with the industry – year mean value, and then divided by the value of industry – year standard deviation for each group indicator strategy) and then calculate the absolute value of the score which has been standardized. The final value of the composite deviant strategy will be calculated by averaging the value of all the six indicators of the strategy.

As for the type of measurement construct clients’ business strategy (STRAT), whether the kind of prospector or defender (typology of Miles et al. (1978)). This study follows the measurements were made by Bentley et al. (2013). First will be measured metrics strategies include: (1) the ratio of R&D costs to sales, (2) the ratio of workers to sales, (3) the sales growth (percentage change in the total sales in year \( t \) to the year \( t-1 \)), (4) the ratio marketing costs to sales, (5) fluctuations workers (standard deviation of total workers), and (6) capital intensity (PPE net divided by total assets). Each company will calculate the average value of the whole year of observations for each indicator.

Subsequently, we will create an order (ranking) the average value of each indicator for a company of samples. Ranking will be divided by five (quantile), where the highest quantile first will get a score of 5, the second highest quantile would receive a score of 4, and so on so that the lowest quantile would receive a score of 1. This grouping is done for all indicators. Then, each company will be calculated a composite score results from the sum of values per indicator. Therefore, it will come by the range of the highest composite score is worth 30 and the lowest is worth 6. Bentley et al. (2013) defines a
company that has a value between 6–12 are the type of defenders, a value between 13 and 23 are the type of analyzers, and 24–30 is the type of company prospector.

3.3.3. Control variables

To ensure that the quality is affected by the auditor industry specialization and moderated by client strategy, then we insert some other variables that have been tested affect audit quality. Client size (SIZE) are included in the model because previous research has found that the bigger the client will improve the quality of the audit [38]. SIZE is measured by the value of the natural logarithm of the total assets of the client. Leverage (LEV) is measured by the ratio of the value of total liabilities divided by total assets. Company with a high leverage has high incentive to increase the value of earnings (earnings management) in order to avoid breaching debt covenants [37].

Return on assets (ROA) is net income divided by the value of the total assets value. Value of discretionary accrual generally positively related to accounting performance [6, 18]. Therefore, this research is enter ROA to control the effects of the company’s performance. While the company’s age (AGE), is a measure of how long a client company has been listed on the Indonesia Stock Exchange. Age of companies included in the model in order to control the effects of the company’s life cycle over the discretionary accruals. And lastly, to control the size of the auditors, we included dummy variables BIG (rated 1 if audited by the Big-4 accounting firm, and 0 otherwise). Because previous studies have proposed the greater the auditing firm the better the quality of audits produced [7].

3.3.4. Sample and data

The population used in this study includes companies listed on the Indonesian Stock Exchange (BEI) during the period 2012–2014, which is based on the industrial sector grouping BEI entered in the category of agriculture and mining. Both types of industries have been to see the differences in the characteristics of the industry. And report business activity to be reported public accounting firms with the finance ministry of the Republic of Indonesia, there is also a category grouping types of clients such as agriculture and mining, so that it is easier in the processing and analysis of research data. While the reason for the timing of observation (2012–2014) is due to report data business activities of public accounting firms that are in the Professional Development
4. Analysis of Results

4.1. Overview of research samples

The sample in this research are companies listed on the Stock Exchange, which is included in this type of industrial *agriculture* (agriculture and forestry, and livestock), and mining. Detailed name of the company in each industry obtained from the Fact Book published by the BEI. While detailed financial data obtained from the database of the Stock Exchange, which is accessed through www.idx.co.id. If the desired data is not available in the database, then the data is downloaded directly from the *website* of the company.

Total companies included in the category of *agriculture* there are 22 companies and categories of *mining* there are 41 companies, bringing the total amount to 63 companies. However, there were 13 companies that were excluded from the sample because the company entry / exit of the Stock Exchange in the period 2012–2014 (10 companies), and the necessary data is not complete (3 companies). Hence, the total sample of companies used in this study amounted to 50 companies (see Table 1).

<table>
<thead>
<tr>
<th>Description</th>
<th>The number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Early Samples</td>
<td></td>
</tr>
<tr>
<td>(Registered Company in BEI until September 2015)</td>
<td>22 More Participatory 41</td>
</tr>
<tr>
<td>Reduced</td>
<td></td>
</tr>
<tr>
<td>Not always registered in the period of observation</td>
<td>5 More Participatory 5</td>
</tr>
<tr>
<td>The required data is not complete</td>
<td>2 Mining 10</td>
</tr>
<tr>
<td>The Total</td>
<td>16 Total 50</td>
</tr>
</tbody>
</table>

Source: processed data
4.2. Analysis descriptive statistics

Descriptive statistical analysis aims to provide a simple description of the data and the results of research conducted (Court, 2001). Table 2 shows that the average value of discretionary accruals is −12.4% of the total assets of the company the previous year. The average value FISLEAD showed an average 24% of the sample audited by the accounting firm that has clients the highest in the industry. The average value FISDOM showed an average 34% of the sample audited by the accounting firm that has a minimum of 10% market share in the industry. Value of PISLEAD showed an average of 4.7% of the sample audited by a partner who has the most clients in the industry. PISDOM showed an average 8% of the sample audited by a partner who has the most clients in the industry. The average value of the DS shows the value of

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Max.</th>
<th>Min.</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA</td>
<td>-0.124</td>
<td>-0.098</td>
<td>0.457</td>
<td>-2.461</td>
<td>0.305</td>
</tr>
<tr>
<td>FISLEAD</td>
<td>0.240</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>0.428</td>
</tr>
<tr>
<td>FISDOM</td>
<td>0.340</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>0.475</td>
</tr>
<tr>
<td>PISLEAD</td>
<td>0.047</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>0.211</td>
</tr>
<tr>
<td>PISDOM</td>
<td>0.080</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>0.272</td>
</tr>
<tr>
<td>DS</td>
<td>0.994</td>
<td>0.943</td>
<td>1.874</td>
<td>0.497</td>
<td>0.280</td>
</tr>
<tr>
<td>DEFISLEAD</td>
<td>0.215</td>
<td>0.000</td>
<td>1.571</td>
<td>0.000</td>
<td>0.407</td>
</tr>
<tr>
<td>DEFISDOM</td>
<td>0.315</td>
<td>0.000</td>
<td>1.571</td>
<td>0.000</td>
<td>0.467</td>
</tr>
<tr>
<td>DEFISLEAD</td>
<td>0.315</td>
<td>0.000</td>
<td>1.151</td>
<td>0.000</td>
<td>0.1182</td>
</tr>
<tr>
<td>DEFISDOM</td>
<td>0.063</td>
<td>0.000</td>
<td>1.151</td>
<td>0.000</td>
<td>0.220</td>
</tr>
<tr>
<td>STRAT</td>
<td>18.240</td>
<td>18.000</td>
<td>28.000</td>
<td>12.000</td>
<td>3.909</td>
</tr>
<tr>
<td>STRATFISLEAD</td>
<td>4.380</td>
<td>0.000</td>
<td>26.000</td>
<td>0.000</td>
<td>8.034</td>
</tr>
<tr>
<td>STRATFISDOM</td>
<td>5.033</td>
<td>0.000</td>
<td>26.000</td>
<td>0.000</td>
<td>8.716</td>
</tr>
<tr>
<td>STRATPISLEAD</td>
<td>0.900</td>
<td>0.000</td>
<td>26.000</td>
<td>0.000</td>
<td>4.242</td>
</tr>
<tr>
<td>STRATPISDOM</td>
<td>1.820</td>
<td>0.000</td>
<td>28.000</td>
<td>0.000</td>
<td>5.852</td>
</tr>
<tr>
<td>IND</td>
<td>3.280</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
<td>0.488</td>
</tr>
<tr>
<td>SIZE</td>
<td>29.238</td>
<td>29.216</td>
<td>35.006</td>
<td>25.724</td>
<td>1.387</td>
</tr>
<tr>
<td>LEV</td>
<td>0.469</td>
<td>0.458</td>
<td>1.113</td>
<td>0.0006</td>
<td>0.249</td>
</tr>
<tr>
<td>ROA</td>
<td>0.033</td>
<td>0.027</td>
<td>0.577</td>
<td>-0.475</td>
<td>0.104</td>
</tr>
<tr>
<td>AGE</td>
<td>10.800</td>
<td>8.000</td>
<td>25.000</td>
<td>2.000</td>
<td>6.941</td>
</tr>
<tr>
<td>BIG</td>
<td>0.467</td>
<td>0.000</td>
<td>1.000</td>
<td>1.000</td>
<td>0.300</td>
</tr>
</tbody>
</table>

N = 50 companies, 150 observations
DA = discretionary accruals; FISLEAD = specialises auditor KAP level, measured from the highest client ownership; FISDOM = specialises auditor KAP level, measured from the ownership market share with a minimum threshold of 10%; PISLEAD = specialises auditor partner level, measured from the highest client ownership; PISDOM = specialises auditor partner level measured from the ownership market share with a minimum threshold of 5%; DS = client's business strategy (Deviant Strategy - deviation strategy); STRAT = client's business strategy typology; Miles et al., (1978); IND = industry dummy variable, 1 if industrial agriculture, 0 if industrial mining; SIZE = size of the company; LEV = leverage the company; ROA = Return on Assets, measuring the performance of companies; AGE = age from first company listed on the Stock Exchange; BIG = variable dummy, 1 if the audited company KAP Big 4, 0 if other.

Source: Processed data
STRAT shows the average value of 18.24, according to Bentley (2013) it shows the average sample company business strategy analyzer. The average value of SIZE is worth 29.24, with a minimum value of 25.72 and the maximum value is worth 35.01, this indicates a relatively homogeneous sample of company size. The average value of LEV worth 0.469. The average value of ROA is worth 0.033. The age minimum sample of companies listed on the Stock Exchange in the year \(i\) was two years old, and a maximum of 25 years. And the value of BIG show average of 46.7% of the sample companies audited by a Big 4 accounting firm.
4.3. Test results hypothesis

The regression results of empirical models can be seen in Table 3. The table shows that the value of the F-statistic equations has Prob. (F-statistic) that significant, that is, 0.0000, this suggests that the independent variables were tested together significant \((\alpha = 1\%)\) influencing variables bound \((DA)\). The magnitude of the R-squared shows the value of 44.75%. This means that the amount of \(DA\) can be explained by the \(FIS, PIS, DS, SIZE, LEV, ROA, AGE,\) and \(BIG\) amounted to 44.75%. The remaining amount of 65.25% is explained by other variables that are not addressed in this study.

4.3.1. Testing hypothesis 1 (H1)

As shown in Table 3. The regression results show that four independent variables that measure the auditor specialization, namely \(FISLEAD, FISDOM, PISLEAD,\) and \(PISDOM\), only variables \(FISLEAD\) which has a value significantly affect audit quality, the value of \(-2.391\) \((\alpha = 1\%)\). This indicates that the auditor specialization in KAP level significantly negative effect on audit quality. Thus, the alleged hypothesis 1 (H1) in the alternative form stating that the auditor specialization positive effect on audit quality is not able to be accepted (rejected).

4.3.2. Testing hypothesis 2 (H2a and H2b)

Variable business strategy client show how far the business strategy of the client differ/deviate strategy clients’ business in general \((deviant strategy – DS)\) indicates that either directly, or in the interaction with the variable specialization auditor, variable \(DS\) indicates a value significantly affect audit quality. This can be seen from Table 3 which shows that the \(DS\) has a value of coefficient of \(-0.441\) \((\alpha = 10\%)\), \(DSFISLEAD\) has a coefficient \(-1.847\) \((\alpha = 1\%)\), \(DSFISDOM\) has a 2.441 coefficient value \((\alpha = 1\%)\), \(DSPISLEAD\) value coefficient of \(-1.018\) \((\alpha = 1\%)\), and \(DSPISDOM\) has a 1.512 coefficient value \((\alpha = 1\%)\).

Results of regression interaction between a client’s business strategy with specialization auditor showed ambiguous results. If the auditor specialization is measured using a number of auditors have a market-share the highest \((LEAD)\), then the client’s business strategy affect the relationship between specialization auditors with audit quality negatively and significantly (weaken). Meanwhile, if the specialization audit measured using a number of auditors have a market-share with a value of minimum
10% (to the level of KAP – FISDOM) and the minimum value of 5% (to the level of partner – PISDOM), then the business strategy of the client affects the relationship between specialization auditor to audit quality positive and significant (strengthen). However, because the current testing variables multicollinearities PISDOM identified have multicollinearity problems, the analysis of the results of the hypothesis is only seen from a variable interaction FISLEAD and PISLEAD, namely client business strategies affect the relationship between specialization auditors with audit quality is negatively significant (weaken).

In accordance with the results of the first hypothesis, it can be declared negative relationship between specialization auditor to audit quality will be weakened by the deviant strategy that is applied to the client (supports the reduced knowledge gap hypothesis). However, when referring to the hypothesis 2a which states that the positive relationship between specialization auditor to audit quality will be reinforced by a deviant strategy that is applied to the client, and hypothesis 2b which states that the positive relationship between specialization auditor to audit quality will be reinforced by a deviant strategy that is applied to the client, then this result is not able to accept hypothesis 2a and 2b (the hypothesis is rejected).

4.3.3. Testing hypothesis 3 (H3a and H3b)

Multicollinearities test results indicate that the client’s business strategy variables as seen from the typology of Miles et al. (1978), namely the type of defenders, analyzer, and prospectors (STRAT) have multicollinearity problems, so this variable is omitted from the regression. But if moderated by specialization auditor (firm level – FISLEAD and FISDOM), regression results indicate significant values (α = 1%), but with two different directions. STRATFISLEAD shows coefficient 0.214 (α = 1%), and STRATFISDOM indicating the value of the coefficient of −0.153 (α = 1%).

In accordance with the results of the first hypothesis, when the auditor specialization is measured by the number of clients the most, it can be declared negative relationship between specialization auditor to audit quality would be enhanced by strategies prospector applied to clients (supporting the enlarged knowledge gap hypothesis). Meanwhile, when the auditor specialization is measured based on the ownership of market share with a minimum threshold of 10%, it can be declared negative relationship between specialization auditor to audit the quality of the strategy will be weakened by the defender who applied the client (supports the reduced knowledge gap hypothesis).
However, when referring to the hypothesis 3a which states that the positive relationship between specialization auditor to audit quality would be enhanced by strategies *prospector* applied to the client, and the hypothesis 3b which states that the positive relationship between specialization auditor to audit quality would be mitigated by a strategy *defender* applied to the client, then this result is not able to accept hypothesis 3a and 3b (the hypothesis is rejected).

4.4. Discussion of results

4.4.1. Analysis of the relationship between specialization Auditor and the Audit Quality

The estimated regression coefficient value $FISLEAD$ which is negative and significant, indicating that this study provides evidence for a negative influence of specialization auditors on audit quality. This contrasts with the results of many previous studies [6, 13, 21, 29, 32] which found no evidence that specialization auditor positive effect on audit quality.

But if refer to the related research specialization auditor has been done before in Indonesia, such as Herusetya (2009) were not able to provide evidence of the difference in the quality of earnings for companies audited by the specialization of auditors as well as by non-specialists, and also there is no difference between companies audited by the Big4 and non-Big4. As well as research conducted by Setiawan and Fitriany (2011) who found that the workload faced by auditors can degrade the quality of the audit. Then the argument might explain why the results of this study provide the results of a negative relationship between specialization auditor to audit quality, is due to specialization auditor (as measured by client ownership highest) have a manager or staff auditor who bear the workload greater than it should be. This can degrade the quality of expertise (competence) which has, so in the end the quality of audits decreased.

4.4.2. Analysis of the relationship between business strategy with Specialization Auditor and Audit Quality

This study measures the client’s business strategy applied by the two constructs, the strategy of aberrant (deviant strategy – DS) and the strategy typology Miles et al. (1978), namely the defender, analyzer and prospector (STRAT). Results of regression
testing showed the value of the DS, DSFISLEAD and DSPISLEAD negatively and significantly. Referring to the results of testing the first hypothesis, it can be declared negative relationship between specialization auditor to audit quality will be weakened by the deviant strategy that is applied to the client.

With the argument that the alleged negative relationship between specialization auditor to audit quality occurs because the workload of specialization auditor is excessive, then the client which currently implementing deviant strategy would reduce the difference in the auditor’s information specialist with the non-specialist. This is because the non-specialist auditors do not have sufficient knowledge and experience on a particular industry, and on the other hand auditor specialization, because workload of work is excessive, are not able to use the knowledge and experience to good (proper) in the face of client strategy that deviates. Excess of jobs workload also makes a specialty of auditors tend to immediately carry out substantive procedures and does not perform the procedure to understand the client’s business strategy in depth, so that it reduces the advantages of specialization information held by the auditor. Overall, the results of this test support the reduced knowledge gap hypothesis.

The multicollinearities test results variable STRAT indicate that these variables have a relationship with the other independent variables. Therefore, variable STRAT excluded from the regression testing. This multicollinearity problem may occur because of the variable STRAT is a composite of six indicators [4] where there are several indicators that measurement is the same as another independent variable measurement were tested in this study. When viewed from the sample data, it appears that the majority of companies in the sample into the category of the analyzer are 45 companies (90%). The rest fall into the category prospector consists of 4 companies (8%), and defender amounted to one company (2%). This suggests a homogeneity in the type of business strategy applied by the company sample. Because of this homogeneity problem, the influence of client strategy (as measured by the typology of Miles (1978)) on the relationship between specialization auditors with audit quality is not analyzed further.

5. Conclusion and Limitations of Research

5.1. Conclusions research

This study aims to determine the role of the client’s business strategy moderating influence of specialization auditor to audit quality in Indonesia. Tests carried out on the company’s agriculture and mining are listed on the Stock Exchange in 2012–2014.
Both types of these industries have to look at the effect of different types of industries and also to adjust the division of the categories of business clients in the Firm business activity report required by the Professional Development Center for Finance, Secretary General – Ministry of Finance of the Republic of Indonesia (P2PK).

Differences of this study with previous research is in addition to measuring the client’s business strategy to construct deviant strategy as practiced by Yuan, Cheng, and Ye (2016), this study also used the construct of business strategy in accordance with the strategy typology Miles et al. (1978). Auditor of data used in this study also uses data directly from P2PK, so that the number of clients for each public accounting firms and partners (market share) reflect the real situation, not only public companies only.

The model proposed in this study has a value of $\text{Prob. (F-statistic)}$ were significant at 0.0000, this suggests that the independent variables were tested together significant ($\alpha = 1\%$) influencing variables bound ($DA$). However, this study has not been able to provide proof of the whole hypothesis.

The study found that auditor specialization negatively affects audit quality, and client’s business strategy negatively affects (weakens) a negative relationship between auditor specialization and auditor quality. Referring to the research of Setiawan and Fitriany (2011) who found that the workload encountered by the auditor could degrade the quality of the audit, the authors suspect a negative relationship between the auditor’s specialty and audit quality because the auditor’s special audit team members’ (as measured by the highest client ownership) workload that is larger than it should be. This can degrade the quality of skills (competence) it has, so in the end the quality of the audit decreases.

In relation to the deviant strategy employed by clients, this study finds that client’s client business strategy weakens the negative relationship between auditor specialization and audit quality. This is supposed to happen because while auditor specialization has more knowledge and experience than non-specialists, but the number of job workloads makes auditor specializations incapable of using their knowledge and experience properly in understanding the deviant client’s strategy. The results of this test support the reduced knowledge gap hypothesis.

The number of workloads also tends to make the auditor specialization directly implement substantive procedures and not perform procedures to understand the client’s business strategy in depth. This shows the Audit Standards 315 that regulates the Identification and Risk Assessment of Mistakes of Material Presentation through Understanding of Entities and the Environment has not been properly implemented.
Business strategy testing using Miles typology (1978) is not analyzed further because there is a problem of multicollinearity and homogeneity in the sample company.

5.2. Research implications

The results of this study empirically provide evidence that the auditor’s specialization (as measured by the highest client ownership) has a negative effect on audit quality, and the client’s business strategy negatively affects the negative relationship between auditor specialization and auditor quality. This is supposed to happen because members of the auditor’s specialization team bear more workload than they should. To maintain the quality of the audit, both KAP and regulators should set or set the optimal workload for each member of the audit team. Because if over-workload conditions continue to occur, then the quality of the audit will continue to decline, and ultimately the credibility of the audit profession can be questioned.

5.3. Limitations of research

There are several limitations encountered in this study. First, this study uses only one model of discretionary accruals measurement using Kaznik (1999) model, and measurement of audit specialization using only the number of clients. There are still several ways to measure discretionary accruals as well as other audit specializations. Like Jones’s (1999) model, Dechow et al. (1995) and Kothari (2005) to measure discretionary accruals. And use the audit fee or the value of the total asset ratio of the client to measure the auditor’s specialization. The use of limited measurements may cause the test results to be less accurate.

Secondly, this study only conducted one-time regression testing for all independent variables tested. Testing all independent variables, each measured by some measurement, may cause bias in the analysis of results.

Third, the number of years of observation in this study only three years, and only use two types of industries. So, the test results cannot be generalized.

5.4. Suggestions for further research

With the various limitations contained in this study, it can be recommended some of the following. First, discretionary accruals and auditor specializations should be measured in various sizes and models. So that the test results can be more accurate and robust.
Second, independent variable testing should be done partially. For example, the first regression test uses only the independent variables FISLEAD, PISLEAD and DS. Second, the second regression test uses only the independent variables FISLEAD, PISLEAD and STRAT. Third, the three regression tests only use independent variables FISDOM, PISDOM and DS. And fourth, the regression test uses only independent variables FISDOM, PISDOM and STRAT. Such tests are expected to eliminate the multicollinearity problem of the independent variables tested, and provide more precise analysis results.

Third, increase the number of years of observation and the number of industries tested. This is so that the test results can be generalized.

References


