

Ethical Decision Making Among Auditors in Indonesia: Examination on State Professional Skepticism and Auditor Independence

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ABSTRACT

Auditors' ethical behavior has become a concern globally with the continued occurrence of financial scandals. As a result, regulators, researchers and other stakeholders are focusing on auditors' ethical behaviour, auditor independence and professional skepticism. As there are limited studies on the issue, the purpose of this study was to examine the influence of professional skepticism and independence on the ethical behaviour of Indonesian auditors based on Rest's model within the context of certain material audit adjustments to be recorded by an audit client. This study was also intended to examine the mediation effect of state professional skepticism on the relationship between auditor's independence threat and auditors' ethical decision making. This study adopted the experiment approach by utilizing case scenarios. There were 121 auditors from the Big 10 firm in Indonesia as participants of this study. This study found that despite auditors not recognizing the ethical issues due to independence threat, they still can act ethically. Further, state professional skepticism did not affect ethical decision making of auditors.

Keywords: ethical decision making, professional skepticism, auditor independence

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INTRODUCTION

Ethical dilemmas are inherent in the audit profession resulting from auditors' commercial interest and their public responsibility which are separated by a thin line called ethics. Auditors have the responsibility to perform their duties with objectivity, trustworthiness and independence to preserve public trust (Ardelean, 2013; IESBA, 2018b). On the other hand, to pursue their commercial interest, auditors are motivated to continue a relationship with their clients to obtain more benefits from this economic bond (e.g. audit contract renewal) (Church, Jenkins, McCracken, Roush, & Stanley, 2015; Kim, Kim, Pae, & Kim, 2018). As such, the need to satisfy multiple stakeholders creates conflicts for the auditors and most of the time, it is difficult to reconcile and satisfy the different needs and interests of all stakeholders.

The Public Company Accounting Oversight Board (PCAOB) had noted an average audit deficiency rate of 12% for Big 4 firms which means that one in every nine audits selected for the 2020 inspection exhibited serious audit problems (PCAOB, 2020a, 2020b, 2020c, 2020d). Similarly, in Indonesia, the Financial Profession Supervisory Centre, in their 2018 inspections over 60 audit firms and 80 public accountants, noted 752 findings (P2PK, 2019) whereby most of the findings (692 findings or 92%) were related to the Non-Big 10 audit firms. Notable findings included inadequate audit documentation, insufficient audit evidence and violations of the Code of Professional Ethics (P2PK, 2019). Those findings by regulators may indicate potential audit deficiency resulting from unethical behaviour of auditors. With the continued occurrence of financial scandals, potential audit deficiency resulting from unethical behaviour of auditors has become a concern for audit firms and audit regulatory bodies across the world including Indonesia. The term "decision-making" refers to making up one's mind about the issue at hand and taking a course of action in a certain context involving the evaluation of choices and possibly certain preferences (Bonner, 1999; Mosier & Fischer, 2010). As such, ethical decision making is often used interchangeably with ethical behavior as the end of the process under the Rest Model (1986) depending on the context.

Financial scandals may represent poor ethical decision making among auditors (Abdelhak, Elamer, AlHares, & McLaughlin, 2019). Their

pervasive impact to many stakeholders has made regulators, researchers and other stakeholders to focus on auditors' ethical behaviour, independence and professional skepticism (Abdelhak et al., 2019; Cullinan, 2004). For example, the financial scandals of Steinhoff had resulted in the loss of US\$231 million of the South African Government Employees' Fund for 1.2 million members (Koko, 2017). Auditors are usually blamed for a perceived lack of applying professional skepticism during the audit for audit failures (Bazerman & Moore, 2011; Beasley, Carcello, & Hermanson, 2001; Carmichael & Craig Jr., 1996). Much research have been conducted to address the professional skepticism issue but it is still remains a topic where there are more questions than answers because it involves human behaviour even at the unconscious level (Hurt, Brown-Liburd, Earley, & Krishnamoorthy, 2013). The Rest model was found to be applicable to ethical decision making in the context of determining to record or not to record material audit adjustment which may impact the audit opinion being issued (Cohen & Martinov-Bennie, 2006).

Ethical intention was found to have a significant association with their actual ethical action being made (Ajzen, 1991). In addition, there are limited studies related to the independence threat to ethical decision making components (Cianci & Bierstaker, 2009; Martinov-Bennie, Cohen, & Simnett, 2011). Similarly, auditors are prohibited from providing certain non-audit services, are based on the belief that the economic bond between auditor and client would impair independence, hence compromising audit quality (Tepalagul & Lin, 2014). In the case of audit failures, auditors are vulnerable to being accused of negligence due to impaired independence (FERENCE, 2013; Martinov-Bennie et al., 2011; Moore, Tetlock, Tanlu, & Bazerman, 2006) and blamed for a perceived lack of applying professional skepticism (Beasley et al., 2001; Carmichael & Craig Jr., 1996). The purpose of this study was to examine the influence of professional skepticism and auditors' independence on the ethical behaviour of Indonesian auditors based on the Rest Model within the context of certain material audit adjustments to be recorded by an audit client. This study was intended to establish a foundation for a more comprehensive study on auditors' ethical decision making using the Behavioral Decision Theory in the auditing field.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Ethical Decision Making Among Auditors

Ethical decision making is a comprehensive process of evaluating and choosing among alternatives in a manner consistent with ethical principles. Ethical decision making of auditors is important because the public perceives auditors as the guardians of public trust. The growing importance of ethics in the audit profession is due to the occurrence of financial scandals (Ardelean, 2013). The collapse of Steinhoff and Wirecard has resonated the unethical behaviour of auditors which has affected their reputation. The most important ethical decision made by an auditor relating to a specific audit is the decision to either release an unqualified audit opinion or decline to do so (Wedemeyer, 2010). A wrong opinion may be issued because of the lack of competence, but this should be considered as unusual because under the Code of Ethics and the International System of Quality Control, audit firms should only accept an audit engagement when they have competency and capability before accepting the engagement.

Rest (1986)'s Theory of Four-Component Model has been widely used in explaining individual ethical decision making and behaviour (Craft, 2013; O'Fallon & Butterfield, 2005). The Rest' theory has been developed based on the theory of cognitive moral development, and it is specifically for the applied psychology of ethics to explain the individual ethical decision making process (Rest, 1986). In accordance with Rest's model, in making an ethical decision, an individual as a moral agent must (1) recognize the moral issue (ethical sensitivity); (2) make a moral judgment (ethical judgment); (3) prioritize moral values over other values (ethical intention); and (4) act on the moral intent to the situation (ethical behaviour) (see Figure 1).

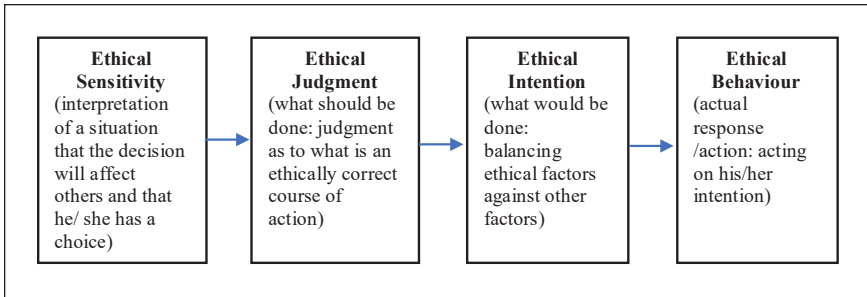


Figure 1: Four Component Model of Ethical Decision-Making Process

Source: Rest (1986)

The first component, ethical sensitivity refers to an individual's ability to recognize an ethical dilemma or an ethical issue based on how an individual's action affects the interest and welfare of others (Craft, 2013; Moores & Chang, 2006). The recognition of an ethical issue has the potential to influence their judgments, intentions and decisions (Chia & Mee, 2000). Once an ethical issue is identified, an individual comes to the second stage (ethical judgment) by evaluating the outcomes that may occur in a given situation by using some ethical idea to determine the courses of action that are ethically or morally right (O'Fallon & Butterfield, 2005). The third component, ethical intention refers to an individual's ability to prioritize moral values over other values (Craft, 2013; Moores & Chang, 2006). The establishment of an ethical intention is a key factor in ethical decision making and behavior (Jones, 1991). The last component, ethical behaviour is the ability to execute and implement an intention into actual behaviour (Moores & Chang, 2006; O'Fallon & Butterfield, 2005). Sufficient perseverance, ego strength and implementation skills of an individual are able to convert his or her intention to behave ethically (Rest, 1986).

There are many studies on ethical decision making, but there are only a handful in the auditing field (Craft, 2013; O'Fallon & Butterfield, 2005). O'Fallon and Butterfield (2005) and Craft (2013) noted that there were less empirical research that tested all four variables in the Rest Model. Generally, in the auditing field, most of the empirical research tested moral judgment and moral intent of the Rest Model or the combination of ethical sensitivity, ethical judgment and ethical intention (Craft, 2013). Studies on ethical sensitivity and ethical actions are relatively unexplored (Sweeney & Costello, 2009). Moores and Chang (2006) confirmed that the Four

Components of the Rest model possess a sequential causal relationship as proposed by Rest (1986), but they failed to address the interrelationship between the components. However, Johari (2013) confirmed that there are positive relationships for the sequential process of the auditors' ethical decision making. As such, the hypotheses below were developed to test the sequential process among the four components of the Rest model:

H1(a): Auditors' ethical sensitivity influences auditors' ethical judgment.

H1(b): Auditors' ethical judgment influences auditors' ethical intention.

H1(c): Auditors' ethical intention influences auditors' ethical action.

Independence of Auditors

Under the Code of Ethics for Professional Accountants, independence of auditors is the hallmark of the audit profession because it can influence audit quality (IAASB, 2016b). Given the unique role of auditors to maintain public trust and their relationship with management, auditors should maintain their independence to all the stakeholders to prevent them from making purely impartial, objective decisions (Bazerman, Morgan, & Loewenstein, 1997). Being independent (both in mind and in appearance), the auditors enhance their ability to act with integrity and objectivity and to a certain extent maintain an attitude of professional skepticism (Chiang, 2016; Hurr et al., 2013). Audit firms are self-interested entities in providing audit services (McRoberts, 2002; Staubus, 2005) because similar with other business entities, they try to make profits from audit services as well as other non-audit services they provide. In the case of a corporate collapse, usually auditors are vulnerable to being accused of negligence due to impaired independence (FERENCE, 2013; Martinov-Bennie et al., 2011; Moore et al., 2006).

The Code of Ethics for Professional Accountants described threat to auditors' independence into self-interest, self-review, familiarity, advocacy and intimidation threats (IESBA, 2018b). However, most research has considered threat to independence differently by client importance, provision of non-audit services, auditor tenure and client affiliation with the audit firm (Tepalagul & Lin, 2014). As such, most research has focussed on self-interest, self-review and familiarity threats only. Provision of non-audit services is generally associated with the self-review threat as well as the self-interest threat because an audit client with significant non-audit services

is considered as an important client by the audit firm. Client importance can be associated with the self-interest threat because of the fee dependence on audit clients. Fee dependence on a client can be in the form of audit fees and/or non-audit fees. Hence, enforcement by regulators is generally a result of provision of non-audit services (SEC, 2019).

In this study, self-interest was proxied by fee dependence on audit clients. Fee dependence provides auditors with economic incentive to compromise their independence in making ethical decisions (DeAngelo, 1981). Once the auditors are perceived to have high fee dependency on their clients, the auditor's ability to act with integrity, be objective and maintaining a skeptical mindset when they are carrying out an audit is perceived as diminished. Auditors are perceived to be more lenient and considerate in evaluating the audit evidence obtained before issuing the audit opinion to preserve economic bonds with the client. However, the Code of Professional Ethics does not preclude the audit firms to perform non-audit services as long as the threat to auditor's independence can be reduced to an acceptable level.

Past studies on the effect of client importance on auditors' judgment have offered mixed results. For example, Farmer, Rittenberg, and Trompeter (1987) and (Nelson, Elliott, & Tarpley, 2002) supported the negative impact of client importance on an auditor's judgment while Chi, Douthett, and Lisic (2012) also noted that client importance reduces audit quality. On the contrary, Li (2009) provided evidence on the positive relationship between client importance and auditor's judgment in issuing going concern opinions. His study indicated that companies which pay a higher fee to their auditors are more likely to receive going-concern opinions. The result is consistent with the view that audit reports are more conservatively for larger clients to protect their reputation and to avoid litigation costs. However, there are also studies which found no association between client importance and an auditor's judgment (Ashbaugh, LeFond, & Mayhew, 2003; Chung & Kallapur, 2003; Hunt & Lulseged, 2007). However, Cianci and Bierstaker (2009) investigated the effect of client importance on auditor's ethical judgment and noted that auditors make less ethical judgments in a public-focused task when auditing a more important client which showed a negative relationship. On the contrary, Johari (2013) found that auditors' self-interest threat positively influenced auditors' ethical judgment.

Despite the contradictory finding between client importance and auditors' judgment, more studies believed that client importance has a negative relationship with auditor's judgment. In other words, the independence threat has a negative relationship with auditor's judgment, and therefore the second set of hypotheses were as follows:

- H2(a):** Auditors' independence threat negatively influences auditors' ethical sensitivity.
- H2(b):** Auditors' independence threat negatively influences auditors' ethical judgment.
- H2(c):** Auditors' independence threat negatively influences auditors' ethical intention.
- H2(d):** Auditors' independence threat negatively influences auditors' ethical behavior.

Professional Skepticism

A high-quality audit features the exercise of sound professional judgment and professional skepticism by auditors throughout the audit process (Hurt et al., 2013; IAASB, 2012; M. Nelson, 2009). However, it appears that the skeptical traits of an individual auditor is different and may result in an audit firm developing a skepticism score for each auditor and find a way to increase it through training, guidance and monitoring it over time (Farag & Elias, 2012). This may result from the lack of a common understanding of what professional skepticism is because it encompasses a variety of behaviour characteristics (IESBA, 2018c). In addition, it appears that professional skepticism could be applied differently by professional accountants practiced in different areas (e.g. audit or non-audit, auditors or professional accountants working in the companies) (IAASB, 2018). Auditors are usually blamed for a perceived lack of applying professional skepticism during the audit for audit failures.

Robinson, Curtis, and Robertson (2018) suggested that measurement of state professional skepticism is also important to improve professional skepticism. Traits can be developed slowly over time although it is difficult to change (Church, 2000; Hurt, 2010; McRae & Costa, 1996), but state is more malleable and could be influenced by particular context or situations (Steyer, Schmitt, & Eid, 1999). In the real situation, auditors usually will

adjust their skeptical traits toward situational factors, such as level of control, inherent or detection risks of client, which require changes to the audit procedures performed. This is consistent with the “skepticism continuum” concept proposed by Glover and Prawitt (2014) which suggest auditors use different levels of skepticism depending on the situation they face during the audit. As such, a focus on state professional skepticism may provide more opportunities for improving audit quality than trait professional skepticism.

Past studies have indicated that auditors who have demonstrated higher level of skepticism (e.g. as measured by HPSS) tend to exhibit more skeptical judgments (Hurt et al., 2013). Since auditors should also adhere to ethical standards when exercising their professional judgment and decision making, essentially all judgments and decision making taken by auditors are ethical judgments and decision-making. These ethical judgments and decision making are measured by the number of alternative explanations and less reliance on management’s explanations (Quadackers, Groot, & Wright, 2014). As such, our third hypothesis was:

- H3(a):** State professional skepticism positively influences auditors’ ethical sensitivity.
- H3(b):** State professional skepticism positively influences auditors’ ethical judgment.
- H3(c):** State professional skepticism positively influences auditors’ ethical intention.
- H3(d):** State professional skepticism positively influences auditors’ ethical behavior.

Mediation Between State Professional Skepticism and Independence Threat

International Standards on Auditing requires that an auditor plans and performs an audit with professional judgment and maintains professional skepticism throughout the audit process including when forming an audit opinion on the financial statements (IAASB, 2016a). Professional skepticism is necessary for critical assessment of audit evidence, in particular upon the questioning mind of contradictory audit evidence and the reliability of information used as audit evidence. Further, auditors are not expected to discount their past experience of honesty and integrity of an audit client.

Auditors may still need to maintain their professional skepticism mindset when they are about accepting less than persuasive audit evidence (IAASB, 2016a).

Being independent, the auditors enhance their ability to act with integrity and objectivity and to a certain extent maintain an attitude of professional skepticism (Chiang, 2016; Hurtt et al., 2013). As such, professional skepticism has a close inter-relationship with auditor's independence. Auditor independence is a necessary antecedent of professional skepticism which improves the auditor's ability to exercise his professional judgment (which is an ethical judgment) when identifies the existence of potential issues or when auditors need to modify the audit procedures they previously planned to take (Chiang, 2016). Despite the fact that all auditors are aware of the need for them to be independent, the existence of cognitive and psychological biases (conscious and unconscious) makes it difficult for an auditor to maintain an attitude of independence of the mind which is a necessary antecedent to professional skepticism. Such personal bias would have negative effects on professional skepticism and hence audit quality (Chiang, 2016).

There are very few studies on the relationship between independence and professional skepticism (Hurtt et al., 2013). Menon and Williams (2004) noted that a company that hired a former audit partner as a director or an officer report larger accrual and is likely to meet earnings forecast. Tucker, Matsumura, and Subramanyam (2003) noted that the pressure not to create a self-fulfilling prophecy may impede the auditors' willingness to take skeptical action. Other recent studies also noted that provision of non-audit services have a negative influence on audit quality. Causholli, Chambers, and Payne (2014) noted that the opportunity to sell additional non-audit services to an audit client in the future can impact the current level of independence. They expect the economic bonding to manifest in lower audit quality proxied by earnings management: discretionary accruals and classification shifting as a result from lacking professional skepticism during an audit process. Based on the above, the fourth hypothesis was:

H4(a): Independence threat influences state professional skepticism negatively.

- H4(b):** State professional skepticism mediates the relationship between independence threat and ethical sensitivity.
- H4(b):** State professional skepticism mediates the relationship between independence threat and ethical judgment.
- H4(d):** State professional skepticism mediates the relationship between independence threat and ethical intention.
- H4(e):** State professional skepticism mediates the relationship between independence threat and ethical action.

The conceptual framework of the study can be described in Figure 2 as follows:

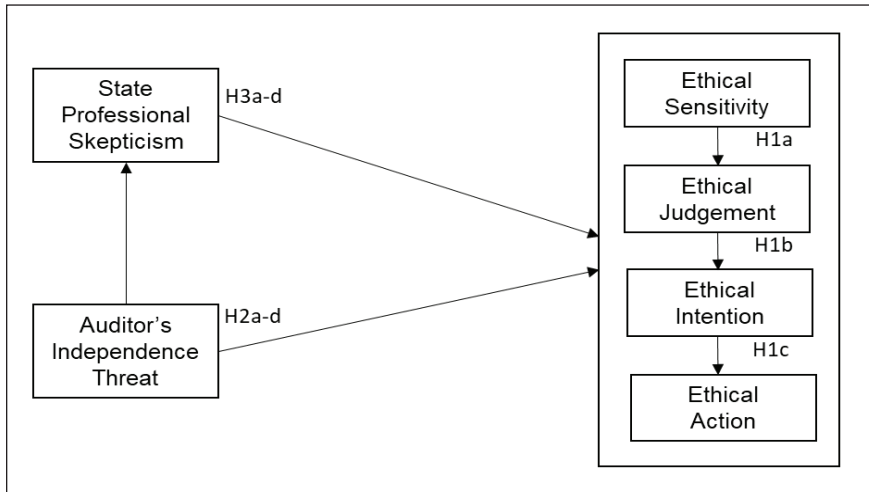


Figure 2: Conceptual Framework

RESEARCH METHODOLOGY

Research Design and Data Collection

The study adopted the experimental approach by utilizing case scenarios which is viewed as a better method of tapping individual ethical decision (Ashton, 1990; Bonner, 1990; Gramling, O'Donnell, & Vandervelde, 2013). However, the use of scenario does have some setback in the case when the participants may not be familiar with the selected scenarios. As

such, the scenarios used in this study were based on previous research scenarios but were modified to include manipulation of certain variables and was discussed with two partners in the two of the Big 4 firm in Indonesia to ensure that they were relevant in today's audit setting.

The samples in past studies on auditors' ethical reasoning process were usually students or the combination of students and other individuals (Craft, 2013; O'Fallon & Butterfield, 2005). They believed that the samples used need to represent the hypothesized population. As such, in this study, the samples were auditors with the expectation that the samples represented the hypothesized population. Further, since the case study was the ethical behaviour of auditors when formulating the audit opinion to be issued, the participants were partners who were able to sign audit reports as well as highly experienced audit team members, i.e., the managers, senior managers, and directors.

Auditors from the Big 10 firm in Indonesia were chosen as the participants. Participation in the study was voluntary and participants were assured that all results would remain confidential and there were no right or wrong answers. The rationale for this instruction was to prevent the socially desirable response bias that occurs in behavioural ethics research (Tourangeau & Yan, 2007). Further, the participants were also advised not to discuss the questions and answers with their colleagues to increase the validity. Any discussions among the participants may cause a potential bias of respondents. For the purpose of this study, 500 questionnaires were distributed. Total questionnaires received were 154 questionnaires and the final number questionnaires used for this study were 121 questionnaires after eliminating the inappropriate participants. The demographic profile of the participants is summarized in Table 1 as follows:

Table 1: Demographic Profile of the Participants

	Description	Frequency	Percentage (%)
Gender	Male	90	74.4
	Female	31	25.6
Age	26 – 30	32	26.4
	31 – 35	39	32.2
	36 – 40	12	9.9
	41 – 45	8	6.6
	46 – 50	16	13.2
	>50	14	11.6
Firm	Big 4	85	70.2
	Non-big 4	36	29.8
Education	Bachelor	109	90.1
	Master	8	6.6
	Doctoral	4	3.3
Position	Partner	41	33.9
	Director/Senior Manager	23	19.0
	Manager	57	47.1
Experience	>5 - 10	54	44.6
	>10 – 15	27	22.3
	>15 – 20	11	9.1
	>20	29	24.0

The eligible respondents comprised of 90 males (74.4%) and 31 females (25.6%). Most of the respondents were between 26 – 35 years old comprising 71 of them dominating the number with more than half (58.6%). Most of the respondents have been working in the audit firm ranging from > 5 - 15 years. The respondents included managers (47.1%), senior managers/directors (19.0%) and partners (33.9%). Almost all of the respondents had bachelor's degree.

Research Instrument

The case used in this study was adapted from the “Babyboomers, Inc.” (Cohen & Trompeter, 1997). The same case was also adapted in another study on independence (Martinov-Bennie et al., 2011). The client background was modified to make it consistent with the current audit setting in Indonesia including the Indonesian Auditing and Financial Accounting Standards. The case study deals with a potential inventory write-down due to lower net realizable value. Based on prior research, inventory write-down and stock obsolescence (Reckers & Wing, 1991) have been indentified as judgment-based decisions which is a necessary environmental factor for existence of threat to independence (Johnstone, Sutton, & Warfield, 2001). All of the information provided in the case study was reviewed by two partners of a Big-4 firm in Indonesia to ensure the case was appropriate for the current audit setting and correct interpretation of accounting standards and to confirm sufficient levels of judgment in the issue being examined in the case study.

Measurement of Variables

This study examined auditors’ ethical decision-making process as a dependent variable and investigated auditors self-interest threat and state professional skepticism as independent variables. The operationalization of the variables were as follows:

Ethical Decision Making Process

The ethical decision-making process involves four sequential processes: ethical sensitivity, ethical judgment, ethical intention, and ethical action. Table 1 presents the questions that measured each construct of the ethical decision-making process, as well as the sources of the adapted measurement.

The measurements for ethical sensitivity and ethical judgment used a seven-point Likert scale, ranging from 1 = “strongly disagree” to 7 = “strongly agree”. A high score reflects that a respondent has a high degree of sensitivity toward the issues described in the case (respondent perceives the action in the case as unethical) and has the capacity to form ethical judgments. The measurements for ethical intention and ethical action used

a seven-point Likert scale, ranging from 1 = “not at all” to 7 = “to great extent”. The probability that respondents would make the same decisions has been used to measure intention to act in previous studies (Gul, Ng, & Yew, 2003; Singhapakdi, Vitell, & Kraft, 1996; Sweeney, Arnold, & Pierce, 2010). In the previous studies, intention to act was assessed by asking respondents the likelihood that they would perform the same action (Singhapakdi et al., 1996). However, intention to act is determined by value an individual places on the ethical course of action versus the value of other courses of action (Sweeney et al., 2010). In this study, ethical action was assessed by asking respondents the likelihood that they would really perform the same action in the given scenario.

Table 1: Measurement of Ethical Decision Making Components

Construct	Measurement Questions	References
Ethical Sensitivity	Do you agree as an audit partner that the situation you face is an ethical dilemma?	Singhapakdi and Vitell (1990), Singhapakdi et al. (1996).
Ethical Judgment	Do you agree as an audit partner that the act of issuing an unmodified opinion, previously known as an unqualified opinion as an act that is in accordance with professional ethics?	May and Pauli (2002), Singhapakdi et al. (1996).
Ethical Intention	How likely are you as an audit partner to consider issuing an unmodified opinion?	Gul et al. (2003), Singhapakdi et al. (1996), Sweeney et al. (2010).
Ethical Action	How likely is an unmodified opinion that will actually be issued by you as an audit partner?	

State Professional Skepticism Measurement

The state professional skepticism measurement was adapted from Robinson et al. (2018). However, the questionnaire was modified to reflect the case. The measurement comprised of 12 statements which measured auditors’ skeptical trait during evidence collection and evaluation given certain facts and circumstances facing by auditors during the audit. However, for the purpose of this study, two statements were eliminated because they were not relevant for the purpose of this study. The Table 2 below presents the modification made to the state professional skepticism measurement.

Table 2: State Professional Skepticism Construct

State Professional Skepticism (Robinson et al., 2018)	Modification
Overall, I tend to question the statements that I read from Phil, the controller. (PS1) While working on this case, I frequently questioned things that I see or hear. (PS2)	Overall, you tend to question why Husin (Director of Finance) proposed a reduction in value of zero. When working on this audit, you question the reasonableness of the assumptions used in each of the management scenarios regarding impairment in the inventory.
While working on this case, I had a tendency to reject statements unless I had proof that they were true. (PS3)	When working on this audit, you tend to reject the explanation of the reasons for using certain assumptions in each scenario of impairment of inventories unless you can obtain evidence that the use of those assumptions made sense.
During this experiment, I did not like to decide until I had a chance to look at all of the available information. (PS4)	During this audit, you will not make a decision until you have the opportunity to see all available information (for example, the achievement of each of these scenarios in the past or see industry trends where the audit client operates).
I did not like having to make decisions quickly while working on this case. (PS5)	During this audit, you will take time when making decisions, especially when there are a number of scenarios that must be considered in solving a problem (for example in the case of a decline in inventory value above).
Currently, I like to ensure that I've considered most available information before making a decision. (PS6)	In conducting an audit, you want to ensure that you have considered all the latest information available before making a decision, for example accepting one of the three scenarios listed above.
While working on this case, I waited to make decisions until I could get more information. (PS7)	When resolving audit problems such as impairment in inventory, you will not make a decision until you get additional information to assess the reasonableness of the scenarios proposed by management. For example, discussing with fellow partners in the same Public Accounting Firm who work on audits or other services including consulting in the same industry.
I actively sought out all of the information that I could while completing this case. (PS8)	You are actively looking for all the information you can get while resolving audit problems such as a decrease in inventory value which has many scenarios including seeking public information about the industry in which the client audit operates and other similar company information.
I tended to search for more evidence in order to improve my chances of getting the correct answer to the case. (PS9)	You will look for more evidence to increase your chances of getting the right answer in solving the audit problem (for example a decrease in inventory value), including searching for external evidence in addition to internal evidence and client historical data.

State Professional Skepticism (Robinson et al., 2018)	Modification
I used all resources available to me to get all of the information that I could, in the case. (PS10)	You use all available resources for example seeking information about the industry in which the client operates and other companies in similar industries, discussing the problem with management other than the Director of Finance / CFO (such as the Director of Marketing or Director of Operations or Managing Director), in resolving audit issues and also discuss with fellow partners in the same Public Accounting Firm that serves clients in the same industry.

Independence Threat

This variable was measured as a dichotomous variable. A low level of the independence threat (i.e., self-interest threat) was coded as “0” and a high level was coded as “1”. If a participant received a case with the following statement: “In addition to the audit engagement, your firm also provides regular non-audit services. The fees obtained from the non-audit services were approximately at least equal to your audit fees annually and in some years were even higher (up to 300% of audit fees).”, this is a high level threat. On the contrary, if the participants receive a case with the following statement: “Your firm only provides audit service only, no non-audit services were provided”, this is a low threat.

ANALYSIS

Measurement Model

Partial least squares (“PLS”) regression was employed to assess the causal-predictive of the theoretical model and proposed hypotheses. PLS-SEM is suitable because it works efficiently with relatively small sample sizes and requires practically minimal assumption about the underlying data (Cassel, Hackl, & Westlund, 1999). The analysis of data used the SmartPLS version 3.3.3. The measurement of items forming various constructs were assessed using the statistics from the PLS-SEM measurement model.

The construct reliability for the measurement model was adequate. First, for the factor loadings, there were three items of state professional

skepticism construct which were below the recommended minimum factor loading of 0.708 (Hair, Hult, Ringle, & Sarstedt, 2017) with the initial average variance extracted (“AVE”) of 0.553 which was above the minimum threshold of 0.50 (Hair et al., 2017). Despite the fact that there were three items with factor loadings less than 0.708 but higher than 0.40, all items were maintained because the summation of loadings still resulted in AVE > 0.50 (Hair et al., 2017). The composite reliability (the “CR”) without any deletion was also greater than the threshold of 0.70 (Nunnally & Bernstein, 1994). In addition, the Cronbach’s alpha value indicated a satisfactory reading with all above the threshold of 0.60 (Nunnally & Bernstein, 1994). As such, state professional skepticism construct was considered as strongly reliable.

Henseler, Ringle, and Sarstedt (2015) demonstrated that based on a simulation study, Fornell-Lacker criterion and (partial) cross-loadings, were largely unable to detect a lack of discriminant validity in common research situations, therefore, they proposed an alternative approach, the Heterotrait-Monotrait (“HTMT”) ratio of correlations which is based on the multitrait-multimethod matrix, to assess discriminant validity. For SmartPLS 3.2.1 and later version that the HTMT criterion computation uses the absolute value, the HTMT value is $0 < HTMT < 1$. As shown in Table 3, all the HTMT values were below 0.90 (conservative criterion) (Gold, Malhotra, & Segars, 2001; Hair et al., 2017; Henseler, Sarstedt, & Ringle, 2015), as such the model did not indicate any discriminant validity issue.

Table 3: Discriminant Validity Results – HTMT

	EDM1	EDM2	EDM3	EDM4	INDTHR	PSKE
EDM1						
EDM2	0.213					
EDM3	0.233	0.484				
EDM4	0.192	0.542	0.855			
INDTHR	0.376	0.025	0.077	0.200		
PSKE	0.068	0.248	0.232	0.257	0.149	

Note:

EDM1: ethical sensitivity, EDM2: ethical judgment, EDM3: ethical intention, EDM4: ethical behaviour.
 IDNTHR: independence threat, PSKE: state professional skepticism

Structural Model

After completing the assessment on the validity and reliability of the measurement model, the structural model should be assessed in order to test the relationship between constructs (endogenous and exogenous) and to assess the strength of the model. SmartPLS Bootstrapping was carried out to evaluate the statistical significance of each path coefficient because PLS-Sem makes no assumptions on the data distribution (Chin, 1998). Hair et al. (2017) provided guidelines that five steps are needed to be performed to examine the (1) collinearity issue; (2) significance of the structural model relationship via the path model; (3) coefficient of determination (R^2); (4) effect size (f^2); and (5) level of predictive relevance (Q^2). The main objective in evaluating the structural model was to maximize the variance explained or the R^2 for the endogenous latent construct as well as to determine the size and significance of all path coefficients. The results of structural model assessment, which would indicate how well the data collected support a theory or concept and to provide the evidence for the hypothesis testing, are presented in Table 4. Before performing step 2 – 5 as presented in Table 4, collinearity issue was evaluated and the VIF values for all item retained for state professional skepticism construct were all below 5 but greater than 0.2 (Hair, Ringle, & Sarstedt, 2011), indicating there were no significant level of collinearity among the exogenous constructs.

Coefficient of Determination (R^2)

The R^2 for structural model was 0.142, 0.119, 0.253, and 0.751 for ethical decision making process (ethical sensitivity, ethical judgment, ethical intention and ethical behavior), respectively. This demonstrated that 14.2%, 11.9%, 25.3% and 75.1% of the variance in endogenous constructs could be explained and predicted by all exogenous constructs linked to them, respectively. Hair et al. (2017) considered R^2 exceeding 0.2 as highly acceptable in behavioral studies.

Effect Size (f^2)

The f^2 effect sizes measures the influence a selected predictor construct has on the R^2 values of an endogenous construct. Cohen (1998) determines that f^2 of 0.35, 0.15 and 0.02 can be categorized as substantial, moderate, and weak, respectively. As shown in Table 5, for the supported hypothesis,

the effect size for the relationship between ethical judgment and ethical intention was moderate ($f^2 = 0.261$). Further, the relationship between ethical intention and ethical behavior was strong ($f^2 = 2.627$). However, the relationship between ethical sensitivity and ethical judgment was weak ($f^2 = 0.054$). Finally, the relationship between independence threat and ethical sensitivity was moderate ($f^2 = 0.162$).

Predictive Relevance (Q^2)

The final step in assessing the structural model was to examine the Stone-Geisser’s predictive relevance (Q^2). Q^2 measures the extent to which the model’s prediction is successful, and a value of $Q^2 > 0$ confirm the existence of predictive relevance (Hair et al., 2017). The Table 5 shows $Q^2 = 0.085, 0.064, 0.229, 0.736,$ and 0.010 for ethical sensitivity, ethical judgment, ethical intention, ethical behavior and professional skepticism, respectively. As these values were all above 0, the structural model exhibited predictive relevance for the endogenous constructs.

PLSPredict

Shmueli et al. (2019) demonstrates that the Root Mean Square Error (“RMSE”) and Mean Absolute Error (“MAE”) are the best suitable criteria for predictive model compared to R^2 , adjusted R^2 , f^2 or Q^2 . The RMSE is a preferred default for predictive modelling unless the distribution is highly non-symmetric (Chica & Rand, 2017). As shown in Table 4, all Root Mean Square Error (RMSE) values were lower than a Liner Regression Model (LM), as such it indicated that the model had high predictive power (Shmueli et al., 2019) for all the decision making processes.

Table 4: PLSPredict Results

Item	Q2_predict	RMSE_PLS	RMSE_LM	Difference
EDM1	0.109	1.750	1.854	PLS < LM
EDM2	0.023	1.290	1.308	PLS < LM
EDM3	0.016	1.475	1.563	PLS < LM
EDM4	0.061	1.366	1.446	PLS < LM

Test of Hypotheses 1

Consistent with the theory proposed by (Rest, 1986), as shown in Table 5 a positive and statistically significant relationship between ethical sensitivity and ethical judgment was observed ($\beta = 0.236, p = 0.005$); ethical judgment and ethical intention ($\beta = 0.458, p = 0.000$); and ethical intention and ethical action ($\beta = 0.833, p = 0.000$). These results supported H1(a), H1(b) and H1(c).

Test of Hypotheses 2

The relationship between level of independence threat and ethical sensitivity was negative and statistically significant ($\beta = -0.377, p = 0.000$). As such, H2(a) was supported. On the contrary, the relationship between level of independence threat and ethical judgment was positive but statistically not significant ($\beta = 0.025, p = 0.394$) as well ethical intention ($\beta = 0.073, p = 0.159$). As such, H2(b) and H2(c) were not supported. Further, the relationship between level of independence threat and EDM4 was positive but it was statistically significant ($\beta = 0.129, p = 0.006$). As such, H2(d) was also not supported.

Test of Hypotheses 3

As indicated in Table 5 that the relationship between state professional skepticism with ethical sensitivity, ethical judgment, ethical intention, and ethical behavior were positive but they were all not statistically significant. As such, H3(a), H3(c) and H(d) were not supported. Further, the relationships between state professional skepticism with ethical judgment was positive and statistically significant and therefore H3(b) was supported.

Table 5: Structural Model Results

Relationships	Hypothesis	β	t-statistic	p - Values	Confidence Intervals		Result	R ²	F ²	Q ²
					5%	95%				
					EDM1 -> EDM2	H1(a)				
EDM2 -> EDM3	H1(b)	0.458	5.036	0.000	0.314	0.615	Supported	0.253	0.261	0.229
EDM3 -> EDM4	H1(c)	0.833	19.066	0.000	0.758	0.897	Supported	0.751	0.627	0.736
INDTHR -> EDM1	H2(a)	-0.377	4.668	0.000	-0.511	-0.243	Supported	0.142	0.162	0.085
INDTHR -> EDM2	H2(b)	0.025	0.268	0.394	-0.124	0.190	Not Supported	0.119	0.001	0.064
INDTHR -> EDM3	H2(c)	0.073	1.002	0.159	-0.032	0.201	Not Supported	0.253	0.007	0.229
INDTHR -> EDM4	H2(d)	0.129	2.510	0.006	0.047	0.204	Not Supported	0.751	0.065	0.736
INDTHR -> PSKE	H4(a)	0.147	1.541	0.062	-0.006	0.296	Not Supported	0.021	0.022	0.010
PSKE -> EDM1	H3(a)	0.002	0.028	0.489	-0.154	0.149	Not Supported	0.142	0.000	0.085
PSKE -> EDM2	H3(b)	0.267	2.600	0.005	0.083	0.417	Supported	0.119	0.079	0.064
PSKE -> EDM3	H3(c)	0.108	1.157	0.124	-0.048	0.263	Not Supported	0.253	0.014	0.229
PSKE -> EDM4	H3(d)	0.048	1.076	0.141	-0.031	0.119	Not Supported	0.751	0.009	0.736

Test of Hypotheses 4

As shown in Table 5 the direct effect of independence threat on professional skepticism was positive and not statistically significant and therefore H4(a) was not supported. Further, as shown in Table 6 state professional skepticism did not mediate the relationship between level of independent threat and ethical decision making process and as such H4(b), H4(c), H4(d) and H4(e) were not supported.

Table 6: Summary of Structural Path Estimates

Description	β	Standard Deviation	t-statistic	p - Values	Confidence Intervals	
					2.50%	97.50%
INDTHR -> PSKE						
INDTHR -> EDM1	0.000	0.015	0.024	0.981	-0.031	0.026
INDTHR -> EDM2	-0.050	0.052	0.954	0.341	-0.159	0.041
INDTHR -> EDM3	0.004	0.049	0.092	0.927	-0.087	0.103
INDTHR -> EDM4	0.072	0.079	0.910	0.363	-0.081	0.219

DISCUSSION AND CONCLUSIONS

One of the objectives of this study was to examine whether sequential relationships existed for the four components of ethical decision making process proposed by Rest (1986). This study confirmed that such sequential relationships exist. This is consistent with previous findings that unethical behavior is carried out by individuals who fail to recognize themselves as moral agents, fail to judge the consequences of the action appropriately, fail to prioritize the appropriate ethical concerns and finally fail to engage in ethical actions and the action they take has severe impact on others (Johari, Sanusi, & Chong, 2017).

This study found a negative relationship between independence threat (self-interest threat) and ethical sensitivity. This is contrary with past studies which found a positive relationship between independence threat and ethical sensitivity (e.g., Johari et. al., 2017). If auditors cannot recognize ethical issues, it means that their ethical decision making is based on other considerations such as economic considerations or litigation risks (Jones, 1991). However, this study also found the relationship between the independence threat and ethical behavior to be positive. This means that

despite auditors not recognizing the ethical issues due to independence threat, they can still act ethically. The Rest's model of ethical decision making may encapsulate important variables, but some of the elements in the model — the notion that ethical sensitivity, a set order of stages, and intentionality — obscure ethical judgment precedes behavior that leads to unethical behaviors in organizations. By ignoring ethical decision that occur without ethical sensitivity, the model leaves a substantial portion of unethical decisions, and the reasons behind them, unexamined (Bazerman & Tenbrunsel, 2011). Auditors may also consider the reputation risks or litigation risks faced by audit firms; thus they act ethically despite the existence of the independence threat (in this study: self-interest threat).

State professional skepticism had no impact to the ethical decision making. This may be because auditors consider professional skepticism more relating to the way an auditor collects audit evidence by challenging the inappropriate or contradictory evidence. State professional skepticism may be considered as front end process as described by (Mosier & Fischer, 2010) when individuals make their decisions. In this stage, all audit evidence collected will be diagnosed and assessed and used for the formulation of the judgment or the alternatives to be selected for decision-making. The judgment will later trigger the decision-making process (back end process) (Mosier & Fischer, 2010) to act ethically or not. Since the auditors are in the reporting stage, evidence has therefore been collected and assessed. Thus, the decision to act ethically or not may be based on other considerations such as the independence threat due to economic dependence of audit firms or even unconscious bias (Chiang, 2016; Johari, Sanusi, & Zarefar, 2019).

Independence threat does not have any impact on the state professional skepticism behavior of auditors. Perceived economic dependence may be viewed resulting in reducing auditors' objectivity and integrity and hence reducing audit quality and ethical behavior of auditors (Kinney, Palmrose, & Scholz, 2004). However, audit a firm has its own policies and procedures to manage their fee dependence issue as required under the auditing standards (IAASB, 2016a, 2016b). Further, the audit firm will provide non-audit services to its audit clients for services that will clearly not impose a self-review threat or certain safeguard has been put in place to ensure that the risk of threat has been reduced to an acceptable level (such as the separation of the engagement team) (IESBA, 2018a). As a result, from the audit team

perspective, the provision of significant non-audit services which may create fee dependency will not have a significant impact on the auditors' state professional skepticism. Further, there are no mediation effect of state professional skepticism on the relationship between independence threat and auditors' ethical decision making.

The finding has several practical implications. It appears the ethical decision-making of Indonesian auditors is generally based on economic rationality; therefore, Indonesian regulators may need to emphasis a training program for ethical values for Indonesian auditors. In addition, Indonesian regulators may also need to ensure that all audit firms have their own internal ethical training. Audit firms may also need to start an initiative to improve the ethicality of their human resources such as the establishment of Ethical Business Conduct Committee within the audit firm to ensure all professionals working in the audit firm will act ethically in all occasions.

Despite all precautionary steps considered and the findings supporting several past studies, there are unavoidable limitations of our studies which should be acknowledged. First, our study required respondents to form their ethical decision-making based on a case scenario. Despite the fact, that the case relates to a common situation facing auditors and has been validated for their relevance to auditors, the use of case has some setbacks in the case when the participants may not be familiar with the selected case. As such, the results are appropriate with the current respondents and may change depending on the familiarity of the respondents to the given case.

Second, our research respondents were working in Big 10 audit firms in Indonesia. The firm policies and procedures to address the independent threat as well as audit quality management systems including training provided to client serving staff may be different for smaller audit firms. As such, ethical behaviour, state professional skepticism and independence threat may be different for smaller audit firms and therefore it is an opportunity for future research on the same issue with smaller firms. This is consistent with the findings noted by P2PK where there were more findings for smaller firms than Big 10 audit firms in Indonesia.

Finally, our research focussed only on two variables, i.e., professional skepticism and self-interest threat and how they affected the ethical

behaviour of auditors. The decision-making process of auditors is complex and may include other factors such as moral intensity, ethical environment of audit firms, individual ethical orientation, etc. As such, future research may consider those new factors to comprehend the ethical behaviour of auditors better.

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APPENDIX

Research Case

The below information relates to a typical situation during an audit including the negotiation between auditor and management to resolve certain audit issues.

Background information

KAP MASMED has been appointed as the auditor of PT Millennial, a large successful women's clothing manufacturer and distributor, for the year ended 31 December 2018. You are the audit partner for the Millennial audit assignment. During your audit for the year ended 31 December 2018, you noted that due to intense competition, some inventories have not yet been sold and are potentially required to be written down to reflect their net realizable value. The Finance Director, Mr. Husin Alatas, has outlined three scenarios for potential inventory write-down, which require the auditors to exercise their professional judgment and skepticism in determining the acceptable write-down within a possible range of US\$0.6 million to US\$15 million. The overall materiality for the audit is US\$4 million.

Scenario 1, which uses the assumption of average sales and cost growth on the historical average for the last five years and adjusted with the industry report for the women apparel industry, as well as a moderate discounting program, will result in a US\$15 million write-down adjustments.

Scenario 2, which uses the assumption of average sales and cost growth on the historical average for the last five years, as well as a moderate discounting program, will result in a US\$9 million write-down adjustments.

Scenario 3, which is based on a very aggressive discounting program and optimistic sales forecasts will result in material write-down of only US\$0.6 million. Scenario 3 is supported by a new marketing strategy that is expected to be more effective, where Millennials will target new but more profitable segments (higher profit margin), initiating marketing campaigns in various social media, using innovative channel distribution network, and a number of other new initiatives which are expected to increase sales and reduce Millennials' distribution costs. Millennials has no experience with this new marketing strategy and distribution.

Because Millennials already has a new marketing strategy that is expected to be effective in boosting Millennials sales, management believes that the exposure to inventory write down is only US\$0.6 million, which is not material, so Millennial management takes a position not to record a decrease in inventory value in its current financial statements. Husin has tried to convince you that Scenario 3 is sensible during a meeting to discuss the potential write down.

If you accept Scenario 3, you will issue an unmodified audit opinion.

In addition to the audit engagement, your firm also provides regular non-audit services. The fees obtained from the non-audit services were approximately at least equal to your audit fees annually and in some years were even higher (up to 300% of audit fees).