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# The Effects of Tone at the Top and Professional Skepticism on Fraud Risk Judgment Among Internal Auditors in Indonesia

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## ABSTRACT

Failure of the internal auditors (IAs) to appropriately apply fraud risk judgment could result in audit failure in revealing fraud and scandals. It leads to significant harmful consequences to the IAs' profession. In carrying out their duties, IAs sometimes have to face top management pressure. Tone at the top becomes essential in creating an ideal working environment for the IAs. Moreover, the lack of professional skepticism has been one factor causing an auditor's failure to achieve the optimal result in detecting fraud. The findings from 202 respondents revealed that the IAs who have high professional skepticism are more effective in making fraud risk judgments. However, the direct influence of the tone at the top on fraud risk judgment is not statistically supported. This new finding may help professional regulatory bodies and the internal auditing function consider the profile and its necessary environment to elevate fraud risk judgment to regain public trust in the profession.

**KEYWORDS:** Fraud Risk Judgment, Professional Skepticism, Tone at the Top, Internal Auditor, Indonesia

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## INTRODUCTION

The bankruptcy of big companies due to fraud has drastically dropped public confidence in the internal auditors' function (Chambers, 2015; Tabuchi, 2012). As the 3<sup>rd</sup> line of defense in an organization, their role as internal auditors has been argued due to the enormous report of financial scandals in the mass media, such as the PT Jiwasraya case in Indonesia and the Toshiba case in Japan. Both cases involved a significant sum of fund loss of IDR 37.4 trillion and USD 1.8 billion of mark up profit, respectively. The flaws in fraud judgment have also led internal auditors into the process of litigation. For example, the media has scrutinized Toshiba's internal auditors for excluding accounting audits from the internal audit scope since they were too focused on providing consulting services to management and were not aware of the USD 1.8 billion inflated profit (Erbuga, 2019). It is claimed that the internal auditors' low judgment performance related to internal auditor fraud risk is a significant reason for undetected fraud before it became a big published scandal (Tabuchi, 2012).

Due to corporate scandal, the effectiveness of internal auditing functions in fraud risk judgment is commonly questioned and challenged by the public. The ACFE report in 2018 specified that the performance of internal auditors in uncovering fraud is relatively low since they only managed to detect 16% of total cases compared to 48% of total fraud cases that were uncovered by tips from whistleblowers. As one of the control mechanisms, the internal audit function is ranked as the third most generic anti-fraud control installed in 73% of surveyed organizations. However, its performance in preventing fraud is deemed very low and ineffective (ACFE, 2018).

Therefore, the internal auditors' (IAs) fraud risk judgment, together with its contributing factors, becomes a significant problem to be discussed by researchers to understand how to improve the IAs fraud risk judgment. The environment factor is deemed crucial in the IAs' working environment due to their relationship with the company's top management as they are carrying out the top management's role in preventing and detecting fraud from happening. On the other hand, the top management itself is the party with the most significant probability of committing fraud, making IAs conflict with management. Even though IAs are expected to be objective

and independent (IIA, 2017), but in a conflict situation, IA's are likely to make judgments favoring the management (Harrell, Taylor, & Chewning, 1989; Mason & Levy, 2001).

Professional skepticism is claimed as a key of a successful audit (Bagshaw, 2018) and one of the determinant factors of the quality of fraud risk-related judgment (Carpenter & Reimers, 2013). On the other hand, Beasley, Carcello, & Hermanson (2001) found that professional skepticism is one factor that leads to audit deficiency. The public and other stakeholders have scrutinized auditors' professional skepticism and fraud risk judgment along with the leakage of various scandals to the mass media. However, only a few studies elaborate on the professional skepticism concept in internal auditing (Hurt, 2010; Johari, Sayed Hussin, & Razali, 2019) leaving a significant gap in the study on the effect of professional skepticism on internal auditors. Thus, this study was designed to address the gaps raised by investigating the effect of the tone at the top and professional skepticism on IAs' fraud risk judgment.

## **LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### **Fraud Risk Judgment**

In this study, fraud risk judgment refers to a set course of behavior to respond to the vulnerability that an entity faces from a capable person in combining all three elements of the fraud triangle. Auditors will make judgments in every stage of the audit process, in every audit assignment. However, when making judgments, auditors are likely to be significantly deficient in responding to fraud risk that leads to low fraud detection rates (Trompeter, Carpenter, Desai, Jones, & Riley, 2013). Tschakert (2016) suggested that by improving auditors' judgment in evaluating red flags, internal auditors can better-respond to fraud risks and safeguard company assets. In line with the finding, some previous studies measured fraud risk judgment by the accuracy in recognizing a set of red flags as predictors of fraud occurrences (Fullerton & Durtschi, 2004; Schafer & Schafer, 2019; Boyle, DeZoort, et al., 2015). This study evaluates how the use of alternative fraud model practice aids

affects external auditors' fraud risk judgments. The extant fraud literature, including professional audit standards, focuses almost exclusively on the fraud triangle model (Cressey, 1973). In contrast, others used various fraud-related cases (Vance, 2017; Simon, Smith, & Zimbelman, 2018; Carpenter, Reimers, & Fretwell, 2011) researchers and leaders in the profession suggest that it may be helpful to internal auditors in assessing and identifying risks. In this study, we investigate whether the group interaction associated with brainstorming is necessary to reap the benefits of brainstorming for internal auditors' fraud judgments. Guided by psychology theory on cognitive load, we also examine whether this group interaction can reduce a response mode bias that auditors have exhibited when assessing risk. Consistent with prior research on external auditors, we find that internal auditors who brainstorm in groups identify fewer fraud risks (i.e., quantity).

### **Tone at the Top**

People learn by observing others and their environment (Bandura, 1989). The behavior of top management is constantly scrutinized by all employees, including internal auditors. The top management's daily behavior is synthesized into the tone at the top, and all employees will make judgments and decisions that are in line with it. (Schwartz, Dunfee, & Kline, 2005). Internal auditors' attitudes towards managements tend to be an advocate to them. (Brody & Lowe, 2000; Messier et al., 2011); furthermore, they are likely to make judgments aligned with management expectations (Harrell et al., 1989; Mason & Levy, 2001). That is why management support or tone at the top is essential to fraud risk judgment performance as internal auditors' behavior. Tone at the top significantly affects internal auditors' financial misstatement assessment (Wang & Fargher, 2014) and significantly affects fraud risk assessment (Wang & Fargher, 2015). Thus, the proposed research hypothesis was :

**H<sub>1</sub>:** Tone at the top positively influences internal auditor's fraud risk judgment.

### **Professional Skepticism**

Professional skepticism consists of a skeptical mindset and a skeptical attitude process (Nolder & Kadous, 2018) and inspectors around the globe

often identify a lack of skepticism as a root cause of audit deficiencies (IFIAR, 2015, 2016). A skeptical mindset is a cognitive process that understands the issue, gathers the facts, and performs an analysis. A skeptical attitude is a judgment process based on cognitive and affective evaluation. The outcome of a skeptical attitude is an intention to behave, and it will be followed by behavioral action. Previous studies have provided evidence that trait professional skepticism positively influences auditor fraud detection performance (Siew et al., 2018) limited studies have attempted to measure professional skepticism traits in Malaysia although the concern for auditors' professional skepticism pertaining fraudulent financial reporting has increased tremendously since the year 1997. Hurtt's Professional Skepticism Model was adopted in this research to examine the relationship between the six professional skepticism characteristics (questioning mind, search for knowledge, suspension of judgement, interpersonal understanding, self-confidence and self-determining. This statement is in line with Popova (2012) who found that auditors with high-level professional skepticism tend to detect errors and use them as initial fraud expectation. It is also supported by Fullerton & Durtschi (2004), who found the positive influence of professional skepticism on fraud detection performance. Carpenter et al. (2002) found that the higher the professional skepticism, the better the judgment in assessing the likelihood of fraud occurrence. Furthermore, audit partner preference for enhanced professional skepticism leads auditors to increase their ability to detect fraud risks and run more relevant procedures in detecting fraud (Carpenter & Reimers, 2013). Thus, the proposed research hypothesis was:

**H<sub>2</sub>:** Auditor's professional skepticism positively influences internal auditor's fraud risk judgment.

## RESEARCH METHOD

### Data Collection

This study used an online questionnaire survey with internal auditors as a targeted population. This study used the judgment sampling method since it needed suitable resource persons to give specialized feedback in measuring fraud risk judgment. The survey respondents were in-house internal auditor

practitioners who worked for public and private organizations with a minimum of three years of experience as an internal auditor. A total of 600 self-administered e-questionnaires were distributed to internal auditor practitioners in e-questionnaires distribution and collection. Ultimately, 208 questionnaires were completed and returned, of which only 202 questionnaires (33.67%) were valid for further analysis due to outliers. The required minimum sample size for this study based on the G\*Power 3.1 was only 68 samples (Hair, Hult, Ringle & Sarstedt, 2017) we were confident the interest in partial least squares structural equation modeling (PLSSEM); thus, the 202 samples gathered were considered sufficient and appropriate.

## Measures

Fraud risk judgment was measured by a case that contained a set of red flags based on the Fraud Triangle Theory (Cressey, 1950). Based on the provided case, respondents were asked to judge whether the standard audit plan needs to be modified. The nine indicators of construct produced a Cronbach's alpha of 0.903. Professional skepticism was measured using a slightly modified version of Robinson et al.'s (2018) multi-dimensional 12 indicators scale. Respondents were asked their condition when they made judgment after they had read the case. The Cronbach alpha of this current study was 0.937. For the tone at the Top, respondents were asked their perception of the tone of their top management of the organization they worked for. The 6 (six) indicators of the tone at the top scale were extracted from Moeller (2014). The Cronbach alpha of the scale in this current study was 0.909.

## Data Analysis

This study used the Statistical Package for the Social Science (SPSS) software version 23 to analyze the respondents' data. The data was tested through the goodness of measures, descriptive and inferential analysis. Since the sample size was sufficiently large, the assumption of normality was not required as the Central Limit Theorem ensures that the distribution of disturbance term will approximate normality (Schmidt & Finan, 2018). Hair Jr, Sarstedt, Ringle, & Gudergan (2018) suggested that a sample size of more than 200 is considered a large sample size. Since the total respondents in this study were more than 200 or more than 10 samples for each variable,

as Schmidt & Finan (2018) suggested, the normality test was not required. In this study, parametric tests were conducted. Reliability and validity were also tested to verify that the instrument used was reliable and valid.

## RESULTS AND DISCUSSION

### Respondents' Demographic Profile

In total, there were 202 respondents involved in this study. All internal auditors who worked in the private and public sectors in Indonesia were the targeted respondents. The respondent's profile indicated a high percentage of male domination responses (69.3%). Most respondents were from the private sector (74.8%), and most of them had accounting backgrounds (57.9%). Most respondents were in the middle position of the internal audit function (manager level or equivalent 26.8% and assistant manager level or equivalent 37.6%). In terms of working experience as internal auditors, the composition was 37.6% for 3-7 years; 27.3% for 7-11 years; 18.8% for above 15 years, and 16.3% for 11-15 years.

### Data Fitness

The latent variable scores were used in this study. As shown in Table 1, the fraud risk judgment mean and standard deviation were 4.3626 and 1.0119, respectively. The professional skepticism and tone at the top means were 4.8508 and 4.8172, while the standard deviation of professional skepticism and tone at the top were 0.5793 and 0.8092. All construct have left-tailed skewed data distribution. The fraud risk judgment and the tone at the top had mesocurtic kurtosis, while the professional skepticism tended to be platycurtic kurtosis.

**Table 1: Data Distribution**

Constructs	Mean	Std. Deviation	Skewness	Excess Kurtosis
Fraud Risk Judgment	4.3626	1.0119	-0.862	0.322
Professional Skepticism	4.8508	0.5793	-0.673	1.640
Tone at the Top	4.8172	0.8092	-0.862	0.674

The Common Method Bias (CMB) was problematic if more than 50% of the total variance was explained only by the first factor (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). It is essential to assess the bias’s extent reflected by the Harman single factor (Hair Jr. et al., 2019). This study’s unrotated factor analysis showed that the first factor explained 29.522% of the total variance of 69.405%. Thus, CMB confirmed was not an issue in this study.

**Correlation Analysis**

Table 2 highlights the Pearson correlation analysis between variables. The professional skepticism (STPS) was significantly positively correlated with fraud risk judgment (FRJP) and tone at the top. However, the tone at the top (TATT) was not significantly correlated with fraud risk judgment as the Pearson correlation value was close to zero (0.041).

**Table 2: Correlation Analysis**

	<b>FRJP</b>	<b>STPS</b>	<b>TATT</b>
<b>FRJP</b>	1.000		
<b>STPS</b>	0.388 <sup>a</sup>	1.000	
<b>TATT</b>	0.041	0.295 <sup>a</sup>	1.000

<sup>a</sup> Correlation is significant at the level 0.01 level (one-tailed)

**Regression Analysis**

The Variance Inflation Factors (VIF) were used to check collinearity issue. Any value of VIF higher than 3.3 means the collinearity is an issue (Diamantopoulos & Siguaw, 2006). The VIF between professional skepticism and fraud risk judgment was 1.095, and the VIF between tone at the top and fraud risk judgment is 1.096. Therefore, it can be indicated that collinearity was not an issue in this study.

**Table 3: Regression Analysis**

Variables	Unstandardized Coefficients	Standardized Coefficients	t-stat	p-value
Constant	1.356		2.239	0.026
Professional Skepticism	0.719	0.412	6.043	0.000
Tone at the Top	-0.100	-0.080	-1.772	0.243

R = 0.396\*

R<sup>2</sup> = 0.156R<sup>2</sup> Adjusted = 0.148

F-statistic (p-value) = 18.458 (.000)

Durbin Watson statistic = 1.848

Significance at p &lt; 0.05

Table 3 provides the results for hypotheses testing. The results showed that the relationship between professional skepticism and fraud risk judgment was positively significant, and the path coefficient was 0.412. (t statistic = 6.043;  $p < 0.01$ ). Thus, H1 was supported. The result is supported by previous studies of Popova (2012), Fullerton & Durtschi (2004), Carpenter et al. (2002), and Carpenter & Reimers (2013). Professional skepticism can lead the auditors to be alert to the contradiction among the evidence obtained, the reliability of the evidence, the responses of auditees that can be used as evidence, and the probability of fraud circumstances that lead to additional audit procedures. Consequently, in a high state of professional skepticism, internal auditors can avoid misleading conclusions from gathering evidence and the risk of overlooking conditions that may lead to possible fraud.

As regard H2, the beta was a negative value, and the t-values and the p-value indicated insignificant results ( $b = -0.082$ ;  $t = 0.978$ ; and  $p > 0.05$ ). Therefore, H2 can not be supported, which meant the tone at the top had no significant relationship with fraud risk judgment. The samples were taken based on the judgment sampling method that excludes internal auditors who have working experience of fewer than three years. Therefore, the sample taken were mature persons who have a free mind in applying fraud risk judgment. Moreover, internal auditors have professional and ethical responsibilities to society. They must behave and carry out their duties according to professional and ethical standards regardless of threats from other parties and actions of previous auditees', including top management threats and actions. A low tone at the top indicates a weak control environment. As the Committee of Sponsoring Organizations of

the Treadway Commission (COSO) internal control concept's foundation, a weak control environment indicates that other COSO internal control elements such as risk assessment, control activities, information & communication, and monitoring activities are not implemented effectively. The low tone at the top should be an indication that fraud may occur. Previous studies suggested contrary results. Wang & Fargher (2015) suggested a negative relationship between tone at the top and fraud risk judgment. On the contrary, Bahtiar et al. (2017) found that tone at the top positively influences fraud detection performance.

Table 3 also provides the  $R^2$  value that reflected the fraud risk judgment variance explained by professional skepticism and tone at the top in the research model. As shown in the Table, the  $R^2$  of fraud risk judgment is 0.156, which denoted that the independent variables (tone at the top and professional skepticism) explained 15.6% of the variance in the dependent variable (fraud risk judgment).

## CONCLUSION AND RECOMMENDATION

As a means to prevent and detect fraud occurrence, the importance of tone at the top and professional skepticism on fraud risk judgment cannot be underestimated. This study contributes to the literature on the significant role of individual factors (professional skepticism) and environment factors (tone at the top) and their effect on internal auditors' fraud risk judgment.

This study provided evidence on the influence of professional skepticism and tone at the top on internal auditors' performance in judging fraud risk. The findings also give input to regulatory bodies of the internal auditor profession. The regulatory bodies should take proactive action in ensuring that the attributed standard is updated to match the internal auditor profile with current needs. The regulatory bodies should ensure that the performance standard is kept updated to address independence impairment due to top management threats.

Some issues arise beyond control. The sample was taken using Judgment Sampling since the provided case in the questionnaire needed respondents with specific criteria who had enough experience to recognize

risks and control related to fraud. Thus judgment sampling was the best available option to consider; however, it may slightly alleviate the generalizability of findings compare to those with random sampling. The study also creates opportunities for future research that could benefit from this study output, such as exploratory research to further examine on the state professional skepticism measurement.

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