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An Evaluation of Clients' Fraud Reasoning Motives in Assessing Fraud Risks: From the Perspective of External and Internal Auditors

Zuraidah Mohd-Sanusi, Nurliyana Haji Khalid, Amilin Mahir

Accounting Research Institute, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia

Abstract

The auditor's accuracy in conducting fraud risk assessment continues to be the most critical task. The reason is the effectiveness and efficiency of an audit depends on auditor's ability to accurately assess the existing audit risks (Jones, 2004). Applying to that, Malaysian Approved Standards on Auditing AI 240 on "Fraud and Error", provides recommendation to auditors in assessing the client's likelihood of fraud risks based on the three elements of fraud triangle concept; *opportunity, pressure and rationalization*. Ideally, this audit standard highlighted the importance of auditors' to evaluate these elements as it will assist them to understand their clients' fraud reasoning motives and thus, properly assess the potential fraud risks that might be occurred. Based on the risk assessment, the auditors are required to plan the audit procedures in order to detect any material misstatement that may lead to fraud or error. In this study, as established in the ISA240, the fraud triangle concept has been used to examine the direct and interaction effect of the following fraud risk factors: (1) internal control system *(opportunity)*; (2) pressure and; (3) type of auditors *(internal and external auditors)* on fraud risk assessment. An experimental research approach is adopted by sending a set of case scenarios to 129 auditors, comprises of both internal and external auditors. The respondents were required to complete two different case scenarios, where the level of internal controls and pressures were being manipulated; high and low. The results showed that there are significant relationships between each risk factors and fraud risk assessment. Furthermore, the results of the interaction effects (combination of two variables) also show significant effect on fraud risk assessment. The findings of this study may provide insights into the auditors' judgment in assessing fraud risk. It is also could be beneficial to the auditors to increase their awareness of the importance to understand their client's fraud motives during fraud risk assessment task and thus, improve the audit quality.

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Keywords: fraud risk assessment; fraud reasoning motives; internal control; pressure; fraud triangle, auditors

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1. Introduction

The financial frauds together with audit failures have been progressively a hot issue. Failures to assess potential fraud risks will expose an organization to serious consequences. A survey done by Association of Certified Fraud Examiners (ACFE) (2014) estimated that the typical organization loss 5% of its revenues to fraud every year with approximately $3.7 trillion from the $74 trillion 2013 Gross World Product. In context of Malaysia, a survey conducted by KPMG (2013) indicated that 48 percent of the respondents confessed the fraud occurrence in their organizations during the period from January 2010 to December 2012. For this reason, this issue of fraud became very important for public accountants including both internal and external auditors as there is an increasing demand from the public, that they should have adequate skills and ability to assess fraud risks in order to detect the financial statement fraud more effectively. While management developing and establishing an effective system of internal controls, the auditor carries the responsibility to plan and perform the audit in order to obtain reasonable assurance that the financial statements are free of material misstatement due to fraud or error. In addition, other than normal accounting fraud, tax fraud or tax evasion became hot issue as it challenge the tax authority to curb that type of fraud. The reason behind this statement is that normal accounting fraud would leads to tax fraud as well. Therefore, tax audit is one of the enforcement method carried out by the tax authority to mitigate the fraud to be occurred.

The current international auditing standards that apply to auditors require them to assess and detect the likelihood of fraud risks in order to determine whether the financial statements are free from material misstatement or error. However, due to the complexity of the nature of frauds and various risk factors, they are not easy to detect even though the audit process has been implemented according to the standards. In addition, in the processing of making judgments, auditors may encounter various situations and conditions that arise from the audit tasks assigned to them (Iskandar, Sari, Mohd-Sanusi, & Anugerah, 2012).

Prior research on auditors' fraud risk assessment focuses primarily on external auditors' judgment and it is observed that little research is done that focuses on internal auditors' perspectives (Norman, Rose, & Rose, 2010). There are limited studies that investigate the fraud risk factors embedded in the fraud triangle theory on the auditors' fraud risk assessment. This study focuses on both types of auditors as they have the same roles and responsibilities in relating to fraud risk assessment. However, as they are expose to different audit environment and nature of audit, this study take this into consideration whether there is difference in their judgment. This study is conducted with two main objectives. The first objective is to examine the effects of the following fraud risk factors namely; 1) pressures; 2) internal control system (opportunity); and 3) type of auditors (internal and external auditors) on their ability in assessing fraud risks. The second objective of this study is to examine the interaction effects of different combinations of fraud risk factors on the auditors' ability in assessing the fraud risks.

1.1. The roles of auditors in conducting fraud risk assessment.

Fraud risk assessment is defined as "systematic process for identifying and evaluating events or conditions (e.g. likelihood of fraud risks and opportunities) that could affect the achievement of an organization's objectives, positively or negatively" (PriceWaterHouseCoopers, 2008). Furthermore, fraud risk assessment has been highly recommended as an critical audit procedure that would improve the auditor's ability in detecting the likelihood of fraud (Knapp & Knapp, 2001). Therefore, accountants and standard setting bodies have attempted to define the appropriate roles and responsibilities for both type of auditors in respect of fraud risk assessment and fraud detection (Norman et al., 2010).

Both internal and external auditors have same roles and responsibilities in fraud risk assessment and detection. For external auditors, the fraudulent financial reporting is a serious matter as the failure to detect any material misstatement may expose them to litigation. As a result, this situation would lead to the damage of good reputation which results from public dissatisfaction (Jaffar, 2008). Upon finding evidence of fraudulent financial accounting, the external auditors must communicate their findings to the audit committee, or other governing body within the organization. The external auditors are also required to report the audit findings of procedures that could put the company at risk of possible fraud. Similar to external auditor, the internal auditor also carries the same responsibilities in assessing and detecting fraud risk. The Institute of Internal Auditors (IIA) stated that internal auditors have a responsibility to exercise "due professional care" with respect to fraud detection. Internal auditors

also are expected to have sufficient knowledge of fraud so that they are able to identify fraud signals or indicators, be alert to opportunities that could lead fraud to occur, and report to the appropriate authorities. Statement on Internal Auditing Standards No. 3 states the expectations of internal auditors in relating the fraud assessment judgment, deterrence, prevention, detection and reporting of fraud.

For this reason, based on the Fraud Triangle concept, the International Standard on Auditing (ISA) 240 (Paragraph 24) states that for better risk assessment and evaluation, auditors are required to have a good understanding of these fraud risk factors (fraud reasoning motives) when conducting their audit task. This is because when someone is able to understand this concept, they will have better understanding of frauds, how frauds occur, the reasons why they occur and the most important things is what are the possible actions to mitigate them from occurring and recurring in the future.

1.2. The Fraud Triangle Concept

The fraud triangle concept was founded by a renowned criminologist, Donald R. Cressey (Omar et al., 2010). There are three elements of the fraudster fraud reasoning motives which are "incentives/ pressures" to commit fraud, "opportunities" to execute the fraud or "attitudes/ rationalizations." The first critical element in fraud triangle is an opportunity to commit, to conceal and to avoid being punished. This element refers to a poor system in an organization where the employee has the authority or ability to manipulate, and thus making fraud possible (Rae & Subramaniam, 2008). In other words, this is a situation that could provide a space for an individual to commit fraud. For instance, lack of internal control system such as inappropriate monitoring and no segregation of duties may allow an employee to misuse funds allocation (Wilks & Zimbelman, 2004). In other word, opportunity could exists in the form of trust given by an organization or when the organization's internal control system is poor (Omar et al., 2010). Second, the pressure (also referred as incentive) factor, refers to a situation where the fraudster is confronted with financial, work or personal pressures. In other word, pressure could arise when excessive pressure exists in the management to meet third party requirements and expectation such as industry trend level expectations among investment analyst and institutional investors (Chen & Elder, 2007). These circumstances are more likely to be involved in fraud behavior in order to satisfy their own dissatisfactions (Dellaportas, 2013). The third factor in the fraud triangle framework is rationalization. This factor denotes that the justification of unlawful behavior is a result of an employee's lack of moral reasoning and personal integrity. Although rationalization is a part of the factor that influences an individual to commit fraud, it is considered as a grey area in fraud triangle (Ravisankar et al., 2011). This is because rationalization is closely related to individuals and the circumstances they are facing. This factor is not ex post facto which justifies a theft act, but in fact it becomes a necessary element of the crime and fraud even before it occurs. Therefore, this factor would not be discussed in this study.

2. Discussion of previous works and hypotheses development

2.1. Client's level of internal control system (opportunity) and fraud risk assessment.

For over the years, the auditors as the third party were required to attest to the clients' internal control effectiveness in order to minimize the possibility of fraud to occur within the organization (Schneider, 2009). Therefore, in order to comply with this requirement, internal control assessment must be a part of the audit engagement. If internal controls were rated as weak or low, it may not be possible to express an accurate opinion on all the accounts presented, thus audit programs are modified accordingly and substantive tests are increased. In contrast, if the internal controls were rated strong or high, the amount of substantive testing is reduced (Josiah & Samson, 2012). Therefore, other than a requirement for the auditors to understand the design of a client's internal control system, it is important for the auditors to be able to identify any internal control weaknesses since poor performance on this task can lead to incorrect opinions and overlook of any misstatement (Bierstaker & Thibodeau, 2006). Opportunity has been examined in the context of poor monitoring and weak internal controls in place in an organization which has contributed as at major factor of fraud (KPMG, 2009). A study by Josiah & Samson (2012) on selected firms in Nigeria, found that occurrence of fraud cases in these organizations were due to poor management and internal controls system. Likewise, similar findings have been found in a study carried out by

Brennan & McGrath (2007) on 14 companies that were subjected to investigation due to publication of fraudulent financial statements. They found that all the companies had a poor internal control as the senior management was the one noted to be the most responsible party that has caused fraud to occur Moyes & Hasan (1996) found that the use of appropriate audit techniques can assists in identifying the weaknesses of internal controls and thus, minimize the likelihood of fraud to occur. As the internal controls efficiency were closely related to the likelihood of fraud risk, and there is a need for auditors to attest the client's internal control, thus, we develop the following hypotheses:

H1: There is a significant relationship between client's internal control system and auditors' fraud risk assessment.

2.2. Type of auditors (internal and external auditors) and fraud risk assessment.

External auditors are said to be more concerned with "fraudulent financial reporting" or "management fraud", while the internal auditors are likely more concerned than external auditors of the misappropriation of assets such as done in employee fraud (Wilks & Zimbelman, 2004). Other than conducting their own audits of different areas of the accounting system, internal auditors also assist external auditors in performing financial statement audits (Moyes et al., 2006). A survey conducted by KPMG Malaysia (2009) shows that 78% of the respondents believed that Internal Audit is the most responsible party for fraud detection and investigation. Research suggests that most frauds are discovered through audit processes that were conducted by internal auditors which also have reduced unnecessary losses from occurring due to the fraud (Norman et al., 2010). Therefore, both internal and external auditors are expected to have same requirements and deep understanding in assessing the likelihood of fraud in conducting their audit work. A study by Dezoort & Harrison (2008) on the perceived responsibility for detecting fraud found that there were significant results between internal and external auditors, of which they were allocated 19.13% and 10.36% respectively. The results indicate that internal auditor feel that it is their primary roles and responsibilities for detecting fraud compared to external auditors. As compared to external auditors, the internal auditors is face significant pressures from management whereas internal auditors must assess the likelihood that members of management (who have the authority in evaluating and promoting of the internal auditors' performance) are involved in fraudulent activities (Norman et al., 2010). Given that both of them are facing different audit areas, motivation, pressure and exposure in relating to fraud risk assessment, we develop the following hypotheses:

H2: There is a significant relationship between type of auditors (internal and external) and fraud risk assessment.

2.3. Level of client's level of pressure and auditors' fraud risk assessment.

Pressure or incentive is one of the significant factors that motivates an individual to behave illegitimately (Dellaportas, 2013). A study by Cox & Weirich (2002) revealed that the pressure to achieve or exceed analysts' expectations has induced various entities to tend to publish fraudulent financial reporting. In a practitioner's view, Albrecht et al., (2008) stated that approximately, 95 percent of all frauds involve either financial or vice-related pressures. In study carried out by Rezaee (2005) on factors that may increase the likelihood of financial statement fraud, he found that excessive pressures on management to meet earnings' expectation and to beat analysts' forecasts become the main reasons the perpetrators were involved in fraudulent financial statements. From the above findings, pressure provides significant motivation to perpetrators to behave illegally. Thus, the audit standards require that auditors to consider clients' pressure during risk assessment at planning stage of their audit work. Based on the above discussions, we develop the following hypotheses:

H3: There is a significant relationship between client's level of pressure and fraud risk assessment.

2.4. Interaction effect of clients' level of internal control system (high/low), level of pressure (high/low) and type of auditors (internal and external) on fraud risk assessment.

Each of these factors (fraud risk factors) is necessary but not sufficient conditions for fraud to occur, and thus the fraud risk assessment should consider the interaction of these factors (Wilks & Zimbelman, 2004). In addition,

according to Cressey (1953), the combination of the fraud risk factors must exist for the abuse of trust to occur. Therefore, auditors must be able to understand the possibility of these combination and identify all of these elements during the process of fraud risk assessment. Based on the above discussion, we develop the following hypotheses:

H4: There is an interaction effect between the type of auditors (internal and external) and the client's level of internal control system on auditors' fraud risk assessment.

H5: There is an interaction effect between the type of auditors (internal and external) and the client's level of pressure on auditors' fraud risk assessment.

3. Methodology

3.1. Research Design

This study uses an experimental approach to examine the effect of pressure, internal control system and type of auditors (internal and external) on the auditors' fraud risk assessment judgment. This approach has been adopted in many studies in fraud risk assessment judgment literature (Knapp & Knapp, 2001; Wilks & Zimbleman, 2004; Payne & Ramsay, 2005; LaSalle, 2007; Jaffar, 2008; Dezoort & Harrison, 2008). This study adopts a 2 x 2 between - subjects factorial experimental design. The study has one dependent variable which is fraud risk assessment and three independent variables namely, internal control, pressure and type of auditors (internal and external). The cases scenario were adopted from LaSalle (2007) which is modified to suit the current study. The two independent variables (client's level of internal control system and level of pressure) were manipulated in two experimental scenarios. Specifically, the participants were provided with two sets of case scenario – Scenario 1 and Scenario2. Both independent variables: internal control system and pressure being manipulated.

3.2. Data Collection

The target respondents for this study are practicing internal and external auditors in Malaysia. The internal auditors have been randomly selected from the auditors who are working in Internal Audit Department in the Private Listed Companies, particularly in banking and financial services. On the other hand, the external auditors have been selected from the government body, the National Audit Department. In total, 200 research instruments were distributed to both internal and external auditors in hardcopy or softcopy form via email or fax. For internal auditors, the research instruments were distributed personally upon their confirmation to participate in the study. While for the government auditors who represent as external auditors, the research instrument was distributed through the Head of Audit Department for distribution to their subordinates. Out of 200 research instruments, 140 were returned of which 129 were useable while eleven were excluded due to incomplete data. This represents a 65 percent response rate.

3.3. Measurement of variables

The dependent variable of this study is the auditor' fraud risk assessment judgment. This variable was directly measured on a seven-point Likert-type scaling ranging from 1= strongly unlikely to 7=strongly likely, by asking the subject: "Based on your judgment, what is the likelihood of fraud risk in the above case?" Jaffar (2008) uses the seven-point Likert scale and similar question to measure the likelihood of fraud to exist in her case scenario materials.

The first independent variable is level of pressure. Similar to the measurement of dependent variable, the seven-point Likert scale was used for the respondents to indicate their level of agreement on pressure that being manipulated into two levels: high and low in the two different case scenario. The respondents were required to rate their level of agreement ranging from 1=strongly disagree to 7=strongly agree on the statement of "management or employees of the above case have the pressure to commit fraud". The second independent variable is level of internal control system. The low level of internal control system was measured by 0 and the high level of internal

control system was measured by 1. Again, the seven-point Likert scale ranging from 1=strongly disagree to 7=strongly agree was used in order to measure the respondents' agreement of the level of internal control system that was being manipulated (high and low) in the two different case scenario by asking the respondents the following question; "The above case has enough internal control policy". There were four questions used to manipulate the respondent's consistency in indicating their judgment on the level of internal control system in each case scenario. The measurement of each independent variables are similar with prior studies (e.g. Bierstaker, 1991; Jaffar, 2008; Rae & Subramaniam, 2008; Alon & Dwyer, 2010). The third independent variable is the type of auditors who are targeted as respondents in this study. Each type of auditors was given two different sets of case scenarios. For analysis purpose, the external auditor was measured by 0 and internal auditor was measured by 1.

4. Analysis

4.1. Demographic of Participants

Table 1 displays the demographic characteristics of the respondents. The respondents of this study consist of 60 external auditors and 69 internal auditors which bring to a total of 129 respondents. Out of the total respondents, there are 49 males (38%) and 80 females (62%) which show that the number of female auditors who participates in this study is about double from the number of male auditors. In terms of race, 102 of the respondents are Malays (79%), 21 are Chinese (16.3%) and 6 are Indians (4.7%). Most of the respondents are Bachelor Degree holders (62%), followed by Diploma (22.5%), Post Graduate (10.9%) and Certificate (4.6%). In addition, the table also shows that majority of the respondents, 75 of them (58.1%) had not enrolled in any professional membership bodies. 20 respondents (15.5%) are registered with Institute of Internal Auditors (IIA) followed by 14 respondents (10.9%) are registered with Malaysian Institute of Accountants (MIA), 4 respondents (3.1%) are registered with Association of Certified Fraud Examiners (ACFE) and 16 respondents (12.4%) are registered by other professional accounting and auditing bodies in Malaysia. A total of 61 (47.3%) respondents are executive, 25 respondents (19.4%) are senior executive, 22 respondents (17%) are assistant manager and another 21 respondents (16.3%) are in the position of JUSA and above (applicable to external auditors) or Audit Manager and Senior Audit Manager (applicable for internal auditors). Lastly, majority (72.9%) of the respondents which are represented by 94 respondents have less than 10 years of working experiences in audit field, followed by 28 respondents (21.7%) ranging from 11 to 20 years, 6 respondents (4.6%) ranging from 21 to 30 years while only 1 (0.8%) of the respondents have working experiences in audit field for 31 years or more.

Table 1. Descriptive Analysis of the participant demographic characteristics.

		Overall (N=129)	
Item		**Frequency**	**Percent**
Types of Auditors	External Auditor	60	46.5%
	Internal Auditor	69	53.5%
Gender	Male	49	38%
	Female	80	62%
Race	Malay	102	79%
	Chinese	21	16.3%
	Indian	6	4.7%
Academic Qualification	Post Graduate Degree	14	10.9%
	Bachelor Degree	80	62%
	Diploma	29	22.5%
	Certificate	6	4.6%
Professional Membership	Malaysian Institute of Accountants (MIA)	14	10.9%
	Institute of Internal Auditors	20	15.5%
	Association of Certified Fraud Examiner (ACFE)	4	3.1%
	Others	16	12.4%

Item		Overall (N=129) Frequency	Percent
	None	75	58.1%
Position	JUSA and above/ Manager/ Senior Manager	21	16.3%
	Assistant Manager	22	17%
	Senior Executive	25	19.4%
Years of Service	Less than 10 years	94	72.9%
	11 – 20 years	28	21.7%
	21 – 30 years	6	4.6%
	More than 30 years	1	0.8%

4.2. Hypotheses testing

4.2.1. Internal control system and auditors' fraud risk assessment.

Using the Independent Samples t-Test, this test is to compare the mean scores of two different levels of internal control system i.e. high and low (Pallant, 2010). In overall, the mean scores for the both groups were 5.38 and 4.14 respectively. Considering the Independent Samples Test table, Levene's Test for Equality of Variances for both Scenario 1 and Scenario 2, an insignificant p value of .804 and p value of .926<.05 were observed respectively. Next, to test for a difference in the mean scores between low and high internal control system, the Sig. (2-tailed) is used. With the value below .05, significant differences between the two compared groups would exist (Pallant, 2010). In Scenario 1, the Sign (2-tailed) value is .000, and therefore it could be concluded that there was a significant difference in the mean scores of low and high internal control system. This indicates that there is a significant difference in the mean score of Scenario 2 compared to Scenario 1. Furthermore, as there are two Scenarios tested, the results of Hypothesis 1 shall be discussed under each of the test conducted on the respective case scenarios. Table 2 and Table 3 demonstrate the results of the general linear model two-way between-groups ANOVA for both Scenario 1 and 2 respectively. For Scenario 1, the result shows that there is significant effects of which p< .1, F = 18.800, p = .000. Moreover, the partial eta squared value is measured for the effect size. The effect size is measured by the degree of association between and effect and the dependent variable (Pallant, 2010). In other words, it can be thought of as the correlation between and effect on the dependent variable. According to the guidelines proposed by Cohen (1988) (.01 = small, .06 = moderate, .14 = large effect), the result for Scenario 1, suggests a modest effect size for internal control system (partial eta squared values is .133). Whereas, for Scenario 2, the result also shows that there is significant effects with p<.1, F = 36.497, p = .000 respectively whereby the result shows that there is a large effect size for internal control system (partial eta squared values is .229). Based on these results, it is indicated that the association between internal control systems in Scenario 2 has larger effect size as compared to Scenario 1. This result can also be supported through the result of Independent Samples t-Test which also indicates that Scenario 2 has greater impact compared to Scenario 1. Therefore, the first hypothesis (H1) is supported.

4.2.2. Type of auditors (internal and external auditors) and fraud risk assessment.

For the Hypothesis 2, a non-parametric technique of Chi-square was used. The reason is it is useful to measure on nominal or categorical scales (0=external auditors; 1=internal auditors) and ordinal scale (fraud risk assessment). The result of Chi-Square test is .505, and thus indicates that there is no significant relationship between type of auditors and the fraud risk assessment. In addition, a Test of Between-Subject Effects in ANOVA was used to examine the significant difference between type of auditors and fraud risk assessment. Based on the results presented in the Table 2 and Table 3, for the Scenario 1, the result indicates that there is no significant effects of type of auditors (*F=.363, p=.548)*. For Scenario 2, the result shows that there are significant difference (*F=5.630,p=.019)*. Based on the above results, we can conclude that in Scenario 1, both internal and external

auditors have made similar judgment when assessing fraud risk factors in both case scenarios. However, for Scenario 2, the result shows that there is a significant difference between type of auditors and fraud risk assessment. Thus, Hypothesis 2 is supported.

Table 2.Test of Between-Subjects Effect: Scenario 1

Dependent Variable: Fraud Risk Assessment Judgment							
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed power b
Corrected model	42.420a	5	8.484	4.872	.000	.165	.977
Intercept	152.124	1	152.124	87.354	.000	.415	1.000
Internal Control System	32.739	1	32.739	18.800	.000	.133	.990
Type of Auditors	.631	1	.631	.363	.548	.003	.092
Internal Control System*Type	5.588	1	5.588	3.209	.076	.025	.428
Error	214.200	123	1.741				
Total	3552.000	129					

a. R Squared = .165 (Adjusted R Squared = .131)
b. Computed using alpha = .1

Table 3.Test of Between-Subjects Effect: Scenario 2

Dependent Variable: Fraud Risk Assessment Judgment							
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed power b
Corrected model	87.788a	5	17.558	9.413	.000	.277	1.000
Intercept	156.674	1	156.674	83.992	.000	.406	1.000
Internal Control System	68.079	1	68.079	36.497	.000	.229	1.000
Type of Auditors	10.502	1	10.502	5.630	.019	.044	.653
Internal Control System*Type	7.446	1	7.446	3.992	.048	.031	.509
Error	229.437	123	1.865				
Total	2827.000	129					

a. R Squared = .277 (Adjusted R Squared = .247)
b. Computed using alpha = .01

4.2.3. Level of pressure and auditors' fraud risk assessment

For the Hypothesis 3, Independent Samples T-Test, Pearson correlation coefficient and Multivariate Tests in ANOVA was conducted. For Scenario 1 (high level of pressure), the mean score is 5.06, while in the Scenario 2 (low level of pressure), the mean score is 4.39. Moreover, the result of Multivariate Tests ANOVA indicates that the value for Wilks' Lambda is .000<.05 and therefore we conclude that there is a significant effect on high and low level of pressure. Therefore, Hypothesis 3 is supported.

4.2.4. Type of auditors (internal and external), level of internal control system and fraud risk assessment.

As shown in Table 2 (Scenario 1) there is a significant interaction effect between high internal control system and type of auditors on auditors' fraud risk assessment judgment ($F = 3.209$, $p = .076 < .1$). The effect of interaction between low internal control system and type of auditors (Scenario 2) as presented in Table 3 also indicates that there is a significant interaction effect between these two variables and the fraud risks assessment judgment ($F = 3.992$, $p = .048 < .1$). Furthermore, the effect size of the interaction in Scenario 2 (partial eta squared = .031) is larger than the effect size of the interaction in Scenario 1 (partial eta squared = .025). To simplify, the result is presented in graphical manner. Figure 1 for Scenario 1 and Figure 2 for Scenario 2. For Scenario 1, the line shows that in a condition of low level internal control system, internal auditors marked higher likelihood of fraud risk (mean=5.872) as compared to external auditors (mean=5.295). Whereas in a condition of high level internal control system, the internal auditors marked lower likelihood of fraud risk (mean=4.428) as compared to external auditors (mean=4.714). While in Figure 2, for Scenario 2, the result shows that in a condition of low level of internal control system, the internal auditors marked higher fraud risk assessment judgment (mean = 5.186) as compared to external

auditors (mean = 5.092). However, in a condition of high internal control system, the external auditors marked lower fraud risk assessment judgment (mean = 3.132) as compared to internal auditors (mean = 4.225). These results indicate that the interaction effect of the variables in Scenario 2 is more significant or stronger as compared to Scenario 1. Based on the above findings, it can be concluded that Hypothesis 4 is supported.

Figure 1. Scenario 1

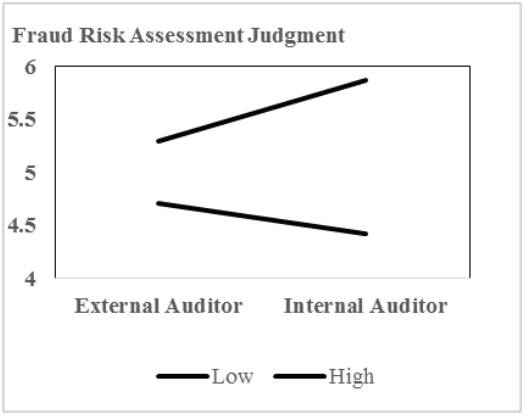
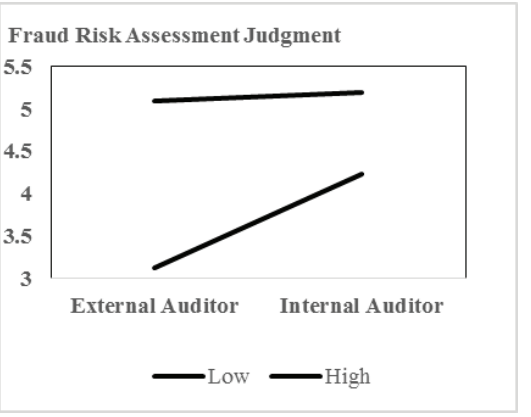


Figure 2. Scenario 2



4.2.5 Type of auditors (internal and external), level of pressure and fraud risk assessment.

To test this hypothesis, repeated measures in ANOVA were used to compare the auditors' response to the two different case scenarios (high and low level of pressure). For high level of pressure, the mean and standard deviation of both internal and external auditors is (M = 5.09, SD = 1.401) and (M = 5.02, SD = 1.444) respectively. For low level of pressure, the mean and standard deviation of both internal and external auditors is (M = 4.70, SD = 1.602) and (M = 4.08, SD = 1.488). In order to simplify the results, the results of the above findings are also presented in a graphical manner. Figure 3 shows that in a condition of low level of pressure, external auditors marked lower likelihood of fraud risk (mean = 4.08) as compared to internal auditors (mean = 4.70). Whereas in a condition of high level of pressure, the internal auditors marked higher likelihood of fraud risk (mean = 5.09) as compared to external auditors (mean = 5.02). In addition, it was also indicates that lower levels of pressure lead to stronger interaction effects between internal and external auditors compared to high levels of pressure.

Moreover, the result of multivariate tests indicates that in overall, there is a significant interaction effect between the levels of pressure (high and low) and type of auditors on the auditors' fraud risk assessment judgment (F = 2.891, Sig. .092, p<0.1). Based on the above findings, Hypothesis 5 is supported.

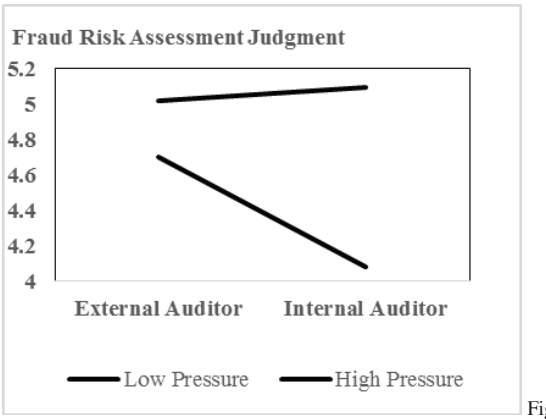


Figure 3

5. Discussion and Conclusion

This study investigates the effects of elements of fraud risk factors in fraud triangle theory namely, internal control system (opportunity), pressure and type of auditors on the auditors' fraud risk assessment which becomes the core requirement of all fraud auditing standards in assessing the likelihood of fraud risks (Lou & Wang, 2009). As there were limited studies that examine the various combinations of the fraud risks elements, we have also enhanced our study by examining the interaction effects of two combinations of variables which are: 1) internal control system and type of auditors, and 2) pressure and type of auditors on the auditors' fraud risk assessment judgment. For these testing of interaction effects, we have analysed to see if there any difference and cause in the gap between internal and external auditors in making fraud risk assessment.

Based on the results of the hypotheses we can conclude that in overall, there are significant relationships between the elements of the fraud risk factors and the auditors' fraud risk assessment judgment. In addition, it was noted that auditors assessed higher level of internal control system associated with lower likelihood of fraud risks and vice versa. This judgment of likelihood of fraud risks would effects the audit procedures of the auditors in selecting samples and minimize consumption of audit period. It was obviously found that client's level of internal control system is one of the main factors that influence the auditors in conducting fraud risk assessment. However, this study revealed that in the condition where the level of internal control is high (Scenario 1), both type of auditors have similar judgment on the likelihood of fraud risk. In contrast, in the condition that the level of internal control system is low, the study found that there is a different judgment made by both type of auditors. This may indicate that as the internal auditors are familiar with an organization, they are more likely to have better understanding of the level of risks in the organization (Dezoort & Harrison, 2008).

Overall, it can be conclude that, internal control system and pressure have significant relationship on the auditors' fraud risk assessment judgment. In assessing fraud risk factors, the auditors should enhance their understanding by taking into account any fraud risk elements that might contribute to fraud to occur. In terms of the ability in assessing the likelihood of fraud risks, both internal and external auditors have similar ability in making fraud risk assessment judgment. In addition, even though there are differences in the task of audit assignments and scope, fraud exposures and experiences between internal and external auditors, both groups has similar ability in assessing the likelihood of fraud risks.

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