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THE RELATIONSHIP BETWEEN INTERNAL AUDIT CHARACTERISTIC, AUDIT COMMITTEE CHARACTERISTIC AND INTERACTION BETWEEN INTERNAL AUDIT AND AUDIT COMMITTEE ON INTERNAL AUDIT CONTRIBUTION

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ABSTRACT

Internal auditing has become as an important tool in helping an organisation to achieve its objectives. Organisations with internal audit activities capable to identify business risks, and system inefficiencies and ineffectiveness, take appropriate corrective actions, and ultimately support continuous improvement. Therefore, its contribution must be monitored in order to maintain and enhance the credibility of internal audit. The objectives of this study are, therefore, to investigate the contribution of internal audit and its determinants of internal audit characteristics, audit committee characteristics, and interaction between internal audit and audit committee. Questionnaires were distributed to 413 public listed companies in Bursa Malaysia and 172 responses were received. The finding showed that internal audit contributed the most in internal control. The result revealed that internal audit competence has a significant effect on internal contribution. Hence, internal audit team should consist of member with different expertise; both in technical and soft skills. Factors related to audit committee and interaction between audit committee and internal audit were not found to be significant. The relationship between audit committee and internal audit needs to be reinforced for better oversight mechanism. The Malaysian Code of Corporate Governance (MCCG) and the International Professional Practice Framework (IPPF) should require higher compliance to IPPF with the disclosure on the audit committee activities.

Keywords: *Internal audit, audit committee, internal audit contribution*

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INTRODUCTION

The Malaysian Code of Corporate Governance (MCCG) was first introduced in 2000 and the code was then revised in 2007 and 2012. This was then followed by the Bursa Malaysia Revamped Listing Requirement in 2001 and Guidelines on Internal Audit Function for Public Listed Companies in 2002. These enacted reforms aim to promote and improve corporate governance in public listed companies in Malaysia. Bursa Malaysia has recognised the importance of internal audit as the key governance function in public listed companies, and highlighted the roles as closely linked with audit committees. The revised MCCG Code 2007 recognises the importance of internal audit by requiring all companies to have an internal audit function. Both of these reforms have put internal audit in the lime-light of the means of improving risk management and governance. Besides, this is also helpful in order to preserve and enhance stakeholder value. Given the perceived importance of internal audit as part of good corporate governance, these changes are likely to enhance the role and value of internal audit (Coram, Ferguson & Moroney, 2006). When there is an adding value to the company, there should be no better resource of a company than internal auditing.

This study examines the effects of internal audit characteristics, audit committee characteristics, and interaction between internal audit and audit committee in regards to internal audit contribution. Several studies have found that these monitoring mechanisms are the important factors which contribute onto internal audit contribution (Felix, Gramling & Maletta, 2001; Hay, Knechel & Wong, 2006; Prawitt, Sharp & Wood, 2011; Al-Twaijry, Brierley & Gwilliam, 2004; Messier & Schneider, 1988; Prawitt, Smith & Wood, 2009). A number of recent studies (Gramling, Maletta, Schneider, & Church, 2004; Carcello, Hermanson & Raghunandan, 2005; Sarens & De Beelde, 2006) had called for further research into the contribution of the internal audit function from the perspectives of key corporate governance parties. Therefore, in this study, internal audit characteristics, audit committee characteristics, interaction between internal audit, and audit committee will give an influence towards internal audit contribution. This study is defined as the extent of roles which played by internal audit in risk management, control and governance.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Agency Theory

Agency Theory assumed that principals and agents act rationally and that they will use the contracting process to maximize their wealth. In such settings, internal auditing can be viewed either as a bonding cost incurred by the agents “to signal to principal / owner that they are acting responsibly” or as a monitoring cost “incurred by principal / owner to protect their economic interests” (Adam, 1994). Sherer and Kent (1983) perceived auditing to be a “bonding cost borne by the senior manager to satisfy the demands for accountability made by external participants especially shareholders”.

The audit committee plays an important role in protecting the owners’ interests by monitoring management’s action (DeZoort, Hermanson, Archambeault & Reed, 2002; Spira, 2002). High quality audit committee that maintains close working relationship with internal audit are better placed to monitor the management with the help of internal audit as a necessary source of information for audit committee to execute its monitoring responsibilities (Raghunandan, Read & Rama, 2001; Scarbrough, Rama & Raghunandan, 1998). Independent audit committee has an incentive to monitor management because their own value as an outside director in the human capital market depends primarily on the performance of the companies on whose boards they sit (Harrison & Harrell, 1993). Audit committee with more financial literacy will make better judgements when compared to less experienced members (DeZoort, 1998). Effective internal audit will provide audit committee the quality information for its monitoring role in corporate governance. Active audit committee that maintains close working relationship between audit committee and internal audit will give impact on the internal contribution as the interaction will improve the position and resources of internal audit.

Contribution of Internal Audit

When the internal audit profession was emerging in the 1940’s, the scope of internal auditing and the reporting relationship was rather simple. The role of internal auditor has been described as the eyes and ears of management, which help to ensure that shareholders by individuals, as well

as stakeholders' interests are being taken care of. However, the growing concerns over financial controls, management fears of fraud, an increased need for organizational efficiency, increase usage of information technology, environmental awareness and changes in legislation have had an impact on the development of internal audit. For instance, Malaysian Code of Corporate Governance (2000) has considered internal audit as one of the four cornerstones of good corporate governance. All these factors have shifted the focus of internal audit's work dramatically over the last decade, from validating financial controls into adding real value to the organisation.

The IPPF (IIAM, 2011) stated that the internal audit activity does add value to the organization (and its stakeholders) when there is objective and relevant assurance; and contributes to the effectiveness and efficiency of governance, risk management, and control processes. The latest definition of internal auditing in 1999 expands the role of internal auditors in internal control, risk management, and governance. The growing emphasis on corporate accountability has led to a drive for more openness, in a way for business to manage and communicate their performance to key stakeholders. Internal audit appears on the horizon in respect of identifying risks and control, governance weaknesses and in contribution to their improvement, and ultimately at the same help to increase shareholders' value. Practice Standard 2100 of IPPF (IIAM, 2008) states that internal audit activity should evaluate and contribute to the improvement of risk management, control, and governance processes by using a systematic and disciplined approach. Making an organisation successful is the key driver for corporate governance, risk management and internal controls. The action would reflect into the broad nature, or scope of internal auditing.

Internal Audit Characteristics and Internal Audit Contribution

Agency theory suggests that the more information asymmetry present between management and shareholders, the greater the need for monitoring, thus a higher internal audit contribution is required to convince principals in which their interest is being protected. A quality internal audit may reduce the incentive problems that arise when the manager does not own 100 percent of the residual claims on the firms (Jensen & Meckling, 1976). This study defines the contribution of internal audit as the work done by internal audit. The quality of internal audit is depending on the certainty that internal audit has upon the capability to perform their roles in risk management,

control, and governance in order to meet the high expectation. In addition, the organisation's operation is also need to be ensured to be stood under well monitoring system and effective control. Therefore, better quality of internal audit will lead to higher contribution in risk management, control and governance, as well as help to reduce the problems of agency.

Internal auditing would only be able to gain recognition as a profession if is the performance is consistently still at a high level. The quality of internal audit may enhance its contribution in risk management, control, and governance. Prior research and auditing guidelines have been used in order to identify the factors in relation to the internal audit quality. These would include independence, competence and performance of work.

Most of the prior studies has looked at the contribution of internal audit in control as internal-auditing is one of the internal control mechanisms of a company. If the internal audit is reaching the high quality standard, the external audit can rely more on the work conducted by internal audit. Findings have shown that the higher quality of internal audit, the higher reliance of external auditor on the work of internal auditor (Abdel-Khalik, Snowball & Wragge, 1983; Brown, 1983; Schneider, 1985; Margheim, 1986). For an instance, Abdel-Khalik, Snowball and Wragge (1983) found that the reporting line of internal audit staff is a significant factor in determining judgments which concerning the reliance of external auditor on the internal audit staff. The reliance is higher when internal audit staff report to board of directors as compared to the controller. Brown (1983) found that independence and satisfaction with the internal audit previous audits are the primary factors that affect the reliability of an internal audit. Schneider (1985) and Margheim (1986) revealed a positive relationship between average internal audit strength and reliance decisions. Both of them found that internal auditor competence and work performance were perceived as almost equally important in reliance decisions, but not through the objectivity.

Another area that receives attention by previous researchers is related to control perspective. This includes relationship between internal audit quality and internal audit contribution in financial statement audit. Results of prior studies revealed a positive relationship between internal audit quality and internal audit contribution in financial statement audit (Elliot & Korpi 1978; Stein, Simunic & O'Keefe, 1994; Felix, Gramling &

Maletta, 2001; Al-Twaijry, Brierley & Gwilliam, 2004; Zain, Subramaniam & Stewart, 2006). The overall quality of the internal auditor increases, where the extent of their contribution to the financial statement audit has also increases (Felix, Gramling & Maletta, 2001; Al-Twaijry, 2004). A study conducted by Zain, Subramaniam and Stewart (2006) examined the relationship between quality aspects of an internal audit unit; namely the size of the internal audit, the level of audit experience of internal audit staff, and internal auditors' assessment of their contribution to financial statement audit. The study found that size and experience have given a significant effect onto the contribution of financial statement audit. In short, internal audit contribution is influenced by internal audit quality.

Previous studies mostly look at the contribution of internal audit that was in control as an assistant in ensuring reliability and integrity of financial statement. Internal audit contribution is not limited to its contribution in financial statement audit, as its roles have expanded to be included with risk management, control and governance. Therefore, it is important to study how the internal audit characteristic will affect internal audit contribution in risk management, control, and governance.

According to Zain, Subramaniam and Stewart (2006), in order for an internal audit to perform well in its audit work, competent staff needs to be well-resourced. A competent audit staff is expected to undertake duties more efficiently and provide more valuable input towards improving the risk management, control and governance. Whereas, independent internal audit will result in more objective and rigorous audit investigations, which consequently render impartial and unbiased judgments that would help to provide recommendation on how to improve the organisational activities. Meanwhile, work performance has ensures the quality of audit work to be started from planning the plan, in order to communicate the vivid results. The higher the quality work performance, the better coverage of audit, documentation, and communication of results. Thus, this study suggests that competence, independence and quality of work performance are likely to promote higher contribution of internal audit in risk management, control and governance.

These arguments lead to the following hypotheses:

H_{1a}: The higher the competency of internal audit, the higher the internal audit contribution in risk management.

- H_{1b}**: The higher the independence of internal audit, the higher the internal audit contribution in risk management.
- H_{1c}**: The higher the quality of the work performance of internal audit in performing the engagement, the higher the internal audit contribution in risk management.
- H_{1d}**: The higher the quality of the work performance of internal audit in engagement planning, the higher the internal audit contribution in risk management.
- H_{1e}**: The higher the quality of the work performance of internal audit in communication of results, the higher the internal audit contribution in risk management.
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- H_{2a}**: The higher the competency of internal audit, the higher the internal audit contribution in control.
- H_{2b}**: The higher the independence of internal audit, the higher the internal audit contribution in control.
- H_{2c}**: The higher the quality of the work performance of internal audit in performing the engagement, the higher the internal audit contribution in control.
- H_{2d}**: The higher the quality of the work performance of internal audit in engagement planning, the higher the internal audit contribution in control.
- H_{2e}**: The higher the quality of the work performance of internal audit in communication of results, the higher the internal audit contribution in control.
-
- H_{3a}**: The higher the competency of internal audit, the higher the internal audit contribution in governance.
- H_{3b}**: The higher the independence of internal audit, the higher the internal audit contribution in governance.
- H_{3c}**: The higher the quality of the work performance of internal audit in performing the engagement, the higher the internal audit contribution in governance.
- H_{3d}**: The higher the quality of the work performance of internal audit in engagement planning, the higher the internal audit contribution in governance.
- H_{3e}**: The higher the quality of the work performance of internal audit in communication of results, the higher the internal audit contribution in governance.

Audit Committee Characteristic and Internal Audit Contribution

Audit committee must possess certain attributes in order to enhance and support the existence and performance of internal audit. Audit committees' support will affect the appreciation and the status of internal audit, which hence would increase the ability of internal audit in mitigating the inherent moral hazard problem in principal-agent relationship and adding value in organization operation. These views are supported by the results of research studies that show the characteristics of audit committee and the impact of it towards committee's effectiveness (Beasley, 1996; Carcello & Neal, 2000; DeZoort & Salterio, 2001; Abbott, Parker, Peters & Raghunandan, 2004).

Beasley, Carcello, Hermanson and Lapidés (2000) found the companies that committing financial statement fraud would have less independent committees than the industry benchmarks. Likewise, Abbott, Parker, Peters and Raghunandan (2003), based on 78 matched pairs of fraud and no fraud companies, found that no-fraud companies would tend to have more independent audit committees as compared to fraud companies. Zain, Subramaniam and Stewart (2006) found that independence of audit committee members is significantly related to internal audit contribution to financial statement audit. This is due to the less of interference from management when an audit committee is independent. Independent audit committee members are more likely to demand higher internal audit quality because they expect internal audit capable to perform more roles. High quality internal audit will protect themselves from reputational damages. Hence, this study propose that the independent of audit committee will be highly effective and would likely to call for greater depth and wider scope of internal audit activities in risk management, control and governance as such higher contribution of internal audit.

Audit committee members need to have knowledge and experience relating to accounting, auditing and / or finance as some of the common oversight duties of audit committees include risk management, financial decision, internal control systems and cost-benefit analysis of operational decisions. All of them need to have an in-depth financial knowledge and experience in order to understand the issues, ask the right question and make optimal decision. A more financially literate committee is likely giving into better enhancement for internal audit structures and process, which in turn

increase the contribution of internal audit in risk management, control and governance.

Financial expertise of audit committee members has been shown to be important in dealing with the complexities of financial reporting (Kalbers & Fogarty, 1993; Scarbrough, Rama & Raghunandan, 1998; Raghunandan, Read & Rama, 2001) and for reducing the occurrence of financial restatements (Abbott, Parker, Peters & Raghunandan, 2004). Zain, Subramaniam and Stewart (2006) found that knowledge and experience of accounting and auditing are significantly related to internal audit contribution to financial statement audit.

Little work has been done to examine how audit committees may affect internal audit contribution. In spite of these limited findings, this study posits that there will be a positive relationship between audit committee financial literacy with internal audit contribution in risk management, control, and governance. Hence, the following hypotheses are developed:

H_{4a} : The higher the independence of audit committee, the higher the internal audit contribution in risk management.

H_{4b} : The higher the financial literacy of audit committee, the higher the internal audit contribution in risk management.

H_{5a} : The higher the independence of audit committee, the higher the internal audit contribution in control.

H_{5b} : The higher the financial literacy of audit committee, the higher the internal audit contribution in control.

H_{6a} : The higher the independence of audit committee, the higher the internal audit contribution in governance.

H_{6b} : The higher the financial literacy of audit committee, the higher the internal audit contribution in governance.

Interaction between Audit Committee and Internal Audit and Internal Audit Contribution

An important reason for the existence of the board is based on the monitoring role in corporate governance (Sarens & Abdolmohammadi, 2011). According to Zain, Subramaniam and Stewart (2006) audit committees

assume as important responsibilities with respect to internal audit, such as reviewing the internal audit programme, and ensuring adequacy of the scope of internal audit activities. As such, interaction between audit committees and internal audit has its implications for internal auditors' contribution in terms of risk management, control, and governance. On the other hand, the increased demand for greater monitoring by audit committee has indicates the need for more audit committee activity to communicate with internal audit, which is often seen as a device and source of information for each audit committee. The objectives of internal audit and audit committee are alike in many respects. Both do help the organisation to achieve the objectives. Therefore, close coordination and communication between audit committee and internal audit will enable each of them to experience a better discharge of their responsibilities. According to Agency Theory, audit committee and internal audit are viewed as a monitoring response to agency costs (Anderson, Francis & Stokes, 1993). Interaction between audit committee and internal audit will help audit committee to clearly understand the scope of work of internal audit and the required resources, that therefore providing the internal audit with an appropriate environment and support system for carrying out its own governance-related activities (Gramling, Maletta, Schneider & Church, 2004). Zain, Subramaniam and Stewart (2006) found that interaction between audit committee with internal audit is related to the internal audit contribution in financial statement audit.

The interaction between audit committee and internal audit has reinforces the quality of the company's internal audit, and thereby helps to assure the auditor as to be having free rein, capability and resources in the audit process. The closer the working relationship between internal audit and audit committee, the higher likelihood of increasing the quality of internal audit; therefore increasing contribution of the internal audit in risk management, control and governance. From the above discussion, the hypotheses tested are as follows:

- H_{7a}**: The higher the quality of review of audit committee, the higher the internal audit contribution in risk management.
- H_{7b}**: The higher the quality of involvement of audit committee in the dismissal of CAE, the higher the internal audit contribution in risk management.
- H_{7c}**: The higher the quality meeting between audit committee and internal audit, the higher the internal audit contribution in risk management.

- H_{8a}**: The higher the quality of review of audit committee, the higher the internal audit contribution in control.
- H_{8b}**: The higher the quality of involvement of audit committee in the dismissal of CAE, the higher the internal audit contribution in control.
- H_{8c}**: The higher the quality meeting between audit committee and internal audit, the higher the internal audit contribution in control.
- H_{9a}**: The higher the quality of review of audit committee, the higher the internal audit contribution in governance.
- H_{9b}**: The higher the quality of involvement of audit committee in the dismissal of CAE, the higher the internal audit contribution in governance.
- H_{9c}**: The higher the quality meeting between audit committee and internal audit, the higher the internal audit contribution in governance.

RESEARCH DESIGN

This study examines 181 companies listed in the Stock Exchange of Bursa Malaysia. The target population consists of 641 public listed and companies listed on the main board of Bursa Malaysia as at February 27, 2009. Year 2009 was chosen because MCCG has been revised in year 2007 and the revised MCCG has recognises as the importance of the internal audit by requiring all companies to have an internal audit and set of stringent requirement for audit committee. The reasons why only companies from main board were chosen because these companies have similar homogeneity characteristics in terms of firm size (market capitalisation). Bigger companies used to have more resources and this might affect the internal audit effectiveness. Further, the population will include all industry except those companies from government sectors as these companies are subjected to special accounting practices and requirements. Another reason to include all industry is because corporate governance is crucial and fraud cases happen in all public listed companies regardless of type of industry. Malaysia is an ideal setting to examine this issue as evidently suggested through many listed companies in Malaysia that do have internal audit.

The primary data of this research was obtained by using a questionnaire. Chief audit executive is selected as the respondents for this study. Chief

audit executive reports to audit committee and maintain a strong and close working relationship with audit committee, which thus deemed to be as the appropriate parties in evaluating the quality of internal audit and quality of audit committee and contribution of internal audit.

Measuring Internal Audit Contribution

The internal audit contribution in this study is the audit committee’s assessment of internal audit contribution to risk management, control and governance. Each item has a five-point rating scale with a score of five for “Very high”, four for “Moderate High, three for “Neutral”, two for “Fairly Low” and one for “Very low”. These questions are adopted from a research of Institute of Internal Auditors Malaysia (2008).

Internal audit contribution to risk management is measured in section C of the questionnaire which consists of questions relating to risk assessment, risk management, and risk communication. In terms of measuring internal audit contribution in control, there are relatively include with the control of effectiveness, control adequacy and alignment of control and organisational objectives which were included in section C of the questionnaire. As governance is wide, therefore there are more dimensions which internal audit can contribute such as board related, communication and reporting, ethic related, governance related and management related. For each category of contribution, an average score across the items will be calculated.

Regression Models

We use the following cross-sectional regression model to examine the association between internal audit characteristic and audit committee characteristics and internal audit contribution:

$$\begin{aligned}
 RM_i &= \alpha + b_1 IAC_i + b_2 IAI_i + b_3 WP_PLAN_i + b_4 WP_PERFORM_i \\
 &\quad + b_5 WP_RESULT_i + b_6 ACI_i + b_7 ACFL_i + b_8 REV_i + b_9 DISM_i \\
 &\quad + b_{10} MEET_i + \varepsilon \\
 CTL_i &= \alpha + b_{11} IAC_i + b_{12} IAI_i + b_{13} WP_PLAN_i + b_{14} WP_PERFORM_i + \\
 &\quad b_{15} WP_RESULT_i + b_{16} ACI_i + b_{17} ACFL_i + b_{18} REV_i + b_{19} DISM_i + \\
 &\quad b_{20} MEET_i + \varepsilon \\
 GOV_i &= \alpha + b_{21} IAC_i + b_{22} IAI_i + b_{23} WP_PLAN_i + b_{24} WP_PERFORM_i + \\
 &\quad b_{25} WP_RESULT_i + b_{26} ACI_i + b_{27} ACFL_i + b_{28} REV_i + b_{29} DISM_i + \\
 &\quad b_{30} MEET_i + \varepsilon
 \end{aligned}$$

Where

IAE	= Internal audit effectiveness
IAC	= Internal audit's competence
IAI	= Internal audit's independence
WP_PLAN	= Internal audit's work performance in engagement planning
WP_PERFORM	= Internal audit's work performance in performing engagement
WP_RESULT	= Internal audit's work performance in result communication
ACI	= Audit committee independence
ACFL	= Audit committee financial literacy
REV	= Audit committee review
DISM	= Involvement of audit committee in dismissal of CAE
MEET	= Meeting between audit committee and internal audit
RM	= Contribution in Risk Management
CTL	= Contribution in Control
GOV	= Contribution in Governance

RESULT

Descriptive Statistics

Table 1 shows that the average internal audit competence is 0.95 with the minimum of 0.63 and maximum 1.42. The average internal audit independence (IAI) is 9.13 with a minimum of 2.00 and a maximum of 11.00. The average of work performance is 4.31 with a minimum of 3.13 and a maximum of 5. Among the three dimensions of work performance, the planning of work performance has to be considered as maximum (4.39) and minimum (3.00) while the performing of work performance scores the lowest with the mean of 4.12.

Audit committee independence, which is an item of audit committee characteristic, is found to have a mean of 4.33 with the minimum of 1.00 and a maximum of 5.00, which is quite high. The average audit committee financial literacy is lower as compared to audit committee independence, with a mean of 3.87. In terms of interaction between audit committee and

internal audit, audit committee review and meeting between audit committee and internal audit score is relatively high with a score of 4.25 and 4.27 respectively. Both variables have a maximum score of 5.00 and a minimum of 2.00. Dismissal of CAE (DISM) only scores 3.79 with a minimum of 1.00 and a maximum of 5.00.

From the result, all the risk management’s dimensions have more than 3.00 mean scores with RIDE and RREV holding higher scores respectively as compared to the rest of the two dimensions. The least is RCOM with a mean of 3.34. The overall mean contribution in control is 4.15. An analysis of the results reveals that the internal audit has the highest contribution in control and, of the contribution in control; contribution in control effectiveness is highly rated with a mean of 4.24 as compared to contribution in control alignment with a mean of 3.82.

As indicated by the mean scores of contribution governance, internal audit contribution is lowest in this aspect. It appears that the respondents placed the highest score on the contribution in governance relating to management, followed by contribution in governance relating to ethics (mean = 3.30), contribution in governance relating to board (mean = 3.12) and contribution in governance relating to communication (mean = 3.08).

Table 1: Descriptive Statistics (n = 172)

Variables	Mean	SD	Skewness	Kurtosis	Min	Max
IAC	0.95	0.17	0.54	-0.20	0.63	1.42
IAI	9.13	1.66	-1.63	3.95	2.00	11.00
WP	4.31	0.44	-0.06	-0.77	3.13	5.00
WP_RESULT	4.34	0.49	-0.27	-0.35	2.86	5.00
WP_PLAN	4.39	0.51	-0.30	-0.92	3.00	5.00
WP_PERFORM	4.12	0.60	-0.96	3.52	1.00	5.00
ACI	4.33	0.75	-1.24	1.83	1.00	5.00
ACFE	3.87	0.76	-0.23	-0.57	2.00	5.00
RM	3.83	0.58	-0.44	0.78	1.93	5.00
REV	4.25	0.63	-0.60	0.23	2.00	5.00
DISM	3.79	0.82	-0.63	0.67	1.00	5.00
MEET	4.27	0.69	-0.50	-0.90	2.67	5.00
CTL	4.15	0.52	-0.15	-0.43	2.69	5.00
GOV	3.28	0.74	-0.40	-0.11	1.18	4.77

Findings

In the regression analyses shown in Table 5.2, all of the three models (Model 1, Model 2 and Model 3) were found to be significant with *F*-statistics ranging from 2.813 to 12.135, and all models were found to be strongly significant either at $p < .01$ or $p < .05$. However, the percentages of variance which explained by the models are in between of 15% to 43%. Only seven out of thirty hypotheses are found as significant. Most of all are related to internal audit characteristics.

In Model 1, internal audit contribution in risk management is used as the dependent variable. The model is significant at $p < .01$ and able to explain about 20% of variance in contribution of internal audit in risk management. The results show that the internal audit competence is positively significant ($p < .10$). For internal audit work performance variable, the analyses results show that there is a significant positive relationship ($p < .001$) between internal audit work performance in relation to the result of communication and internal audit contribution in risk management. Work performance in relation to engagement planning and engagement performance are found to be positively related to internal audit contribution in risk management, which however, the relationships are not significant.

In Model 2, the results indicate that when internal audit contribution in control served as the dependent variable, the internal audit work's performance in relation to engagement planning and result communication are positive and significantly related with the internal audit contribution in control.

In Model 3, where internal audit contribution in governance served as the dependent variable, it is found that the model is significant at $p < .01$ although the percentages of variance explained is rather low by only 14.9%. The results show that audit committee financial's literacy, internal audit competence and internal audit independence are significantly related with internal audit contribution in governance.

Table 2: Multiple Regression Results between Independent Variable (Internal Audit Characteristic, Audit Committee Characteristic and Interaction between Audit Committee and Internal Audit) and Depending Variables (Internal Audit Contribution in RM, CTL, GOV)

Variables	Model 1		Model 2		Model 3	
	β	t-value	β	t-value	β	t-value
Constant	1.383	2.768	.794	2.073	.926	1.391
Audit Committee Characteristic						
ACI	.085	1.221	.031	.572	.022	.241
ACFE	.075	1.239	.036	.769	.208	2.577**
Interaction						
REV	-.047	-.534	.021	.758	.040	.339
DISM	.091	1.637	.044	1.033	.073	.994
MEET	-.120	-1.465	.038	.612	-.169	-1.553
Internal Audit Characteristic						
IAC	.402	1.674*	.045	.247	.584	1.826*
IAI	-.029	-1.137	-.023	-1.173	.068	2.031**
WP_PLAN	.135	1.263	.285	3.481***	-.032	-.225
WP_PERFORM	.067	.728	.028	.400	.195	1.580
WP_RESULT	.268	2.130**	.336	3.488***	-.025	-.149
R ²	.208		.430		.149	
Adjusted R ²	.158		.394		.096	
F-statistics	4.217		12.135		2.813	
Sig F-statistics	.000		.000		.003	
N	172		172		172	

Note: Model 1 - Dependent variable: Internal audit contribution in risk management (RM)
 Model 2 - Dependent variable: Internal audit contribution in control (CTL)
 Model 3 - Dependent variable: Internal audit contribution in governance (GOV)
 *p < .10 **p<.05 *** p<.01

Internal Audit Characteristic

The study hypothesised that internal audit competence is positively related to internal audit contribution of risk management, control and governance. The results show that internal audit competence and internal audit contribution in risk management and governance are significant in a positive direction, whilst the result with control is insignificant. This has to be as an interesting finding since risk management and governance are still new, with the challenging roles of internal audit, which indispensably

the internal audit knowledge of these areas to be adequate respectively in order to assist both management and audit committee in assessing and recommending appropriate improvements in risk management and governance. These findings are consistent with those of Felix, Gramling and Maletta (2001) and Zain, Subramaniam and Stewart (2006), which found that the more competence the internal audit, the greater the internal auditors' perception of their contribution to the external audits.

According to Zain, Subramaniam and Stewart (2006), organizations may channel the appropriate level and type of resources into their internal audit function in order to reap the existing benefits, especially in terms of increasing the internal audit function's potential contribution. Competency determines the efficiency of internal auditors, which therefore portray the importance of ensuring the high quality and adequate number of staff in order to accommodate the requirement. This finding validated the reason why internal audit competency is to be as the important criterion for external auditors in judging the reliance of internal audit work, as according to the study that been conducted by Haron and Chambers (2004).

This study hypothesised a positive relationship between internal audit independence and internal audit contribution in risk management, control and governance. The results however have indicated the relationship as to be insignificant for both internal audit contribution in risk management and control. However, the relationship with contribution in governance is found as positive and significant. This meant that this study is partially supports the assertions that claim the higher the internal audit independence, the higher the contribution of internal audit in particular pertaining to governance. Internal audit must be independent enough to involve in assessing the effectiveness of governance's structure that has been adopted in a company, especially in reviewing the code of conduct and ethics policies, assisting board of directors in its self-assessment and best practices, assessing audit committee effectiveness, and compliance with regulators. Lack of independence might cause compromises of the role of internal audit.

The study hypothesised that internal audit work performance is positively related to internal audit contribution in risk management, control and governance. The results show that internal audit work performance has a positive impact on internal audit contribution in risk management, control

and governance, but that is only significant with internal audit contribution in risk management and control. This might be due to the auditing risk management and control, which require internal auditor to spend more time and effort in setting a systematic and disciplined approach while evaluating and improving the effectiveness of risk management and control.

These results do justify why work which performed by internal auditors is considered as the most important factor in determining the reliance that need to be placed on the IAF in the study of Brown (1983), Schneider (1984, 1985) and Margheim (1986). This is because this factor does give impact on the internal audit effectiveness. Margheim (1986) found that external auditors did rely on internal auditors in order to adjust the audit hours when internal auditors were perceived to have high-competence-work performance.

These results provide additional support to previous studies by Felix, Gramling and Maletta (2001) and Brody, Golen and Reckers (1998), which suggested that internal audit quality is a key determinant of external auditors' reliance on internal audit work. The positive results of internal audit competence and work performance are consistent with findings by Felix, Gramling and Maletta (2001) who found the overall quality of the internal auditor increases would lead the extent of their contribution to the financial statement audit to be relatively increased.

Audit Committee Characteristic

This study hypothesised a positive relationship between audit committee independence and financial literacy and internal audit contribution in risk management, control and governance. However, the findings did not support a statistically significant relationship between audit committee independence and internal audit contribution in risk management and control. The results however show a positive and significant relationship between the audit committee financial literacy and internal audit contribution in governance. This meant that this study supports partially the assertions of the higher the audit committee financial literacy, the higher the contribution of internal audit in particular pertaining to governance, but not in risk management and control.

The findings of this study are consistent with the findings of a corporate governance study which conducted by Zain, Subramaniam and Stewart (2006) on two characteristics of audit committee, namely the independence and financial literacy. Zain, Subramaniam and Stewart (2006) had found that the more independent and stronger the level of financial literacy of audit committee, the greater the contribution of internal auditors to financial statement audit. Their results do support the current debate on the appointment of independent audit committee members and the need for members to be financial literacy. According to Abbott and Parker (2000), the independent and active audit committee member will demand a high level of audit quality because of their concerns about monetary or reputational losses, which might be resulted from the lawsuit or SEC sanction. These inconsistent findings could be explained by the usage of different basis of measuring the audit committee independence and financial literacy. This study used Likert scale in order to measure audit committee independence and financial literacy which might not fully captured within the both characteristics of audit committee; whereas, the study of Zain, Subramaniam and Stewart (2006) used number of outside directors on the audit committee as a percentage of total directors on the audit committee and score 1 to 5 (1 = poor, 2 = below par, 3 = good, 4 = very good, 5 = excellent) in order to measure the extent of audit committee member in terms of knowledge and experience in accounting and auditing.

The positive relationship between audit committee's financial literacy and internal audit contribution in governance might be due to the fact that audit committee with more financial backgrounds is likely to advise management to adopt good corporate governance as they should have the knowledge of the importance of governance, and provide the valuable monitoring which could improve the governance (Xie, Davidson & DaDalt, 2003).

Interaction between Audit Committee and Internal Audit

Audit committees assume the important responsibilities with respect to internal audit, such as meeting with CAE privately, involving in the dismissal of CAE, reviewing the internal audit programme, and ensuring the adequacy of the scope of internal audit activities. This has been hypothesised that there is a positive relationship between the three aspect of interaction

between audit committee and internal audit, and internal audit contribution in risk management, control and governance. This study found none of the other three dimensions in this study are significant. The findings of this study were inconsistent with the findings of earlier study which conducted by Zain, Subramaniam and Stewart (2006) who found a significant positive association between reviews of internal audit programme/plans with internal audit contribution to the financial statement audit. This inconsistent finding could be explained by the usage of different basis for measuring the three aspects of interaction between audit committee and internal audit. This study used Likert scale in order to measure all the three aspects; whereas, the study of Zain, Subramaniam and Stewart (2006) used frequency of meetings between chief internal auditor and the audit committee, involvement of audit committee in dismissal of CAE is a dummy variable and scoring for reviewing the internal audit programme.

CONCLUSIONS

The study found that there is a significant relationship between the internal audit competency and internal audit contribution in control. Similarly, Felix, Gramling and Maletta (2001) and Mazlina Zain, Subramaniam and Stewart (2006), which found that the more competence the internal audit, the greater the internal auditors' perception of their contribution to the external audits. Companies should consider level of education and types of experiences when appointing new internal auditor. This finding has given an implication to the importance of certified internal audit and IIAM should consider of making this as a mandatory for the manager to own a certified internal audit.

Most of the audit committee characteristic's factors and interaction between audit committee and internal audit shows an insignificant result with the internal audit contribution. This finding does not support the mandating of audit committee independence and financial literacy's requirement in the revised MCCG 2007 for the purpose of better oversight mechanism, as well as what has been recommended by IPPF to have close working relationship between audit committee and internal audit. These findings also have implication to the revised MCCG which requires independence and financial literacy of audit committee, and the Institute of Internal Auditors (IIA) which recognises audit committees and internal auditors that have interlocking

goals and a strong working relationship with the audit committee. These are essential for each perspective in order to fulfill its responsibilities to senior management, board of directors, shareholders, and other outside parties. Given that internal audit is new in Malaysia, companies should establish proper guidelines in audit charter or ensure compliance to IPPF in order to increase the quality of internal audit characteristic which would lead to higher internal audit contribution.

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