

**INTERNAL AUDIT EFFECTIVENESS IN THE AREA  
OF ENTERPRISE RISK MANAGEMENT**



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**UNIVERSITI MALAYSIA SABAH**

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**INTERNAL AUDIT EFFECTIVENESS IN THE AREA  
OF ENTERPRISE RISK MANAGEMENT**

**MAHMOUD KERTALI**

**THESIS SUBMITTED IN FULFILLMENT FOR THE  
DEGREE OF MASTER OF ACCOUNTING**



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**UNIVERSITI MALAYSIA SABAH**

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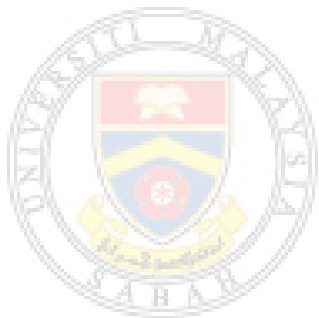
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24 September 2018

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24 September 2018

## ABSTRACT

Until recently, there is no consensus among researchers about the effectiveness of internal auditors when they perform their role regarding Enterprise Risk Management (ERM) process. The purpose of this study is to investigate internal audit effectiveness and its related factors in the area of ERM. The study addresses the relationships of internal audit effectiveness with the involvement of internal auditors in ERM process, senior management support, internal audit independence and internal audit objectivity, as well as addresses the mediation effects of internal audit independence and objectivity. The study used a quantitative method based on a cross-sectional survey to understand the effect of the above-mentioned factors on internal audit effectiveness in the light of the recent changes in internal audit function. The data was gathered from 119 members of the Institute of Internal Auditors Malaysia (IIAM) who are currently working as internal auditors in both private and public sector organizations in Malaysia. A structural equation modeling technique was applied in order to examine the direct and the mediating effects hypotheses. The findings of the study revealed that internal auditors' involvement in ERM, senior management support, and internal audit independence are positively related to internal audit effectiveness. The results also indicate that internal audit independence has a mediation effect. However, the findings failed to support the hypothesized direct effect and the mediation effect of internal audit objectivity. This research would contribute to enriching the literature of internal auditing by identifying the main factors that are positively associated with internal audit effectiveness in the area of ERM as well as describe how internal auditors in Malaysia perceive their current role regarding ERM and whether a thoughtful involvement in ERM influence such effectiveness of internal auditing.

**Keywords:** Internal Audit, Effectiveness, Enterprise Risk Management, Senior Management Support, Independence and Objectivity.

## **ABSTRAK**

### **KEBERKESANAN AUDIT DALAM DALAM BIDANG PENGURUSAN RISIKO PERUSAHAAN**

*Sehingga kini, tidak ada persetujuan dalam kalangan penyelidik mengenai keberkesanan juruaudit dalaman apabila mereka melaksanakan peranan mereka berkaitan proses Pengurusan Risiko Perusahaan (ERM). Tujuan kajian ini adalah untuk mengkaji keberkesanan audit dalaman dan faktor yang berkaitan dalam bidang Pengurusan Risiko Perusahaan (ERM). Kajian ini membincangkan hubungan keberkesanan audit dalaman dengan penglibatan juru audit dalam dalam proses ERM, sokongan pengurusan kanan, kebebasan audit dalaman dan objektif audit dalaman, serta menyiasat kesan pengantara bebas dan objektif audit dalaman. Kajian ini menggunakan kaedah kuantitatif berdasarkan kaji selidik silang untuk memahami kesan faktor-faktor yang dinyatakan di atas mengenai keberkesanan audit dalaman memandangkan perubahan dalam fungsi audit dalaman baru-baru ini. Data telah diperolehi daripada 119 ahli Institut Juruaudit Dalaman Malaysia (IIAM) yang kini bekerja sebagai juruaudit dalaman organisasi di sektor swasta dan awam di Malaysia. Teknik struktur pemodelan persamaan digunakan untuk meneliti hipotesis kesan langsung dan pengantara. Penemuan kajian mendapati bahawa penglibatan juruaudit dalaman dalam ERM, sokongan pengurusan kanan dan kebebasan audit dalaman mempengaruhi secara positif keberkesanan audit dalaman. Keputusan analisis juga menunjukkan bahawa kebebasan audit dalaman mempunyai kesan pengantaraan. Walau bagaimanapun, penemuan tersebut gagal menyokong kesan langsung hipotesis dan kesan pengantaraan objektif audit dalaman. Penyelidikan ini akan menyumbang untuk memperkayakan literatur pengauditan dalaman dengan mengenal pasti faktor utama yang berkaitan secara positif dengan keberkesanan audit dalaman dalam bidang ERM serta menerangkan bagaimana juruaudit dalaman di Malaysia memahami peranan mereka pada masa kini mengenai ERM dan sama ada penglibatan yang bijak dalam ERM mempengaruhi keberkesanan audit dalaman.*

**Kata kunci:** *Audit Dalaman, Keberkesanan, Pengurusan Risiko Organisasi, Sokongan Pengurusan Kanan, Kebebasan dan Objektiviti.*



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## LIST OF ABBREVIATIONS

<b>AICPA</b>	American Institute of Certified Public Accountants
<b>CAE</b>	Chief Audit Executive
<b>CIA</b>	Chief Internal Auditors
<b>CIIA</b>	Chartered Institute of Internal Auditors
<b>CLUSIF</b>	<i>Club de la Sécurité de L'Information Français</i>
<b>COSO</b>	Committee of Sponsoring Organizations of the Treadway Commission
<b>ECIIA</b>	European Confederation of Institutes of Internal Auditing
<b>ERM</b>	Enterprise Risk Management
<b>EY</b>	Ernst and Young
<b>HTMT</b>	Heterotrait-Monotrait Ration
<b>IAF</b>	Internal Audit Function
<b>ICA</b>	Institute of Chartered Accountant
<b>IIA</b>	Institute of Internal Auditors
<b>IIAM</b>	Institute of Internal Auditors Malaysia
<b>IRM</b>	Institute of Risk Management
<b>ISPPIA</b>	International Standards for the Professional Practice of Internal Auditing
<b>MICG</b>	Malaysian Institute of Corporate Governance
<b>NYSE</b>	New York Stock Exchange
<b>UAE IAA</b>	United Arab Emirates Internal Audit Association
<b>US.SEC</b>	United States Securities Exchange Commission



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# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

There is no doubt that the events the world has known before and during the twentieth century such as the industrial revolution and economic crisis have contributed to significant changes in the economic and business environment. Today's economic environment contains much of barriers and complexities which have a considerable impact on business and resulted in a significant evolution in the companies and organizations. Moreover, the shareholders and owners expect returns from their investments, but they can no longer be knowledgeable with all sufficient information to ensure that their objectives are consistent with the managers' objectives under the cover of a delegation of authority. Further, the recent events of big corporate scandals, the global economic crisis, and the financial reporting irregularities exposed the weakness of many organizations' control systems and revealed the need for better oversight of risk (Arena, Arnaboldi, and Azzone, 2006; Alizadah, 2011; Thompson, 2013). Put simply, the previously mentioned incidents highlighted the need for internal auditing and its effectiveness as a professional mechanism to ensure more transparency on the organizations' processes and provide a neutral opinion to help managers in making right decisions. In this respect, more attention was increased on internal audit function from the boards of the organizations due to its critical role in corporate governance and modern companies.

Traditionally, internal audit has been viewed as just a compliance function and assistant tool for accounting department aims to safeguard the organizations' assets (Arena, 2013). Currently, it has become one of the major elements for companies by recognizing its place, roles, responsibilities, and contributions to the

main internal and external stakeholders (Erasmus and Coetzee, 2018). In order to be a vital part in corporate governance system and play a crucial role in management, the internal audit should establish its credibility and preserve the legitimacy by adding value to the organizations, serving as a substantial link in business and financial statement as well as providing in place an internal assurance in risk management and internal control systems (Cohen and Sayag, 2010; Soh and Martinov-Bennie, 2011). According to Mihret (2014), internal auditing is increasingly considered as a control mechanism which assists management and the board of directors to achieve corporate goals. With this sustainable growth in its importance, many aspects of internal auditing have become under scrutiny. Thus, the internal auditors are expected to undertake the responsibility of adding the necessary value to the management of companies and to ensure that internal control system and risk management process are evaluated properly.

For this reason, the present study focuses on the internal auditors due to their important role in a business where they contribute to improving the organizations' processes. Internal auditors are considered as a central force in mitigating and preventing the misappropriation of an organization's assets, as well as helping the identification of fraud risks (Halbouni, 2015; Asiedu and Deffor, 2017). A study conducted by the Malaysian Institute of Corporate Governance (MICG), the Institute of Internal Auditors Malaysia (IIAM) and Ernst and Young (EY) showed that the internal auditors are in the best position to understand and assess the companies' business processes, help management to reduce risks and help to run an organization more efficiently and effectively to raise the shareholders' value (Fadzil, Haron, and Jantan, 2005). Even though the internal auditors help their organizations by contributing to a lot of areas related to their scope of work, but they also face several challenges and opportunities when they perform their work including the lack of management support, increasing the need for extending their scope of work and the lack of independence. A prior study conducted by Mirhet and Yismaw (2007) established that the recommendations provided by internal auditors are not worth enough the management's attention and there are no plans or policies in place to oversight and follow-up the implementation of internal audit recommendations which may adversely impact the organization performance and the internal audit effectiveness. Thus, internal auditors are required to develop

other strategies and learn new skills to meet these challenges and to carry out their work effectively.

In the same vein, effectiveness is defined as the achievement of objectives which should result in the determination of the quality of the auditee's processes effectiveness (Dittenhofer, 2001). The effectiveness of internal auditing is determined by its contribution to the effectiveness of the internal audit's customers and to the whole of the organization. Therefore, this concept has become one of the main issues of modern internal audit function and internal control system by gaining the confidence of different parties at the top level of organizations especially the board of directors, audit committee, and senior management. In the Malaysian context, internal audit function has grown exponentially in the recent years as a result of the fast developed economic of the country. However, the recent events have revealed that internal audit in Malaysia is still facing some problems which would negatively influence its effectiveness. For instance, the management of the properties purchased in Australia by MARA has faced some problems due to the ineffective audit reports. This led the government to appoint external auditors to investigate this issue (FMT, 2015). Tan Sri Annuar Musa the chairman of MARA in that period commented on this matter as follows: "*Internal auditing alone is insufficient... from our point, we should also look at our audit management for enhancement in the future*" (Sundaily, 2015). This may provide additional motivation for performing this study in Malaysia which considered as an appropriate context due to the previous factors.

On the other hand, the scope of internal auditing has been expanded in later years from taking financial audit only to cover both the management audit and the financial audit (Ahmad, Othman, Othman and Jussof, 2009; Gros, Koch and Wallek, 2016). This expansion allowed the internal auditors to perform some activities that lie under the responsibility of management and led to the emergence of a new role for internal auditors within organizations especially in internal control and risk management. For instance, in a study organized by the Institute of Internal Auditors (IIA) (2007), it has been found that 67 percent of internal auditors already had a role in risk management process while 25 percent were expected to carry out some roles within the next three years. Sarens and De Beelde (2006a) also argued that

the role of internal auditors has also changed quickly in order to adapt to the constantly emerging changes in economic and business environment.

Furthermore, there are several motivations that stand behind the focusing of this study on ERM when addressing the issue of internal audit effectiveness. First, the IIA (2009) stated that ERM is one of the main areas and objectives of internal auditing which is likely to improve the organizations' processes. Additionally, evidence shows that the trend of ERM adoption in the context of Malaysia has been extended in the recent years (Daud, Yazid, and Hussin, 2010). According to Thompson (2013), the importance of internal audit effectiveness in the area of ERM has been increasingly acknowledged. Consequently, the role of internal auditors regarding ERM has grown rapidly in the last years due to the needs of the boards and senior management for better oversight and management of risks. However, playing a leading role in this area may exposes the internal auditors and their characteristics such independence and objectivity to a high risks especially when they become increasingly involved in ERM (De Zwaan, Stewart, and Subramaniam, 2011). This would also affect the effectiveness of internal auditors due to the critical importance of internal audit independence and objectivity in this area (Alzeban and Gwilliam, 2014; Endaya and Hanefah, 2016). Therefore, this study focuses on internal audit effectiveness and its determinants taking into account the factors that can affect this concept in the area of Enterprise Risk Management.

## **1.2 Problem Statement**

Since the establishment of the institute of internal auditors (IIA) in 1941, the internal audit function has marked a significant progress to become one of the main functions within organizations, subject to specific standards and has clear tasks and responsibilities. The demand for the role of internal auditing is likely to be increased likewise due to the need of managers to have some independent assurance (Chambers and Odar, 2015). The internal auditors thus are playing this role as a part of their tasks within organizations. However, in order for internal auditing to be an effective function, there is a wide discussion among researchers and practitioners about the capability of internal auditors in implementing their duties efficiently and effectively as well as the main factors that affect this concept. These issues have

been focused especially on increasing the attention on effectiveness as one of the main internal auditing target (Dittenhofer, 2001). Subsequently, it is extremely important to identify the factors associated with internal auditing and affect its effectiveness.

In fact, there are several of previous studies have been conducted around the world to examine and address the internal audit effectiveness and its related aspects in both the developing and the developed counties. See for examples Ahmad et al. (2009) in Malaysia; Alzeban and Gwilliam, (2014) in Saudi Arabia; Arena and Azzone, (2009) in Italy; and Dittenhofer, (2001) in the USA. Nevertheless, there is a lack of academic studies that addressed the concept of internal audit effectiveness in some specific areas such as risk management and internal control. Coetzee (2016) argued that there are limited empirical studies have been conducted concerning the interaction between internal audit and risk management. Moreover, Lenz, Sarens and Hoos (2017) concluded that internal audit effectiveness is still a relatively unexplored area of research that deserves more attention from researchers. Earlier, there are several studies recommended that there is a need to enrich the literature of internal auditing and its effectiveness (Sarens, 2009; Cohen and Sayag, 2010). This phenomenon was one of the main motivations and reasons behind conducting the present study.

In the Malaysian context, although internal auditing has evolved rapidly in the last years, it has still a few problems such as the ineligibility of internal audit staff and the lack of adequate competencies and skills (Ali, Gloeck, Ali, Ahmi, and Sahdan, 2007). Additionally, it was asserted that there are limited studies addressing internal audit effectiveness in the public sector as pointed out by Ahmad et al. (2009). They further attempted to discover the main problems faced by internal audit function in the public sector in Malaysia. They found that the internal auditors do not have full support and commitment from top management; and there is a lack of the independence of internal auditing. They further concluded that these kinds of problems would weaken the effectiveness of internal audit function. This would explain that internal auditing is probably in the evolution phase within the Malaysian organizations. Ferry, Zakaria, Zakaria and Slack (2017) argued that internal audit function in Malaysia still at its nascent stage. Earlier, Ahmad et al.

(2009) suggested future studies to examine relationships between the problems facing internal audit function in the private and public sectors in Malaysia and the effectiveness of internal auditors. Furthermore, while there were few studies have addressed the effectiveness of risk-based internal audit approach (Allegrini and D'Onza, 2003; Spira and Page, 2003; Coetzee and Lubbe, 2013), the author of the current study is not aware of any empirical study conducted in Malaysia regarding this issue. Therefore, this study sheds light on the effectiveness of internal audit function in the area of enterprise risk management. This required also focusing on the role played by internal auditors in this area.

For more illustration, it was found that the expansion of internal audit scope has contributed to appear new challenges and responsibilities for internal auditing within the organizations. In the last issuing of internal audit definition in 1999, the IIA confirmed these changes by listing both assurance and consulting activities as fundamental roles of internal auditing. A few years later, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) issued the Enterprise Risk Management – Integrated Framework (COSO, 2004). Since then, the role of internal auditing has been grown significantly towards the contribution to improving the areas of Enterprise Risk Management and internal control by providing objective assurance and consulting service in a variety of ways (Sarens and De Beelde, 2006a; De Zwaan et al., 2011).

Besides, serious risks may arise when internal auditors extend their engagement in ERM process to perform activities beyond the assurance role. Several bodies and researchers expressed concerns over the threats posed by this engagement towards internal audit objectivity, independence, and effectiveness (IIA, 2009; Stewart and Subramaniam, 2010). Recognising this possibility, the IIA issued a position statement to clarify the role of internal auditors regarding ERM activities which has been listed in three categories: 1) core role where internal auditing coordinate with management deemed as assurance activities; 2) legitimate roles with safeguard; and 3) prohibited roles (IIA, 2009). Even though the IIA stressed to respect this classification and that the implementing of ERM process must rest under management responsibilities, earlier studies found that the internal auditors can increase their involvement and become primarily responsible for ERM

process (Gramling and Myers, 2006; Fraser and Henry, 2007). However, while the IIA and many researchers tend to consider that the role of internal auditors regarding risk management is limited to provide assurance services about the management of risks within organizations, there is also another point of view that claim that the changing role of internal audit imposes internal auditors to perform more responsibilities particularly regarding ERM. Thompson (2013) claimed that the internal auditors are expected to be increasingly involved in ERM process by adding value to their entities and performing their role effectively in this area. Further, David Landsittel, the former chairman of COSO and the Auditing standards board of AICPA gave his view on what role an internal auditor should play in ERM process when he said:

*"I think there is an opportunity for internal auditors, particularly those in mid-market and smaller enterprises, to take more of a hands-on approach to ERM implementation and to play a key role that extends beyond the assurance process. That's because the skills of the internal audit group are consistent with the skills needed for those who oversee the ERM process, and the relationships that internal auditors build are consistent with what is needed in building an ERM process ..."*

In the internal Auditor Magazine, (Steffee, 2009)

This debate led to examine the implications of the internal auditors' involvement in their role regarding ERM on the objectivity and the independence of internal audit function as well as on the effectiveness of internal auditors. Therefore, the main problem is pertaining to addressing the effectiveness of internal audit function when the internal auditors exercise their responsibility of ERM. In other words, investigating the main factors that can affect the effectiveness of internal auditors when they perform their role regarding ERM process. According to this, the current study aims to examine the effects of internal auditors' involvement in ERM and senior management support on internal audit effectiveness through ensuring the independence and objectivity based on the perception of internal auditors in Malaysia regarding this issue.