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# FACTORS OF INTERNAL AUDIT EFFECTIVENESS AND MODERATING EFFECT OF MANAGEMENT SUPPORT IN MALYSIAN PUBLIC SECTOR

SITI NUR FARHANAH KIFFLEE



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DISSERTATION PRESENTED TO QUALIFY FOR A MASTER OF ACCOUNTING  
(RESEARCH MODE)

FACULTY OF MANAGEMENT AND ECONOMICS  
SULTAN IDRIS EDUCATION UNIVERSITY

2024



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## ACKNOWLEDGEMENT

First and foremost, thanks and praise Allah for giving me the means, courage, strength, and perseverance to complete this research. I am thankful to Allah for blessing me with a sound mind, which has allowed me to endure and get through various challenges during this research. My deepest gratitude and honourable appreciation to my main supervisor, Dr. Rosmini Binti Ismail, and my co-supervisor, Mohd Abdullah Jusoh (Prof. Dr.), for their unreserved guidance, invaluable assistance, constructive comments, and advice on how to write a good thesis. They enable me to exert my utmost potential to accomplish this thesis. Besides, their kindness and support sustained me throughout my research process. Their suggestions and criticisms have improved the quality and the content of the thesis. Last but not least, my heartfelt thanks go to my family and friends for their endless support, invaluable ideas, and moral support to keep me up with the task.





## ABSTRACT

This study examines the direct relation effects of independent variables (internal auditor competence, internal auditor independence, and internal control system effectiveness) towards the dependent variable (internal audit effectiveness) in Malaysian public sector. Further, this research investigated the moderating effect of management support on the relationship between the independent variables and dependent variable. The theoretical framework is based on the Resource-Based Theory and Contingency Theory. Using the purposive sampling method, 206 internal auditors who work under Malaysian Federal Statutory Bodies (MFSB) were selected as the research subjects. The quantitative research method employed questionnaires with 50 items to measure the relationship between the independent variables and moderating effect towards the dependent variable. The data were collected through questionnaires distributed via respondents' electronic mail (e-mail). Among the total of 206 questionnaires that were sent, 111 valid responses were received. Data were analyzed using descriptive analysis, correlation analysis, and regression analysis (multiple linear regression and moderated regression). The findings of the direct effect show statistical significance at a 5% level of significance: competence of the internal auditor ( $\beta = 0.275$ ,  $p < 0.05$ ), independence of the internal auditor ( $\beta = 0.298$ ,  $p < 0.05$ ), and the effectiveness of the internal control system ( $\beta = 0.307$ ,  $p < 0.05$ ). On top of that, the moderating effect of management support influenced the relationship between all of the independent variables and the dependent variables at  $p < 0.05$ . One of the main contributions of this study is that all of the measured factors are significant, especially in dealing with audit-related issues, which may indirectly reduce the corruption rate and enhance the performance of an organization.





## FAKTOR-FAKTOR KEBERKESANAN AUDIT DALAMAN DAN KESAN MODERASI SOKONGAN PENGURUSAN DI SEKTOR AWAM MALAYSIA

### ABSTRAK

Kajian ini mengkaji kesan hubungan langsung pembolehubah bebas (kompetensi juruaudit dalaman, kebebasan juruaudit dalaman, dan keberkesanan sistem kawalan dalaman) terhadap pembolehubah bersandar (keberkesanan audit dalaman) dalam Sektor Awam Malaysia. Seterusnya, penyelidikan ini menyiasat kesan penyederhanaan sokongan pengurusan terhadap hubungan antara pembolehubah bebas dan pembolehubah bersandar. Kerangka teori adalah berdasarkan Teori Berasaskan Sumber dan Teori Kontingensi. Menggunakan kaedah persampelan bertujuan, 206 juruaudit dalaman yang bekerja di bawah Badan Berkanun Persekutuan Malaysia (MFSB) telah dipilih sebagai subjek kajian. Kaedah penyelidikan kuantitatif ini menggunakan soal selidik dengan 50 item untuk mengukur kesan hubungan antara pemboleh ubah bebas dan kesan penyederhanaan terhadap pemboleh ubah bersandar. Data dikumpul melalui borang soal selidik yang diedarkan melalui mel elektronik (e-mel) responden. Daripada jumlah 206 borang soal selidik yang dihantar, 111 jawapan yang sah telah diterima. Data dianalisis menggunakan analisis deskriptif, analisis korelasi, dan analisis regresi (regresi linear berganda dan regresi sederhana). Penemuan kesan langsung adalah signifikan pada tahap keertian 5%: kecekapan juruaudit dalaman ( $\beta = 0.275$ ,  $p < 0.05$ ), kebebasan juruaudit dalaman ( $\beta = 0.298$ ,  $p < 0.05$ ), dan keberkesanan sistem kawalan dalaman ( $\beta = 0.307$ ,  $p < 0.05$ ). Selain itu, kesan penyederhanaan sokongan pengurusan mempengaruhi hubungan antara semua pembolehubah bebas dan pembolehubah bersandar pada  $p < 0.05$ . Salah satu sumbangan penting kajian ini ialah semua faktor yang diukur adalah signifikan, terutamanya dalam menangani isu berkaitan audit, yang secara tidak langsung boleh mengurangkan kadar rasuah dan meningkatkan prestasi sesebuah organisasi.







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## LIST OF ABBREVIATIONS

AA	Audit Act
AC	Audit Committee
ACCA	Association of Chartered Certified Accountants
CA	Chartered Accountant
CAE	Chief Audit Executive
CG	Corporate Governance
FC	Federal Constitution
IA	Internal Audit
IACOMP	Competence of Internal Auditor
IAE	Internal Audit Effectiveness
IAIND	Independence of Internal Auditor
ICSYS	Effectiveness of internal control system
IIA	Institute of Internal Auditors
INTOSAI	International Organisation of Supreme Audit Institutions SAls Supreme Audit Institutions



LGA	Local Government Act
LKAN	Auditor General's Report
MCCG	Malaysian Code of Corporate Governance
MFSB	Malaysian Federal Statutory Bodies
MNGSUP	Management Support
MOF	Ministry of Finance
NAD	National Audit Department
SBA	Statutory Bodies Act
SOR	Statement of Responsibility of the Internal Auditor
SOX	Sarbanes-Oxley Act of 2002





## APPENDIX LIST

A      Introductory Letter

B      Questionnaire Administered to Internal Auditors





## CHAPTER 1

### INTRODUCTION

This chapter demonstrates the background of the study, which consists of the background of the research and a statement of the problem. It continues with the research objectives, research questions, research hypothesis, conceptual framework, the significance of the research, operational definition, limitation of the study, and conclusion.

#### 1.1 Background

Internal audit is an independent and objective activity that provides assurance and consulting services to organizations to enhance their operations (Institute of Internal Audit, 2020). It also acts as an effective instrument to monitor and enhance corporate governance (Gramling, Maletta, Schneider & Church, 2004). Audit services may assist an organization in ensuring its success in the financial management of the public sector





through their effective and efficient way of promoting good governance by way of handling public funds (Baharud-din, Shokiyah, & Ibrahim, 2014). The Institute of Internal Audit (2015) explained the internal audit activities, including examining operations and verifying information, engaging with external assurance providers, identifying risks, reviewing controls, and providing advice to managers at all levels. The internal audit function should hire employees who are competent, experienced, professionals, and able to comply with the Code of Ethics and the International Standards in order to have a successful internal audit mandate (Institute of Internal Audit, 2021).

The Auditor General has highlighted the importance of the internal audit function, whose duties include keeping track and examining current projects as well as assisting government agencies in attaining their goals in a way that is morally, economically, and effectively (Yusof, Haron, & Ismail, 2016). This is due to the problems mentioned in the Auditor General's Report (LKAN) that incurred losses of millions of Ringgit in Malaysia's public finances. One of the largest fraud and scandal cases in the Malaysian public sector was the National Feedlot Corporation's Scandal (2014), which involved allegations concerning their investments in upscale properties. Another case that arose in 1992 was Bank Negara Malaysia Forex Scandal. This scandal occurred when Bank Negara Malaysia suffered losses from foreign exchange transactions totaling more than US\$10 billion (approximately RM25 billion) due to the absence of a control mechanism to track those enormous losses. These scandalous incidents prove that the internal audit function has not achieved its objective (Shamsuddin, Manjieggar, & Kirupanangtan, 2014).







The government's primary objective, especially when dealing with COVID-19's social and economic impacts, is to offer the most effective and efficient means of providing public service (Postula, Irodenko, & Dubel, 2020). According to Arena and Azzone (2007), effectiveness is the capacity to achieve desired results that align with the intended purpose. According to this study, the effectiveness of the internal audit function can be measured based on the adherence to the specified objectives and its contribution to helping other corporate governance parties (stakeholders and shareholders) to successfully discharge their duties (Turetken, Jethefer, & Ozkan, 2019). As a result, internal audit functions may help the public sector achieve their goals systematically and disciplined (Shamsuddin et al., 2014). The goal may be accomplished by enhancing the control system's effectiveness and governance process (Hermanson & Rittenberg, 2003).



Gramling et al. (2004) held the opinion that the level of internal auditor independence and competency, as well as the support and commitment of the management team, are all necessary for the internal audit role to be effective. Therefore, the management team should encourage the internal auditor to be independent while doing their job (Pelser, Mensah, & Ngwenya, 2020). This is one of the approaches that the management team may practice in their organization in order to demonstrate their full support for the internal auditing role. On the other hand, it is only possible to consider the competence of internal auditors. Internal auditors are urged to strengthen their professional capabilities through training and career development. According to Gong, Li, Lin, and Wu (2016), internal auditors' competencies may be improved along with the effectiveness of internal auditing by becoming members of appropriate professional organizations, including accounting associations and professional auditors.





The relationship between the internal auditor's competency, independence, the internal control systems' effectiveness, and management support (a moderating effect) in relation to the effectiveness of internal audits is still a lack of research conducted in the Malaysian public sector. Thus, this study evaluates potential influences on internal audit effectiveness in the Malaysian public sector. This research might provide additional information from the existing literature on internal audit effectiveness in the public sector.

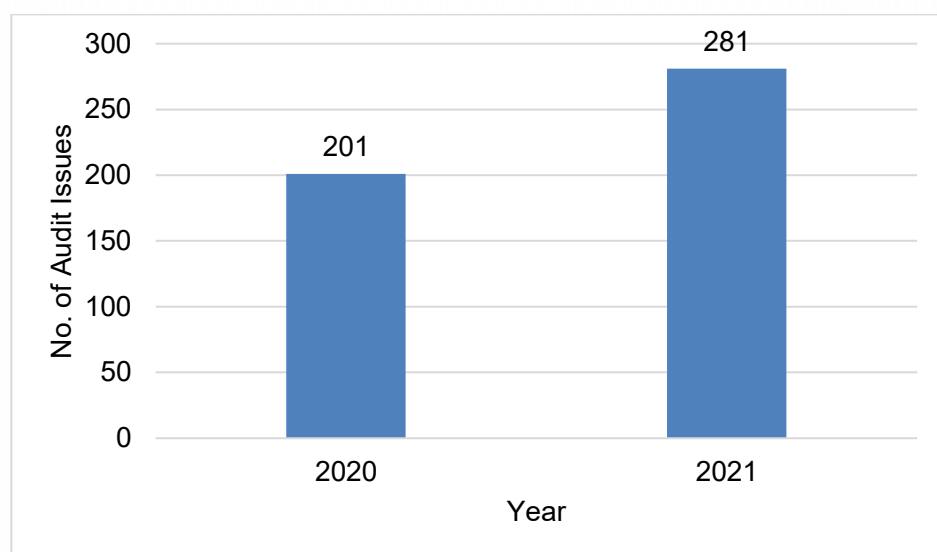
## 1.2 Problem Statement

The roles of internal audit and the rules of governance are intended to promote effective governance practices, including adherence to regulations to prevent any misconduct and improve management performance in rendering public services (Ferry, Zakaria, Zakaria, & Slack, 2017). Despite that, internal auditing has been criticized in light of the recent global financial crisis and the numerous scandals that significantly affected business in the early 2000s (Almahuzi, 2020). These concerns center on whether internal auditing is being carried out effectively to ensure compliance with regulatory controls and standards to help manage risks (Chambers & Odar, 2015). One of the largest fraud and scandal cases was the Bank Negara Malaysia Forex Scandal (1992), which was due to the absence of a control mechanism to track the enormous losses that happened. This scandal shows that corporate governance issues still exist, raising the question of what factors influence the effectiveness of internal audits (Yusof et al., 2016).

A statistic that was gathered from the Auditor General's Dashboard (a website operated by the National Audit Department, which provides progress of issues related to LKAN) shows the total audit issues recorded in 2021 and 2020 were 281 and 201 cases,



respectively (refer to Figure 1.1). The increment in audit issues was due to several reasons. Among the issues reported in the Auditor General's Report 2021 are irregular payments and loss of government revenues that cause the leakage of public money, as well as significant management issues that occur due to non-compliance with financial laws and regulations. The increasing trends of cases show that the Malaysian public sector is still plagued by insufficient financial management and a lack of internal control systems within an organization. These issues will hinder the internal audit unit from functioning effectively and efficiently.



*Figure 1.1.* Statistics of the Number Issues for the Malaysian Federal Statutory Bodies in the Year 2020 and 2021

There have been studies on the effectiveness of internal audits in the public sector, such as those by Tahajuddin and Kertali (2018) and Hassan, Rahmat, and Mohamed (2016). According to Cohen and Sayag (2010), one key finding that prompts additional debate is the need for a link between professional proficiency (competency), career development, and internal audit effectiveness variables. Moreover, Joshi (2021)

and Abdullah and Mustafa (2020) were unable to find a connection between internal audit effectiveness and internal auditor independence, which prompted the researcher to explore the variable in the context of Malaysia. Research on the effectiveness of internal control systems is still lacking, particularly in the context of the Malaysian public sector, given that the newest research appears to have been undertaken by Hassan et al. (2016). According to the research findings, the management's commitment and the effectiveness of the internal control system had an impact on the effectiveness of the internal audit.

The increasing number of audit issues shows that the internal audit function in the Malaysian public sector is still ineffective. This can be seen where the increase in audit issues is derived from the mismanagement of public monies due to the lack of an internal control mechanism within an organization. In order to improve the effectiveness of internal audits, it is essential to analyze what factors contribute to them, especially in the Malaysian public sector.

### 1.3 Research Objectives

The objective of this investigation is explicitly listed below:

Research objective 1: To explore the influence of the internal auditor's competency, the internal auditor's independence, and the effectiveness of the internal control system on the internal audit effectiveness in the Malaysian public sector.

Research objective 2: To assess the impact of management support (moderating effect) on the link between the internal auditor's competency, the internal auditor's



independence, and the effectiveness of the internal control system towards the internal audit effectiveness in the Malaysian public sector.

#### 1.4 Research Questions

The purpose of this research is to address the following research questions:

Research question 1: Does internal auditors' competence influence internal audits' effectiveness in the Malaysian public sector?

Research question 2: Does internal auditors' independence influence internal audits' effectiveness in the Malaysian public sector?

Research question 3: Does the effectiveness of the internal control system influence the effectiveness of internal auditors in the Malaysian public sector?

Research question 4: Does management support moderate the effect of internal audit competency and the effectiveness of internal audit in the Malaysian public sector?

Research question 5: Does management support moderate the effect of internal audit independence and the effectiveness of internal audits in the Malaysian public sector?

Research question 6: Does management support moderate the effect of internal control system effectiveness and the effectiveness of internal audit in the Malaysian public sector?





## 1.5 Research Hypotheses

This research aims to assess factors that influence the effectiveness of internal audits in the Malaysian public sector. This research ought to find the relationship between a dependent variable and the independent variable by considering the moderating effect (management support).

Hypothesis 1 ( $H_1$ ): The effectiveness of internal audit is positively associated with internal auditors' competency in the Malaysian public sector.

Hypothesis 2 ( $H_2$ ): The effectiveness of internal audit is positively associated with the internal auditor's independence in the Malaysian public sector.

Hypothesis 3 ( $H_3$ ): The effectiveness of internal audit is positively associated with the effectiveness of the internal control system in the Malaysian public sector.

Hypothesis 4 ( $H_4$ ): Management support moderates the relationship between internal auditor competency and the effectiveness of internal audit in the Malaysian public sector.

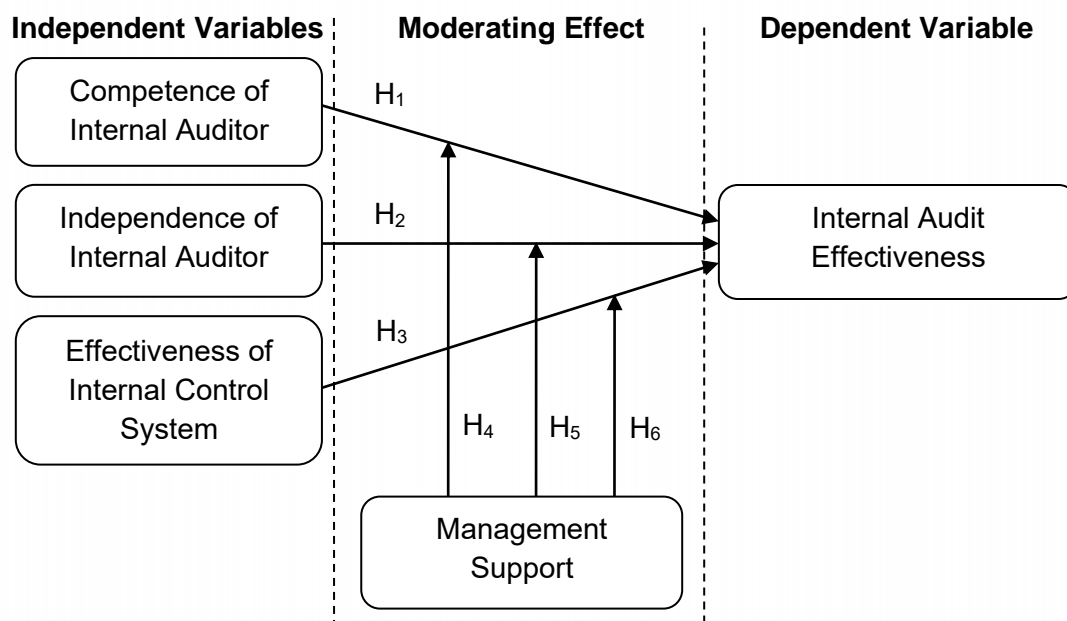
Hypothesis 5 ( $H_5$ ): Management support moderates the relationship between internal auditor independence and the effectiveness of internal audits in the Malaysian public sector.

Hypothesis 6 ( $H_6$ ): Management support moderates the relationship between the internal control system's effectiveness and the internal audit's effectiveness in the Malaysian public sector.



## 1.6 Conceptual Framework

In order to explain the relationship between independent variables, dependent variables, and moderating effect, this research will combine two theories, namely Resource-Based Theory and Contingency Theory. The independent variables used in this research are the competence of internal audit, the independence of the internal auditor, and the effectiveness of the internal control system. Besides, the dependent variable for this research is the internal audit effectiveness. Furthermore, this research will focus on management support as a moderating effect. The Resource-Based Theory may be used to explain the competence of internal auditors and the independence of internal auditor that might influence internal audit effectiveness. The Contingency Theory may justify the impacts of mediator and moderator variables (management support). Based on the theoretical perspectives, a new conceptual framework was designed as per Figure 1.2.



*Figure 1.2.* Conceptual Framework (Source: Prepared by the author with reference to Tahajuddin & Kertali, 2018; Hassan, Rahmat, & Mohamed, 2016; Arena & Azzone, 2009)



## 1.7 Significance of Research

Firstly, this research is significant for its contribution to the theoretical understanding of internal audit effectiveness. To establish a theoretical foundation for internal audit effectiveness, this study employs Resource-Based Theory and Contingency Theory. The Resource-Based Theory emerged to explain how distinct firm-specific assets (tangible and intangible assets), which are viewed as resources or capabilities, result in long-term competitive advantage (Barney, 1991). Alkebsi and Aziz (2017) find that firm resources, such as information technology usage and management support, are the main internal audit effectiveness drivers. In this context, the effectiveness of internal audits in the Malaysian public sector is determined by the competency and independence of internal auditors. Internal audit effectiveness may be achieved by having sufficient resources (human capital resources) employed within an organization. According to Chenhall (2003), the Contingency Theory is a behavior-based theory that takes into account factors including the environment, technology, size, organizational structure, strategy, and culture. The contingency theory is used to clarify the influence that management support (a moderating effect) and the effectiveness of internal control systems have on internal audit effectiveness.

Secondly, this research is crucial for its contribution to improving the internal audit performance in the public sector, promoting public sector financial responsibility, and leading to effective and efficient public governance. Internal auditors play a crucial role in preventing any non-compliance activities from occurring by following the established policies, plans, procedures, rules, and regulations that might have a substantial influence on an organization's operations (Hailemariam, 2014). Thirdly, this research's findings will also substantially influence the empirical evidence available to



the public sector, the government, policymakers, and the general public. Besides, this study will contribute to a new knowledge of the factors that influence internal audit effectiveness in the Malaysian public sector. This research finding may be used by top management and development policymakers, as well as future researchers who need additional references when conducting their own research on this research topic.

## 1.8 Operational Definitions

Definitions of keywords involved in this research are internal audit, effectiveness, internal audit effectiveness, public sectors, independence, competence, internal control system, and management support. These keywords will be explained briefly in the next subsection.



### 1.8.1 Internal Audit

Internal auditing is defined as an independent, objective assurance and consulting activity that adds value and improves an organization's operations. Internal auditing also aids an organization in achieving its goals by using a disciplined, systematic method to assess and enhance the effectiveness of its risk management, control, and governance processes (Institute of Internal Auditors, 2017). The role of internal audit has now shifted from merely focusing on financial and accounting matters to evaluate active risk and control evaluations. It is considered integral to the corporate governance process (Kagermann, Kinney, & Küting, 2021).





### 1.8.2 Effectiveness

In general, effectiveness refers to the capacity to produce outcomes that are consistent with goals (Dittenhofer, 2001). Effectiveness here refers to how well the internal auditing process operates in order to complete the job outlined by the internal audit goal (Arena & Azzone, 2009). Efficacy and efficiency are frequently used interchangeably, although they actually signify distinct things in a literal sense. According to Bednarek (2018), effectiveness is more crucial than efficiency since an internal audit function would be meaningless if it is not carried out successfully, no matter how efficient the audit function is.



### 1.8.3 Internal Audit Effectiveness

In relation to this research, internal audit effectiveness refers to the function's duties in aiding the corporate governance parties in effectively carrying out their tasks and compliance with the defined objectives (Turetken et al., 2019). To fulfill the internal audit mission successfully, the internal audit function needs to hire capable, skilled, and experienced people who can work in compliance with the Code of Ethics and the International Standards (Institute of Internal Audit, 2021). Any of the Core Principles must be attained for an internal audit operation to be regarded as effective in carrying out an internal audit mission. The use of resources, adherence to policies and procedures, improved governance, the provision of valuable recommendations, evaluation of organizational missions and objectives, examination of organizational operations, presence of follow-up procedures, and assessment of the possibility of fraud





occurrence are all factors that will be considered in this study to determine the effectiveness of internal auditing.

#### **1.8.4 Public Sectors**

Public sectors are organizations that are created, controlled, and funded by the government on behalf of the general public and are not privately owned and operated (Yusof et al., 2016). In general, Malaysia has three tiers of government: the federal, the state, and the local government, with the federal government being the highest. This study will concentrate on the federal government (Malaysian Federal Statutory Bodies).



#### **1.8.5 Competence**

According to Baharud-din et al. (2014), competency is defined as the ability of an individual to perform a task correctly based on educational degree, professional experience, and professional development. The Institute of Internal Auditors (2017) states that, in order to fulfill their specific job (also known as proficiency), internal auditors must have the knowledge, abilities, and other competencies required. With the use of particular internal audit software, abilities, completed audit activities on time, educational background, professional certifications, and job experience in the internal audit industry, this study will assess the competency of internal auditors. Therefore, this research should assess the effect of internal audit competency on the effectiveness of internal audits in the Malaysian public sector by considering the influence of management support as a moderating effect.





### 1.8.6 Independence

In the context of this study, independence is defined as a state of being free from all influences and biases, and the absence of independence will significantly reduce the value of the audit service and the audit report (Egbunike, Egbunike, & Okafor, 2017). When internal auditors can make objective decisions during their engagements, this indicates that they have already achieved independence (Pelser et al., 2020). In this study, the internal auditors' independence will be evaluated based on their level of independence, reporting responsibilities, direct communication with the board and senior management, conflicts of interest, interference, and unfettered access to all departments and workers. So, by considering the role of management support as a moderating effect, this research intends to explore the impact of internal auditor independence on the effectiveness of internal audit in the Malaysian public sector.



### 1.8.7 Internal Control System

A system that may improve a company's monitoring and reporting procedures and ensure compliance with laws and regulations is known as an internal control system (Fadzil, Haron, & Jantan, 2005). A successful internal control system typically consists of five components: the control environment, risk assessment, activities control, information and communication, and monitoring (Karagiorgos, Drogalas, & Giovanis, 2011). The board and audit committee, management philosophy, organizational structure, process-level objectives, risk identification, policies and procedures, control activities in place, quality of information, the effectiveness of communication, ongoing monitoring, and separate evaluations will all be taken into consideration when determining the





effectiveness of the internal control system in this study. Therefore, this study aims to examine the effects of internal control system effectiveness on internal audit effectiveness in the Malaysian public sector while considering management support as a moderating effect.

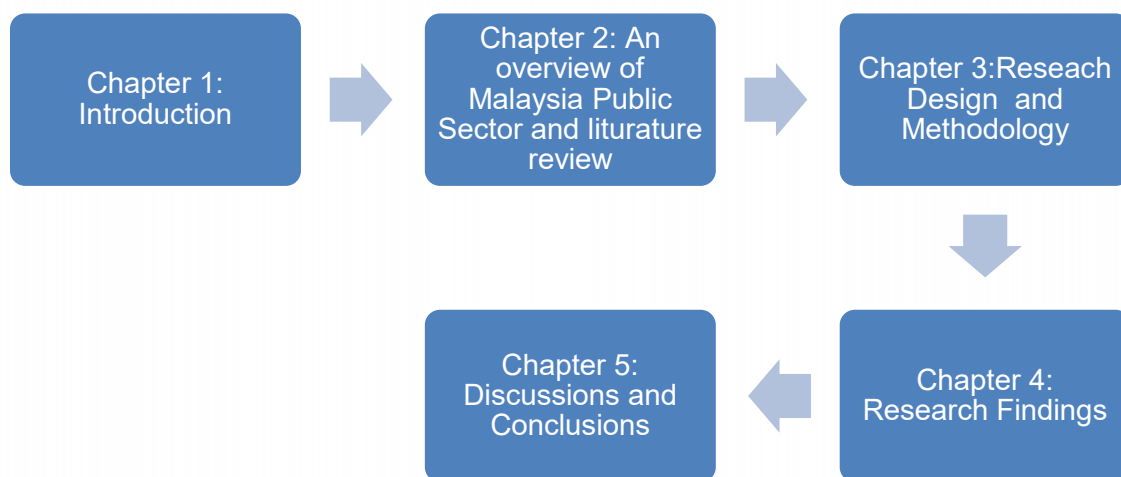
### 1.8.8 Management Support

The success of an internal audit depends on the management team's total commitment and support, as well as the board of directors' attitude toward the internal auditors' work in order to foster an environment that is favorable to the organization's operations and the accomplishment of the internal audit mandate (Pelser et al., 2020). According to the Institute of Internal Audit (2017), the chief audit executive should report to senior management and the board regularly regarding the goals, mandates, responsibilities, and performance of the internal audit activity following its plan, as well as its adherence to the Code of Ethics and Standards. For this research purpose, management support will be measured based on the communication of the internal auditors with management, acknowledgment of internal audit roles, provision of training by management, receiving adequate resources and cooperation, promptly taking corrective action, and commitment to improving the internal audit division.



## 1.9 Structure of the Thesis

This thesis is divided into five chapters including this introductory chapter. Figure 1.3 shows the flow of the thesis's chapters.



**Chapter 1:** This chapter starts by explaining the background of this research related to internal audit functions in the public sector. The research problem is then explained, and the objectives are clarified. The research questions are developed based on the research objectives. The chapter also discussed the developed conceptual framework as well as the significance of research to current knowledge and the body of literature. The limitations of this research are also highlighted at the end of this chapter.

**Chapter 2:** This chapter describes the overview of the Malaysian public sector, Malaysian federal statutory bodies (MFSB), and the history of internal audits. The background of internal auditing in the Malaysian public sector was also explained in this chapter, including the internal audit philosophy, the definition of internal audit, the role of





internal auditing in an organization, and its contribution towards corporate governance. To provide a thorough research background, this chapter examines pertinent academic and professional literature on the internal audit effectiveness in the Malaysian public sector and the underpinning theories for each variable.

**Chapter 3:** This chapter focuses on the research techniques. The research process and design are presented in this chapter. The procedures for collecting data through questionnaires are then covered. In addition, the pilot research was discussed. Based on the opinions of the internal auditors, the chapter describes how the three independent variables, a moderating effect, and a dependent variable, were measured.

**Chapter 4:** The findings of the questionnaires are presented in this chapter. In order to summarize the information gleaned from the respondents, the critical data received through surveys are presented: 111 internal auditors who work under Malaysian Federal Statutory Bodies (MFSB).

**Chapter 5:** The key conclusions are covered in this chapter, emphasizing the research's results and providing suggestions on the research. The chapter also provides direction for future research.





### 1.10 Conclusion

In conclusion, the effectiveness of financial management depends on the function of internal audit in the public sector. If internal audit functions could promote good governance practices, it would eventually benefit corporate governance parties (stakeholders, shareholders, and the public). However, the requirement for an effective internal audit role has become apparent in light of recent problems in the Malaysian public sector, which include a significant loss of public funds. Therefore, the purpose of this study is to investigate the elements that may have an impact on the internal audit effectiveness in the Malaysian public sector.

Given the lack of research on this issue in the Malaysian context, a new conceptual framework is developed based on the past literature. The resourced-based theory and contingency theory were integrated in this study to explain the link between the independent factors, the dependent variables, and a moderating effect. This study may provide a further understanding of the effectiveness of internal audits in the Malaysian public sector and give ideas to future researchers for potential study topics.

