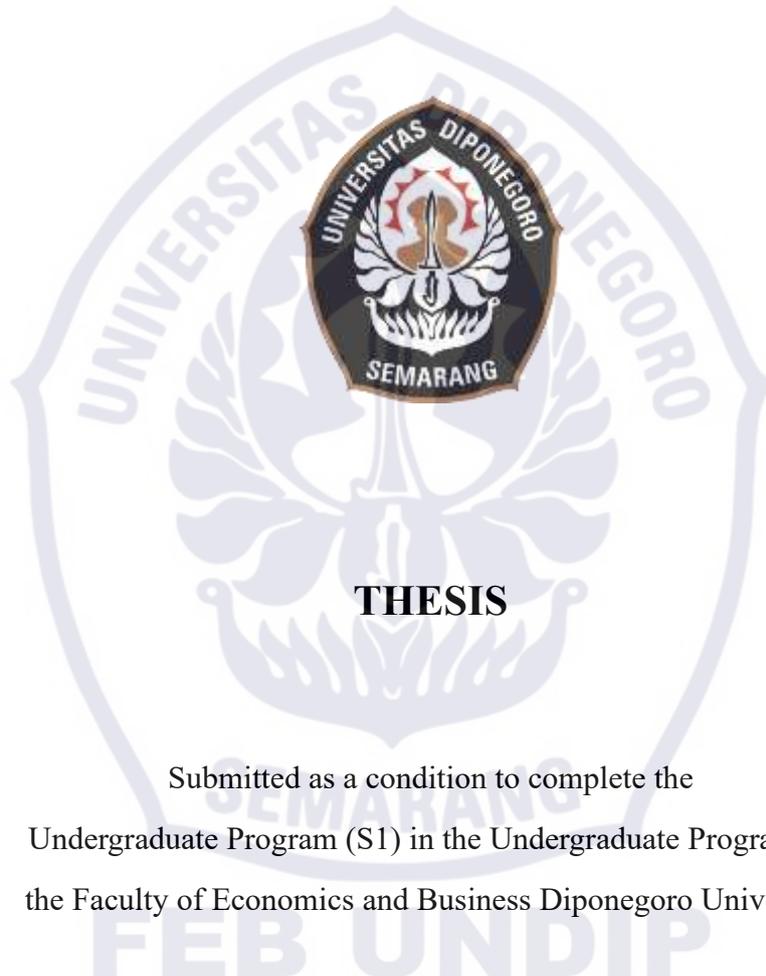


**FACTOR AFFECTING THE EFFECTIVENESS
OF INTERNAL AUDIT IN BANK IN INDONESIA
(Study Case Bank in DKI Jakarta)**



THESIS

Submitted as a condition to complete the
Undergraduate Program (S1) in the Undergraduate Program of
the Faculty of Economics and Business Diponegoro University

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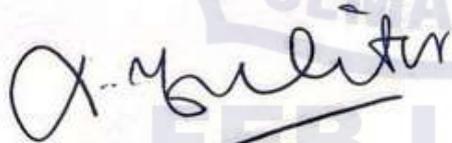
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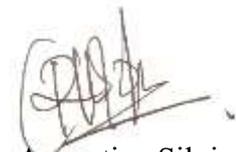
ORIGINALITY STATEMENT

The Undersigned, Clara Augustine Silvianti, declares that the bachelor thesis entitled: Factor Affecting of Internal Audit in Bank in Indonesia (Study Case Bank in DKI Jakarta), is the result of my writing. I hereby declare that in this bachelor thesis there is no whole or part of other people's writings that I took by copying or imitating in the form of a series of sentences or symbols that show the ideas or opinions or thoughts of other authors, which I admit as if they were my writing, and/or there is no part or all of the writing that I copy, imitate, or take from other people's writings without giving acknowledgement of the original author.

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MOTTO

"And whatever you ask in prayer, believing, you will receive."

Matthew 21:22

"Surely there is a future, and your hope will not be cut off."

Proverbs 23:18



ABSTRACT

This study investigates the factors that influence the effectiveness of internal audits in the Indonesian banking sector, particularly in the DKI Jakarta region, using Attribution Theory as its theoretical foundation. The study empirically examines the influence of internal auditor competence, internal auditor independence, management support, and organizational culture on the effectiveness of internal audits. Using a quantitative approach, data were collected through structured questionnaires from 105 internal auditors and related staff at Indonesian commercial banks and were analyzed using multiple linear regression.

The research findings indicate that internal auditor competence, internal auditor independence, and organizational culture have a significant positive influence on the effectiveness of internal audits. These results underscore that the professional capabilities of auditors, their autonomy from intervention, and a transparent and ethical organizational culture are crucial for the success of internal audits in the banking industry. However, the hypothesis regarding management support was rejected, as no statistically significant influence on internal audit effectiveness was found within the context of this study.

Theoretically, this study contributes by applying Attribution Theory to explain how the perception of audit effectiveness is shaped by attributions to stable, internal factors like competence and culture. Practically, the findings offer insights for banking management and regulators to focus on enhancing auditor competence, strengthening independence, and developing an organizational culture that supports accountability to improve audit quality, mitigate fraud risks, and reinforce governance frameworks in the Indonesian financial sector

Keywords: Internal Audit Effectiveness, Internal Auditor Competence, Internal Auditor Independence, Management Support, Organizational Culture.

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ABSTRAK

Penelitian ini menginvestigasi faktor-faktor yang memengaruhi efektivitas audit internal di sektor perbankan Indonesia, khususnya di wilayah DKI Jakarta, dengan menggunakan Teori Atribusi sebagai landasan teoretis. Studi ini secara empiris menguji pengaruh kompetensi auditor internal, independensi auditor internal, dukungan manajemen, dan budaya organisasi terhadap efektivitas audit internal. Dengan pendekatan kuantitatif, data dikumpulkan melalui kuesioner terstruktur dari 105 auditor internal dan staf terkait di bank-bank komersial Indonesia dan dianalisis menggunakan regresi linier berganda.

Hasil penelitian menunjukkan bahwa kompetensi auditor internal, independensi auditor internal, dan budaya organisasi memiliki pengaruh positif yang signifikan terhadap efektivitas audit internal. Temuan ini menggarisbawahi bahwa kapabilitas profesional auditor, otonomi dari intervensi, serta budaya organisasi yang transparan dan etis merupakan faktor krusial bagi keberhasilan audit internal di industri perbankan. Namun, hipotesis mengenai dukungan manajemen ditolak, karena tidak ditemukan pengaruh yang signifikan secara statistik terhadap efektivitas audit internal dalam konteks penelitian ini.

Secara teoretis, studi ini berkontribusi dengan menerapkan Teori Atribusi untuk menjelaskan bagaimana persepsi efektivitas audit dibentuk oleh atribusi terhadap faktor-faktor internal yang stabil, seperti kompetensi dan budaya. Secara praktis, temuan ini memberikan wawasan bagi manajemen perbankan dan regulator untuk fokus pada peningkatan kompetensi auditor, penguatan independensi, dan pengembangan budaya organisasi yang mendukung akuntabilitas guna meningkatkan kualitas audit, memitigasi risiko penipuan, dan memperkuat kerangka tata kelola di sektor keuangan Indonesia.

Kata Kunci: *Efektivitas Audit Internal, Kompetensi Auditor Internal, Independensi Auditor Internal, Dukungan Manajemen, Budaya Organisasi.*

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FOREWORDS

All praise and gratitude the author expresses to God Almighty for His blessings and presence throughout the process of writing this thesis. The author has completed the thesis entitled "Factors Affecting the Effectiveness of Internal Audit in Banks in Indonesia (A Case Study of Banks in DKI Jakarta)." This thesis was written to fulfill one of the requirements for completing the Bachelor's degree program (S-1) at the Faculty of Economics and Business, Diponegoro University.

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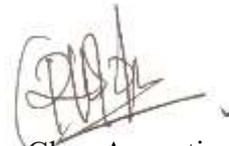
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It is the sincere hope of the author that this thesis will be beneficial to its readers and contribute to future studies in this field.

Semarang, 14 Juli 2025



Clara Augustine



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CHAPTER 1

INTRODUCTION

1.1 Theoretical Foundation

The effectiveness of internal audit has increasingly become a focal point in scholarly inquiry, driven by its significant implications for organizational governance, risk management, and internal control systems. Internal audit effectiveness is pivotal as it directly influences an organization's ability to achieve strategic objectives, uphold accountability, and maintain transparency (Lenz & Hahn, 2015). Empirical evidence underscores the essential role of internal audit effectiveness in enhancing financial reporting quality and overall governance, which consequently strengthens stakeholder confidence (Alqudah et al., 2023; Alzeban & Gwilliam, 2014).

This topic gains particular relevance against the backdrop of rising complexity in organizational operations and heightened regulatory scrutiny. Recent financial scandals, notably within the banking sector, have highlighted severe deficiencies within internal audit functions, thereby exposing organizations to significant fraud and financial irregularities (Khanam, 2024). Studies conducted in Bangladesh and Saudi Arabia confirm that weaknesses in internal audit effectiveness can severely impair organizational integrity and financial stability (Alzeban & Gwilliam, 2014; Khanam, 2024). Additionally, research from Jordan identifies internal audit empowerment, including independence and management support, as critical determinants of auditor effectiveness, further emphasizing the

practical and theoretical importance of examining this variable (Alqudah et al., 2023).

In the context of the Indonesian higher education and banking sectors, where accountability and public trust are paramount, exploring the determinants and impact of internal audit effectiveness becomes particularly compelling. This research gap is significant as prior studies have predominantly focused on public sector institutions, leaving room for further investigation into private and educational sectors (Onay, 2021). Consequently, exploring internal audit effectiveness allows scholars and practitioners to identify how auditor competence, independence, management support, and organizational culture collectively influence the functionality and efficacy of internal audit operations, thereby providing critical insights to enhance governance practices (Shah et al., 2023; Turetken et al., 2020).

Recent high-profile fraud cases in Indonesian banking institutions, such as the IDR 548 billion fictitious credit scandal at Bank BJB Syariah between 2014 and 2017, have highlighted critical weaknesses in the internal audit function (UIN Sunan Gunung Djati, 2021). Additional credit irregularities in branches across Sukajadi, Surabaya, and Sukabumi further illustrate the inability of internal auditors to detect early signs of misconduct (Bisnis Indonesia, 2019). Academic evaluations reveal that these failures stem from issues such as lack of auditor independence, limited professional competence, and structural oversight gaps—including prolonged leadership vacancies (Universitas Padjadjaran, 2022). These events underscore the pressing need to investigate how internal factors such as auditor

competency, independence, management support, and organizational culture affect internal audit effectiveness within Indonesia's banking sector.

Furthermore, other studies have discussed more factors that affect the effectiveness of internal audits, namely internal competency audits, internal audit independence, management support, and organizational culture (Alqudah et al., 2023; Alzeban & Gwilliam, 2014; Grima et al., 2023; Khanam, 2024; Onay, 2021; Shah et al., 2023).

Studies on internal audit effectiveness have extensively focused on traditional variables such as internal auditor competence, independence, and management support. Nevertheless, these studies have produced inconsistent results across various contexts and sectors (Alzeban & Gwilliam, 2014; Khanam, 2024; Onay, 2021). One plausible explanation for such inconsistencies is the omission of critical contextual factors such as organizational culture (Shah et al., 2023). Given its pervasive influence on organizational processes and employee behaviors, organizational culture represents a crucial yet under-explored variable in internal audit research (Grima et al., 2023).

Organizational culture encompasses the values, beliefs, and norms that guide employee behavior and decision-making processes within an organization (Coghlan, 2024). In the context of internal auditing, culture directly influences how internal auditors perceive their roles, uphold ethical standards, and interact with stakeholders. For instance, in hierarchical or authority-driven cultures, auditors might face constraints in exercising independence or effectively communicating

critical findings, whereas in more open and transparent cultures, auditors may experience enhanced autonomy and efficacy (Alzeban & Gwilliam, 2014; Lenz & Hahn, 2015).

Prior research has identified culture implicitly as a factor affecting internal audit effectiveness. Study of Saudi public-sector organizations, implicitly acknowledge the role organizational culture plays in shaping internal audit effectiveness through management practices and decision-making processes. Nonetheless, these studies often overlook explicit measurements of cultural dimensions, thereby limiting our comprehensive understanding of its direct impact (Alzeban & Gwilliam, 2014).

Moreover, research in Pakistan and found that ethical culture, one dimension of organizational culture, did not significantly moderate the relationship between internal control systems and internal audit effectiveness. This finding raises important questions regarding whether other cultural dimensions, such as power distance, uncertainty avoidance, or organizational commitment, might offer more explanatory power in influencing internal audit effectiveness. (Shah et al., 2023).

Given the variations in cultural practices across geographical contexts, exploring organizational culture explicitly within the Indonesian banking sector provides a critical extension of existing research. Indonesia's banking industry is characterized by strong regulatory oversight and hierarchical corporate governance structures, thereby presenting a unique context to explore how culture shapes the efficacy of internal audits (Indonesia Financial Services Authority, 2022).

Furthermore, explicit integration of organizational culture as a variable may resolve prior inconsistencies in literature by contextualizing how internal audit processes operate under different cultural frameworks.

Therefore, it is imperative to explicitly include organizational culture as a new variable in examining factors influencing internal audit effectiveness. Such an approach promises deeper insights, greater explanatory power, and practical implications, enhancing organizational policy-making and internal auditing practices in diverse cultural settings.

Previous research extensively addresses the factors influencing internal audit effectiveness, notably auditor competence, auditor independence, and management support. Despite considerable attention to these variables, existing literature yields inconsistent and sometimes contradictory findings, suggesting significant research gaps. For instance, auditor competence has been affirmed by multiple studies as essential for enhancing internal audit effectiveness (Grima et al., 2023; Onay, 2021; Zakwan et al., 2024). Nevertheless, relationship between auditor competence and audit effectiveness in the banking context of Bangladesh, indicating that contextual differences might moderate this relationship was not found (Khanam, 2024). Similarly, auditor independence is frequently highlighted as a critical factor positively influencing internal audit effectiveness (Khanam, 2024; Onay, 2021; Shah et al., 2023). However, research has produced partially significant or mixed outcomes, suggesting potential moderating or mediating factors that could affect these results (Alqudah et al., 2023; Grima et al., 2023). Management support, another pivotal element, also exhibits varying degrees of significance. While some

research consistently supports its positive impact (Alqudah et al., 2023; Alzeban & Gwilliam, 2014; Grima et al., 2023), other studies report non-significant outcomes (Khanam, 2024; Shah et al., 2023). These inconsistencies indicate a need to further explore conditions under which management support significantly influences internal audit effectiveness.

Given these discrepancies, incorporating additional contextual variables such as organizational culture becomes crucial. Organizational culture is increasingly recognized as influencing audit effectiveness by shaping auditors' behaviors, interactions, and procedures (Algabry et al., 2020; Roussy et al., 2020). (Algabry et al., 2020) specifically highlight cultural differences and organizational values as significantly affecting audit processes and effectiveness outcomes. Hence, integrating organizational culture explicitly into future research frameworks could potentially resolve these inconsistencies and enrich the understanding of internal audit effectiveness within specific sectors, including banking.

Attribution theory provides a compelling alternative framework to address existing research gaps concerning internal audit effectiveness, particularly regarding the role of organizational culture in the Indonesian banking sector. Attribution theory posits that individuals seek to understand and assign causes to behaviors and outcomes based on perceived internal or external factors, which then influence subsequent judgments and actions (Heider, 1958; Weiner, 1986). In the context of internal auditing, stakeholders—such as management or audit committees—form perceptions of audit effectiveness based on their attributions regarding internal auditors' competence, independence, and organizational support.

When internal audit success is attributed to internal, stable, and controllable causes—such as high auditor capability or strong organizational ethics—it enhances perceived audit credibility and legitimacy (Martinko et al., 2007). Conversely, attributions to unstable or external causes, such as luck or organizational politics, may diminish the perceived value of audit functions. By applying attribution theory, this study aims to examine how organizational culture influences these attributional processes within banking institutions in Indonesia, ultimately shaping stakeholder perceptions of internal audit effectiveness. This theoretical lens provides a novel and psychologically grounded explanation to reconcile inconsistent empirical findings in prior literature, especially by clarifying how internal contextual cues—like ethical culture or leadership behavior— influence the attribution of audit outcomes (Martinko et al., 2007; Roussy et al., 2020; Shah et al., 2023).

1.2 Problem Formulation

Despite extensive research into internal audit effectiveness, empirical findings regarding key determinants such as auditor competence, auditor independence, and management support remain inconsistent across different contexts (Alzeban & Gwilliam, 2014; Khanam, 2024; Onay, 2021). A critical oversight in these studies is the limited consideration given to the contextual influence of organizational culture, particularly within sectors characterized by strong hierarchical and regulatory environments, such as the banking industry in Indonesia (Algabry et al., 2020; Grima et al., 2023; Roussy et al., 2020). Therefore, this research addresses the existing gap by explicitly exploring how organizational

culture, along with auditor competence, independence, and management support, collectively influences internal audit effectiveness in Indonesia's banking sector through the lens of Attribution theory.

This study aims to answer the following research questions:

1. Does internal auditor competence influence internal audit effectiveness in the Indonesian banking sector?
2. Does internal auditor independence influence internal audit effectiveness in the Indonesian banking sector?
3. Does management support influence internal audit effectiveness in the Indonesian banking sector?
4. Does organizational culture influence internal audit effectiveness in the Indonesian banking sector?

1.3 Research Objectives

This This research aims to empirically investigate factors influencing internal audit effectiveness within the Indonesian banking sector. Specifically, the objectives of this study are:

1. To examine the influence of internal auditor competence on the effectiveness of the internal audit function.
2. To determine the impact of internal auditor independence on the effectiveness of the internal audit function.
3. To investigate the significance of management support as a critical factor in enhancing internal audit effectiveness.

4. To assess the role of organizational culture in fostering an environment conducive to effective internal auditing.

1.4 Research Contribution

This study is expected to contribute both theoretically and practically to various stakeholders, including academics, policymakers, and practitioners. The specific contributions are as follows:

1. **Academic Contribution:** This study contributes a nuanced understanding of the interactive effects among internal auditor competence, independence, management support, and organizational culture, revealing how these factors synergistically influence audit outcomes. This model refines existing theories by demonstrating the contextual dependencies within developing economies, thereby enriching the literature with a comprehensive framework that accounts for the unique challenges and dynamics inherent in these settings.
2. **Practical Implications:** Beyond theoretical contributions, this research offers actionable insights for practitioners and policymakers. For managers, the empirical findings underscore the critical need for strategic investments in auditor training and development, the establishment of robust independence mechanisms, and the cultivation of a supportive organizational culture that prioritizes audit functions. Policymakers can leverage the study's validated model to design and implement targeted regulatory reforms aimed at enhancing public sector transparency and accountability. By providing evidence-based recommendations, this research facilitates the development

of effective internal audit practices, ultimately mitigating fraud risks and strengthening governance frameworks in developing economies.

1.5 Structure of Writing

In order to obtain research that is structured, concise, and easy to understand, thesis writing needs to be written systematically. The writing sequence starts from Chapter I to the last chapter, which is Chapter V. The following is an overview of the five chapters:

CHAPTER I - INTRODUCTION

The researcher explained the background of the problem why the researcher was interested in conducting research on this topic. After that, the researcher described the formulation of the problem, an explanation of the purpose and benefits of the research and the systematics of writing.

CHAPTER II – LITERATURE REVIEW

The author explains several theoretical foundations related to this research in order to get reasons for the problems listed, then combined with data from previous research, and research assumptions (hypotheses).

CHAPTER III – WRITING METHODS

This section describes several variables in the study that explain the types and sources of data, population and samples, variables in the research, analysis

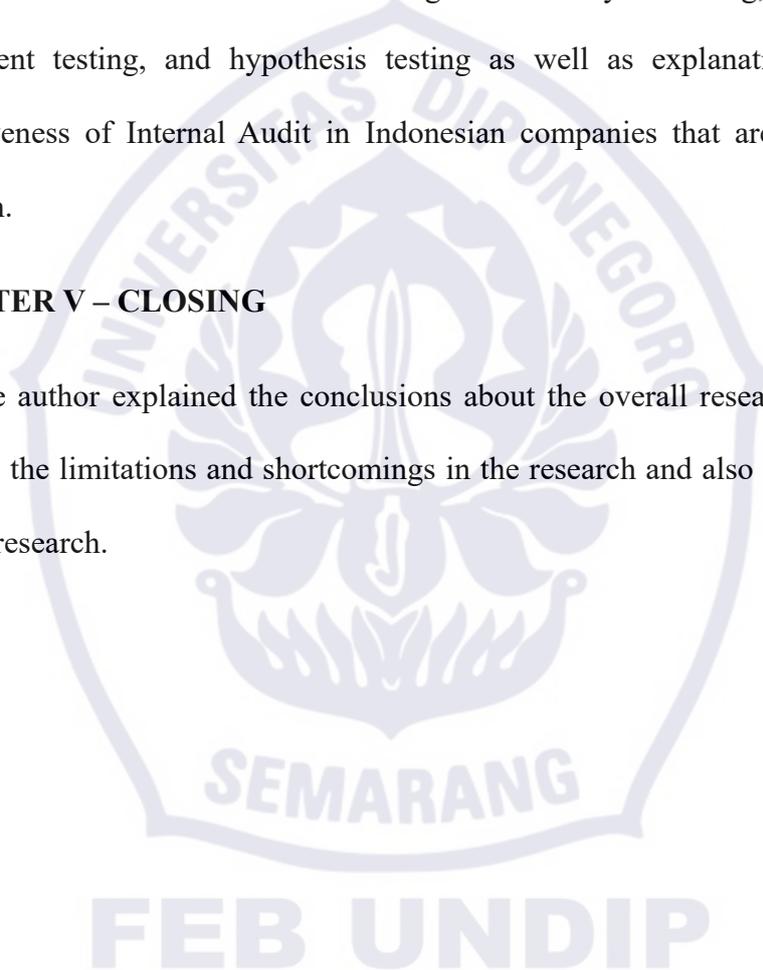
methods, and hypothesis testing used in obtaining the analysis of the results of the research.

CHAPTER IV – RESULTS AND ANALYSIS

Discussion of the results of regression analysis testing, determination coefficient testing, and hypothesis testing as well as explanations about the Effectiveness of Internal Audit in Indonesian companies that are the object of research.

CHAPTER V – CLOSING

The author explained the conclusions about the overall research findings in general, the limitations and shortcomings in the research and also suggestions for further research.



CHAPTER 2

LITERATURE REVIEW

This chapter will describe the theory and arguments that are used as guidelines to help identify problems. The effectiveness of internal audit (IAE) plays a pivotal role in strengthening corporate governance, improving organizational performance, and mitigating financial irregularities. According to the Institute of Internal Auditors (IIA), internal auditing is defined as "an independent, objective assurance and consulting activity designed to add value and improve an organization's operations" (IIA, 2017). Internal audits help organizations accomplish their objectives through a systematic, disciplined approach to evaluating and improving the effectiveness of risk management, control, and governance processes.

This study adopts a Attribution Theory as framework for explaining the relationship among variables.

2.1 Attribution Theory

Attribution Theory is a social-psychological framework that examines how individuals infer the causes of observed behaviors and events (Heider, 1958). The central premise is that people are motivated to understand causality and will attribute outcomes to either internal factors (e.g., ability, effort, disposition) or external factors (e.g., task difficulty, luck, environmental constraints) (Weiner, 1986). These attributions are critical as they directly influence subsequent attitudes,

expectations, and behaviors.

Weiner (1986) further refined the theory by proposing three key dimensions for causal attributions:

1. Locus of Causality: Whether the cause is internal or external to the person.
2. Stability: Whether the cause is stable or unstable over time.
3. Controllability: Whether the person can control the cause.

In the context of internal auditing, the effectiveness of the function is significantly enhanced when its positive contributions (e.g., identifying critical control weaknesses, providing value-adding recommendations) are attributed by stakeholders to internal, stable, and controllable factors. For example, if management attributes a successful audit to the auditor's high competence (internal, stable) and diligent effort (internal, controllable), the perceived effectiveness of the audit function will increase. Conversely, if success is attributed to luck (external, unstable) or if failures are blamed on the auditor's lack of effort (internal, controllable), the function's credibility and effectiveness will be undermined (Martinko, Harvey, & Douglas, 2007).

This study posits that the independent variables—internal auditor competence, independence, management support, and organizational culture—are crucial because they directly shape the attributions that stakeholders make about the internal audit function. They provide the necessary signals for stakeholders to infer that the audit function is inherently capable and trustworthy, thereby fostering the perception of effectiveness.

2.2 Effectiveness Internal Audit

Internal audit effectiveness is broadly understood as the degree to which internal audit activities successfully fulfill their intended purposes, primarily by enhancing organizational governance, risk management, and internal control processes (Lenz & Hahn, 2015). This effectiveness encompasses several critical dimensions, including the accuracy and thoroughness of audit findings, the timeliness and practicality of recommendations, and the extent to which these recommendations are implemented to improve organizational processes and controls (Alzeban & Gwilliam, 2014; Grima et al., 2023).

From a conceptual standpoint, internal audit effectiveness also pertains to the capability of internal audit functions to proactively identify and mitigate risks, prevent and detect fraud, and reinforce the accountability and transparency mechanisms within organizations. Effective internal audits should provide meaningful insights that assist management in informed decision-making and strategic planning, thereby fostering a robust internal control environment (Zakwan et al., 2024).

Furthermore, the concept of effectiveness in internal auditing extends beyond mere compliance and procedural adherence. It encapsulates the perceived value and impact of audit functions within the broader organizational framework, emphasizing their role in influencing positive behavioral and cultural changes. Auditors' perceptions are critical to understanding effectiveness, as they offer insights based on their direct experiences and interactions within the organizational context (Khanam, 2024; Roussy et al., 2020).

This comprehensive conceptualization emphasizes that internal audit effectiveness is inherently multidimensional and context-specific. It integrates technical expertise, professional judgment, organizational support, and cultural alignment. These elements collectively determine the ability of internal audits to make substantial contributions to organizational governance and risk management.

This study argues for adopting this particular conceptualization because it directly captures the practical contributions of internal auditing functions as perceived by auditors themselves. Prior studies underline that auditors' perceptions provide reliable insights into actual audit effectiveness due to their proximity and direct involvement with audit processes (Grima et al., 2023; Roussy et al., 2020). Moreover, this conceptualization supports consistency with the research instrument designed for this study, utilizing perception-based survey items addressing the identification of control weaknesses, implementation of audit recommendations, contributions to risk management, and fraud prevention capabilities.

By explicitly adopting this definition and conceptual approach, the current study ensures alignment between theoretical conceptualization, measurement of the dependent variable, and empirical evaluation, thereby enhancing the robustness and reliability of the research findings.

2.3 Internal Auditor Competency

Internal auditor competency is defined as the collective skills, knowledge, educational qualifications, professional certifications, and relevant experience required by internal auditors to perform audit tasks effectively and efficiently

(Grima et al., 2023; Onay, 2021). Competency encompasses technical expertise, including proficiency in auditing standards, risk management practices, control systems evaluation, and financial analysis, as well as the auditors' capacity to apply this expertise practically within organizational contexts (Zakwan et al., 2024).

Competency is considered critical for internal auditor effectiveness because it directly impacts auditors' ability to identify significant issues, formulate accurate and practical recommendations, and contribute meaningfully to organizational governance and risk management processes (Alzeban & Gwilliam, 2014; Khanam, 2024). Auditors possessing relevant qualifications and professional certifications, such as the Certified Internal Auditor (CIA), demonstrate a commitment to adhering to international auditing standards, enhancing audit quality, and thereby increasing stakeholders' trust and organizational accountability.

This study specifically conceptualizes internal auditor competency as multidimensional, including formal education, professional training, practical auditing experience, and recognized certifications. The rationale for adopting this comprehensive conceptualization aligns with prior research indicating that effectiveness in internal auditing depends significantly on the auditor's professional preparedness and ongoing skill development (Grima et al., 2023; Roussy et al., 2020).

2.4 Independence of Internal Auditor

Internal auditor independence refers to the degree of freedom internal auditors possess to perform their duties objectively and impartially, free from

management or external influences that could impair their judgments and conclusions (Alzeban & Gwilliam, 2014; Khanam, 2024). Independence involves both structural and functional dimensions, including clear reporting lines to senior governance bodies such as audit committees or boards of directors, unrestricted access to organizational information and personnel, and autonomy in selecting areas of audit focus and reporting audit findings (Grima et al., 2023).

Conceptually, independence is considered vital as it ensures internal auditors can provide impartial assessments of organizational practices and controls, thereby enhancing the credibility and reliability of audit outcomes. Independence is fundamentally linked to auditors' capacity to identify significant organizational risks and effectively communicate unbiased findings and recommendations to management and governance bodies without fear of repercussions or bias (Onay, 2021; Zakwan et al., 2024). Furthermore, independence is crucial in reinforcing stakeholder confidence by demonstrating that internal audits are performed objectively and transparently.

The concept of internal auditor independence encompasses both perceived and actual independence. Perceived independence refers to stakeholders' confidence in auditors' objectivity, while actual independence involves the structural protections and mechanisms within the organization that safeguard auditors against potential conflicts of interest and undue pressures (Roussy et al., 2020). It implies that auditors' roles must be clearly separated from operational management roles to avoid conflicts, and auditors must be empowered to perform their tasks effectively and report findings candidly.

This research emphasizes that effective internal auditor independence requires both formal institutional safeguards and the supportive organizational culture that encourages openness, transparency, and accountability. Thus, measuring internal auditor independence in this study includes auditors' freedom from interference, their access to critical information, the objectivity of reporting mechanisms, and their ability to report directly to oversight bodies. These dimensions collectively contribute to a robust conceptual understanding and empirical evaluation of internal auditor independence.

By adopting this comprehensive conceptualization, the study ensures consistency between theoretical definitions, measurement instruments, and the empirical analysis, enhancing the validity and applicability of the research outcomes.

2.5 Management Support

Management support refers to the extent to which senior management provides necessary resources, guidance, and commitment to enable internal auditors to perform their duties effectively and efficiently (Alzeban & Gwilliam, 2014; Grima et al., 2023). Management support is demonstrated through adequate provision of financial, human, and informational resources, timely responsiveness to internal audit recommendations, active collaboration with auditors, and explicit recognition of the internal audit function's importance to organizational governance (Alqudah et al., 2023; Onay, 2021).

Conceptually, management support is crucial to internal audit effectiveness because it significantly influences auditors' operational capacities and overall organizational status. Effective internal auditing requires management's proactive engagement, which facilitates unrestricted access to vital information, ensures sufficient audit staffing and budgets, and promotes a culture that values transparency and accountability (Khanam, 2024). Without substantial management support, internal auditors may face significant obstacles, including resource limitations, reduced organizational influence, and impaired capacity to implement necessary improvements.

This study explicitly conceptualizes management support through several measurable dimensions: resource adequacy, management responsiveness, communication openness, recognition, and active involvement with internal audit processes. This conceptualization aligns with existing literature emphasizing the critical role of management support in enhancing internal audit effectiveness by fostering a supportive environment that empowers auditors and underscores their strategic value within the organization (Roussy et al., 2020; Zakwan et al., 2024).

2.6 Organization Culture

Organizational culture encompasses the shared values, norms, beliefs, attitudes, assumptions, and behaviors that characterize and differentiate one organization from another, guiding how organizational members perceive, interpret, and respond to their internal and external environments (Cameron & Quinn, 1999; Coghlan, 2024). It operates as a pervasive force that shapes collective identity,

influences employee interactions, decision-making processes, organizational priorities, and behaviors at all hierarchical levels (Field, 2011).

The concept of organizational culture is complex and multi-dimensional, comprising explicit and implicit components. Explicit elements include formal policies, procedures, and communication channels, while implicit elements involve unwritten norms, informal rules, values, and deep-rooted beliefs that govern organizational life (Grima et al., 2023). Additionally, organizational culture manifests through symbols, stories, rituals, and practices that reinforce organizational identity and sustain shared understandings among members (Cameron & Quinn, 1999).

Within the context of internal auditing, organizational culture significantly influences auditors' effectiveness by shaping their working environment, ethical orientations, reporting behaviors, and the organization's openness to internal control improvements. Cultures that prioritize ethical conduct, transparency, accountability, and proactive risk management foster an environment conducive to robust audit processes, thereby supporting auditors in performing their roles effectively and objectively (Algabry et al., 2020; Alzeban & Gwilliam, 2014). Conversely, organizations characterized by hierarchical rigidity, limited transparency, resistance to change, or low ethical standards can hinder internal audit effectiveness, impacting auditors' autonomy and their ability to communicate findings without fear or restraint (Roussy et al., 2020).

This expanded conceptualization underscores the significance of aligning organizational culture with internal audit functions, recognizing that effective audit practices require cultural support to ensure auditors can operate with integrity and independence. Thus, this study adopts a comprehensive approach to measuring organizational culture, focusing on transparency, ethical orientation, communication openness, accountability, and compliance orientation as critical cultural dimensions. By employing this robust conceptual framework, the study ensures coherence between theoretical constructs, empirical measurement, and practical implications, addressing previously identified research gaps in organizational culture's role in audit effectiveness.

2.7 Previous Research

The effectiveness of internal audit (IAE) has received considerable scholarly attention, particularly in developing economies where governance structures and accountability mechanisms continue to evolve. This study adopts Attribution Theory as the central theoretical lens to understand how stakeholders—such as senior management, audit committees, and regulatory bodies—form causal judgments about the internal audit function. Attribution Theory posits that individuals tend to explain outcomes by attributing them to internal causes (e.g., competence, effort) or external causes (e.g., environmental constraints, luck), which in turn influence their subsequent attitudes, expectations, and behaviors (Heider, 1958; Weiner, 1986).

In the context of internal auditing, stakeholders evaluate the effectiveness of audit functions by attributing audit outcomes to observable factors such as auditor

competence, independence, organizational support, and cultural alignment. When these factors are perceived as internal, stable, and controllable, they enhance the credibility of the internal audit function and strengthen stakeholder confidence (Martinko, Harvey, & Douglas, 2007). Conversely, if audit effectiveness is attributed to external or unstable factors—such as temporary management cooperation or favorable external circumstances—stakeholders may question the reliability of the internal audit function.

Internal auditor competency is among the most consistently identified antecedents of internal audit effectiveness. It encompasses knowledge, skills, training, and professional experience that enable auditors to deliver insightful and reliable evaluations. For example, stakeholders are more likely to attribute successful audits to auditor competence when auditors exhibit technical expertise and professional certifications (Grima et al., 2023; Onay, 2021). In contrast, auditor competence did not significantly impact audit effectiveness in Vietnamese firms, suggesting that stakeholders may have attributed success or failure to external factors such as organizational hierarchy or audit mandates, rather than individual auditor attributes (Ta and Doan, 2022).

Auditor independence also plays a central role in shaping attribution processes. When internal auditors are perceived as operating without undue influence from management, stakeholders are more likely to attribute effective outcomes to intrinsic auditor integrity and objectivity—thereby enhancing audit legitimacy (Dellai & Omri, 2016; Grima et al., 2023). However, in contexts where reporting lines are unclear or political pressures are present, such as in some public

sector institutions, audit outcomes may be attributed to external constraints, thereby diminishing perceived effectiveness (Abdullah & Mustafa, 2020).

Management support is another key factor that shapes attribution. Supportive leadership that allocates adequate resources and implements audit recommendations signals to stakeholders that internal audit outcomes are the result of deliberate effort and organizational commitment—factors that are internal and controllable. Empirical studies from Tunisia, Turkey, and Vietnam have consistently shown that when management is engaged, stakeholders are more likely to attribute audit success to the internal audit function's strategic relevance (Dellai & Omri, 2016; Onay, 2021; Ta & Doan, 2022).

Organizational culture further influences the attribution of audit effectiveness by creating an environment where ethical behavior, accountability, and transparency are institutionalized. A culture that supports openness and ethical standards reinforces internal attributions, wherein stakeholders view audit success as stemming from internalized values and auditor diligence (Algabry et al., 2020; Karikari Appiah et al., 2023). In contrast, toxic or rigid cultures may lead stakeholders to attribute audit failure to external resistance or systemic barriers rather than audit team capability.

In summary, while prior research has emphasized the role of auditor competency, independence, management support, and organizational culture in shaping internal audit effectiveness, the current study advances this understanding by employing Attribution Theory to explain how stakeholders assign causality to

audit outcomes. This perspective highlights the importance of perception in determining how effectiveness is judged and offers a psychologically grounded framework to address inconsistencies found in previous empirical findings, particularly within the Indonesian banking sector.

Table 2. 1 Summary of Previous Research

NO	RESEARCHER	RESEARCH PURPOSES	RESEARCH METHODS	RESEARCH FINDINGS
1	Thu Trang Ta & Thanh Nga Doan (2022)	To investigate the factors affecting internal audit effectiveness in nonfinancial listed companies in Vietnam.	Dependent: Internal Audit Effectiveness; Independent: Auditor Independence, Auditor Competence, Management Support, Audit Quality	Independence and management support significantly influence effectiveness; competence and quality do not.
2	Ahmet Onay (2021)	To examine factors influencing internal audit effectiveness in Turkish private sector organizations.	Dependent: Internal Audit Effectiveness; Independent: Management Support, Competence, Independence, Risk Management Participation, External Auditor Cooperation	All factors positively influence effectiveness, with management support being most significant.
3	Hella Dellai & Mohamed Ali Brahim Omri (2016)	To explore the determinants of internal audit effectiveness in Tunisia.	Dependent: Internal Audit Effectiveness; Independent: Auditor Independence, Objectivity, Management Support, IA as	All variables except 'IA as a training ground' positively affect IA effectiveness.

			Training Ground, Organization Sector	
4	Ahmed Yahya Abdullah & Aree Saeed Mustafa (2020)	To identify factors affecting internal audit effectiveness at Duhok University, Kurdistan-Iraq.	Dependent: Internal Audit Effectiveness; Independent: Auditor Independence, Management Support, Competence	Only management support had a significant positive effect; independence and competence were not significant.
5	Leif Christensen (2022)	To explore how internal audit functions impact internal controls in a Danish financial institution.	Dependent: Internal Control Improvement; Independent: Internal Audit Function (process quality, recommendation implementation)	Internal audit positively influences internal controls through effective management letter processes.
6	Ayman Abdelrahim & Husam-Aldin Al- Malkawi (2022)	To propose a conceptual model of the factors influencing internal audit effectiveness.	Dependent: Internal Audit Effectiveness; Independent: Audit Organization Characteristics, Relationships, Processes, Resources, Coordination	All proposed factors contribute to a comprehensive model of IA effectiveness; conceptual foundation established.
7	Zuhdi Zakwan et al. (2024)	To examine the effect of competence, independence, and objectivity on internal audit effectiveness at Legal Entity State Universities.	Dependent: Internal Audit Effectiveness; Independent: Competence, independence, objectivity; Moderating: Management support	Competence, independence, and objectivity positively affect effectiveness; management support does not moderate the relationship.
8	Ahmet Onay (2021)	To examine the factors that have an impact on	Dependent: Internal Audit Effectiveness;	All factors positively influence internal audit effectiveness,

		internal audit effectiveness in Turkish private sector organizations.	Independent: Management Support, Competence, Independence, Risk Management Participation, Cooperation with External Auditor	with management support having the highest impact.
9	Alzeban & Gwilliam (2014)	To investigate the factors influencing internal audit effectiveness in the Saudi public sector.	Dependent: Internal Audit Effectiveness; Independent: Competence, Independence, Size of IAD, Management Support, Relationship with External Auditors	Management support is the most significant factor; all others also show positive influence.
10	Hamza Alqudah et al. (2023)	To analyze how empowerments influence internal audit effectiveness in the Jordanian public sector and the moderating role of extrinsic rewards.	Dependent: Internal Audit Effectiveness; Independent: Management Support, Independence, External Auditor Cooperation, IAD Size, Extrinsic Rewards	Management support, independence, and external auditor cooperation positively affect IAE; extrinsic rewards partially moderate the effect.
11	Zobaida Khanam (2024)	To assess the impact of internal audit factors on effectiveness in Bangladesh's banking industry.	Dependent: Internal Audit Effectiveness; Independent: Independence, Competence, Quality of Audit, Management Support	Independence and audit quality significantly affect IAE; competence and management support do not.
12	Steven Grima et al. (2023)	To design a model of characteristics that influence internal audit	Dependent: Internal Audit Effectiveness; Independent:	Most factors positively affect IAE; outsourcing negatively affects it; some

		effectiveness using factor analysis.	Competency, Independence, Management Support, Risk Management, External Audit and Audit Committee Cooperation, Control Environment	variables show partial or no significance.
13	Ebrahim Mohammed & Dr. Gurudutta P. Japee (2023)	To systematically review the literature on factors influencing internal audit effectiveness from 2014 to 2023.	Dependent: Internal Audit Effectiveness; Independent: Auditor Competence, Independence, Management Support, Organizational Characteristics, Culture, Coordination	Identified various internal and external factors including competence, support, independence, and culture that influence internal audit effectiveness.
14	Ansar Abbas Shah et al. (2023)	To evaluate the effect of independence, management support, and external auditor cooperation on internal audit effectiveness with ethical culture as moderator and internal controls as mediator.	Dependent: Internal Audit Effectiveness; Independent: Independence, Management Support, External Auditor Cooperation; Mediator: Internal Controls; Moderator: Ethical Culture	Independence and external auditor cooperation significantly affect internal audit effectiveness; management support showed no direct effect.
15	Lenz, Sarens, & Hoos (2017)	To explore how relationships between Chief Audit Executives and Senior Management influence internal audit effectiveness.	Dependent: Internal Audit Effectiveness; Independent: Interpersonal Relationships, Organizational Factors, Personal Factors	Interaction quality between CAEs and Senior Management is key to internal audit effectiveness; organizational alignment and personality traits matter.

16	Oktay Turetken et al. (2019)	To identify operational indicators and influencing factors of internal audit effectiveness through systematic review.	Dependent: Internal Audit Effectiveness; Independent: Risk Management Quality, Internal Control, Audit Process and Scope, Management Support	Compiled framework showing effectiveness is influenced by clear objectives, process rigor, and internal controls.
17	Yu-Tzu Chang et al. (2019)	To examine how internal audit attributes affect internal control effectiveness over operations and compliance.	Dependent: Internal Control Effectiveness; Independent: Internal Auditor Competence, Audit Team Size	Audit team size improves both operation and compliance control; competence only improves compliance.
18	Ahmad Feizizadeh (2012)	To propose performance evaluation through balanced scorecard for improving internal audit effectiveness.	Dependent: Internal Audit Effectiveness; Independent: Stakeholder Alignment, Audit Capability, Standards Compliance, Communication	Recommended a performance framework focusing on stakeholder alignment and audit proficiency to strengthen effectiveness.
19	Ebrahim Mohammed & Dr. Gurudutta P. Japee (2023)	To systematically review the literature on factors influencing internal audit effectiveness from 2014 to 2023.	Dependent: Internal Audit Effectiveness; Independent: Auditor Competence, Independence, Management Support, Organizational Characteristics, Culture, Coordination	Identified various internal and external factors including competence, support, independence, and culture that influence internal audit effectiveness.
20	Ahmad Feizizadeh (2012)	To propose a framework for strengthening internal audit	Dependent: Internal Audit Effectiveness; Independent:	Balanced scorecard approach enhances internal audit effectiveness through

		effectiveness using performance measurement and stakeholder alignment.	Stakeholder Needs Alignment, Audit Capability, Standard Compliance, Performance Measurement	better alignment, compliance, and capability.
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A critical review of the extant literature reveals a consistent identification of internal auditor competence, independence, management support, and organizational culture as pivotal determinants of internal audit effectiveness (IAE). Empirical studies conducted across various national and organizational contexts—such as Turkey, Tunisia, and Vietnam—demonstrate that these factors are generally perceived by stakeholders as contributing positively to internal audit outcomes. For example, Onay (2021) found that in Turkish private-sector organizations, all four variables had a statistically significant and positive impact on IAE, with management support exerting the most substantial influence. These findings suggest that when stakeholders attribute audit success to internal, stable, and controllable factors—such as skilled auditors or robust managerial backing—they are more likely to perceive the audit function as credible and effective (Weiner, 1986; Martinko, Harvey, & Douglas, 2007).

However, contrasting results in other settings underscore the nuanced nature of these attributions. Ta and Doan (2022), in a study of Vietnamese non-financial firms, reported that auditor competence did not significantly influence perceived audit effectiveness, implying that stakeholders may have attributed audit outcomes to external constraints or unstable conditions rather than internal capabilities.

Similarly, Abdullah and Mustafa (2020) found that, within public universities in Kurdistan-Iraq, only management support emerged as a significant factor, while competence and independence had no observable impact. These discrepancies highlight the importance of contextual variables—such as cultural expectations, leadership attitudes, and perceptions of organizational control—that shape how audit outcomes are interpreted and attributed by relevant stakeholders.

Despite the breadth of existing research, a notable gap remains concerning how these variables influence IAE within the Indonesian banking sector. The reviewed literature lacks empirical studies specifically situated within this context, leaving unanswered questions regarding how attributional processes operate in a highly regulated and hierarchically structured environment like Indonesia's financial industry. Given the country's unique institutional landscape—characterized by strong top-down governance, evolving corporate transparency norms, and increasing public scrutiny—it is crucial to investigate whether stakeholders attribute internal audit effectiveness to internal auditor traits (e.g., competence and independence) or to broader organizational and cultural forces (e.g., management support and ethical climate). Attribution Theory provides a psychologically grounded framework to explore these dynamics by focusing on how perceptions of causality influence judgments of audit quality (Heider, 1958; Weiner, 1986).

Therefore, this study seeks to fill this critical research gap by examining the extent to which internal auditor competence, independence, management support, and organizational culture contribute to IAE in Indonesian banks—specifically by

analyzing the attributional mechanisms through which stakeholders evaluate audit performance. This investigation will not only contribute context-specific insights to the broader literature on internal audit but also offer practical implications for audit practice, organizational leadership, and regulatory oversight in Indonesia's banking industry.

2.8 Research Framework

This research framework helps to demonstrate the logical link between variables. Independent and dependent variables are the two types of variables used in this study. The independent variables in this research are Internal Auditor Competence, Independence of Internal Audit, Management Support, and Organizational Culture. Internal Audit Effectiveness serves as the dependent variable.

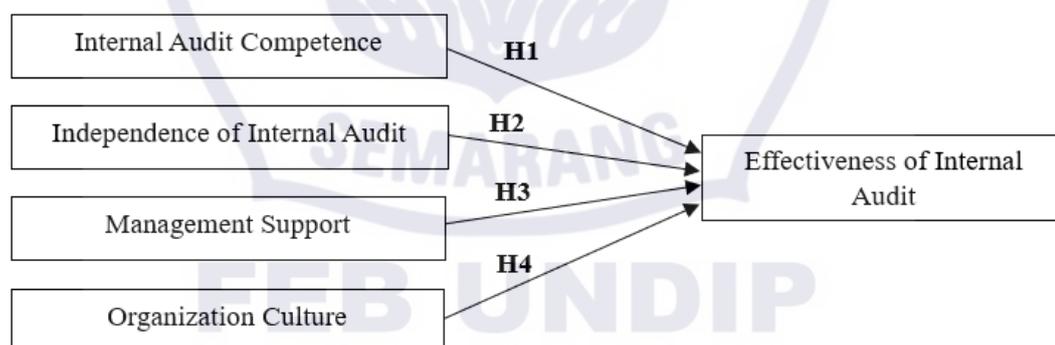


Figure 2. 1 Research Framework

The research framework illustrates how key organizational factors influence the effectiveness of internal audit (IAE), and this relationship can be conceptually grounded through the lens of Attribution Theory. Attribution Theory, posits that individuals interpret and respond to events by attributing causes to either internal

factors (e.g., ability, effort) or external factors (e.g., luck, task difficulty) (Heider; 1958). These causal attributions are fundamental in shaping stakeholders' perceptions, attitudes, and behaviors toward organizational functions, including internal audit (Martinko, Harvey & Douglas, 2007).

Firstly, the relationship between internal auditor competence and internal audit effectiveness is heavily shaped by internal, stable, and controllable attributions. When stakeholders perceive audit outcomes as resulting from high auditor competence—such as professional knowledge, technical expertise, and relevant certifications—they are more likely to credit the internal audit function for its success (Grima et al., 2023; Onay, 2021). This attribution enhances the perceived legitimacy and trustworthiness of the audit team. Conversely, if auditors lack visible competence, stakeholders may attribute any positive outcomes to external or unstable factors, reducing the perceived value of the audit function.

Secondly, internal auditor independence influences effectiveness by fostering perceptions of objectivity and impartiality. Attribution Theory suggests that when audit reports are free from managerial interference, stakeholders are inclined to attribute positive audit outcomes to auditors' intrinsic values, integrity, and ethical judgment (Weiner, 1986). These are considered internal and stable traits, which strengthen confidence in audit findings. However, in environments where auditors are perceived as influenced by management or lack autonomy, attribution shifts toward external pressures, thereby undermining perceived effectiveness (Abdullah & Mustafa, 2020; Shah et al., 2023).

Thirdly, management support is crucial in shaping the attributions stakeholders make about the internal audit function. Strong support—manifested through resource allocation, responsiveness to recommendations, and integration of audit insights—signals to stakeholders that the audit function is valued and empowered, leading them to attribute audit success to organizational commitment and strategic alignment (Alzeban & Gwilliam, 2014; Dellai & Omri, 2016). On the contrary, in the absence of visible management backing, audit outcomes may be attributed to circumstantial or unstable factors, diminishing the audit's perceived impact and authority.

Lastly, organizational culture shapes the attribution process by influencing how audit activities and findings are interpreted. In organizations with cultures that promote transparency, accountability, and ethical behavior, stakeholders are more likely to perceive audit effectiveness as resulting from internalized norms and auditor diligence—again, internal and stable attributions (Roussy et al., 2020; Karikari Appiah et al., 2023). In contrast, in rigid or compliance-averse cultures, stakeholders may perceive audit limitations or resistance to audit recommendations as inherent flaws in the system, leading to external attributions and devaluing audit credibility.

Through this attributional lens, the research framework recognizes that internal audit effectiveness is not merely an objective outcome, but a perceptual construct shaped by how stakeholders assign causality to the actions and conditions surrounding the audit process. This theoretical grounding offers a psychologically informed perspective to explain inconsistencies in the literature and contextual

variations in internal audit performance, particularly within Indonesia's banking sector.

2.9 Hypothesis Development

Internal audit effectiveness (IAE) is essential to ensuring strong organizational governance, sound risk management, and reliable internal control systems—especially within the banking sector. Drawing upon Attribution Theory, this study explores how specific organizational and individual-level factors—namely internal auditor competency, internal auditor independence, management support, and organizational culture—influence perceptions of internal audit effectiveness.

Attribution Theory, posits that individuals seek to understand the causes of outcomes by attributing them to either internal factors (such as effort or ability) or external factors (such as luck or task difficulty) (Heider; 1958 and Weiner, 1986). These attributions affect how people respond to those outcomes, including how they judge success, assign responsibility, and develop future expectations (Martinko, Harvey, & Douglas, 2007). In the context of internal auditing, stakeholders—including senior management, boards, and audit committees—evaluate the function's effectiveness through these attributional lenses. When audit success is attributed to internal, stable, and controllable factors (e.g., auditor competence or ethical culture), it reinforces confidence in the audit process and enhances the perceived effectiveness of the function.

2.9.1 Internal Auditor Competence and Internal Audit Effectiveness

Internal auditor competency is a fundamental driver of internal audit effectiveness because the skills, knowledge, and experience possessed by auditors directly determine their capacity to perform high-quality audits. Competent auditors are more capable of identifying control weaknesses, evaluating risk exposures, and offering evidence-based recommendations that are relevant and actionable. Inadequate competency may result in ineffective audit procedures, missed risks, or poor-quality findings, which undermine the role of internal audit as a critical function in governance and control systems. Therefore, logically, organizations with highly competent auditors are more likely to achieve better audit outcomes, contributing positively to governance, risk management, and compliance.

From the perspective of Attribution Theory, internal auditor competency is considered an internal, stable, and controllable factor influencing audit outcomes. Stakeholders such as senior management or audit committees tend to evaluate audit performance based on their perceptions of auditor professionalism and technical capability. When audits are completed effectively, these outcomes are often attributed to the internal qualities of the auditors, particularly their expertise and qualifications (Weiner, 1986; Martinko et al., 2007). This attribution strengthens the perceived credibility of the internal audit function and reinforces organizational trust, because stakeholders see the audit's success as a result of the auditors' personal effectiveness rather than chance or external conditions.

Empirical research consistently supports the positive impact of auditor competency on internal audit effectiveness. Onay (2021), in a study of private sector

firms in Turkey, demonstrated that professional knowledge and technical skills significantly improved the effectiveness of audit operations. Similarly, Chang et al. (2019) found in Taiwanese firms that auditor experience and certification were positively correlated with internal control quality and audit reliability. Grima et al. (2023) extended this finding across multiple industries, showing that highly qualified auditors contribute meaningfully to audit quality and risk mitigation. These studies provide empirical validation for the attributional mechanism, affirming that when auditors are competent, stakeholders attribute audit success to their capabilities.

H1: Internal auditor competency positively influences internal audit effectiveness.

2.9.2 Internal Auditor Independence and Internal Audit Effectiveness

Internal auditor independence is crucial to internal audit effectiveness because it ensures that auditors can perform their work objectively, without interference or undue influence from management. Independence allows auditors to critically evaluate business processes and controls, identify irregularities, and report findings truthfully, even when such findings may be unfavorable to those in power. A lack of independence, conversely, can compromise audit judgments and create bias, undermining the reliability of audit reports and diminishing their value for governance. Thus, auditor independence logically contributes to audit effectiveness by safeguarding objectivity and strengthening audit credibility.

Attribution Theory provides a theoretical lens to explain how stakeholders interpret the role of auditor independence in driving audit outcomes. According to this theory, when internal audit reports are perceived as impartial and unbiased, stakeholders attribute these qualities to internal characteristics of the auditors—such as professional ethics and personal integrity—which are viewed as stable and controllable causes (Heider, 1958; Weiner, 1986). These attributions elevate the legitimacy of the audit function because audit effectiveness is seen not as a result of external coercion or luck, but as a reflection of the auditor's inherent values and autonomy. This perception reinforces stakeholder trust in both audit findings and the broader governance structure.

The positive relationship between auditor independence and audit effectiveness is supported by extensive empirical evidence. Alzeban and Gwilliam (2014) found a significant correlation between perceived independence and internal audit credibility in Saudi Arabia's public sector. Shah et al. (2023) revealed that auditor independence significantly influenced internal control effectiveness in Pakistani private firms. Furthermore, Khanam (2024) demonstrated that in the context of the banking sector, independence was one of the most influential factors in achieving audit quality and functional legitimacy. These findings support the attributional logic that stakeholders associate independent audit behavior with higher effectiveness.

H2: Internal auditor independence positively influences internal audit effectiveness.

2.9.3 Management Support and Internal Audit Effectiveness

Management support is a critical organizational factor influencing internal audit effectiveness, as it directly affects the internal audit function's resources, authority, and organizational position. When management allocates adequate funding, provides access to relevant data, and responds positively to audit recommendations, auditors are better able to execute their responsibilities and influence organizational improvements. Conversely, insufficient support limits the scope and authority of internal auditors, weakening their effectiveness and reducing the impact of their work. Logically, an internal audit function that is backed by strong management commitment is more likely to perform successfully and contribute to organizational performance.

Attribution Theory offers a valuable explanation for how management support influences perceptions of audit effectiveness. Stakeholders often view strong management engagement as an internal and stable organizational factor, which signals that the organization prioritizes accountability and transparency. When management visibly supports internal audit processes, stakeholders are more likely to attribute successful audit outcomes to internal systemic alignment and cultural reinforcement, rather than external compliance pressure or luck (Martinko et al., 2007; Weiner, 1986).

Empirical studies consistently highlight the positive association between management support and internal audit effectiveness. Alzeban and Gwilliam (2014) found that managerial responsiveness was one of the strongest predictors of internal audit performance in Saudi government entities. Alqudah et al. (2023) emphasized

that empowerment through leadership engagement and resource provision significantly strengthened audit capacity in Jordanian public sector organizations. In Turkey, Onay (2021) demonstrated that management support, especially regarding audit integration into strategic planning, contributed significantly to audit quality and impact. These findings support the attributional view that when leadership visibly endorses audit functions, audit success is perceived as a result of internal commitment and institutional strength.

H3: Management support positively influences internal audit effectiveness.

2.9.4 Organizational Culture and Internal Audit Effectiveness

Organizational culture plays a critical role in shaping internal audit effectiveness because it influences how audit processes are perceived, supported, and acted upon within the organization. A culture that promotes ethical behavior, openness, accountability, and learning will encourage auditors to conduct thorough evaluations and enable management to respond constructively to audit findings. In contrast, cultures that are resistant to change, lack transparency, or view audits as punitive may suppress auditor engagement and diminish the impact of audit outcomes. Therefore, logically, a supportive and ethically grounded organizational culture fosters an environment where internal audit can operate effectively and meaningfully contribute to governance, risk management, and internal control systems.

Attribution Theory offers a psychological framework to explain how organizational culture shapes stakeholder perceptions of audit effectiveness.

According to this theory, individuals attribute outcomes based on perceived causes; when internal audit is successful in an organization with a strong ethical culture, stakeholders are more likely to attribute this success to internal, stable organizational values and behavioral norms (Weiner, 1986; Martinko et al., 2007). These internal attributions enhance the legitimacy of the audit function, as it is seen not merely as a compliance tool but as an integrated element of the organization's value system. In this context, culture functions as a signal to stakeholders that audit effectiveness is the result of intentional, value-driven actions embedded in the organization's daily operations.

Empirical studies provide strong support for the influence of organizational culture on internal audit effectiveness. Algabry et al. (2020) found that internal audits conducted in organizations with cultures emphasizing ethics and accountability were significantly more effective than those in less supportive environments. Roussy et al. (2020) demonstrated that organizational openness and leadership tone at the top play a moderating role in how audit work is perceived and acted upon. Additionally, Karikari Appiah et al. (2023) showed that ethical organizational culture not only enhances audit performance but also mediates the relationship between audit effectiveness and overall organizational resilience. These findings reinforce the attributional logic that when a positive culture surrounds the audit function, stakeholders view audit outcomes as a product of internal, value-based organizational drivers.

H4: Organizational culture positively influences internal audit effectiveness.

CHAPTER 3

RESEARCH METHODOLOGY

This study employs a quantitative research design utilizing a causal-explanatory approach to investigate the impact of internal auditor competency, internal auditor independence, management support, and organizational culture on internal audit effectiveness within the Indonesian banking sector. Aligned with the positivist research philosophy, this design seeks to empirically test hypotheses derived from Attribution Theory. Attribution Theory offers a psychologically grounded framework by emphasizing how stakeholders interpret and assign causality to observed audit outcomes whether they are attributed to internal factors such as auditor competence and ethical culture, or to external, uncontrollable factors. Operational Variable

3.1.1 Dependent Variables

Dependent variables are variables that are described or influenced by independent variables (Wulandari & Efendi, 2021). The dependent variable used in this study is Internal Audit Effectiveness. The effectiveness of internal audit refers to the extent to which the internal audit function in an organization is able to achieve its goals, such as increasing transparency, accountability, fraud detection, and ensuring compliance with policies and regulations.

3.1.1.1 Effectiveness Internal Audit

Internal audit effectiveness refers to the extent to which internal audit functions achieve their intended objectives, particularly in strengthening governance, enhancing risk management, improving internal controls, ensuring regulatory compliance, and supporting overall organizational performance (Alzeban & Gwilliam, 2014; Lenz & Hahn, 2015). Grounded in Attribution Theory, internal audit effectiveness is conceptualized as a perceptual outcome shaped by how stakeholders assign causal explanations to audit results (Heider, 1958; Weiner, 1986). Stakeholders such as senior management, audit committees, and regulators tend to evaluate audit performance based on whether they attribute audit outcomes to internal factors and external factors. These attributional judgments critically influence the perceived credibility, legitimacy, and value of the internal audit function.

In this study, internal audit effectiveness is measured using five key indicators adapted from previous research (Alzeban & Gwilliam, 2014; Lenz & Hahn, 2015). Specifically, respondents evaluate the extent to which: (1) the internal audit enhances organizational risk management; (2) the internal audit provides relevant and actionable recommendations; (3) internal audit findings are effectively addressed by management; (4) internal audit activities improve compliance with policies and regulations; and (5) internal audit contributes significantly toward achieving organizational goals. Responses to these indicators are captured using a five-point Likert scale, where 1 indicates "Strongly Disagree" (very low internal audit effectiveness), and 5 indicates "Strongly Agree" (very high internal audit effectiveness).

effectiveness). This measurement approach ensures alignment between theoretical foundations, empirical findings, and context-specific perceptions, facilitating an accurate and comprehensive assessment of internal audit effectiveness in Indonesian banking institutions.

3.1.2 Independent Variables

An independent variable is a variable that explains or affects another variable (Wulandari & Efendi, 2021). The independent variables used in this study were Internal Auditor Competence Independence of Internal Auditor, Management Support and Organization Culture.

3.1.2.1 Internal Auditor Competence

Internal auditor competency refers to the collective knowledge, skills, and experiences internal auditors possess to perform their roles effectively in accordance with recognized professional standards (Grima et al., 2023). Grounded in Attribution Theory, this construct is viewed as an internal, stable, and controllable factor that shapes stakeholders' perceptions of audit effectiveness (Heider, 1958; Weiner, 1986). When auditors exhibit high levels of competency demonstrated through technical expertise, formal qualifications, and professional judgment stakeholders are more likely to attribute successful audit outcomes to these internal qualities. Such attributions enhance the credibility and perceived legitimacy of the internal audit function, reinforcing the belief that competent auditors are directly responsible for delivering high-quality, value-added audit services (Martinko, Harvey, & Douglas, 2007).

In this study, internal auditor competency is conceptualized as a multidimensional construct and measured using five indicators adapted from prior empirical literature (Alzeban & Gwilliam, 2014; Chang et al., 2019). These indicators include: (1) auditors' knowledge of accounting and auditing standards, (2) technical expertise in risk assessment, (3) understanding of business processes and industry-specific risks, (4) strong analytical and problem-solving skills, and (5) participation in ongoing training and professional development programs.

Each item is evaluated using a five-point Likert scale, where 1 = Strongly Disagree (indicating very low competency) and 5 = Strongly Agree (indicating very high competency). This perception-based measurement approach enables the study to capture internal auditors' practical competencies and normative alignment within their organizational context, particularly in Indonesia's regulated banking sector.

3.1.2.2 Independence of Internal Auditor

Internal auditor independence refers to the extent to which internal auditors are able to perform their duties objectively, free from undue influence or interference by management or other internal stakeholders, thereby ensuring impartial evaluation and credible reporting of audit findings (Alzeban & Gwilliam, 2014; Khanam, 2024). Grounded in Attribution Theory this construct is perceived as an internal and stable trait that shapes how stakeholders interpret the quality and trustworthiness of audit outcomes (Heider, 1958; Weiner, 1986). When auditors demonstrate independence—by acting without bias or external pressure—stakeholders tend to attribute audit success to the auditor's ethical disposition, integrity, and professional autonomy. These attributions reinforce the perceived

legitimacy of the audit function and enhance confidence in audit recommendations (Martinko, Harvey, & Douglas, 2007).

To empirically measure internal auditor independence, the study adopts five indicators adapted from prior validated instruments used in internal audit research. Each item is rated using a five-point Likert scale, ranging from 1 (“Strongly Disagree”) to 5 (“Strongly Agree”). The indicators are (1) Freedom from Management Interference, (2) Unrestricted Access to Information, (3) Ability to Report Audit Findings Objectively, (4) Direct Reporting Line to Oversight Bodies, (5) No Involvement in Managerial Duties

This measurement approach ensures consistency between Attribution Theory as a conceptual foundation and the practical realities of internal auditor independence within the Indonesian banking sector. By focusing on stakeholder perceptions of internal attributes—such as integrity, autonomy, and ethical consistency—this framework captures how internal independence contributes to the attribution of audit effectiveness in organizational settings.

3.1.2.3 Management Support

Management support refers to the degree of commitment, resource allocation, responsiveness, and strategic engagement provided by senior management to facilitate effective internal audit activities (Alzeban & Gwilliam, 2014; Grima et al., 2023). Grounded in Attribution Theory, management support is conceptualized as an internal, stable, and controllable organizational factor that

shapes stakeholders' perceptions of audit effectiveness (Heider, 1958; Weiner, 1986).

In this study, management support is measured using five indicators adapted from Alqudah et al. (2023) and Alzeban & Gwilliam (2014), are (1) Senior management values and supports internal audit activities, (2) Management actively follows up on internal audit recommendations, (3) Management provides sufficient resources (staff, training, and budget) to the internal audit function, (4) Internal auditors have direct access to senior management and the audit committee, (5) Management fosters a culture that promotes transparency and accountability in the audit process.

Each item is rated using a five-point Likert scale, where 1 = "Strongly Disagree" and 5 = "Strongly Agree," capturing internal auditors' perceptions of the degree and quality of management support within their organizations. This measurement approach is aligned with Attribution Theory by focusing on how perceived internal organizational behaviors—particularly managerial commitment and involvement—contribute to stakeholders' attribution of internal audit effectiveness within the Indonesian banking sector.

3.1.2.4 Organization Culture

Organizational culture refers to the shared values, norms, beliefs, and behaviors that shape how individuals within an organization interact, make decisions, and perform their responsibilities (Akpa et al., 2021; Cameron & Quinn, 1999). In the context of Attribution Theory, culture is organizational culture is

conceptualized as an internal, stable characteristic of the organization that significantly shapes stakeholder attributions regarding the success or failure of internal audit functions (Heider, 1958; Weiner, 1986).

In this study, organizational culture is assessed using five indicators adapted from (Alzeban & Gwilliam, 2014; Chang et al., 2019; Lenz et al., 2017), which reflect the cultural context in which internal audit operates: (1) The organization promotes open communication and ethical behavior. (2) Employees understand and comply with corporate governance principles. (3) Internal audit is perceived as a value-adding function, not merely a regulatory requirement. (4) Organizational culture supports transparency and accountability. (5) Employees are receptive to audit recommendations and actively implement improvements.

Each statement is rated on a five-point Likert scale, where 1 = Strongly Disagree and 5 = Strongly Agree, enabling internal auditors to express their perceptions of the prevailing organizational culture. This measurement approach integrates institutional theory with practical organizational dynamics, providing a comprehensive view of how culture shapes audit effectiveness—particularly in the Indonesian banking context.

3.2 Population and Sample

The population of this study comprises internal auditors actively engaged in the internal audit function within the Indonesian banking sector, encompassing both state-owned and private commercial banks operating under the supervision of the Financial Services Authority (OJK) and Bank Indonesia. These individuals are

deemed key informants due to their direct involvement in internal audit processes—ranging from planning and execution to reporting and communication with top management—which positions them as credible and informed evaluators of factors affecting internal audit effectiveness (Alzeban & Gwilliam, 2014).

The unit of analysis in this study is the individual internal auditor, as the research is focused on perception-based data. A purposive sampling technique is employed to ensure that only respondents with relevant audit roles and responsibilities are included. To align with the actual criteria applied in the questionnaire instrument, the inclusion criteria for respondents are as follows:

1. Currently employed as an internal auditor in a commercial bank in Indonesia.
2. Directly involved in audit tasks such as planning, fieldwork, reporting, or follow-up.
3. Willing to complete the distributed questionnaire independently and responsibly.

These criteria are clearly stated in the introduction section of the questionnaire to ensure the validity of responses and the suitability of the sample.

To determine the minimum sample size, the study follows the rule of thumb for multiple regression analysis suggested by Hair et al. (2017), which recommends 5 to 10 observations per predictor variable. Given the model includes four independent variables—internal auditor competency, internal auditor independence, management support, and organizational culture—the estimated

minimum sample size ranges from 100 to 150. However, to improve generalizability and mitigate the risk of low response rates, the study aims to distribute the questionnaire to at least 200 internal auditors across various commercial banks in Indonesia. This sampling strategy is expected to yield reliable, representative data on the internal auditing environment in the Indonesian banking sector.

3.3 Data Types and Sources

This study employs primary data of a quantitative nature. The data are collected through a structured survey instrument using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A perception-based approach is adopted, whereby internal auditors are asked to evaluate their professional experiences and organizational conditions based on their individual perceptions. This approach is commonly used in behavioral audit research, as it captures subjective evaluations that are closely linked to internal processes and organizational culture (Alzeban & Gwilliam, 2014; Grima et al., 2023).

The primary data source consists of internal auditors employed in Indonesian commercial banks, including both state-owned and private institutions under the supervision of the Financial Services Authority (OJK) and Bank Indonesia. These respondents are selected based on their direct involvement in internal audit functions, including risk assessment, control evaluation, communication with management, and implementation monitoring. Internal auditors are considered the most appropriate respondents due to their first-hand knowledge of how internal

audit effectiveness is shaped by auditor competence, independence, management support, and organizational culture.

3.4 Methods of Collecting Data

This study employs a survey-based data collection method using a structured questionnaire distributed electronically to internal auditors working in Indonesian commercial banks. The primary reason for selecting a survey method is its suitability for gathering standardized responses from a relatively large population within a limited timeframe, particularly when the research involves perceptual data related to organizational practices (Alzeban & Gwilliam, 2014; Grima et al., 2023).

The questionnaire was developed based on established constructs and prior validated instruments from previous studies in internal auditing, governance, and organizational behavior. It includes closed-ended statements measured using a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree), which allows for statistical analysis and comparison across respondents.

3.5 Data Analysis Method

To ensure the accuracy and consistency of the measurement instruments utilized in this study, validity and reliability tests were conducted before performing descriptive statistics and multiple regression analysis. These tests are crucial to confirm that questionnaire items reliably measure the theoretical constructs outlined in the conceptual framework—specifically internal audit effectiveness, internal auditor competency, internal auditor independence, management support, and organizational culture.

3.5.1 Descriptive Statistical Analysis

Data obtained from the survey questionnaires were first analyzed using descriptive statistics to summarize respondent characteristics and responses to each item. This included calculating means, standard deviations, and frequency distributions for perceptions regarding internal auditor competency, independence, management support, organizational culture, and internal audit effectiveness. Descriptive analysis provides a clear overview of the basic features of the data, enabling a preliminary understanding of respondents' perceptions prior to more in-depth statistical testing (Hair et al., 2017)

3.5.2 Reliability and Validity Tests

Validity testing assesses whether a questionnaire accurately measures what it intends to. A survey is considered valid if its questions effectively capture the concepts being investigated (Ghozali, 2021). This test involves correlating each factor with the total score. A factor is deemed a strong or effective component if its correlation is positive and greater than or equal to 0.3 (Sugiyono, 2013).

Validity was assessed through exploratory factor analysis (EFA), confirming construct validity by ensuring each survey item accurately represents the intended theoretical concepts and constructs (Hair et al., 2017).

Reliability refers to the consistency of a data collection instrument and its variables (Anshori and Iswati, 2007: 75). A reliable instrument consistently produces the same data (measurements) when used multiple times to assess the same object. Reliable instruments thus yield reliable data. Reliability testing is

conducted by calculating Cronbach's Alpha coefficient for each instrument within a variable (Ghozali, 2021). An instrument is considered reliable if its Cronbach's Alpha coefficient exceeds 0.6.

3.5.3 Multiple Linear Regression Analysis

Following reliability and validity testing, multiple linear regression analysis was employed to examine relationships between independent variables—internal auditor competency, internal auditor independence, management support, and organizational culture—and the dependent variable, internal audit effectiveness. Multiple linear regression analysis is used in this study to predict the dependent variable based on the independent variables and to measure the impact of two or more independent variables on a single dependent variable. The multiple linear regression model is mathematically represented as follows:

$$IAE = \beta_0 + \beta_1COMP + \beta_2IND + \beta_3MS + \beta_4OC + \varepsilon$$

Where:

IAE = Internal Audit Effectiveness

COMP = Internal Auditor Competence

IND = Auditor Independence

MS = Management Support

OC = Organizational Culture

β_0 = Constant

$\beta_1 - \beta_4$ = Regression coefficients

ε = Error term

3.5.4 Classical Assumption Test

3.5.4.1 Normality Test

The normality test is conducted to ascertain whether the residuals, or error terms, in a regression model follow a normal distribution (Ghozali, 2006). This study employs the Kolmogorov-Smirnov (K-S) non-parametric statistical test for normality, which involves analyzing the unstandardized residuals. The null hypothesis (H_0) posits that the data are normally distributed, while the alternative hypothesis (H_a) suggests non-normal distribution. If the asymptotic significance probability (Asymp. Sig.) is greater than 0.05, the null hypothesis is accepted, indicating that the data are normally distributed. Conversely, if the probability is less than 0.05, H_0 is rejected (Ghozali, 2006).

3.5.4.2 Uji Multikolinearitas

The multicollinearity test assesses the intercorrelations among independent variables within a regression model. A robust regression model is characterized by the absence of substantial correlations between its independent predictors. To identify potential multicollinearity, researchers typically examine tolerance values and Variance Inflation Factors (VIF). Commonly accepted thresholds suggest the presence of multicollinearity if tolerance falls below 0.10 or VIF exceeds 10 (Ghozali, 2016).

3.5.4.3 Uji Heteroskedastisitas

The multicollinearity test assesses the correlation among independent variables within a regression model. An ideal regression model exhibits no significant correlation between its independent variables. Detection of multicollinearity is typically performed by examining tolerance values and Variance Inflation Factors (VIF). Commonly accepted cutoff values indicate the presence of multicollinearity if tolerance is less than 0.10 or VIF is greater than 10 (Ghozali, 2016).

In addition to scatterplot analysis, this study employs the Park test to further strengthen the assessment of heteroscedasticity. The Park test helps determine if the variance of the errors is constant across all levels of the independent variables. If the significance value (sig.) between the independent variables is greater than 0.05, it indicates the absence of heteroscedasticity in the regression model (Ghozali, 2016).

3.5.5 Hypothesis Testing

Hypothesis testing is employed as a statistical tool to interpret the actual values within the regression function and to determine whether the established hypotheses are supported by valid data analysis results. Statistically, hypothesis testing is conducted by examining the coefficient of determination (R^2), the F-statistic, and the t-statistic (Ghozali, 2016).

3.5.5.1 Uji Koefisien Determinasi

The coefficient of determination (R^2) serves to quantify the proportion of variance in the dependent variable that can be explained by the independent variables within the model (Ghozali, 2016). An R^2 value greater than 0 indicates that the independent variables do indeed influence the dependent variable. Conversely, an R^2 value approaching 1 suggests that the independent variables provide nearly all the necessary information to predict the variation in the dependent variable.

A fundamental limitation of R^2 is its susceptibility to bias with the inclusion of additional independent variables. The value of R^2 will inevitably increase with each added variable, irrespective of whether that variable significantly impacts the dependent variable. Consequently, researchers often recommend utilizing the adjusted R^2 when evaluating the optimal regression model, as it accounts for the number of predictors in the model, providing a more accurate assessment of the model's explanatory power.

3.5.5.2 F-Test

The F-test is a statistical method used to determine whether all independent variables collectively or simultaneously influence the dependent variable (Ghozali, 2016). This test can be explained using an analysis of variance (ANOVA) approach. If the significance value of the data is less than or equal to the predetermined significance level (commonly 5%), it indicates that the independent variables collectively have a significant impact on the dependent variable (Widarjono, 2010).

3.5.5.3 T-Test

The individual impact of each independent variable on the dependent variable is determined using the partial significance test, also known as the t-test. The decision rule is based on comparing that indicates the direction of the link between the independent and dependent variables (Widarjono, 2010). Comparing the computed t-statistic or the significant probability value (p-value) with the predefined significance threshold (α , often 0.01, 0.05, or 0.10) forms the basis of the decision rule. A significant relationship between the independent and dependent variables is indicated if the p-value is smaller than the selected α ($p < \alpha$). The sign of the regression coefficient indicates which way the independent and dependent variables are related (Widarjono, 2010).

CHAPTER 4

RESULT AND DISCUSSION

This chapter will analyze and discuss the outcomes of primary data acquired from 105 respondents. The data contains Internal Audit Effectiveness, Internal Auditor Competency, Internal Auditor Independence, Management Support and Organization Culture as the subject of this research, where Internal Audit Effectiveness is the dependent variable and the independent variable are Internal Auditor Competency, Internal Auditor Independence, Management Support and Organization Culture.

This study employed a questionnaire comprising 25 items designed to measure five research variables. The target population consisted of internal auditors, finance professionals, and other staff with audit-related responsibilities within banking companies who met the relevant inclusion criteria.

The questionnaire was disseminated online through internet channels and social media. Data were collected over a three-week period, from June 30, 2025, to July 17, 2025. The details of the responses received are as follows:

Table 4. 1 Processable Questionnaire

Return Questionnaire	111
Questionnaire Cannot Be Processed	6
Processable Questionnaire	105
Useable RR	94,59%

4.1 Description of Research Object

4.1.1 Overview of Research Object

This study aims to investigate the influence of Internal Auditor Competence, Internal Auditor Independence, Management Support, and Organizational Culture on the Effectiveness of Internal Audit. The subjects of this research include internal auditors, finance staff, or individuals with prior auditing experience within the banking sector.

A survey methodology was employed, involving the distribution of questionnaires to internal auditors, finance departments, and staff who have been subject to audits in banking institutions across DKI Jakarta. The questionnaire comprised statements related to internal audit effectiveness, internal auditor competence, internal auditor independence, management support, and organizational culture. Responses to these statements were measured using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), indicating the respondents' level of agreement. The researchers successfully distributed questionnaires to the entire study population and obtained responses from 105 respondents.

4.1.2 Data Analysis

This sub-section outlines the descriptive analysis of the study's results and the outcomes of data analysis performed using SPSS 26, employing the methods detailed earlier. Each analytical test result will be elaborated upon below:

4.1.3 Descriptive Statistical Analysis

Descriptive statistical analysis is employed to provide an overview of the data by examining measures such as mean, standard deviation, maximum, minimum, and median (Ghozali, 2016).

Table 4. 2 Descriptive Statistic

Variable	N	Theoretical Range			Empirical Findings			SD
		Min	Max	Median	Min	Max	Mean	
Internal Audit Effectiveness	105	5	25	15	19	25	22,981	1,581
Internal Auditor Competence	105	5	25	15	20	25	22,905	1,547
Internal Auditor Independence	105	5	25	15	20	25	23,143	1,578
Management Support	105	5	25	15	19	25	23,181	1,555
Organization Culture	105	5	25	15	19	25	23,200	1,672

Source: Output Data IBM SPSS 26, 2025

Based on Table 4.2, An analysis of the data distribution indicates the following:

1. The descriptive statistics for the Internal Audit Effectiveness (Y1) variable are presented in Table 4.2. The mean score was 22,981 with a standard deviation of 1,581. The scores obtained had a range from 20 to 25. The data indicates that a majority of respondents answered positively, with most ratings on the higher end of the scale (4-5), reflecting a favorable perception of internal audit effectiveness.

2. The descriptive statistics for Internal Auditor Competence (X1) indicate a mean score of 22,905 (SD = 1,547), with values ranging from a minimum of 20 to a maximum of 25. These results show that the majority of respondents answered using a 4-5 scale, reflecting a positive perception of internal auditor competence within the context of this study.
3. Descriptive statistics for Internal Auditor Independence (X2) show a mean score of 23,143 (SD = 1,578), with values ranging from a minimum of 20 to a maximum of 25. These data indicate that the majority of respondents utilized a 4-5 scale for their answers, reflecting a positive perception of internal auditor independence in the context of this study.
4. The descriptive statistics for the Management Support (X3) variable show a minimum value of 20 and a maximum value of 25. The mean for this variable was 23,181, with a standard deviation of 1,555. These figures indicate that the majority of respondents answered questions regarding Management Support using a 4-5 scale, which suggests a positive perception of this construct within the context of this study.
5. For the Organization Culture (X4) variable, the descriptive statistics indicate a minimum value of 19 and a maximum of 25. The variable's mean score was 23,200, with a standard deviation of 1,672. These results show that the majority of respondents answered questions related to

Organization Culture on a 4-5 scale, which suggests a positive perception of this aspect within the research context.

6. Based on the descriptive statistics from the research, all variables were perceived at a high level by the respondents. Specifically, Organizational Culture recorded the highest mean score ($M = 23.200$, $SD = 1.672$), followed closely by Management Support ($M = 23.181$, $SD = 1.555$), Internal Auditor Independence ($M = 23.143$, $SD = 1.578$), Internal Audit Effectiveness ($M = 22.981$, $SD = 1.581$), and Internal Auditor Competence ($M = 22.905$, $SD = 1.547$). Given that the theoretical range for each construct was 5 to 25, with a neutral midpoint of 15, these mean values are all positioned strongly towards the maximum possible score. This indicates a consistent and highly positive perception across the sample, suggesting that respondents view internal audit effectiveness and its contributing factors favorably within the context of Indonesian banks in DKI Jakarta.

4.1.4 Descriptive Demograph of Respondents

Based on the questionnaire results, the respondent's characteristic data is known regarding Gender, Age, Education Stage, Year of Work, and Position. This sub-chapter analyzes the information obtained from the questionnaire regarding Gender, Age, Education Stage, Year of Work, and Position. The following is an explanation of the respondent's demographics.

4.1.4.1 Respondents Based on Gender

The following table classifies respondents depending on the Gender of respondents.

Table 4. 3 Respondents Based on Gender

	Frequency	Percent	Cumulative Percent
Female	62	59%	59%
Male	43	41%	100%
TOTAL	105	100%	

Source: Output Data IBM SPSS 26, 2025

Table 4.3, presents the demographic distribution of the study's participants. Out of a total of 105 respondents, the majority are female, accounting for 62 individuals or 59% of the sample. Male respondents comprise the remaining 43 individuals, representing 41% of the total. This indicates a notable imbalance in gender representation, with female participants outnumbering male participants by a significant margin in this study.

4.1.4.2 Respondents Based on Age

The following table classifies respondents depending on the Age of respondents.

Table 4. 4 Respondents Based on Age

	Frequency	Percent	Cumulative Percent
<25 years old	57	54%	54%
25–34 years old	30	29%	83%
35–44 years old	16	15%	98%
45–54 years old	2	2%	100%
≥55 years old	0	0%	100%
TOTAL	105	100%	

Based on Table 4.4, The largest segment of respondents falls into the youngest age bracket, with 57 individuals (54%) being under 25 years old. The next significant group is those aged 25-34 years, accounting for 30 respondents (29%). A smaller proportion, 16 individuals (15%), are between 35-44 years old. The study includes very few older participants, with only 2 respondents (2%) aged 45-54 years, and notably, no respondents are 55 years old or older. This indicates that the sample primarily consists of younger individuals.

4.1.4.3 Respondents Based on Education Level

The following table classifies respondents depending on the Education Level of respondents.

Table 4. 5 Respondents Based on Education Level

	Frequency	Percent	Cumulative Percent
High School	1	1%	1%
Diploma	2	2%	3%
Bachelor	78	74%	77%
Master	21	20%	97%
Doctor	3	3%	100%
TOTAL	105	100%	

Table 4.5, illustrates the educational background of 105 survey participants. The data reveals a strong inclination towards higher education among the respondents, with the majority (74%) holding a Bachelor's degree (S1), followed by 20% with a Master's degree (S2). A small percentage (3%) also hold a Doctoral degree (S3), bringing the total with university-level education to a substantial 91%.

In contrast, only a minor portion of respondents completed high school (1%) or an Associate's degree (2%), indicating a sample heavily weighted towards individuals with advanced academic qualifications.

4.1.4.4 Respondents Based on Years of Work

The following table classifies respondents depending on the Year of Work of respondents.

Table 4. 6 Respondents Based on Years of Work

	Frequency	Percent	Cumulative Percent
<1 years	32	30%	30%
1–5 years	58	55%	86%
6–10 years	15	14%	100%
>10 years	0	0%	100%
TOTAL	105	100%	

Source: Output Data IBM SPSS 26, 2025

Based on Table 4.6, a significant majority of the respondents (55%) have between 1 to 5 years of work experience, indicating a sample predominantly composed of individuals in the early to mid-stages of their careers. Furthermore, 30% of the respondents have less than 1 year of experience, suggesting the inclusion of very recent entrants to the workforce. A smaller proportion (14%) possess 6 to 10 years of experience, while notably, no respondents reported having more than 10 years of work experience, highlighting that the sample is primarily represented by individuals with limited to moderate professional tenure.

4.1.4.5 Respondents Based on Position

Tabel 4.7 outlines the distribution of roles among the 105 survey participants. The data clearly shows that half of the respondents (50%) are Internal Auditors, making this the most represented position by a significant margin. Following them, Finance personnel account for 30% of the sample, indicating a strong presence from these two critical departments. Human Resources (HR) staff represent 10%, while Operation and IT roles each contribute a smaller proportion,

Table 4. 7 Respondents Based on Position

	Frequency	Percent	Cumulative Percent
Internal Auditor	53	50%	50%
Finance	32	30%	81%
Operation	5	5%	86%
HR	10	10%	95%
IT	5	5%	100%
TOTAL	105	100%	

Source: Output Data IBM SPSS 26, 2025

A key strength of this study's methodology is its balanced inclusion of both internal auditors (n=53) and a cohort of non-auditor stakeholders (n=52), encompassing roles in finance, operations, HR, and IT. This dual-perspective approach facilitated a sensitivity analysis to test the research model's robustness across different viewpoints.

The variance in the model's explanatory power between the two groups is a significant finding. It strongly suggests a nuanced divergence in perception regarding the primary drivers of audit effectiveness. While the investigated factors such as competence and independence are highly salient from the auditors'

perspective, the non-auditor cohort's perception of effectiveness appears to be influenced by a different or broader set of variables not captured in this model.

4.1.5 Data Quality Test

4.1.5.1 Validity Test

Validity is a critical assessment that determines the extent to which a test accurately measures what it purports to measure. According to Ghozali (2016), data must undergo a validity test to ascertain its accuracy. A questionnaire is considered valid if its statements effectively represent the construct it aims to measure.

To evaluate validity, the Pearson Product-Moment correlation coefficient is employed. The level of validity is determined by comparing the calculated r-value (r_{count}) with the table r-value (r_{table}). If the calculated r-value is greater than the table r-value (at a significance level of 0,05), the statements within the questionnaire are deemed valid.

Table 4. 8 Validity Test

Variable	Question Item	Pearson Correlation	Description
<i>Effectiveness Internal Auditor</i>	Y1	0.672**	Valid
	Y2	0.578**	Valid
	Y3	0.597**	Valid
	Y4	0.595**	Valid
	Y5	0.671**	Valid
<i>Internal Auditor Competence</i>	X1.1	0.656**	Valid
	X1.2	0.603**	Valid
	X1.3	0.574**	Valid
	X1.4	0.628**	Valid
	X1.5	0.644**	Valid
<i>Internal Auditor Independence</i>	X2.1	0.607**	Valid
	X2.2	0.590**	Valid
	X2.3	0.585**	Valid
	X2.4	0.700**	Valid
	X2.5	0.697**	Valid
<i>Management Support</i>	X3.1	0.636**	Valid
	X3.2	0.643**	Valid
	X3.3	0.631**	Valid
	X3.4	0.602**	Valid
	X3.5	0.687**	Valid
<i>Organization Culture</i>	X4.1	0.715**	Valid
	X4.2	0.651**	Valid
	X4.3	0.650**	Valid
	X4.4	0.661**	Valid
	X4.5	0.710**	Valid

Source: Output Data IBM SPSS 26, 2025

As presented in Table 4.8, the statements comprising the variables of Internal Audit Effectiveness, Internal Auditor Competence, Internal Auditor Independence, Management Support, and Organizational Culture were all determined to be valid. This conclusion is supported by the fact that the calculated r-values (r_{count}) for all statements consistently exceeded the critical table r-value (r_{table}) of 0,1918, given a sample size of 105 respondents (N=105) and a

significance level of 0,05. Therefore, based on these results, all statements within the aforementioned variables meet the established criteria for validity.

4.1.5.2 Reliability Test

Reliability assesses the consistency of a questionnaire's items, ensuring they yield similar results across repeated administrations. This study employed Cronbach's Alpha to test reliability. According to Ghozali (2016), a Cronbach's Alpha value exceeding 0,60 indicates reliability (dependability) of the data. The results of the reliability test are presented in the following table below.

Table 4. 9 Reliability Test

Variable	Cronbach's Alpha	N of Items	Description
<i>Effectiveness Internal Audit</i>	0,605	5	reliable
<i>Internal Auditor Competence</i>	0,601	5	reliable
<i>Internal Auditor Independence</i>	0,630	5	reliable
<i>Management Support</i>	0,636	5	reliable
<i>Organization Culture</i>	0,705	5	reliable

Source: Output Data IBM SPSS 26, 2025

As shown in Table 4.9, all five variables included in the reliability test demonstrated Cronbach's Alpha values exceeding 0,60. Consequently, all variables are considered reliable and dependable for this study.

4.2 Classic Assumption Test

4.2.1 Normality Test

Normality testing is conducted to ascertain whether the independent and dependent variables within a regression model are normally distributed or

approximate a normal distribution. A regression model is considered robust when its data exhibits a normal or near-normal distribution.

One method for assessing normality involves examining the Normal Probability Plot. This plot compares the cumulative distribution of the data against that of a normal distribution (Ghozali, 2016). If the data points on the normal probability plot are clustered around the diagonal line and follow its direction, the regression model is deemed to satisfy the assumption of normality. Conversely, if the data points deviate significantly from the diagonal or do not follow its path, the regression model does not meet the normality assumption.

Additionally, normality can be assessed using the non-parametric Kolmogorov-Smirnov (K-S) statistical test. In this test, if the significance value (Sig.) is less than 0,05, the regression model's residuals are not normally distributed. However, if the Sig. value is greater than 0,05, the regression model's residuals are considered to be normally distributed.

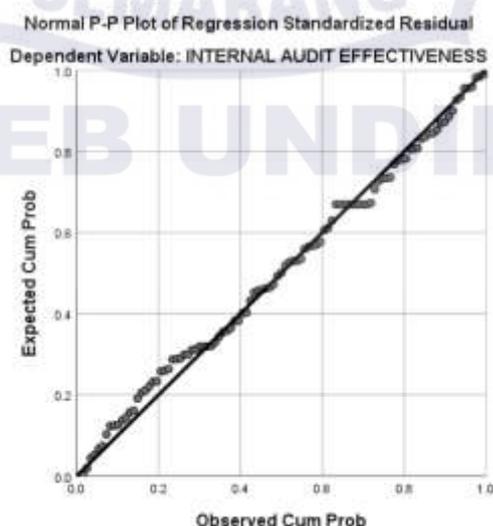


Figure 4. 1 Normal P-Plot of Regression

Table 4. 10 Nonparametric Kolmogorog Smirnov (K-S)

		Unstandardized Residual
N		105
Normal Parameters ^{a,b}	Mean	0,000000
	Std. Deviation	1,231985
Internal Auditor Independence	Absolute	0,055
	Positive	0,048
	Negative	-0,055
Test Statistic		0,055
Asymp. Sig. (2-tailed)		0,200 ^{c,d}

Source: Output Data IBM SPSS 26, 2025

The analysis of the normal probability plot (Figure 4.1) indicates that the residual points are closely aligned with the diagonal line, signifying a normal distribution of residuals within the regression model. Furthermore, the one-sample Kolmogorov-Smirnov test (Table 4.10) yielded an Asymp. Sig. (2-tailed) value of 0,200. As this value is greater than 0,05, it confirms that the residuals are indeed normally distributed.

4.2.2 Multicollinearity Test

Multicollinearity testing is performed to determine if there is a correlation (relationship) among the independent variables within a regression model. The presence of multicollinearity can be assessed by examining the tolerance value and the Variance Inflation Factor (VIF). A regression model is considered free from multicollinearity if its tolerance value is greater than 0,1 or its VIF value is less than 10. Conversely, multicollinearity is present if the tolerance value is less than 0,1 or

the VIF value exceeds 10. The results of the multicollinearity test are presented in Table 4.10.

Table 4. 11 Multicollinearity Test

Model	Collinearity Statistic		Criteria		Description
	Tolerance	VIF	Tolerance	VIF	
Internal Auditor Competence	0,705	1,419	> 0,1	< 10	no multicollinearity
Internal Auditor Independence	0,520	1,923	> 0,1	< 10	no multicollinearity
Management Support	0,536	1,866	> 0,1	< 10	no multicollinearity
Organization Culture	0,700	1,428	> 0,1	< 10	no multicollinearity

Source: Output Data IBM SPSS 26, 2025

Based on Table 4.11, it can be concluded that the regression model in this study does not exhibit multicollinearity. This is evidenced by all variables in the model having a tolerance value greater than 0,10 and a VIF value less than 10.

4.2.3 Heteroscedasticity Test

Heteroscedasticity Testing is performed to identify whether the regression model exhibits varying residual variances across observations (Ghozali, 2016). A model is characterized by heteroscedasticity if the variance of residuals differs between observations; conversely, if the residual variance remains constant across observations, it's termed homoscedasticity. A robust regression model should ideally possess homoscedasticity.

Two methods were employed in this study to detect heteroscedasticity. The first involves examining the scatterplot of SRESID versus ZPRED. If the scatterplot points form a discernible pattern, it suggests the presence of heteroscedasticity in the regression model. The second method utilizes the Park test. In the Park test, a

regression model is considered free from heteroscedasticity if the significance value between independent variables is greater than 0,05. The scatterplot results will be presented in the following figure, while the Park test results will be displayed in Table 4.12.

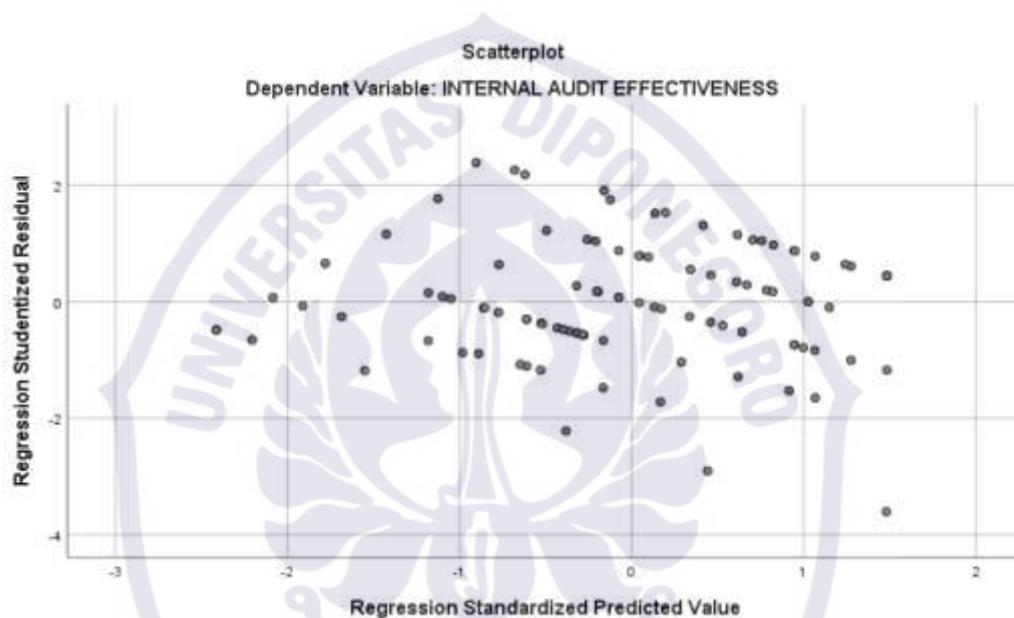


Figure 4. 2 Scatterplot

Table 4. 12 Heteroscedasticity Testing

Variable	T	Sig	Result
Internal Auditor Competence	-1,226	0,223	no heteroscedasticity
Internal Auditor Independence	-0,334	0,739	no heteroscedasticity
Management Support	1,649	0,102	no heteroscedasticity
Organization Culture	0,947	0,346	no heteroscedasticity

Source: Output Data IBM SPSS 26, 2025

The heteroscedasticity analysis, as depicted in the scatterplot of the regression model, reveals no discernible pattern among the residual points, which are

randomly scattered around zero. This indicates the absence of heteroscedasticity in the regression model employed. Furthermore, the Park test for heteroscedasticity corroborates this finding, showing that the significance value for each variable is greater than 0,05. Therefore, it can be concluded that the regression model is free from heteroscedasticity.

4.3 Hypothesis Testing

4.3.1 Coefficient of Determination test

The measurement of the magnitude of the ability of the independent variable to explain the dependent variable is done by testing the coefficient of determination. If the adjusted R² result is close to 0, then it is considered that the independent variable has limited ability to reveal the variation of the dependent variable. Meanwhile, if the value is close to 1, then the independent variable has the ability to explain the variation of the dependent variable (Ghozali, 2021). The results of the determination coefficient test are seen from the adjusted R² value in table 4.13.

Table 4. 13 Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,627 ^a	0,393	0,369	1,295

Source: Output Data IBM SPSS 26, 2025

Based on table 4.13, it can be seen that the adjusted R² value is 0.369 (approaching 1). This shows that the independent variables used in this study can influence 36,9%. While the remaining 63,1% is influenced by other variables not used in this study.

4.3.2 F-Test

To determine the effect of all independent variables on the dependent variable, an F statistic test is performed or often referred to as an overall significance test (stimulant). The results of this F statistic test can be seen using analysis of variance (ANOVA) shown in table 4.14.

Table 4. 14 Hypothesis Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	102,112	4	25,528	16,172	0,000 ^b
	Residual	157,850	100	1,578		
	Total	259,962	104			

Source: Output Data IBM SPSS 26, 2025

The F test value in the regression model is 16,172 with a significance level of 0,000 which means it is smaller than 0,05. This shows that in terms of stimulation, the independent variable in this regression model has an effect on the dependent variable.

4.3.3 T-Test

The t-statistic test assesses the extent to which each individual independent variable explains the variation in the dependent variable (Ghozali, 2016). The significance of an independent variable is determined by comparing its probability value with the predetermined alpha (α) level (typically 0.05). If the probability value is less than or equal to the chosen significance level, it indicates that the independent variable significantly influences the dependent variable. The results of the t-statistic analysis are presented below:

Table 4. 15 Hypothesis Test

	Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	5,149	2,300	0,000	2,238	0,027
	Internal Auditor Competence	0,206	0,095	0,202	2,175	0,032
	Internal Auditor Independence	0,323	0,108	0,322	2,981	0,004
	Management Support	0,003	0,108	0,003	0,026	0,980
	Organization Culture	0,240	0,088	0,254	2,729	0,008

Source: Output Data IBM SPSS 26, 2025

The statistical results presented in the table 4.15 above demonstrate that the independent variable, Internal Auditor Competence, Internal Auditor Independence, and Organization Culture significantly influences Internal Audit Effectiveness, with a significance level below 0,05.

Specifically, the test of the first hypothesis revealed that Internal Auditor Competence has a positive coefficient of 0,206 and a significance level of 0,032. Since this significance level is less than the threshold of 0,05, it indicates that Internal Auditor Competence plays a significant role in the resulting Internal Audit Effectiveness. Consequently, Hypothesis 1 (H1) is accepted.

The test results of the second hypothesis show that internal auditor independence has a coefficient value of 0,323 with a positive direction and has a significance level of 0,004 (smaller than the required value, which is 0,05). This indicates that Internal Auditor Independence is involved in the resulting Internal Audit Effectiveness. The hypothesis H2 is accepted.

The test results of the third hypothesis show that Management Support has a coefficient value of 0,003 with a positive direction and has a significance level of 0,980 (bigger than the required value, which is 0,05). This indicates that

Management Support is involved in the resulting Internal Audit Effectiveness. The hypothesis H3 is rejected.

The test results of the fourth hypothesis show that Organization Culture has a coefficient value of 0,240 with a positive direction and has a significance level of 0,000 (smaller than the required value, which is 0,05). This indicates that Organization Culture is involved in the resulting Internal Audit Effectiveness. The hypothesis H4 is accepted.

Table 4. 16 Summary of Hypothesis Test Results

	Hyphotesis	Result
H1	Internal auditor competency positively influences internal audit effectiveness.	Accepted
H2	Internal auditor independence positively influences internal audit effectiveness.	Accepted
H3	Management support positively influences internal audit effectiveness.	Rejected
H4	Organizational culture positively influences internal audit effectiveness.	Accepted

4.4 Sensitivity Analysis

A sensitivity analysis was conducted to assess the robustness of the model across different respondent groups. The analysis involved segmenting the sample into two subgroups—Auditors and Non-Auditors—and running separate regression analyses for each. The results, as detailed in Table 4.17 and Table 4.18, are summarized below.

- a. Auditor Subgroup (Table 4.17): For this cohort, the model yielded an Adjusted R Square of 0.443. This indicates that 44.3% of the variance in Internal Audit Effectiveness can be explained by the study's independent variables (competence, independence, organizational culture, and management support) from the auditors' perspective.
- b. Non-Auditor Subgroup (Table 4.18): For the non-auditor cohort, the model produced an Adjusted R Square of 0.382. This suggests that 38.2% of the variance in Internal Audit Effectiveness is explained by the same set of variables from the perspective of non-audit staff.

Table 4 17. Sensitivity Auditor Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,697 ^a	0,486	0,443	1,24964

Source: Output Data IBM SPSS 26, 2025

Table 4 18. Sensitivity Non-Auditor Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,658 ^a	0,431	0,382	1,23636

Source: Output Data IBM SPSS 26, 2025

The comparison reveals that the model possesses a greater explanatory power for the

Auditor subgroup (44.3%) than for the Non-Auditor subgroup (38.2%). This finding suggests that the factors investigated in this study are more salient predictors of effectiveness from the internal auditors' own viewpoint. For non-

auditors, it is plausible that other factors not included in this research framework also play a significant role in shaping their perception of internal audit effectiveness

4.5 Interpretation of Results

4.5.1 Internal Auditor Competency Positively Influences Internal Audit Effectiveness.

The results of the first hypothesis test indicate that the Internal Auditor Competency variable has a positive and statistically significant influence on Internal Audit Effectiveness. This is evidenced by a positive regression coefficient of 0,206 and a significance value of 0,032, which is below the 0,05 threshold. This finding unequivocally confirms that the higher the level of competency possessed by internal auditors—encompassing knowledge, skills, and professional qualifications the greater the effectiveness of the internal audit function in achieving its objectives within the Indonesian banking environment.

Attribution Theory, this finding can be interpreted as a result of how stakeholders assign causality to the success of audit processes. According to this theory, individuals tend to attribute organizational outcomes to internal, stable, and controllable factors when such outcomes are consistently associated with observable professional behavior. In this case, internal audit effectiveness is attributed to the auditors' own competencies—such as expertise, judgment, and training—rather than external factors like regulatory compliance or chance. These internal attributions reinforce the credibility and trustworthiness of the audit

function, strengthening its perceived legitimacy and institutional value (Martinko et al., 2007).

(Chang et al., 2019; Grima et al., 2023; Onay, 2021) collectively demonstrates a strong positive relationship between auditor competency and the success of the internal audit function. Thus, this finding reaffirms that competency is a fundamental and indispensable prerequisite for achieving internal audit effectiveness.

4.5.2 Internal Auditor Independence Positively Influences Internal Audit Effectiveness.

The test of the second hypothesis yields robust statistical evidence that Internal Auditor Independence significantly and positively influences Internal Audit Effectiveness. The regression coefficient for this variable was 0,323 with a significance level of 0,004, well below the 0,05 limit. This result indicates that the higher the degree of independence held by internal auditors defined by freedom from interference, objectivity in reporting, and unrestricted access the more effective their role becomes in enhancing governance, risk management, and internal control.

Attribution Theory, findings suggest that stakeholders including senior management, audit committees, and regulators perceive internal audit effectiveness as being caused by internal, stable traits of the auditors themselves. When auditors demonstrate independence in both structure and behavior, stakeholders tend to attribute successful audit outcomes to internal characteristics such as integrity,

professionalism, and ethical discipline. This attribution enhances trust in audit results, reinforces the legitimacy of the audit function, and encourages greater organizational reliance on audit insights (Martinko, Harvey, & Douglas, 2007).

(Khanam, 2024) in the banking sector of Bangladesh, (Alzeban & Gwilliam, 2014) in the Saudi public sector, and Shah et al. in Pakistan all found that independence is a primary driver of internal audit effectiveness. The finding in this research is in line with this consensus, underscoring that in the highly regulated Indonesian banking environment, independence is not merely a formal requirement but a critical determinant of the internal audit function's success.

4.5.3 Management Support Positively Influences Internal Audit Effectiveness.

In contrast to the other hypotheses, the third hypothesis was rejected. The statistical analysis reveals that the Management Support variable does not have a statistically significant influence on Internal Audit Effectiveness. Although the regression coefficient is positive (0,003), its significance value of 0,980 is substantially higher than the 0,05 threshold. This means that, within the context and sample of this research, auditors' perceptions of the presence or absence of management support were not proven to be a determining factor that directly increased or decreased internal audit effectiveness.

The rejection of this hypothesis presents an interesting anomaly when viewed through the lens of Attribution Theory. Theoretically, finding suggests that auditors and organizational stakeholders may not view management support as a

salient internal cause of audit success or failure. In attributional terms, management support might be perceived as an external, unstable, or even uncontrollable factor something beyond the auditor's direct influence and therefore less central to evaluations of audit performance. When stakeholders attribute audit effectiveness more strongly to internal auditor traits (such as competence and independence), the presence or absence of managerial support may be seen as secondary or assumed, thus weakening its perceived causal impact on audit outcomes (Martinko et al., 2007).

The implication is that to enhance audit effectiveness, the banking sector in Indonesia should focus its resources on building auditor competence through training and certification, as well as structurally reinforcing the audit function's independence. Furthermore, fostering an organizational culture that supports transparency and accountability is proven to be more crucial, as demonstrated by the acceptance of hypothesis 4. Although management support was not found to be a statistically significant driver in this study, its absence could still pose practical challenges to the implementation of audit recommendations.

4.5.4 Organizational Culture Positively Influences Internal Audit Effectiveness.

The test of the fourth hypothesis shows that Organizational Culture has a significant and positive influence on Internal Audit Effectiveness. This result is supported by a positive regression coefficient of 0,240 and a significance value of 0,008, which is below the 0,05 significance level. This proves that the prevailing culture within an organization encompassing its shared values, behavioral norms,

ethics, and openness is a critical factor that can enhance the effectiveness of the internal audit function.

this result can be interpreted as stakeholders attributing audit effectiveness not only to the traits of individual auditors but also to internal, stable characteristics of the organization—namely its culture. A culture that fosters transparency, ethical conduct, and receptiveness to audit improves the internal environment in which audits are conducted. In such settings, audit recommendations are not seen as threats but as constructive inputs. This internal attribution to a positive cultural context reinforces the perception that the organization itself facilitates audit success, thereby increasing acceptance, cooperation, and the overall effectiveness of the audit function (Martinko et al., 2007).

Culture emphasizing openness and accountability is directly correlated with higher audit quality (Roussy et al., 2020). The findings in this study strengthen this evidence and confirm that beyond technical factors like competence and independence, "soft factors" such as organizational culture play a crucial role in determining the true success of the internal audit function in practice.

CHAPTER 5

CONCLUSION AND SUGGESTION

5.1 Conclusion

The following key conclusions can be drawn after going through all the stages of investigation in the previous chapter:

1. Internal Auditor Competency was found to have a significant positive influence on internal audit effectiveness. This suggests that the knowledge, skills, and professional qualifications of auditors are fundamental prerequisites for an effective audit function.
2. Internal Auditor Independence also demonstrated a significant positive effect on internal audit effectiveness. This finding affirms that objectivity and freedom from intervention are crucial pillars supporting the credibility and success of the audit function.
3. Organizational Culture was identified as having a significant positive influence on internal audit effectiveness, underscoring the importance of a work environment that supports transparency, ethics, and accountability.
4. Management Support did not have a statistically significant influence on internal audit effectiveness. This suggests that in the highly regulated Indonesian banking context, its impact may be overshadowed by more dominant institutional pressures, such as mandatory compliance with professional and regulatory standards for competency and independence.

5.2 Limitation of Study

The researcher acknowledges that during the research process, several limitations were present that could influence the results and should be considered for future research. These limitations include the following:

1. Data collection was conducted via an online questionnaire distributed through internet channels and social media. This method presents a limitation regarding the verification of respondent identities, as there was no direct control mechanism to ensure that each questionnaire was completed by individuals who genuinely met the criteria as practitioners in the banking sector with relevant audit experience. This raises the possibility that some responses were submitted by individuals who were not part of the target population or who did not complete the survey with due seriousness, potentially affecting the validity of the collected perceptual data.
2. The research focus is specifically on the banking sector within the DKI Jakarta region. Consequently, the findings may not be directly generalizable to other industrial sectors or to the banking industry in other geographical regions of Indonesia, which may possess different regulatory and organizational culture environments.
3. This study focuses exclusively on internal auditors working within commercial banks in Indonesia. While the banking sector is highly regulated and audit-intensive, the findings may not be generalizable to other sectors such as manufacturing, services, or public institutions, where audit structures and cultural dynamics may differ significantly.

5.3 Recommendation

Based on the research findings, the following recommendations are proposed recommendations for Future Research:

1. Expand the Research Scope: Future studies should extend the research to other industrial sectors or geographical regions outside of DKI Jakarta to test the generalizability of the findings.
2. Develop the Methodology: Employ a longitudinal research design to observe causal relationships over time, or a qualitative approach (e.g., interviews) to gain deeper contextual insights.
3. Incorporate Additional Variables: Future models should include other relevant variables (e.g., the use of audit technology, cooperation with external auditors) to more comprehensively explain internal audit effectiveness, given that the current model explains 36,9% of the variance.

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APPENDIX

QUESTIONNAIRE

**FACTOR AFFECTING THE EFFECTIVENESS
OF INTERNAL AUDIT IN BANK IN INDONESIA
(Study Case Bank in DKI Jakarta)**

Clara Augustine

12030121190079

Research Questionnaire "Factors Affecting the Effectiveness of Internal Audits"

Respectfully,

Introduction, I am Clara Augustine (NIM 12030121190079), a student of the Bachelor of Accounting Program, Faculty of Economics and Business, Diponegoro University. I am currently preparing a thesis with the title: **"Factors Affecting the Effectiveness of Internal Audits"**

This research is part of my final project as a requirement to obtain a Bachelor's degree, under the guidance of Prof. Anis Chariri, SE., MCom., PhD., Ak., CA., CFrA.

In this regard, I really hope that you will be willing to take about 3-5 minutes to fill out the short questionnaire that I attached. Your participation will greatly help the smooth and quality of this research.

All information provided will be kept confidential and only used for academic purposes.

This questionnaire can be filled out within a maximum of 1 week from receipt.

For your attention and participation, I would like to thank you very much.

Regards,

Clara Augustine



Appendix 1 Research Permit Letter



KEMENTERIAN PENDIDIKAN TINGGI, SAINS,
DAN TEKNOLOGI
UNIVERSITAS DIPONEGORO
FAKULTAS EKONOMIKA DAN BISNIS

Jalan Prof. Mulyono, S. Trusmi
Semarang, Semarang, Kode Pos 50275
Telepon (024) 7648841, 7648842
Lembar: www.feb.unidp.ac.id
Fax: 024-7648844

Nomor : 397 / UN7.F2.1 / AF / 01 / 2025
Lampiran : -
Hal : Izin Penelitian

Yth. Kepala Kantor Bank di Jakarta dan Semarang

Dalam rangka mempersiapkan mahasiswa untuk menempuh ujian, maka setiap mahasiswa diwajibkan menyusun paper / skripsi sehingga diperlukan data dari Badan Usaha Milik Pemerintah.

Schubungan dengan hal tersebut di atas, mohon dapat diizinkan melaksanakan penelitian pada perusahaan/instansi yang Bapak/Ibu pimpin, bagi mahasiswa Fakultas Ekonomika dan Bisnis tersebut di bawah ini:

Nama : Clara Augustine
NIM : 12030121190079
Program Studi : S-1 Akuntansi
Alamat Rumah : Jl Patimura no 26
No. Telepon / HP : 085718798709
Judul Paper / Skripsi : FACTOR AFFECTING THE EFFECTIVENESS OF
INTERNAL AUDIT
Alamat Email : Claraaugustine14@gmail.com

Demikian atas segala bantuan serta kerja sama yang baik, kami ucapkan terima kasih.

Semarang, 2 Juni 2025



Prof. Dr. Harjum Muharam, S.E., M.E.
NIP. 195201182000031001

Dekan Fakultas Ekonomika dan Kemahasiswaan,

Appendix 2. Respondent Identity

1. Name (can be initial) :
2. Gender : P/L
3. Age : Year
4. Final Education :
5. Length of Work in Current Agencies :
.....
6. Work Unit : Internal Audit TBSP
 Finance IT
 Operational Other.....

This questionnaire consists of several statements related to Internal Auditor Effectiveness, Auditor Competence, Auditor Independence, Management Support, and Organizational Culture. Please provide your answer by selecting the selected answer available, with the one that best matches your opinion or experience with each statement:

LIST OF COMMISSIONERS

Please mark (V) on each statement you select

Description Scale

STS = strongly disagree TS

= disagree

N = Neutral

S = Agree

SS = Strongly Agree

SEMARANG
FEB UNDIP

Appendix 3 Questionnaire List

A. Effectiveness of Internal Audit

NO	STATEMENT	STS	TS	N	S	SS
1	Internal auditor help improve risk management in organization.					
2	Internal auditor provides relevant recommendations and can Applied.					
3	The findings of the internal audit are effectively followed up by management.					
4	Internal audits improve regulatory compliance and policy.					
5	Internal audits contribute to the achievement of organizational goals.					

B. Internal Auditor Competence

NO	STATEMENT	STS	TS	N	S	SS
1	Internal auditors have adequate knowledge of accounting and auditing standards.					
2	Internal auditors have sufficient technical expertise in assessing risk.					
3	Internal auditors understand business processes and industry-specific risks.					
4	Internal auditors have analytical and solving skills a strong problem.					
5	Internal auditors routinely improve their competencies through training and development.					

C. Internal Auditor Independence

NO	STATEMENT	STS	TS	N	S	SS
1	Internal auditors can conduct audits without any intervention from other party.					
2	The internal auditor department is structurally independent of the operational management.					
3	The internal auditor has the authority to access all information and required documents.					
4	Internal auditors are free to report audit findings without fear get pressure or sanctions.					
5	Organizations ensure that internal auditors remain objective in conduct an assessment.					

D. Management Support

NO	STATEMENT	STS	TS	N	S	SS
1	Senior management appreciates and supports audit activities Internal.					
2	Management actively follows up on internal audit recommendations.					
3	Management provides sufficient resources (staff, training, budget) for internal audits.					
4	Internal auditors have direct access to senior management and Audit Committee.					
5	Management creates a culture that encourages transparency and accountability in the audit process.					

E. Organizational Culture

NO	STATEMENT	STS	TS	N	S	SS
1	My organization encourages open communication and ethical behavior.					
2	Employees understand and adhere to the principles of corporate governance.					
3	Internal audits are seen as a value-added function, not just a regulatory burden.					
4	Organizational culture supports transparency and accountability.					
5	Employees receive audit recommendations well and actively implement improvements.					

Appendix 4 Testing Results with IBM SPSS Statistics 26 Software

Descriptive Test

	N	Minimum	Maximum	Mean	Std. Deviation
INTERNAL AUDIT EFFECTIVENESS	105	20.00	25.00	22.9810	1.58102
INTERNAL AUDIT COMPETENCE	105	20.00	25.00	22.8048	1.54748
INTERNAL AUDIT INDEPENDENCE	105	20.00	25.00	23.1429	1.57766
MANAGEMENT SUPPORT	105	20.00	25.00	23.1810	1.55527
ORGANIZATION CULTURE	105	19.00	25.00	23.2000	1.67217
Valid N (listwise)	105				

Validity Test

a. Internal Audit Effectiveness

	IAE1	IAE2	IAE3	IAE4	IAE5	INTERNAL AUDIT EFFECTIVENESS	
IAE1	Pearson Correlation	1	.170	.249*	.382**	.304**	.672**
	Sig. (2-tailed)		.083	.010	.000	.002	.000
	N	105	105	105	105	105	105
IAE2	Pearson Correlation	.170	1	.148	.097	.386**	.578**
	Sig. (2-tailed)	.083		.131	.326	.000	.000
	N	105	105	105	105	105	105
IAE3	Pearson Correlation	.249*	.148	1	.212*	.244*	.597**
	Sig. (2-tailed)	.010	.131		.030	.012	.000
	N	105	105	105	105	105	105
IAE4	Pearson Correlation	.382**	.097	.212*	1	.155	.595**
	Sig. (2-tailed)	.000	.326	.030		.115	.000
	N	105	105	105	105	105	105
IAE5	Pearson Correlation	.304**	.386**	.244*	.155	1	.671**
	Sig. (2-tailed)	.002	.000	.012	.115		.000
	N	105	105	105	105	105	105

b. Internal Auditor Competence

Correlations

		AC1	AC2	AC3	AC4	AC5	INTERNAL AUDIT COMPETENCE
AC1	Pearson Correlation	1	.293**	.252**	.203*	.298**	.656**
	Sig. (2-tailed)		.002	.009	.038	.002	.000
	N	105	105	105	105	105	105
AC2	Pearson Correlation	.293**	1	.070	.204*	.273**	.603**
	Sig. (2-tailed)	.002		.475	.037	.005	.000
	N	105	105	105	105	105	105
AC3	Pearson Correlation	.252**	.070	1	.284**	.186	.574**
	Sig. (2-tailed)	.009	.475		.003	.057	.000
	N	105	105	105	105	105	105
AC4	Pearson Correlation	.203*	.204*	.284**	1	.259**	.628**
	Sig. (2-tailed)	.038	.037	.003		.008	.000
	N	105	105	105	105	105	105
AC5	Pearson Correlation	.298**	.273**	.186	.259**	1	.644**
	Sig. (2-tailed)	.002	.005	.057	.008		.000
	N	105	105	105	105	105	105
INTERNAL AUDIT COMPETENCE	Pearson Correlation	.656**	.603**	.574**	.628**	.644**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	105	105	105	105	105	105

c. Internal Audit Independence

Correlations

		IA1	IA2	IA3	IA4	IA5	INTERNAL AUDIT INDEPENDEN CE
IA1	Pearson Correlation	1	.285**	.171	.250*	.203*	.607**
	Sig. (2-tailed)		.003	.082	.010	.038	.000
	N	105	105	105	105	105	105
IA2	Pearson Correlation	.285**	1	.091	.249*	.280**	.590**
	Sig. (2-tailed)	.003		.357	.010	.004	.000
	N	105	105	105	105	105	105
IA3	Pearson Correlation	.171	.091	1	.295**	.284**	.585**
	Sig. (2-tailed)	.082	.357		.002	.003	.000
	N	105	105	105	105	105	105
IA4	Pearson Correlation	.250*	.249*	.295**	1	.446**	.700**
	Sig. (2-tailed)	.010	.010	.002		.000	.000
	N	105	105	105	105	105	105
IA5	Pearson Correlation	.203*	.280**	.284**	.446**	1	.697**
	Sig. (2-tailed)	.038	.004	.003	.000		.000
	N	105	105	105	105	105	105

d. Management Support

		Correlations					MANAGEMENT SUPPORT
		MS1	MS2	MS3	MS4	MS5	
MS1	Pearson Correlation	1	.210 [*]	.341 ^{**}	.198 [*]	.275 ^{**}	.836 ^{**}
	Sig. (2-tailed)		.032	.000	.042	.005	.000
	N	105	105	105	105	105	105
MS2	Pearson Correlation	.210 [*]	1	.219 [*]	.183	.472 ^{**}	.843 ^{**}
	Sig. (2-tailed)	.032		.025	.097	.000	.000
	N	105	105	105	105	105	105
MS3	Pearson Correlation	.341 ^{**}	.219 [*]	1	.248 [*]	.224 [*]	.831 ^{**}
	Sig. (2-tailed)	.000	.025		.011	.022	.000
	N	105	105	105	105	105	105
MS4	Pearson Correlation	.198 [*]	.183	.248 [*]	1	.268 ^{**}	.802 ^{**}
	Sig. (2-tailed)	.042	.097	.011		.006	.000
	N	105	105	105	105	105	105
MS5	Pearson Correlation	.275 ^{**}	.472 ^{**}	.224 [*]	.268 ^{**}	1	.887 ^{**}
	Sig. (2-tailed)	.005	.000	.022	.006		.000
	N	105	105	105	105	105	105
MANAGEMENT SUPPORT	Pearson Correlation	.836 ^{**}	.843 ^{**}	.831 ^{**}	.802 ^{**}	.887 ^{**}	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	105	105	105	105	105	105

e. Organization Culture

		Correlations					ORGANIZATION CULTURE
		OC1	OC2	OC3	OC4	OC5	
OC1	Pearson Correlation	1	.334 ^{**}	.311 ^{**}	.373 ^{**}	.390 ^{**}	.715 ^{**}
	Sig. (2-tailed)		.000	.001	.000	.000	.000
	N	105	105	105	105	105	105
OC2	Pearson Correlation	.334 ^{**}	1	.246 [*]	.232 [*]	.363 ^{**}	.651 ^{**}
	Sig. (2-tailed)	.000		.011	.017	.000	.000
	N	105	105	105	105	105	105
OC3	Pearson Correlation	.311 ^{**}	.246 [*]	1	.323 ^{**}	.340 ^{**}	.650 ^{**}
	Sig. (2-tailed)	.001	.011		.001	.000	.000
	N	105	105	105	105	105	105
OC4	Pearson Correlation	.373 ^{**}	.232 [*]	.323 ^{**}	1	.323 ^{**}	.661 ^{**}
	Sig. (2-tailed)	.000	.017	.001		.001	.000
	N	105	105	105	105	105	105
OC5	Pearson Correlation	.390 ^{**}	.363 ^{**}	.340 ^{**}	.323 ^{**}	1	.710 ^{**}
	Sig. (2-tailed)	.000	.000	.000	.001		.000
	N	105	105	105	105	105	105
ORGANIZATION CULTURE	Pearson Correlation	.715 ^{**}	.651 ^{**}	.650 ^{**}	.661 ^{**}	.710 ^{**}	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	105	105	105	105	105	105

Reliability Test

- a. Internal Audit Effectiveness

Reliability Statistics

Cronbach's Alpha	N of Items
.605	5

- b. Internal Audit Competence

Reliability Statistics

Cronbach's Alpha	N of Items
.601	5

- c. Internal Audit Independence

Reliability Statistics

Cronbach's Alpha	N of Items
.630	5

- d. Management Support

Reliability Statistics

Cronbach's Alpha	N of Items
.636	5

- e. Organization Culture

Reliability Statistics

Cronbach's Alpha	N of Items
.705	5

Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		105
Normal Parameters ^{a,b}	Mean	.000000
	Std. Deviation	1.23199481
Most Extreme Differences	Absolute	.055
	Positive	.048
	Negative	-.055
Test Statistic		.055
Asymp. Sig. (2-tailed)		.200 ^a

- a. Test distribution is Normal.
 b. Calculated from data.
 c. Lilliefors Significance Correction.
 d. This is a lower bound of the true significance.

Multicollinearity Test

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5.149	2.300		2.238	.027		
	INTERNAL AUDIT COMPETENCE	.206	.095	.202	2.175	.032	.705	1.419
	INTERNAL AUDIT INDEPENDENCE	.323	.108	.322	2.981	.004	.520	1.923
	MANAGEMENT SUPPORT	.003	.108	.003	.026	.980	.536	1.866
	ORGANIZATION CULTUR	.240	.088	.254	2.729	.008	.700	1.428

a. Dependent Variable: INTERNAL AUDIT EFFECTIVENESS

Heteroscedasticity Test

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5.522	4.092		-1.350	.180
	INTERNAL AUDIT COMPETENCE	-.207	.169	-.142	-1.226	.223
	INTERNAL AUDIT INDEPENDENCE	-.064	.193	-.045	-.334	.739
	MANAGEMENT SUPPORT	.317	.192	.220	1.649	.102
	ORGANIZATION CULTUR	.148	.157	.110	.947	.346

a. Dependent Variable: LN_RES1

Coefficient of Determination Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.627 ^a	.393	.369	1.25638

a. Predictors: (Constant), ORGANIZATION CULTURE, INTERNAL AUDIT COMPETENCE, MANAGEMENT SUPPORT, INTERNAL AUDIT INDEPENDENCE

b. Dependent Variable: INTERNAL AUDIT EFFECTIVENESS

F-Test

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	102.112	4	25.528	16.172	.000 ^b
	Residual	157.850	100	1.578		
	Total	259.962	104			

a. Dependent Variable: INTERNAL AUDIT EFFECTIVENESS

b. Predictors: (Constant), ORGANIZATION CULTURE, INTERNAL AUDIT COMPETENCE, MANAGEMENT SUPPORT, INTERNAL AUDIT INDEPENDENCE

T-Test

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5.149	2.300		2.238	.027		
	INTERNAL AUDIT COMPETENCE	.206	.095	.202	2.175	.032	.705	1.419
	INTERNAL AUDIT INDEPENDENCE	.323	.108	.322	2.981	.004	.520	1.923
	MANAGEMENT SUPPORT	.003	.108	.003	.026	.980	.536	1.866
	ORGANIZATION CULTUR	.240	.088	.264	2.729	.008	.700	1.428

a. Dependent Variable: INTERNAL AUDIT EFFECTIVENESS

Sensitivity Analysis

a. Auditor

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.697 ^a	.486	.443	1.24964

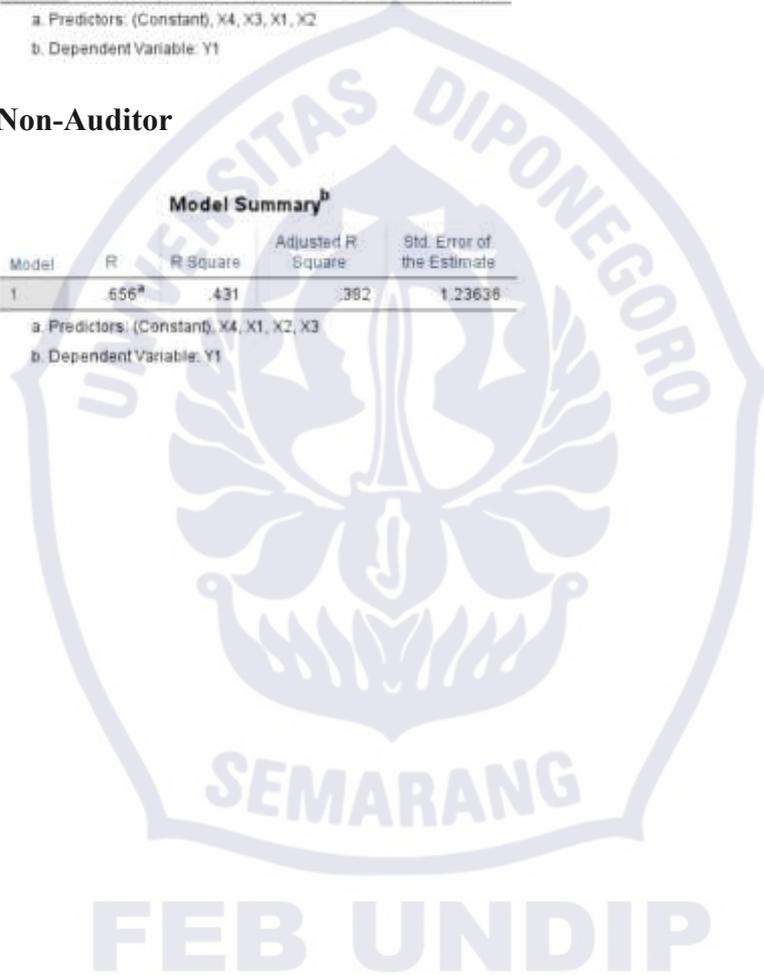
a. Predictors: (Constant), X4, X3, X1, X2
b. Dependent Variable: Y1

b. Non-Auditor

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.656 ^a	.431	.382	1.23638

a. Predictors: (Constant), X4, X1, X2, X3
b. Dependent Variable: Y1



Appendix 5 Respondent Demographics

NO	Gender	Age	Education	Year of Work	Position
1	Female	< 25 years old	S1	< 1 years	Internal Auditor
2	Female	< 25 years old	S1	1–5 years	Finance
3	Female	< 25 years old	S1	< 1 years	Finance
4	Female	< 25 years old	S3	1–5 years	Internal Auditor
5	Female	< 25 years old	S1	< 1 years	HR
6	Female	25–34 years old	S1	1–5 years	Internal Auditor
7	Female	< 25 years old	S1	1–5 years	HR
8	Male	25–34 years old	S1	1–5 years	Internal Auditor
9	Male	< 25 years old	S1	1–5 years	Internal Auditor
10	Male	25–34 years old	S1	1–5 years	Internal Auditor
11	Female	< 25 years old	S1	1–5 years	Internal Auditor
12	Female	25–34 years old	S2	1–5 years	Finance
13	Male	< 25 years old	S1	1–5 years	Internal Auditor
14	Female	25–34 years old	S1	< 1 years	Internal Auditor
15	Female	25–34 years old	S1	1–5 years	Finance
16	Male	< 25 years old	S1	< 1 years	Finance
17	Male	25–34 years old	S1	1–5 years	IT
18	Female	25–34 years old	S1	1–5 years	Internal Auditor
19	Male	< 25 years old	S1	< 1 years	Internal Auditor
20	Female	35–44 years old	S1	1–5 years	Internal Auditor

21	Female	< 25 years old	S1	1–5 years	Finance
22	Male	< 25 years old	S1	< 1 years	Internal Auditor
23	Female	25–34 years old	S1	1–5 years	HR
24	Male	25–34 years old	S1	1–5 years	Internal Auditor
25	Female	25–34 years old	S1	1–5 years	Internal Auditor
26	Male	< 25 years old	S1	< 1 years	HR
27	Male	< 25 years old	S1	< 1 years	Finance
28	Female	< 25 years old	S1	< 1 years	Finance
29	Female	25–34 years old	S2	1–5 years	HR
30	Female	25–34 years old	S2	1–5 years	Operation
31	Female	35–44 years old	S2	6–10 years	HR
32	Female	35–44 years old	S2	1–5 years	Operation
33	Female	35–44 years old	S3	6–10 years	HR
34	Male	25–34 years old	S1	1–5 years	Internal Auditor
35	Female	< 25 years old	S1	1–5 years	Finance
36	Female	< 25 years old	Associate	< 1 years	Finance
37	Male	< 25 years old	S1	< 1 years	Internal Auditor
38	Female	< 25 years old	S1	1–5 years	Internal Auditor
39	Female	25–34 years old	S1	< 1 years	IT
40	Male	< 25 years old	S1	< 1 years	Internal Auditor
41	Female	< 25 years old	High School	1–5 years	Finance
42	Male	< 25 years old	S1	< 1 years	Finance

43	Female	25–34 years old	S1	1–5 years	Finance
44	Male	< 25 years old	S1	1–5 years	Finance
45	Male	< 25 years old	S1	1–5 years	Finance
46	Female	< 25 years old	S1	< 1 years	Operation
47	Female	25–34 years old	S2	1–5 years	HR
48	Male	35–44 years old	S2	1–5 years	Finance
49	Female	< 25 years old	Associate	1–5 years	Finance
50	Female	< 25 years old	S1	1–5 years	Internal Auditor
51	Female	< 25 years old	S1	< 1 years	Internal Auditor
52	Male	25–34 years old	S2	1–5 years	Finance
53	Female	< 25 years old	S1	1–5 years	Finance
54	Male	< 25 years old	S1	< 1 years	Finance
55	Female	< 25 years old	S1	1–5 years	Internal Auditor
56	Female	25–34 years old	S1	1–5 years	IT
57	Female	25–34 years old	S1	6–10 years	Finance
58	Female	< 25 years old	S1	< 1 years	Internal Auditor
59	Female	< 25 years old	S1	< 1 years	Finance
60	Female	< 25 years old	S1	1–5 years	Operation
61	Female	< 25 years old	S2	6–10 years	Finance
62	Male	25–34 years old	S1	1–5 years	Finance
63	Female	< 25 years old	S2	6–10 years	IT
64	Male	< 25 years old	S3	> 10 years	Internal Auditor

65	Male	35–44 years old	S2	> 10 years	Finance
66	Male	25–34 years old	S2	6–10 years	HR
67	Male	25–34 years old	S1	1–5 years	Internal Auditor
68	Male	25–34 years old	S1	1–5 years	Finance
69	Female	25–34 years old	S1	1–5 years	Finance
70	Male	< 25 years old	S1	1–5 years	Internal Auditor
71	Male	< 25 years old	S1	1–5 years	Internal Auditor
72	Male	< 25 years old	S1	< 1 years	Finance
73	Male	< 25 years old	S1	1–5 years	Operation
74	Male	< 25 years old	S1	< 1 years	Internal Auditor
75	Female	< 25 years old	S1	< 1 years	HR
76	Male	< 25 years old	S1	< 1 years	IT
77	Male	25–34 years old	S2	6–10 years	Finance
78	Female	< 25 years old	S1	1–5 years	Internal Auditor
79	Female	< 25 years old	S1	1–5 years	Internal Auditor
80	Female	< 25 years old	S1	1–5 years	Finance
81	Female	< 25 years old	S1	1–5 years	Internal Auditor
82	Female	< 25 years old	S1	1–5 years	Internal Auditor
83	Male	25–34 years old	S1	1–5 years	Internal Auditor
84	Female	35–44 years old	S2	1–5 years	Internal Auditor
85	Female	35–44 years old	S2	6–10 years	Internal Auditor
86	Female	< 25 years old	S1	> 10 years	Internal Auditor

87	Female	< 25 years old	S1	1–5 years	Internal Auditor
88	Female	35–44 years old	S2	6–10 years	Internal Auditor
89	Female	35–44 years old	S1	6–10 years	Internal Auditor
90	Male	< 25 years old	S2	> 10 years	Internal Auditor
91	Female	25–34 years old	S1	1–5 years	Internal Auditor
92	Female	25–34 years old	S1	6–10 years	Internal Auditor
93	Female	35–44 years old	S2	1–5 years	Internal Auditor
94	Male	25–34 years old	S1	1–5 years	Internal Auditor
95	Male	35–44 years old	S1	1–5 years	Internal Auditor
96	Male	35–44 years old	S2	6–10 years	Internal Auditor
97	Male	35–44 years old	S2	6–10 years	Finance
98	Female	45–54 years old	S1	> 10 years	Internal Auditor
99	Male	< 25 years old	S2	> 10 years	Internal Auditor
100	Male	45–54 years old	S1	> 10 years	Internal Auditor
101	Male	35–44 years old	S1	6–10 years	Internal Auditor
102	Male	35–44 years old	S1	6–10 years	Internal Auditor
103	Female	< 25 years old	S1	1–5 years	Internal Auditor
104	Female	< 25 years old	S1	< 1 years	Finance
105	Female	< 25 years old	S1	1–5 years	Internal Auditor