



Top Management Support and Internal Audit Effectiveness in Public Sector Organisations in Indonesia: Does Policy Dynamics and Leadership Changes Matter?

Budi S Purnomo¹  Denny Andriana²  Abi Sopyan Febrianto³ 
Godwin Ahiase⁴ 

^{1,2,3,4} Universitas Pendidikan Indonesia, Jl. Dr. Setiabudhi 229, Bandung 40154, Indonesia
budi.purnomo@upi.edu

Abstract. This study examines the influence of top management support on the effectiveness of internal audits in Indonesian public-sector organizations. This study also considers the moderating effects of policy dynamics and leadership changes. Data were collected from 344 internal auditors in West Java Province using a quantitative survey. The findings indicate that top management support significantly and positively impacts internal audit effectiveness, particularly in organizations with higher initial audit effectiveness. Auditors' professional proficiency contributes positively to audit effectiveness, while the quality of audit work has varying effects. Surprisingly, organizational independence negatively influences audit effectiveness, suggesting coordination challenges. Policy dynamics and leadership changes disrupt audit processes, highlighting the importance of a stable governance framework. This study provides valuable insights for policymakers and organizational leaders seeking to enhance audit practices and governance in the public sector.

Keywords: Management Support, Internal Audit Effectiveness, Policy Dynamics, Leadership Changes, Public Sector Organisations

1 Introduction

The effectiveness of internal audits is critical for the performance of an organization, particularly in the public sector, where transparency and accountability are paramount. This study examines the relationship between top management support and the effectiveness of internal audits within Indonesian public sector organizations. This study investigates the moderating effects of leadership changes and policy dynamics on this relationship. As the complexity of public-sector operations increases and governance frameworks evolve, it is imperative to examine these elements [1].

Recognizing the significance of support from upper management in augmenting the effectiveness of internal audits is universal. Prior research has consistently underscored the importance of management support in facilitating effective audit processes, ensuring the allocation of critical resources, and fostering a culture of accountability [2, 3]. However, external factors, such as policy dynamics and leadership changes, particularly in emerging economies like Indonesia, have not been extensively studied [4-6]. This study investigates the influence of leadership transitions and policy changes on the relationship between internal audit effectiveness and top management support.

© The Author(s) 2025

R. Hurriyati et al. (eds.), *Proceedings of the 9th Global Conference on Business, Management and Entrepreneurship (GCBME 2024)*, Advances in Economics, Business and Management Research 342,
https://doi.org/10.2991/978-94-6463-817-2_83

This study is distinctive in that it analyzes the interplay among leadership changes, policy dynamics, and managerial support from an inclusive perspective. By incorporating these variables, this study provides a clear understanding of the factors influencing the effectiveness of internal audits. This is particularly relevant in Indonesia's public sector, where frequent policy dynamics and leadership transitions are the norm [3, 7]. The findings of this study provide policymakers and organizational leaders with significant insights into how to enhance audit efficiency in dynamic and often disorderly administrative environments [8].

Furthermore, this study contributes to the existing body of knowledge by employing a robust methodological framework that integrates factorial assessments for various factors, such as the effectiveness of internal audits, support of top management, proficiency of professionals conducting audits, independence of the organization, quality of audit work, policy dynamics, and changes in leadership [9, 10]. The comprehensive dataset, comprising several public sector organizations, facilitates an in-depth analysis incorporating moderating variables.

This study fills this research gap by investigating the moderating effect of policy dynamics and leadership changes on the relationship between internal audit effectiveness and top management support in Indonesian public sector organizations. The insights gained from this research will ultimately contribute to the enhancement of governance and organizational performance in the public sector by providing directions for the creation of techniques that enhance audit processes.

2 Methods

We conducted a quantitative survey of West Java Province's regencies and cities to examine the relationships between the study variables. Using known theories to construct hypotheses, this technique follows the positivist paradigm [11]. We chose the design because it can systematically create hypotheses, conduct empirical research, and evaluate the results according to theories [12]. West Java Province, Indonesia, has 27 regencies and cities. Twenty were named. The government polled 19 internal auditors from each regency and town. The sample size was 380 internal auditors. We uploaded a well-organized questionnaire to Google Forms and provided URLs to the respondents. Initial responders were requested to share the link with colleagues in similar roles across numerous areas and municipalities to increase their responses and facilitate administration. Participants provided informed consent by email, phone, or person in compliance with APA ethical standards. The responses were anonymous and neutral, with no correct or incorrect responses. We preserved the permission-granting participants' emails to thank them following data collection. The researcher's contact information was also included for explanation. A preliminary study of five West Java regencies and cities assessed the feasibility of comprehensive research before the main survey. This pilot study randomly recruited 15 residents from West Java. The findings of this study have improved the questionnaire. Indonesia collected 344 surveys over 3 months and 2 weeks. We employed quantile regressions (QR) to examine the study variables and ordinary least squares (OLS) as a robustness check for the baseline model. The empirical models for the quantile regression are as follows:

$$IAE_q = \beta_{0q} + \beta_{1q}TMS + \beta_{2q}PP + \beta_{3q}QAW + \beta_{4q}ORGI + \beta_{7q}TMS \times PDLC + \varepsilon_q \quad (1)$$

where IEA_q denote the internal audit effectiveness (IAE) quantile at the specific quantile levels (10th, 25th, 50th, 75th, and 90th quantiles). TMS: top management support, PP: professional proficiency, QAW: quality of audit work, ORGI: organizational independence, ε_q is the error term.

3 Results and Discussion

3.1 Descriptive statistics

Table 1. Descriptive statistics

Variable	Definition	Unit	Mean	Std.	Obs.
IAE	The factorial measure of internal audit effectiveness	Quantity	5.708	0.748	343
TMS	The factorial measure of top management support	Quantity	5.609	1.020	343
PP	The factorial measure of professional proficiency	Quantity	5.355	1.212	343
QAW	The factorial measure of the quality of audit work	Quantity	5.465	0.798	343
ORGI	The factorial measure of organizational independence	Quantity	5.465	0.798	343
PDLC	The factorial measure of policy dynamics and leadership changes	Quantity	4.437	1.301	343

Note: IAE: Internal audit effectiveness, PP: Professional proficiency, QAW: Quality of audit work, ORGI: Organizational independence, CAD: Top management support, PDLC: Policy dynamics and leadership changes.

The study's key variables, including internal audit effectiveness, top management support, professional proficiency, quality of audit work, organizational independence, policy dynamics, and leadership changes, are presented in Table 1 as descriptive statistics. Based on the data, it can be concluded that the internal auditors in the sample have a rather high degree of audit effectiveness. This finding is supported by the mean value for internal audit effectiveness of 5.708 with a standard deviation of 0.748. Top management support, with a mean of 5.609 and a standard deviation of 1.020, showed significant but inconsistent support from high management. The professional proficiency maximum standard deviation of 1.212 and mean of 5.355 suggest significant variation in auditors' professional competency. The mean and standard deviation of 0.798 for the quality of audit work and organizational independence equals 5.465, indicating that their audit work consistently demonstrates high quality and independence. Policy dynamics and leadership changes, with a mean of 4.437 and a standard deviation of 1.301, indicate substantial shifts and dynamics in leadership and policy. While management typically recognizes and endorses the success of internal audit methods, statistical

evidence indicates significant variation in professional competency and the impact of policy and leadership changes

3.2 Quartile regression analysis

Table 2. Regression results on top management support, internal audit effectiveness, policy dynamics, and leadership changes

Variable	Dependent variable: IAE					
	OLS	Q.10	Q.25	Q.50	Q.75	Q.90
Constant	2.397*** (0.000)	5.334*** (0.000)	5.225*** (0.000)	5.609*** (0.000)	2.341*** (0.000)	3.751*** (0.000)
TMS	0.501*** (0.000)	-0.843*** (0.000)	0.013 (0.892)	0.116* (0.014)	0.192** (0.002)	0.098*** (0.000)
PP	0.099*** (0.000)	0.102** (0.002)	0.198*** (0.000)	-0.042** (0.005)	0.327*** (0.000)	0.103*** (0.000)
QAW	-0.477*** (0.000)	0.452* (0.008)	-0.303** (0.002)	-0.366*** (0.000)	-0.379*** (0.000)	-0.627*** (0.001)
ORGI	-0.287*** (0.000)	-0.344*** (0.000)	-0.318*** (0.000)	-0.269*** (0.000)	-0.220*** (0.000)	-0.215* (0.036)
PDLC	-0.021 (0.690)	-0.138*** (0.000)	0.017 (0.812)	-0.098*** (0.000)	-0.072*** (0.000)	0.101 (0.450)
TMS×PDLC	-0.006 (0.615)	0.019 (0.489)	-0.003 (0.853)	-0.025 (0.853)	-0.017 (0.110)	-0.020 (0.503)
R ²	0.960					
Pseudo R ²		0.854	0.922	0.901	0.880	0.851
F-test	492.37					
Observation	344	344	344	344	344	344

Note (s): ***, **, and * signify significance levels of 1%, 5%, and 10%, respectively. IAE, internal audit effectiveness; PP: Professional proficiency; QAW: Quality of audit work; ORGI: Organizational independence; TMS: Top management support; PDLC: Policy dynamics and leadership changes. OLS: Ordinary Least Square. Q.10: Quantiles 10, Q.25: Quantiles 25, Q.50: Quantiles 50, Q.75: Quantiles 75, Q.90: Quantiles 90.

The findings of the regression analysis examining the relationship between leadership changes, internal audit effectiveness, policy dynamics, and top management support in Indonesian public sector organizations are presented in Table 2. The findings indicate that top management support significantly and positively influences internal audit effectiveness across various public-sector organizations. This finding implies that top management support is crucial in enhancing the efficacy of internal audits. This finding aligns with prior studies that underscore the critical significance of management support in facilitating effective audit processes, ensuring appropriate resource allocation, and fostering a culture of accountability [13]. OLS regression revealed a statistically significant positive coefficient of 0.501 for top management support. This finding supports the notion that assistance from upper management positively affects the effectiveness of internal audits. However, the quantile regression analysis revealed heterogeneity across multiple quantiles. Top management support exhibits a negative

correlation in the 10th and 25th quantiles; however, it attains a positive and statistically significant correlation in the 50th, 75th, and 90th quantiles. This finding suggests that organizations with high levels of audit effectiveness are more susceptible to the impact of top management support on audit effectiveness. This underscores the criticality of consistent and robust assistance for achieving optimal audit outcomes.

Notably, at the 10th, 25th, and 50th percentiles, the results for professional proficiency indicate a generally positive and statistically significant correlation with internal audit effectiveness. Further research has established that auditors' competencies and expertise are crucial for enhancing their effectiveness [5]. This finding conforms with the existing body of knowledge. Auditors possessing a considerable degree of professional expertise are indispensable for conducting thorough and accurate audits, which are pivotal in maintaining the accountability and effectiveness of an organization. However, the relationship between internal audit effectiveness and the quality of audit work is complex. It has a positive correlation at the tenth quantile, although commonly associated with a decline in internal audit effectiveness across most quantiles. Varying standards and procedures concerning the calibration of auditing work may account for the observed complexity. Further, this suggests that, in the absence of professional competency and management support, high-quality audit processes may not consistently enhance audit effectiveness [9].

Across all quantiles, organizational independence consistently demonstrated an inverse relationship with internal audit effectiveness. This finding is intriguing because it challenges certain hypotheses in the field that propose an increase in audit effectiveness with greater independence [14]. The presence of a negative relationship implies that maintaining effective audit operations within a highly autonomous framework is a challenge. This could be due to coordination limitations or a lack of integration with broader organizational processes. Variable outcomes resulted from policy dynamics and leadership changes, with significant adverse effects observed in the tenth and 75th quantiles but no discernible effects in the remaining quantiles. The results suggest that regular modifications in policies and leadership could potentially disrupt audit processes, leading to reduced efficacy, particularly in organizations with moderate or low levels of audit effectiveness [6]. However, the lack of significant effects observed in other quantiles implies that the impact of policy dynamics and leadership changes might be contingent upon specific situations and be influenced by additional organizational factors.

4 Conclusions

This study examines the moderating effects of policy dynamics and leadership changes on the relationship between top management support and internal audit effectiveness. The study concludes by highlighting the importance of senior management support in improving the efficacy of internal audits in public sector organizations in Indonesia. The study found that while auditors' professional competency and the quality of their work have a positive impact, the effectiveness of audits can vary. It also suggests that organizational independence can have a negative effect on audit effectiveness, indicating the challenges in coordinating and integrating within institutions with high degrees of freedom. Policy dynamics and leadership changes can also disrupt audit procedures,

underscoring the need for consistent governance. Therefore, a comprehensive strategy with strong management support, skilled auditors, and a stable policy and leadership setting is necessary to achieve the best possible audit effectiveness.

References

1. Alazzabi WYE, Mustafa H, Karage AI. Risk management, top management support, internal audit activities, and fraud mitigation. *Journal of Financial Crime*. 2020;56(2):1-32
2. Alazzabi WYE, Mustafa H, Karage AI. Risk management, top management support, internal audit activities, and fraud mitigation. *Journal of Financial Crime*. 2023;30(2):569-82.<https://doi.org/10.1108/JFC-11-2019-0147>
3. Vafaei E, Singh H, Scully G, Gilchrist D, Agrawal P. Relational contracting theory and internal audit: Chief audit executives' perspectives on creating and strengthening trust by building credibility and clarity. *International Journal of Auditing*. 2024;28(1):24-43
4. Zada M, Khan J, Saeed I, Zada S, Jun ZY. Linking public leadership with project management effectiveness: Mediating goal clarity and moderating role of top management support. *Heliyon*. 2023;9(5)
5. Pooe JB, Barac K, Plant K, Steyn B. Signalling of internal audit effectiveness. *South African Journal of Accounting Research*. 2022;26(3):1-37
6. Rakipi R, D'Onza G. The involvement of internal audit in environmental, social, and governance practices and risks: Stakeholders' salience and insights from audit committees and chief executive officers. *International Journal of Auditing*. 2023
7. Usman R, Rohman A, Ratmono D. The relationship of internal auditors' characteristics with external auditors' reliance and its impact on audit efficiency: Empirical evidence from Indonesian government institutions. *Cogent Business & Management*. 2023;10(1):2191781
8. Abdelrahim A, Al-Malkawi H-AN. The Influential Factors of Internal Audit Effectiveness: A Conceptual Model. *International Journal of Financial Studies*. 2022;10(3):1-23
9. Roussy M, Barbe O, Raimbault S. Internal audit: from effectiveness to organizational significance. *Managerial Auditing Journal*. 2020;76(2):23-47
10. Islam K, Bhuiyan AB. Determinants of the effectiveness of internal Shariah audit: Evidence from Islamic banks in Bangladesh. *The Journal of Asian Finance, Economics, Business*. 2021;8(2):223-30
11. Ababneh OMA. The impact of organizational culture archetypes on quality performance and total quality management: the role of employee engagement and individual values. *International Journal of Quality & Reliability Management*. 2021;38(6):1387-408
12. Kothari C. *Research methodology methods and techniques*. India: New Age International Limited, Publishers 2020.

13. Alzeban A. CEO characteristics, management support for internal audit and corporate performance: an analysis of listed Malaysian companies. *Managerial Auditing Journal*. 2022;37(1):102-28
14. Islam K, BHUIYAN ABJTJoAF, Economics,, Business. Determinants of the effectiveness of internal Shariah audit: Evidence from Islamic banks in Bangladesh. 2021;8(2):223-30

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

