



Addressing Challenges in Implementing COSO-Based Internal Control in Public Universities

Mengatasi Tantangan dalam Menerapkan Pengendalian Internal Berbasis COSO di Universitas Negeri

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Abstract

This study highlights the challenges faced by public universities in implementing internal control systems based on the COSO framework. Increasing demands for accountability and transparency require institutions to ensure that internal control mechanisms are not only formally established but also effectively applied. This research aims to identify key issues in the implementation of COSO-based internal control and propose practical improvements. A qualitative descriptive approach was employed using data collected from documentation, interviews, and observations. The findings reveal that although internal control practices have been generally established, several challenges persist, including inconsistencies across units, limited responsiveness to emerging risks, and gaps in integrating risk assessment with control activities. This study emphasizes the need for strengthening coordination, improving adaptability, and conducting continuous evaluation to enhance the effectiveness of internal control systems in higher education institutions.

Abstrak

Penelitian ini mengkaji berbagai tantangan yang dihadapi perguruan tinggi dalam mengimplementasikan sistem pengendalian internal berbasis COSO. Peningkatan tuntutan akuntabilitas dan transparansi mendorong institusi untuk memastikan bahwa mekanisme pengendalian internal tidak hanya tersedia secara formal, tetapi juga diterapkan secara efektif. Penelitian ini bertujuan untuk mengidentifikasi permasalahan utama dalam implementasi pengendalian internal berbasis COSO serta merumuskan upaya perbaikan yang bersifat praktis. Metode yang digunakan adalah pendekatan deskriptif kualitatif dengan teknik pengumpulan data melalui studi dokumentasi, wawancara, dan observasi. Hasil penelitian menunjukkan bahwa meskipun praktik pengendalian internal telah diterapkan, masih terdapat berbagai tantangan seperti ketidakkonsistenan antar unit, keterbatasan dalam merespons risiko yang berkembang, serta lemahnya integrasi antara penilaian risiko dan aktivitas pengendalian. Penelitian ini menekankan pentingnya penguatan koordinasi, peningkatan adaptabilitas, serta evaluasi berkelanjutan guna meningkatkan efektivitas sistem pengendalian internal di perguruan tinggi.



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A. INTRODUCTION

1. Background

The escalating fiscal pressures and expanding financial autonomy in public universities have severely tested institutional governance, exposing systemic vulnerabilities in internal control mechanisms. As public sector entities managing state funds, these institutions are legally bound to enforce fiscal discipline, ensuring that resources are administered with absolute transparency and accountability. Deficiencies in internal audits and risk management no longer represent mere non-compliance; they actively trigger operational deficits, commercial debt exposure, and profound reputational damage. Ultimately, these systemic governance failures erode public trust, compromise academic equity, and directly impede the role of higher education as an engine for regional and national economic development.¹

To mitigate these critical institutional threats, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework has shifted from a voluntary benchmark to a regulatory cornerstone for structuring robust internal control systems. Operating through its five interconnected components—control environment, risk assessment, control activities, information and communication, and monitoring—this framework provides an empirical matrix for universities to systematically preempt fraud, secure data integrity, and ensure statutory compliance. By embedding these controls into daily operations, higher education institutions can transition from reactive crisis management to proactive risk mitigation, thereby stabilizing their financial posture and securing long-term strategic objectives.²

Nevertheless, the operational efficacy of the COSO framework remains heavily contested within the public sector, where rigid bureaucratic silos, political interference, and conflicting stakeholder demands routinely impede practical execution. In these highly politicized environments, internal controls are frequently reduced to a symbolic, 'tick-the-box' compliance exercise rather than functioning as a dynamic tool for economic

¹ Wahyu Setio Utomo, "Internal Control Effectiveness, Internal Audit Function, Institutional Complexity, and Audit Opinions as Determinants of Corruption: Evidence from Indonesian Public Sector Institutions," *JEMBA: Jurnal Ekonomi Pembangunan, Manajemen & Bisnis, Akuntansi* 6, no. 1 (April 1, 2026): 49–65, <https://doi.org/10.52300/jemba.v6i1.22983>.

² COSO, "COSO Internal Control" (Amstelveen, 2013), <https://assets.kpmg.com/content/dam/kpmg/pdf/2016/05/2750-New-COSO-2013-Framework-WHITEPAPER-V4.pdf>.

optimization and risk prevention.³

Recent studies have produced differing explanations regarding the factors that influence the success of internal control implementation. Several scholars argue that organizational factors, including management commitment, organizational culture, and human resource competence, play a dominant role in determining internal control effectiveness.⁴ In contrast, other studies emphasize the importance of regulatory arrangements, risk management practices, and information systems integration as key determinants of successful implementation.⁵ These contrasting perspectives indicate that the effectiveness of COSO-based internal control systems cannot be explained solely by individual or organizational characteristics but should also consider the practical interaction among control components within institutional settings.

Furthermore, empirical findings reveal that many organizations formally adopt COSO principles without ensuring their consistent application across operational units. Although control procedures are adequately documented, implementation gaps frequently emerge due to limited coordination, insufficient monitoring, and inadequate integration between risk assessment and control activities.⁶ Such conditions become increasingly challenging in higher education institutions, where dynamic risks associated with digital transformation, governance reforms, and accountability requirements require internal control systems to be more adaptive and responsive. Consequently, the existing literature presents an unresolved debate concerning whether the shortcomings of internal control primarily originate from organizational culture and managerial factors or from deficiencies in governance infrastructure and control processes.

Despite the increasing number of studies on internal control effectiveness, previous research has predominantly focused on identifying determinants such as management support, auditor competence, organizational culture, and technological factors. Relatively

³ Rita Bužinskienė and Aistė Padgureckienė, "Vidaus Kontrolės Sistemos Efektyvumo Vertinimas," *Applied Scientific Research* 4, no. 2 (December 2, 2024): 29–40, <https://doi.org/10.56131/tmt.2024.4.2.324>.

⁴ Arum Ardianingsih et al., "The Determinant of the Effectiveness of Risk-Based Internal Audit," *Risk Governance and Control: Financial Markets and Institutions* 14, no. 3 (August 1, 2024): 39, <https://doi.org/10.22495/rgcv14i3p4>.

⁵ Siti Alya Noviani and Sri Trisnaningsih, "Effectiveness Of The Audit Function As An Internal Control Tool," *International Journal of Economics and Management Research* 3, no. 2 (June 19, 2024): 103–8, <https://doi.org/10.55606/ijemr.v3i2.210>.

⁶ Dewi Puspa Sari and Anggreliya Afrida, "Moral Reasoning Internal Auditor Dukungan Manajemen Senior Dan Motivasi Terhadap Efektivitas Audit Internal Dengan Budaya Organisasi Sebagai Variabel Moderasi," *Balance: Jurnal Akuntansi Dan Bisnis* 6, no. 1 (June 1, 2021): 83–96, <https://doi.org/10.32502/jab.v6i1.4460>.

little attention has been devoted to understanding the practical challenges encountered during the implementation process and the interaction among COSO components in real organizational contexts. This limitation represents an important blind spot in the literature, particularly in the context of public universities where institutional complexity differs substantially from that of business organizations. Unlike previous studies that mainly examine factors influencing internal control effectiveness, this study offers a different perspective by focusing on implementation challenges and identifying gaps between formal control structures and actual practices within public universities. Therefore, the novelty of this study lies in its emphasis on the practical dimension of COSO implementation within higher education institutions.

This study argues that the effectiveness of COSO-based internal control systems in public universities is determined not merely by the existence of formal control mechanisms, but by the extent to which the five COSO components are integrated and implemented consistently across organizational functions. Understanding the implementation challenges and the underlying gaps is essential for developing more adaptive and sustainable governance mechanisms. By providing evidence from the higher education sector, this study contributes to the broader discourse on public sector governance and offers insights into strengthening internal control systems to support institutional accountability and long-term organizational performance.

2. Research Questions

- a. Why do challenges persist in the implementation of COSO based internal control systems in public universities, and what organizational and structural factors contribute to these implementation gaps?
- b. How can the integration and restructuring of the five COSO components be operationalized to address these challenges and enhance the effectiveness of internal control in public universities?

3. Research Methods

This study employed a qualitative approach to investigate the challenges associated with the implementation of COSO-based internal control systems in public universities. A qualitative approach was considered appropriate because it enables an in-depth examination of organizational processes and implementation issues that cannot be adequately captured through quantitative measurements. Furthermore, this approach provides a comprehensive understanding of how organizational and structural factors

influence the effectiveness of internal control practices in higher education institutions.

Primary data were obtained through semi-structured interviews with key informants who are directly involved in internal control and governance processes within the university. These informants include officials from the Internal Audit Unit (SPI), financial management personnel, and other individuals responsible for planning, implementing, and monitoring internal control activities. Secondary data were collected through the analysis of relevant institutional documents, including internal control policies, standard operating procedures, risk management documents, audit reports, and other records related to governance and accountability practices.

Data were analyzed using thematic analysis and triangulation techniques. Interview transcripts, observational findings, and documentary evidence were first reduced and coded to identify recurring themes. The findings were subsequently mapped according to the five components of the COSO framework, namely the control environment, risk assessment, control activities, information and communication, and monitoring. Triangulation among different data sources was conducted to ensure the consistency and credibility of the findings. Through this process, the study identifies implementation gaps and examines how the interaction among COSO components contributes to the effectiveness of internal control systems in public universities.

B. DISCUSSION

1. Persistent Implementation Gaps and Organizational Incentive Problems

The findings indicate that implementation gaps in COSO-based internal control systems persist across organizational units within public universities. Although formal policies and procedures have been established, their practical application varies considerably depending on the commitment, understanding, and priorities of individual units. Consequently, internal control mechanisms tend to function unevenly, resulting in differences in the quality and consistency of control activities. Rather than reflecting isolated operational deficiencies, these inconsistencies suggest the existence of deeper organizational and structural problems that hinder the substantive implementation of internal control systems.⁷

From the perspective of Agency Theory, these implementation gaps can be explained by the existence of information asymmetry and divergent interests between

⁷ COSO, "COSO Internal Control."

university management and organizational units. University leaders, acting as principals, expect faculties and administrative units as agents to implement internal control mechanisms consistently. However, imperfect monitoring and limited incentive structures may encourage units to focus primarily on administrative compliance rather than on achieving effective control outcomes. As a result, internal control practices are often perceived merely as procedural obligations instead of strategic instruments for improving governance and accountability.⁸

These findings are consistent with previous studies emphasizing the importance of management support, organizational culture, and auditor competence in determining the effectiveness of internal control systems. Sari and Afrida demonstrated that organizational factors significantly influence internal control effectiveness, while Dewi Puspa and Anggrelia highlighted the roles of senior management support and organizational culture in strengthening internal audit performance. Likewise, Marlina and Fury Khristianty found that top management commitment and auditor professionalism contribute positively to internal control effectiveness.⁹ Nevertheless, the present findings extend these arguments by suggesting that the persistence of implementation gaps is not solely attributable to managerial commitment or individual competencies. Rather, structural incentive problems and principal-agent relationships also shape the way internal control systems are interpreted and implemented across organizational units.

From a broader public governance perspective, persistent implementation gaps may generate administrative inefficiencies and weaken the effective allocation of public resources. Differences in the interpretation and application of control procedures can result in duplicated processes, inconsistent monitoring mechanisms, and inefficient use of organizational resources. Such conditions may reduce institutional performance and undermine the accountability expected from publicly funded higher education institutions. Therefore, the challenge of implementing COSO-based internal control systems should not be viewed merely as an internal managerial issue, but also as a governance concern with implications for the efficiency and sustainability of public resource management.¹⁰

⁸ Michael C. Jensen and William H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *Journal of Financial Economics* 3, no. 4 (October 1976): 305–60, [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X).

⁹ Ardianingsih et al., "The Determinant of the Effectiveness of Risk-Based Internal Audit."

¹⁰ Ardianingsih et al.

2. Limited Risk Responsiveness and Adaptive Governance Challenges

Another challenge identified in the implementation of COSO-based internal control systems is the limited responsiveness of risk assessment mechanisms to emerging and dynamic risks. Although risk assessment procedures have been formally established, they remain predominantly focused on routine and compliance-related issues. Consequently, risk management practices tend to be reactive rather than anticipatory, limiting the institution's ability to address uncertainties arising from regulatory changes, technological developments, and increasing demands for transparency and accountability.¹¹

From the perspective of adaptive governance, this condition reflects the limited capacity of public institutions to continuously adjust their control mechanisms in response to a rapidly changing environment. Risk management processes are often conducted periodically and are not fully integrated into strategic decision-making. As a result, internal control systems may lag behind actual organizational risks. This finding also aligns with the principles of New Public Management, which emphasize flexibility, performance orientation, and continuous monitoring as essential elements of effective public sector governance.¹² In contrast, rigid administrative procedures and fragmented information systems may constrain the ability of universities to develop more proactive and data-driven approaches to risk management.

The present findings support previous studies suggesting that the effectiveness of internal control systems depends on the ability of institutions to integrate risk assessment into operational activities. Alya Noviani and Trisnaningsih found that the relationship between risk assessment and control activities remains one of the major determinants of internal control effectiveness. Likewise, Ardianingsih et al. emphasized that weaknesses in implementation often arise not from the absence of formal procedures, but from the inability of organizations to adapt their control mechanisms to evolving circumstances. These findings complement the broader international literature, which argues that public institutions increasingly require dynamic governance arrangements to manage complex risks and maintain organizational resilience.

¹¹ COSO, "COSO Internal Control."

¹² OECD, *OECD Public Governance Reviews: Czech Republic*, OECD Public Governance Reviews (OECD Publishing, 2023), <https://doi.org/10.1787/41fd9e5c-en>.

At the macro level, limited responsiveness to emerging risks may affect the efficiency of public resource allocation and reduce institutional performance. Delays in identifying and mitigating strategic risks can lead to ineffective decision-making, duplication of activities, and inefficient utilization of resources. Compared with public universities in several OECD countries that have adopted New Public Management principles and technology-based monitoring systems, many higher education institutions in developing countries continue to rely on periodic and compliance-oriented approaches. Consequently, strengthening adaptive governance capacities and promoting continuous risk monitoring are essential to ensure that internal control systems contribute not only to regulatory compliance but also to the efficient and sustainable management of public resources.¹³

3. Institutional Isomorphism and Weak Integration Between Risk Assessment and Control Activities

The findings reveal that the relationship between risk assessment and control activities remains insufficiently integrated, despite the formal adoption of COSO principles within public universities. Although risk identification processes are generally implemented, the resulting control activities are often standardized and procedural rather than specifically designed to address identified risks. Consequently, control mechanisms may formally exist without effectively mitigating the actual risks faced by organizational units.

This phenomenon can be interpreted through the lens of Institutional Theory, particularly the concept of institutional isomorphism proposed by DiMaggio and Powell. Public institutions frequently adopt governance frameworks and management practices not solely to improve efficiency, but also to gain legitimacy and demonstrate compliance with external expectations.¹⁴ In this context, the implementation of COSO-based internal control systems may exhibit ceremonial characteristics, where policies and procedures are formally established to satisfy regulatory requirements and institutional expectations, while their substantive integration into operational activities remains limited. As a result,

¹³ Nadirsyah, Mirna Indriani, and Ratna Mulyany, "Enhancing Fraud Prevention and Internal Control: The Key Role of Internal Audit in Public Sector Governance," *Cogent Business & Management* 11, no. 1 (December 31, 2024), <https://doi.org/10.1080/23311975.2024.2382389>.

¹⁴ Paul J. DiMaggio and Walter W. Powell, "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," *American Sociological Review* 48, no. 2 (April 1983): 147, <https://doi.org/10.2307/2095101>.

risk assessment and control activities tend to operate as separate processes rather than as interconnected components of a comprehensive internal control system.

These findings complement previous studies that emphasize the importance of risk assessment and control activities in determining internal control effectiveness.¹⁵ Alya Noviani and Trisnaningsih argued that stronger integration between risk management and control mechanisms contributes significantly to the effectiveness of internal control systems. Similarly, Ardianingsih et al. highlighted that implementation failures often arise from inconsistencies between formal procedures and actual practices. However, the present study extends these arguments by suggesting that such inconsistencies may also reflect institutional pressures and legitimacy-seeking behavior, which encourage organizations to prioritize formal compliance over substantive efficiency.

From a public sector economics perspective, weak integration between risk assessment and control activities may lead to the inefficient allocation of organizational resources. Control activities that are not aligned with actual risks may generate redundant procedures, unnecessary administrative costs, and ineffective monitoring mechanisms. In the long term, these inefficiencies may undermine institutional performance and reduce the effectiveness of public expenditure allocated to higher education institutions. Compared with universities in several OECD countries that have embraced New Public Management principles and risk-based governance approaches, public universities in developing countries often continue to emphasize compliance-oriented mechanisms. Therefore, strengthening the substantive integration between risk assessment and control activities is essential to ensure that internal control systems function not merely as instruments of legitimacy, but also as mechanisms for improving efficiency, accountability, and the sustainable management of public resources.

4. Restructuring COSO Components Through Incentive Based Governance

The findings suggest that improving the effectiveness of COSO-based internal control systems requires more than the existence of formal policies and periodic evaluations. Persistent implementation gaps, limited risk responsiveness, and weak integration between risk assessment and control activities indicate that internal control challenges are rooted not only in technical issues but also in organizational incentives and

¹⁵ Camelia Negri and Gheorghita Dincă, "Public Sector's Efficiency as a Reflection of Governance Quality, an European Union Study," ed. Javier Cifuentes-Faura, *PLOS ONE* 18, no. 9 (September 8, 2023): e0291048, <https://doi.org/10.1371/journal.pone.0291048>.

governance arrangements. Therefore, addressing these challenges requires a restructuring of the interaction among the five COSO components to ensure that internal control mechanisms are implemented substantively rather than merely symbolically.

From the perspective of New Public Management, effective governance depends on the establishment of performance-oriented and results-based management systems. Consequently, strengthening internal control systems should involve integrating risk assessment processes into strategic planning and operational decision-making, enhancing information and communication mechanisms through technology-based monitoring systems, and reinforcing monitoring activities through continuous performance evaluation. Such measures may improve coordination among organizational units and promote greater alignment between identified risks and corresponding control activities.¹⁶

In addition, the findings indicate that relying solely on moral appeals and organizational culture may be insufficient to ensure the substantive implementation of internal control systems. Instead, incentive-based governance mechanisms should be developed to encourage organizational units to internalize COSO principles. Performance indicators related to internal control effectiveness may be incorporated into institutional evaluation systems, while risk-based budgeting mechanisms can strengthen the relationship between resource allocation and accountability.¹⁷ Furthermore, clearer sanctions and reward structures may create stronger incentives for organizational units to implement internal control procedures consistently and effectively.

From a broader public governance perspective, restructuring COSO components through incentive-based mechanisms has the potential to improve the efficiency of public resource utilization and strengthen accountability within higher education institutions. Public universities in several OECD countries have increasingly adopted performance-based governance and continuous monitoring approaches to ensure that internal control systems contribute to organizational effectiveness rather than merely fulfilling regulatory requirements.¹⁸ Therefore, strengthening the substantive integration among COSO

¹⁶ Christopher Hood, "A Public Management for All Seasons?," *Public Administration* 69, no. 1 (March 3, 1991): 3–19, <https://doi.org/10.1111/j.1467-9299.1991.tb00779.x>.

¹⁷ Erni Qomariyah and Ninik Endang Purwati, "Performance Accountability System of Government Institutions: A Key to Achieving Good Governance," *International Journal of Research in Social Science and Humanities* 04, no. 12 (2023): 37–44, <https://doi.org/10.47505/IJRSS.2023.V4.12.4>.

¹⁸ OECD, *The Financial Sustainability of Higher Education*, Higher Education (OECD Publishing, 2025), <https://doi.org/10.1787/f544ccfe-en>.

components should be viewed not only as an internal managerial reform but also as part of a broader effort to enhance governance quality and ensure the sustainable management of public resources in higher education institutions.

Following the discussion above, the restructuring of COSO components should be viewed not only from the perspective of compliance but also from the standpoint of governance efficiency and accountability. The findings indicate that weaknesses in the implementation of internal control systems are associated with different forms of organizational inefficiency, which may ultimately affect the effective utilization of public resources. To summarize these relationships, Table 1 presents the linkage between the five COSO components, the implementation gaps identified, and their potential implications for public governance and resource management.

Table 1. Mapping of COSO Components, Implementation Gaps, and Economic Implications

COSO Component	Identified Implementation Gap	Form of Economic Inefficiency	Implications for Public Governance and Resource Management
Control Environment	Uneven commitment and varying levels of understanding across organizational units	Administrative inefficiency and inconsistent implementation	Reduced organizational performance and weakened accountability mechanisms
Risk Assessment	Limited responsiveness to emerging and dynamic risks	Delayed risk identification and inefficient risk mitigation	Inefficient allocation of resources and lower institutional resilience
Control Activities	Weak alignment between identified risks and control mechanisms	Redundant procedures and ineffective controls	Potential waste of public expenditure and reduced operational efficiency
Information and Communication	Fragmented information flows and limited integration of information	Information asymmetry and delays in decisionmaking	Poor coordination and lower governance quality
Monitoring	Periodic rather than continuous evaluation processes	Delayed corrective actions and weak feedback mechanisms	Reduced transparency and diminished effectiveness of institutional oversight

Source: processed by the author (2026)

The analytical matrix demonstrates that implementation challenges within each COSO component are interconnected and may collectively undermine the efficiency and accountability of public universities. Therefore, improving internal control systems requires not only technical adjustments within individual components but also a more integrated and incentive-based governance approach. Such an approach may enhance the capacity of public universities to utilize public resources more efficiently while strengthening institutional accountability and governance effectiveness.

C. CONCLUSIONS

This study demonstrates that the persistence of challenges in implementing COSO-based internal control systems in public universities is influenced not only by technical issues but also by organizational incentive problems, limited adaptive governance capacities, and weak integration between risk assessment and control activities. The findings suggest that formal adoption of internal control mechanisms does not necessarily guarantee their substantive effectiveness, as implementation is often shaped by institutional pressures and compliance-oriented practices. Consequently, improving internal control effectiveness requires restructuring the interaction among the five COSO components through more integrated and incentive-based governance arrangements. These findings contribute to the broader discourse on public sector governance by emphasizing that strengthening internal control systems is essential for promoting accountability and enhancing the efficiency of public resource management in higher education institutions.

REFERENCES

- Ardianingsih, Arum, Doddy Setiawan, Payamta Payamta, Wahyu Widarjo, and Juandy Seiver Langelo. "The Determinant of the Effectiveness of Risk-Based Internal Audit." *Risk Governance and Control: Financial Markets and Institutions* 14, no. 3 (August 1, 2024): 39. <https://doi.org/10.22495/rgcv14i3p4>.
- Bužinskienė, Rita, and Aistė Padgureckienė. "Vidaus Kontrolės Sistemos Efektyvumo Vertinimas." *Applied Scientific Research* 4, no. 2 (December 2, 2024): 29–40. <https://doi.org/10.56131/tmt.2024.4.2.324>.
- COSO. "COSO Internal Control." Amstelveen, 2013. <https://assets.kpmg.com/content/dam/kpmg/pdf/2016/05/2750-New-COSO-2013-Framework-WHITEPAPER-V4.pdf>.
- DiMaggio, Paul J., and Walter W. Powell. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48, no. 2 (April 1983): 147. <https://doi.org/10.2307/2095101>.

- Hood, Christopher. "A Public Management for All Seasons?" *Public Administration* 69, no. 1 (March 3, 1991): 3–19. <https://doi.org/10.1111/j.1467-9299.1991.tb00779.x>.
- Jensen, Michael C., and William H. Meckling. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics* 3, no. 4 (October 1976): 305–60. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X).
- Nadirsyah, Mirna Indriani, and Ratna Mulyany. "Enhancing Fraud Prevention and Internal Control: The Key Role of Internal Audit in Public Sector Governance." *Cogent Business & Management* 11, no. 1 (December 31, 2024). <https://doi.org/10.1080/23311975.2024.2382389>.
- Negri, Camelia, and Gheorghița Dincă. "Public Sector's Efficiency as a Reflection of Governance Quality, an European Union Study." Edited by Javier Cifuentes-Faura. *PLOS ONE* 18, no. 9 (September 8, 2023): e0291048. <https://doi.org/10.1371/journal.pone.0291048>.
- Noviani, Siti Alya, and Sri Trisnaningsih. "Effectiveness Of The Audit Function As An Internal Control Tool." *International Journal of Economics and Management Research* 3, no. 2 (June 19, 2024): 103–8. <https://doi.org/10.55606/ijemr.v3i2.210>.
- OECD. *OECD Public Governance Reviews: Czech Republic*. OECD Public Governance Reviews. OECD Publishing, 2023. <https://doi.org/10.1787/41fd9e5c-en>.
- . *The Financial Sustainability of Higher Education*. Higher Education. OECD Publishing, 2025. <https://doi.org/10.1787/f544ccfe-en>.
- Qomariyah, Erni, and Ninik Endang Purwati. "Performance Accountability System of Government Institutions:A Key to Achieving Good Governance." *International Journal of Research in Social Science and Humanities* 04, no. 12 (2023): 37–44. <https://doi.org/10.47505/IJRSS.2023.V4.12.4>.
- Sari, Dewi Puspa, and Anggrelia Afrida. "Moral Reasoning Internal Auditor Dukungan Manajemen Senior Dan Motivasi Terhadap Efektivitas Audit Internal Dengan Budaya Organisasi Sebagai Variabel Moderasi." *Balance : Jurnal Akuntansi Dan Bisnis* 6, no. 1 (June 1, 2021): 83–96. <https://doi.org/10.32502/jab.v6i1.4460>.
- Utomo, Wahyu Setio. "Internal Control Effectiveness, Internal Audit Function, Institutional Complexity, and Audit Opinions as Determinants of Corruption: Evidence from Indonesian Public Sector Institutions." *JEMBA: Jurnal Ekonomi Pembangunan, Manajemen & Bisnis, Akuntansi* 6, no. 1 (April 1, 2026): 49–65. <https://doi.org/10.52300/jemba.v6i1.22983>.