Internal Control Effectiveness, Internal Audit Function, Institutional Complexity, and Audit Opinions as Determinants of Corruption: Evidence from Indonesian Public Sector Institutions

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ABSTRACT

This study aims to examine the influence of governance mechanisms on corruption cases in Indonesian ministries and government agencies. Specifically, it investigates the effect of internal control effectiveness, internal audit role, institutional size, institutional complexity, and audit opinion on the likelihood of corruption. The study employs a quantitative approach using secondary data collected from official reports published by Komisi Pemberantasan Korupsi, Badan Pemeriksa Keuangan Republik Indonesia, and Badan Pengawasan Keuangan dan Pembangunan over the period 2018–2022. The final sample consists of 405 observations derived from 81 ministries and government agencies selected using purposive sampling. Binary logistic regression is applied to analyze the relationship between the independent variables and corruption cases, which are measured as a dichotomous variable based on finalized legal decisions. The results reveal that internal control effectiveness, internal audit role, institutional size, and institutional complexity have a positive and statistically significant effect on corruption cases. These findings indicate that weaknesses in governance mechanisms and increased organizational scale and complexity are associated with a higher likelihood of corruption. Among the variables, the internal audit role demonstrates the strongest influence, highlighting its critical function in detecting and preventing irregularities. In contrast, audit opinion does not show a statistically significant effect on corruption, suggesting that formal financial reporting assessments may not fully capture underlying corruption dynamics. This finding implies that audit outcomes alone are insufficient to serve as reliable indicators of corruption risk in the public sector. This study contributes to the literature by providing updated empirical evidence on corruption determinants in Indonesian public institutions using recent data and improved variable measurement. The findings offer important policy implications for strengthening governance systems, particularly in enhancing internal control and internal audit effectiveness. Future research is encouraged to incorporate more comprehensive datasets and explore additional governance variables to better understand corruption dynamics.

INTRODUCTION

Corruption remains a persistent and systemic challenge in many developing countries, particularly within the public sector where governance structures are often vulnerable to inefficiencies and abuse of power. In this context, Transparency International provides a widely accepted benchmark through the Corruption Perceptions Index (CPI), which measures perceived levels of corruption across countries. In 2022, Indonesia recorded a CPI score of 34 on a scale ranging from 0 (highly corrupt) to 100 (very clean), indicating a relatively high

level of corruption. This score positions Indonesia among the more corruption-prone countries in Southeast Asia and below the global average of 43. Such findings highlight the urgency of strengthening governance systems and enhancing accountability mechanisms in Indonesian public institutions.

Empirical findings from Indonesian Corruption Watch further reveal the widespread nature of corruption within government institutions. Between 2016 and 2021, corruption cases involved at least 83 mid-level officials, 76 employees, and 51 directors within ministries and government agencies. Additionally, approximately 40 individuals categorized under other occupational backgrounds were also implicated in corruption cases. These findings indicate that corruption is not limited to a particular hierarchical level but rather permeates across organizational structures. Therefore, corruption in the public sector should be understood as a systemic issue requiring comprehensive institutional reform.

The persistence of corruption cases in Indonesian ministries and government agencies raises critical concerns regarding the effectiveness of internal governance mechanisms. Despite regulatory frameworks and institutional reforms, corruption continues to occur, suggesting that existing control systems may not function optimally. This condition implies potential weaknesses in monitoring, supervision, and enforcement processes within public sector organizations. Moreover, institutional complexity may exacerbate coordination challenges and reduce the effectiveness of oversight mechanisms. Consequently, it is necessary to investigate the determinants of corruption within the context of public sector governance.

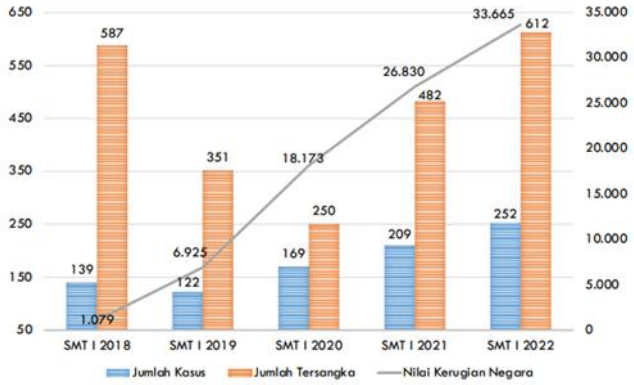

Figure 1. Trend of Corruption Case Enforcement in the First Semester of 2018–2022
(Source: Indonesian Corruption Watch, www.antikorupsi.org)

The figure illustrates the trend of corruption case enforcement over the period 2018–2022, reflecting fluctuations in the number of cases handled by authorities. These variations may indicate changes in enforcement intensity, reporting mechanisms, or actual incidence rates of corruption. The observed trend also suggests that corruption remains a recurring issue despite ongoing anti-corruption efforts. This reinforces the need for more effective governance instruments to reduce corruption risks. Therefore, understanding the institutional factors that influence corruption is essential for improving public sector integrity.

From a theoretical standpoint, good governance is supported by three fundamental pillars: supervision, control, and audit, as emphasized by Mardiasmo. These elements play a

crucial role in ensuring transparency, accountability, and efficiency in public sector management. In this study, these governance dimensions are represented by internal control systems, internal audit functions, and audit-related variables. Internal control systems are designed to prevent irregularities, while internal audits provide assurance and recommendations for improving organizational processes. Meanwhile, audit opinions reflect the quality of financial reporting and compliance with applicable standards.

This study builds upon and extends prior research conducted by Nurhasanah, which examined the relationship between internal control effectiveness, internal audit roles, and corruption cases in Indonesian ministries. The previous study utilized proxies such as audit findings from the Supreme Audit Institution reports and internal audit characteristics. However, the scope of the data was limited to the period 2012–2014, which may not fully capture recent developments in governance practices. Furthermore, the measurement of variables relied on relatively limited indicators, leaving room for refinement and expansion. Therefore, a more updated and comprehensive analysis is needed to provide stronger empirical evidence.

This research introduces several key contributions that distinguish it from prior studies. First, it employs logistic regression analysis, which is considered more appropriate for handling categorical dependent variables related to corruption cases. Second, the study utilizes more recent data covering the period 2018–2022, thereby providing a more aĸtyal and relevant analysis of current conditions. Third, it incorporates audit opinion as an additional variable, recognizing its importance in reflecting financial accountability and governance quality. Fourth, the measurement of internal control effectiveness is expanded to include both internal control system findings and compliance with laws and regulations, offering a more comprehensive proxy.

In addition, the role of internal audit is measured using the internal audit maturity level based on performance reports, which provides a more robust and qualitative assessment compared to previous proxies. The size of ministries and government agencies is measured using budget realization percentages, rather than nominal values, to better reflect operational scale and efficiency. Furthermore, this study excludes variables such as auditor authority level and internal audit size to focus on more impactful governance factors. These methodological refinements are expected to enhance the explanatory power of the model. Ultimately, this study aims to provide deeper insights into the determinants of corruption in Indonesian public sector institutions and contribute to the development of more effective anti-corruption strategies.

LITERATURE REVIEW

Corruption

Corruption is broadly defined as the abuse of public office for private gain, a concept that has been widely discussed in governance and public administration literature. Robert Klitgaard conceptualizes corruption as a deviation from official duties driven by personal benefits, including financial gain, status, or group interests. This definition highlights the interaction

between authority and opportunistic behavior in institutional settings. Furthermore, corruption is often linked to monopolistic power combined with weak accountability and transparency mechanisms (Klitgaard, 2005; Rose-Ackerman, 1999). As such, corruption is not merely an individual moral failure but a systemic governance issue.

The theoretical foundation for understanding corruption behavior is strongly influenced by the Fraud Triangle Theory introduced by Donald R. Cressey. This theory posits that fraud occurs due to the interaction of three elements: pressure, opportunity, and rationalization (Cressey, 1950). Pressure may arise from financial needs or perceived incentives, while opportunity is often linked to weak internal controls and ineffective oversight mechanisms. Rationalization allows individuals to justify unethical behavior, thereby reducing psychological resistance. This framework remains widely used in explaining corruption in both public and private sectors (Albrecht et al., 2012; Dorminey et al., 2012).

Empirical studies have demonstrated that corruption is influenced by both institutional and behavioral factors. Weak governance systems, lack of transparency, and ineffective monitoring increase the likelihood of corruption (Jain, 2001; Treisman, 2007). In addition, organizational culture and ethical climate play significant roles in shaping individual behavior within institutions (Kaptein, 2011). Public sector corruption is particularly complex due to bureaucratic structures and multi-layered decision-making processes. Therefore, addressing corruption requires a multidimensional approach that integrates structural reforms and behavioral interventions.

Recent literature also emphasizes the importance of accountability and governance mechanisms in mitigating corruption risks. Strengthening institutional controls, enhancing audit functions, and improving transparency are considered effective strategies in reducing corruption (Mungiu-Pippidi, 2015; OECD, 2020). In the context of developing countries, corruption tends to persist due to institutional weaknesses and enforcement gaps. Consequently, empirical research is needed to examine how governance variables influence corruption in specific institutional settings. This study contributes to the literature by focusing on Indonesian ministries and government agencies.

Internal Control Effectiveness

Internal control is a fundamental component of organizational governance, designed to ensure efficiency, reliability of financial reporting, and compliance with regulations. According to Committee of Sponsoring Organizations of the Treadway Commission, internal control consists of five key elements: control environment, risk assessment, control activities, information and communication, and monitoring. These components collectively aim to minimize risks and prevent irregularities within organizations. In the public sector, internal control systems are essential for safeguarding public resources. Effective implementation of these controls significantly reduces opportunities for fraud and corruption (COSO, 2013; Romney & Steinbart, 2018).

In the Indonesian context, government internal control systems are regulated under Government Regulation No. 60 of 2008, which defines internal control as a continuous process carried out by leadership and employees. The regulation emphasizes accountability,

transparency, and compliance in achieving organizational objectives. A well-functioning internal control system ensures that financial and operational activities are conducted in accordance with established policies. Conversely, weak controls increase the likelihood of mismanagement and corruption. Therefore, internal control effectiveness is a critical determinant of governance quality.

Empirical research supports the negative relationship between internal control effectiveness and corruption. Organizations with strong internal controls tend to experience fewer instances of fraud and financial irregularities (Doyle et al., 2007; Ashbaugh-Skaife et al., 2008). Audit findings related to internal control weaknesses often indicate higher risks of corruption. In this regard, the number of audit findings can be used as a proxy for internal control effectiveness. A higher number of findings suggests weaker controls and greater vulnerability to corruption.

Internal Audit Role

Internal audit plays a vital role in enhancing organizational governance by providing assurance and consulting services. According to the Institute of Internal Auditors, internal audit helps organizations achieve objectives by evaluating and improving risk management, control, and governance processes. In the public sector, internal auditors are responsible for ensuring compliance with regulations and identifying potential risks. Their role extends beyond detection to the prevention of fraud and corruption. Effective internal audit functions contribute to improved accountability and transparency (IIA, 2017; Arena & Azzone, 2009).

In Indonesia, internal audit is conducted by the government's internal supervisory apparatus, including Badan Pengawasan Keuangan dan Pembangunan (BPKP) and inspectorates. These institutions are responsible for auditing, reviewing, and monitoring government activities. The effectiveness of internal audit is often measured through maturity levels, which reflect the capability of audit functions in managing risks and detecting fraud. Higher maturity levels indicate more advanced audit practices. Consequently, internal audit maturity serves as an important indicator of audit effectiveness.

Previous studies indicate that effective internal audit functions reduce the likelihood of fraud and corruption. Internal auditors play a proactive role in identifying weaknesses and recommending improvements (Coram et al., 2008; Cohen & Sayag, 2010). Additionally, strong internal audit functions enhance organizational integrity by promoting ethical behavior. However, ineffective audit functions may fail to detect irregularities promptly. This highlights the importance of strengthening internal audit capabilities.

Institutional Size and Complexity

Organizational size is an important factor influencing governance and corruption risks. Larger organizations tend to have more complex structures, which may increase coordination challenges and reduce monitoring effectiveness (Herbert A. Simon; Blau, 1970). In the public sector, the size of ministries and agencies can be measured through budget allocation, number of employees, and operational scope. Larger institutions typically manage more resources,

increasing the potential for mismanagement. Therefore, organizational size is often associated with higher corruption risks.

Institutional complexity refers to the degree of structural differentiation and operational diversity within an organization. Complex organizations often face difficulties in maintaining effective internal controls and coordination (Lawrence & Lorsch, 1967). In government institutions, complexity arises from multiple units, hierarchical layers, and diverse functions. This complexity may create information asymmetry and reduce transparency. As a result, opportunities for corruption may increase.

Empirical evidence suggests that larger and more complex organizations are more prone to corruption. Increased budget size and operational scope provide greater opportunities for resource misuse (Goel & Nelson, 2011; Fan et al., 2009). Additionally, complex structures may weaken accountability mechanisms. In the Indonesian public sector, ministries with higher budget realization and more work units tend to face greater governance challenges. Therefore, both size and complexity are critical variables in explaining corruption.

Audit Opinion

Audit opinion represents an independent assessment of the fairness of financial statements. According to Badan Pemeriksa Keuangan Republik Indonesia, audit opinions are classified into unqualified, qualified, adverse, and disclaimer opinions. These opinions reflect the extent to which financial reports comply with applicable standards. A favorable audit opinion indicates high-quality financial reporting and compliance. Conversely, unfavorable opinions suggest potential issues in financial management.

Audit opinions serve as an important signal of organizational accountability and transparency. High-quality financial reporting reduces information asymmetry and enhances stakeholder trust (DeFond & Zhang, 2014). In the public sector, audit opinions are closely linked to governance quality. Institutions receiving unqualified opinions are generally considered to have better financial management practices. Therefore, audit opinion can be used as an indicator of corruption risk.

Previous studies have found that better audit opinions are associated with lower levels of corruption. Strong financial reporting and compliance reduce opportunities for fraud (Chan & Jaggi, 2000; Liu & Lin, 2012). Conversely, poor audit opinions may indicate weaknesses in internal control and governance. These weaknesses can increase the likelihood of corruption. Thus, audit opinion plays a crucial role in corruption prevention

METHODS

Research Design

This study employs a quantitative research design with a causal approach to examine the relationships between governance variables and corruption cases in Indonesian public sector institutions. The causal approach is used to identify and test the effect of independent variables on the dependent variable, allowing for hypothesis testing within a structured analytical

framework. The study relies on secondary data obtained from official government reports and institutional publications. Such an approach is widely adopted in empirical accounting and public sector research due to its ability to provide objective and measurable evidence. Therefore, this research aims to analyze the determinants of corruption using observable and verifiable data sources.

Population and Sample

The population of this study consists of Indonesian ministries and government agencies whose financial statements were audited over a five-year period from 2018 to 2022. In total, 448 institutional observations were identified across the study period, reflecting variations in the number of audited entities each year. The sampling technique employed is purposive sampling, based on the criterion that institutions must have complete and consistently audited financial reports for five consecutive years. Based on this criterion, 81 ministries and government agencies were selected. Consequently, the final sample consists of 405 observations (81 institutions × 5 years), which ensures data consistency and comparability across the study period.

Table 1. Research Sample Selection

Description	2018	2019	2020	2021	2022
Audited Ministries/Agencies	91	89	89	90	89
Not Audited	10	8	8	9	8
Final Sample	81	81	81	81	81

Source: Processed by the author

Variable Measurement

The dependent variable in this study is corruption, which is operationalized as the occurrence of legally confirmed corruption cases (inkracht) within ministries and government agencies. The concept of corruption follows Robert Klitgaard, who defines it as the abuse of public office for private gain. The variable is measured using a binary scale, where the presence of corruption cases is coded as 1 and the absence as 0. This measurement approach is consistent with prior empirical studies examining corruption using categorical outcomes. It also justifies the use of logistic regression as the primary analytical method.

The independent variables include internal control effectiveness, internal audit role, institutional size, institutional complexity, and audit opinion. Internal control effectiveness is measured using the number of audit findings related to internal control weaknesses and non-compliance with regulations. The role of internal audit is proxied by the maturity level of the Government Internal Control System (SPIP), reflecting the capability of internal audit functions. Institutional size is measured using the percentage of budget realization, which represents the operational scale of ministries and agencies. Institutional complexity is proxied by the number of work units, indicating the level of organizational differentiation.

Audit opinion is measured based on the classification issued by Badan Pemeriksa

Keuangan Republik Indonesia, including unqualified, qualified, adverse, and disclaimer opinions. For analytical purposes, audit opinion is transformed into a dummy variable, where unqualified opinion (WTP) is coded as 1 and non-unqualified opinions are coded as 0. This classification reflects the quality of financial reporting and compliance with accounting standards. Overall, the selected variables are consistent with governance and auditing literature. They are expected to capture key institutional factors influencing corruption.

Data Collection

This study utilizes secondary data collected through documentation techniques from official and publicly accessible sources. Data on corruption cases are obtained from the official reports of Komisi Pemberantasan Korupsi, specifically cases that have reached final legal status (inkracht). Data on internal control effectiveness and compliance findings are sourced from the Summary of Audit Reports published by the Supreme Audit Institution. Information on internal audit maturity levels is obtained from performance reports issued by Badan Pengawasan Keuangan dan Pembangunan. Meanwhile, data on budget realization, number of work units, and audit opinions are collected from audited financial reports of ministries and government agencies.

The use of multiple official data sources enhances the reliability and validity of the dataset. Additionally, all data are collected for the same observation period (2018–2022), ensuring temporal consistency. The documentation method allows for systematic data collection without direct intervention from the researcher. This approach is particularly suitable for studies involving institutional-level analysis. Therefore, the dataset is considered robust for empirical testing.

Data Analysis Technique

This study employs binary logistic regression analysis to examine the effect of independent variables on corruption. Logistic regression is appropriate because the dependent variable is dichotomous in nature. The model estimates the probability of corruption occurrence based on the explanatory variables. The general form of the logistic regression model is presented as follows:

$$\ln\left(\frac{P}{1-P}\right) = \beta_0 + \beta_1 IC + \beta_2 IA + \beta_3 SIZE + \beta_4 COMP + \beta_5 AO$$

where *P* represents the probability of corruption occurrence, *IC* denotes internal control effectiveness, *IA* represents internal audit role, *SIZE* indicates institutional size, *COMP* refers to institutional complexity, and *AO* represents audit opinion.

The analysis is conducted using statistical software, and all variables are entered simultaneously using the enter method. Model evaluation includes overall model fit (-2 Log Likelihood), goodness-of-fit test (Hosmer–Lemeshow), and explanatory power (Nagelkerke R Square). Additionally, classification accuracy is assessed using a classification matrix.

Hypothesis testing is conducted using the Wald test for individual variables and omnibus tests for overall model significance. A significance level of 5% is applied in all statistical tests.

RESULTS AND DISCUSSION

Model Goodness-of-Fit

The goodness-of-fit of the logistic regression model was evaluated using the Hosmer–Lemeshow test. The null hypothesis (H_0) states that there is no significant difference between the observed and predicted values, indicating that the model fits the data well. Conversely, the alternative hypothesis (H_1) suggests that the model does not fit the data. As presented in Table 2, the Hosmer–Lemeshow test yields a chi-square value of 12.172 with a significance level of 0.144. Since the p-value exceeds the significance threshold of 0.05, the null hypothesis cannot be rejected.

Table 2. Hosmer–Lemeshow Goodness-of-Fit Test

Step	Chi-square	df	Sig.
1	12.172	8	0.144

Source: Processed SPSS Output (2024)

The results presented in Table 2 indicate that the logistic regression model demonstrates a good fit with the observed data. The significance value of 0.144, which is higher than the 0.05 threshold, confirms that there is no statistically significant difference between observed and predicted values. This implies that the model is capable of adequately representing the underlying data structure. A well-fitted model suggests that the selected independent variables are relevant in explaining the dependent variable. Furthermore, this result provides a strong foundation for proceeding with further statistical analysis and hypothesis testing.

Classification Accuracy

The predictive accuracy of the model was assessed using the classification table. As shown in Table 3, the overall classification accuracy reaches 82.7%, indicating that the model performs well in distinguishing between institutions with and without corruption cases. The model demonstrates a high accuracy rate in predicting non-corruption cases (99.1%), but relatively low accuracy in predicting corruption cases (5.6%). This imbalance suggests that while the model is effective in identifying non-corrupt institutions, it has limited capability in detecting actual corruption occurrences.

Table 3. Classification Table

Observed	Predicted (0)	Predicted (1)	Percentage Correct
0 (No Corruption)	331	3	99.1%
1 (Corruption)	67	4	5.6%
Overall Percentage			82.7%

Source: Processed SPSS Output (2024)

The classification results reveal that the model has strong predictive power for non-corruption cases but performs poorly in identifying corruption cases. The very high accuracy for non-corruption observations (99.1%) indicates that the model is highly reliable in predicting institutions without corruption incidents. However, the low accuracy rate for corruption cases (5.6%) suggests a potential imbalance in the dataset, where non-corruption observations dominate. This imbalance may lead to biased predictions, reducing the model's sensitivity in detecting actual corruption events. Therefore, while the overall accuracy appears high, caution is needed in interpreting the model's predictive performance, particularly for corruption detection.

Overall Model Significance (Omnibus Test)

The overall significance of the model was tested using the Omnibus Test of Model Coefficients. This test evaluates whether all independent variables jointly influence the dependent variable. As presented in Table 4, the chi-square value is 33.187 with a significance level of 0.000. Since the p-value is lower than 0.05, the null hypothesis is rejected.

Table 4. Omnibus Test of Model Coefficients

Test	Chi-square	df	Sig.
Step	33.187	7	0.000
Block	33.187	7	0.000
Model	33.187	7	0.000

Source: Processed SPSS Output (2024)

The results in Table 4 indicate that the logistic regression model is statistically significant as a whole. The p-value of 0.000 confirms that the independent variables jointly have a significant effect on corruption cases. This finding suggests that the model provides meaningful explanatory power in understanding corruption within Indonesian ministries and government agencies. The significant omnibus test result also implies that at least one of the independent variables contributes to the model. Therefore, the model is considered valid for further interpretation of individual parameter estimates.

Individual Parameter Estimates (Wald Test)

The significance of individual variables was examined using the Wald test, as shown in Table 5. The results indicate that internal control effectiveness (SP), internal audit role (IA), institutional size (RA), and institutional complexity (KO) have statistically significant effects on corruption cases at the 5% significance level. In contrast, audit opinion (OA) does not show a statistically significant effect.

Table 5. Logistic Regression Results (Variables in the Equation)

Variable	B	S.E.	Wald	Sig.	Exp(B)	Decision
SP	1.201	0.790	5.784	0.000	3.323	Supported
IA	2.807	0.511	32.314	0.000	16.560	Supported
RA	0.417	0.069	20.493	0.000	1.517	Supported
KO	0.001	0.000	12.730	0.000	1.001	Supported
OA	-1.020	1.059	0.928	0.335	0.361	Not Supported
Constant	-2.275	1.210	3.532	0.050	0.103	

Source: Processed SPSS Output (2024)

The results in Table 5 demonstrate that most governance variables significantly influence corruption cases. Internal audit role (IA) exhibits the strongest effect, indicating its critical importance in preventing corruption. Internal control effectiveness (SP) also shows a significant positive relationship, suggesting that weaker controls increase corruption risk. Institutional size (RA) and complexity (KO) further contribute to higher corruption likelihood, reflecting the challenges of managing large and complex organizations. However, audit opinion (OA) is not statistically significant, implying that formal audit outcomes may not fully capture underlying corruption dynamics. Overall, these findings highlight the importance of strengthening internal governance mechanisms to reduce corruption risks.

Discussion

The Effect of Internal Control Effectiveness on Corruption Cases

The results of this study indicate that internal control effectiveness has a positive and statistically significant effect on corruption cases in Indonesian ministries and government agencies. The empirical findings show that the coefficient is significant at the 5% level ($p < 0.05$) with a positive beta value, suggesting that weaknesses in internal control systems are associated with a higher likelihood of corruption. This result confirms that internal control plays a crucial role in mitigating corruption risks. The positive direction reflects that an increase in audit findings—indicating weaker controls—leads to a higher probability of corruption. Therefore, internal control effectiveness remains a fundamental pillar in preventing fraudulent behavior.

From a theoretical perspective, this finding aligns with the Fraud Triangle Theory introduced by Donald R. Cressey, particularly the “opportunity” dimension. Weak internal control systems create opportunities for individuals to engage in corrupt practices without detection. When monitoring mechanisms are ineffective, the perceived risk of being caught decreases, thereby encouraging unethical behavior. In this context, internal control serves as a barrier that limits opportunities for corruption. Thus, the findings reinforce the importance of strengthening control systems to reduce fraud opportunities.

Empirically, the results are consistent with prior studies that demonstrate a significant relationship between internal control weaknesses and corruption. Research by Doyle et al. (2007) and Ashbaugh-Skaife et al. (2008) highlights that deficiencies in internal controls are strongly associated with financial misstatements and fraud. Similarly, public sector studies

indicate that ineffective controls increase vulnerability to corruption (Umar et al., 2021; Apriani, 2020). The consistency of these findings suggests that internal control effectiveness is a universal determinant of corruption risk. This strengthens the external validity of the current study.

In the Indonesian context, internal control systems are regulated under Government Regulation No. 60 of 2008, which emphasizes accountability and transparency. However, the presence of significant audit findings indicates that implementation gaps still exist. These gaps may arise from weak enforcement, lack of competence, or organizational culture issues. As a result, internal control systems may exist formally but not function effectively in practice. This condition creates an environment conducive to corruption.

Overall, the findings imply that improving internal control effectiveness should be a strategic priority for policymakers. Strengthening monitoring systems, enhancing compliance mechanisms, and fostering ethical organizational culture are essential steps. In addition, reducing the number of audit findings should be a key performance indicator for government institutions. By addressing internal control weaknesses, the government can significantly reduce corruption risks. Therefore, this study provides important policy implications for governance reform in the public sector.

The Effect of Internal Audit Role on Corruption Cases

The findings reveal that the role of internal audit has a positive and statistically significant effect on corruption cases. The coefficient is highly significant ($p < 0.05$) with a relatively large beta value, indicating a strong relationship between internal audit effectiveness and corruption. This result suggests that weaker internal audit functions are associated with higher levels of corruption. Conversely, more effective internal audit practices contribute to reducing corruption risks. Therefore, internal audit plays a critical role in strengthening governance.

From a theoretical standpoint, internal audit functions as a key component of organizational control systems. According to Institute of Internal Auditors, internal audit provides assurance and consulting services aimed at improving governance and risk management. In the context of the Fraud Triangle, internal audit reduces both “opportunity” and “rationalization” by increasing oversight and accountability. Effective audits enhance transparency and discourage unethical behavior. Thus, the findings are theoretically consistent with governance and auditing frameworks.

Empirical studies also support the significant role of internal audit in preventing corruption. Coram et al. (2008) and Cohen and Sayag (2010) demonstrate that strong internal audit functions are associated with lower fraud incidence. In the public sector, internal audit maturity is often used as an indicator of institutional capability in detecting and preventing irregularities. The results of this study align with previous research, confirming that internal audit effectiveness significantly influences corruption outcomes. This consistency enhances the robustness of the findings.

In Indonesia, internal audit is conducted by Badan Pengawasan Keuangan dan Pembangunan and inspectorates. The maturity level of the Government Internal Control System (SPIP) reflects the effectiveness of these functions. However, variations in maturity

levels across institutions indicate uneven implementation. Institutions with lower maturity levels are more likely to experience governance failures. This highlights the need for continuous improvement in internal audit capabilities.

From a policy perspective, strengthening internal audit functions should be prioritized to combat corruption. This includes enhancing auditor competence, increasing independence, and improving audit methodologies. Additionally, integrating technology in audit processes can improve detection capabilities. By improving internal audit effectiveness, government institutions can significantly reduce corruption risks. Therefore, this study underscores the importance of internal audit as a governance mechanism.

The Effect of Institutional Size on Corruption Cases

The results indicate that institutional size has a positive and significant effect on corruption cases. The positive coefficient suggests that larger ministries and government agencies are more likely to experience corruption. This finding is consistent with the argument that larger organizations face greater challenges in monitoring and control. As institutional size increases, so does the complexity of managing resources and operations. Consequently, the risk of corruption also increases.

From a theoretical perspective, organizational theory suggests that larger organizations are more prone to inefficiencies and control failures. Herbert A. Simon emphasizes bounded rationality, which limits decision-making effectiveness in complex organizations. Larger institutions often suffer from coordination problems and information asymmetry. These conditions create opportunities for opportunistic behavior. Therefore, institutional size is closely linked to corruption risk.

Empirical evidence supports the positive relationship between organizational size and corruption. Studies by Fisman and Gatti (2002) and Goel and Nelson (2011) show that larger government expenditures are associated with higher corruption levels. In the Indonesian context, large budget allocations may increase the risk of mismanagement. The findings of this study are consistent with these prior studies. This reinforces the argument that institutional size is a significant determinant of corruption.

The use of budget realization as a proxy for institutional size provides a practical measure of operational scale. Higher budget realization reflects greater financial activity, which may increase exposure to corruption risks. Without effective oversight, large budgets can be misused or diverted. This highlights the importance of strengthening financial controls in large institutions. Therefore, managing institutional size requires effective governance mechanisms.

In terms of policy implications, large institutions should implement stricter control and monitoring systems. This includes improving transparency, enhancing reporting mechanisms, and strengthening audit functions. Additionally, decentralizing decision-making may reduce complexity and improve accountability. By addressing the challenges associated with institutional size, governments can reduce corruption risks. Thus, this study provides valuable insights for public sector management.

The Effect of Institutional Complexity on Corruption Cases

The findings show that institutional complexity has a positive and significant effect on corruption cases. The positive coefficient indicates that more complex organizations are more likely to experience corruption. Complexity, measured by the number of work units, reflects the level of organizational differentiation. Higher complexity often leads to coordination difficulties and reduced transparency. As a result, corruption risks increase.

From a theoretical perspective, complexity theory suggests that highly differentiated organizations face greater governance challenges. Lawrence and Lorsch (1967) argue that increased differentiation requires stronger integration mechanisms. Without effective integration, organizations may experience inefficiencies and control failures. These conditions create opportunities for corruption. Therefore, institutional complexity is an important factor in understanding corruption.

Empirical studies also support the relationship between complexity and corruption. Liu and Lin (2012) find that complex government structures are associated with higher corruption levels. Similarly, other studies highlight the role of organizational structure in influencing governance outcomes. The findings of this study are consistent with these prior studies. This strengthens the theoretical and empirical basis of the results.

In the Indonesian public sector, the number of work units varies significantly across ministries. Institutions with more work units may face challenges in maintaining effective oversight. Decentralized structures may lead to information asymmetry and weak coordination. These issues increase the likelihood of corruption. Therefore, managing complexity is crucial for improving governance.

Policy implications suggest that simplifying organizational structures may help reduce corruption risks. This can be achieved through organizational restructuring and improved coordination mechanisms. Additionally, implementing integrated information systems can enhance transparency and monitoring. By addressing institutional complexity, governments can improve governance effectiveness. Thus, this study highlights the importance of structural reforms.

The Effect of Audit Opinion on Corruption Cases

The results indicate that audit opinion does not have a significant effect on corruption cases. The coefficient is not statistically significant ($p > 0.05$), suggesting that audit opinion is not a strong predictor of corruption. Although the coefficient is negative, indicating a potential inverse relationship, the effect is not statistically meaningful. This finding implies that audit opinion may not fully capture corruption dynamics. Therefore, the hypothesis is not supported.

From a theoretical perspective, audit opinion primarily reflects the fairness of financial statements rather than the presence of corruption. According to Badan Pemeriksa Keuangan Republik Indonesia, audit opinions assess compliance with accounting standards and disclosure adequacy. However, corruption may occur outside the scope of financial reporting. Therefore, audit opinion may not be a reliable indicator of corruption. This explains the lack

of significant findings.

Empirical studies show mixed results regarding the relationship between audit opinion and corruption. Some studies find a significant relationship, while others do not. The findings of this study are consistent with research that finds no significant effect (Utami, 2020). This suggests that audit opinion alone is insufficient to explain corruption. Other governance factors may play a more important role.

One possible explanation is that organizations can receive favorable audit opinions despite underlying governance issues. This may occur due to limitations in audit scope or procedures. Additionally, corruption may involve non-financial aspects that are not captured in financial audits. Therefore, relying solely on audit opinion may lead to incomplete conclusions. This highlights the need for complementary governance mechanisms.

In conclusion, audit opinion should not be considered as the sole indicator of corruption risk. While it reflects financial reporting quality, it does not necessarily capture broader governance issues. Policymakers should integrate audit opinion with other indicators, such as internal control and audit effectiveness. By adopting a more comprehensive approach, corruption risks can be better identified and mitigated. This finding contributes to the ongoing debate on the role of audit in corruption prevention.

CONCLUSION

This study aims to examine the influence of governance mechanisms on corruption cases within Indonesian ministries and government agencies. The findings provide strong empirical evidence that internal control effectiveness, internal audit role, institutional size, and institutional complexity significantly affect the occurrence of corruption, highlighting the critical role of governance quality in mitigating corruption risks. Conversely, audit opinion does not demonstrate a statistically significant effect, suggesting that formal financial reporting assessments may not fully capture the complexity of corruption phenomena in the public sector. Despite these contributions, this study is subject to several limitations, particularly regarding data availability, as corruption case data were limited to finalized cases reported by Komisi Pemberantasan Korupsi, excluding cases handled by Kejaksaan Republik Indonesia and Kepolisian Negara Republik Indonesia. Additionally, the study period is restricted to 2018–2022 due to the unavailability of more recent audited financial reports at the time of analysis, and the level of data granularity remains limited. Therefore, future research is encouraged to incorporate more comprehensive datasets, including multi-agency corruption records, extend the observation period to include more recent years, and employ more detailed and disaggregated measures to better capture the dynamics of governance and corruption.

REFERENCES

Albrecht, W. S., Albrecht, C. C., Albrecht, C. O., & Zimbelman, M. F. (2012). *Fraud examination* (4th ed.). South-Western Cengage Learning.

Apriani, R. (2020). The effect of internal control on corruption prevention in public sector institutions. *Journal of Public Sector Accounting*, 5(2), 45–58.

Apriastanti, D., & Widajantie, T. D. (2022). Internal control effectiveness and fraud prevention in government institutions. *Jurnal Akuntansi dan Keuangan Indonesia*, 19(1), 87–102.

Arena, M., & Azzone, G. (2009). Identifying organizational drivers of internal audit effectiveness. *International Journal of Auditing*, 13(1), 43–60. https://doi.org/10.1111/j.1099-1123.2008.00392.x

Ashbaugh-Skaife, H., Collins, D. W., Kinney, W. R., & LaFond, R. (2008). The effect of SOX internal control deficiencies on firm risk and cost of equity. *Journal of Accounting Research*, 46(1), 1–43.

Badan Pemeriksa Keuangan Republik Indonesia. (2020). *Ikhtisar hasil pemeriksaan semester*.

Badan Pengawasan Keuangan dan Pembangunan. (2017). *Laporan kinerja BPKP*.

Blau, P. M. (1970). A formal theory of differentiation in organizations. *American Sociological Review*, 35(2), 201–218.

Chan, K. C., & Jaggi, B. (2000). Association between independent non-executive directors, family control, and financial disclosures. *Journal of Accounting and Public Policy*, 19(4–5), 285–310.

Cohen, A., & Sayag, G. (2010). The effectiveness of internal auditing: An empirical examination. *Australian Accounting Review*, 20(3), 296–307.

Committee of Sponsoring Organizations of the Treadway Commission (COSO). (2013). *Internal control—Integrated framework*. COSO.

Coram, P., Ferguson, C., & Moroney, R. (2008). Internal audit, alternative internal audit structures and the level of misappropriation of assets fraud. *Accounting & Finance*, 48(4), 543–559.

Cressey, D. R. (1950). The criminal violation of financial trust. *American Sociological Review*, 15(6), 738–743.

DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58(2–3), 275–326.

Dorminey, J., Fleming, A. S., Kranacher, M. J., & Riley, R. A. (2012). The evolution of fraud theory. *Issues in Accounting Education*, 27(2), 555–579.

Doyle, J., Ge, W., & McVay, S. (2007). Determinants of weaknesses in internal control over financial reporting. *Journal of Accounting and Economics*, 44(1–2), 193–223.

Fan, C. S., Lin, C., & Treisman, D. (2009). Political decentralization and corruption: Evidence from around the world. *Journal of Public Economics*, 93(1–2), 14–34.

Firmansyah, A. (2020). The role of internal audit in fraud prevention in Indonesian public institutions. *Jurnal Akuntansi Multiparadigma*, 11(2), 233–250.

Fisman, R., & Gatti, R. (2002). Decentralization and corruption: Evidence across countries. *Journal of Public Economics*, 83(3), 325–345.

Goel, R. K., & Nelson, M. A. (2011). Measures of corruption and determinants of US corruption. *Economics of Governance*, 12(2), 155–176.

Jain, A. K. (2001). Corruption: A review. *Journal of Economic Surveys*, 15(1), 71–121.

Kaptein, M. (2011). Understanding unethical behavior by unraveling ethical culture. *Human Relations*, 64(6), 843–869.

Klitgaard, R. (2005). *Controlling corruption*. University of California Press.

Lawrence, P. R., & Lorsch, J. W. (1967). *Organization and environment*. Harvard University Press.

Liu, J., & Lin, B. (2012). Government auditing and corruption control. *China Journal of Accounting Research*, 5(2), 163–186.

Mungiu-Pippidi, A. (2015). *The quest for good governance*. Cambridge University Press.

Nahartyo, E., & Haryono, S. (2018). Internal control systems and corruption prevention. *Jurnal Akuntansi dan Auditing Indonesia*, 22(1), 1–10.

Nurhasanah. (2016). The influence of internal control and audit on corruption cases in Indonesian ministries. *Jurnal Akuntansi Pemerintahan*, 10(2), 115–130.

OECD. (2020). *Public integrity handbook*. OECD Publishing.

Rose-Ackerman, S. (1999). *Corruption and government*. Cambridge University Press.

Romney, M. B., & Steinbart, P. J. (2018). *Accounting information systems* (14th ed.). Pearson.

Simon, H. A. (1997). *Administrative behavior* (4th ed.). Free Press.

Treisman, D. (2007). What have we learned about the causes of corruption? *Annual Review of Political Science*, 10, 211–244.

Umar, H., et al. (2021). Internal audit effectiveness and corruption prevention. *Journal of Financial Crime*, 28(3), 789–804.

Utami, W. (2020). Audit opinion and corruption: Evidence from Indonesia. *Jurnal Akuntansi dan Keuangan*, 22(1), 55–67.