

EFFECTIVENESS OF RISK MANAGEMENT-BASED BUDGET MANAGEMENT IN THE BOLAANG MONGONDOW REGENCY GOVERNMENT

Sofiah Y. Matantu¹, Rahmisyari², Arifin³

^{1,2,3}Master of Management Study Program, Postgraduate Program, Universitas Ichsan
Gorontalo, Indonesia

Corresponding author e-mail: arifin.unisan@gmail.com

Abstract

This study analyzes the effectiveness of risk management-based Regional Budget (APBD) management in the Bolaang Mongondow Regency Government. The study addresses a SIPD paradox: despite four consecutive Unqualified Opinions (WTP) and full implementation of the Regional Government Information System (SIPD) since 2022, the region recorded a relatively high budget surplus (SILPA) of 8.34%, budget absorption in strategic regional agencies of 61–84%, achievement of RPJMD indicators of only 71.22%, and recurring internal oversight findings. A descriptive qualitative case-study approach was employed using the COSO Enterprise Risk Management (ERM) 2017 and ISO 31000:2018 frameworks. Five key informants were selected from budget management and internal oversight functions. Data were collected through in-depth interviews, observation, and document review, and credibility was strengthened through source and technique triangulation. The findings show that five of eight COSO ERM components—control environment, objective setting, risk identification, risk response, and control activities—were effective, while risk assessment, information and communication, and monitoring were not yet effective. SIPD was effective as a preventive control but remained limited as a detective control for substantive waste. The main contribution is the identification of a SIPD paradox in which formal compliance and digital control do not automatically ensure substantive value for money when risk assessment remains manual and fragmented.

Keywords: APBD effectiveness; Risk Management; COSO ERM; SPIP; SIPD; Value For Money

1. Introduction

Regional budget management is a strategic element of local government because public expenditure must support development outcomes, accountability, service quality, and value for money. Budget effectiveness therefore cannot be assessed solely from administrative compliance or the percentage of expenditure realized. It also depends on whether fiscal, planning, human-resource, information-technology, and compliance risks are identified and managed throughout the budget cycle (Mardiasmo, 2020; Mahmudi, 2019).

The Bolaang Mongondow Regency Government presents an important empirical setting. The regency has obtained four consecutive WTP opinions and has implemented SIPD fully since 2022. However, these formal achievements coexist with a SILPA of Rp98.45 billion, equivalent to 8.34% of the total budget, strategic regional agency



expenditure absorption of approximately 61–84%, and RPJMD performance achievement of 71.22%. Recurring internal oversight findings remain concentrated in capital expenditure, fixed assets, and operational expenditure accountability.

This condition represents what the thesis identifies as the “SIPD paradox”: digitalization is effective in enforcing formal alignment and preventing activities outside the RKPDP, but it is not yet sufficiently effective in detecting substantive inefficiencies such as technical-specification mark-ups and fragmentation of expenditure components. The phenomenon indicates that a strong compliance system does not necessarily produce substantive value for money when risk assessment and monitoring are not fully integrated into the digital system.

Previous studies have generally examined these issues separately. Irianto and Amiryah (2024) discuss integrated risk management in regional financial management, while Angraini et al. (2026) emphasize weaknesses in risk assessment within SPIP. Ayatullah and Fadillah (2025) focus on public-sector information-technology risk, whereas Aditya et al. (2024) associate fiscal dependence with lower efficiency. These studies leave a gap concerning how multiple risk categories operate simultaneously across the APBD cycle and how their management relates to substantive value for money. Accordingly, this study aims to analyze the effectiveness of risk management-based budget management in the Bolaang Mongondow Regency Government, particularly through the eight COSO ERM components and the 3E value-for-money perspective. The study contributes an integrated empirical explanation of the gap between formal digital compliance and substantive budget effectiveness in a fiscally dependent local government.

2. Literature Review

2.1 Public Finance and Good Governance

Public finance theory views the government budget as an instrument for allocation, distribution, and stabilization. In local government, fiscal decentralization is expected to make public spending more responsive to local needs, but high dependence on central transfers can create fiscal vulnerability. Good governance complements this perspective by emphasizing transparency, accountability, effectiveness, efficiency, and participation. Thus, APBD effectiveness should be assessed not only through procedural compliance but through public outcomes and responsible use of resources (Moenek & Suwanda, 2019; Mardiasmo, 2020).

2.2 Agency and Contingency Perspectives

Agency theory explains the potential divergence between the interests of citizens and those of officials who manage public resources. Information asymmetry may create budgetary slack, moral hazard, and weak accountability. Internal control and risk management are therefore mechanisms for aligning managerial actions with public objectives. Contingency theory further suggests that no single management system is universally optimal; risk-management arrangements should fit the fiscal structure,



institutional maturity, technology, and environmental conditions of each local government.

2.3 Risk Management and COSO ERM

COSO ERM frames risk as an integral part of strategy and performance. In the public sector, risk management is intended to identify uncertainty that may prevent the achievement of organizational objectives and to establish appropriate responses. ISO 31000:2018 similarly emphasizes a systematic process of identifying, analyzing, evaluating, treating, monitoring, and communicating risk. In Indonesia, risk-based internal control is reflected in SPIP and the BPKP guidelines. The relevant analytical dimensions in this study are the eight components used in the thesis: control environment, objective setting, risk identification, risk assessment, risk response, control activities, information and communication, and monitoring.

2.4 Value for Money

Value for money is operationalized through economy, efficiency, and effectiveness (3E). Economy concerns obtaining inputs at appropriate quality and reasonable cost; efficiency concerns the relationship between inputs and outputs; and effectiveness concerns achievement of intended outcomes. In the present study, budget absorption, SILPA, achievement of key development indicators, service outcomes, and recurring audit findings are used as empirical manifestations of budget effectiveness.

3. Research Method

This study employed a descriptive qualitative approach with a case-study strategy. The case was the management of the regional budget based on risk management in the Bolaang Mongondow Regency Government. A qualitative design was selected because the research seeks to understand organizational processes, perceptions, practices, and meanings surrounding risk management rather than to test statistical relationships. The primary data were obtained from five key informants representing budget management, SIPD operations, treasury, and internal oversight functions: the Head of the Budget Division, budget management staff, SIPD operator, expenditure treasurer, and an Inspectorate regional assistant. Informants were selected purposively based on their direct involvement in planning, budgeting, administration, payment, and supervision.

Data collection consisted of in-depth semi-structured interviews, observation, and document review. Documents included budget-management records and the audited BPK report for fiscal year 2025. The interview guide was structured around the eight COSO ERM components. Data analysis followed qualitative interpretation through data reduction, organization of evidence, comparison across informants, and drawing conclusions. Credibility was strengthened through source triangulation and technique triangulation. The analytical framework combined COSO ERM 2017, ISO 31000:2018, SPIP, and value for money.



4. Result

4.1 Overview of the Risk Management Condition

The evidence indicates that risk management in Bolaang Mongondow has developed into a structured system but remains uneven across components. At the macro level, the regency has maintained WTP opinions for four consecutive years and reached SPIP maturity Level 3 (Defined). At the operational level, however, several risk-management processes still depend on manual documentation, professional judgment, and controls outside SIPD.

The most relevant risk categories identified in the study are fiscal risk, planning and budgeting risk, human-resource and information-technology risk, and compliance risk. These risks affect budget absorption, the accumulation of SILPA, the quality of expenditure, and the achievement of development outcomes.

Table 1. Effectiveness of the Eight COSO ERM Components

COSO ERM component	Assessment	Key evidence
Control environment	Effective	Strong regulatory basis and TAPD gatekeeping; no specific Perbup on risk appetite and integrated APBD risk SOP.
Objective setting	Effective	SIPD cascading links RPJMD–Renstra–Renja–RKA; repeated provincial evaluation notes show substantive alignment gaps.
Risk identification	Effective	Risks identified from planning through payment and oversight, including fictitious activities, technical mark-ups, server instability, SPM compliance and recurring findings.
Risk assessment	Not effective	No integrated risk register and automated 5×5 matrix; assessment remains qualitative and judgment-based.
Risk response	Effective	TAPD protection and cancellation of misaligned proposals; risk treatment operates through



		verification and corrective actions.
Control activities	Effective	Layered verification, authorization, reconciliation, and segregation of functions.
Information & communication	Not effective	No integrated risk dashboard/risk register in SIPD; information remains partly manual and fragmented.
Monitoring	Not effective	SIPD history and audit trail are centrally controlled, limiting independent evaluation by the local government.

4.2 The SIPD Paradox

The central finding is the SIPD paradox. SIPD is highly effective as a preventive control because it locks the alignment of programs and activities with the RKPd and prevents the formal entry of activities outside approved planning documents. However, its detective function is weaker. The system does not automatically detect all substantive inefficiencies, including mark-ups in technical specifications or splitting expenditure components into several accounts to remain within the Standard Unit Price ceiling. The paradox explains why strong formal indicators can coexist with recurring substantive findings. WTP reflects the fairness of financial statements, while value for money requires a stronger assessment of whether public resources are acquired economically, used efficiently, and converted into intended outcomes. The study therefore distinguishes compliance effectiveness from substantive effectiveness.

4.3 Factors Hindering Risk Management

The main internal constraints are the absence of a specific local regulation establishing risk appetite, risk tolerance, and an integrated APBD risk-management SOP; limitations of SIPD features; uneven human-resource capability; and fragmented risk documentation. External or system-level constraints include the centralization of SIPD audit trails and dependence on national system features.

A further issue is the disconnection between upstream planning and downstream payment. The expenditure treasurer does not formally receive a risk profile as a mandatory payment document, even though risk information may be communicated informally. This weakens the continuity of risk information across the APBD cycle. Monitoring also remains dependent on complementary physical documents and internal evaluation because the digital audit trail is centrally managed.



5. Discussion

The findings support the argument that risk management should be integrated into performance management rather than treated as an administrative compliance exercise. The effectiveness of five COSO components shows that the institutional architecture is already present: leadership and control mechanisms exist, objectives can be cascaded through SIPD, risks can be identified, responses can be implemented, and control activities operate through layered verification. However, the three weak components—risk assessment, information and communication, and monitoring—are precisely the components required to transform risk management from a preventive compliance mechanism into a dynamic performance-management system.

The result is consistent with the broader literature emphasizing that public-sector risk management must connect risk information with organizational objectives and performance. Bracci et al. (2024) highlight the importance of integrating performance management and risk management in public organizations. Fedchenko et al. (2022) similarly position budget management mechanisms as instruments of risk control. In the Bolaang Mongondow case, however, the integration is incomplete because risk information is not yet fully embedded in SIPD and because risk assessment is still partly manual.

The study also extends the discussion of digital government controls. The existence of a digital system does not automatically eliminate substantive inefficiency. Firmansyah and Wibowo (2024) emphasize limitations in e-budgeting systems in realizing efficient public expenditure allocation. The present study specifies the mechanism: when digital controls are primarily designed to enforce ceilings, codes, and formal alignment, they can prevent unauthorized activities but may fail to identify whether the underlying quantity, specification, and economic rationale are reasonable.

From a contingency perspective, the finding is particularly important because Bolaang Mongondow has high fiscal dependence and a relatively large employee expenditure share. Under such conditions, a compliance-oriented system is insufficient. Risk appetite, risk tolerance, and risk-based resource allocation must be tailored to local fiscal vulnerabilities. The study therefore contributes a context-specific explanation of why SPIP maturity Level 3 does not necessarily guarantee substantive value for money.

The novelty lies in integrating four risk categories—fiscal, planning and budgeting, human resources/technology, and compliance—with the 3E value-for-money perspective in one empirical case. The research also contributes the concept of the SIPD paradox: formal digital control can be effective while substantive risk detection remains incomplete. This distinction is useful for public managers because it shifts the focus from whether controls exist to whether controls are capable of preventing and detecting economically inefficient expenditure.

6. Conclusion

The study concludes that risk management-based budget management in the Bolaang Mongondow Regency Government is partially effective. Five COSO ERM components—control environment, objective setting, risk identification, risk response, and control activities—operate effectively, whereas risk assessment, information and



communication, and monitoring remain insufficiently effective. SIPD has a strong preventive-control function but a weaker detective-control function for substantive inefficiency.

The principal implication is that improving budget effectiveness requires more than maintaining formal compliance. The local government should establish explicit risk appetite and risk tolerance policies, develop an integrated APBD risk register and 5×5 risk matrix, strengthen the integration of risk information into SIPD, improve access to monitoring and audit trails, and reinforce risk-management capability among OPD personnel. These improvements would support the transition from compliance-based control toward risk-based and outcome-oriented budget management.

The study is limited by its qualitative case-study design and the small number of key informants. Future studies may compare multiple local governments, examine changes across fiscal years, or combine qualitative evidence with quantitative measures of budget efficiency and risk maturity.

References

- Aditya, et al. (2024). Fiscal dependence and efficiency in local government budgeting.
- Angraini, et al. (2026). Analisis implementasi Sistem Pengendalian Internal Pemerintah (SPIP) dalam pengelolaan anggaran keuangan daerah. *Konstitusi: Jurnal Hukum, Administrasi Publik, dan Ilmu Komunikasi*, 3(1), 29–39.
- Asqolani, et al. (2022). Akuntansi pemerintah Indonesia kontemporer. Politeknik Keuangan Negara STAN.
- Ayatullah, & Fadillah. (2025). Manajemen risiko dan pengendalian intern sektor publik. Rajawali Pers.
- Badan Pemeriksa Keuangan RI. (2022). Standar pemeriksaan keuangan negara. BPK RI.
- Badan Pemeriksa Keuangan RI Perwakilan Provinsi Sulawesi Utara. (2026). Laporan hasil pemeriksaan Kabupaten Bolaang Mongondow Tahun Anggaran 2025. BPK RI.
- Badan Pengawasan Keuangan dan Pembangunan RI. (2021). Pedoman manajemen risiko pemerintah daerah. BPKP.
- Bracci, E., Adhariani, D., & Mura, L. (2024). The integration of performance management and risk management in the public sector: An empirical case. *Journal of Management Control*, 35(1), 1–28.
- Committee of Sponsoring Organizations of the Treadway Commission [COSO]. (2017). Enterprise risk management: Integrating with strategy and performance. COSO.



- Creswell, J. W. (2014). *Research design: Pendekatan kualitatif, kuantitatif, dan mixed* (4th ed.). Pustaka Pelajar.
- Direktorat Jenderal Perimbangan Keuangan. (2021). *Modul peningkatan kapasitas pengelolaan keuangan daerah*. Kementerian Keuangan Republik Indonesia.
- Fedchenko, E. A., Gusarova, L. V., Vasyunina, M. L., Lozhechko, A. S., & Lysenko, A. A. (2022). The mechanism of budget management as an element of risk control in regulatory authorities. *Risks*, 10(9), 177.
- Firmansyah, A., & Wibowo, H. (2024). Analisis batasan sistem e-budgeting dalam mewujudkan efisiensi alokasi belanja publik di pemerintah daerah. *Jurnal Tata Kelola dan Akuntansi Keuangan Daerah*, 5(1), 45–58.
- Halim, A. (2020). *Akuntansi keuangan daerah* (5th ed.). Salemba Empat.
- Hanifah, L. (2025). *Pengaruh akuntabilitas dan transparansi terhadap kinerja pengelolaan anggaran ...* [Tesis tidak dipublikasikan]. Universitas Muhammadiyah Sumatera Utara.
- Irianto, G., & Amiryah. (2024). *Manajemen risiko terintegrasi pada pengelolaan keuangan daerah*. UB Press.
- International Organization for Standardization [ISO]. (2018). *Risk management—Guidelines (ISO 31000:2018, 2nd ed.)*. ISO.
- Kementerian Dalam Negeri Republik Indonesia. (2020). *Peraturan Menteri Dalam Negeri Nomor 77 Tahun 2020 tentang Pedoman Teknis Pengelolaan Keuangan Daerah*.
- Kementerian Keuangan Republik Indonesia. (2024). *Kerangka ekonomi makro dan pokok-pokok kebijakan fiskal tahun 2025*. Kementerian Keuangan Republik Indonesia.
- Luru, & Woestho. (2025). Tata kelola anggaran dan tata kelola pemerintah terhadap kemiskinan. *Jurnal Plano Buana*, 5(2), 98–108.
- Mahmudi. (2019). *Analisis laporan keuangan pemerintah daerah* (4th ed.). UPP STIM YKPN.
- Majid, J. (2019). *Akuntansi sektor publik*. Pusaka Almada.
- Manoppo, B., Pangemanan, S., & Loindong, S. (2020). Implementasi Sistem Informasi Pemerintahan Daerah (SIPD) Kementerian Dalam Negeri dalam perencanaan pembangunan daerah. *Jurnal Administrasi Publik*, 6(102), 112–120.
- Mardiasmo. (2020). *Akuntansi sektor publik*. Andi.



- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- Moenek, & Suwanda. (2019). *Good governance pengelolaan keuangan daerah*. Remaja Rosdakarya.
- Mokoginta, N., Lambey, L., & Pontoh, W. (2021). Pengaruh sistem akuntansi keuangan daerah dan pengendalian intern terhadap kualitas laporan keuangan pemerintah daerah. *Jurnal Akuntansi Publik*, 8(1), 22–37.
- Moleong, L. J. (2021). *Metodologi penelitian kualitatif* (Edisi revisi). Remaja Rosdakarya.
- Nazir, M. (2014). *Metode penelitian*. Ghalia Indonesia.
- Peraturan Pemerintah Republik Indonesia Nomor 12 Tahun 2019 tentang Pengelolaan Keuangan Daerah.
- Peraturan Pemerintah Republik Indonesia Nomor 60 Tahun 2008 tentang Sistem Pengendalian Intern Pemerintah.
- Putra, et al. (2025). Public finance and fiscal functions in local government. [Reference details as listed in the thesis].
- Sugiyono. (2022). *Metode penelitian kualitatif*. Alfabeta.
- Yin, R. K. (2018). *Case study research and applications: Design and methods*. SAGE Publications.

