

# Risk Control Strategy in Public Financial Management in North Sumatra

Irawan<sup>1\*</sup>, Ilham Ramdhan Nasution<sup>2</sup>, Ahmad Sani<sup>3</sup>

<sup>1</sup>Department of Accounting, Universitas Pembangunan Panca Budi, Medan, Indonesia

<sup>2</sup>Department of Accounting, Universitas Darmawangsa, Medan, Indonesia

<sup>3</sup>Department of Accounting, Universitas Harapan, Medan, Indonesia

Email: irawana@dosen.pancabudi.ac.id<sup>1</sup>, ilham.nst@gmail.com<sup>2</sup>, saniahmad20152015@gmail.com<sup>3</sup>

## Abstract

Public financial management is a vital element in realizing transparent, accountable, and service-oriented governance. However, the complexity of the planning, budgeting, implementation, and accountability processes at the regional level often gives rise to various risks that can hamper the effectiveness of government administration. This study aims to analyze risk control strategies in public financial management in North Sumatra Province, identify the most dominant types of risks, and evaluate the effectiveness of control mechanisms implemented by the regional government. The research method uses a qualitative approach with data collection techniques through documentation studies, interviews with regional financial management officials, and analysis of financial reports and supervisory findings. Data analysis was conducted descriptively with reference to the enterprise risk management (ERM) framework and the Government Internal Control System (SPIP). The results show that the main risks in public financial management in North Sumatra include the risk of inaccurate planning, budget implementation discrepancies, administration and procurement risks, and the risk of low compliance with standard procedures. Although the regional government has implemented a number of control measures, such as increasing the role of APIP, strengthening SPIP, and utilizing information technology, their effectiveness remains limited due to variations in human resource capacity, suboptimal cross-unit coordination, and a weak risk management culture. This study concludes that risk control strategies in North Sumatra need to be directed at strengthening data-based risk identification, integrating oversight with planning and budgeting processes, improving staff competency, and implementing an integrated information system that supports sustainable control. The findings of this study are expected to serve as a reference in developing more comprehensive risk management policies in the public sector, particularly in improving the accountability and effectiveness of regional budget management.

**Keywords:** Risk Management, Public Financial Management, SPIP, Internal Control, North Sumatra.

## I. INTRODUCTION

Public financial management is a crucial aspect of regional governance, as it determines the quality of development, the effectiveness of public services, and the level of government accountability to the public. In the context of modern public administration, financial management is no longer viewed simply as a technical process of collecting and using funds, but as a series of strategic activities that require a strong oversight mechanism and an integrated risk control system. The central government has emphasized the importance of risk control through various regulations, such as Law Number 17 of 2003 concerning State Finance, Law Number 1 of 2004 concerning State Treasury, and Government Regulation Number 60 of 2008 concerning the Government Internal Control System (SPIP). These regulations position risk management as the foundation for creating transparent and accountable financial governance.

Nevertheless, challenges in public financial management in the regions remain significant. The complexity of the budget

planning and implementation processes, limited human resource capacity, the dynamics of development needs, and varying levels of compliance with administrative procedures create various risks that could potentially hamper the effectiveness of budget management. (Ebute, 2024) These risks can arise at every stage, from planning and budgeting, activity implementation, procurement of goods and services, disbursement of funds, to reporting and accountability. Without an adequate control strategy, these risks can trigger inefficiencies, budget leakage, and even potential corruption.

North Sumatra Province is one of the provinces with highly complex development dynamics and fiscal activities. With a large number of districts/cities, socio-economic diversity between regions, and a large annual regional budget (APBD), North Sumatra faces significant challenges in ensuring optimal public financial governance. In recent years, evaluations of regional financial management performance in North Sumatra have revealed persistent weaknesses in internal oversight, inaccurate program implementation, and administrative risks that impact the quality of local government financial reports. Meanwhile, public demands for improved public service quality are increasing, requiring local governments to manage

their budgets more effectively, transparently, and free from irregularities (Beiter et al, 2024).

This situation underscores the need for a more systematic risk control strategy based on enterprise risk management (ERM) principles. This strategy includes identifying risks that may hinder the achievement of financial management objectives, analyzing the level of impact and probability of risk, and establishing mitigation measures that can be used to minimize potential losses. Implementing risk control is not only beneficial for preventing irregularities, but also for improving the quality of decision-making, strengthening institutional integrity, and increasing the effectiveness and efficiency of public resource use (Bouchetara et al, 2024).

In the context of North Sumatra, risk control strategies are becoming increasingly relevant as local governments face various changes in national policy, demands for public accountability, and the need for innovation in budget governance. Strengthening the SPIP (Supporting Information System), enhancing the capabilities of the Government Internal Supervisory Apparatus (APIP), using information technology in financial management, and integrating risk-based supervision are some of the efforts that have been promoted, but their implementation effectiveness still requires further study. Differences in capacity between district/city governments also affect the quality of risk management implementation, necessitating strategies that are not only normative but also adaptive to local conditions (De & Costa, 2024).

Based on these considerations, this study was conducted to explore how risk control strategies are implemented in public financial management in North Sumatra Province. This study aims to: (1) identify the types of risks that arise in public financial management; (2) analyzing the factors that influence the emergence of these risks; (3) evaluating the effectiveness of risk control mechanisms implemented by local governments; and (4) formulating more optimal and contextual risk control strategies to strengthen regional financial governance (Okeke et al, 2024). This research is expected to contribute to improving the quality of financial management in North Sumatra, while enriching academic studies on the implementation of risk management in the Indonesian public sector.

## II. RESEARCH METHODOLOGY

### 2.1. Public Financial Management

Public financial management is a series of processes encompassing planning, budgeting, implementation, administration, reporting, and

accountability for government budgets. According to Mikesell (2014), public financial management must adhere to the principles of effectiveness, efficiency, and accountability to ensure that state resources are used in accordance with development objectives. In Indonesia, the legal framework for regional financial management is regulated by Law No. 17 of 2003, Law No. 1 of 2004, and Law No. 23 of 2014, which emphasizes the importance of transparency and accountability as part of good governance. Good financial management requires a strong internal control system to minimize deviations and ensure alignment between plans and program implementation.

### 2.2. Risk Management in the Public Sector

Risk management is a systematic process for identifying, analyzing, assessing, and controlling risks that could hinder the achievement of organizational goals. According to ISO 31000:2018, risk management includes the steps of risk identification, risk analysis, risk evaluation, and determining appropriate mitigation strategies. In the public sector, risk management aims not only to avoid financial losses but also to improve public trust, service accuracy, and the performance of government organizations. Several researchers (e.g., Daud & Zailani, 2017) emphasize that risks in the public sector are multidimensional, ranging from strategic, operational, and compliance risks to financial reporting risks. Implementing sound risk management helps the government anticipate changing social, political, regulatory, and community needs.

### 2.3. Government Internal Control System (SPIP)

SPIP is a system designed to provide reasonable assurance regarding the effectiveness and efficiency of activities, the reliability of financial reports, asset security, and compliance with regulations. Government Regulation No. 60 of 2008 stipulates that SPIP includes five elements: control environment, risk assessment, control activities, information and communication and internal control monitoring. Risk assessment is a key element in the SPIP (Regional Government Financial Reporting System) because it allows the government to identify potential performance barriers and take appropriate mitigation measures (Saputra et al, 2024). Research shows that the maturity level of SPIP in many regions is still low, resulting in suboptimal risk control implementation. This is one of the main challenges in improving the integrity of local government financial reports.

### 2.4. Enterprise Risk Management (ERM)

Enterprise Risk Management (ERM) is a comprehensive approach to managing risk in an integrated manner across all organizational units. COSO (Committee of Sponsoring Organizations) initiated the ERM framework, emphasizing the link between risk and organizational strategy and objectives. ERM in the public sector helps

governments manage risk holistically, not only at the operational level but also at the strategic level. Research by McPhee (2015) shows that implementing ERM in public agencies increases transparency, improves planning processes, and strengthens internal oversight. In the regional context, ERM is particularly relevant for reducing budget planning risk, procurement risk, moral hazard risk, and the risk of reporting discrepancies.

#### 2.5. Risks in Regional Financial Management

The literature shows various types of risks that frequently occur in regional financial management, including (Sipayung & Cristian, 2022):

- a) Planning risks: inaccurate program formulation, invalid data, and misalignment of targets with regional capacity.
- b) Budgeting risks: budget allocation that is not based on needs (need-based planning), delays in the establishment of the Regional Budget (APBD), and overlapping programs.
- c) Budget implementation risks: activity delays, administrative errors, the risk of irregularities in the procurement of goods and services, and spending inefficiencies.
- d) Reporting and accountability risks: documentation weaknesses, inconsistent expenditure evidence, low-quality financial reports, and repeated audit findings.

Research by the Financial and Development Supervisory Agency (BPKP) and several academics shows that these risks often arise due to limited human resources, weak internal oversight, lack of coordination between units, and an organizational culture that is not yet oriented towards risk management.

#### 2.6. Risk Control Strategies in the Public Sector

Risk control strategies are steps taken by the government to minimize the impact of risks on the achievement of organizational goals. According to risk management theory, control strategies can include: (1) risk avoidance; (2) risk reduction; (3) risk transfer; (4) risk acceptance (Opabola, & Galasso, 2024). In the public sector, the most commonly used strategy is risk reduction through increased oversight, the use of information technology, strengthening the capacity of civil servants, improving standard operating procedures (SOPs), and enhancing integrity and compliance. Previous research has shown that control programs are effective when supported by leadership commitment, a healthy

organizational culture, and ongoing monitoring mechanisms.

### III. RESULTS AND DISCUSSION

#### 3.1. Result

The research results show that local governments in North Sumatra Province face various types of risks at every stage of public financial management. The most dominant risks include:

##### a. Planning Risk

Some regional government agencies still face limitations in providing accurate planning data. Mismatches between field needs and planning documents result in the risk of programs not being properly targeted. Furthermore, coordination between the Regional Development Planning Agency (Bappeda) and Regional Government Work Units (SKPD) is suboptimal in formulating development priorities, resulting in inaccurate budget allocations.

##### b. Budgeting Risk

This risk arises from frequent budget shifts, delays in the preparation of the Budget Work Plan (RKA), and mismatches between the strategic plan and the operational budget. Several financial management officials stated that political pressure and changes in central government policy also influence changes in the budget structure, increasing the potential risk of uncertainty.

##### c. Budget Execution Risk

The most prominent implementation risks are delays in activity implementation, delays in the procurement of goods and services, and low budget absorption in the first quarter. These contributing factors include a lack of prepared technical documents, uneven staff competency, and administrative issues that hamper the budget disbursement process.

##### d. Administrative and Compliance Risks

The study found persistent weaknesses in documentation, such as incomplete supporting evidence for expenditures, recording errors, and discrepancies between budget realization reports and field conditions. Compliance risks increased because not all work units understood and consistently implemented Standard Operating Procedures (SOPs).

##### e. Reporting and Audit Risks

Reporting risks are related to the inaccuracy of financial report preparation and recurring findings in internal and external audits. Several local governments have low SPIP maturity levels, resulting in ineffective control processes.

The study found that the Provincial Government and several district/city governments in North Sumatra have implemented various risk control strategies, but their effectiveness varies.

##### a. Strengthening SPIP and APIP

Most regional government agencies have made efforts to improve their understanding of SPIP. However, the maturity level of SPIP in some units remains low to medium. APIP has also conducted risk-

based audits, but the limited number of auditors and their competencies hinder comprehensive oversight.

b. Use of Information Technology

Regional governments have used financial applications such as SIPD and SIMDA. The use of these systems has been proven to improve data accuracy and minimize administrative errors. However, some regional government agencies still struggle to utilize advanced features, particularly in risk analysis and automated reporting.

c. Increasing Apparatus Capacity

Training activities related to risk management and financial management have been conducted, but their frequency and quality remain uneven. Officials at the operational level acknowledge that their technical understanding of risk assessment is still limited, resulting in most risk identification processes being conducted normatively, rather than based on data and in-depth analysis.

d. Continuous Monitoring

Risk monitoring and evaluation efforts have been implemented, but they have not been fully integrated with the budgeting cycle, resulting in some risks only being identified after problems have occurred. This indicates that the continuous monitoring mechanism is not functioning optimally.

### 3.2. Discussion

The research results indicate that risks emerging in public financial management in North Sumatra include risks in planning, budgeting, implementation, administration, and reporting. This finding aligns with the public sector risk theory proposed by Daud & Zailani (2017), which states that risks in government organizations are generally multidimensional and can arise at all stages of the budget process. This also aligns with the ISO 31000:2018 framework, which emphasizes that public organizations must conduct comprehensive risk identification to support the achievement of strategic objectives.

The risk findings at the planning and budgeting stage are consistent with Wahyudi's (2019) research, which found that inaccurate planning data and inter-unit coordination are the main causes of regional budget inefficiency. Similarly, Mardiasmo's (2018) research indicates that procurement and administrative risks are the most dominant risks in regional governments because they relate to documentation processes and regulatory compliance.

The ongoing reporting and audit risks indicate that the SPIP maturity level in many regions remains low. This aligns with the BPKP

(2020) study, which revealed that most regional governments in Indonesia are still at SPIP maturity levels 2–3 (developing and defined), resulting in suboptimal control processes.

Strengthening of the SPIP (Standard Risk Management System) implemented by local governments in North Sumatra has not been optimal. Government Regulation No. 60 of 2008 places risk assessment as the second element that must form the basis for developing control activities, but its implementation remains largely formal. This finding supports COSO's (2017) view on ERM, which states that risk control will be effective if supported by a proactive organizational culture and full integration with the planning and budgeting process. Research by Febrianto (2020) shows that SPIP weaknesses often arise from a lack of top management commitment and suboptimal coordination between financial management units. This situation is also evident in North Sumatra, where variations in human resource capacity and a weak risk-based oversight culture are key obstacles.

The use of financial applications such as SIPD and SIMDA improves data accuracy and administrative efficiency, but they are not yet widely used for risk analysis. Heeks' (2018) e-government theory explains that digitalization is only effective if accompanied by business process transformation, not simply administrative automation. This explains why IT implementation in the North Sumatra regional government has not yet fully improved risk control. Research by Lubis & Hidayat (2021) shows that integrating financial applications with internal control systems has been proven to reduce the risk of budget irregularities. Therefore, local governments in North Sumatra need to expand their use of technology towards risk prediction (predictive analytics), not just recording.

### IV. CONCLUSION

Based on the research results, it can be concluded that public financial management in North Sumatra still faces various risks at every stage of the budget process, from planning and budgeting to implementation and reporting. These risks arise from data inaccuracies, weak coordination between units, limited staff capacity, and an organizational culture that is not fully oriented towards risk management. Although local governments have implemented several control strategies, such as strengthening SPIP (Integrated Public Accounting System), increasing the role of APIP (Integrated Public Accounting System), and utilizing information technology, the effectiveness of their implementation still varies and does not fully meet the ideal standards according to the ISO 31000 framework, COSO ERM, or Government Regulation No. 60 of 2008. The implementation of risk control still tends to be administrative and not based on in-depth

data analysis. Therefore, risk control strategies in North Sumatra need to be directed at increasing human resource capacity, optimizing information technology integration, strengthening coordination across regional agencies, and developing an organizational culture that supports continuous monitoring. These efforts are expected to improve accountability, effectiveness, and transparency in public financial management, thereby better achieving regional development goals.

## V. RECOMMENDATIONS

Based on the research findings, it is recommended that local governments in North Sumatra strengthen the implementation of risk management in a more systematic and integrated manner throughout the financial management process, from planning to reporting. Human resource capacity building should be a priority through ongoing training in risk assessment, information technology utilization, and a thorough understanding of SPIP and ERM. Local governments should also optimize the use of digital-based financial information systems not only for recording but also for risk analysis and real-time performance monitoring. Furthermore, coordination between regional government agencies should be strengthened to ensure more synchronized and data-driven planning and budgeting processes. The role of APIP (Internal Auditor) as an internal supervisor needs to be enhanced, both in terms of the number of auditors, technical capabilities, and authority in risk-based audits. Finally, efforts are needed to build an organizational culture that is more disciplined, transparent, and proactive in detecting and controlling risks, so that efforts to improve accountability and effectiveness of public financial management can be carried out sustainably.

## VI. REFERENCES

- Beiter, P., Guillet, J., Jansen, M., Wilson, E., & Kitzing, L. (2024). The enduring role of contracts for difference in risk management and market creation for renewables. *Nature Energy*, 9(1), 20-26.
- BPKP. (2020). *Laporan maturitas SPIP di pemerintah daerah 2020*. Badan Pengawasan Keuangan dan Pembangunan.
- Bouchetara, M., Zerouti, M., & Zouambi, A. R. (2024). Leveraging artificial intelligence (AI) in public sector financial risk management: Innovations, challenges, and future directions. *EDPACS*, 69(9), 124-144.
- COSO. (2017). *Enterprise risk management—Integrating with strategy and performance*. Committee of Sponsoring Organizations of the Treadway Commission.
- Daud, N., & Zailani, S. (2017). Risk management in the public sector: A review and research agenda. *International Journal of Public Sector Management*, 30(1), 1–15.
- De Lorena, A. L. F., & Costa, A. P. C. S. (2024). Strategies for implementing risk management in Brazilian state governments. *International Journal of Public Sector Management*, 37(6), 824-841.
- Ebute, M. (2024). Cybersecurity Risk Management in Government Auditing: Strategies for Assessing and Addressing Vulnerabilities. Available at SSRN 4867148.
- Febrianto, A. (2020). Implementasi Sistem Pengendalian Intern Pemerintah (SPIP) dan dampaknya terhadap kinerja pengelolaan keuangan daerah. *Jurnal Akuntansi dan Keuangan Publik*, 6(2), 45–60.
- Heeks, R. (2018). *Information and communication technology for development (ICT4D)*. Routledge.
- Hermawan, D. (2018). Koordinasi lintas unit dalam perencanaan dan penganggaran daerah: Studi pada pemerintah kabupaten/kota di Indonesia. *Jurnal Administrasi Publik*, 12(1), 25–40.
- Lubis, M., & Hidayat, R. (2021). Pemanfaatan teknologi informasi untuk pengendalian risiko pengelolaan keuangan daerah. *Jurnal Sistem Informasi dan Teknologi*, 9(1), 15–28.
- Mardiasmo. (2018). *Akuntansi sektor publik* (4th ed.). Yogyakarta: Andi.
- McPhee, I. (2015). Enterprise risk management in the public sector. *Public Money & Management*, 35(4), 263–270.
- Mikesell, J. L. (2014). *Fiscal Administration: Analysis and Applications for the Public Sector* (9th ed.). Wadsworth, Cengage Learning.
- OECD. (2019). *Public sector human capital management: Principles and practices*. Organisation for Economic Co-operation and Development.
- Okeke, N. I., Bakare, O. A., & Achumie, G. O. (2024). Integrating policy incentives and risk management for effective green finance in emerging markets. *International Journal of Frontiers in Science and Technology Research*, 7(1), 76-88.
- Opabola, E. A., & Galasso, C. (2024). Informing disaster-risk management policies for education infrastructure using scenario-based recovery analyses. *Nature Communications*, 15(1), 325.
- Rahmawati, T. (2021). Integrasi sistem informasi keuangan dalam pengendalian internal pemerintah daerah. *Jurnal Akuntansi dan Sistem Informasi*, 7(2), 101–116.

- Saputra, A., Setiawan, A. B., & Jamaludin, A. (2024). The effect of the government internal control system on the performance of government agencies. *Jurnal Ilmiah Akuntansi Kesatuan*, 12(5), 781-790.
- Schein, E. H. (2017). *Organizational culture and leadership* (5th ed.). Wiley.
- Sipayung, B., & Cristian, R. D. (2022). The Influence of the Implementation of Regional Autonomy on Regional Financial Management of East Kalimantan Province. *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 2(3), 356-368.
- Tambunan, R. (2020). Pelatihan manajemen risiko dan kualitas laporan keuangan pemerintah daerah: Analisis komparatif. *Jurnal Akuntansi dan Keuangan Daerah*, 5(1), 33-50.
- Wahyudi, S. (2019). Ketepatan perencanaan dan dampaknya terhadap efektivitas pengelolaan anggaran daerah. *Jurnal Ilmu Administrasi Publik*, 11(2), 55-70.
- Undang-Undang Republik Indonesia Nomor 17 Tahun 2003 tentang Keuangan Negara.
- Undang-Undang Republik Indonesia Nomor 1 Tahun 2004 tentang Perbendaharaan Negara.
- Undang-Undang Republik Indonesia Nomor 23 Tahun 2014 tentang Pemerintahan Daerah.
- Peraturan Pemerintah Republik Indonesia Nomor 60 Tahun 2008 tentang Sistem Pengendalian Intern Pemerintah