



THE INFLUENCE OF SUPERVISION AND COMPLIANCE WITH PROCUREMENT REGULATIONS ON THE EFFICIENCY OF REGIONAL GOVERNMENT SPENDING IN NORTH MINAHASA REGENCY

Rizky Rachel Widagdo^{a,1*}, Wilson Bogar^{b,2}, Recky H. E. Sendouw^{c,3}

^{ab}Universitas Negeri Manado, Tondano, Indonesia

¹ ***@gmail.com; ² wilsonbogar@unima.ac.id, ³ reckysendouw@unima.ac.id

Received: 02/04/2026 | Revised: 04/05/2026 | Accepted: 20/05/2026 | Published: 09/06/2026

Abstract

This study aims to describe, analyze, and interpret the effect of supervision and compliance with procurement regulations on the spending efficiency of the Regional Government of North Minahasa Regency, both partially and simultaneously. This research employs a quantitative approach using a survey method by distributing questionnaires to 33 respondents who are government officials involved in financial management and public procurement processes. The data were analyzed using multiple linear regression techniques with the assistance of IBM SPSS version 26. The results indicate that, partially, the supervision variable has a positive and significant effect on spending efficiency, with a t-value of 4.106 and a significance level of 0.002. Similarly, compliance with procurement regulations also shows a positive and significant effect on spending efficiency, with a t-value of 3.104 and a significance level of 0.004. Simultaneously, both independent variables significantly influence spending efficiency, as indicated by an F-value of 4.917 and a significance level of 0.014. Furthermore, the coefficient of determination (R^2) is 0.247, which means that supervision and regulatory compliance jointly contribute 24.7% to the variation in spending efficiency, while the remaining 75.3% is explained by other factors outside the research model. These findings suggest that strengthening supervision mechanisms and improving compliance with procurement regulations are critical factors in enhancing regional spending efficiency.

Key word: Supervision, Regulatory Compliance, Public Procurement, Spending Efficiency, Local Government

INTRODUCTION

Regional financial management is one of the main pillars in realizing effective, accountable, and service-oriented governance [1]. The regional budget is not only a representation of the government's fiscal capacity, but also an instrument that determines the direction of development and public welfare. Within the framework of modern public administration, the budget is understood as part of the management process that includes planning, implementation, monitoring, and accountability [2]. This is in line with the views of Rubin and Bartle who emphasized that the quality of budgeting is greatly influenced by the ability of local governments to optimize resources, minimize waste, and ensure that every rupiah spent provides maximum benefits to the community. Thus, spending efficiency is one of the vital indicators in assessing the success of regional financial management [3].

From a public financial administration perspective, regional spending efficiency is not only understood as budget savings, but also as the ability of regional governments to produce program outputs and outcomes with the most rational and productive use of resources. Mardiasmo explains that efficiency is closely related to productivity, namely the comparison between the output produced and the input used, so that an activity is said to be efficient if it is able to produce a certain output with the lowest use of resources or produce a greater output with the same input. Rubin and Bartle also emphasized that efficiency is a measure of the success of public budgeting because it reflects the government's ability to prepare a realistic budget and implement the budget in an orderly manner to provide optimal results [3]. Within the framework of the government's allocation function, Fisher places public budget efficiency as part of the government's responsibility to provide public goods and services appropriately to avoid waste of resources [4]. Therefore, regional spending efficiency in this study is understood as the ability of regional

governments to achieve spending goals at a reasonable cost and produce maximum public benefits (*value for money*). This concept is also in line with the efficiency indicators according to Syam, namely achieving goals, saving resource use, and optimizing resource utilization productively [5]. In Indonesia, regional financial management is governed by various regulations that provide both a legal basis and operational guidelines for regional governments in carrying out their fiscal functions. Law Number 17 of 2003 concerning State Finance and Law Number 23 of 2014 concerning Regional Government emphasize that financial management must be carried out efficiently, effectively, economically, transparently, and accountably [6], [7]. These regulations emphasize that efficiency is not only measured by the level of budget absorption, but also by the ability of regional governments to achieve planned outputs and outcomes at the most rational and reasonable cost. When spending inefficiencies occur, several consequences will arise, such as low program effectiveness, slow development, and structural inefficiencies that ultimately harm the community. Mahmudi explained that inefficient government spending can result in obstacles to the achievement of development goals and reduce public accountability [8].

One important factor that is theoretically directly related to spending efficiency is supervision. Supervision is a managerial function that plays a role in ensuring that the implementation of activities runs according to plans, standards, and predetermined objectives. [1], [9]Robbins and Coulter define supervision (*controlling*) as the process of monitoring performance, comparing actual results with standards or targets, and taking corrective action if there are deviations [10]. In line with that, Siagian explains that supervision is a systematic effort to set implementation standards, measure work implementation, and make corrections if there is a discrepancy between implementation and these standards [11]. In the context of the public sector, supervision is also related to efforts to ensure that budget management runs according to the principle of *value for money* so that the use of public resources can be carried out economically, efficiently, and effectively [12].[13]

In the Indonesian government system, supervision is carried out through the Government Internal Control System (SPIP) as regulated in Government Regulation Number 60 of 2008. Within the SPIP structure, the Financial and Development Supervisory Agency (BPKP) has a strategic role in providing assurance that budget management runs according to the rules and principles of *good governance*. BPKP not only conducts audits, but also carries out budget reviews, program evaluations, and provides assistance to local governments. According to Purnamasari, the effectiveness of BPKP's supervision has been proven to contribute to reducing the risk of irregularities and improving the quality of spending, especially on programs that have strategic value and have a direct impact on public services [14]. Thus, BPKP supervision is suspected to influence the efficiency of regional spending. This relationship is also supported by previous research findings that show that strong supervision contributes significantly to the effectiveness of budget management because it is able to reduce deviations and improve the quality of program implementation [15], and the role of BPKP in audits and assistance has been proven to improve development budget governance so that opportunities for waste can be minimized [16].

Besides supervision, another aspect that influences spending efficiency is compliance with procurement regulations for goods/services (PBJ). According to Salman and Tjaraka in Wella [17], compliance is the behavior of carrying out or not carrying out certain activities in accordance with applicable rules and regulations. Meanwhile, procurement of goods/services (PBJ) is one of the most critical stages in the budget cycle because the largest proportion of regional spending is absorbed in this sector, especially capital expenditure and infrastructure development. Presidential Regulation Number 16 of 2018 concerning Government Procurement of Goods/Services, along with its amendments, emphasizes the importance of healthy competition, transparency, accountability, and compliance with technical and administrative procedures throughout the procurement process. Conceptually, compliance with PBJ regulations will encourage cost control, timely work implementation, and conformity of output to specifications, thus making regional spending more efficient. Conversely, non-compliance in PBJ can trigger the risk of failed tenders, re-tenders, cost overruns, low output quality, and work delays that ultimately hinder the achievement of development targets and reduce spending efficiency.[18]

Various issues related to the supervision and compliance of goods/services procurement (PBJ) are still being identified in several local governments, including North Minahasa Regency. Based on internal audit and evaluation reports, several activities experienced cost deviations and non-conformity with initial planning specifications. Furthermore, several projects experienced delays in completion, impacting the low effectiveness of budget implementation. These conditions indicate that even though the budget has been realized, the quality of regional expenditure management still faces various obstacles that have the potential to lead to inefficiencies.

This is reflected in Table 1.1, which presents the North Minahasa Regency Government Budget Realization Report for the 2022–2024 period. The data shows that the percentage of expenditure realization is in the range above 90 percent and tends to increase from year to year, namely 92.27 percent in 2022, increasing to 94.29 percent in 2023, and reaching 94.80 percent in 2024. Although this achievement indicates a relatively good budget absorption

THE INFLUENCE OF SUPERVISION AND COMPLIANCE WITH PROCUREMENT REGULATIONS ON THE EFFICIENCY OF REGIONAL GOVERNMENT SPENDING IN NORTH MINAHASA REGENCY

Rizky Rachel Widagdo et al

capacity, a high level of budget realization does not necessarily reflect spending efficiency, because efficiency is also determined by the accuracy of budget use, the conformity of output with planning, and control of costs and the timing of activity implementation. Therefore, further study is needed regarding the factors that influence regional spending efficiency, especially those related to supervision and compliance with goods/services procurement regulations.

Table 1. Report on the Realization of the North Minahasa Regency Government Budget for 2022-2024

N	Year	Target	Realization	%
1	2022	941,713,881,958.00	868,921,974,095.00	92.27
2	2023	1,172,877,710,248.00	1,105,944,808,286.00	94.29
3	2024	1,164,487,619,951.12	1,103,912,637,904.56	94.80

Source: Report on the Realization of the Revised Regional Budget of North Minahasa Regency 2022-2024 (Processed by researchers)

In the procurement sector, problems became increasingly apparent when the North Minahasa Regency PBJ Section recorded failed tenders for work packages. In 2023, more than four packages had to undergo a re-tendering process due to non-compliance with administrative and technical requirements, hampering timely implementation. Furthermore, several regional government agencies remained non-compliant with PBJ planning requirements, from the preparation of the Terms of Reference (TOR), technical specifications, to unit price analysis. This non-compliance not only hampers the procurement process but also has the potential to lead to budget inefficiencies. Oversight by the North Sulawesi BPKP Representative Office has actually been carried out through performance audits, compliance audits, and budget preparation assistance. However, based on follow-up evaluations, several regional agencies have not consistently and comprehensively implemented BPKP recommendations. For example, recommendations related to strengthening technical planning, improving contract management, and enhancing spending control have not been fully implemented. This situation indicates that effective BPKP oversight must be accompanied by a commitment from regional agencies to follow up on each recommendation to minimize the risk of inefficiency.

From an academic perspective, several previous studies have shown that oversight and compliance in goods/services procurement play a crucial role in increasing the effectiveness and efficiency of regional budget management. Research conducted by Suri, Angi, and Tungga on regional financial oversight in Belu Regency found that strong oversight contributed 33.4 percent to budget management effectiveness. Factors such as timely tender scheduling, accurate technical documents, and administrative compliance with procurement contracts are key determinants of efficient budget use. This series of studies demonstrates that both procurement oversight and compliance have been shown to influence budget effectiveness and efficiency. However, these studies still examine these variables separately and have not combined the BPKP's oversight and procurement regulatory compliance into a single comprehensive model. Thus, a research gap remains to be filled to understand how these two variables simultaneously influence the efficiency of local government spending, particularly in the context of North Minahasa Regency.

Practically, this type of research is also highly urgent because local governments, including North Minahasa Regency, are striving to improve the quality of budget management in order to improve financial performance and the quality of public services. Given the various obstacles in oversight, procurement (PBJ) implementation, and fluctuations in spending efficiency, local governments require empirical studies that can provide a more comprehensive picture of the factors influencing budget efficiency. Research findings, using the BPKP (Financial Supervisory Agency) oversight and procurement (PBJ) compliance variables, are expected to provide concrete input for improving the oversight system, strengthening procurement (PBJ) capacity, and increasing accountability in regional financial management.

In order for the research to be more focused, the problem limitations are set as follows:

1. BPKP supervision, namely variable X1.
2. PBJ Regulation Compliance as variable X2.

3. Regional Spending Efficiency as variable Y.

Based on the problem limitations above, the formulation of this research is as follows:

1. Does BPKP supervision have an impact on the efficiency of regional government spending in North Minahasa Regency?
2. Does compliance with PBJ regulations affect the efficiency of regional government spending in North Minahasa Regency?
3. Do BPKP supervision and compliance with PBJ regulations jointly influence the efficiency of regional government spending in North Minahasa Regency?

METHOD

This study uses a quantitative approach because it allows researchers to objectively explain phenomena through variable measurement and statistical analysis. [19] This approach emphasizes the use of numerical data analyzed systematically to test the relationships between research variables. The research location is the North Minahasa Regency Government, with a focus on work units directly involved in the procurement of goods/services and the implementation of regional spending. Specifically, the research was conducted at the Goods/Services Procurement Work Unit (UKPBJ)/Goods/Services Procurement Section of the North Minahasa Regency Regional Secretariat, as well as several Regional Apparatus Organizations (OPD) that play a role in procurement planning, contract implementation, and regional spending control.

The following are the definitions and indicators of research variables:

1. BPKP Supervision (X1)

BPKP's oversight is measured through five indicators. First, the BPKP's performance audits of programs/activities utilizing regional expenditures, encompassing the frequency, scope, and depth of the audits. Second, the BPKP's budget reviews and evaluations of expenditure planning and implementation, such as reviews of the Budget Plan (RKA/DPA) and the efficiency of expenditure allocations. Third, the BPKP's assistance and consultation in the implementation of SPIP (Standard Budget Implementation Plan), risk management, and governance of goods/services procurement. Fourth, the clarity and usefulness of BPKP recommendations, namely the extent to which recommendations are easy to understand, operational, and relevant to improving spending. Fifth, the level of follow-up on BPKP recommendations, namely the extent to which work units follow up on supervisory findings and recommendations by changing policies or procedures.

2. PBJ Regulatory Compliance (X2)

PBJ Regulatory Compliance is measured through five indicators. First, procurement planning compliance, including the timeliness and completeness of the RUP presentation, preparation of the KAK, technical specifications, HPS, and tagging of PDN/Import packages in accordance with the provisions. Second, supplier selection compliance, namely the implementation of the tender/selection process through SPSE in accordance with procedures, objective and non-discriminatory bid evaluation, and the application of Domestic Product (PDN) priorities in accordance with TKDN/BMP. Third, contract implementation compliance, namely the implementation of work in accordance with the timeframe, technical specifications, contract value, and management of contract changes in accordance with regulations so as not to cause unauthorized cost overruns. Fourth, PBJ administration and reporting compliance, including the completeness of procurement documents (contracts, minutes, evaluation documents) and PDN reporting through SIRUP/SPSE in accordance with the provisions. Fifth, compliance with PBJ internal controls, namely the existence of APIP/BPKP reviews of PBJ/PDN, monitoring of local catalogs, validation of TKDN certificates, and follow-up on supervisory recommendations related to PBJ.

3. Regional Spending Efficiency (Y)

Regional spending efficiency is measured through five indicators. First, achievement of spending objectives, namely the extent to which activities funded by the Regional Budget (APBD) achieve the established output and outcome targets so that programs run according to their targets. Second, budget efficiency, namely the extent to which spending is carried out without waste, budget deviations can be suppressed, and cost overruns can be avoided. Third, optimization of budget utilization, namely the perception that every rupiah of spending provides significant benefits for public services and development (value for money). Fourth, efficiency of implementation time use, namely activities funded by regional spending are generally completed on schedule without unnecessary delays. Fifth, optimization of the use of non-financial resources (human resources, infrastructure, and systems), namely the extent to which supporting resources are utilized productively to achieve program results.

The population in this study is all the apparatus directly involved in the procurement process of goods/services and the implementation of regional spending within the North Minahasa Regency Government and the number of samples in this study is the entire population, namely 33 respondents. The research hypothesis test p at a significance level of 5% ($\alpha = 0.05$), obtained a t -table value of 2.03. The testing criteria are as follows:

- If $t \text{ count} > t \text{ table}$ (2.03) and the significance value < 0.05 , then the hypothesis is accepted.
- If $t \text{ count} \leq t \text{ table}$ (2.03) and the significance value ≥ 0.05 , then the hypothesis is rejected.

Based on the results of the multiple linear regression analysis presented previously in table 4.5, it can be described as follows:

1. The Effect of Supervision (X1) on Spending Efficiency (Y)

The Supervision variable (X1) has a t -value of 4.106 with a significance level of 0.002. When compared to the t -table value (2.03), the t -value is greater ($4.106 > 2.03$), and the significance value is also smaller than 0.05. These results indicate that the supervision variable has a positive and significant effect on spending efficiency. This means that improving the quality of supervision will significantly contribute to increasing the efficiency of regional budget use. Thus, the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected.

2. The Effect of Compliance with Procurement Regulations for Goods and Services (X2) on Spending Efficiency (Y)

The PBJ Regulation Compliance variable (X2) has a t -value of 3.104 with a significance level of 0.004. This value is greater than the t -table ($3.104 > 2.03$) and the significance value is also below 0.05. This indicates that compliance with goods and services procurement regulations has a positive and significant influence on spending efficiency. In other words, the higher the level of compliance with applicable regulations, the more efficient the management of local government spending. Therefore, the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. Based on the results of the partial test, it can be concluded that the two independent variables in this study, namely Supervision (X1) and PBJ Regulatory Compliance (X2), individually have a significant influence on Spending Efficiency (Y).

RESULTS AND DISCUSSION

The Effect of Supervision (X1) on the Spending Efficiency (Y) of the North Minahasa Regency Regional Government

The results of the hypothesis testing indicate that the Supervision variable (X1) has a positive and significant influence on Spending Efficiency (Y). This is evidenced by the calculated t value of 4.106 which is greater than the t table of 2.03 ($4.106 > 2.03$), as well as a significance value of 0.002 which is smaller than 0.05. This finding indicates that improving the quality of supervision can significantly increase efficiency in the use of regional budgets. Thus, the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. Empirically, these results strengthen that supervision is one of the important determinants in creating efficient regional financial management.

These findings are further supported by the results of multiple linear regression analysis, which show a regression coefficient of 0.440 for the supervision variable, indicating a positive correlation. This means that every increase in supervision quality will be followed by a 0.440 unit increase in spending efficiency, assuming other variables remain constant. In fact, based on the *Standardized Coefficients (Beta) value* of 0.517, the supervision variable has a slightly more dominant influence than the regulatory compliance variable. This indicates that supervision is a highly strategic factor in increasing regional spending efficiency. Thus, the results of this study not only demonstrate statistical significance but also demonstrate the substantial contribution of supervision to the model.

Conceptually, the results of this study align with the view of Robbins and Coulter (2021), who stated that supervision is a systematic process of monitoring performance, comparing results to standards, and taking corrective action on deviations. In the context of regional budget management, this function is crucial because it can prevent waste and ensure that all activities are carried out according to predetermined plans. This is further reinforced by Siagian, [11] who emphasized that supervision is not merely about finding errors, but rather a tool to ensure the efficiency and effectiveness of program implementation.

From the perspective of public budget efficiency, these findings are also relevant to the theory that emphasizes that efficiency is related to the ability to produce maximum output with minimal input usage [12]. Good oversight will ensure that resource use is carried out economically and on target, so that the principle of *value for money* can be achieved. Furthermore, Rubin and Bartle stated that budget efficiency is not only determined by the planning stage, but also depends heavily on the budget implementation and control process [3]. In other words, without effective oversight, the potential for inefficiency in budget implementation will increase.

Furthermore, in the context of Indonesian government institutions, oversight is implemented through the Government Internal Control System (SPIP), as stipulated in Government Regulation Number 60 of 2008. SPIP emphasizes the importance of integrated internal control, ranging from the control environment, risk assessment, to ongoing monitoring. Optimal SPIP implementation will improve accountability and transparency in regional financial management, ultimately impacting spending efficiency. In addition to internal oversight conducted by regional apparatus, the Financial and Development Supervisory Agency (BPKP) also plays a strategic role in improving the efficiency of regional government spending. Based on Presidential Regulation Number 192 of 2014, BPKP has a mandate to carry out internal oversight through audits, reviews, evaluations, and other supervisory activities regarding state/regional financial management. In this context, the supervision carried out by BPKP is not only administrative, but also oriented towards improving the quality of budget management through a *value for money approach*, namely ensuring the economic aspects, efficiency, and effectiveness in every government program.

Operationally, the effectiveness of BPKP oversight, which contributes to spending efficiency, is reflected in several key dimensions in this study. First, the implementation of performance audits, reviewed in terms of frequency, scope, and depth, demonstrates the extent to which intensive and comprehensive oversight is conducted on programs/activities utilizing regional spending. Audits conducted routinely, covering various sectors, and supported by in-depth analysis down to the root causes, will be more effective in identifying potential inefficiencies. Second, budget review and evaluation activities reflect the preventive function of oversight, particularly in assessing the suitability of planning documents such as the Budget Plan (RKA) and Budget Implementation Plan (DPA) and the effectiveness of budget implementation. Through this process, potential misallocations and waste can be detected early, allowing for systematic improvement in spending efficiency.

Third, the BPKP's assistance and consultancy in the implementation of SPIP, risk management, and procurement governance contribute to strengthening the capacity of local government organizations. This approach is not only corrective, but also preventive and educational, thus creating a more reliable and efficient financial management system in the long term. Fourth, the quality of supervisory recommendations is a critical factor in determining the effectiveness of follow-up. Clear, operational, and relevant recommendations will facilitate regional apparatuses in making concrete improvements to expenditure management. Conversely, normative recommendations tend to have less significant impact on efficiency.

Fifth, the level of follow-up on recommendations is a key indicator in assessing the success of oversight. The higher the percentage of recommendations followed up, especially those resulting in policy changes or procedural improvements, the greater the impact of oversight on improving spending efficiency. Purnamasari explained that the BPKP's role in conducting performance audits and compliance audits is able to identify various potential inefficiencies in budget implementation, such as wasteful spending, inaccurate program targets, and non-compliance with regulations [14]. Furthermore, through budget review and evaluation activities, the BPKP can provide constructive recommendations for improvements to local governments. Follow-up on these recommendations is a crucial factor in increasing spending efficiency, as it encourages continuous improvement in the regional financial management system. Thus, BPKP supervision functions not only as a control tool but also as an organizational learning instrument.

Furthermore, the Financial and Development Supervisory Agency (BPKP) also plays a role in providing guidance and consultation to local governments, particularly in the implementation of the Government Internal Control System (SPIP) and risk management. This guidance is crucial for increasing human resource capacity and improving the overall budget management system. Research by Tasik, Remmang, and Faridah shows that the BPKP's role contributes significantly to improving the quality of regional development budget utilization [16]. This confirms that synergy between internal and external oversight is a crucial factor in creating spending efficiency.

The results of this study are also consistent with previous research findings. Suri, Angi, and Tungga [15] found that regional financial oversight significantly impacted budget management effectiveness, contributing 33.4%. These findings reinforce the central role of both internal and external oversight in improving the efficiency of regional government spending. Substantively, the findings of this study indicate that increased spending efficiency in North Minahasa Regency is significantly influenced by the quality of the oversight implemented. Effective oversight serves not only as a control tool but also as a mechanism for continuous improvement in budget management. With intensive oversight, every stage of budget management, from planning and implementation to evaluation, can proceed in an orderly, transparent, and accountable manner. Therefore, strengthening the oversight system is a crucial strategy that needs to be continuously developed to achieve more efficient regional financial management oriented towards improving public welfare.

The Influence of PBJ Regulation Compliance (X2) on the Spending Efficiency (Y) of the North Minahasa Regency Regional Government

Based on the results of partial hypothesis testing (t-test), the variable Compliance with Goods/Services Procurement Regulations (X2) has a calculated t-value of 3.104 with a significance level of 0.004. When compared with the t-table value of 2.03, it can be seen that the calculated t-value is greater ($3.104 > 2.03$) and the significance value is less than 0.05. This indicates that compliance with PBJ regulations has a positive and significant effect on the efficiency of regional spending. Thus, the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. This finding indicates that the higher the level of compliance of the apparatus with the provisions of goods/services procurement, the more optimal the efficiency of regional budget use.

These results are also supported by the multiple linear regression analysis used in the study to determine the magnitude of the influence of the Supervision (X1) and PBJ Regulatory Compliance (X2) variables on Spending Efficiency (Y). The regression coefficient of the PBJ Regulatory Compliance (X2) variable is 0.421, indicating that every one-unit increase in regulatory compliance will increase spending efficiency by 0.421 units, assuming other variables are constant. This positive coefficient value confirms that the relationship between regulatory compliance and spending efficiency is unidirectional. This means that the higher the level of compliance with procurement regulations, the more efficient the management of regional spending.

Theoretically, these findings align with the concept of compliance in public administration, which emphasizes the importance of adherence to regulations as part of an organization's control mechanism. Compliance is a form of organizational behavior that demonstrates the conformity of actions to applicable norms and regulations. Robbins and Coulter also emphasize that compliance is part of the control function, which aims to ensure that activities are carried out in accordance with established plans and procedures [3]. In this context, compliance with procurement regulations is an important instrument for preventing deviations and ensuring the effectiveness and efficiency of budget implementation.

From the perspective of government procurement of goods/services, regulatory compliance plays a strategic role in realizing the principle of value for money. Based on Presidential Regulation Number 16 of 2018, the PBJ process must be implemented with the principles of efficiency, effectiveness, transparency, openness, competition, fairness, and accountability. Failure to comply with these principles often leads to various problems such as cost overruns, delays in activity implementation, and low output quality (Arsyad & Karisma, 2022). Therefore, regulatory compliance is a key factor in ensuring that every stage of procurement, from planning and supplier selection to contract implementation and reporting, can proceed in an orderly and efficient manner.

Operationally, this study reflects compliance with procurement regulations through several important interrelated dimensions. First, compliance during the procurement planning stage, which includes the timely and complete preparation of the RUP, TOR, technical specifications, and Own Estimated Price (HPS). Planning that complies with regulations will result in accurate and realistic procurement documents, thus minimizing the risk of revisions, tender failure, and budget wastage from the outset. Second, compliance in the supplier selection process, which emphasizes objective, transparent, and non-discriminatory tendering or selection through an electronic system (SPSE), as well as the implementation of a Domestic Product (PDN) priority policy in accordance with TKDN/BMP provisions. A selection process that complies with regulations will create healthy competition, allowing the government to obtain suppliers with the best prices and optimal quality.

Third, compliance with contract implementation, which includes ensuring the work conforms to technical specifications, implementation timelines, and the agreed contract value. Compliance at this stage is crucial because it directly impacts activity output. Non-compliant contract implementation can potentially lead to delays, uncontrolled contract changes, and cost overruns, which can lead to reduced spending efficiency. Fourth, compliance with procurement administration and reporting, including complete contract documents, minutes, and reporting through systems such as SIRUP and SPSE. Orderly administration will increase transparency and accountability, as well as simplify the monitoring and evaluation process.

Fifth, compliance with internal controls in procurement, which includes reviews by the APIP or BPKP, monitoring the use of local catalogs, validating TKDN certificates, and following up on supervisory recommendations. This dimension demonstrates that compliance extends beyond formal procedures and encompasses control mechanisms that ensure the continued quality of procurement management. The findings of this study are also consistent with previous research. Aprianto and Mulyani (2022) found that compliance with procurement regulations has a positive and significant impact on regional budget efficiency. Increased compliance has been shown to reduce budget waste through cost control and timely implementation of activities. Substantively, the impact of compliance with procurement regulations on spending efficiency can be explained through several important aspects. First, compliance during the planning stage ensures that procurement documents such as the RUP, KAK, and HPS

are prepared accurately and realistically, thereby reducing the risk of planning errors. Second, compliance during the supplier selection stage ensures a transparent and competitive tender process, resulting in the best price and quality. Third, compliance during contract implementation ensures that work is carried out according to the established specifications, timeframe, and cost. Fourth, compliance in administration and reporting increases accountability and facilitates the evaluation and monitoring process. Thus, it can be concluded that compliance with procurement regulations is a critical factor influencing the efficiency of local government spending. Compliance serves not only as an administrative obligation but also as a strategic instrument for improving the quality of regional financial governance. Therefore, the North Minahasa Regency Government needs to continue strengthening the implementation of procurement regulations, improving human resource capacity, and ensuring consistency in procurement procedures to ensure sustainable spending efficiency.

The Effect of Supervision (X1) and PBJ Regulatory Compliance (X2) Simultaneously on the Spending Efficiency (Y) of the North Minahasa Regency Regional Government

Testing the influence of the Supervision variable (X1) and Compliance with Procurement Regulations (X2) simultaneously on Spending Efficiency (Y) in this study was conducted through the F test (ANOVA). Based on the analysis results, the calculated F value was 4.917 with a significance level of 0.014. When compared with the F table value of 3.31, it can be seen that the calculated F is greater than the F table ($4.917 > 3.31$) and the significance value is less than 0.05. These results indicate that together the supervision variable and PBJ regulatory compliance have a positive and significant influence on regional spending efficiency. Thus, the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected.

In addition, the correlation test results show an R value of 0.497, which indicates that the relationship between the variables of Supervision (X1) and PBJ Regulatory Compliance (X2) with Spending Efficiency (Y) is in the moderate category and is positive. This means that an increase in the quality of supervision and the level of regulatory compliance together tends to be followed by an increase in spending efficiency. This correlation value strengthens the results of the F test which shows a significant relationship, while also providing an overview of the strength of the relationship between variables in the research model.

Empirically, these findings indicate that the efficiency of local government spending is not solely influenced by a single factor, but rather results from the interaction between the quality of oversight and the level of regulatory compliance. These two variables complement each other in creating effective, efficient, and accountable regional financial governance. Strong oversight without regulatory compliance has the potential to be suboptimal, as implementation activities can still deviate from regulations. Conversely, regulatory compliance without adequate oversight also risks inconsistent implementation in the field. Therefore, synergy between oversight and compliance is a key factor in improving spending efficiency.

Upon deeper analysis, this synergy is reflected in the interrelationship between the indicators of both variables. From a supervisory perspective, performance audits conducted intensively (frequency), broadly (scope), and in-depth (depth) will be able to identify critical points of inefficiency in each stage of procurement and expenditure implementation. These findings are then reinforced through budget review and evaluation activities that ensure that budget planning and realization are in accordance with the principle of *value for money*. On the other hand, regulatory compliance at the procurement planning stage (RUP, KAK, HPS) ensures that activities have been designed realistically and in accordance with regulations from the outset, thereby minimizing the potential for deviations that must then be corrected through supervision.

This integration becomes even more evident during the implementation phase. Supervisory guidance and consultancy, particularly in the implementation of SPIP, risk management, and procurement governance, will enhance the capacity of officials to compliantly carry out the procurement process. At the same time, compliance in supplier selection and contract execution ensures that the entire process follows established procedures, technical specifications, and timelines. Thus, supervision serves as a system strengthening mechanism, while compliance serves as a concrete form of implementation of the system in the field.

Furthermore, the causal relationship between the two variables is also evident in the quality of supervisory recommendations and their level of follow-up. Clear, operational, and relevant BPKP recommendations will be easier to implement if the organization maintains a high level of regulatory compliance. Conversely, compliance with internal procurement control systems, such as APIP/BPKP reviews, TKDN validation, and follow-up on findings, will accelerate recommendation implementation and result in continuous system improvements. Thus, supervisory and compliance indicators do not stand alone but rather reinforce each other in creating spending efficiency. The results of multiple linear regression analysis also support this finding, where both independent variables have positive regression coefficients, namely 0.440 for Supervision (X1) and 0.421 for PBJ Regulatory Compliance (X2). This

indicates that an increase in both variables simultaneously will contribute to increased spending efficiency. In addition, the coefficient of determination (R Square) value of 0.247 indicates that 24.7% of the variation in spending efficiency can be explained by the combination of supervision and PBJ regulatory compliance variables, while the remainder is influenced by other factors outside the research model. Theoretically, these results align with the concept of public budget efficiency, which emphasizes the importance of optimizing resource use through effective control and regulatory compliance. Mardiasmo stated that efficiency is closely related to how the government is able to generate maximum output with limited input [12]. In this context, oversight serves as a control mechanism to ensure budget implementation runs according to plan, while regulatory compliance ensures that all processes are carried out according to applicable standards and procedures. The combination of these two aspects will result in more productive budget management and minimize waste.

Furthermore, within the framework of the Government Internal Control System (SPIP), supervision and compliance are two inseparable elements. Supervision is part of control and monitoring activities, while compliance with regulations reflects the effectiveness of the control system's implementation. With proper SPIP implementation, local governments can improve the quality of budget planning, implementation, and evaluation across the board, thus directly impacting spending efficiency. The findings of this study are also supported by previous research. Suri, Angi, and Tunga found that regional financial oversight significantly impacts budget management effectiveness [15]. Meanwhile, Aprianto and Mulyani demonstrated that compliance with procurement regulations significantly impacts budget efficiency. When these two factors are combined, the impact on efficiency becomes even stronger because it encompasses both control and procedural compliance.

Thus, it can be concluded that simultaneous supervision and compliance with procurement regulations play a crucial role in improving the efficiency of regional government spending in North Minahasa Regency. Therefore, efforts to improve spending efficiency cannot be carried out in isolation but must be carried out through an integrated approach, namely by strengthening the oversight system while simultaneously increasing compliance with goods/services procurement regulations. This is crucial to ensure that regional budget management is optimal, transparent, and accountable, and is able to provide maximum benefits to the community.

CONCLUSION

Based on the research results and discussion in the previous section, several conclusions can be formulated as follows:

1. Supervision has a positive and significant effect on spending efficiency.
The partial test results show that the monitoring variable has a calculated t value of 4.106, which is greater than the t table (2.03) with a significance level of 0.002 (<0.05). Systematic and continuous monitoring allows for early detection of deviations, prevents waste, and encourages corrective actions, so that the use of regional budgets becomes more efficient and on target.
2. Compliance with PBJ regulations has a positive and significant effect on spending efficiency.
The partial test results show that the regulatory compliance variable has a calculated t value of 3.104, which is greater than the t table (2.03) with a significance level of 0.004 (<0.05). Compliance with procurement procedures can minimize waste, delays, and non-conformities with specifications, so that regional budget management becomes more efficient, optimal, and accountable.
3. Supervision and compliance with PBJ regulations simultaneously have a positive and significant impact on spending efficiency.
The results of the simultaneous test show that the calculated F value of 4.917 is greater than the F table (3.31) with a significance level of 0.014 (<0.05). The correlation value (R) of 0.497 indicates a moderate and positive relationship. Meanwhile, the correlation coefficient (R²) of 0.247 indicates that BPKP supervision and PBJ Regulatory Compliance have a 24.7% contribution to regional spending efficiency, while 75.3% is influenced by other factors not examined in this study.

REFERENCES

- [1] EE Masengi, EM Lumingkewas, and BF Supit, *Government Bureaucracy*. Minhaj Pustaka, 2025.
- [2] RH Sendouw, *Strategic Management in Public Organizations*. Kupang : Tangguh Denara Jaya Publisher , 2023.
- [3] M. Rubin and J. Bartle, "Equity in public budgeting: Lessons for the United States," *Journal of Social Equity and Public Administration* , vol. 1, no. 2, pp. 11–25, 2023.
- [4] RC Fisher, *State and local public finance* . Routledge . , 2022.
- [5] H. Syam, "Work efficiency in public organizations, " . *Journal of Public Management* , vol. 5, no. 2, pp.

- 55–67, 2020.
- [6] Republic of Indonesia, *Law Number 17 of 2003 concerning State Finance* . Indonesia, 2003.
- [7] Republic of Indonesia, *Law Number 23 of 2014 concerning Regional Government* . Indonesia, 2014.
- [8] Mahmudi, *Public sector performance management* . Yogyakarta: UPP STIM YKPN., 2021.
- [9] LE Masengi Evi Elvira, *Principles of Management* . Malang: Wineka Media, 2019.
- [10] SP Robbins and M. Coulter, *Management (Global Edition)* . . Pearson Education., 2020.
- [11] SP Siagian, *Management (Third edition)* . Jakarta: Bumi Aksara, 2020.
- [12] Mardiasmo, *Public sector accounting (Latest Edition)* . . Yogyakarta: Andi, 2021.
- [13] W. Bogar, *Strategic Management* . Kupang: Tangguh Denara Jaya Publisher, 2025.
- [14] D. Purnamasari, “BPKP supervision in increasing accountability in regional budget management, ” . *Journal of Government Accountability* , , vol. 8, no. 2, pp. 98–113, 2021.
- [15] PK Suri, YF Angi, and CA Tingga, “The Influence of Regional Financial Supervision on the Effectiveness of Budget Management of the Belu Regency Regional Government,” *Journal of Management and Creative Economy* , vol. 2, no. 2, pp. 59–66, 2024.
- [16] P. Tasik, H. Remmang, and F. Faridah, “The Role of the Financial and Development Supervisory Agency in the Use of the Makassar City Regional Development Budget, ” . *ACCESS: Journal of Accounting, Finance and Sharia Accounting* , , vol. 2, no. 3, pp. 163–171, 2024.
- [17] S. Wella, *The Influence of Tax Service Quality and Tax Payment Compliance on Motivation to Pay Land and Building Tax (PBB) in Pasar Merah Timur Subdistrict* . Medan: STIE Eka Prasetya., 2021.
- [18] N. Syafrina, “). Responsibility for Managing Procurement of Goods and Services in Accelerating Development in Binjai City (Study on the Goods and Services Procurement Work Unit),” Doctoral dissertation, Islamic University of North Sumatra, Medan, 2024.
- [19] Prof. DR. Sugiyono, *Educational Research Methods: Quantitative, Qualitative, and R&D Approaches* . Alfabeta, 2013.