Economic and Business Horizon

ISSN: 2963-2765

Economic and Business Horizon
Volume: 05
Issue: 04
Year: 2026
Page: 459-472

Citation:
Prawinda, D., Sari, K. R., & Aprianti, S. (2026). The effect of local own-source revenue, general allocation funds, budget surplus/deficit, and capital expenditure on regional loans. *Economic and Business Horizon*, *5*(4), 459-472.

The Effect of Local Own-Source Revenue, General Allocation Funds, Budget Surplus/Deficit, and Capital Expenditure on Regional Loans

Destira Prawinda[1*], Kartika Rachma Sari[1], Siska Aprianti[1]

[1] Department of Public Sector Accounting, Politeknik Negeri Sriwijaya, Palembang, Indonesia

[*] *Corresponding author: Destira Prawinda (destiraprawinda11@gmail.com)*

Abstract

Regional loans play an important role in supporting regional development when local fiscal resources are insufficient. However, previous studies have reported inconsistent findings regarding the fiscal factors influencing regional loans. This study investigates the effects of local own-source revenue, the general allocation fund, budget surplus/deficit, and capital expenditure on regional loans in Indonesia. A quantitative approach was employed using balanced panel data from 17 provinces during 2020–2024 (85 province-year observations). Secondary data obtained from the audited Regional Government Financial Statements were analyzed using panel data regression with the Random Effect Model (REM) in EViews 13. The results indicate that local own-source revenue, budget surplus/deficit, and capital expenditure positively and significantly affect regional loans, whereas the general allocation fund has no significant effect. Simultaneously, all variables significantly influence regional loans. These findings suggest that regional loan decisions are primarily driven by fiscal capacity, budget conditions, and investment needs, providing updated evidence to support more effective regional fiscal management. The findings also provide practical implications for policymakers in formulating sustainable regional loan strategies while strengthening fiscal capacity and supporting long-term regional development.

Keywords

Budget Surplus/Deficit, Capital Expenditure, General Allocation Fund, Local Own-Source Revenue, Regional Loan.

1. Introduction

Indonesia's vast territory is characterized by diverse regional potentials, fiscal capacities, and levels of development, creating challenges in achieving equitable regional development (Sofilda et al., 2023). To address these disparities, the government implemented regional autonomy through Law Number 23 of 2014, granting local governments the authority to manage their own affairs and finances. This authority is further strengthened by Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments, which establishes a fiscal framework based on fairness, transparency, and accountability (Lewis, 2023). Despite these arrangements, regional fiscal capacity remains uneven, preventing many local governments from fully financing development through their own revenues. Consequently, alternative financing mechanisms, including regional loans, have become increasingly important to support development and public service delivery.

Table 1. Average Percentage of Government Revenue Realization in 2020-2024

Revenue Source	2020	2021	2022	2023	2024
Local Own-Source Revenue	97.47%	100.78%	100.52%	97.55%	101.63%
Intergovernmental Transfers	97.11%	100.01%	99.05%	96.81%	97.57%
Regional Loans	16.24%	31.40%	32.53%	24.59%	19.80%
Other Legitimate Revenue	91.75%	80.32%	48.12%	31.42%	101.28%

Regional loans have become an important financing instrument for supporting regional development in Indonesia. However, their utilization remains inconsistent across local governments. As illustrated in Table 1, between 2020 and 2024, the realization of regional loans fluctuated from 16.24% to 31.40%, increased slightly to 32.53%, and then declined to 24.59% and 19.80%. These fluctuations indicate that local governments adopt different loan policies according to their fiscal conditions and financing priorities. Although loan levels remained well below the maximum limit of 75% of general regional revenue stipulated in Government Regulation Number 1 of 2024 on the Harmonization of National Fiscal Policy, the observed variation suggests that loan decisions are influenced by multiple fiscal factors that require further investigation.

Local own-source revenue reflects regional fiscal capacity and the ability of local governments to meet debt obligations (Mulyana et al., 2022). Higher local own-source revenue generally indicates stronger financial independence, lower default risk, and greater access to external financing. Yulsiati et al. (2025) argue that higher local own-source revenue improves regional debt repayment capacity, while Salsabila (2025) states that stronger fiscal capacity increases opportunities for regional loans. However, previous findings remain inconsistent. Mourão et al. (2023) found that local own-source revenue significantly affects regional loans, whereas Salsabila (2025) reported no significant relationship. The general allocation fund transferred from the central government is intended to reduce fiscal disparities among regions. Nevertheless, insufficient transfers may encourage local governments to rely on loans as an alternative financing source. Empirical evidence is also inconclusive, as Salsabila (2025) found a significant effect of the general allocation fund on regional loans, while Yulsiati and Maqruf (2022) reported otherwise. Similarly, budget surplus/deficit has produced inconsistent findings. Berisha (2026) demonstrated that budget deficits significantly influence regional loans, whereas Ilmidaviq (2018) found no significant effect. Moreover, several provinces continued to undertake substantial loans despite recording budget surpluses, indicating that loan decisions cannot be explained solely by fiscal balance conditions.

Capital expenditure represents a key component of regional spending because it finances long-term infrastructure and public development. However, Lubis and Purwoko (2025) argued that intergovernmental transfers are often allocated to operational expenditures rather than capital investment, thereby increasing the need for alternative financing. In this context, Galinski (2023) emphasized that regional loans serve as a strategic financing source for development projects. Empirical evidence generally supports this relationship, as Yulsiati et al. (2025) found that capital expenditure positively influences regional loans. Nevertheless, differences in regional fiscal characteristics suggest that these findings may not be universally applicable (Oates, 1999).

Despite the growing body of literature, the determinants of regional loans in Indonesia remain inconclusive due to inconsistent findings across previous studies. Moreover, existing research has largely examined fiscal determinants separately, while evidence integrating local own-source revenue, the general allocation fund, budget surplus/deficit, and capital expenditure within a single framework using the latest post-pandemic regional fiscal data is still limited. This study addresses these research gaps by providing updated empirical evidence from Indonesian local governments during the 2020–2024 period. Accordingly, this study aims to examine the effects of local own-source revenue, the general allocation fund, budget surplus/deficit, and capital expenditure on regional loans in Indonesia.

2. Literature Review and Hypothesis Development

2.1. The Effect of Local Own-Source Revenue on Regional Loans

Local own-source revenue refers to revenue generated independently by local governments from their own fiscal sources, including local taxes, service charges, returns from separated regional assets, and other legally recognized sources. According to Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments, local own-source revenue constitutes the primary source of locally generated income used to finance government administration, regional development, and public service delivery. William and Harjanto (2024) defined local own-source revenue as revenue derived from regional economic potential and managed by local governments in accordance with prevailing regulations. Similarly, Yulsiati and Maqruf (2022) emphasized that local own-source revenue is a fundamental source of financing for government operations and regional development.

According to fiscal decentralization theory, the transfer of fiscal authority from the central government to local governments enables regions to manage their own financial resources and determine financing policies, including the use of regional loans as an alternative funding source (Bahasoan et al., 2025). Higher local own-source revenue reflects stronger fiscal capacity, greater financial independence, and an enhanced ability to meet debt obligations (Tiawon & Hukom, 2025). Consequently, fiscally stronger local governments are more likely to obtain external financing when needed. Salsabila (2025) argued that higher local own-source revenue indicates stronger regional economic and fiscal capacity, thereby increasing the likelihood of regional loans because local governments are better positioned to repay their debt obligations. Supporting this argument, Mourão et al. (2023) found that local own-source revenue has a positive and significant effect on regional loans.

H1: Local own-source revenue has a positive and significant effect on regional loans.

2.2. The Effect of the General Allocation Fund on Regional Loans

General Allocation Fund (GAF) is an intergovernmental transfer allocated from the State Budget to local governments to reduce fiscal disparities and support the implementation of fiscal decentralization (Akita et al., 2021). According to Government Regulation Number 12 of 2019 concerning Regional Financial Management, the general allocation fund is intended to equalize fiscal capacity among regions and finance local government needs in carrying out decentralized functions (Pattawe et al., 2022; Andhini et al., 2023). Salsabila (2025) described the general allocation fund as a fiscal transfer designed to improve financial equity across regions and reduce interregional fiscal imbalances. Similarly, Widowati et al. (2024) emphasized that the general allocation fund enhances the financial capacity of local governments and supports the implementation of fiscal decentralization.

From the perspective of fiscal decentralization theory, intergovernmental transfers enable local governments to provide public services and finance regional development while reducing fiscal inequality. However, when general allocation fund transfers are insufficient to meet local financing needs, regional governments may rely on regional loans as an alternative source of funding. Therefore, the adequacy of central government transfers is expected to influence local loan decisions. Empirical evidence supports this theoretical argument. Salsabila (2025) found that the general allocation fund significantly affects regional loans, indicating that variations in transfer allocations influence local governments' reliance on external financing.

H2: General allocation fund has a positive and significant effect on regional loans.

2.3. The Effect of Budget Surplus/Deficit on Regional Loans

Budget surplus/deficit represents the difference between regional revenue and expenditure within the regional revenue and expenditure budget. According to Government Regulation Number 12 of 2019 concerning Regional Financial Management, a budget surplus occurs when regional revenue exceeds expenditure and may be allocated for regional financing, whereas a budget deficit arises when expenditure exceeds revenue and must be covered through financing sources. Similarly, Government Regulation Number 71 of 2010 concerning Government Accounting Standards defines budget surplus/deficit as the excess or shortfall of revenue over expenditure during a reporting period. Mourão et al. (2023) explained that persistent public sector deficits financed through loans contribute to the accumulation of public debt, while Berisha (2026) described a budget deficit as a condition in which government expenditure exceeds revenue, whereas a surplus occurs when revenue is greater than expenditure.

According to fiscal decentralization theory, local governments have the authority to determine financing strategies to support regional development and public service delivery. Salsabila (2025) argued that although a budget surplus reflects relatively adequate fiscal resources, it does not necessarily eliminate the need for regional loans because large-scale development projects may still require additional financing. Conversely, budget deficits increase reliance on external loans to cover financing gaps. Therefore, both surplus and deficit conditions may influence local governments' loan decisions depending on their fiscal needs and development priorities. Empirical evidence supports this relationship, as Berisha (2026) found that budget surpluses and deficits significantly affect regional loans.

H3: Budget surplus/deficit has a positive and significant effect on regional loans.

2.4. The Effect of Capital Expenditure on Regional Loans

Capital expenditure refers to government spending for acquiring fixed assets and other long-term assets that provide benefits for more than one accounting period (Ningsi et al., 2023). According to Government Regulation Number 12 of 2019 concerning Regional Financial Management, capital expenditure includes expenditures for land, buildings, equipment and machinery, roads, irrigation and networks, other fixed assets, and other capital assets. Similarly, Rinaldi and Siska (2024) defined capital expenditure as investment spending for acquiring fixed and long-term assets that are utilized in local government operations and meet the capitalization criteria established under public sector accounting standards.

From the perspective of fiscal decentralization theory, local governments are granted authority not only to generate revenue but also to allocate expenditures to support regional development and public service delivery (Rondinelli, 2017). Capital expenditure plays a crucial role in financing infrastructure and productive public assets. However, increasing investment needs are often constrained by limited local revenue and intergovernmental transfers. Under such circumstances, regional loans become an alternative financing instrument that enables local governments to undertake long-term development projects without delaying essential infrastructure investment. Empirical evidence supports this theoretical relationship. Galinski (2023) and Yulsiati et al. (2025) found that capital expenditure has a positive effect on regional loans, indicating that higher investment requirements increase local governments' reliance on external financing.

H4: Capital expenditure has a positive and significant effect on regional loans.

2.5. Simultaneous Effect on Regional Loans

Regional loans refer to debt financing obtained through loan agreements rather than securities, whereby local governments receive funds from external parties and assume an obligation to repay them. This definition is stipulated in Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments and further reinforced by Government Regulation Number 56 of 2018 concerning Regional Loans. In addition, Government Regulation Number 1 of 2024 concerning the Harmonization of National Fiscal Policy requires regional loans to be managed in accordance with the principles of legality, transparency, accountability, efficiency and effectiveness, prudence, and professionalism to ensure sustainable fiscal management. According to Syafri et al. (2024), regional financial independence remains a major challenge for local governments because limited fiscal capacity increases dependence on external financing sources to support regional development programs. Furthermore, Pabayo (2025) explained that strengthening regional fiscal capacity and improving financial governance are essential to ensure that fiscal decentralization can be implemented sustainably without creating excessive financial burdens for local governments.

Several fiscal conditions influence regional loan decisions. Local own-source revenue reflects a region's fiscal capacity and repayment ability, while the general allocation fund provides intergovernmental transfers that may reduce or, when insufficient, increase the need for external financing (Rahula & Bowo, 2021). Budget surplus/deficit indicates the fiscal balance of local governments, with deficits generally encouraging loans to finance expenditure, whereas surpluses do not necessarily eliminate loan needs when investment requirements exceed available resources. Furthermore, higher capital expenditure increases demand for long-term financing, particularly when infrastructure investment cannot be fully supported by local revenue and central government transfers. Previous studies by Yulsiati and Maqruf (2022) and Yulsiati et al. (2025) provide empirical evidence that these fiscal factors significantly influence regional loans.

H5: Simultaneous influence of local own-source revenue, general allocation fund, budget surplus/deficit, and capital expenditure on regional loans in Indonesia

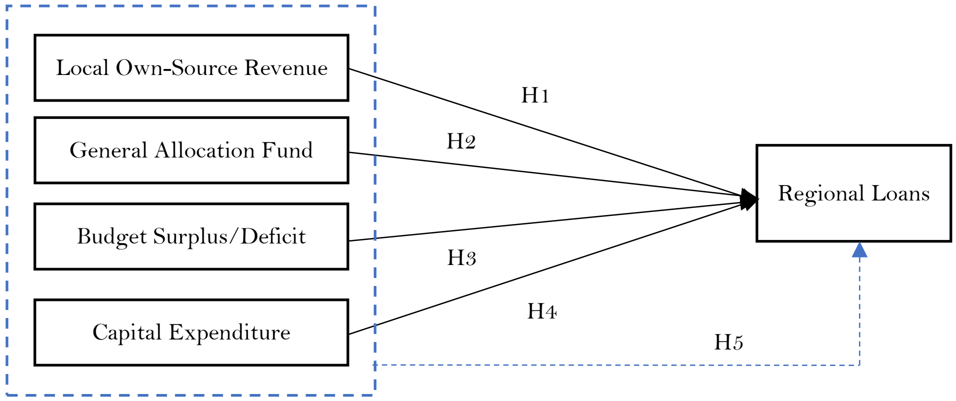

Figure 1. Research Framework

Figure 1 illustrates the research framework examining the influence of local own-source revenue, general allocation fund, budget surplus/deficit, and capital expenditure on regional loans in Indonesia. The framework proposes that each independent variable has a positive effect on regional loans. Furthermore, the model examines the simultaneous influence of these variables on regional loan decisions.

3. Methods

This study employed a quantitative research design with an associative approach to examine the relationships between multiple independent variables and regional loans. Quantitative research is grounded in the positivist paradigm and uses statistical analysis to test predetermined hypotheses (Sugiyono, 2019). The associative approach was adopted because the study aims to analyze the influence of Local Own-Source Revenue (X_1), the General Allocation Fund (X_2), Budget Surplus/Deficit (X_3), and Capital Expenditure (X_4) on Regional Loans (Y). The research was conducted using data from 38 provincial governments in Indonesia covering the 2020–2024 period. Secondary data were obtained from the regional budget realization reports and balance sheets published by the Audit Board of the Republic of Indonesia through its official electronic public information portal (e-ppid.bpk.go.id).

The dependent variable was regional loan, measured as the sum of newly contracted loans and outstanding regional loans, following the regional loan information concept used by the Directorate General of Fiscal Balance and Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments. The independent variables consisted of local own-source revenue, measured by total local own-source revenue (Law Number 1 of 2022); general allocation fund, measured by total general allocation fund transfers (Government Regulation Number 12 of 2019); budget surplus/deficit, measured by the total budget surplus or deficit reported in the Regional Budget Realization Report (Government Regulation Number 12 of 2019); and capital expenditure, measured by total capital expenditure (Government Regulation Number 12 of 2019). All variables were measured using the ratio scale.

The study population comprised all 38 provincial governments in Indonesia. The sample was selected using purposive sampling, which determines samples based on predefined criteria. Provinces were included if they recorded regional loans in both the Regional Budget Realization Report and the Balance Sheet during the 2020–2024 period. Based on these criteria, 17 provinces met the sampling requirements, resulting in 85 panel observations (17 provinces × 5 years). Data were collected using the documentation method, with all information obtained from audited financial statements issued by the audit board of the Republic of Indonesia.

Data analysis was conducted using panel data regression because the dataset combines cross-sectional and time-series observations (Chiu et al., 2026). The analysis began with descriptive statistics, followed by estimation using the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The most appropriate model was selected using the Chow test, Hausman test, and Lagrange Multiplier (LM) test. Decision criteria were based on a 5% significance level: for the Chow and Hausman tests, $p < 0.05$ indicates the preferred alternative model (FEM), whereas $p > 0.05$ favors CEM or REM, respectively; for the LM test, $p < 0.05$ indicates that REM is preferred over CEM. Classical assumption tests included the Jarque–Bera normality test, Variance Inflation Factor (VIF) for multicollinearity, the Glejser test for heteroscedasticity, and the Durbin–Watson test for autocorrelation. The study employed the coefficient of determination (R^2), t-test, and F-test to evaluate the proposed hypotheses. All statistical analyses were performed using EViews 13.

4. Results

The research results from data analysis were conducted to answer the problem formulation and test the research hypothesis. The analysis conducted includes descriptive statistical analysis, panel regression model selection, classical assumption test, panel data regression analysis, and hypothesis testing consisting of determination test (R^2), partial test (t-test), and simultaneous test (F-test). The entire analysis process was carried out by transforming the data into natural logarithm (ln) form using EViews software version 13 to test the results of the study regarding the effect of local own-source revenue, general allocation funds, budget surplus/deficit, and capital expenditure on regional loans in Indonesia for the 2020-2024 fiscal year.

Table 1. Descriptive Statistic

Variable	Mean	Median	Max	Min	Std Dev
Regional Loans	27.36791	27.34527	29.41464	25.04162	0.909315
Local Own-Source Revenue	28.36828	28.12834	30.86226	26.57220	1.160659
General Allocation Fund	28.02655	27.99518	29.12638	27.56867	0.382074
Budget Surplus/Deficit	-2.848277	-24.46678	27.76029	-28.91839	25.93705
Capital Expenditure	27.41480	27.45549	28.71546	25.89569	0.674111

Based on Table 1, the descriptive statistics indicate that regional loans (Y) have a mean of 27.36791, a median of 27.34527, a maximum value of 29.41464 recorded in West Java 2021, a minimum value of 25.04162 in Gorontalo 2021, and a standard deviation of 0.909315. Local own-source revenue (X_1) has a mean of 28.36828, a median of 28.12834, a maximum of 30.86226 in West Java (2024), a minimum of 26.57220 in West Sulawesi 2020, and a standard deviation of 1.160659. Meanwhile, the general allocation fund (X_2) records a mean of 28.02655, a median of 27.99518, a maximum value of 29.12638 in East Java 2024, a minimum of 27.56867 in the Bangka Belitung Islands 2021, and a standard deviation of 0.382074.

The budget surplus/deficit (X_3) variable has a mean of −2.848277, a median of −24.46678, a maximum value of 27.76029 in West Java (2024), a minimum of −28.91839 in West Java 2020, and the largest standard deviation (25.93705), indicating substantial variation across provinces and years. Capital expenditure (X_4) has a mean of 27.41480, a median of 27.45549, a maximum value of 28.71546 in Central Kalimantan 2024, a minimum of 25.89569 in Gorontalo 2021, and a standard deviation of 0.674111, suggesting relatively moderate variability compared with the other variables.

Table 2. Panel Data Model

Test	Category	Statistics	d.f.	Prob	Results
Chow Test	Cross-section F	9.666439	(16.64)	0.0000	Fixed Effect Model (FEM)
	Cross-section Chi-square	104.435146	16	0.0000	
Hausman Test	Cross-section Random	8.152214	4	0.0862	Random Effect Model (REM)
Lagrange Multiplier (LM)	Breusch-Pagan	57.98705 (0.0000)	0.022539 (0.0000)	58.00958 (0.0000)	Random Effect Model (REM)

Table 2 presents the panel data model selection results. The Chow test produced a Cross-section Chi-square probability of 0.0000 ($p < 0.05$), indicating that FEM is preferred over the CEM. Subsequently, the Hausman test yielded a Cross-section Random probability of 0.0862 ($p > 0.05$), suggesting that the REM is more appropriate than the FEM. Because the Chow and Hausman tests recommended different models, the Lagrange Multiplier test was performed to determine the most suitable specification. The Lagrange Multiplier test produced a probability value of 0.0000 ($p < 0.05$), indicating that the REM is preferred over the CEM. Based on the combined results of the Chow, Hausman, and Lagrange Multiplier tests, the REM was selected as the most appropriate panel regression model for subsequent analysis.

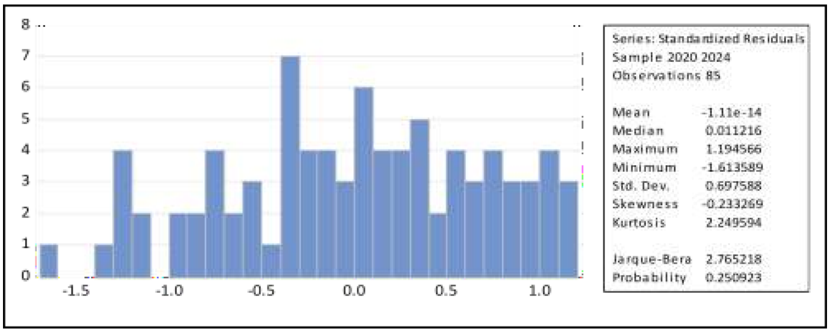

Figure 2. Normality Test

Based on Figure 2, the results of the normality test were obtained with a Jarque-Bera value of 2.765218 and a probability value of 0.087901. The probability value is greater than α (0.250923 > 0.05), so H0 is accepted, which means the results of the normality test show that the data can be normally distributed.

Table 3. Multicollinearity Test

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
Constant	42.698850	7492.303	NA
Local Own-Source Revenue	0.013331	1885.592	3.114107
General Allocation Fund	0.095406	13152.100	2.415083
Budget Surplus/Deficit	0.00000954	1.126768	1.113183
Capital Expenditure	0.037181	4906.280	2.929851

Based on Table 3, the results of the multicollinearity test show that all independent variables have a Variance Inflation Factor (VIF) value smaller than 10. Variable local own-source revenue has a VIF value of 3.114107, general allocation fund of 2.415083, budget surplus/deficit of 1.113183, and capital expenditure of 2.929851. Thus, it can be concluded that the regression model does not experience multicollinearity problems because all VIF values are still below the specified limit of 10.

Table 4. Heteroscedasticity Test Results (Glejser Test)

Test Statistic	Value	Probability
F-statistic	1.664061	0.1665
Obs*R-squared (Chi-Square)	6.529026	0.1630
Scaled Explained SS (Chi-Square)	5.089263	0.2783

Based on Table 4, the results of the heteroscedasticity test show that the Obs*R-squared value is 6.529026 and the Chi-Square Probability value (4) is 0.1630. The p-value (Chi-Square probability) is greater than the α value (0.1630 > 0.05), so the data in this study do not show heteroscedasticity.

Table 5. Autocorrelation Test (Durbin-Watson Test)

Statistic	Value
Mean Dependent Variable	8.463851
Standard Deviation of Dependent Variable	0.514840
Sum of Squared Residuals	14.914200
Durbin–Watson Statistic	1.486795

Based on Table 5, the results of the autocorrelation test obtained a Durbin Watson stat value of 1.486795. Where the DW value is between -2 and +2, it indicates the absence of autocorrelation; it can be concluded that the regression model used does not experience autocorrelation.

Table 6. R Square and F Test

Statistic	Value
R-squared	0.330152
Adjusted R-squared	0.296659
Standard Error of Regression	0.431772
F-statistic	9.857503
Prob. (F-statistic)	0.000002

Table 6 presents the coefficient of determination and overall model significance. The regression model produces an R^2 value of 0.330152, indicating that 33.02% of the variation in regional loans can be explained by the four independent variables included in the model. The Adjusted R^2 is 0.296659, suggesting that after adjusting for the number of predictors and sample size, the model explains 29.66% of the variation in the dependent variable. In comparison, the remaining 70.34% is attributable to other factors not included in the model. This indicates that the selected fiscal variables provide moderate explanatory power for regional loan decisions.

The F-test further confirms the overall significance of the regression model. The estimated F-statistic is 9.857503, which exceeds the critical F-value of 2.72, with a probability value of 0.000002 ($p < 0.05$). These results indicate that the regression model is statistically significant, meaning that local own-source revenue, the general allocation fund, budget surplus/deficit, and capital expenditure jointly have a significant effect on regional loans. Accordingly, H5 is supported, demonstrating that the four fiscal variables simultaneously influence regional loans among Indonesian provincial governments.

Table 7. Panel Regression Results

Variable	Coefficient	Standard Error	t-statistic	p-value
Constant	18.645170	11.566920	1.611940	0.1109
Local Own-Source Revenue (X1)	0.400724	0.179783	2.228927	0.0286
General Allocation Fund (X2)	-0.822966	0.508221	-1.619306	0.1093
Budget Surplus/Deficit (X3)	0.005170	0.002145	2.410177	0.0182
Capital Expenditure (X4)	0.745383	0.174764	4.265081	0.0001

Table 7 presents the results of the panel regression analysis using REM. The estimated regression equation is $Y = 18.64517 + 0.400724X_1 - 0.822966X_2 + 0.005170X_3 + 0.745383X_4 + e$. The constant coefficient of 18.64517 indicates that when local own-source revenue, general allocation fund, budget surplus/deficit, and capital expenditure are assumed to be zero, the predicted value of regional loans is 18.64517. The estimated coefficients describe the direction and magnitude of the relationship between each independent variable and regional loans while holding the other variables constant.

The results indicate that local own-source revenue has a positive and statistically significant effect on regional loans ($\beta = 0.400724$; $t = 2.228927$; $p = 0.0286$). Since the p-value is less than 0.05, the hypothesis proposing that local own-source revenue positively affects regional loans is accepted. This finding suggests that regions with higher locally generated revenue tend to have greater capacity to obtain regional loans. In contrast, the general allocation fund has a negative coefficient ($\beta = -0.822966$), but its effect on regional loans is not statistically significant ($t = -1.619306$; $p = 0.1093$). Because the p-value exceeds 0.05, the hypothesis proposing that the general allocation fund affects regional loans is rejected. This result indicates that transfers from the central government do not significantly influence the level of regional borrowing.

The analysis further shows that budget surplus/deficit has a positive and statistically significant effect on regional loans ($\beta = 0.005170$; $t = 2.410177$; $p = 0.0182$). Since the p-value is below 0.05, the hypothesis proposing that budget surplus/deficit positively affects regional loans is accepted. This finding implies that changes in regional fiscal balance are associated with changes in borrowing decisions. Similarly, capital expenditure has a positive and highly significant effect on regional loans ($\beta = 0.745383$; $t = 4.265081$; $p = 0.0001$). As the p-value is well below the 5% significance level, the hypothesis proposing that capital expenditure positively affects regional loans is accepted. This finding indicates that local governments tend to increase borrowing to finance capital investment and infrastructure development. Among all explanatory variables, capital expenditure has the largest positive coefficient, suggesting that it has the strongest positive association with regional loans in the estimated model.

5. Discussion

The results indicate that local own-source revenue has a positive and significant effect on regional loans, suggesting that provinces with stronger fiscal capacity are more likely to utilize external financing. Higher local revenue reflects greater fiscal autonomy and stronger repayment capacity, enabling regional governments to access loans for development while maintaining debt sustainability. From the perspective of fiscal decentralization, regional loans serve as a strategic financing instrument rather than a sign of fiscal weakness. This finding is consistent with

Mourão et al. (2023), who found that stronger local revenue increases borrowing capacity, and supports the arguments of Yulsiati et al. (2025) and Salsabila (2025) that higher local own-source revenue enhances a region's ability to repay debt and expands opportunities to finance development through regional loans.

In contrast, the general allocation fund does not significantly affect regional loans, indicating that central government transfers are not the primary determinant of borrowing decisions. The general allocation fund mainly functions to equalize fiscal capacity and finance routine government expenditures, whereas borrowing decisions are more closely related to regional fiscal priorities and investment needs. This finding is consistent with Yulsiati and Maqruf (2022) but differs from Salsabila (2025), who reported a significant relationship between the general allocation fund and regional loans. The discrepancy may be explained by differences in study periods and fiscal conditions, particularly during the post-pandemic period when fiscal transfers were accompanied by national fiscal adjustment policies that reduced regional dependence on borrowing.

The findings also show that budget surplus/deficit has a positive and significant effect on regional loans. This suggests that fiscal balance influences borrowing decisions, although a budget surplus does not necessarily eliminate the need for debt financing. Regional governments may continue borrowing to support strategic investment projects that require substantial capital beyond available fiscal resources. This result supports Salsabila (2025) and Berisha (2026), who argued that both deficit and surplus conditions can influence borrowing depending on financing requirements. The empirical evidence also reflects the experience of several Indonesian provinces, including Banten, Southeast Sulawesi, Riau Islands, and West Nusa Tenggara, where budget surpluses coexisted with regional loans exceeding IDR 100 billion in several cases. These observations suggest that borrowing decisions are driven not only by annual fiscal balances but also by long-term development strategies.

Capital expenditure positively and significantly influences regional loans, indicating that infrastructure investment remains a major driver of external financing. Because capital projects require substantial financial resources, regional governments often rely on borrowing when local revenue and intergovernmental transfers are insufficient. This finding is consistent with Galinski (2023) and Yulsiati et al. (2025), who reported a positive relationship between capital expenditure and regional loans, and complements the argument of Lubis and Purwoko (2025) that fiscal transfers are frequently allocated to operational rather than investment expenditures. These findings suggest that regional loans in Indonesia are primarily determined by fiscal capacity, fiscal balance, and investment needs, providing updated post-pandemic evidence on the determinants of regional loans under fiscal decentralization.

The simultaneous results indicate that local own-source revenue, the general allocation fund, budget surplus/deficit, and capital expenditure collectively have a significant effect on regional loans, suggesting that borrowing decisions are determined by the combined influence of regional fiscal capacity, intergovernmental transfers, fiscal balance, and development expenditure (Benius, 2025). This finding reinforces the fiscal decentralization perspective, which emphasizes that borrowing policies should be based on comprehensive fiscal management rather than individual fiscal indicators. The result is broadly consistent with the findings of Yulsiati and Maqruf (2022) and Salsabila (2025), which collectively demonstrate that regional fiscal conditions play an important role in shaping local government borrowing decisions. However, the significance of individual determinants may vary across regional contexts and periods.

6. Conclusion

This study examined the effects of local own-source revenue, the general allocation fund, budget surplus/deficit, and capital expenditure on regional loans in Indonesia during the 2020–2024 period. The findings demonstrate that local own-source revenue, budget surplus/deficit, and capital expenditure have positive and significant effects on regional loans, indicating that stronger fiscal capacity, changing budget conditions, and greater investment needs encourage regional governments to utilize borrowing as a financing instrument. In contrast, the general allocation fund does not significantly influence regional loans, suggesting that central government transfers are not the primary consideration in regional loan decisions. Furthermore, the simultaneous analysis confirms that all four fiscal variables jointly have a significant effect on regional loans, emphasizing that borrowing decisions are shaped by multiple fiscal factors rather than by a single determinant.

These findings imply that regional governments should strengthen own-source revenue capacity and ensure that borrowing is directed toward productive capital investment. Effective management of budget surpluses and deficits is also essential to maintain fiscal sustainability and support strategic development within an integrated fiscal framework. This study is subject to several limitations. It focuses only on four fiscal determinants of regional loans and covers a relatively short observation period from 2020 to 2024. Consequently, the findings may not fully capture broader macroeconomic and institutional factors affecting regional loan decisions. Future research is therefore encouraged to incorporate additional variables, such as economic growth, fiscal independence, regional financial capacity, debt sustainability, or governance quality, while extending the observation period and expanding the analytical scope. Such efforts would provide a more comprehensive understanding of the determinants of regional loans and support the formulation of more effective regional fiscal policies.

References

Akita, T., Riadi, A. A., & Rizal, A. (2021). Fiscal disparities in Indonesia in the decentralization era: Does general allocation fund equalize fiscal revenues?. *Regional Science Policy & Practice*, *13*(6), 1842-1866. https://doi.org/10.1111/rsp3.12326.

Andhini, S., Gunawan, J., & Chen, H. Y. (2023). Influence of general allocation fund, special allocation fund, and capital expenditure on financial performance of local government. *International Journal of Contemporary Accounting*, *5*(2), 125-140. http://dx.doi.org/10.25105/ijca.v5i2.17381.

Bahasoan, A., Rahmatia, L., Tajibu, M. J., & Yunus, A. (2025). The impact of fiscal decentralization on economic growth: A theoretical and empirical review. *International Journal of Environmental Sciences*, *11*(4), 1076-1087.

Benius. (2025). *Keuangan daerah dan desentralisasi fiskal.* Padang: CV Luminary Press Indonesia.

Berisha, A. (2026). The role and impact of public debt in financing the budget deficit and the economy: The case of Kosovo. *International Journal of Economics & Business Administration (IJEBA)*, *14*(1), 105-118.

Chiu, A., Lan, X., Liu, Z., & Xu, Y. (2026). Causal panel analysis under parallel trends: lessons from a large reanalysis study. *American Political Science Review*, *120*(1), 245-266. https://doi.org/10.1017/S0003055425000243.

Galinski, P. (2023). Determinants of debt for local governments in Europe – panel data research. *Forum Scientiae Oeconomia*, *5*(1), 5–18. https://doi.org/10.23762/FSO_VOL11_NO2_3.

Government of the Republic of Indonesia. (2010). *Government Regulation of the Republic of Indonesia Number 71 of 2010 Concerning Government Accounting Standards.*

Government of the Republic of Indonesia. (2018). *Government Regulation of the Republic of Indonesia Number 56 of 2018 Concerning Regional Loans.*

Government of the Republic of Indonesia. (2019). *Government Regulation of the Republic of Indonesia Number 12 of 2019 Concerning Regional Financial Management.*

Government of the Republic of Indonesia. (2024). *Government Regulation of the Republic of Indonesia Number 1 of 2024 Concerning Harmonization of National Fiscal Policy.*

Ilmidaviq, M. B. (2018). Faktor-faktor yang berpengaruh terhadap pinjaman daerah pada kota/kabupaten di Provinsi Jawa Timur. *PRIVE: Jurnal Riset Akuntansi dan Keuangan*, *1*(2), 134-147.

Lewis, B. D. (2023). Indonesia's new fiscal decentralisation law: A critical assessment. *Bulletin of Indonesian Economic Studies*, *59*(1), 1-28. https://doi.org/10.1080/00074918.2023.2180838.

Lubis, S., & Purwoko, A. (2025). Efficiency analysis of regional government expenditure on development: Evidence from Indonesia. *Economics: Innovative & Economic Research Journal/Casopis za Ekonomsku Teoriju i Analizu*, *13*(3), 104-118. https://doi.org/10.2478/eoik-2025-0058.

Mourão, P., Bronić, M., & Stanić, B. (2023). The impact of local governments'budget transparency on debt in Croatia. *The South East European Journal of Economics and Business*, *18*(2), 21-33. https://doi.org/10.2478/jeb-2023-0016.

Mulyana, M., Din, M., Mustamin, M., Amir, A. M., Karim, F., & Betty, B. (2022). Local government own-source revenue and general allocation funds on capital expenditure: Economic growth as moderating variable. *Arthatama: Journal of Business Management and Accounting*, *6*(1), 44-54.

Ningsi, N., Junaidi, J., & Sultan, S. (2023). The effect of capital expenditure and goods and services expenditure on economic growth. *Derivatif: Jurnal Manajemen*, *17*(2), 204-215. https://doi.org/10.24127/jm.v17i2.1269.

Oates, W. E. (1999). An essay on fiscal federalism. *Journal of Economic Literature*, *37*(3), 1120-1149. https://doi.org/10.1257/jel.37.3.1120.

Pabayo, A. S. T. (2025). Impact of fiscal decentralization policy on regional fiscal independence in Indonesia. *Journal of Local Government Issues*, *8*(1), 100-124. https://doi.org/10.22219/logos.v8i1.37646.

Pattawe, A., Abdullah, M. I., Karim, F., Kahar, A., Din, M., Zahra, F., ... & Dharma, D. M. A. (2022). Improving regional financial management through administration of regional property and financial reporting on regional assets. *Research Horizon*, *2*(1), 283-294. https://doi.org/10.54518/rh.2.1.2022.50.

Rahula, S. A., & Bowo, P. A. (2021). The effect of general allocation funds and local own-revenue on regional government expenditure in Central Java province. *Indicators: Journal of Economic and Business*, *2*(1), 50-59. https://doi.org/10.47729/indicators.v2i1.63.

Republic of Indonesia. (2014). *Law of the Republic of Indonesia Number 23 of 2014 concerning Regional Government.*

Republic of Indonesia. (2022). *Law of the Republic of Indonesia Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments.*

Rinaldi, A. G., & Siska, E. Y. (2024). *Sistem akuntansi dan pengelolaan keuangan di sektor publik*. Malang: PT. Samudra Solusi Profesional.

Rondinelli, D. A. (2017). Decentralization and development. In *International development governance* (pp. 391-404). London: Routledge.

Salsabila, H. (2025). *Pengaruh pendapatan asli daerah, surplus/defisit anggaran dan dana alokasi umum terhadap pinjaman daerah di Provinsi Sumatera Selatan.* Palembang: Politeknik Negeri Sriwijaya (Doctoral dissertation).

Sofilda, E., Zilal Hamzah, M., & Kusairi, S. (2023). Analysis of fiscal decentralisation, human development, and regional economic growth in Indonesia. *Cogent Economics & Finance*, *11*(1), 222-232. https://doi.org/10.1080/23322039.2023.2220520.

Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D.* Bandung: Alfabeta.

Syafri, R. A., Sofilda, E., & Suparyati, A. (2024). Determinan kemandirian keuangan pemerintah kabupaten/kota di Indonesia. *Indonesian Treasury Review: Jurnal Perbendaharaan, Keuangan Negara dan Kebijakan Publik*, *9*(4), 277-290.

Tiawon, H., & Hukom, A. (2025). The effect of tax revenue sharing funds in encouraging fiscal independence and local own-source revenue growth. *Jurnal Ilmiah Akuntansi Kesatuan*, *13*(6), 1959-1970. https://doi.org/10.37641/jiakes.v13i6.4587.

Widowati, N., Mulyana, D., & Supriadi, A. (2024). Pengaruh pendapatan asli daerah, dana alokasi umum, dana alokasi khusus, dana bagi hasil dan jumlah penduduk terhadap kinerja keuangan pemerintah daerah. *Jurnal Nuansa: Publikasi Ilmu Manajemen dan Ekonomi Syariah*, *2*(3), 413-433.
William, F., & Harjanto, K. (2024). Local own-source revenue and its determinants. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, *8*(1), 102-118. https://doi.org/10.29040/ijebar.v8i1.7402.
Yulsiati, H., & Maqruf, R. (2022). Determinan pinjaman pemerintah daerah Provinsi di Indonesia. Balance: *Jurnal Akuntansi dan Bisnis*, *7*(2), 134-145. https://doi.org/10.32502/jab.v7i2.5382.
Yulsiati, H., Sartika, I., & Febriantoko, J. (2025). The influence of own-source revenue, transfer funds, regional fiscal capacity, and capital expenditure on regional loans. *Journal of Governance, Taxation and Auditing*, *4*(2), 380-388. https://doi.org/10.38142/jogta.v4i2.1658.