



Factors Influencing Infrastructure Risk Disclosure in Local Governments in Indonesia

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Abstract: Infrastructure Risk Disclosure (IRD) is an important aspect of public sector transparency in local governments. This study examines the effect of Capital Expenditure (CE), Population (PT), Local Leaders' Educational Background (LLEB), Regional Investment Income (RII), Regional Financial Independence (RFI), and Political Support (PS) on IRD using 235 observations and multiple linear regression with robust standard errors. The results show that only Population (PT) has a positive and significant effect on IRD, while other variables are not significant. Although the model is statistically significant, its low explanatory power suggests that other factors influence IRD. These findings indicate that population size, reflecting higher public demand and scrutiny, plays a key role in driving transparency, consistent with legitimacy theory. Future research should include governance and institutional variables to improve explanatory power.

Keywords: Infrastructure Risk Disclosure, Capital Expenditure, Population, Local Leaders Educational Background, Regional Investment Income, Regional Financial Independence, Political Support

INTRODUCTION

Risk disclosure is an important aspect in enhancing transparency and accountability within an entity, particularly in the public sector. It not only serves to communicate potential risks faced by the entity but also helps reduce information asymmetry between the government and stakeholders, thereby supporting more informed decision-making. Risk disclosure enables stakeholders to evaluate uncertainty, financial conditions, and the future prospects of an entity (Elshandidy & Kamel, 2024). Forward-looking risk information provides insights into organizational sustainability and long-term performance (Dobler & Luckner, 2018). Risk disclosure practices also vary across countries and are influenced by regulatory environments and governance structures, where stronger governance tends to improve the quality of disclosure (Adwoa et al., 2026; Elamer et al., 2020). Overall, risk disclosure plays a significant role in improving risk management, strengthening accountability, and enhancing the credibility of financial reporting (Wong et al., 2020). According to the Minister of Home Affairs Regulation No. 77 of 2020 concerning Technical Guidelines for Regional Financial

Management, local governments are required to present information transparently, including financial and non-financial risks that may affect development performance. However, audit findings from the Audit Board of Indonesia (BPK) indicate that most local governments have not fully implemented risk management in all stages of infrastructure development.

The low level of infrastructure risk disclosure among local governments reflects a gap between regulatory requirements and actual reporting practices. Non-compliance with transparency principles may reduce public trust. Previous studies indicate that various factors influence the extent of disclosure in local government financial reports (Budiarto, 2019). Transparent and accountable financial management is essential to maintain and enhance public trust in government performance (Idah, 2023). The role of accounting extends beyond providing financial information to also include non-financial information necessary for decision-making, ensuring government sustainability (going concern), and supporting sustainable development goals (SDGs).

This study focuses on empirically examining several independent variables, including capital expenditure, population, local leaders' educational background, regional investment income, regional financial independence, and political support, to provide a comprehensive perspective on infrastructure risk disclosure. Transparency and accountability in local government financial management are influenced by various measurable factors, such as audit opinions, audit findings, leaders' educational background, and leadership commitment, which reflect the government's capacity in governance and financial management (Nor et al., 2025).

Capital expenditure represents government spending for acquiring fixed assets and developing infrastructure (Astuty, 2022), supported by policies such as Ministry of Finance Regulation No. 113/PMK/2010 aimed at improving public services and accelerating regional development. Higher capital expenditure reflects intensive development activities and contains strategic information regarding policy direction and future projections, thus requiring greater transparency related to associated risks (Putri & Amalia, 2024). Empirical findings also show that capital expenditure influences the level of disclosure in local government financial reports, as observed in Bangka Belitung with a disclosure level of 42% (Fasa, 2022). In contrast, population size has not been found to significantly affect the level of financial disclosure (Aswar, 2021), indicating that demographic characteristics do not necessarily drive transparency. This condition may create a legitimacy gap when public information needs are not adequately fulfilled, particularly in the context of infrastructure risk disclosure, which has broad societal impacts and demands higher accountability.

The educational background of local leaders is a factor that may influence the quality of risk disclosure, as leaders with relevant competencies can utilize their knowledge and experience to improve disclosure practices (Irsyad et al., 2024). However, this finding is inconsistent with other studies showing that educational background does not significantly affect the quantity and scope of risk disclosure (Viola et al., 2023), suggesting variations in regional characteristics, reporting systems, and understanding of transparency. On the other hand, regional investment income, reflected in increased investment activities and the number of investors, plays an important role in regional economic development and governance transparency. Although research on this variable remains limited, investment income is believed to strengthen fiscal capacity and improve financial management quality (Mulyani, 2021), thereby encouraging greater transparency to maintain public trust.

Regional financial independence reflects the ability of local governments to manage their finances without reliance on the central government (Jannah & Handayani, 2025) and has been found to positively influence financial disclosure (Dianti, M. M., 2022; Suladri, 2019; Setyorini, 2020). Leadership support and commitment are also crucial in promoting awareness and implementation of risk management (Irianto & Amirya, 2024). Local political context and leadership support determine reporting priorities and transparency levels, where political legitimacy can either encourage or hinder disclosure practices depending on political incentives

(Khadafi et al., 2021). Political alignment has the potential to shape governance patterns and transparency, influencing the level of risk disclosure in Indonesia.

Infrastructure risk disclosure is closely related to legitimacy theory, as it represents an effort by local governments to maintain public legitimacy through transparency and accountability in financial management. Legitimacy theory assumes that organizations operate under an implicit social contract with society (Velte, 2022). Increased transparency through risk disclosure not only strengthens social legitimacy but also enhances public trust in the effectiveness and integrity of infrastructure development. Poor quality of risk disclosure may damage organizational legitimacy (Velte, 2022).

Research on the determinants of infrastructure risk disclosure in local governments remains limited. Existing studies tend to focus on the private sector or general disclosure practices without specifically addressing infrastructure-related risks. This gap highlights an important opportunity for further research, considering the strategic role of infrastructure projects in supporting economic growth and improving public services. This study aims to contribute both empirically and theoretically by providing new insights into the factors influencing infrastructure risk disclosure in the Indonesian public sector.

Based on the urgency, phenomena, and research gaps identified, this study examines the factors affecting infrastructure risk disclosure in local governments in Indonesia. The research focuses on local governments and municipalities in 2024. The selection of this object is based on the consideration that there has been limited research specifically addressing infrastructure risk disclosure in Indonesian local governments. The structure of this study includes hypothesis development, research methodology, empirical results, discussion, and conclusions.

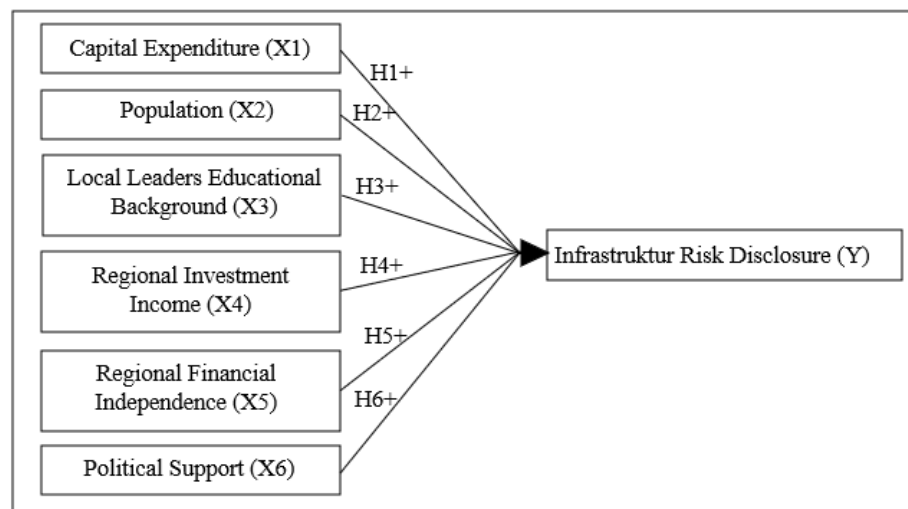


Figure 1. Conceptual Framework of Research

Source: Processed by author, 2026

METHOD

This study adopts a quantitative research approach to examine infrastructure risk disclosure. Quantitative methods enable objective measurement, statistical hypothesis testing, and the generalization of findings across entities and time periods (Sekaran, & Bougie, 2020). The research design employed in this study is a hypothesis testing study, which aims to analyze the relationships among variables based on previously formulated research hypotheses. The type of data used in this study is secondary data in the form of cross-sectional data. The data are obtained from the Local Government Financial Statements published by the Audit Board of Indonesia.

The population of this study consists of 514 local governments (districts and municipalities) in Indonesia for the fiscal year 2024, comprising 416 districts and 98

municipalities. This population is selected due to the limited scope of the phenomenon and the relatively low level of infrastructure risk disclosure among local governments (Kassim et al., 2019). The low level of infrastructure risk disclosure reduces the level of accountability and transparency in public sector reporting.

The sample size in this study is determined using the Isaac and Michael sampling table (1991). The sample is drawn from the total population of 514 local governments (districts and municipalities) for the year 2024. The researcher applies a margin of error of 5%. The determination of the sample size used in this study is presented in Table 1.

Table 1. Sample Size Determination Using Isaac and Michael Table for Error Levels of 1%, 5%, and 10%

N	S		
	1%	5%	10%
10	102	10	10
15	15	14	14
...
500	285	205	176
550	301	213	182
...
10000	269	286	232
...

Source: Processed by Sugiyono, 2013

Table 1 shows that the sample was determined based on the Isaac and Michael sampling table using a proportional random sampling technique. This technique is applied to randomly select district and municipal governments proportionally across provinces as the research sample. The total number of observations used in this study is 235, which represents the final sample after excluding outlier data from the initial sample for one year. Therefore, the total unit of analysis for the cross-sectional regression in this study is 235 observations. The results of the sample selection criteria are presented in Table 2.

Table 2. Stages of Obtaining the Unit of Analysis

Stages of Obtaining Unit of Analysis	Total
Population: Local governments (districts and municipalities) in Indonesia, fiscal year 2024	514
Number of local governments selected as samples based on the Isaac and Michael table	294
Outlier data excluded from the sample	(59)
Final number of observations used in the study	235

Source: Secondary data processed by the author, 2026

The data were analyzed using descriptive statistics to describe the characteristics of the variables, along with classical assumption tests, multiple linear regression analysis, partial significance testing (t-test), overall model significance testing (F-test), coefficient of determination analysis, robustness tests and sensitivity analysis. All analyses were conducted using StataMP version 17 statistical software.

Table 3. Operational Definition and Measurement of Variables

Variable	Code	Definition	Measurement	Expected Sign
Infrastructure Risk Disclosure (Y)	IRD	Disclosure is the process by which relevant and important information is communicated to the public to ensure transparency and accountability (Jannah & Handayani, 2025).	Disclosure Index (0 = not disclosed, 1 = disclosed); $(\sum \text{Risk Disclosure Items} / \sum \text{Total Index Items}) \times 100\%$	
Capital Expenditure (X1)	CE	Capital expenditure refers to the realization of regional budget (APBD) used to increase regional assets with a	$(\text{Total Capital Expenditure} / \text{Total Regional Expenditure})$	(+)

		useful life of more than one fiscal year × 100% (Praptiningsih & Khoirunnisa, 2020).		
Population (X ₂)	PT	Population refers to all individuals residing within the territory of Indonesia for more than six months. Population data are generally collected by Statistics Indonesia (BPS) through a census conducted every ten years, covering all residents except diplomatic corps members (Naopal, 2017).	Total population based on BPS data	(+)
Local Leaders Educational Background (X ₃)	LLEB	Regional leaders with adequate competence, experience, and understanding of risk management are more capable of directing risk disclosure processes in a more optimal and structured manner (Irsyad et al. 2024).	Dummy variable (1 = Accounting/Finance background, 0 = Non-Accounting/Finance background)	(+)
Regional Investment Income (X ₄)	RII	Regional investment reflects increased capital investment activities and the number of incoming investors, which play an important role in regional economic development (Mulyani 2021).	Inv_D = Total long-term investment (permanent + non-permanent)	(+)
Regional Financial Independence (X ₅)	RFI	The regional financial independence ratio measures the ability of local governments to finance their activities independently without relying on central government transfers (Jannah & Handayani, 2025).	Independence Ratio = (Local Own-Source Revenue / Total Revenue) × 100%	(+)
Political Support (X ₆)	PS	Political legitimacy conditions may encourage or constrain risk disclosure practices depending on prevailing political interests and incentives in a region (Khadafi et al., 2021).	Dummy variable (1 = Same political party as the President, 0 = Different party)	(+)

Source: Processed from various references by the author, 2026

RESULTS AND DISCUSSION

Descriptive Statistics

This section presents the empirical findings of the study. The analysis begins with descriptive statistics to provide an overview of the distribution and characteristics of the research variables. The results, including the minimum, maximum, mean, and standard deviation values, are presented in Table 4.

Table 4. Descriptive Statistics

Variable	Mean	Std. Dev.	Minimum	Maximum
IRD	0.67	0.19	0.00	1.00
CE	0.16	0.07	0.01	0.60
PT	7.26	2.67	4.22	13.69
LLEB	0.36	0.48	0.00	1.00
RII	25.27	1.08	22.33	28.58
RFI	0.13	0.11	0.01	0.87
PS	0.29	0.45	0.00	1.00

Source: Output StataMP version 17 processed by author, 2026

Table 4 delineates the descriptive statistical compendium for the entirety of the investigatory variables. The Infrastructure Risk Disclosure (IRD) variable, as the dependent variable, has a mean value of 0.67 with a standard deviation of 0.19, indicating that the level of

infrastructure risk disclosure among local governments is relatively high with moderate variation. The minimum value of 0.00 and maximum value of 1.00 suggest that some local governments do not disclose any information, while others fully disclose based on the applied index. The Capital Expenditure (CE) variable has a mean of 0.16 and a standard deviation of 0.07, indicating that the proportion of capital expenditure to total regional expenditure is relatively low with limited variation. The minimum value of 0.01 and maximum value of 0.60 reflect differences in capital allocation across local governments, where some allocate very small amounts while others allocate relatively large portions. The Population (PT) variable shows a mean of 7.26 with a standard deviation of 2.67, indicating considerable variation in population size across regions.

The minimum value of 4.22 and maximum value of 13.69 represent differences in administrative scale, ranging from less populated to highly populated areas. The Local Government Head Educational Background (LLEB) variable has a mean of 0.36 and a standard deviation of 0.48, suggesting that most regional leaders do not have an educational background in accounting or finance. The minimum and maximum values of 0.00 and 1.00 confirm that this is a dummy variable. The Regional Investment (RII) variable has a mean of 25.27 with a standard deviation of 1.08, indicating relatively high levels of investment with low variation across regions. The minimum value of 22.33 and maximum value of 28.58 suggest that all regions have a substantial level of investment, although some differences remain.

The Regional Financial Independence (RFI) variable has a mean of 0.13 and a standard deviation of 0.11, indicating that financial independence among local governments is generally low and varies considerably. The minimum value of 0.01 and maximum value of 0.87 reflect a substantial gap in the ability of regions to finance their activities independently without relying on central government transfers. Finally, the Political Support (PS) variable has a mean of 0.29 with a standard deviation of 0.45, indicating that only a small proportion of local governments share the same political party as the President. The minimum and maximum values of 0.00 and 1.00 confirm that this variable is measured as a dummy variable indicating the presence or absence of political alignment.

Classical Assumption Tests

This study employs cross-sectional regression analysis; therefore, the classical assumption tests conducted include the normality test, multicollinearity test, and heteroskedasticity test.

Normality Test

The normality test aims to determine whether the disturbance term or residuals in the regression model are normally distributed (Ghozali, 2018). In this study, the normality test is conducted using the Shapiro–Francia W' test. The results indicate that all variables have 235 observations. The probability values (Prob > z) indicate that IRD (0.00001), CE (0.00001), PT (0.00001), RII (0.00273), and RFI (0.00001) are not normally distributed ($p < 0.05$). The LLEB variable shows a probability of 1.00000 ($p > 0.05$), indicating normal distribution, although it is a dummy variable. Meanwhile, PS has a probability of 0.00001 ($p < 0.05$), but as a dummy variable, this does not pose a serious issue. To address this issue, the normality assumption is evaluated using the Central Limit Theorem (CLT). This theorem states that the sampling distribution will approach normality as the sample size increases, regardless of the population's original distribution (Gujarati & Porter, 2009). Since this study uses 235 observations ($n > 30$), the sample size is considered sufficiently large. Therefore, the normality assumption is deemed to be satisfied, and the regression model can proceed without requiring data transformation.

Multicollinearity Test

The multicollinearity test aims to examine whether there is a high correlation among independent variables (Ghozali, 2016). In this study, multicollinearity is detected using

tolerance values and the Variance Inflation Factor (VIF). The results show that all variables have relatively low VIF values, namely RII (1.70), RFI (1.55), CE (1.16), PT (1.07), PS (1.03), and LLEB (1.00). The mean VIF value of 1.25 further indicates a very low level of multicollinearity. Generally, the acceptable threshold is $VIF < 10$ or more conservatively $VIF < 5$. All variables fall well below these thresholds. Additionally, the tolerance values ($1/VIF$) for all variables are above 0.10, confirming the absence of serious multicollinearity issues. Therefore, it can be concluded that the independent variables in this study do not exhibit multicollinearity and are suitable for regression analysis.

Heteroskedasticity Test

The heteroskedasticity test is conducted to identify whether the variance of residuals is constant across observations (Ghozali, 2018). . If the variance of residuals is constant, the condition is referred to as homoskedasticity. The hypotheses for this test are H_0 : homoskedasticity and H_1 : heteroskedasticity. The test results show that the Prob > chi² value is 0.0000, which is less than 0.05. This indicates the presence of heteroskedasticity in the model, leading to the rejection of the null hypothesis. To address this issue, this study employs the robust standard error (Huber–White) approach, as suggested by Wooldridge (2002). Under this approach, the regression coefficients are still estimated using Ordinary Least Squares (OLS), but the standard errors are adjusted to be robust to heteroskedasticity. Consequently, the statistical inference regarding the significance of the independent variables remains valid. All estimations in this study are conducted using Stata software.

Multiple Linear Regression Analysis

Multiple linear regression analysis is employed to examine the linear relationship between independent variables and the dependent variable.

Empirical Model

$$IRD = \alpha_0 + \beta_1 CE_it + \beta_2 PT_it + \beta_3 LLEB_it + \beta_4 RII_it + \beta_5 RFI_it + \beta_6 PS_it + \epsilon_it$$

Interpretation of Coefficients, t-statistics, and Significance

The estimation results indicate that CE has a coefficient of -0.0030 ($t = -0.02$; $p = 0.986$), suggesting that a one-unit increase in CE decreases IRD by 0.0030, ceteris paribus. However, the effect is not statistically significant. PT shows a positive and significant coefficient of 0.0192 ($t = 3.95$; $p = 0.000$), indicating that an increase in PT leads to an increase in IRD. LLEB has a coefficient of 0.0122 ($t = 0.47$; $p = 0.641$), indicating a positive but insignificant effect. RII exhibits a coefficient of -0.0017 ($t = -0.11$; $p = 0.912$), suggesting a negative but statistically insignificant relationship. RFI has a coefficient of -0.0166 ($t = -0.12$; $p = 0.904$), also indicating an insignificant negative effect. PS shows a positive coefficient of 0.0429 ($t = 1.54$; $p = 0.125$), but the effect is not statistically significant. The constant term is 0.5653 ($t = 1.52$; $p = 0.129$), indicating that when all independent variables are zero, IRD is estimated at 0.5653; however, the intercept is not statistically significant.

Hypothesis Testing

Partial Significance Test (t-test)

Table 5. T-Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IRD				
CE	-0.003	0.171	-0.02	0.986
PT	0.019	0.004	3.95	0.000

LLEB	0.012	0.026	0.470.641
RII	-0.001	0.015	-0.110.912
RFI	-0.016	0.137	-0.120.904
PS	0.042	0.027	1.540.125
C	0.565	0.370	1.520.125

Source: Output StataMP version 17 processed by author, 2026

The partial significance test (t-test) is used to examine the effect of each independent variable on the dependent variable. The results of the test are as follows:

- The CE variable has a coefficient of -0.0030 with a significance value of 0.986 (> 0.05), indicating that it does not have a significant effect on IRD.
- The PT variable has a positive coefficient of 0.0192 with a significance value of 0.000 (< 0.05), indicating a positive and significant effect on IRD. This suggests that an increase in PT leads to a higher level of infrastructure risk disclosure.
- The LLEB variable has a coefficient of 0.0122 with a significance value of 0.641 (> 0.05), indicating that it does not significantly affect IRD.
- The RII variable has a negative coefficient of -0.0017 with a significance value of 0.912 (> 0.05), indicating that it does not have a significant effect on IRD.
- The RFI variable has a coefficient of -0.0166 with a significance value of 0.904 (> 0.05), indicating that it does not significantly affect IRD.
- The PS variable has a coefficient of 0.0429 with a significance value of 0.125 (> 0.05), indicating that it does not have a significant effect on IRD.

Based on the results of the partial significance test (t-test) from the multiple linear regression analysis, only one hypothesis namely the second hypothesis is supported, while the remaining hypotheses are rejected.

Table 6. Model Significance Test (F-test)

Model	Sum of Squares	df	Mean Square	F
Regression	0.680	6	0.113	3.060
Residual	8.450	228	0.037	
Total	9.131	234	0.039	

Source: Output StataMP version 17 processed by author, 2026

The F-test is used to assess the joint effect of all independent variables included in the model on the dependent variable. This test aims to evaluate the overall ability of the regression model to explain variations in the dependent variable. The results of the multiple linear regression analysis show that the model is based on 235 observations, with an F-statistic of 3.06 and a probability value (Prob > F) of 0.0067. Since the probability value is less than 0.05, it can be concluded that the regression model is statistically significant. This indicates that all independent variables, when considered simultaneously, have a significant effect on the dependent variable, namely infrastructure risk disclosure (IRD).

Table 7. Coefficient of Determination (Adjusted R-squared)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.273	0.074	0.050	0.192

Source: Output StataMP version 17 processed by author, 2026

The coefficient of determination is used to measure the extent to which the model explains the variation in the dependent variable. The R-squared value of 0.0745 indicates that the model explains 7.45% of the variation in infrastructure risk disclosure (IRD), while the remaining 92.55% is explained by other variables outside the model. The Adjusted R-squared value of 0.0501, which is relatively low, suggests that after adjusting for the number of independent

variables, the explanatory power of the model becomes weaker. The high proportion of unexplained variance indicates that infrastructure risk disclosure is still influenced by several external factors that are not included in this research model.

Table 8. Robustness Tests

IRD	Main Model (OLS)	Robust	GLM Analysis Techniqu
CE	0.986	0.985	0.936
PT	0.000	0.000	0.000
LLEB	0.641	0.630	0.664
RII	0.912	0.898	0.986
RFI	0.904	0.891	0.873
PS	0.125	0.115	0.122
C	0.129	0.074	0.288
F (6, 228)	3.060	6.240	
Prob > F	0.006	0.000	
Adj R-square	0.050	0.074	

Source: Output StataMP version 17 processed by author, 2026

Based on the regression results presented in the table, it can be observed that the estimation results demonstrate consistency across the main model (OLS), the robust model, and the additional model using the Generalized Linear Model (GLM). Partially, only the Population (PT) variable is found to have a significant effect on Infrastructure Risk Disclosure (IRD) across all models, with a significance value of 0.000 ($p < 0.01$). This indicates that a higher population is associated with a higher level of infrastructure risk disclosure by local governments. Meanwhile, the variables Capital Expenditure (CE), Local Leaders' Educational Background (LLEB), Regional Investment Income (RII), Regional Financial Independence (RFI), and Political Support (PS) do not exhibit a significant effect on IRD, as their probability values exceed the 5% significance level in all estimated models.

Simultaneously, the F-test results in the main model show a value of 3.060 with a probability of 0.006, indicating that the regression model is statistically significant at the 5% level. This finding is reinforced by the robust model, which produces a Prob > F value of 0.000, suggesting that all independent variables jointly affect IRD. In terms of the model's explanatory power, the Adjusted R-squared value in the main model is 0.050, indicating that approximately 5.0% of the variation in IRD can be explained by the independent variables included in this study. This value increases to 0.074 in the robust model, suggesting a slight improvement in the model's explanatory ability, although it remains relatively low overall.

Furthermore, the use of the GLM as an additional robustness test yields results consistent with those of the OLS model, where only the Population (PT) variable remains significant, while the other variables are not significant. This consistency indicates that the findings are robust and not sensitive to changes in estimation methods. Therefore, it can be concluded that population size is the primary determinant in promoting infrastructure risk disclosure by local governments, while other factors examined in this study do not show a significant influence.

Table 9. Sensitivity Analysis

IRD	Main Model (OLS)	RFI1=Local Own-Source Revenue / Total Regional Expenditure
CE	0.986	0.536
PT	0.000	0.000
LLEB	0.641	0.504
RII	0.912	0.244
RFI	0.904	0.607
PS	0.125	0.075
C	0.129	0.055

F (6, 228)	3.060	3.350
Prob > F	0.006	0.003
Adj R-square	0.050	0.056

Source: Output StataMP version 17 processed by author, 2026

A sensitivity analysis was conducted by modifying the measurement of the Regional Financial Independence (RFI) variable, from the ratio of Local Own-Source Revenue to Total Revenue, to the ratio of Local Own-Source Revenue to Total Regional Expenditure. This adjustment aims to examine the robustness of the empirical results against differences in the operational definition of the variable. Based on the estimation results, it can be observed that the regression outcomes in the sensitivity model remain generally consistent with the main model (OLS). The Population (PT) variable continues to show a significant effect on Infrastructure Risk Disclosure (IRD), with a significance value of 0.000 ($p < 0.01$), indicating that the result remains stable despite the change in the measurement of RFI. Meanwhile, the variables CE, LLEB, RII, RFI, and PS remain statistically insignificant at the 5% level, although slight variations in their p-values are observed.

In terms of joint significance, the model remains statistically significant, with a Prob > F value of 0.003, which is even lower (and thus stronger) than that of the main model (0.006). This indicates that the independent variables collectively continue to explain variations in IRD despite the alternative specification of the RFI variable. Furthermore, the Adjusted R-squared slightly increases from 0.050 to 0.056, indicating a marginal improvement in the model's explanatory power. Therefore, it can be concluded that the change in the definition of RFI does not alter the main findings of the study. The results are thus considered robust and stable, particularly for the Population (PT) variable, which consistently demonstrates a significant effect on IRD.

Discussion

The Effect of CE on IRD

The regression results show that the CE variable has a negative coefficient of -0.0030 with a significance value of 0.985 ($p > 0.05$), indicating that CE does not have a significant effect on infrastructure risk disclosure (IRD). Therefore, the first hypothesis, which posits a positive effect of CE on IRD, is rejected. Capital expenditure represents local government spending allocated to finance the development of facilities and infrastructure, including physical infrastructure as well as investments in human resources, technology, and innovation (Juli & Maharani, 2024). Theoretically, economic capacity is expected to promote transparency due to the availability of greater resources. However, the findings of this study indicate that higher economic capacity does not necessarily lead to increased disclosure. This suggests that the availability of resources is not always accompanied by a stronger commitment to transparency. These findings are consistent with Fasa (2022), who found that capital expenditure has a stronger influence on the level of local government financial statement disclosure (LKPD). This implies that more specific variables, such as capital expenditure directly related to infrastructure development, are more effective in driving disclosure compared to broader measures like economic capacity. From a legitimacy theory perspective, disclosure is more influenced by external pressures and the need to obtain legitimacy from stakeholders. Local governments tend to increase disclosure when there are significant development activities that attract public attention, rather than solely due to high economic capacity.

The Effect of PT on IRD

The regression results indicate that the PT variable has a positive coefficient of 0.0192 with a significance value of 0.000 ($p < 0.05$), suggesting that PT has a positive and significant effect on infrastructure risk disclosure (IRD). Therefore, the second hypothesis is accepted. PT does

not directly represent external pressure from the public and stakeholders, but rather reflects population size as a demographic characteristic of a region. A larger population tends to increase the demand for transparency as well as the complexity of local government administration, thereby encouraging governments to enhance disclosure as a form of public accountability. This finding is not consistent with Aswar (2022), who found that population size does not influence the level of local government financial statement disclosure (LKPD). This difference suggests that, in the context of this study, population size plays an important role in promoting disclosure, particularly with regard to infrastructure risk. From the perspective of legitimacy theory, local governments tend to increase disclosure in order to obtain and maintain legitimacy in the eyes of the public. The larger the population, the greater the demand for information and public scrutiny, which in turn encourages governments to disclose more comprehensive information, including infrastructure-related risks.

The Effect of LLEB on IRD

The regression results indicate that the LLEB variable has a positive coefficient of 0.0122 with a significance value of 0.630 ($p > 0.05$), suggesting that LLEB does not have a significant effect on infrastructure risk disclosure (IRD). Therefore, the hypothesis proposing an effect of LLEB on IRD is rejected. In this study, LLEB is a dummy variable, where a value of 0 represents leaders with a non-Accounting/Finance educational background and a value of 1 represents those with an Accounting/Finance educational background. The insignificant result indicates that differences in educational background are not sufficient to explain variations in the level of infrastructure risk disclosure. This finding is not consistent with (Irsyad et al., 2024), who argue that leadership background has a positive effect on risk disclosure due to the ability to utilize skills and experience. However, the result is consistent with (Viola et al., 2023), who find that leadership educational background does not influence the quantity and scope of risk disclosure. From the perspective of legitimacy theory, disclosure is more influenced by external pressures and accountability demands than by individual characteristics of leaders. Therefore, even when leaders have an economic educational background, it does not necessarily lead to increased infrastructure risk disclosure.

The Effect of RII on IRD

The regression results indicate that the RII variable has a coefficient of -0.0017 with a significance value of 0.898 ($p > 0.05$), suggesting that RII does not have a significant effect on infrastructure risk disclosure (IRD). Therefore, the proposed hypothesis is rejected. The negative coefficient indicates a tendency for higher RII to be associated with lower levels of infrastructure risk disclosure; however, this relationship is not statistically significant. This finding suggests that RII is not a key determinant of infrastructure risk disclosure among local governments. From a theoretical perspective, regional investment income is expected to strengthen fiscal capacity and improve the quality of financial management thereby encouraging greater transparency (Mulyani, 2021). The findings of this study, however, indicate that increases in RII do not significantly enhance disclosure practices. From the perspective of legitimacy theory, disclosure is more influenced by external pressures than by fiscal capacity. This suggests that even when investment income increases, it does not necessarily lead to greater infrastructure risk disclosure.

The Effect of RFI on IRD

The regression results indicate that the RFI variable has a coefficient of -0.0166 with a significance value of 0.891 ($p > 0.05$), suggesting that RFI does not have a significant effect on infrastructure risk disclosure (IRD). Therefore, the proposed hypothesis is rejected. RFI reflects the level of regional financial independence, defined as the ability of local governments to manage their finances independently without relying on the central government (Jannah &

Handayani, 2025). Theoretically, a higher level of independence is expected to promote greater transparency. Previous studies by Dianti (2022), Suladri (2019), and Setyorini (2020) found that regional financial independence has a positive effect on local government financial statement disclosure. However, the findings of this study are not consistent with those results, as RFI is not found to have a significant effect on infrastructure risk disclosure. This discrepancy suggests that regional financial independence does not necessarily drive infrastructure risk disclosure specifically. From the perspective of legitimacy theory, disclosure is more influenced by external pressures and accountability demands than by the level of financial independence. This indicates that even when a region has a high level of financial independence, it does not automatically lead to greater infrastructure risk disclosure.

The Effect of PS on IRD

The regression results indicate that the PS variable has a coefficient of 0.0429 with a significance value of 0.115 ($p > 0.05$), suggesting that PS does not have a significant effect on infrastructure risk disclosure (IRD). Therefore, the proposed hypothesis is rejected. PS in this study is a dummy variable, where a value of 0 represents regional heads who are not affiliated with the same political party as the president, and a value of 1 represents those who are affiliated with the same party. The insignificant result indicates that political party alignment does not explain variations in the level of infrastructure risk disclosure. The positive coefficient suggests a tendency that alignment with the president's political party may increase disclosure; however, the relationship is not statistically significant. This indicates that political factors, in terms of party alignment, are not a primary determinant of transparency in infrastructure risk disclosure.

This finding can be related to (Khadafi et al., 2021), who argue that the local political context and leadership support determine reporting priorities and the level of transparency. Political legitimacy can either encourage or hinder disclosure practices depending on the political incentive orientation in each region. The results of this study indicate that party alignment alone is not sufficient to reflect strong political support or incentives. From the perspective of legitimacy theory, disclosure is more influenced by external pressures and the need to gain legitimacy than by political affiliation alone. This suggests that even when regional heads share the same political party as the president, it does not necessarily lead to increased infrastructure risk disclosure.

CONCLUSION

This study aims to examine the effect of Capital Expenditure, Population, Local Leaders' Educational Background, Regional Investment Income, Regional Financial Independence, and Political Support on infrastructure risk disclosure (IRD) in local governments. The results show that, partially, only Population has a positive and significant effect on infrastructure risk disclosure (IRD), while Capital Expenditure, Local Leaders' Educational Background, Regional Investment Income, Regional Financial Independence, and Political Support do not have significant effects. These findings indicate that population size, which reflects higher public demand and scrutiny, plays an important role in driving transparency, rather than economic capacity, leadership characteristics, fiscal capacity, or political affiliation.

The simultaneous test results indicate that the regression model is statistically significant, suggesting that all independent variables collectively influence IRD. However, the relatively low coefficient of determination indicates that the model explains only a small proportion of the variation in IRD, implying that many other factors outside the model influence infrastructure risk disclosure. The robustness test results show that the model remains significant after applying robust standard errors, confirming that the main findings are consistent and reliable.

The practical implication of this study highlights the importance of public demand and accountability pressures in improving the quality of infrastructure risk disclosure. Efforts to

enhance transparency are not solely dependent on internal capacity but are also influenced by external factors that encourage better reporting practices.

Future research is recommended to include more relevant variables, such as governance quality, audit roles, legislative oversight, or other institutional factors, in order to better explain variations in IRD. Extending the observation period and applying more diverse analytical methods may also improve the robustness and explanatory power of future studies.

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