

Causal Interaction Between Regional Financial Performance and Provincial-Level SDGs Achievement in Indonesia

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ABSTRACT: This study examines the reciprocal causal relationship between regional financial performance and the achievement of the Sustainable Development Goals (SDGs) at the provincial level in Indonesia. Using panel data from 34 provinces over the period 2019–2023, the study combines SDG indicators from Statistics Indonesia with provincial fiscal data from the Regional Financial Information System. Structural Equation Modeling (SEM) is employed to analyze bidirectional effects while addressing measurement errors. The results reveal a positive and statistically significant two-way relationship between regional financial performance and SDGs achievement. The effect of financial performance on SDGs achievement is stronger than the reverse relationship, highlighting the importance of fiscal capacity in accelerating sustainable development. Expenditure efficiency and fiscal decentralization are identified as the main drivers of regional financial performance, while partnerships for the goals (SDG 17) contribute most significantly to SDGs achievement. This study provides empirical evidence of a dynamic fiscal–sustainability feedback mechanism at the subnational level. Policy implications suggest that investment in SDGs serves as a long-term fiscal strategy that strengthens regional financial sustainability.

KEYWORDS: Regional Financial Performance; Sustainable Development Goals; Fiscal Decentralization; Structural Equation Modeling

1. INTRODUCTION

The challenges of achieving the Sustainable Development Goals (SDGs) in developing countries include: (a) limited funding, (b) economic and social inequality, (c) political instability, and (d) a lack of public awareness and commitment (UNDP, 2017; World Bank, 2019; OECD, 2018; Bhattacharya et al., 2016; Neto, 2025; Sachs, 2015). On the other hand, opportunities for developing countries in achieving the SDGs include: (a) innovation and technology, (b) international support, (c) private sector participation, (d) a progressive young generation, and (e) increased global awareness (Sachs, 2015; Schwab, 2016; UNDESA, 2020; OECD, 2018; BSDC, 2017; Strauss & Howe, 2000).

Indonesia's SDGs achievement in 2024 ranked 78th out of 167 countries, with a score of 69.40, where 16% of the goals are on track, while the remaining 84% show limited progress (Sachs et al., 2024). Meanwhile, the government's efforts and commitment to SDGs received a rating of 7 with a score of 77.30, indicating that the government is serious about SDGs (Sachs et al., 2023).

Referring to the Sustainable Development Report (SDR) 2024, global SDGs achievement has declined (in 2023 the score was 70.16 with a rank of 75). Globally, SDG No. 1 (No Poverty) and SDG No. 4 (Quality Education) are the best-performing goals (on track), while SDG No. 7 (Clean Energy) and SDG No. 13 (Climate Action) have experienced declining (weakening) achievement (SDR, 2024; SDR, 2023). At the ASEAN level, Indonesia ranks fourth out of ten countries, below Thailand, Vietnam, and Singapore. One of the challenges in achieving SDGs in Indonesia is regional finance or funding.

The achievement of SDGs is carried out using a holistic approach, requiring aligned policies and mechanisms between central and local governments, as well as the availability of financial resources (Abidoye & Orlic, 2022; Alisjahbana, 2018; Le Blanc, 2015). One of the pillars in achieving SDGs is the economic pillar, which includes: (a) clean and affordable energy (SDG 7), (b) decent work and economic growth (SDG 8), (c) industry, innovation, and infrastructure (SDG 9), (d) reduced inequalities (SDG 10), and (e) partnerships for the goals (Fianto et al., 2024).

In the field of clean and affordable energy, the government has reduced regional budget allocations for clean energy investment, which was done to accelerate the handling of COVID-19 (CPI, 2021). According to CPI initiatives, decentralized clean energy involving communities, such as mini-grid models (small-scale solar energy models), can save electricity, thereby reducing

Causal Interaction Between Regional Financial Performance and Provincial-Level SDGs Achievement in Indonesia

government subsidies, reducing fiscal burdens, increasing regional revenue, and attracting local investors to finance clean energy projects through the issuance of green bonds (climatepolicyinitiative.org, 2021). Green finance helps the development of renewable energy (Subramaniam & Loganathan, 2023; Shaheen et al., 2023). Furthermore, renewable energy will generate regional revenue streams (Raimi, 2024; Ikenna, 2024).

Regional finance is the main resource to support local economic development and job creation. For example, Local Own-Source Revenue (PAD) is directed to build economic infrastructure such as local markets, industrial areas, and public transportation, which serve as a foundation for growth. General Allocation Funds (DAU) and Special Allocation Funds (DAK) are used for workforce training programs, MSME empowerment, and the development of community-based industrial facilities. Budget allocations to provide incentives to small and medium enterprises, such as loan interest subsidies or training, can increase their capacity to absorb labor. Regional finance can also be used to support vocational education and training based on labor market needs, which is important for increasing productivity and individual income. Fair and development-oriented local taxes and retributions can encourage the participation of local economic actors in regional development (BPS, 2022; UNDP, 2022; Ministry of Finance of the Republic of Indonesia, 2023; Rahmatullah, 2021).

SDG 9 aims to build resilient infrastructure, promote inclusive and sustainable industrialization, and support innovation. These three elements are interrelated in creating sustainable economic growth, with regional finance as one of the main supporting factors. The use of central government transfer funds and PAD to build infrastructure such as roads, electricity, clean water networks, and internet access can increase local industrial productivity (Wibowo & Haryanto, 2022). Regional budgets are allocated to finance innovation centers, technology incubators, and research that support technology-based industrial transformation (UNDP, 2022). Regional development funds can be used to create industrial areas or special economic zones, facilitating business actors' access to facilities and distribution networks (Lestari & Nugroho, 2021). Regional fiscal policies, such as tax reductions or subsidies for technology companies, can encourage investment in the innovation sector (World Bank, 2021). Regional finance plays an important role in reducing inequality through: (a) the provision of equitable basic services, such as budget allocations for education, health, and infrastructure (mandatory spending) in underdeveloped regions (UNDP, 2023; Wahyuni et al., 2022; Hakim & Rachmawati, 2021). Progressive local taxes and local subsidy programs can help distribute resources more fairly to vulnerable groups (Ministry of Home Affairs, 2023). Special Allocation Funds (DAK) and village funds can be directed to support the development of micro, small, and medium enterprises (MSMEs) in underdeveloped areas, creating jobs and reducing regional economic disparities (Hakim & Rachmawati, 2021). Pro-poor budgeting, including for women, persons with disabilities, and indigenous communities, can ensure social justice (UNDP, 2022). Transfers from the central government to local governments, such as General Allocation Funds (DAU) and Village Funds, play an important role in ensuring equitable development across regions (World Bank, 2021).

SDG 17 emphasizes the importance of global, regional, and local partnerships to support the implementation of sustainable development goals. Regional finance plays an important role in creating and managing effective partnerships in the following ways: local governments can partner with the private sector through Public-Private Partnership (PPP) schemes to finance infrastructure and public services (UNDP, 2022). Grants and loans from international institutions can be used to support regional development projects (Siregar & Aditya, 2021). Partnerships with donor agencies or non-governmental organizations can help manage funds efficiently and ensure accountability in program implementation (Bappenas, 2023). Collaboration with universities and research institutions helps enhance technical capacity in results-based budget planning. Partnerships can also be used to develop innovative financing schemes, such as green bonds for environmentally friendly projects or result-based financing (Ministry of Finance of the Republic of Indonesia, 2022).

Several previous studies supporting this research include findings of a positive relationship between SDG levels and financial performance (Beretta et al., 2024), the positive effect of financial independence on financial sustainability (Lhutfi & Sugiharti, 2022), a significant positive correlation between renewable energy consumption and green finance, as well as the potential of green finance to drive ecological and economic transformation in developing countries (Nabil et al., 2024). Other studies highlight strategies to improve local government financial performance that can support sustainable development (Abdullah et al., 2024), the positive and significant impact of environmental SDGs on firm financial performance, while social SDGs have a negative and significant effect (Saha et al., 2024). Social SDGs in city-status regions are more advanced through transfer funds, resulting in greater SDG progress compared to regency-status regions (Morales et al., 2025). Local governments need to enhance their intermediary role to facilitate SDG partnerships (Masuda et al., 2022). Accounting and SDG reporting practices contribute to SDG progress (Kaur et al., 2025).

Transfer funds have a positive and significant effect on financial sustainability, intellectual capital has a positive and significant effect on financial sustainability, and transfer funds and intellectual capital jointly have a positive and significant effect on financial sustainability (Ichsan et al., 2025). Land area and Local Own-Source Revenue simultaneously affect the level of SDGs achievement,

Causal Interaction Between Regional Financial Performance and Provincial-Level SDGs Achievement in Indonesia

while Local Own-Source Revenue does not have a significant effect on the level of SDGs achievement (Mutiarani & Siswantoro, 2020). The importance of the relationship between management accounting in the implementation of SDGs indicates that local governments must fully institutionalize and sustain it (Sinervo et al., 2024). Local government efficiency is achieved after the implementation of SDG 6, namely clean water and sanitation services (Córdoba et al., 2020). Local governments with better financial conditions devote more effort to achieving SDGs related to the biosphere as well as social and economic development. These results may encourage politicians and managers to combat tax avoidance in order to increase their resources (Bisogno et al., 2024). The impact of SDG implementation by local governments on financial sustainability is reflected in better SDG compliance being associated with shorter supplier payment periods and smaller surpluses (Benito et al., 2023). Sustained commitment and support in terms of legal and regulatory frameworks, policy documents aligned with SDGs, and available financial resources are required to support inclusive domestic development (Abidoye & Orlic, 2022). SDGs are positively and significantly related to financial performance (Syahrial et al., 2023).

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Literature Review

Regional financial performance reflects the capacity of local governments to manage financial resources effectively, efficiently, transparently, and accountably in delivering governance, development, and public services. Strong financial performance indicates the ability of a region to finance regional autonomy, enhance local revenue, and optimize expenditure allocation (Halim, 2020). In this context, regional financial performance serves as a critical foundation for sustainable development at the subnational level. Regional financial independence represents a region's ability to finance development and public services through the optimization of Local Own-Source Revenue (PAD), thereby reducing reliance on intergovernmental transfers. According to Government Regulation No. 12 of 2019 on Regional Financial Management, fiscal decentralization is characterized by an increasing proportion of PAD relative to total regional revenue. A higher PAD-to-transfer ratio indicates stronger fiscal autonomy and greater flexibility in responding to local development needs (Ministry of Finance of the Republic of Indonesia, 2021).

Expenditure efficiency is another key dimension of regional financial performance. Efficient budget allocation enables local governments to generate greater development outputs—such as improved healthcare, education, and environmental management—using limited fiscal resources (Astuti & Mulyani, 2022). Efficient spending enhances the conversion of fiscal inputs into sustainable development outcomes, thereby increasing the likelihood of achieving SDG targets.

Fiscal decentralization reflects the degree of fiscal authority granted to regional governments. Theoretical perspectives suggest that decentralization allows regions to tailor policies to local development priorities. However, excessive decentralization may also create coordination problems and inefficiencies. Empirical evidence indicates that while fiscal autonomy can enhance policy responsiveness, its effectiveness depends on institutional quality and governance capacity.

Revenue growth and revenue effectiveness further strengthen regional fiscal capacity. Growing regional revenue expands the potential for investment in SDG-related sectors, while effective revenue realization ensures that planned revenues are collected and utilized productively. Provinces with high PAD effectiveness are shown to achieve better outcomes in poverty reduction and basic education indicators (Lestari & Setyawan, 2023).

SDG achievement reflects the extent to which regions progress toward the 17 Sustainable Development Goals, encompassing economic, social, environmental, and institutional dimensions (United Nations, 2020). In this study, SDG achievement is represented by five key dimensions. Clean and affordable energy is measured by the electrification ratio, indicating equitable access to electricity and its role in supporting productivity, income growth, and fiscal revenue (Ministry of Energy and Mineral Resources, 2023). Decent work and economic growth are proxied by Gross Domestic Product (GDP), which reflects output expansion, productivity, and income generation (Todaro & Smith, 2020).

Industry, innovation, and infrastructure are measured by the proportion of manufacturing value added to GDP, capturing industrial capacity, efficiency, and the creation of a sustainable economic base (BPS, 2024; World Bank, 2023). Reduced inequality is represented by the Economic Freedom Index, which reflects governance quality and institutional efficiency in supporting economic activity. Finally, partnerships for the goals are measured by total government revenue as a proportion of GDP, indicating fiscal capacity and the ability to mobilize resources through multi-stakeholder collaboration.

2.2 Hypothesis Development

The Effect of Regional Financial Performance on SDGs Achievement

Regional financial performance reflected in fiscal independence, expenditure efficiency, revenue growth, and PAD effectiveness determines the capacity of provincial governments to provide infrastructure, public services, and social programs that directly support SDG targets. Public resource theory posits that greater fiscal capacity enables more effective allocation of resources to

Causal Interaction Between Regional Financial Performance and Provincial-Level SDGs Achievement in Indonesia

education, health, sanitation, and infrastructure sectors, thereby accelerating sustainable development outcomes. Empirical studies in the Indonesian context consistently demonstrate a positive relationship between sound regional financial management and SDG-oriented development performance (Sari & Wibowo, 2021; Putra & Rahayu, 2021; Syaiful Islam, 2024; Morales et al., 2025).

H1: Regional financial performance has a positive effect on SDGs achievement at the provincial level.

The Effect of SDGs Achievement on Regional Financial Performance

Conversely, progress in achieving SDGs particularly in clean energy, economic growth, industrial development, inequality reduction, and partnerships—can strengthen the regional economic base, expand the tax base, increase productivity, and enhance investor confidence. These improvements contribute to higher PAD, stronger revenue growth, and more efficient public spending, ultimately improving regional financial performance. Several empirical studies confirm that SDG implementation and reporting are associated with improvements in fiscal performance, both directly and through enhanced investment and policy efficiency (Indrawati et al., 2023; Benito et al., 2023; Morales et al., 2025).

H2: SDGs achievement has a positive effect on regional financial performance at the provincial level.

3. RESEARCH METHODOLOGY

This study examines the reciprocal effect between financial performance and the achievement of the Sustainable Development Goals (SDGs) using secondary data, with observations covering the period 2019–2023 and a population of 34 provinces across Indonesia. In detail, the variables, dimensions, indicators, and data sources are presented as follows, including the description of variables, indicators, and their measurements:

The Sustainable Development Goals (SDGs) variable consists of five dimensions, namely:

(a) clean and affordable energy, measured by the electrification ratio; (b) decent work and economic growth, measured by gross domestic product per capita; (c) industry, innovation, and infrastructure, measured by the proportion of manufacturing sector value added to gross domestic product; (d) reduced inequalities, measured by the freedom index; and (e) partnerships for the goals, measured by total government revenue as a proportion of GDP. Furthermore, the regional financial performance variable is measured using five dimensions, namely: (a) the regional financial independence ratio, measured by the comparison of Local Own-Source Revenue (PAD) with external sources; (b) the expenditure efficiency ratio, measured by the comparison of realized regional expenditure with targeted regional expenditure; (c) the fiscal decentralization degree ratio, measured by the comparison of PAD with total regional revenue; (d) the revenue growth ratio, measured by revenue in year n minus revenue in year $n-1$ divided by revenue in year n ; and (e) the effectiveness ratio, measured by the comparison of realized PAD with targeted PAD.

Data analysis uses Structural Equation Modeling (SEM), which is a statistical method to measure constructs and examine relationships in order to study complex connections between directly observed variables and latent variables. SEM is used to test causal hypotheses while simultaneously correcting for measurement errors.

The procedures in SEM-based analysis are as follows:

- (a) formulation of the theoretical model. This stage is used to develop a path diagram based on relevant theory (Hair et al., 2021) to identify relationships among variables. Subsequently, structural model analysis is conducted to test significance and obtain a p -value < 0.05 (Hair et al., 2021). In addition to p -values, this study evaluates R^2 to assess predictive power (Sarstedt et al., 2022);
- (b) evaluation of measurement model fit. This stage confirms the extent to which a latent construct is empirically distinct from other constructs in the model. This is demonstrated by ensuring that indicators of a construct do not correlate excessively with indicators of other constructs through HTMT (Heterotrait–Monotrait Ratio) < 0.9 (Henseler et al., 2015), and by reliability testing ($\alpha \geq 0.7$), which indicates internal consistency of indicators in measuring latent constructs (Fornell & Larcker, 1981; updated by Hair et al., 2019).

The final stage in the analysis process is to measure model fit, known as goodness-of-fit, which consists of several analyses and criteria, such as the Chi-Square test, a non-parametric statistical method used to test relationships between categorical variables (independence) and the suitability of data distribution with the theoretical distribution (goodness-of-fit). An appropriate chi-square value is indicated when it is lower than the degree of freedom (df).

3. RESEARCH RESULTS AND DISCUSSION

The results of the analysis show that discriminant validity through HTMT meets the criteria, as the values are below the threshold of 0.9, and reliability measured by Cronbach's alpha (ρ_A) also meets the criteria, as the values are above 0.7. Therefore, it can

Causal Interaction Between Regional Financial Performance and Provincial-Level SDGs Achievement in Indonesia

be concluded that the model is valid and reliable. The following is the analysis of the structural model, which produces a reciprocal effect between regional financial performance and SDGs achievement:

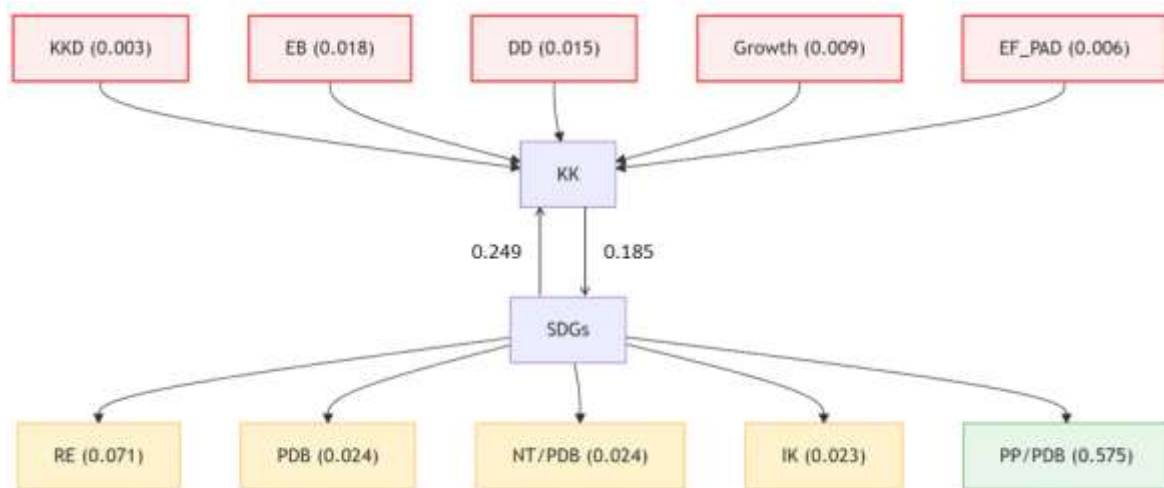


Figure 1. Structural Model of the Reciprocal Effect between Regional Financial Performance and SDGs

The Effect of Regional Financial Performance on SDGs Achievement

Referring to the figure above, the following table illustrates the latent variable of Financial Performance (FP) on SDGs achievement.

Table 1. Regional Financial Performance and SDGs Achievement

Predictor	Estimate (β)	Std. Error	t-value	p-value	Significance
Intercept	-1.31	2.90E-16	-4.51E+15	0.000	significant
KKD	0.00326	1.30E-18	2.51E+15	0.000	significant
EB	0.0185	3.49E-18	5.30E+15	0.000	significant
DD	0.0149	5.17E-18	2.89E+15	0.000	significant
Growth	0.00913	3.00E-18	3.05E+15	0.000	significant
EF_PAD	0.00643	1.93E-18	3.34E+15	0.000	significant

Source: Data Processing Results, 2025

The magnitude of the contribution of the comparison between Local Own-Source Revenue and external sources to regional financial performance is 0.00326, with a p-value of 0.000. This indicates that the regional financial independence ratio (KKD) has a positive and significant effect on regional financial performance, meaning that the higher the KKD ratio, the higher the financial performance of local governments. The contribution of the comparison between realized regional expenditure and targeted regional expenditure to regional financial performance is 0.018, with a p-value of 0.000. This indicates that the expenditure efficiency ratio has a positive and significant effect on the financial performance of local governments.

The contribution of the comparison between Local Own-Source Revenue and total regional revenue to financial performance is 0.015, with a p-value of 0.000. This indicates that the degree of fiscal decentralization has a positive and significant effect on financial performance. Furthermore, the contribution of the revenue growth ratio to financial performance is 0.009, with a p-value of 0.000, indicating that revenue growth has a positive and significant effect on financial performance. Finally, the contribution of the comparison between realized Local Own-Source Revenue and targeted Local Own-Source Revenue to local government financial performance is 0.006, with a p-value of 0.000, indicating that Local Own-Source Revenue effectiveness has a positive and significant effect on financial performance.

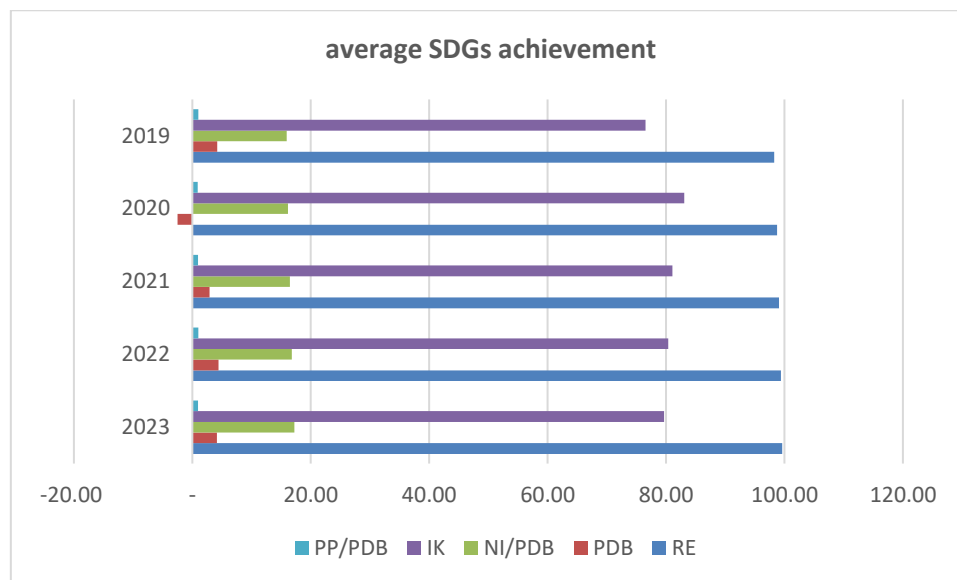


Figure 2: Average SDGs Achievement

The hypothesis testing of the effect of regional financial performance on SDGs achievement can be seen in the table below:

Table 2. Hypothesis Testing 1

Predictor	Estimate (β)	Std. Error	t-value	p-value	Significance
Intercept	1.272	2.68E-01	4.75E+00	<0.001	significant
SDGs	0.249	9.00E-02	2.76E+00	0.007	significant

Source: Data Processing Results, 2025

Based on Table 2, regional financial performance has a positive and significant effect on SDGs achievement, as indicated by a p-value of 0.007 or < 0.05. Regional financial performance is able to contribute to SDGs achievement by 0.249 or 24.9%.

Regional financial independence has a positive effect on SDGs achievement because it provides fiscal strength, policy autonomy, and flexibility for local governments to allocate resources toward sustainable development priorities. Financially independent regions are able to accelerate the achievement of SDGs, particularly in social, economic, and equitable governance aspects (Putra & Rahayu, 2021; Indrawati et al., 2021; Rahman & Sari, 2023). Expenditure efficiency has a significant effect on SDGs achievement because it enables targeted, transparent, and results-oriented use of public budgets, improves the quality of public services, accelerates socio-economic development, and supports the realization of governance with integrity (Sari & Wibowo, 2021; Rahmadani & Nugroho, 2022; Wicaksono & Rahayu, 2024).

Fiscal decentralization, through an increased degree of regional fiscal capacity, has been proven to have a positive effect on SDGs achievement. By providing fiscal independence, greater policy space, and higher accountability, local governments are able to improve the effectiveness of public spending, optimize Local Own-Source Revenue (PAD), enhance the quality of basic services, and accelerate the achievement of SDGs (Mulyadi et al., 2023; Putra & Rahayu, 2021). Regional revenue growth has a positive effect on SDGs achievement because it can increase regional fiscal capacity to finance sustainable development programs, strengthen fiscal independence and accountability, promote regional economic growth and welfare distribution, and reduce interregional disparities (Susanti & Darmawan, 2022; Syafri et al., 2024).

The Effect of SDGs Achievement on Regional Financial Performance

Referring to Figure 1, the following table shows the contribution of SDGs indicator elements to SDGs achievement.

Table 3. Relationship between SDGs Indicators and SDGs Achievement

Predictor	Estimate (β)	Std. Error	t-value	p-value	Significance
Intercept	-6.945	3.12E-15	-2.22E+15	0.000	Significant
RE	0.07062	3.15E-17	2.24E+15	0.000	Significant
PDB	0.02421	1.54E-17	1.57E+15	0.000	Significant
NT/PDB	0.02392	6.54E-18	3.66E+15	0.000	Significant

Causal Interaction Between Regional Financial Performance and Provincial-Level SDGs Achievement in Indonesia

IK	0.02306	8.09E-18	2.85E+15	0.000	Significant
PP/PDB	0.5747	2.30E-16	2.50E+15	0.000	Significant

Source: Data Processing Results, 2025

The magnitude of the contribution of the Electrification Ratio (ER), which represents clean and affordable energy, to SDGs achievement is 0.071 with a p-value of 0.000. This indicates that clean and affordable energy has a positive and significant effect on SDGs achievement. The contribution of Gross Domestic Product (GDP) to SDGs achievement is 0.024 with a p-value of 0.000, indicating that decent work and economic growth have a positive and significant effect on SDGs. The contribution of the proportion of manufacturing sector value added to GDP to SDGs achievement is 0.024 with a p-value of 0.000, indicating that industry, innovation, and infrastructure have a positive and significant effect on SDGs achievement.

On the other hand, the contribution of the freedom index to SDGs achievement is 0.023 with a p-value of 0.000, indicating that reduced inequalities have a positive and significant effect on SDGs achievement. Finally, the contribution of total government revenue as a proportion of GDP to SDGs achievement is 0.0575 with a p-value of 0.000, indicating that partnerships for the goals have a positive and significant effect on SDGs achievement.

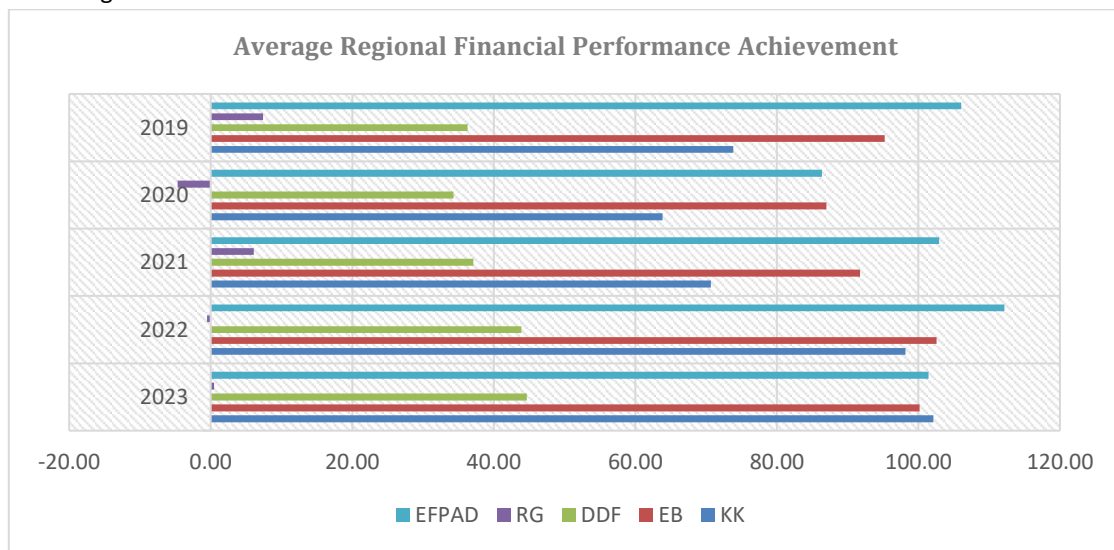


Figure 3: Average Regional Financial Performance Achievement

The hypothesis testing of the effect of SDGs achievement on regional financial performance can be seen in the following table:

Table 4. Hypothesis Testing 2

Predictor	Coefficient (β)	Std. Error	t-value	p-value	Significance
Intercept	2.567	1.39E-01	1.85E+01	<0.001	significant
KK	0.185	6.70E-02	2.76E+00	0.007	significant

Source: Data Processing Results, 2025

Based on Table 4, SDGs achievement has a positive and significant effect on regional financial performance, with a p-value of 0.007 or < 0.05. Furthermore, SDGs achievement is able to contribute to regional financial performance by 0.185 or 18.5%. To further strengthen whether the model used has an acceptable model fit or not, the following are the results:

Table 5. Model Fit Test Results

Aspect	Threshold	Value	Result
Chi-Square Test	Chi-square value < df	142.826 < 34	Good
RMR	< 0.05	0.004	Good
ECVI	Lower is better	1.155	Good

Source: Data Processing Results, 2025

Causal Interaction Between Regional Financial Performance and Provincial-Level SDGs Achievement in Indonesia

Based on the table above, the model is considered fit and has good goodness-of-fit, as it meets the chi-square, RMR, and ECVI tests. The expansion of electricity networks increases manufacturing activity, firm turnover, and creates churning (entry and exit), which in net terms raises manufacturing sector output. This indicates a direct effect of electrification on regional economic performance (Kasim D., 2018). A high Gross Regional Domestic Product (GRDP) reflects strong regional economic growth, which has a positive impact on regional revenue, expenditure effectiveness, and fiscal independence (Ardani & Putra, 2021). Industry, innovation, and infrastructure jointly improve regional financial performance by expanding the economic base, improving fiscal efficiency, and creating a healthy investment climate.

Local governments that successfully develop these three aspects will be more fiscally independent and more resilient to national and global economic pressures (Rizal & Hidayat, 2024). The freedom index, from economic, political, and institutional perspectives, has been proven to have a positive effect on regional financial performance. Regions that are more economically and politically free tend to have higher Local Own-Source Revenue (PAD), more efficient public spending, and a higher level of fiscal independence (Setiawan & Dewi, 2021). Partnerships for the goals (SDG 17) have been proven to have a positive effect on regional financial performance. Effective collaboration between government, the private sector, academia, and civil society leads to expanded fiscal capacity, improved efficiency and transparency in financial management, and strengthened regional fiscal sustainability (Fauzi & Wulandari, 2021).

4. CONCLUSIONS AND RECOMMENDATIONS

Based on hypothesis testing, the results indicate that there is a reciprocal interaction between regional financial performance and SDGs achievement. Furthermore, SDGs achievement also has an effect on regional financial performance. This study also finds that expenditure efficiency and the degree of fiscal decentralization make a large contribution to regional financial performance, while regional financial independence, revenue growth, and the effectiveness of Local Own-Source Revenue (PAD) make relatively low contributions. Meanwhile, the dimension of partnerships for the goals makes a large contribution to SDGs achievement, whereas clean and affordable energy, decent work and economic growth, industry, innovation and infrastructure, and reduced inequalities make relatively low contributions to SDGs achievement. Novelty: SDGs achievement serves as a long-term investment and generates regional revenue.

REFERENCES

- 1) Amanpreet Kaur, Daniela Argento, Umesh Sharma and Teerooven Soobaroyen, 2025. The role of accounting and reporting in achieving sustainable development goals, *Journal of Public Budgeting, Accounting & Financial Management*, Vol. 37 No. 2, pp. 137-155, Emerald Publishing Limited e-ISSN: 1945-1814, p-ISSN: 1096-3367, DOI [10.1108/JPBAFM-01-2025-0011](https://doi.org/10.1108/JPBAFM-01-2025-0011)
- 2) Amnatia R Abdullah, Titi Umi Kalsum Hulopi, Abdul rival Hartoyo, Ely Ibrahim, and Risna Sanaba. 2024. Local Government Financial Performance: Challenges and Opportunities, *West Science Interdisciplinary Studies*, Vol. 02, No. 12, December: pp. 2458-2462
- 3) Aln Pujo Priambodo & Mohammad Ahlis Djirimu. 2024. Government Intervention Strategy in Poverty Reduction, Study on the District and City in Indonesia Across 2016–2023, *Jurnal Bina Praja*, 16(3), 489–508. <https://doi.org/10.21787/jbp.16.2024.489-508>
- 4) Ardini, L., & Putra, A. (2021). *Pengaruh PDRB, PAD, dan Dana Transfer terhadap Kinerja Keuangan Daerah di Indonesia*. *Jurnal Ekonomi dan Kebijakan Pembangunan*, 10(3), 210–225
- 5) Bachril Bakri, Ernan Rustiadi, Akhmad Fauzi & Soeryo Adiwibowo, 2017. Sensitivity Indicators Analysis and Regional Sustainable Development Status in Indonesia, *Jurnal Bina Praja* 9 (2) (2017): 265 – 280,, e-ISSN: 2503-3360 | p-ISSN: 2085-4323
- 6) Badan Pemeriksa Keuangan RI, 2022. Peran Badan Pemeriksa Keuangan Republik Indonesia Dalam Sustainability Development Goals.
- 7) Badan Pusat Statistik 2022. *Analisis Pengangguran dan Pertumbuhan Ekonomi Berbasis Daerah*.
- 8) Benito B., Guillamon GM, and Rios AM, 2023. The sustainable development goals: How does their implementation affect the financial sustainability of the largest Spanish municipalities, *Sustainable Development*.:2836–2850.
- 9) Dahhou Nabil, Bahetta Soufiyan, Oulakhmis Abdellah and Massiki Ayoub, 2024. The Role Of Green Finance In Harmonizing Economic And Environmental Goals: A Moroccan Perspective, *RGSA – Revista de Gestão Social e Ambiental*, Vol. 18 No 12, pp 01-23, ISSN: 1981-982X, DOI: <https://doi.org/10.24857>
- 10) Erti Nurfindarti, 2019. Strategies and Road Map in Implementing Sustainable Development Goals in Serang City, *Jurnal Bina Praja* 11 (2) : 219-235

- 11) Fathurrahman, Julia Safitri, Musran Munizu & Nasir, 2024. Strategy for Optimizing Regional Original Income (PAD) Through Innovation and Collaboration in Central Lombok Regency, *Jurnal Bina Praja*, 16(2), 347–359. <https://doi.org/10.21787/jbp.16.2024.347-359>
- 12) Fauzi, A., & Wulandari, S. 2021. *Kemitraan Publik–Swasta terhadap Efisiensi Fiskal Pemerintah Daerah*. *Jurnal Ekonomi dan Pembangunan Daerah*, 9(2), 112–128.
- 13) Hair, J.F., et al. 2019. Partial Least Squares Structural Equation Modeling (PLS-SEM). SAGE
- 14) Hair, J.F., et al. 2021. PLS-SEM: Indeed a Silver Bullet. *J. of Marketing Theory*
- 15) Henseler, J., & Fassott, G. 2015. "Testing Moderating Effects". *Handbook of SEM*
- 16) Henseler, J., et al. 2015. "A New Criterion for Assessing Discriminant Validity". *J. of the Acad. Mark. Sci.*
- 17) Hiromi Masuda, Shun Kawakubo, Mahesti Okitasari and Kanako Morita, 2022. Exploring the role of local governments as intermediaries to facilitate partnerships for the Sustainable Development Goals, *Sustainable Cities and Society*, 82. 103883, journal homepage: www.elsevier.com/locate/scs
- 18) Hisyam Ichsan, Ahmad Mansur, Eni Novitasari and Ayu Aulia, 2025. The Effect of Transfer Funds and Intellectual Capital on Local Government Financial Sustainability, *Owner: Riset & Jurnal Akuntansi*, e –ISSN : 2548-9224 | p–ISSN : 2548-7507, Volume 9 Nomor 1, Januari. . DOI : <https://doi.org/10.33395/owner.v9i1.2523>
- 19) Indrawati, N., Rahman, A., & Sari, Y. 2023. *Fiscal Efficiency and Sustainable Development Goals Achievement in Local Governments*. *Jurnal Ekonomi dan Pembangunan Indonesia*, 23(1), 29–44.
- 20) Iqbal Lhutfi and Harpa Sugiharti, 2022. Financial Sustainability Of Local Governments In Indonesia *Jurnal Aset (Akuntansi Riset)*, 14 (1), pp. 159-170
- 21) Kassem, D. 2018. *Does electrification cause industrial development? Grid expansion and firm performance in Indonesia*.
- 22) Kementerian Keuangan RI 2023. *Laporan Keuangan Daerah dan Pencapaian SDGs di Indonesia*.
- 23) Khaled Fayez Bazeed, 2023. The Effect of Local Governance In Achieving Sustainable Development In Light Of The Contemporary Economic And Political Transformations, (Case Study: Egypt). *International Of Journal Professional Business Review*, Vol. 08 No. 09, Pp 01-19
- 24) Lalu Riza Ihwandi & Khoirunurrofik, 2023. Regional Financial Performance and Inclusive Economic Development, Empirical Evidence From Provinces in Indonesia. *Jurnal Bina Praja*, 15(2), 417–429. <https://doi.org/10.21787/jbp.15.2023.417-429>
- 25) Lotta-Maria Sinervo., Elina Vikstedt., Mika Luhtala., Harri Laihonon and Olga Welinder., 2024. Fostering sustainability in local government: The institutional work perspective on the accounting–management nexus, *Financial Acc & Man.*;40:592–612.
- 26) Marco Bisogno, Beatriz Cuadrado-Ballesteros, Francesca Manes-Rossi & Noemi Peña-Miguel, 2024. Financial Sustainability and Sustainable Development in Local Governments: Empirical Insights, *Public Performance & Management Review*, DOI: 10.1080/15309576.2024.2340116
- 27) Marcos Neto, 2025. Local government financing critical to advance Sustainable Development Goals, UN Assistant Secretary-General and Director of UNDP's Bureau for Policy and Programme Support
- 28) Miquel Salvador and David Sancho 2021. The Role of Local Government in the Drive for Sustainable Development Public Policies. An Analytical Framework Based on Institutional Capacities, *Sustainability*, 13, pp. 01-17, 5978. <https://doi.org/10.3390/su13115978>
- 29) Morales , Natalia Alonso-Morales, Martín and Rosario, 2025. The role of local public spending in the achievement of the social dimension of sustainable development: An empirical analysis, *Sustainable Futures* 9 100475, journal homepage: www.sciencedirect.com/journal/sustainable-futures
- 30) Moni Wehelmina_Muskanan_Carol Tilt_Kathy Rao_Rob Whait , 2025. Contributing to Indonesia's SDG achievement: disclosures of regional-owned enterprises, [Journal of Public Budgeting, Accounting & Financial Management](https://doi.org/10.1016/j.jpubeco.2025.100475), ISSN: 1096-3367, Vol. 37 No. 2, pp. 273-295
- 31) Mulyadi, D., Puspita, E., Auliarrahma, N. I., Shelvira, S. A., & Fattah, M. S. F. 2023. Regional Autonomy in Indonesia: Challenges and Opportunities in Sustainable Development in the Era of SDGs. *Indonesian Journal of Law and Justice*, 2(2), 3450.
- 32) Nafila Dwi Mutiarani & Dodik Siswanto, 2020. The impact of local government characteristics on the accomplishment of Sustainable Development Goals (SDGs), *Cogent Business & Management*, 7: 1847751, pp. 1-11., ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/oabm20
- 33) Natalia Alonso Morales, Alejandro Saez Martín and Arturo Haro deRosario, 2025. The role of local public spending in the achievement of the social dimension of sustainable development: An empirical analysis, *Sustainable Futures* 9 . 100475,

Causal Interaction Between Regional Financial Performance and Provincial-Level SDGs Achievement in Indonesia

- 34) Pedro-José Martínez-Córdoba, Nicola Raimo, Filippo Vitolla and Bernardino Benito, 2020. Achieving Sustainable Development Goals. Efficiency in the Spanish Clean Water and Sanitation Sector, *Sustainability*, 12, 3015, pp. 01-13
- 35) Preacher, K.J., & Hayes, A.F. 2015. "Asymptotic and Resampling Strategies". *Behavior Research Methods*
- 36) Putra, A., & Rahayu, S., 2021. Pengaruh Kemandirian Fiskal Daerah terhadap Indeks Pembangunan Manusia sebagai Indikator SDGs di Indonesia. *Jurnal Ekonomi dan Kebijakan Pembangunan*, 10(3), 210–225.
- 37) Rahmadani, R., & Nugroho, A. 2022. *Efisiensi Pengeluaran Pemerintah Daerah terhadap Pembangunan Berkelanjutan di Indonesia*. *Jurnal Pembangunan Daerah*, 8(1), 45–58.
- 38) Rizal, F., & Hidayat, A. 2024. *Industrial Innovation and Fiscal Efficiency: Evidence from Indonesian Provinces*. *Journal of Regional Fiscal Studies*, 7(1), 45–62
- 39) Rully Novie Wurarah & Mulyanto, 2024. Effective Government Strategies to Deal With Climate Change Impacts in the West Papua Region Budget Optimization for Mitigation and adaptation, *urnal Bina Praja*, 16(2), 235–249. <https://doi.org/10.21787/>.
- 40) Sabuj Saha, Ahmed Rizvan Hasan, Kazi Rezwanul Islam, and Md Asraful Islam priom, 2024. Sustainable Development Goals (SDGs) practices and firms' financial performance: Moderating role of country governance, *Green Finance*, 6(1) pp. 162–198. DOI: 10.3934/GF.2024007
- 41) Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. 2018. *SDG Index and Dashboards Report 2018*. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN).
- 42) Sachs, J.D., Lafortune, G., Fuller, G. 2024. *The SDGs and the UN Summit of the Future*. Sustainable Development Report 2024. Paris: SDSN, Dublin: Dublin University Press. doi:10.25546/108572
- 43) Saiful Islam, 2024. Role of Local Government in Localizing SDG in Bangladesh, *Journal of Information Systems and Informatics*, Vol. 6, No. 2, June e-ISSN: 2656-4882 p-ISSN: 2656-5935
- 44) Samuel Fery Purba, Citra Permatasari, Indra Mudrawan, Bonataon Maruli Timothy Vincent Simandjorang, 2023. The Impact of Fiscal Balance Funds Toward Human Development in Riau Province, *Jurnal Bina Praja*, 15(2), 275–288. <https://doi.org/10.21787/jbp.15.2023.275-288>
- 45) Sari, D., & Wibowo, H. 2021. *Efisiensi Belanja Daerah dan Dampaknya terhadap Indeks Pembangunan Manusia di Indonesia*. *Jurnal Ekonomi dan Kebijakan Publik*, 12(2), 115–130.
- 46) Setiawan, A., & Dewi, R. 2021. *Kebebasan Ekonomi dan Kinerja Keuangan Pemerintah Daerah di Indonesia*. *Jurnal Ekonomi dan Kebijakan Publik*, 12(3), 201–216.
- 47) Sri Mahendra Satria Wirawan, 2018. Evaluation of Budget Spending Sustainability of DKI Jakarta Province's Budget, *Jurnal Bina Praja* 10 (1): 27-38
- 48) Sukhemi, Hadri Kusuma, Johan Arifin and Mahmudi, 2024. Determinant Of Local Government Performance Based On The Sdg (Indonesian Evidence), *Journal of Lifestyle & SDGS Review*, vol. 04, e02521, pp 01-20.
- 49) Sunardi, Abid Djazuli, Risma Dwi Handayani, Bachtari Alam Hidayat & Herie Saksono, 2022. The Role of Human Development in Improving Local Government Performance Through Good Government Governance, *Jurnal Bina Praja*, 14(3), 571–582. <https://doi.org/10.21787/jbp.14.2022.571-582>
- 50) Susanti & Darmawan 2022, Pengaruh Pertumbuhan Pendapatan Asli Daerah (PAD) Terhadap Efektivitas Belanja Daerah Dan Kesejahteraan Masyarakat Sebagai Representasi Sdgs. *Jurnal Ekonomi Pembangunan Indonesia*, 21(2), 155–170.
- 51) Syafri, Sofilda, & Suparyati 2024, Pengaruh Peningkatan PAD dan efisiensi fiskal daerah terhadap efektivitas pembangunan berkelanjutan di Daerah *Indonesian Treasury Review*, 9(4), 277–290.
- 52) Syamsul Bahri Abd. Rasyid, Misran, Herdin Arie Saputra, 2024 A Portrait of Green Economy Governance in Sustainable Development in Eastern Indonesia, *Jurnal Bina Praja*, 16(3), 557–572. <https://doi.org/10.21787/jbp.16.2024.557-572>
- 53) Syahrial, Syukri Abdullah and Rita Meutia, 2023. What Determines Financial Sustainability in Local Government : Evidence From Aceh Province, Indonesia, *SJURNAL Riset Akuntansi dan keuangan Indonesia*, Vol. 08 No. 03, pp 261-271, ce
- 54) Tabah Rizki & Sindhunata Kurniawan, 2023, Public Service Performance An Influence of Female Leadership and Good Governance, *Jurnal Bina Praja*, 15(3), 443–452. <https://doi.org/10.21787/jbp.15.2023.443-452>
- 55) UNDP. 2022. *Achieving SDGs Through Local Government Financing*.
- 56) Valentina Beretta, Maria Chiara Demartini and Sara Trucco 2024. From sustainability to financial performance: the role of SDG disclosure, *Measuring Business Excellence*, DOI 10.1108/MBE-05-2024-0054



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