

Causal Interaction between Regional Financial Performance and SDGs Achievement at the Provincial Level in Indonesia

Sunardi¹, Wely², Fenty Asterina³, Kurnia Krisnahari⁴, Nurul Hutamingsih⁵ & Mia Kusumawati⁶

Program Studi Akuntansi Fakultas Ekonomi dan Bisnis

Universitas Muhammadiyah Palembang

Sunardifeb@gmail.com¹, welly.lht@gmail.com², fentyasterinal@gmail.com³,

kurniakrisnahari@gmail.com⁴, nurulfebump@gmail.com⁵

miakusumawaty@gmail.com⁶

Abstract

Purpose, The purpose of this study is to examine the causal interaction regional financial performance and the achievement of SDGs using a quantitative approach.

Methodology, The data used in this study consist of SDGs indicators obtained from Statistics Indonesia for the period 2020–2024, and provincial revenue and expenditure budget data obtained from the Regional Financial Information System portal for the period 2019–2023. The sample comprises 34 provincial governments in Indonesia. To measure the reciprocal influence and the interrelationship among the dimensions of the variables, the study employs the SEM approach.

Results, The findings reveal a positive and significant reciprocal relationship between regional financial performance and SDGs achievement. Moreover, the influence of regional financial performance on SDGs achievement is found to be stronger than the influence of SDG achievement on regional financial performance. The study also indicates that the spending efficiency and fiscal decentralization degree dimensions contribute significantly to regional financial performance, while the partnerships for the goals dimension provides the greatest contribution to SDG achievement.

Conclusion: There is a (reciprocal) interaction between regional financial performance and the achievement of SDGs, and furthermore, the achievement of SDGs also has an impact on regional financial performance.

Limitation, This research is limited by the availability of data at the district and city levels, the restricted number of variables, and the relatively short observation period

Contribution, Providing an evidence-based policy framework on how improving regional financial performance can directly contribute to improving SDG achievement.

Keywords: Regional Financial Performance; SDGs Achievement

1. Introduction

Challenges to achieving the Sustainable Development Goals (SDGs) in developing countries include: a) limited funding, b) economic and social inequality, c) political instability, d) lack of public awareness and commitment (UNDP, 2017; World Bank, 2019; OECD, 2018; Battacharya et al., 2016; Neto M, 2025, and Sach, 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 (Sach, 2015; Schwab, 2016; UNDESA, 2020; OECD, 2018; BSDC, 2017; Strauss W & Howe N, 2000). Indonesia's achievement of the SDGs by 2024 ranks 78th out of 167 countries, with a score of 69.40, with 16% of goals on track and the remaining

84% experiencing limited progress (Sach et al., 2024). Meanwhile, the government's efforts and commitment to the SDGs rank 7th with a score of 77.30, indicating that the government is serious about the SDGs (Sach et al., 2023).

Referring to the 2024 Sustainable Development Report (SDR), the achievement of SDGs globally has decreased (in 2023 it was 70.16 ranked 75), globally SDG No. 1 (no poverty) and SDG no. 14 (quality education) are the best goals (on the track) while SDG no. 7 (clean energy), and no. 13 (climate change) achievements have decreased (weakened) (SDR, 2024; SDR 2023). At the ASEAN country level, Indonesia is ranked 4th out of 10 countries and below Thailand, Vietnam and Singapore. One of the challenges in achieving SDGs in Indonesia is regional finance or funding. The achievement of the SDGs is carried out with a holistic approach, requiring policies and mechanisms that are aligned between the central and regional governments, as well as the availability of financial resources. (Abidove B and Orlic E, 2022; Alisyahbana, 2018, Le Blanc D, 2015). One of the pillars in achieving the 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 inequality (SDG 10), and e). partnerships to achieve goals. (Fianto, et al., 2024).

In the field of clean and affordable energy, the government has reduced the regional budget for clean energy investment, this was done to accelerate covid 19. (CPI, 2021), CPI initiatives, decentralized clean energy and involving communities, for example the mini grid model (small-scale solar energy model), can save electricity, thereby reducing government subsidies, reducing the fiscal burden and increasing regional income, attracting local investors to finance clean energy projects by issuing green bonds. (climatepolicyinitiative.org, 2021;), green finance helps the development of renewable energy (Subramaniam & Loganathan, 2023; Shaheen et al, 2023) Furthermore, renewable energy will provide a stream of regional income. (Raimi D, 2024; Ikenna N, 2024),

Regional finance is a key resource to support local economic development and job creation, for example: Regional Original Income (PAD) is directed to building economic infrastructure, such as local markets, industrial areas, and public transportation, which form the basis 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 be used to support vocational education and training based on labor market needs, which are important for increasing individual productivity and income. Fair and development-oriented taxes and levies 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 interconnected in creating sustainable economic growth, with regional finance as a key supporting factor. The use of central transfer funds and PAD (Regional Original Revenue) to build infrastructure such as roads, electricity, clean water networks, and internet access can increase the productivity of local industries. (Wibowo S & 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, which facilitate business actors' access to facilities and

distribution networks. (Lestari & Nugroho, 2021). Regional fiscal policies, such as tax cuts or subsidies to technology companies, can encourage investment in the innovation sector. (World Bank, 2021)

Regional finance plays a crucial role in reducing inequality by: a). providing equitable basic services, such as mandatory spending on education, health, and infrastructure in disadvantaged areas (UNDP, 2023; Wahyuni, D, et al, 2022; Hakim T & Rachmawati, 2021). Progressive regional taxes and local subsidy programs can help distribute resources more equitably 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 disadvantaged areas, creating jobs, and reducing economic disparities between regions (Hakim T & Rachmawati, 2021). Budgeting that favors marginalized groups, such as women, people with disabilities, and indigenous communities, can ensure social justice (UNDP, 2022). Transfer funds from the central government to the regions, such as the General Allocation Fund (DAU) and Village Fund, play a vital 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 a crucial role in creating and managing effective partnerships, in the following ways: Regional 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 improve technical capabilities in results-based budget planning. Partnerships can be used to develop innovative funding schemes, such as green bonds for environmentally friendly projects or results-based financing. (Ministry of Finance of the Republic of Indonesia, 2022).

Some previous research, which supports this research, include: a positive relationship between the level of SDGs and financial performance. (Berreta et al, 2024), financial independence has a positive effect on financial sustainability. (Lhutfi and Sugiharti, 2022), a significant positive correlation between renewable energy consumption, green finance, the potential of green finance to drive ecological and economic transformation in other developing countries. (Nabil et al, 2024), Strategies that can be implemented to improve the financial performance of local governments, which in turn can support sustainable development. (Abdullah et al, 2024), environmental SDGs have a positive and significant impact on the company's financial performance. The coefficient of social SDGs on company performance is negative and significant..(Saha et al 2024), social SDGs in city-status areas are superior through transfer funds, so that SDG progress is greater than district-status areas (Morales, et/al, 2025), Local governments to increase their intermediary role to facilitate partnerships for SDGs.(Masuda, et.al. 2022), SDG accounting and reporting practices contribute to the progress of SDGs (Kaur, et.al, 2025)

Fund transfers have a positive and significant influence on financial sustainability, intellectual capital has a positive and significant influence on financial sustainability, and (3) fund transfers and intellectual capital have a positive and significant influence on financial sustainability. (Ichsan, et.al, 2025), area and Regional Original Income simultaneously influence the level of SDGs achievement, Regional Original Income does not have a significant influence on the level of SDGs achievement. (Mutiarani and Siswanto, 2020), The importance of the relationship between management accounting in the implementation of SDGs, so that local governments must institutionalize it fully and sustainably (Sineryo et al, 2024), Local government efficiency is generated after implementing SDGs 6, namely clean water and sanitation services (Cordoba, et al, 2020), local governments with better financial conditions devote more efforts to achieving SDGs related to the biosphere, as well as social and economic development.

Our results can stimulate politicians and managers to fight tax avoidance in order to increase their resources. (Bisogno M, et al, 2024), the impact of SDG implementation by local governments on financial sustainability is with better SDG compliance having shorter supplier payment periods and smaller surpluses. (Benito B, et al, 2023), continuous commitment and support in terms of legal and regulatory frameworks, policy documents aligned with SDGs, and available financial resources to support inclusive development in the country. (Abidove B and Orlic E, 2022), SDGs are positively and significantly related to financial performance (Syahrial, et al, 2023)

2. Literature Review and Hypothesis

2.1 Literature Review

Regional financial performance is a measure of the extent to which a local government is able to manage its financial resources effectively, efficiently, transparently, and accountably in carrying out its governance, development, and public service functions. Regional financial performance reflects the success of a local government in managing regional finances, as measured by the region's ability to finance the implementation of regional autonomy, increase local revenue, and streamline spending (Halim, 2020).

Regional financial independence reflects a region's ability to finance development and public service needs through optimizing Regional Original Revenue (PAD), thereby reducing dependence on central transfers (Halim, 2020). According to Government Regulation Number 12 of 2019 concerning Regional Financial Management, regional financial independence is part of fiscal decentralization governance, which is characterized by an increasing proportion of PAD to total regional revenue. This means that the higher the ratio of PAD to transfer funds, the higher the level of regional fiscal independence. The degree of regional financial independence is measured by the ratio of PAD to total regional revenue, which indicates the extent to which a region is able to finance its fiscal needs independently (PP No. 12 of 2019); (Ministry of Finance of the Republic of Indonesia, 2021).

Regional governments that allocate and use their budgets efficiently will generate greater development output at the same cost. This includes improving healthcare, education, and environmental management (Astuti & Mulyani, 2022). Efficient regional spending means more productive budget use and greater returns per unit of input, thus increasing the potential for conversion to SDGs achievement. Efficient spending allows for maximum development output per unit of input, thus increasing the potential for SDG achievement.

The degree of fiscal decentralization refers to the extent of fiscal authority a region has. Theory suggests that greater decentralization allows regions to respond to specific development needs. However, several studies have also shown that excessive decentralization can lead to coordination problems and inefficiencies. A study on regional spending efficiency found that the degree of fiscal autonomy has a negative and insignificant effect on regional development. A high degree of regional fiscal authority allows for the adjustment of local policies to meet the needs of sustainable development.

Regional revenue growth demonstrates positive dynamics in increasing regional fiscal capacity. If regional revenue grows, the potential for investment in program sectors that support the SDGs will increase. Growing revenue increases fiscal capacity and regional development investment, supporting

SDG targets. Regional revenue effectiveness ensures that planned revenues are actually realized and used for productive activities. This shows that provinces with PAD effectiveness above 90% have higher SDG achievements, especially in indicators of poverty alleviation and basic education (Lestari & Setyawan (2023)).

SDG achievement is the level of progress achieved by a country or region in realizing the 17 sustainable development goals, which encompass economic, social, and environmental dimensions. SDG achievement is the result of implementing sustainable development policies, measured based on target indicators for the 17 SDG goals, encompassing social, economic, environmental, and institutional aspects. (United Nations, 2020)

The dimension of clean and affordable energy is measured by the electrification ratio, which is the percentage of households or residents who have enjoyed access to electricity from the total number of households or residents in a region. This indicator is used to measure the level of equity and availability of electrical energy as part of infrastructure development and community welfare. The electrification ratio is the comparison of the number of households with electricity to the total number of households in a region in a certain period. (Ministry of Energy and Mineral Resources, 2023). The higher the electrification ratio, the greater the potential for increased productivity, community income, and regional investment, which ultimately increases regional fiscal revenue (Regional Original Income/PAD). Equitable access to electricity is a key factor in driving local economic growth and expanding the regional tax base.

The dimensions of decent work and economic growth are measured by gross domestic product (GDP), which is the total value of final goods and services produced by production units in a country's territory within a certain period (usually one year or one quarter), valued at market prices, without taking into account intermediate goods and services used in the production process. (BPS, 2024). According to Todaro & Smith (2020), economic growth reflected in an increase in GDP indicates an expansion of output, productivity, and community income. This growth broadens the regional tax and levy base, thus contributing to improved regional financial performance.

The dimensions of industry, innovation, and infrastructure, measured by the proportion of the manufacturing sector's added value to GDP, indicate the manufacturing sector's significant contribution to the formation of national or regional economic output. High added value indicates increased production activity, good industrial efficiency, and the region's ability to process resources into high-value products (BPS, 2024; World Bank, 2023). The greater the proportion of the manufacturing sector's added value to GDP, the better the region's financial performance, as this sector creates a broad economic base, sustainable sources of income, and strong fiscal capacity.

The Economic Freedom Index measures the extent to which governments allow individuals and businesses to make economic decisions without excessive intervention, within an efficient legal and institutional environment. The higher the freedom index, the better the governance and economic efficiency of the region, ultimately improving regional financial performance through increased revenue, spending efficiency, and fiscal capacity.

The Partnership Dimension to achieve the goal, measured by Total Government Revenue as a proportion of GDP, a macroeconomic indicator that shows how much the government's ability to collect revenue compared to the total national economic output (GDP), this indicator measures the fiscal capacity and the government's ability to finance public expenditure through revenue obtained from various sources, both tax and non-tax.

2.2. Hypothesis Development

The effect of Regional Financial Performance on SDG Achievement

Regional financial performance (including fiscal independence, spending efficiency, PAD effectiveness, and revenue growth) influences the provincial government's capacity to provide public services, infrastructure, and social programs, which are core indicators of the SDGs. Public resource theory states that increased fiscal capacity enables more appropriate allocation to the education, health, sanitation, and infrastructure sectors, thereby accelerating the achievement of SDG goals. Empirical research in the context of Indonesian provinces shows a positive relationship between regional financial management and the ability to target sustainable programs (Syaiful Islam, 2024); (Sari D & Wibowo, 2021); Morales, et al., 2025); (Putra & Rahayu, 2021). Based on these arguments, **H1: Regional financial performance has a positive effect on the achievement of the SDGs at the provincial level.**

The Impact of SDG Achievement on Regional Financial Performance

On the other hand, achieving SDGs (clean and affordable energy, decent work and economic growth, industry, innovation and infrastructure, reducing inequality, partnerships to achieve goals) can improve the regional economic base, increase productivity, tax base, and investor confidence, which in turn strengthen financial performance indicators (PAD, revenue growth, spending efficiency). Several local studies report that SDG efforts and reporting are related to changes in regional fiscal performance, both directly and through investment channels and policy efficiency. (Morales, et al, 2025; Indrawati et al, 2023; Benito, et al, 2023). Based on this argument, **H2. Achievement of SDGs has a positive effect on regional financial performance regional at the provincial level**

3. Method

This study examines the reciprocal influence between financial performance and SDG achievement using secondary data, covering the periods 2019–2023, and a population of 34 provinces across Indonesia. The Sustainable Development Goals (SDGs) variable has five dimensions: 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 value added by the manufacturing sector to gross domestic product; d). Reducing inequality, measured by the freedom index; and e). Partnerships to achieve goals, measured by total government revenue as a proportion of GDP. Furthermore, the regional financial performance variable is measured using five dimensions: a). The regional financial independence ratio, measured by the ratio of local revenue (PAD) to external sources; b). The expenditure efficiency ratio, measured by the ratio of realized regional expenditure to the regional expenditure target; c). The ratio of the degree of fiscal decentralization is measured by comparing PAD with regional income, d). The ratio of revenue growth is measured by revenue in year n – revenue in year $n-1$ divided by revenue in year n , and e). The effectiveness ratio is measured by comparing PAD realization with PAD target.

Data analysis using Structural Equation Modeling (SEM) is a statistical method for measuring constructs and examining relationships to study complex connections between directly measured variables (observed) and latent variables. Researchers use SEM to test causal hypotheses while correcting measurement errors. The procedures in the SEM analysis approach are: a). Formulation of a theoretical

model, This stage is used to develop a path diagram based on relevant theories (Hair et al., 2021) to determine the relationship between variables, then from the structural model analysis the next stage is to test the significance to get a p-value <0.05 (Hair et al., 2021). In addition to the p-value, this study evaluates R^2 to assess predictive power (Sarstedt et al., 2022), b). Evaluation of Measurement Suitability (Measurement Model), This stage confirms the extent to which a latent construct is empirically different from other constructs in the model

This stage proves that the indicators of a construct are not highly correlated with indicators of other constructs through HTMT (Heterotrait-Monotrait Ratio) < 0.9 (Henseler et al., 2015) and reliability ($\alpha \geq 0.7$) indicates the internal consistency of the indicator in measuring the latent construct (Fornell & Larcker, 1981; updated by Hair et al., 2019). The final stage in the analysis process is to measure the suitability of the model or so-called goodness-of-fit which consists of several analyses and limitations such as the Chi-Square test, a non-parametric statistical method to test the relationship between categorical variables (independence) and the suitability of data distribution with the theoretical distribution (goodness-of-fit). The appropriate chi-square value is if it has a value below df (degree-of-freedom).

4. Research Results and Discussion

The analysis results indicate that the discriminant validity using the HTMT is adequate, as it has a value below the 0.9 threshold, and the reliability using Cronbach's alpha (ρ_A) is adequate, as it has a value above 0.7. Therefore, the model can be concluded as valid and reliable. The following is an analysis of the structural model, which yields a reciprocal influence between regional financial performance and SDG achievement:

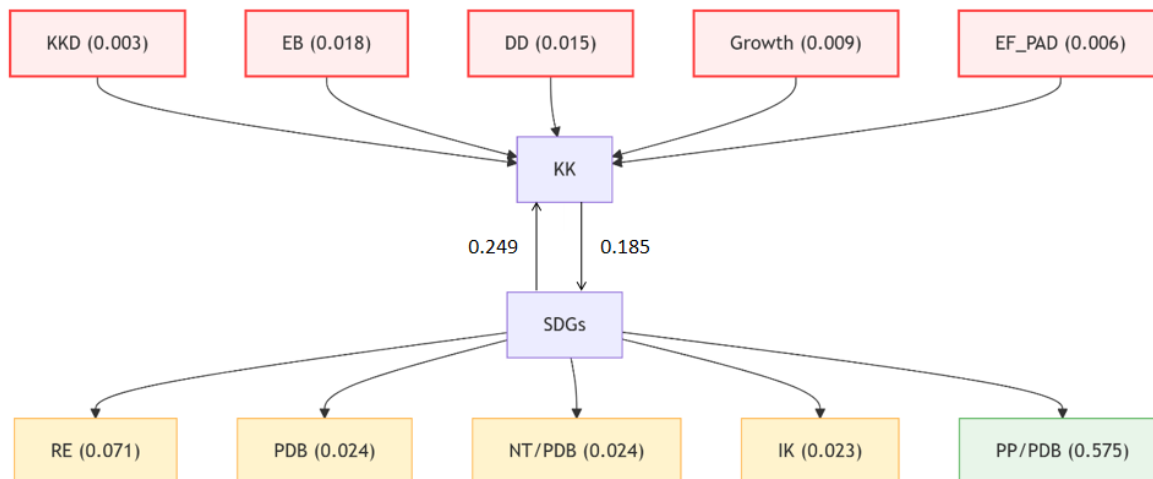


Figure: 1. Structural Model of the Reciprocal Influence of Regional Financial Performance on SDGs

The effect of Regional Financial Performance on SDG Achievement

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

Table 1. 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	Signifikan
KKD	0.00326	1.30E-18	2.51E+15	0.000	Signifikan
EB	0.0185	3.49E-18	5.30E+15	0.000	Signifikan
DD	0.0149	5.17E-18	2.89E+15	0.000	Signifikan
Growth	0.00913	3.00E-18	3.05E+15	0.000	Signifikan
EF_PAD	0.00643	1.93E-18	3.34E+15	0.000	Signifikan

Source: Data processing results, 2025

The contribution of the comparison of local revenue with external sources to regional financial performance is 0.00326, with a P-value of 0.000, this shows that the regional financial independence ratio has a positive and significant influence on Regional Financial Performance, this shows that the higher the KKD ratio, the higher the financial performance of the regional government. The contribution of the Comparison of Realization of Regional Expenditure with Regional Expenditure Targets to Regional Financial Performance is 0.018 with a P-Value of 0.000, this shows that the expenditure efficiency ratio has a positive and significant influence on the Financial Performance of the regional government.

The contribution of the comparison of local revenue with regional income to financial performance is 0.015 with a P-Value of 0.000, this means that Fiscal Degree Decentralization has a positive and significant influence on Financial Performance. Furthermore, the Contribution of Revenue Growth Ratio to financial performance is 0.009 with a P-Value of 0.000, this means that revenue growth has a positive and significant influence on Financial Performance, and finally the contribution of the Comparison of PAD realization with PAD targets to the financial performance of local governments is 0.006 with a P-value of 0.000, this means that the effectiveness of PAD has a positive and significant influence on Financial Performance.

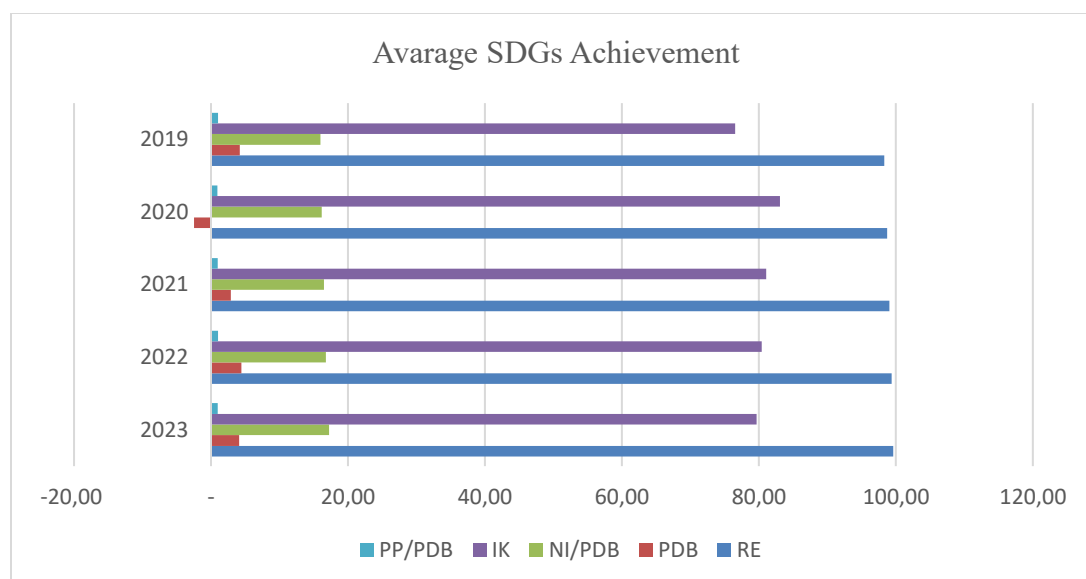


Figure 2. Avarage SDGs Achievement , 2019-2023

Testing the hypothesis that regional financial performance influences the achievement of SDGs 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	Signifikan
SDGs	0.249	9.00E-02	2.76E+00	0.007	Signifikan

Source: Data processing results, 2025

Based on Table 2, regional financial performance has a positive and significant impact on the SDGs, with a p-value of 0.007 or <0.05. Regional financial performance contributes 0.249% or 24.9% to the achievement of the SDGs.

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

Fiscal decentralization, through increasing regional fiscal status, has been shown to have a positive impact on achieving the SDGs. By providing fiscal independence, policy space, and greater accountability, regional governments are able to increase the effectiveness of public spending, optimize local revenue

(PAD), improve the quality of basic services, and accelerate the achievement of SDG goals. (Mulyadi et al., 2023; Putra & Rahayu, 2021). Regional revenue growth has a positive impact on achieving the SDGs because it can increase regional fiscal capacity to finance sustainable development programs, strengthen fiscal independence and accountability, encourage regional economic growth and equitable distribution of welfare, and reduce inter-regional inequality. (Susanti & Darmawan, 2022; Syafri et al., 2024)

The Impact of SDG Achievement on Regional Financial Performance

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

Table 3. Relationship between SDG indicators and SDG achievement

Predictor	Estimate (β)	Std. Error	t-value	p-value	Significance
Intercept	-6.945	3.12E-15	-2.22E+15	0.000	Signifikan
RE	0.07062	3.15E-17	2.24E+15	0.000	Signifikan
PDB	0.02421	1.54E-17	1.57E+15	0.000	Signifikan
NT/PDB	0.02392	6.54E-18	3.66E+15	0.000	Signifikan
IK	0.02306	8.09E-18	2.85E+15	0.000	Signifikan
PP/PDB	0.5747	2.30E-16	2.50E+15	0.000	Signifikan

Source: Data processing results, 2025

The magnitude of the contribution of the Electrification Ratio (RE) indicator which describes clean and affordable energy towards the achievement of SDGs is 0.071 with a p-value of 0.000, this means that clean and affordable energy has a positive and significant influence towards the achievement of SDGs. The contribution of Gross Domestic Product (GDP) towards the achievement of SDGs is 0.024 with a p-value of 0.000, this means that decent work and economic growth have a positive and significant influence towards the SDGs. The contribution of the proportion of added value of the manufacturing industry sector to GDP towards the achievement of SDGs is 0.024 with a p-value of 0.000, this means that industry, innovation and infrastructure have a positive and significant influence towards the achievement of SDGs.

On the other hand, the contribution of the freedom index to the achievement of SDGs is 0.023 with a p-value of 0.000, this means that reducing inequality has a positive and significant influence on the achievement of SDGs, and finally the contribution of Total Government Revenue as a proportion of GDP to the achievement of SDGs is 0.0575 with a p-value of 0.000, this means that the partnership to achieve goals has a positive and significant influence on the achievement of SDGs.

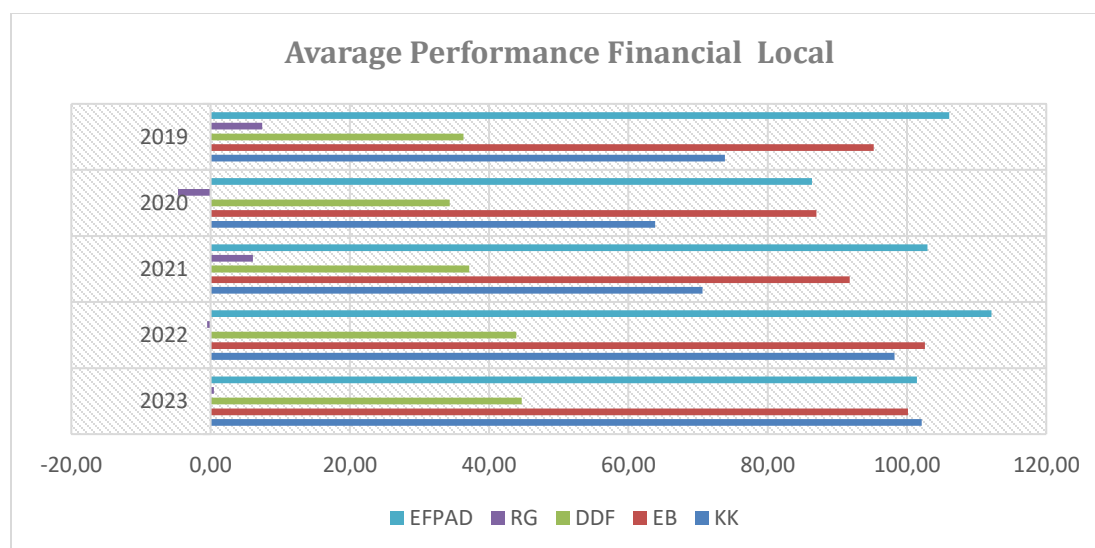


Figure 3. Avarage Performance Financial Regional, 2019-2023

The hypothesis testing of the SDGs achievement's impact 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	Signifikan
KK	0.185	6.70E-02	2.76E+00	0.007	Signifikan

Source: Data processing results, 2025

Based on Table 4, SDG achievement has a positive and significant impact on regional financial performance with a p-value of 0.007 or <0.05. Furthermore, SDG achievement can contribute 0.185% or 18.5% to regional financial performance. To confirm whether the model used is suitable or not, here are the results:

Table 5. Model Suitability Test Results

Aspect	Criteria	Value	Interpratation
Uji Square	Chi- Nilai chi-square < df	142.826 < 34	Good
RMR	< 0.05	0.004	Good
ECVI	Lower is better	1.155	Good

Source: Data processing results, 2025

Based on the table above, the model has a good goodness-of-fit value because it meets the chi-square, RMR, and ECVI tests. Electricity network expansion increases manufacturing activity, company turnover, and creates churning (entry and exit) which nets an increase in manufacturing sector output. This demonstrates the direct effect of electrification on regional economic performance. (Kasim D, 2018), high GRDP reflects strong regional economic growth, which has a positive impact on regional income, spending effectiveness, and fiscal independence. (Ardani & Putra, 2021). Industry, innovation, and infrastructure together improve regional financial performance by expanding the economic base, improving fiscal efficiency, and creating a healthy investment climate.

Regional governments that successfully develop these three aspects will be more fiscally independent and resilient to national and global economic pressures (Rizal & Hidayat, 2024). The freedom index, both from an economic, political, and institutional perspective, has been shown to have a positive influence on regional financial performance. Regions that are more economically and politically free tend to have greater local revenue (PAD), more efficient public spending, and a higher level of fiscal independence (Setiawan & Dewi, 2021). Partnerships to achieve goals (SDG 17) have been shown to have a positive influence on regional financial performance. Effective collaboration between the government, the private sector, academia, and civil society has an impact on expanding fiscal capacity, increasing the efficiency and transparency of financial management, and strengthening regional fiscal sustainability. (Fauzi & Wulandari, 2021)

5. Conclusions

5.1. Conclusion

Based on the hypothesis testing, there is a reciprocal interaction between regional financial performance and the achievement of the SDGs. Furthermore, SDG achievement also influences regional financial performance. This study also found that regional spending efficiency and fiscal decentralization significantly contribute to regional financial performance, while regional financial independence, revenue growth, and PAD effectiveness contribute only slightly. Meanwhile, the partnership dimension contributes significantly to the achievement of the SDGs, while clean and affordable energy, decent work and economic growth, industry, innovation and infrastructure, and reduced inequality contribute only slightly to the achievement of the SDGs. Novelty: Achieving the SDGs is a long-term investment and generates regional income.

5.2. Limitation

This research is limited by the availability of data at the district and city levels, the restricted number of variables, and the relatively short observation period

5.3. Suggestion

Further research suggestion should involve social and environmental pillars to be more comprehensive, in addition, regional governments must focus on SDGs, because SDGs are long-term investments that will ultimately generate regional income.

Acknowledgements

We would like to express our gratitude to the Dean of the Faculty of Economics and Business, Muhammadiyah University of Palembang, for providing assistance with this research.

REFERENSI

- 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)
- 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
- 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](https://doi.org/10.21787/jbp.16.2024.489-508)
- 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
- 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
- Badan Pemeriksa Keuangan RI, (2022). Peran Badan Pemeriksa Keuangan Republik Indonesia Dalam Sustainability Development Goals.
- Badan Pusat Statistik (2022). Analisis Pengangguran dan Pertumbuhan Ekonomi Berbasis Daerah.
- 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.
- 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>
- Erti Nurfindarti, (2019). Strategies and Road Map in Implementing Sustainable Development Goals in Serang City, *Jurnal Bina Praja* 11 (2) : 219-235
- 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>
- Fauzi, A., & Wulandari, S. (2021). *Kemitraan Publik–Swasta terhadap Efisiensi Fiskal Pemerintah Daerah*. *Jurnal Ekonomi dan Pembangunan Daerah*, 9(2), 112–128.

- Hair, J.F., et al. (2019). Partial Least Squares Structural Equation Modeling (PLS-SEM). SAGE
- Hair, J.F., et al. (2021). PLS-SEM: Indeed a Silver Bullet. *J. of Marketing Theory*
- 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
- 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>
- 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.
- Iqbal Lhutfi and Harpa Sugiharti, (2022). Financial Sustainability Of Local Governments In Indonesia *Jurnal Aset (Akuntansi Riset)*, 14 (1), pp. 159-170
- Kassem, D. (2018). Does electrification cause industrial development? Grid expansion and firm performance in Indonesia.
- Kementerian Keuangan RI (2023). Laporan Keuangan Daerah dan Pencapaian SDGs di Indonesia.
- 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
- 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>
- Lotta-Maria Sinervo., Elina Vikstedt., Mika Luhtala., Harri Laihonen and Olga Welinder., (2024). Fostering sustainability in local government: The institutional work perspective on the accounting–management nexus, *Financial Acc & Man.*;40:592–612.
- 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
- 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

- 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>
- 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
- 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*](#), ISSN: 1096-3367, Vol. 37 No. 2, pp. 273-295
- 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.
- 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
- 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,
- 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
- Preacher, K.J., & Hayes, A.F. (2015). "Asymptotic and Resampling Strategies". *Behavior Research Methods*
- 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.
- Rahmadani, R., & Nugroho, A. (2022). *Efisiensi Pengeluaran Pemerintah Daerah terhadap Pembangunan Berkelanjutan di Indonesia*. **Jurnal Pembangunan Daerah**, 8(1), 45–58.
- Rizal, F., & Hidayat, A. (2024). *Industrial Innovation and Fiscal Efficiency: Evidence from Indonesian Provinces*. *Journal of Regional Fiscal Studies*, 7(1), 45–62
- 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/>,
- 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

- 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).
- 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
- 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
- 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>
- 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.
- Setiawan, A., & Dewi, R. (2021). *Kebebasan Ekonomi dan Kinerja Keuangan Pemerintah Daerah di Indonesia*. *Jurnal Ekonomi dan Kebijakan Publik*, 12(3), 201–216.
- Sri Mahendra Satria Wirawan, (2018). Evaluation of Budget Spending Sustainability of DKI Jakarta Province's Budget, *Jurnal Bina Praja* 10 (1) (2018): 27-38
- 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.
- 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>
- 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.
- Syafri, Sofilda, & Suparyati (2024), Pengaruh Peningkatan PAD dan efisiensi fiskal daerah terhadap efektivitas pembangunan berkelanjutan di Daerah *Indonesian Treasury Review*, 9(4), 277–290.
- 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>
- 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

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>

UNDP.(2022). Achieving SDGs Through Local Government Financing.

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