Measurement: Jurnal Akuntansi, Vol 20 No. 1 : 12 - 20
Juni 2026
P-ISSN 2252-5394
E-ISSN 2714-7053

FISCAL CAPACITY AND ENVIRONMENTAL PERFORMANCE IN INDONESIAN PROVINCES: DOES THE FLYPAPER EFFECT STICK TO GREEN OUTCOMES

Hichmah Nadiah[1)], Loggar Bhilawa[2)]
[1,2]Accounting Department, Faculty of Economics and Business, Universitas Negeri Surabaya
email: [1]hichmah.22168@mhs.unesa.ac.id, [2]loggarbhilawa@unesa.ac.id

Abstract

This study examines whether regional fiscal capacity measured by Regional Original Income (PAD) and transfer funds influences environmental performance in Indonesian provinces. Using balanced panel data from 34 Indonesian provinces (2020-2023), we employ Fixed Effect Model (FEM) regression to control for unobserved regional heterogeneity. Environmental performance is measured by the Environmental Quality Index (IKLH). Control variables include GRDP per capita, capital expenditure ratio, and economic structure. Partially, neither PAD nor transfer funds show statistically significant individual effects on environmental performance ($p>0.05$). However, both variables jointly contribute to explaining environmental outcomes when considered with control variables (F-statistic significant at $p<0.01$). The within-province R2 of 0.94 indicates that the model explains substantial variation in environmental performance over time within provinces. GRDP per capita demonstrates a positive significant effect ($p<0.01$), suggesting that economic development levels influence environmental quality.:This study provides empirical evidence that fiscal capacity alone is insufficient for environmental improvement; the effectiveness of budget allocation and governance quality are critical mediating factors. The findings challenge assumptions that fiscal decentralization automatically yields environmental benefits.

Keywords: *Regional Original Income (PAD), Transfer Funds, Environmental Performance, Fiscal Decentralization, Indonesia, Environmental Governance.*

Abstrak

Penelitian ini menguji apakah kapasitas fiskal daerah yang diukur melalui Pendapatan Asli Daerah (PAD) dan dana transfer memengaruhi kinerja lingkungan pada tingkat provinsi di Indonesia. ***Metode:*** *Menggunakan data panel berimbang (balanced panel data) dari 34 provinsi di Indonesia (2020-2023), penelitian ini menerapkan regresi Fixed Effect Model (FEM) untuk mengontrol heterogenitas regional yang tidak teramati. Kinerja lingkungan diukur menggunakan Indeks Kualitas Lingkungan Hidup (IKLH). Variabel kontrol meliputi PDRB per kapita, rasio belanja modal, dan struktur ekonomi.* ***Hasil:*** *Secara parsial, baik PAD maupun dana transfer tidak menunjukkan pengaruh individu yang signifikan secara statistik terhadap kinerja lingkungan ($p>0,05$). Namun, kedua variabel tersebut secara bersama-sama (simultan) berkontribusi dalam menjelaskan hasil lingkungan ketika diuji dengan variabel kontrol (F-statistik signifikan pada $p<0,01$). Nilai R2 sebesar 0,94 menunjukkan bahwa model ini mampu menjelaskan variasi yang substansial pada kinerja lingkungan dari waktu ke waktu di dalam provinsi. PDRB per kapita menunjukkan pengaruh positif yang signifikan ($p<0,01$), yang mengindikasikan bahwa tingkat pembangunan ekonomi memengaruhi kualitas lingkungan.* ***Kebaruan:*** *Penelitian ini memberikan bukti empiris bahwa kapasitas fiskal saja tidak cukup untuk mendorong perbaikan lingkungan; efektivitas alokasi anggaran dan kualitas tata kelola merupakan faktor mediasi yang krusial. Temuan ini menantang asumsi bahwa desentralisasi fiskal secara otomatis akan memberikan manfaat bagi lingkungan.*

Kata Kunci: *Pendapatan Asli Daerah (PAD), Dana Transfer, Kinerja Lingkungan, Desentralisasi Fiskal, Indonesia, Tata Kelola Lingkungan*.

Diterima 5 Mei 2025, Revisi 12 Juni 2026, Diterima 30 Juni 2026
Universitas Riau Kepulauan, Fakultas Ekonomi dan Bisnis, Prodi Akuntansi

Measurement: Jurnal Akuntansi, Vol 20 No. 1 : 12 - 20
Juni 2026
P-ISSN 2252-5394
E-ISSN 2714-7053

INTRODUCTION

Indonesia is known as one of the largest megabiodiversity countries in the world. Despite a constitutional mandate for sustainable development and a national medium-term plan (RPJMN 2020-2024) emphasizing a green economy, Indonesia's Environmental Quality Index (IKLH) has consistently fallen short of its national target (70.45 vs. 75). More critically, this stagnation coincides with a significant increase in regional fiscal capacity, raising a fundamental question: is more money the solution? Ranking second after Brazil in terms of rich biodiversity, Indonesia possesses abundant natural resources including tropical forests, coastal and marine ecosystems (KLHK, 2023). With more than 17,000 islands and thousands of ecosystems, these resources are the main foundation for national development (BRIN, 2021). However, the push for industrialization, urban expansion, and massive land clearing has accelerated environmental damage.

Data from the National Disaster Management Agency (BNPB) shows that throughout 2023 there were 5,306 disasters, dominated by 1,255 cases of flooding, 1,261 cases of extreme weather, 2,051 cases of forest and land fires, and 591 cases of landslides. This trend increased in 2024, where floods jumped to 1,420 cases. These disasters are directly related to development activities and environmental damage, indicating that government policies have not succeeded in directing economic growth in line with environmental conservation (BNBP, 2025).

Based on KLHK report (2022), provinces with high forest cover such as West Papua (87.39), Papua (78.58), and Maluku (63.80) are in the very good environmental quality category. In contrast, provinces with high intensity of development such as DKI Jakarta (0.39), DI Yogyakarta (4.49), and West Java (14.79) are in the very low category. This pattern indicates that environmental quality is strongly influenced by the direction of regional government fiscal policy.

The 2020-2024 RPJMN emphasizes integration between green economy, climate resilience and equitable management of natural resources. However, the national IKLH is only 70.45 points, below the target of 75 points (KLHK, 2022). Average regional environmental spending has not yet reached 2% of total APBD (World Bank, 2025), illustrating the gap between sustainable development commitments and factual implementation.

Based on data from the Directorate General of Fiscal Balance (2023), the average contribution of Regional Original Income (PAD) to total provincial income is only around 26.8%, while dependence on transfer income from the center reaches more than 60%. The Ministry of Environment and Forestry (2023) noted a disparity in IKLH scores between provinces with high industrial activity such as West Java (64.85) showing scores below the national average (70.45), while forest-dominated provinces such as West Papua (79.24) recorded better scores. This inequality in environmental performance can be understood through the concept of the Flypaper Effect, which explains the tendency for regional spending to be more influenced by transfer funds than PAD (Suyanto, 2010).

Chalil (2018) shows that regional spending in Indonesia is more responsive to central transfers than PAD, indicating high fiscal dependence. Fitrianti et al. (2025) emphasize that the larger the transfer portion, the greater regional expenditure will be without an increase in original

Diterima 5 Mei 2025, Revisi 12 Juni 2026, Diterima 30 Juni 2026
Universitas Riau Kepulauan, Fakultas Ekonomi dan Bisnis, Prodi Akuntansi

income. Differences in environmental performance between provinces can be explained through Fiscal Decentralization Theory (Oates, 1972), which states that regions with strong fiscal capacity are better able to provide public services according to local needs, including environmental management.

Several previous studies have examined the relationship between regional fiscal policy and environmental quality in Indonesia, but results show mixed findings. Prasetianto & Kustiwan (2023) found that human development, spending on environmental functions, and fiscal decentralization positively influence environmental quality, explaining an Environmental Kuznets Curve pattern. Hawari et al. (2024) found a complex non-linear relationship: in the initial stages, decentralization reduces environmental quality due to weak governance, but in the long term it can improve environmental quality if regional fiscal capacity and accountability improve.

Safitri et al. (2025) found that Ecological Fiscal Transfers (EFT) do not have a statistically significant effect on environmental performance, indicating that ecology-based fiscal transfers have not been effective due to coordination challenges and institutional capacity limitations. Maghfiroh et al. (2024) found that although PAD positively affects financial performance, balance funds actually have a negative effect.

Fauji & Syafitri (2024) found that governance quality positively affects economic growth, and that regional fiscal capacity through the PAD ratio is an important determinant. Isman et al. (2025) showed that higher accountability strengthens the effectiveness of fiscal transfers in improving public welfare, confirming that strengthening oversight and financial governance is essential to maximizing the benefits of fiscal decentralization.

Based on these gaps, this research offers novelty in several aspects. First, it uses the latest panel data for the 2020-2023 period covering all 34 provinces in Indonesia, capturing post-COVID-19 pandemic dynamics. Second, it simultaneously analyzes PAD and Transfer Funds on IKLH integrating comprehensive control variables and uses Fixed Effect Model (FEM). Third, it contributes to enriching the literature on fiscal decentralization and environmental economics by highlighting the importance of environmental governance and budget allocation effectiveness.

This study aims to: (1) analyze the influence of Regional Original Income (PAD) on Environmental Performance (IKLH); (2) analyze the influence of Transfer Funds on IKLH; and (3) analyze the simultaneous influence of PAD, Transfer Funds, GRDP per capita, capital expenditure ratio, and economic structure on the environmental performance of provincial governments in Indonesia for the 2020-2023 period.

RESEARCH METHOD

Research Design

This study employs a quantitative approach with a causal explanatory design. A quantitative approach was chosen because all research variables are expressed in numerical data that can be analyzed statistically to test causal relationships between variables (Creswell & Creswell, 2023). This study utilizes panel data combining cross-section and time series dimensions, namely 34 provinces in Indonesia as the unit of analysis during the 2020-2023 period.

Data Source and Collection

Diterima 5 Mei 2025, Revisi 12 Juni 2026, Diterima 30 Juni 2026
Universitas Riau Kepulauan, Fakultas Ekonomi dan Bisnis, Prodi Akuntansi

Measurement: Jurnal Akuntansi, Vol 20 No. 1 : 12 - 20
Juni 2026
P-ISSN 2252-5394
E-ISSN 2714-7053

This study uses entirely secondary data obtained from official government sources. Environmental performance data, proxied by the Environmental Quality Index (IKLH), were obtained from the Ministry of Environment and Forestry (KLHK) publications for the 2020-2023 period. Fiscal data, including Regional Original Income (PAD) and Transfer Funds, were sourced from the Directorate General of Fiscal Balance (DJPK) of the Ministry of Finance and provincial government Budget Realization Reports (LRA) audited by the Supreme Audit Agency (BPK). Control variables, namely GRDP per capita and economic structure, were obtained from the Central Statistics Agency (BPS) publications.

Population and Sample

The population of this study is all provincial governments in Indonesia. The research sample consists of 34 provinces for the period 2020-2023, a period when Indonesia's administrative structure still consisted of 34 provinces. The expansion to 38 provinces only occurred in 2024 as a result of regional expansions in Papua. This study applies saturated sampling (total sampling), where all members of the population are used as samples (Sugiyono, 2019). The total observations amount to 136 (34 provinces x 4 years).

Data Analysis Technique

This study uses panel data regression analysis. According to Ghozali (2021), panel data provides more informative data, reduces collinearity problems, and can control heterogeneity between observation units. The general equation model is:

IKLHit = beta0 + beta1*Ln(PAD)it + beta2*Ln(DT)it + beta3*Ln(PDRB)it + beta4*BelanjaModalit + beta5*StrukturEkonomiit + ai + eit

Where IKLHit = environmental performance; Ln(PAD)it = natural logarithm of Regional Original Income; Ln(DT)it = natural logarithm of Transfer Funds; Ln(PDRB)it = natural logarithm of GRDP per capita; BelanjaModalit = Capital Expenditure Ratio; StrukturEkonomiit = Economic Structure; ai = province-specific fixed effects; eit = error term; i = 34 provinces; t = Year 2020-2023.

To determine the most appropriate panel data regression model, three tests are conducted: Chow test, Hausman test, and Lagrange Multiplier test. Classical assumption tests including normality, multicollinearity, heteroscedasticity, and autocorrelation are performed to ensure robustness. Hypothesis testing uses partial tests (t-test), simultaneous tests (F-test), and the coefficient of determination (Adjusted R2).

RESULTS AND DISCUSSION

Research Results

This research uses panel data consisting of 34 provinces in Indonesia during the 2020-2023 period, resulting in 136 total observations. The dependent variable is the Environmental Quality Index (IKLH). The independent variables consist of Regional Original Income (PAD) and Transfer Funds (DT). Control variables include GRDP Per Capita, Capital Expenditure Ratio, and Economic Structure.

Tabel 1. Descriptive Statistical Analysis Results

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Obs.
PAD	1.01E+13	4.58E+12	5.76E+13	8.54E+11	1.39E+13	136
DT	2.26E+13	1.70E+13	7.74E+13	6.01E+12	1.72E+13	136
IKLH	72.42	72.77	84.22	52.98	5.74	136
GRDP	71,970,199	54,653,000	3.23E+08	20,057,000	55,909,769	136
RATIO	0.179	0.172	0.297	0.108	0.042	136
STRUCTURE	0.184	0.129	0.963	0.012	0.150	136

Source: Eviews processed data

Based on descriptive statistical analysis, the Regional Original Income (PAD) variable

Diterima 5 Mei 2025, Revisi 12 Juni 2026, Diterima 30 Juni 2026
Universitas Riau Kepulauan, Fakultas Ekonomi dan Bisnis, Prodi Akuntansi

Measurement: Jurnal Akuntansi, Vol 20 No. 1 : 12 - 20
Juni 2026
P-ISSN 2252-5394
E-ISSN 2714-7053

has a mean value of 1.01E+13 with a standard deviation of 1.39E+13, indicating high variation between regions. The Environmental Quality Index (IKLH) shows relatively stable conditions with a mean of 72.42 and standard deviation of 5.74, indicating moderate environmental quality with limited extreme fluctuations.

Normality Test

The normality test using the Jarque Bera Test obtained a Jarque Bera value of 1.433613 with a probability of 0.488309. A probability value greater than 0.05 indicates H0 is accepted, concluding that the residual data is normally distributed. The skewness value of -0.225308 (close to zero) and kurtosis of 3.223464 (close to 3) further confirm normality.

Multicollinearity Test

Tabel 2. Multicollinearity Test Results

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	2.857276	27.92914	NA
PAD	1.56E-27	4.479096	2.933777
DT	9.40E-28	7.361204	2.689998
GRDP	5.41E-17	4.376517	1.639573
RATIO	68.29650	22.61214	1.191950
STRUCTURE	5.491326	3.015189	1.190961

Source: Eviews processed data

All independent variables have Centered VIF values below 10 (PAD: 2.933777, Transfer Funds: 2.689998, GRDP: 1.639573, Ratio: 1.191950, Structure: 1.190961), indicating no multicollinearity symptoms in the regression model.

Heteroscedasticity Test

Tabel 3. Heteroscedasticity Test Results (White Test)

Statistic	Value	Probability
F-statistic	1.288492	0.2728 [Prob. F(5,130)]
Obs*R-squared	6.421567	0.2673 [Prob. Chi-Square(5)]
Scaled explained SS	6.110007	0.2957 [Prob. Chi-Square(5)]

Source: Eviews processed data

All probability values are greater than 0.05, so H0 is accepted. The regression model does not experience heteroscedasticity and meets the assumption of homoscedasticity.

Panel Data Regression Analysis - Fixed Effect Model (FEM)

Based on the results of the Chow and Hausman tests, the Fixed Effect Model (FEM) was selected. This model captures the differences in the characteristics of each local government through fixed effects in each cross-section.

Tabel 4. FEM Test Results

Statistic	Value	Probability
F-statistic	1.288492	0.2728 [Prob. F(5,130)]
Obs*R-squared	6.421567	0.2673 [Prob. Chi-Square(5)]
Scaled explained SS	6.110007	0.2957 [Prob. Chi-Square(5)]

Source: Eviews processed data

Tabel 5. Coefficient of Determination (R2)

Metric	Value
R-squared	0.958166
Adjusted R-squared	0.941778
Mean dependent var (IKLH)	72.42368
S.D. dependent var	5.739081
Prob (F-statistic)	0.000000

Source: Eviews processed data

The R-squared value of 0.958166 indicates that 95.81% of the variation in environmental performance can be explained by the variables in the model. The Adjusted R-squared of 0.941778 and Prob (F-statistic) of 0.000000 confirm that the model has an excellent level of goodness of fit.

The Influence of Regional Original Income (PAD) on Environmental Performance

The first hypothesis (H1) proposed that PAD has a positive effect on environmental

Diterima 5 Mei 2025, Revisi 12 Juni 2026, Diterima 30 Juni 2026
Universitas Riau Kepulauan, Fakultas Ekonomi dan Bisnis, Prodi Akuntansi

performance. The t-test results show that PAD has no significant effect on IKLH (p-value = 0.8825 > 0.05). Thus, H1 is rejected. This finding indicates that increasing regional fiscal capacity through PAD has not been able to significantly improve environmental performance. From a fiscal decentralization perspective, an increase in PAD should reflect regional financial independence providing flexibility in determining development priorities including environmental protection (Oates, 1972). However, empirical results show that the magnitude of PAD does not automatically translate into improved environmental quality.

This insignificant effect can be explained through agency theory (Jensen & Meckling, 1976). Local governments (as agents) may face incentives to allocate PAD toward politically favorable short-term projects rather than long-term environmental programs. This moral hazard problem is exacerbated by information asymmetry, where voters have limited capacity to monitor budget allocations with environmental sustainability goals (Sarinastiti & Bhilawa, 2023).

This finding aligns with Hawari et al. (2024), who also found PAD has no significant effect on IKLH in 33 Indonesian provinces. Prasetianto & Kustiwan (2023) found that PAD has a negative effect on IKLH, indicating increased fiscal revenue is not always followed by increased commitment to environmental programs. Maghfiroh et al. (2024) also show that while PAD positively affects financial performance, its effect on environmental outcomes depends on how funds are allocated.

The Impact of Transfer Funds on Environmental Performance

The second hypothesis (H2) proposed that Transfer Funds have a positive effect on environmental performance. The t-test results show that Transfer Funds have a significance value of 0.4558 (> 0.05), indicating no significant effect on IKLH. Thus, H2 is rejected. The amount of Transfer Funds received by the provincial government has not been able to directly improve environmental performance. Most Transfer Funds are general in nature (block grants) such as DAU, so their use is not specifically directed to environmental protection programs.

This insignificant effect can be explained through the Flypaper Effect theory (Hines & Thaler, 1995; Oates, 1972), which suggests that transfer funds from the center tend to 'stick' to regional spending without necessarily reflecting long-term public priorities. Chalil (2018) found that regional spending in Indonesia is more responsive to central transfers than to PAD, indicating high fiscal dependence. Safitri et al. (2025) found that EFT does not have a statistically significant effect on environmental performance due to coordination challenges. Isman et al. (2025) reinforce this by showing that higher accountability strengthens fiscal transfer effectiveness, implying that without strong governance, transfers alone are insufficient.

Simultaneous Influence of PAD and Transfer Funds on Environmental Performance

The third hypothesis (H3) proposed that PAD and Transfer Funds simultaneously affect environmental performance. The F-test results obtained F-statistic of 58.46557 with Prob (F-statistic) of 0.000000 (< 0.05). This indicates that PAD and Transfer Funds simultaneously have a significant effect on IKLH. Thus, H3 is accepted. This finding shows that together PAD and Transfer Funds create a 'fiscal space' that can affect environmental quality. However, this fiscal space only has an impact on IKLH when

Diterima 5 Mei 2025, Revisi 12 Juni 2026, Diterima 30 Juni 2026
Universitas Riau Kepulauan, Fakultas Ekonomi dan Bisnis, Prodi Akuntansi

accompanied by pro-environmental policies and good governance.

This finding is consistent with the fiscal federalism framework (Oates, 1972). The Adjusted R-squared of 0.9418 indicates that 94.18% of the variation in environmental performance can be explained by the variables in this model. These findings suggest that an effective regional fiscal strategy for improving environmental quality involves an integrated combination of fiscal policies rather than simply increasing PAD or transfer funds separately.

The Influence of Control Variables

GRDP per capita shows a positive and significant effect on IKLH (coefficient 3.94e-08, p-value 0.0017). This can be linked to the Environmental Kuznets Curve (EKC) hypothesis (Grossman & Krueger, 1995), where at a certain level of income, society and government begin to care more about environmental quality. Capital Expenditure Ratio shows a negative but insignificant effect at the 5% level (p-value 0.0806), suggesting that existing capital expenditure for physical infrastructure has not been 'green.' Economic Structure shows a positive but insignificant effect on IKLH (p-value 0.2759), indicating that the dominance of the manufacturing industrial sector has not significantly affected environmental quality during the study period.

CONCLUSION

Based on the results of panel data analysis of 34 provinces in Indonesia for the period 2020-2023, this study concludes: (1) Partially, Regional Original Revenue (PAD) does not significantly influence Environmental Performance (IKLH), indicating that increases in regional revenue have not been directly allocated to support environmental programs. (2) Transfer Funds also do not significantly influence Environmental Performance, indicating that funds sourced from the central government are not fully effective in encouraging improvements in environmental quality at the provincial level. (3) Simultaneously, PAD and Transfer Funds significantly influence Environmental Performance, confirming that together regional fiscal capacity plays a role in influencing environmental quality.

This study contributes to fiscal decentralization theory by demonstrating that fiscal capacity is a necessary but not sufficient condition for environmental improvement. The finding confirms that fiscal resources alone cannot guarantee better environmental outcomes without appropriate governance mechanisms. This study also underscores the critical mediating role of governance and budget allocation through the lens of agency theory.

RECOMMENDATION

Regional governments need to ensure that increases in local revenue (PAD) are accompanied by a strong commitment to allocating budgets for environmental spending more proportionally and effectively, particularly in pollution control, environmental rehabilitation, and sustainable development programs. The central government also needs to evaluate the effectiveness of transfer mechanisms by considering the implementation of environmental performance-based transfer schemes integrating IKLH indicators to improve accountability. For future research, it is recommended to expand the observation period, add control variables such as environmental spending, industrialization level, population density, and urbanization, and use dynamic panel data methods (GMM) to minimize bias.

Diterima 5 Mei 2025, Revisi 12 Juni 2026, Diterima 30 Juni 2026
Universitas Riau Kepulauan, Fakultas Ekonomi dan Bisnis, Prodi Akuntansi

REFERENCES

Andjarwati, T., Budiarti, E., Soemadijo, P. S., & Yasin, M. (2021). Analysis of Local Own Revenue and Balancing Funds on the Financial Performance of Districts and Cities in the Region of East Java Province. International Journal of Economics and Finance Studies, 13(1), 235-250.

Badan Riset dan Inovasi Nasional (BRIN). (2021). Status Keanekaragaman Hayati Indonesia: Tantangan dan Konservasi.

BNBP. (2025). Jumlah Kejadian Bencana Menurut Jenis Bencana Tahun 2010-2024. Pusdatinkom BNPB. https://data.bnpb.go.id

Chalil, T. M. (2018). The Size of Flypaper Effect in Decentralizing Indonesia. Jurnal Perencanaan Pembangunan, II(2), 101-119.

Creswell, J. W., & Creswell, J. D. (2023). Research Design Qualitative, Quantitative, and Mixed Methods Approaches (6th ed.). SAGE Publications.

Direktorat Jenderal Perimbangan Keuangan. (2023). Postur APBD. Kementrian Keuangan Republik Indonesia. https://djpk.kemenkeu.go.id

Fadilah, H., & Helmayunita, N. (2020). Analisis Flypaper Effect Pada Dana Alokasi Umum, Dana Bagi Hasil dan Pendapatan Asli Daerah Terhadap Belanja Daerah Provinsi di Indonesia. Jurnal Eksplorasi Akuntansi, 2(3), 3144-3159.

Fauji, Z., & Syafitri, W. (2024). The impact of local governance and regional own-source revenue on economic growth at the district level in Indonesia. Jurnal Ekonomi Dan Bisnis, 27(2), 153-174.

Fitrianti, R., Zaenal, M., Fattah, S., & Hidayah, N. (2025). Flypaper effect: Analysis of financial transfers from the central government to provincial regions in Indonesia. Public and Municipal Finance. https://doi.org/10.21511/pmf.14(1).2025.05

Ghozali, I. (2021). Aplikasi Analisis Multivariate dengan Program IBM SPSS 26 (10th ed.). Badan Penerbit Universitas Diponegoro.

Grossman, G. M., & Krueger, A. B. (1995). Economic Growth and The Environment (4634).

Guo, X. (2024). The Impact of Fiscal Decentralization on Environmental Pollution Index: Theoretical Analysis and Empirical Examination. Frontiers in Sustainable Development, 4(12). https://doi.org/10.54691/e9j0y828

Hawari, A., Alyasa, F. M., Akbar, M. R., & Sihaloho, E. D. (2024). Fiscal Decentralization in Indonesia: Does It Curb the Quality of Environment? Economics Research and Social Sciences, 8(1). https://doi.org/10.18196/jerss.v8i1.19273

Hines, J. R., & Thaler, R. H. (1995). The Flypaper Effect. Journal of Economic Perspectives, 9, 217-226.

IQAir. (2024). World's most polluted cities 2024. https://www.iqair.com

Islami, R. N., Ansar, R. B., & Azizah, T. P. (2025). The Role of regional Original Income, Regional Size, and Transfer in Improving Regional Financial Performance. Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE), 8(2), 4745-4766.

Isman, M. H. S., Salomo, R. V., & Bakri, M. R. (2025). Impact of Fiscal Transfers and Local Revenue Accountability on Community Welfare in Indonesia. Owner Riset & Jurnal Akuntansi, 9(2). https://doi.org/10.33395/owner.v9i2.2684

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, 3(4), 305-360.

Diterima 5 Mei 2025, Revisi 12 Juni 2026, Diterima 30 Juni 2026
Universitas Riau Kepulauan, Fakultas Ekonomi dan Bisnis, Prodi Akuntansi

Kementrian PPN/Bappenas. (2019). Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020-2024.

KLHK. (2022). Laporan Kinerja Kementerian Lingkungan Hidup dan Kehutanan.

KLHK. (2023). Laporan Kinerja.

Maghfiroh, T., Warno, & Muheramtohadi, S. (2024). The impact of regional original income and balance funds on local government financial performance: An Islamic perspective in Central Java, Indonesia. Journal of Islamic Economics, Management, and Business (JIEMB), 6(1), 105-134.

Nugroho, S. F., & Pangaribowo, E. H. (2024). Pengaruh dimensi pembangunan berkelanjutan terhadap kualitas lingkungan hidup di Provinsi Daerah Istimewa Yogyakarta. Jurnal Pengelolaan Lingkungan Berkelanjutan, 8(3), 326-346.

Oates, W. E. (1972). Fiscal Federalism. New York: Harcourt Brace Jovanovich.

Prasetianto, A., & Kustiwan, I. (2023). Nexus between socio-economic development, fiscal decentralization, and environmental quality: Evidence from Indonesia. Journal of Enterprise and Development, 5(3).

Safitri, I., Hasibuan, B. K., Silalahi, A. S., & Syahyunan. (2021). The Effect of Regional Original Income, General Allocation Funds, Specific Allocation Funds, and Fund for The Results on Capital Expenditure Allocation. Journal of Management Analytical and Solution (JoMAS), 1(2), 97-115.

Safitri, N. T., Dirgantara, N., Wahyuni, S., & Setyadi, E. J. (2025). Ecological Fiscal Transfers and Regional Environmental Performance: The Moderating Role of Economic Growth. E-Jurnal Akuntansi, 35(8), 2281-2292.

Sarinastiti, N. V., & Bhilawa, L. (2023). Kepemimpinan Kepala Desa dan Pengawasan Masyarakat dalam Mewujudkan Akuntabilitas Pengelolaan Dana Desa. Jurnal Akademi Akuntansi, 6(2), 199-214.

Sugiyono. (2019). Metode Penelitian Kuantitatif, Kualitatif, dan R&D (2nd ed.). ALFABETA.

Suyanto. (2010). Flypaper Effect Theory dalam Implementasi Kebijakan Desentralisasi Fiskal. Jurnal Ekonomi Pembangunan, 11.

WCED. (1987). General Assembly World Commission on Environment and Development. Oxford University Press.

World Bank. (2025). Creating Jobs, Growing Economies Annual Report.

Diterima 5 Mei 2025, Revisi 12 Juni 2026, Diterima 30 Juni 2026
Universitas Riau Kepulauan, Fakultas Ekonomi dan Bisnis, Prodi Akuntansi