

The Role of Tax effort in the Flypaper effect Phenomenon and Its Implications for Fiscal Independence of Regencies/Cities in Java Island for the Period 2019-2024

Pusparani Kirana¹, Ken Paramitha Aryana²
^{1,2}Universitas Padjadjaran, Indonesia

Article Info

Article history:

Accepted: 18 July 2026

Publish: 1 Agustus 2026

Keywords:

Flypaper Effect;

Tax Effort;

Local Own-Source Revenue;

Regional Expenditure;

Fiscal Independence.

Abstract

This study aims to analyze the flypaper effect phenomenon in regency/city governments in Java Island and to examine the role of tax effort in the relationship between the flypaper effect and fiscal independence. This study uses a quantitative approach with panel data from 113 regencies/cities in Java Island during 2019-2024, resulting in 678 observations. The data consist of Regional Expenditure, Local Own-Source Revenue, Intergovernmental Transfer Funds, Flypaper Effect, Tax Effort, and Fiscal Independence. The analytical method is panel data regression using the Fixed Effect Model and Moderated Regression Analysis. The results show that Local Own-Source Revenue and Intergovernmental Transfer Funds have a positive and significant effect on Regional Expenditure. The coefficient of Intergovernmental Transfer Funds is greater than that of Local Own-Source Revenue, indicating the occurrence of the flypaper effect. Regional testing also shows that 80 of 113 regencies/cities experience the flypaper effect. Furthermore, the flypaper effect has a negative and significant effect on fiscal independence. Tax effort has a positive and significant direct effect on fiscal independence and significantly moderates the relationship between the flypaper effect and fiscal independence. These findings indicate that the strengthening of local tax capacity remains important, but fiscal dependence on transfer funds must also be controlled through more performance-oriented transfer policies and sustainable optimization of local revenue.

This is an open access article under the [Lisensi Creative Commons Atribusi-BerbagiSerupa 4.0 Internasional](#)



Corresponding Author:

Pusparani Kirana

Universitas Padjadjaran, Indonesia

Email Correspondent: pusparani22001@mail.unpad.ac.id

1. INTRODUCTION

Since the reform era began in 1998, the Indonesian government has responded to development inequality and low public service effectiveness by transitioning from a centralized to a decentralized system. The decentralization and regional autonomy policy was enacted through Law Number 22 of 1999 on Regional Government and Law Number 25 of 1999 on Fiscal Balance between the Central and Regional Governments. Regional governments were granted broader authority to manage governmental affairs within their respective territories, including the exploration of independent revenue sources. This policy was subsequently updated through Law Number 1 of 2022 on Fiscal Relations between the Central and Regional Governments (UU HKPD), which strengthened the fiscal transfer mechanism based on the principle of money follows function.

Fiscal decentralization grants regional governments the authority to collect taxes, levies, and other revenue sources to finance regional expenditures (Wulandari et al., 2024). The primary objective of fiscal decentralization is to foster regional fiscal independence through effective and efficient management of Local Own-Source Revenue (PAD) (Isnayati & Setiawan, 2012). However, in practice, PAD contributions to total regional revenue remain relatively low in the majority of regional governments, while dependency on central government transfer funds remains persistently high. This condition indicates that the primary objectives of fiscal decentralization have not yet been fully realized as mandated by the prevailing regulations.

High fiscal dependency on transfer funds has the potential to give rise to the flypaper effect phenomenon, a condition in which regional governments are more responsive to Intergovernmental transfer funds than PAD in determining the level of regional expenditure. The term flypaper effect was first introduced by Courant et al. (1979), who described how regional expenditure growth exceeding PAD is caused by grants from the central government, likened to "money that sticks where it hits." This phenomenon indicates that specifically allocated transfer funds tend to be used more for expenditure expansion rather than for broader public interests (Rios et al., 2022 in Suripto et al., 2024). This condition may ultimately have a negative long-term impact on regional fiscal independence.

Java Island represents the region with the largest economic contribution in Indonesia, accounting for 57.02% of national GDP in 2024 (BPS, 2025), with a population of approximately 150 million people or 56% of Indonesia's total population (Erlangga, 2025). Nevertheless, the majority of districts and cities in Java remain heavily dependent on central government transfer funds, with the contribution of Intergovernmental Transfer Funds (Dana Perimbangan) to regional expenditure during the 2019–2024 period far exceeding PAD contributions across nearly all provinces. Even Banten Province, which records the highest PAD contribution among the other provinces, only achieves a PAD contribution of 38% relative to regional expenditure. This fact indicates that Java's substantial economic potential has not been fully translated into optimized PAD at the district and city level, suggesting the presence of the flypaper effect as well as low levels of regional fiscal independence.

Various studies on the flypaper effect have been conducted both domestically and internationally, yielding diverse findings. Somantri (2024) found evidence of the flypaper effect in districts and cities in West Java and East Java Provinces, while Lani et al. (2024) found similar results in East Nusa Tenggara Province. On the other hand, Apriliani (2023) found no flypaper effect through the Special Allocation Fund (DAK) in West Java, and Rahmasari et al. (2024) identified a new dependency pattern on regional financing. Several studies have also begun examining the role of tax effort as a moderating variable, where Dewi et al. (2024) found tax effort to act as a homologizer moderator in Bali Province, while Fadhlil et al. (2022) in Aceh Province and Sholihat & Lubis (2024) across Sumatra Island produced varying moderation results, indicating that the role of tax effort remains inconsistent across different regional contexts.

Based on the research gap identified above, this study aims to analyze the *flypaper effect* phenomenon in districts and cities across Java Island for the period 2019–2024, examine its implications for regional fiscal independence, and test the role of *tax effort* as a moderating variable in this relationship. This study extends the scope of Dewi et al. (2024) by incorporating the full Intergovernmental Transfer Funds as a proxy for the *flypaper effect*, expanding the research object to encompass all districts and cities in Java Island, and updating the observation period through 2024. The selection of the 2019–2024 period also takes into account the fiscal dynamics covering the pre-pandemic period

(2019), the Covid-19 pandemic period (2020–2021), and the post-pandemic recovery period (2022–2024). This study responds to recommendations from prior research (Somantri, 2024; Asmarawati, 2025; Dewi et al., 2024) emphasizing the importance of further investigation into the *flypaper effect* phenomenon and the role of *tax effort* in more contemporary regional and temporal contexts.

2. RESEARCH METHOD

This research uses a quantitative approach research method. The research object consists of regional governments at district and city level across Java Island during the 2019-2024 period. The data used are secondary data in the form of Budget Realization Reports (*Laporan Realisasi Anggaran*) derived from the Audit Reports on Regional Government Financial Statements that have been Audited by the Supreme Audit Board (Badan Pemeriksa Keuangan/BPK), as well as data on Gross Regional Domestic Product (GRDP) as constant prices obtained from the Central Statistics Agency (*Badan Pusat Statistik/BPS*). Data collection was conducted through documentation and literatur review techniques.

The research population encompasses all district and city regional governments on Java Island. The sampling technique employed is purposive sampling, with the criterion that districts and cities must have complete and audited financial statements throughout the 2019-2024 period. The DKI Jakarta Special Capital Region was excluded from the sample as it does not have district or city-level financial statements published separately on the BPK website. Accordingly, the research sample consists of 113 districts and cities observed over six years, yielding a total of 678 panel data observations.

This study develops two analytical models to address the research objectives.

a. Model I (*Flypaper Effect Detection*)

$$BD = \alpha + \beta_1 padit + \beta_1 dpit + eit$$

Model I is constructed to examine the influence of Transfer Funds (DP) and Local Own-Source Revenue (PAD) on Regional Expenditure (BD), with the aim of identifying the partial effect of each independent variable on the dependent variable and detecting the occurrence of the flypaper effect through a comparison of the regression coefficient of Intergovernmental Transfer Funds

b. Model II (Moderated Regression Analysis – MRA)

Model II employs two regression equations following the MRA approach to examine the role of tax effort as a moderating variable in the relationship between the flypaper effect and Fiscal Independence.

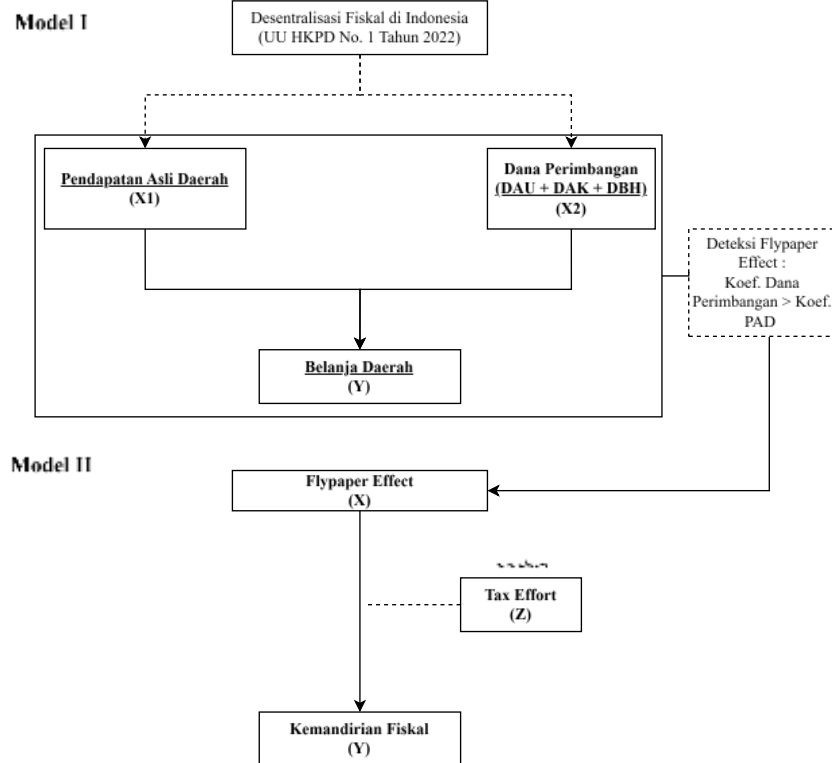
1. Equation 1 – without interaction term (to examine the direct effect of each variable)

$$KF = a + b1FEit + b2TEit + eit$$

2. Equation 2 – with interaction term (to examine the moderating effect of tax effort):

$$KF = a + b1FEit + b2TEit + (b3FEit \times TEit) + eit$$

The result of both equations are subsequently used to classify the type of moderating variable according to the framework proposed by Sharma et al (1981), which distinguishes between pure moderator, quasi moderator, homologizer moderator, and predictor moderator based on the significance of the direct of the moderating variable and the interaction term.

Figure 1. Conceptual Framework

3. RESULTS AND DISCUSSION

Results

3.1 Regression Model Selection

In this study, the selection of the panel data regression estimation technique is conducted through three available models, namely the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). To determine the most appropriate estimation technique for the panel data regression in this study, three sequential tests are performed, namely the Chow Test, Hausman Test, and Lagrange Multiplier Test.

3.1.1 Chow test

The chow test is employed to determine the most appropriate model between the Common Effect Model (CEM) and the Fixed Effect Model (FEM) in panel data regression.

Tabel 3.1 Chow Test Result Model I

Effect Test	Statistic	d.f	Prob.
Cross-section F	8.505888	(112,563)	0.0000
Cross-section chi-square	671.441239	112	0.0000

Source : Data Processed by EViews 13 (2026)

Based on the Chow Test results presented in the table above, the cross-section F probability value of $0,0000 < 0,05$. Therefore, the fixed Effect Model (FEM) is selected as the appropriate estimation model, and the analysis proceeds to the Hausman Test.

Tabel 3.1 Chow Test Result Model II

Effect Test	Statistic	d.f	Prob.
Cross-section F	96.448844	(112,563)	0.0000
Cross-section chi-square	2037.415703	112	0.0000

Source : Data Processed by EViews 13 (2026)

Based on the Chow Test results presented in the table above, the cross-section F probability value of $0,0000 < 0,05$. Therefore, the Fixed Effect Model (FEM) is selected as the appropriate estimation model, and the analysis proceeds to the Hausman Test.

3.1.2 Hausman Test

The Hausman test is employed to determine the most appropriate model between the Random Effect Model (REM) and the Fixed Effect Model (FEM) in panel data regression.

Tabel 2.3 Hausman Test Result Model I

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	221,676100	2	0.0000

Source : Data processed with Eviews 13 (2026)

Based on the Hausman Test results presented in the table above, the Cross-section Random probability value of $0.0000 < 0,05$. Therefore, the Fixed Effect Model (FEM) is confirmed as the most appropriate estimation model for the panel data regression in this study.

Tabel 3.4 Hausman Test Result Model II

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	180.473247	2	0.0000

Source : Data Processed by EViews 13 (2026)

Based on the Hausman Test results presented in the table above, the Cross-section Random probability value of $0.0000 < 0,05$. Therefore, the Fixed Effect Model (FEM) is confirmed as the most appropriate estimation model for the panel data regression in this study.

3.2 Classic Assumption Test

Referring to Gujarati (2008) in Basuki (2021), classical assumption tests should be adjusted to the characteristics of the data. Since normality is not a prerequisite for obtaining BLUE estimators and autocorrelation testing is primarily relevant to time-series data, this panel data only examines heteroskedasticity and multicollinearity.

3.2.1 Heteroscedasticity Test

The heteroskedasticity test was conducted using a residual graph. Referring to Napitupulu et al. (2021), heteroskedasticity is not indicated when residual values remain within the range of -500 to 500.

Heteroscedasticity test result Model I

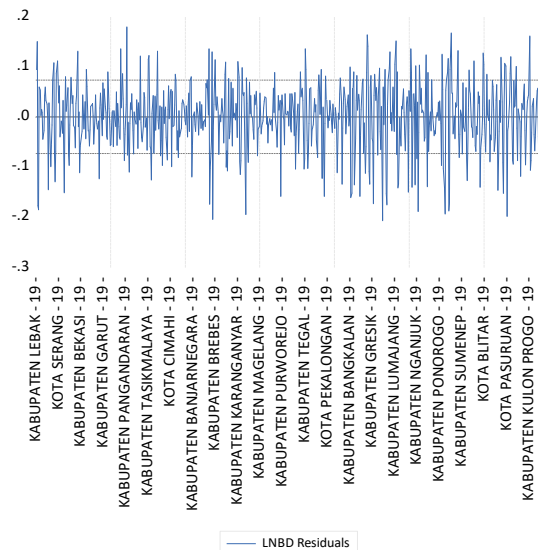


Figure 3.1 Heteroskedasticity test result Model I

Figure 3.1 shows that the residuals range from -0,206 to 0,180, are distributes around the zero line, and exhibited no specific pattern. Therefore, the regression model is considered free from heteroskedasticity.

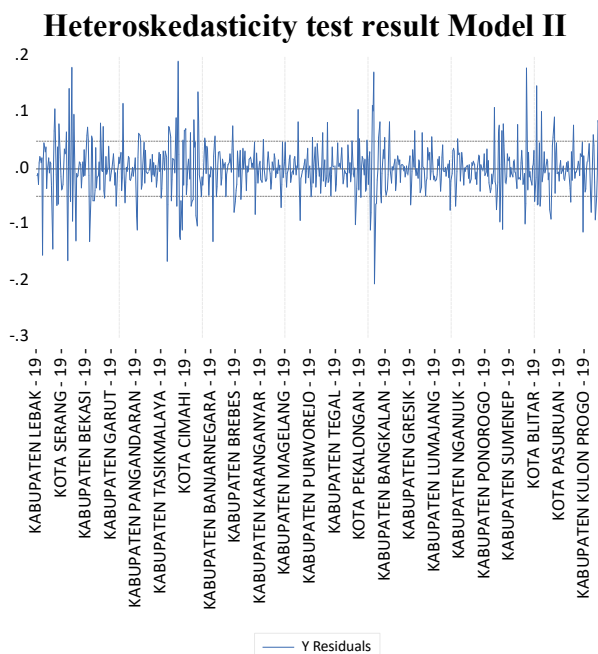


Figure 3.2 Heteroskedasticity test result Model II

Figure 3.2 shows that the residuals range from -0.22 to 0.20, are distributes around the zero line, and exhibited no specific pattern. Therefore, the regression model is considered free from heteroskedasticity.

3.2.2 Multicollinearity test

Multicollinearity was assessed using a correlation matrix. Following Basuki (2021), the model is considered free from multicollinearity when the correlation among independent variables is below 0,85.

Tabel 3.5 Multicollinearity Test Results for Model I

X1	X2
----	----

X1	1.000000	0.545817
X2	0.545817	1.000000

Source : Data Processed by EViews 13 (2026)

Table 4.4 shows that the correlation coefficient *Dana Perimbangan* (X1) and PAD (X2) is $0,545817 < 0,85$. Therefore, Model I does not indicate multicollinearity.

Tabel 3.6 Multicollinearity Test Results for Model II

Variable	X	Z
X	1.000000	-0.502741
Z	-0.502741	1.000000

Source : Data Processed by EViews 13 (2026)

Table 4.4 shows that the correlation coefficient Flypaper Effect (X) and Tax Effort (Z) is $0,545817 < 0,85$. Therefore, Model II does not indicate multicollinearity.

3.3 Hypothesis Testing

3.3.1 Partial Test (t-test)

The t-test examines the individual effect of each independent variable on the dependent variable. The assumptions in this test are the following criteria :

1. If the p-value > 0.05 , the independent variable has no significant partial effect on the dependent variable; H_0 is accepted
2. If the p-value < 0.05 , the independent variable has a significant partial effect on the dependent variable; H_1 is accepted

Tabel 3.7 The Results of the t-test for Model I

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.61474	0.960244	11.05422	0.0000
X1	0.556260	0.037734	14.74145	0.0000
X2	0.086996	0.018455	4.713864	0.0000

Source : Data Processed by EViews 13 (2026)

- 1) Intergovernmental Transfer (X1 has a positive and statistically significant effects on Regional Expenditure (Y) as indicated by a coefficients 0.556260 and p-value is smaller than significant ($0.000 < 0,05$). Accordingly, the null hypothesis is rejected, while the alternative hypothesis stating that *Dana Perimbangan* affects Regional Expenditure is accepted
- 2) PAD (X2) has a positive and statistically significant effects on Regional Expenditure (Y) as indicated by a coefficients 0.086996 and p-value is smaller than significant ($0.000 < 0,05$). Accordingly, the null hypothesis is rejected, while the alternative hypothesis stating that *PAD* affects Regional Expenditure is accepted.

Table 3.10 Result of the t-test for Model II without Moderating Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.538479	0.014607	36.86503	0.0000
X	-0.073571	0.009893	-7.436496	0.0000

Source : Data processed by EViews 13 (2026)

- 1) The Flypaper Effect (X) has a negative but statistically insignificant effect on Fiscal Independence (Y), as indicated by coefficient of -0.073571 and a p-value of 0.0000, which is above the 0.05 significance level. Accordingly, H_0 is accepted, while the alternative hypothesis stating the Flypaper Effect (X) affects Fiscal Independence (Y) is rejected.

Tabel 3.11 Results of the t-Test for Model II with the Moderating Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.370909	0.020676	17.93907	0.0000
X	-0.017187	0.012712	-1.352043	0.1769

Z	0.257135	0.024453	10.51542	0.0000
XZ	-0.111648	0.015977	-6.988101	0.0000

Source : Data processed by EViews 13 (2026)

- 1) The Flypaper Effect (X) has a negative but statistically insignificant effect on Fiscal Independence (Y), as indicated by coefficient of -0.017187 and a p-value of 0.1769, which is above the 0.05 significance level. Accordingly, H_0 is accepted, while the alternative hypothesis stating the Flypaper Effect (X) affects *Kemandirian Fiskal* (Y) is rejected
- 2) Tax Effort (Z) has a positive and statistically significant effect on *Kemandirian Fiskal* (Y), as indicated by a coefficient of 0.257135 and a p-value of 0.000, which is below the 0.05 significance level. Accordingly, the H_0 is rejected, while the alternative hypothesis stating that Tax Effort affect Fiscal Independence is accepted
- 3) The Interaction between the Flypaper Effect*Tax Effort (XZ) has a negative and statistically significant effect on Fiscal Independence (Y), as indicated by a coefficient of -0.111648 and a p-value of 0.0000, which is below the 0.05 significance level. Accordingly, the H_0 is rejected, while the alternative hypothesis H_{a3} is accepted.

3.3.2 Simultan Test (F-test)

The F-test examines whether the independent variables jointly have a significant effect on the dependent variable. The decision is based on the p-value, where a value below 0.05 indicates a significant simultaneous effect.

Tabel 3.12 F-test results for Model I

F-Statistic	257.2556
Prob(F-statistic)	0.000000

Source : Data Processed by EViews 13 (2026)

Based on the fixed-effects model estimation presented in Table 4.7, the F-Statistic is 257.256 with a probability value of 0.0000. Since the probability value is lower than the 0.05 significance level, the null hypothesis (H_0) is rejected. This result indicates that Dana Perimbangan and PAD have a significant effect and simultaneously on Regional Expenditure (Y)

Tabel 3.13 F-test Result for Model II without Moderation Variable

F-statistic	287.4502
Prob(F-statistic)	0.000000

Source : Data Processed by EViews 13 (2026)

Based on the F-test results for Model II without the moderating variable, the F-statistic is 287.4502 with a probability value of 0.0000. Since the probability value is below the 0.05 significance level, the null hypothesis is rejected. This indicates that the Flypaper Effect significantly influences Fiscal Independence (Y)

Tabel 3.14 F-test Result for Model II with Moderation Variable

F-statistic	351.4317
Prob(F-statistic)	0.000000

Source : Data Processed by EViews 13 (2026)

For Model II with the moderating variable, the F-statistic is 351.4317 with a probability value of 0.0000. As the probability value is lower than 0.05, H_0 hypothesis is rejected. Therefore, the Flypaper Effect (X), Tax Effort (Z), and the Interaction Flypaper Effect*Tax Effort (XZ) have a statistically significant effect on Fiscal Independence (Y) in regencies and cities across Java during the 2019-2024 period.

3.3.3 R² Test

The coefficient of determination (R²) measures the extent to which the independent variables explain the variation in the dependent variables within a regression model.

Tabel 3.15 R² test result for Model I

R-squared	0.981164
Adjusted R-squared	0.977350

Source : Data Processed by EViews 13 (2026)

Based on Table 3.15, Model I has an R-squared value of 0.981164 and an adjusted R-squared value of 0.977350. This indicates that Intergovernmental Transfers and Local Own-Source Revenue explain 97.74% of the variation in Regional Expenditure, while the remaining 2.26% is explained by other factors outside the model.

Tabel 3.16 R² test result for Model II without Moderation Variable

R-squared	0.982933
Adjusted R-squared	0.979513

Source : Data Processed by EViews 13 (2026)

Based on Table 3.16, Model II without the moderation variable has an R-Squared value of 0.982933 and an adjusted R-squared value of 0.979513. This indicates that Flypaper Effect and Tax Effort explain 97.95% of the variation in Fiscal Independence, while the remaining 2.05% is explained by other factors outside the model.

Tabel 3.17 R² test result for Model II with Moderation Variable

R-squared	0.986285
Adjusted R-squared	0.983478

Source : Data Processed by EViews 13 (2026)

Based on Table 3.17, Model II with the moderation variable has an R-Squared value of 0.986285 and an adjusted R-squared value of 0.983478. This indicates that Flypaper Effect, Tax Effort, and the interaction between Flypaper Effect and Tax Effort explain 98.35% of the variation in Fiscal Independence, while the remaining 1.65% is explained by other factors outside the model. This increase in the adjusted R-squared value compared to Model II without the moderation variable (0.979513) suggests that the inclusion of the interaction variable improves the model's explanatory power in predicting Fiscal Independence.

Discussion

Flypaper Effect Phenomenon

According to Melo (2001), as cited in Fadilah and Helmayunita (2020), the Flypaper Effect can be identified when the coefficient of General Allocation Fund is greater than the Local Own-Source Revenue and both variables have a significant effect on regional expenditure, or when Local Own-source Revenue has no significant effect on regional expenditure. The estimation results show that coefficient of the Intergovernmental Transfer Fund is 0.5481, which is higher than the Local Own-Source Revenue of 0.0945. Therefore, the flypaper effect occurred in regencies and cities across Java during the study period. These results lead to the rejection H_{01} and acceptance of H_{a1} .

This finding is consistent with the agency theory proposed by Jensen and Meckling (1976), which positions the central government as the principal and local governments as the agents. Local governments possess more detailed information regarding their financial conditions and regional needs, creating information asymmetry between the two parties. When transfers from the central government are perceived as continuously available, local

governments may face a soft budget constraint that weakens their incentive to optimize Locally Generated Revenue. Consequently, local governments tend to rely more heavily on the Intergovernmental Transfer Fund, as increasing Locally Generated Revenue often requires greater administrative and political effort.

Effect of Flypaper Effect on Fiscal Independence

The results show that the flypaper effect has a negative and significant effect on fiscal independence among districts/cities in Java during 2019-2024. This finding suggests that greater reliance on intergovernmental transfers relative to locally generated revenue lowers fiscal independence, as measured by the ratio of Local Own-Source Revenue to Intergovernmental Transfers (BPK, 2019). When transfers dominate regional revenue, local governments perceive their expenditure needs are sufficiently met, reducing incentives to optimize local tax collection. This research is consistent with fiscal illusion theory (Turnbull, 1992, as cited in Ramadhani et al, 2026). This result also supports agency theory, whereby local governments as agents have limited motivation to maximize local revenue once expenditure needs are satisfied by central government transfers, weakening fiscal accountability (Jensen & Meckling, 1976).

Moderating Role of Tax Effort

Moderated Regression Analysis results show that the interaction between the flypaper effect and tax effort has a negative and significant, while tax effort has a positive and significant direct effect on fiscal independence. Since both the direct and interaction effects are significant, tax effort is classified as a quasi moderator. These findings confirm that tax effort changes the relationship between the flypaper effect and fiscal independence among regencies and cities in Java during 2019-2024.

Theoretically, higher tax effort reflects a local government's ability to mobilize tax revenue relative to its economic capacity, as measured by GDRP. A stronger tax effort can increase the contribution of local taxes to locally generated revenue, thereby improving the government's capacity to finance regional expenditure independently and reducing its reliance on intergovernmental transfers (Bahl, 1971). Thus, tax effort may serve as a fiscal mechanism that offsets the dependence created by the flypaper effect and supports regional fiscal independence. This finding is consistent with Sholihat and Lubis (2024), who found that tax effort moderated the relationship between the flypaper effect and regional financial performance, although they classified it as a pure moderator. The difference may reflect variations in regional economic structures and fiscal independence.

4. CONCLUSION

This study confirms the occurrence of the flypaper effect in regencies and cities across Java during 2019-2024, as regional expenditure was more responsive to intergovernmental transfers than to locally generated revenue. The phenomenon was also found to have a negative effect on fiscal independence, indicating that greater reliance on central governments to finance their expenditures through their own revenue sources.

Tax effort was identified as a quasi moderator in the relationship between the flypaper effect and fiscal independence. Its significant role suggests that stronger local tax mobilization can support fiscal independence by increasing the contribution of locally generated revenue and reducing reliance on fiscal transfers. Therefore, local governments need to strengthen tax intensification and extensification while considering local economic capacity. The central government should also develop more performance-based transfer policies to prevent intergovernmental transfers from weakening local incentives to optimize their own-source revenue. Future research may expand the geographical coverage, extend the observation period, and incorporate factors such as governance quality, bureaucratic capacity, and regional economic growth.

5. ACKNOWLEDGMENTS

The author would like to express sincere gratitude to the Applied Bachelor's Program in Public Sector Accounting, Faculty of Economics and Business, Universitas Padjadjaran, and to Ken Paramitha Aryana, S.E., M.Ak., as the academic supervisor, for the guidance, valuable feedback, and support provided throughout the preparation of this study.

6. BIBLIOGRAPHY

- Abdullah, S., & Riani, L. (2020). Flypaper effect pada pendapatan asli daerah (PAD) dan dana alokasi umum (DAU) terhadap belanja daerah serta dampaknya terhadap kinerja keuangan pada kabupaten/kota di Provinsi Jawa Barat. 10(56).
- Aprianti, V., Manan, A., & Agustiani, E. (2026). Tax effort dalam memoderasi flypaper effect dan fiscal stress terhadap kinerja keuangan daerah kabupaten/kota se-Pulau Lombok. *Jurnal Ekonomi dan Kewirausahaan West Science*, 4(2), 189–200. <https://doi.org/10.58812/jekws.v4i02.3308>
- Apriliani, D. (2023). Analisis flypaper effect, pendapatan asli daerah (PAD), dana alokasi umum (DAU), dan dana alokasi khusus (DAK) terhadap belanja daerah kabupaten/kota di Provinsi Jawa Barat 2017–2021. 4(1), 39–50.
- Apriliani, D. M., Fitrijanti, T., & Aryana, K. P. (2023). Flypaper effect di Pulau Jawa: Pengaruh pendapatan asli daerah dan transfer ke daerah terhadap belanja daerah dengan moderasi pertumbuhan ekonomi. *Jurnal Bisnis Mahasiswa*, 5, 2519–2537.
- Asmarawati, M. D. (2025). Analysis of the impact of transfer funds and local revenue on government capital expenditure in regencies/cities in West Java: Testing the existence of the flypaper effect. 8(2), 84–96.
- Asmawanti, D., Elvandari, N., & Baihaqi, B. (2019). Analisis tax effort, efektivitas, kontribusi, dan pertumbuhan pajak daerah Kota Bengkulu tahun 2011–2014. *Jurnal Akuntansi*, 6(1), 35–52. <https://doi.org/10.33369/j.akuntansi.6.1.35-52>
- Badan Pusat Statistik. (2025, February 5). Pertumbuhan ekonomi Indonesia triwulan IV-2024. <https://www.bps.go.id/id/pressrelease/2025/02/05/2408/ekonomi-indonesia-tahun-2024-tumbuh-5-03-persen--c-to-c---ekonomi-indonesia-triwulan-iv-2024-tumbuh-5-02-persen--y-on-y---ekonomi-indonesia-triwulan-iv-2024-tumbuh-0-53-persen--q-to-q--.html>
- Bahl, R. W. (1971). A regression approach to tax effort and tax ratio analysis. 14, 570–612.
- Basuki, A. T. (2021). Analisis data panel dalam penelitian ekonomi dan bisnis.
- Basuki, A. T., & Prawoto, N. (2015). Analisis regresi dalam penelitian ekonomi dan bisnis.
- Courant, P. N., Gramlich, E. M., & Rubinfeld, D. L. (1979). The stimulative effects of intergovernmental grants: Or why money sticks where it hits.
- Cresswell, J. W. (2018). Research design: Quantitative, qualitative, and mixed methods.
- Dewi, N. A., Kusuma Dewi, L. G., & Wiguna, I. G. (2024). Analisis flypaper effect dan implikasinya terhadap kemandirian fiskal daerah: Efek moderasi upaya pajak. 14(1), 1–19.
- Erlangga, C. D. (2025). Pulau Jawa menampung 150 juta jiwa, raih gelar pulau terpadat dunia. *Metro TV*. <https://www.metrotvnews.com/play/koGCa5zx-pulau-jawa-menampung-150-juta-jiwa-raih-gelar-pulau-terpadat-dunia>
- Fadhli, Asnawi, & Jummaini. (2022). Peran tax effort pada pengaruh flypaper effect dan fiscal stress terhadap kinerja keuangan daerah kabupaten/kota di Provinsi Aceh. *Jurnal Manajemen Indonesia*, 7(2), 144–155. <https://doi.org/10.29103/j-mind.v7i2.8884>

- Fadilah, H., & Helmayunita, N. (2020). Analisis flypaper effect pada dana alokasi umum, dana alokasi khusus, dana bagi hasil, dan pendapatan asli daerah terhadap belanja daerah provinsi di Indonesia. 2(3), 3144–3159.
- Ferreira, L. O. G. (2021). Constitutional tax transfers in Brazilian municipalities: The fiscal illusion and the flypaper effect. <https://repositorio.unb.br/handle/10482/42292>
- Gujarati, D. N., & Porter, D. C. (2008). Basic econometrics (5th ed.).
- Isnayati, N. I., & Setiawan, D. (2012). Fenomena flypaper effect pada belanja daerah. 80, 220–239. <https://doi.org/10.24034/j25485024.y2017.v1.i2.2062>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. 3, 305–360.
- Kristiaji, B. B., Vissaro, D., & Ayumi, L. (2021). Mempertimbangkan reformasi pajak daerah berdasarkan analisis subnational tax effort. DDTC Working Paper, 1–25.
- Kuncoro, H. (2007). Fenomena flypaper effect pada kinerja keuangan pemerintah daerah kota dan kabupaten di Indonesia. 1–29.
- Kurniati, H., & Devi, Y. (2022). Pengaruh flypaper effect pada dana alokasi umum dan pendapatan asli daerah terhadap belanja daerah Provinsi Lampung tahun 2016–2019 dalam perspektif ekonomi Islam. 11, 187–208.
- Lani, O. Y., Perseveranda, M. E., Manafe, H. A., & Sonbay, Y. Y. (2024). Pengaruh flypaper effect terhadap belanja daerah dan dampaknya pada kinerja keuangan pemerintah kabupaten/kota di Provinsi NTT. *Journal of Education Research*, 5(4), 6735–6752.
- Napitupulu, R. B., Simanjuntak, T. P., Hutabarat, L., & Damanik, H. (2021). Penelitian bisnis: Teknik dan analisis data dengan SPSS, Stata, dan EViews.
- Oktavia, C., & Handayani, N. (2021). Pengaruh PAD, tax effort, dan belanja modal terhadap tingkat kemandirian keuangan pemerintah daerah.
- Peraturan Pemerintah Republik Indonesia Nomor 12 Tahun 2019 tentang Pengelolaan Keuangan Daerah. (2019). <https://peraturan.bpk.go.id/Details/103888/pp-no-12-tahun-2019>
- Pertiwi, H., Yenni, M. I., & Rusmini, A. (2026). Desentralisasi fiskal sebagai instrumen otonomi daerah di Indonesia: Systematic literature review. 4(4), 10365–10371.
- Poniatowicz, M., & Wildowicz-Szumarska, A. (2024). The increasing importance of intergovernmental transfer revenue in local finance in Poland and the flypaper effect. 22(3), 89–117.
- Rahmasari, T. F., Darmastuti, D., & Nurrahman, K. A. (2024). Local finance and regional expenditures: Is there a flypaper effect in Indonesia? 9(20), 62–84. <https://doi.org/10.18502/kss.v9i20.16474>
- Ramadhani, M. W., Utami, D., & Akib, A. (2026). Ilusi fiskal dan flypaper effect pada belanja daerah kabupaten/kota di Sulawesi Selatan. 11(1), 33–40.
- Sholihat, I., & Lubis, T. A. (2024). Analisis flypaper effect, fiscal stress, dan karakteristik pemerintah daerah terhadap kinerja keuangan daerah dengan tax effort sebagai variabel moderasi pada provinsi-provinsi di Pulau Sumatera. 13(5), 1609–1622.
- Solikin, A. (2016). Analisis flypaper effect pada pengujian pengaruh dana alokasi umum (DAU), pendapatan asli daerah (PAD), dan sisa lebih penghitungan anggaran (SiLPA) terhadap belanja pemerintah daerah di Indonesia: Studi tahun 2012–2014. *Jurnal Akuntansi dan Bisnis*, 16(1), 11. <https://doi.org/10.20961/jab.v16i1.187>
- Somantri, A. D. (2024). Analisis flypaper effect dalam perspektif keuangan daerah: Studi kasus Provinsi Jawa Barat dan Jawa Timur. 5(4). <https://doi.org/10.36418/syntaximperatif.v5i4.450>
- Sopannah, & Haikal, M. F. F. (2021). Refocusing anggaran di masa pandemi COVID-19. *Conference on Economic and Business Innovation*, 35, 1–9. <https://jurnal.widyagama.ac.id/index.php/cebi/article/view/152>

- Sugiyono. (2019). Metode penelitian kuantitatif, kualitatif, dan R&D.
- Suripto, Istanti, Rake, R., & Hajar, F. (2024). Flypaper effect phenomenon on regional spending: Evidence from Lampung Province. 14(1), 134–140. <https://doi.org/10.12928/optimum.v14i1.9482>
- Susan, R. T., & Dekrita, Y. A. (2023). Pengaruh pendapatan asli daerah dan dana perimbangan terhadap belanja daerah serta keterjadian flypaper effect pada Pemerintah Daerah Kabupaten Sikka tahun anggaran 2018–2022. 1(5), 388–412.
- Titing, R., & Bolang, C. (2024). Fenomena flypaper effect: Stimulan atau kemunduran desentralisasi fiskal? 12(2), 53–60.
- Undang-Undang Republik Indonesia Nomor 1 Tahun 2022 tentang Hubungan Keuangan antara Pemerintah Pusat dan Pemerintahan Daerah. (2022). <https://peraturan.bpk.go.id/Details/195696/uu-no-1-tahun-2022>
- Wulandari, M., Pembangunan, E., Trisakti, U., & Info, A. (2024). Fenomena flypaper effect pada 62 kabupaten tertinggal di Indonesia. 1–10