Based on an Examination of the Effect of Flypaper on Regional Expenditures, the Region has Achieved Financial Independence

Rita Martini[1], Kartika Rachma Sari[2], Indra Satriawan[3]
ritamartini@polsri.ac.id[1], kartikasyahrul@yahoo.co.id

Politeknik Negeri Sriwijaya, Jalan Srijaya Negara Bukit Besar, Palembang[1, 2, 3]

Abstract. This article investigates the impact of Regional Original Income (ROI), Generally Allocate Funding (GAF), and Specially Allocate Funding (SAF) on Regionally Expenditure (RE), as well as the implications for the amount of regional financial independence. The data used is the Budget Realization Report (BRR) in the district/city government financial statements of South Sumatra Province. The saturated sampling approach of 85 observation units were used, the population is BRR for five years in seventeen regencies/cities. ROI has a large influence on local spending, GAF has no and no significant influence on local spending, and ROI, GAF, and SAF all have an effect on RE at the same time. ROI, GAF, SAF, and RE all have an impact on the region financiing authonomy. ROI, GAF, SAF, and RE all have an impact on and the incidence of the flypaper impact on RE in the regency/city of South Sumatra Province. Furthermore, enhancing ROI may help the government overcome obstacles and prevent the flypaper effect.

Keywords: Autonomy, local government, spending.

1 Introduction

When funds are provided by the federal government to local governments in the manner of generally allocated fund (GAF) and specially allocated fund (SAF), there is a mismatch in understanding of their functions [1]. The national government provides these funds in order to balance regional budgets [2]. The quantity of money received by each region is different. The amount of this transfer fund is determined by the outcomes of various pre-assessed variables from each region, such as the region's potential. Another purpose is to allow local governments to use this money to develop their areas [3]. Local governments, on the other hand, believe that the funds are intended to meet the needs of their respective communities. This has an impact on regional spending, which diverts more funds from the center rather than generating Regional Original Income (ROI). This tendency is described as the flypaper effect [4]. Furthermore, the flypaper effect will influence other elements.

The amount of financing freedom in the region demonstrates the ability of the regional authority to fund its demands. This is evident when the amount of ROI is compared to the overall transfer income. In short, the amount of regional financial independence [5] is the degree to which the region is financially dependent on the center. The amount of financial independence in districts/cities in South Sumatra Province fluctuated significantly between

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2018 and 2022. This is demonstrated by the quantity of ROI, which remains relatively modest in comparison to the government's contribution to transfer revenue. Furthermore, the district/city's financial capacity has been extremely low over the last five years. This demonstrates because regional administrations remain heavily reliant on federal government subsidies.

There is a popular belief that the phenomena of the more regional shopping comes from transfers is related to spending on the regional level, which determines the degree of regional financial independence. This investigation is intended to provide an overview of connected conditions in districts/municipalities in South Sumatra through the use of financial accounts. Furthermore, the study's findings are expected to contribute in the form of recommendations that the local government may apply to improve their environment.

2 Research Methods

This study shows how variable X (ROI, GAF, and SAF) impacts variable Y_1 (Regional Expenditure), which in turn affects variable Y_2 (Level of Regional Financial Independence). Details regarding the independent and dependent components under investigation, as well as the variables' measuring points and the scale used. The thinking framework describes the relationship between variable X and variable Y_1, which in turn affects variable Y_2. The following structure of thought is used to construct research hypotheses:

H_1: ROI affects Regional Expenditure
H_2: GAF affects Regional Expenditure
H_3: SAF affects Regional Expenditure
H_4: ROI, GAF, and SAF simultaneously affect Regional Expenditure
H_5: ROI, GAF, SAF, and RE have an impact on the level of financial independence in the region.
H_6: Flypaper *Effect* to Local Spending

The focus of this study is the Regional Revenue and Expenditure Budget Realization Report in seventeen districts/cities in South Sumatra Province [6], which comprises of 13 districts and 4 cities for the 2018-2022 fiscal year. Saturated sampling from the entire population, i.e. 17 districts/cities, was used. In this study, 85 samples were gathered. The demographic and sample of the inquiry are described in the table below.

Table 1. Population and Sample.

Number	Identification	Number of Local Governments
1.	Local Government Financial Statements in South Sumatra Province that are presented in full and have been audited by Audit Board of the Republic of Indonesia for a period of 5 years	17
2.	Regencies/cities in South Sumatra Province that were sampled	17
3.	Years of research	5
	Number of Observation Units	85

Multiple linear regression analysis and statistical analysis were utilized in this work to analyze data. The acquired data will be handled using the Econometric Views (Eviews) software version 10 to ease the analysis and testing of the presented hypothesis. Panel data model selection and classical assumption checks will be performed prior to doing multiple linear regression tests.

3 Result and Discussion

3.1 Result

To find the best model to employ in this investigation, panel data models are chosen. The The F test is used to assess whether the approach is the best between general impact and constant impact. The chi-square cross-sectional probability point reaches 0.00, for this reason the appropriate model is the Fixed Effect Model (FEM). The hausman test is used to determine which model is best for predicting panel data between fixed effect and random effect. If the cross-section random probability value is 0.0000, which means value = 0.05, then the appropriate model is FEM. Based on the results of the testing, the usage of FEM was chosen twice. As a result, of the three models (Common Effect Model, Fixed Effect Model, and Random Effect Model), the FEM is the best for interpreting regression of study panel data.

The normality test earned a Jarque-Bera value of 1.299401 and a probability value (P-value) of 0.460500 based on the findings of the classical assumption test. If the probability value (P-value) is more than (0.460500 > 0.05), H0 is authorized. As a result, we can deduce that the data is distributed on a regular basis. The data, which is often distributed, can be analyzed and moved on to the next test. The multicollinearity test results reveal that the VIF value between independent variables in the centered VIF column is less than 10, indicating that each independent variable has no multicollinearity. Data that do not show multicollinearity should be moved on to the next test. When the autocorrelation test was performed with the Langrange Multiplier Test, the Obs*R-Squared probability value was 6.014781. This implies that there is no autocorrelation if the probability value of Obs*R-Squared is greater than (6.014781 > 0.05). Using the Arch test approach, the P-value for the heteroscedasticity test was 0.8752. H0 is acceptable if the P-value is greater than (0.8752 > 0.05). As a result, one can conclude that heteroscedasticity does not exist**.**

The determination value test findings indicate, the R-Squared point is 0.949067. As a result, the ROI, GAF, and SAF variables account for 94.90% of regional spending. And the R-Squared value of 0.957521 is known as the coefficient of determination test. ROI, GAF, SAF, and regional financing contribute an influence of 95.70% to the level of independence of district/city funding, then 4.30% is influenced by other components. The t-test was employed to examine influence per independent factor for the dependent variable. Tabel 2's t-test results are provided.

Table 2. Test Output - t.

Variables	Coefficient	Standart Error	t - Statistic	Probability
C	9.810386	4.953436	1.980521	0.0519
X_1	0.192995	0.048625	3.969033	0.0002

Variables	Coefficient	Standart Error	t - Statistic	Probability
X_2	0.506505	0.202389	2.502628	0.0149
X_3	-0.020727	0.032062	-0.646463	0.5203

3.2 Discussion

3.2.1 The Effect of ROI on Regional Expenditure

The t-table value was 1.98969/-1.98969 and t-count was 3.969033, so the t-count > t-table (3.969033 > 1.98969) then H_1 is accepted. The ROI variable is 0.0002 where the point is under 0.05. This means that ROI partially influence on regional spending. The rise or fall of ROI will affect regional spending.

The lowest ROI revenue in South Sumatra Province was found in PALI Regency in 2015, amounting to Rp 22,025,377,405. While the highest ROI receipts were found in Palembang City in 2017, amounting to Rp 1,091,704,605,854. Musi Banyuasin and East Ogan Komering Ulu districts have ROI that tends to be stable and increases every year. The positive and significant influence of ROI on local spending proves that local governments are able to explore the potential that exists in their regions to obtain income in financing regional needs. Local taxes are one of the elements contributing to the region's increased ROI. Regional taxes are the major source of revenue in almost all districts/cities, in addition to being the greatest contributor to the regional budget. The growth in ROI for the region cannot be separated from the involvement of the community members who participate in it. This is due to the need for the community to pay regional contributions (taxes) in accordance with current regional legislation. Local taxes include motor vehicle taxes and billboard charges.

Another aspect in growing ROI is the allocation of ROI by local governments. The proper deployment of ROI will improve the quality of infrastructure and public services. Local governments must be able to set up a priority scale for regional development in this instance. In general, every region desires to become a comparably developed area, which will necessitate huge growth. The job of local government is to plan carefully in order to attain the desired development. Long, medium and short term development targets are set. Development should be tailored to the region's top priorities and money. Furthermore, by carrying out development through effective regional spending, the community will have greater confidence that the duties they pay to the region are well allocated and on goal. The findings support [7] [8], assertion that ROI considerable impact on local spending, but contradict [9], who claims that ROI has no affect on regional spending.

3.2.2 The Effect of GAF on Regional Spending

Based on the research findings for the GAF variable, H_2 is acceptable since t-count > t-table (2.502628 > 1.98969). The GAF variable has a significant value of 0.0149, which is less than 0.05. This suggests that GAF has a small but important impact on regional spending. This demonstrates that the more the GAF supplied to the regency/city administration in South Sumatra Province on the central government, the greater the local spending.

The lowest GAF revenue was found in Musi Banyuasin Regency in 2015, amounting to Rp131,033,381,000. While the highest GAF revenue in Palembang City in 2019, amounting to Rp1,347,785,960,000. The positive and significant influence of GAF on local spending in districts/cities proves that local governments still rely on GAF revenues in financing spending. This happens because each district/city has a different ability to obtain sources of income. The revenue shortfall in this area is finally covered through GAF revenue. So that in the end resulted in the allocation of GAF which played a lot of role in financing regional expenditures. GAF has a positive and significant effect on blood spending [9] [10], but contrary to [7] that GAF has no influence on regional spending.

3.2.3 SAF's Impact on Regional Spending

The t-table value was 1.98969/-1.98969 and t-count was -0.646463. Because the t-count value > t-table (-0.646463 < 1.98969) then H_3 is rejected**.** SAF is 0.5203 where under 0.05. This means, SAF has no partial and insignificant impact to on local expenditure. This illustrates that changes in SAF have little impact on regional spending.

SAF in districts/cities is relatively small, the main factor in the lack of influence of SAF on regional spending. The lowest SAF revenue was found in Musi Banyuasin Regency in 2015, amounting to Rp. 1,977,700,000. Meanwhile, SAF's revenue was the highest in Palembang city in 2019, amounting to Rp. 481,900,223,636. This happens because in practice, SAF is exclusively used to fund unique activities that are national priorities in each district/city to encourage regional growth acceleration. SAF is given according to the needs that are regional priorities but also in line with national priorities. SAF has an influence on regional spending [10] [11], but contradicts [12] which states SAF does not have an influence on regional spending.

3.2.4 ROI, GAF, and SAF Influence on Regional Spending

H4 is accepted since the F-count value is bigger than the F-table value (63.74608 > 3.11) and the significant value is 0.000000 (0.000000 0.05). As a result, ROI, GAF, and SAF all have significant impact on local expenditure. This demonstrates the extent of the impact of ROI, GAF, and SAF as shown by the coefficient of determination (R^2) study of 0.949067. This suggests that the percentage contribution of ROI, GAF, and SAF influence on regional expenditure is 94.90%.

According to [13], ROI, GAF, SAF, also Profit Sharing Fund (PSF) all have a considerable impact on regional spending. This is due to the district/city administration's continued reliance on central government transfer monies to address regional demands. The central government continues to dominate regional spending financing through transfer funding such as ROI, SAF, and PSF.

3.2.5 ROI, GAF, SAF, and Regional Expenditure Effects on Local Financial Authority

The F-count is 72.13120 and the F-table is 2.72, which can be calculated. H5 is accepted since the F-count value is bigger than the F-table value (72.13120 > 2.72) and the significant value is 0.0000000 (0.000000 0.05). As a result, ROI, GAF, SAF, and regional expenditure all have a positive and significant impact on regional financial independence. The coefficient of determination for the research was 0.957521. This implies that the ROI, GAF, and regional expenditure all contribute 95.70% to the level of local financial authority.

This study experimentally demonstrates that the quantity of regional spending is still controlled by central government transfer funds in the form of GAF and SAF, which have an impact on regional financial independence. This demonstrates the district/city administration's continued reliance on the central government to fund regional requirements. The shifting value of ROI each year causes the high and low level of regional financial independence. According to the district/city financial report, the proportion of ROI that can pay local government expenses is only around 50%. Given its limited financial resources and participation in the system of consultative exchanges, the central government cannot take over completely but can only consult. Local governments inquire about or discuss their local government issues with the central government, anticipating solutions or input and suggestions from the central government.

3.2.6 Analysis of Flypaper Effect on Regional Expenditure

According to the findings of the regression test, the ROI coefficient is 0.192995 and the GAF coefficient is 0.506505. This illustrates that ROI has a smaller influence on regional spending than GAF does, implying that other monies, such as GAF and SAF, are required to address regional demands, resulting in the flypaper effect. The theory of whether or not the flypaper effect happens may be seen by comparing the value of the ROI and GAF coefficients to regional expenditure and determining whether or not the ROI is substantial. The findings of this study reveal that ROI and GAF both have a positive and significant influence on regional spending, however SAF has no effect, proving that there is a flypaper effect on regional spending in districts/cities generated from GAF. The presence of this flypaper effect has an impact on the amount of financial independence in the region, because meeting regional demands still requires additional central government resources, particularly GAF, SAF, and PSF, which causes local governments to be dependent on the central government.

Regional expenditures coming from GAF and PSF have a flypaper impact [13], however SAF does not have a flypaper effect. [7] found no evidence of a flypaper effect on regional spending. The absence of a flypaper impact on regional spending is due to the dominance of local governments in financing regional requirements through ROI rather than GAF. South Sumatra Province's district/city governments require strategic initiatives to improve ROI. Local governments can enhance ROI through a variety of measures. One approach is to investigate the region's possibilities.

The flypaper impact is avoided by directing transfer monies from the federal government to local governments toward sectors that can boost regional investment. If a region attracts a large number of investors, development will proceed smoothly and quickly. In general, investors prefer to invest in the infrastructure industry. Roads and bridges are two examples of infrastructure. It has an impact on the smooth conduct of economic activity since it has adequate infrastructure. Good economic activity will boost people's income, which will ultimately benefit the community. On the other hand, this will have an impact on improving public services, so that it also has an impact on the contribution of ROI in running the life of the area end.

4 Conclusion

ROI and GAF have a considerable effect on regional expenditure, however SAF has no effect and is insignificant. ROI, GAF, and SAF have a significant positive impact on regional spending. ROI, GAF, SAF, and regional spending all have a significant and favorable impact on regional financial independence. South Sumatra Province's regional spending by districts/cities produced a flypaper effect. In these circumstances, local governments must pay more attention to analyzing and then taking additional actions to preserve and even improve ROI. As a result, it will ultimately promote regional financial independence.

Exploring regional potential requires local governments to identify whether variables or sectors in their regions have economic power. Following the findings of the study, local governments must implement strategic initiatives to achieve the principles of increasing ROI. Careful planning, adequate budgeting, and plan execution will increase the efficacy and efficiency of accomplishing goals. Consultation is essential if there are concerns with local government and expect remedies or guidance and proposals from the center. Consultations are generally undertaken when local governments face major problems that they cannot handle on their own.

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References

[1] Martini, R., Agustin, R., & Sari, K. R. (2020). Accrual Discretion Policy on Excess/Less Budget Financing at the Provincial Level. TEST Engineering & Management, 82, 9925-9935.
[2] Republic of Indonesia. (2004). Law Number 33 Concerning Financial Balance between the Central Government and Regional Governments.
[3] Putri, V. N., Pisey, K. K., & Martini, R. (2021, January). Determinants of Regional Budget Absorption in the Regional Apparatus Organization of Palembang City. In 4th Forum in Research, Science, and Technology (FIRST-T3-20) (pp. 162-166). Atlantis Press.
[4] Mulya, R., & Bustamam. (2016). The Influence of the Flypaper Effect on General Allocation Funds and Regional Original Income on Economic Growth in the City of Banda Aceh (Empirical Study on the Government of the City of Banda Aceh in 2008-2014). Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi. 1(2).
[5] Martini, R., Sari, K. R., Somadi, T., & Karman, I. W. (2019, October). Financial Independence of the South Sumatra Regional Government. In International Conference On Applied Science and Technology 2019-Social Sciences Track (iCASTSS 2019) (pp. 41-45). Atlantis Press.
[6] Website of the Indonesian Ministry of Finance, accessible via eppid@bpk.go.id.
[7] Nabilah, A. N., Soelistyo, A., & Kusuma, H. (2016). Flypaper analysis of PAD and DAU effects on Regional Expenditure in East Kalimantan Province in 2010-2014. Jurnal Ekonomi Pembangunan. 12(2).

[8]. Martini, R., Sari, K. R., & Zaliah, Z. (2021). Regional Expenditure of South Sumatra Province: Viewed from Regional Revenue and Financing. Jurnal Riset Terapan Akuntansi, 5(1), 53-62.
[9] Wahyuni, Susanti Eka dan Indrian Supheni. (2017). Flypaper Effect on Asli Daerah (PAD) and Average Daily Income (DAU) in Kabupaten Nganjuk Between 2012 and 2016. Jurnal Akuntansi Dewanatara. 1(2).
[10] Somadi, T., Martini, R., Firmansyah, Pangaribuan, L. V. R., Sari, K. R., Wardhani, R. S. (2019). Determinant of Regional Financial Independence: Regency/City Government at South Sumatra Province. International Conference on Industrial Revolution for Polytechnic Education. 1(1).
[11] Nurdini, R., Wiratno, A., & Farida, Y. N. (2015). Flypaper Effect Analysis on General Allocation Funds, Special Allocation Funds, Revenue Sharing Funds, and Regional Original Income on District/City Regional Expenditures in West Java. Jurnal Akuntansi dan Keuangan. 2(1).
[12] Melda, H., & Syofyan, E. (2020). Flypaper Effect Analysis on General Allocation Funds, Special Allocation Funds, Profit Sharing Funds, and Local Own Revenue on District/City Regional Expenditures in West Sumatra. Jurnal Eksplorasi Akuntansi. 2(2).

[13] Armawaddin, M., Rumbia, A. W., & Afiat, M. N. (2017). Analysis of the Flypaper Effect of District/City Regional Expenditures in Sulawesi. Jurnal Ekonomi dan Pembangunan Indonesia. 18(1).