

Does Flypaper Effect Occurs On Local Government Expenditure?

Nur Fitriana Hamsyi^{1*)}; Fitriyani²⁾

¹⁾nur.fitriannah@ekonomi.untan.ac.id, Department of Accounting, Faculty of Economics and Business, Universitas Tanjungpura

²⁾fitriyani@unsyiah.ac.id, Department of Economic Development, Faculty of Economics and Business, Universitas Syiah Kuala

^{*)} Author Correspondence

Article Info:

Keywords:

Balanced Budget;
Flypaper Effect;
Local government expenditure;
Original Local Government Revenue

Article History:

Received : 2021-02-02
Revised : 2021-04-19
Accepted : 2021-04-23

Article Doi:

<http://dx.doi.org/10.22441/profita.2021.v14i1.006>

Abstract

This research attempts to test whether the flypaper effect occurs in the relationship between original local government revenue and a balanced budget on local government expenditure in West Kalimantan Province. The data obtained were 14 regencies and cities in the period 2013-2019. Panel data is used in this study with analysis using Stata software. The result is that the flypaper effect phenomenon occurs in general allocation funds and special allocation funds for local government expenditure. This study also finds that general and special allocation funds positively affect local government expenditure, whereas the original local government revenue and sharing funds do not affect local government expenditure. It proves that local governments are still highly dependent on central government transfer funds rather than increasing their original local government revenue.

Abstrak

Penelitian ini mencoba menguji apakah flypaper terjadi pada hubungan antara pendapatan asli daerah dan anggaran berimbang terhadap pengeluaran pemerintah daerah di Provinsi Kalimantan Barat. Data yang diperoleh adalah 14 kabupaten dan kota pada periode 2013-2019. Data panel digunakan dalam studi ini dengan analisis menggunakan software Stata. Hasilnya, fenomena flypaper effect terjadi pada dana alokasi umum dan dana alokasi khusus untuk belanja pemerintah daerah. Studi ini juga menemukan bahwa dana alokasi umum dan khusus berpengaruh positif terhadap belanja pemerintah daerah, sedangkan pendapatan asli daerah dan dana bagi hasil tidak mempengaruhi belanja pemerintah daerah. Hal itu membuktikan bahwa pemerintah daerah masih sangat bergantung pada dana transfer pemerintah pusat daripada meningkatkan pendapatan asli daerahnya.

Kata Kunci: *Flypaper Effect*; Pendapatan Asli Daerah; Dana Perimbangan; Belanja Daerah.

INTRODUCTION

The Reformation has brought several changes to Indonesia's government system, one of which was the decentralization system. Several regulations on local government have been developed to bolster the implementation of the system. As the implementation of the regional government system develops, Law No. 32 of 2004 changed to Law Number 23 of 2014 and further regulated Law Number 2 of 2015. The law emphasizes that the implementation of regional government is carried out based on the principle of regional autonomy. Regional autonomy is one form of implementing a decentralized system so that local governments are more independent in developing their resources and can play an active role in advancing their regions. However, in reality, in financing their local government expenditure, local governments are too dependent on a balanced budget (transfer funds) owned by the central

government. This study is expected to develop literature in the field of accounting and provide insight into how the flypaper effect occurs in an area.

Decentralization transfers political power from the central to the regions, but the fiscal policy also includes where subnational governments get financial transfers from the central government (Suyanto, 2015). To achieve the goals of decentralization, local governments must explore other income sources optimally so that local revenue can be maximized to lessen dependence on the central government (Inayati & Setiawan, 2018; Nasir, 2019; Serrasqueiro, Mendes, & Nunes, 2008). This authority is given because local governments are more familiar with their regions' potentials and needs than the central government. It is an indicator in measuring the success of implementing the decentralized system. The greater the original local government revenue generated by a region, indicating that fiscal decentralization in that region has been implemented well. Thus, the central government's dependence level will also be smaller (Bodman & Hodge, 2010).

Based on PMK Number 126/PMK.07/2019 concerning Regional Fiscal Capacity Maps, there are still many regencies or cities in Indonesia with a low level of fiscal capacity, so there is a relatively sizeable fiscal gap. According to Amalia (2017), several regions have abundant human resources and natural resources but have scarcity in investment opportunities and economic infrastructure. On the other hand, some regions have good management in the financial system even though they have shortcomings in natural resources and human resources, but can maximize their regions' considerable tax potential. Meanwhile, several other regions have experienced limitations in both economic infrastructure and resources. As a consequence, the per capita gross domestic product (GDP) produced varies from province to province. To overcome fiscal imbalances, the central government took steps by transferring the balanced budget to the regions. These funds are sources of funding for the local government and the main source, namely, original local government revenue.

Original local government revenue will affect how much the expenditure on local government expenditure. All local revenue obtained, both from local government and central government transfers is used for local government expenditure to improve community welfare and regional development (Aragon, 2013). Surely, each region has different priority needs for public services, so that the expenditure of each region has a fluctuating value.

The budget for transfer funds to the regions continues to increase every year. It is hoped that the allocation of balancing fund transfers is expected to improve regional economic development and diminish the fiscal gap among regions. Nevertheless, the provision of these funds raises a problem in which local governments are too dependent on a balanced budget from the central government in financing local government expenditure compared to optimizing their original local government revenue. This dependence gives rise to the flypaper effect phenomenon, which is a condition in local government expenditure in which local governments give a more significant response to transfer funds than their original local government revenue.

The current reality is the low contribution of original local government revenue to total local government expenditure. Likewise with the conditions that occurred in West Kalimantan Province as presented in table 1.

the data in table 1 describes that in 2013-2019, the realization of original local government revenue was about Rp 10,310,493,617,233 while the total balanced budget was greater than that Rp 89,000,395,423,807. Original local government revenue only contributes 10.38% of total government revenues. This value is very small compared to the balancing funds transferred by the central government, which reached 89.62%. It shows that the regional government in the Regency/City of West Kalimantan Province has not maximized potential regional income sources. With the large number of balancing budgets that are much more

responsive to local government expenditure than original local government revenue, it indicates a high degree of dependence on balancing funds from the central government, thus enabling the flypaper effect phenomenon. This phenomenon contrasts with the original objectives of decentralization and regional autonomy, which demand local governments' independence.

Table 1. Revenue and Expenditure of Village Government Throughout West Kalimantan Province, 2013-2019 (in Rupiahs)

Year	Original Local Government Revenue	General Allocation Fund	Special Allocation Fund	Sharing Fund
2013	881,621,587,520	8,162,096,541,000	1,155,999,941,000	686,536,192,448
2014	1,209,896,028,900	9,003,893,687,000	1,193,812,650,000	701,735,983,560
2015	1,179,038,326,330	9,422,549,308,000	1,701,356,508,000	620,004,776,190
2016	1,346,239,806,977	10,160,916,598,000	3,005,578,791,664	580,263,461,698
2017	1,975,023,900,860	10,073,735,391,000	3,617,520,146,100	479,720,280,130
2018	1,840,200,868,680	10,095,490,363,000	3,349,572,463,340	535,151,662,350
2019	1,878,473,097,966	10,373,176,330,000	3,674,127,738,979	407,156,610,348

Source : Statistics Indonesia (2020)

Research on the flypaper effect phenomenon has been conducted previously in several countries and provinces in Indonesia (Fikri, Pudjihardjo, & Sakti, 2020; Syathi, 2020; Zainuddin & Batubara, 2020). However, there are still few studies that focus on general allocation funds and special allocation funds together with sharing funds and local government revenue. This study is extraordinary to analyze because it includes all funding by the government and focuses on whether all these funds have a flypaper effect phenomenon on local government expenditure in West Kalimantan Province. Data processing was performed using STATA analysis tools. The results of this study are expected to contribute to the central and regional governments in evaluating the financial performance of their regions so that fiscal decentralization can be realized.

LITERATURE REVIEW

Original Local Government Revenue

The implementation of fiscal decentralization can realize economic growth through the implementation of regional autonomy. This refers to the theory of fiscal federalism related to regional income. This theory explains the effect of decentralization on economic conditions, services to the general public, and the welfare of the people (Sari & Supadmi, 2016). Original regional income plays a role in financing the implementation of regional autonomy to enhance public services and advance the regional economy. Local governments are responsible for providing good public services and improving public welfare through local expenditure allocations. Local revenue is the basis for regional financing.

Original local government revenue is a revenue obtained from various potentials owned by the area, which is collected based on applicable regulations (Iskandar, 2012). This is intended to finance regional expenditures in the implementation of regional development. The original local government revenue generated will show the extent to which local governments have succeeded in exploring the sources of revenue they have. If the income value is enormous, the level of decentralization will also increase, and vice versa (Bodman & Hodge, 2010). The components of original local government revenue consist of: local taxes, which provide the most considerable contribution to original local government revenue; retributions, with the

most considerable portion in public service fees, the income of regional government corporate and management of separated regional government wealth; moreover, another local government revenue provides the second-largest contribution after taxes (Nasir, 2019).

Balanced Budget

Balanced budgets are funding assistance from state budget revenues transferred to local governments. The aim is to address financial gaps caused by differences in potential sources of income for each region. With this, it is hoped that it can assist regions in financing their needs to facilitate regions in realizing decentralization. A balanced budget consists of the first, namely sharing funds, whose sources come from taxes and not taxes or natural resources. It is a fund from state budget revenue sharing given by the central government to local governments with a specific state revenue percentage. The sharing fund allocation is given based on two principles, namely by origin, where a larger percentage is given to regions that contribute to generating state revenue, and other regions are divided based on equalization. In contrast, by actual, the distribution is based on actual revenue, both tax, and non-tax.

The second is the general allocation fund, which is the most considerable portion of the transfer funds given to local governments to all autonomous regions. General allocation fund is entirely left to the regions and is mostly used to finance general routine expenditures. It is given to fill the fiscal gap caused by an imbalance between each region's capacity and fiscal needs. So that with the general allocation fund, it is expected that financial capacity is evenly distributed between each region. According to (Inayati & Setiawan, 2018), the fiscal gap's size determines the amount of general allocation fund disbursement to a region. The fiscal gap is obtained from reducing the needs of regions with regional potential.

The last component of the balanced budget is the special allocation fund, which is funds allocated to specific regions, either province, regencies, or cities to assist in funding special needs, which are included in national priorities and become part of regional government affairs. Several criteria need to be considered in the provision of special allocation fund: regional fiscal capacity in funding regional development needs as reflected in the regional budget, characteristics and specificities of an area such as food security areas, border areas, coastal areas, islands, remote, underdeveloped, and prone to natural disasters, are stipulated as unique criteria, and the condition of facilities and infrastructure for each activity to be financed by special allocation fund is based on technical ministries or ministries' indicators where these are designated as technical criteria.

Local Government Expenditure

Local government expenditure is the regional government's total expenditure in financing its government affairs following the stipulated provisions. It is classified into two types of classifications, namely: (1) based on government affairs, which consists of spending on the implementation of mandatory and optional affairs; (2) based on programs and activities, which include indirect spending and direct spending. Regional revenue and regional expenditure have an interrelated relationship. Local government expenditure plays an essential role in increasing the income of a region. Regional income is the source used by local governments to carry out regional spending. An increase in the gross regional domestic product will increase the region's amount of revenue to impact increasing spending to finance regional development.

Flypaper Effect

Two theories that underlie the flypaper effect are fiscal illusion and the bureaucratic model. The fiscal illusion is related to residents do not understand and misperceptions about financing and cost-sharing of public goods. Meanwhile, the bureaucratic model considers flypaper to occur because the behavior of bureaucrats is more comfortable to spend transfer funds in maximizing the budget compared to attempts to raise taxes (Acar, 2019). The flypaper effect is a condition in which local governments tend to be responsive to assistance funds provided by the central government or better known as transfer funds, rather than the original regional income itself in financing regional expenditures (Aragon, 2013; Vegh & Vuletin, 2015). The flypaper effect can occur if local government expenditure has a smaller coefficient value than the effect of transfer funds on regional spending.

The flypaper effect phenomenon has occurred in several countries. Aragon (2013) has conducted research on local expenditure, transfers, and taxes in Peruvian cities. The results prove strongly that central government grants have a more significant stimulating effect than local taxes collected by local governments. The expensive local taxes can explain the flypaper effect. Furthermore, in Mexico, Sour (2013) discusses the flypaper effect on local governments with panel data for 17 years, from 1990 to 2007. The results prove a flypaper effect shown in local government spending, which is driven more by increasing unconditional transfers from the government than an increase in the income of members of that community.

Cruz & Silva (2020) have examined the flypaper effect of intergovernmental transfers in Brazil's education sector. The results found that the elasticity of education costs for funds from federal government transfers is significantly greater than the elasticity of the government's responses to local income, thus indicating that there has been a flypaper effect. However, this study is not in line with Thornton (2012), which examines the effect of grants from the federal government with a sample of non-profit companies. The results showed that no flypaper effect was found in non-profit companies.

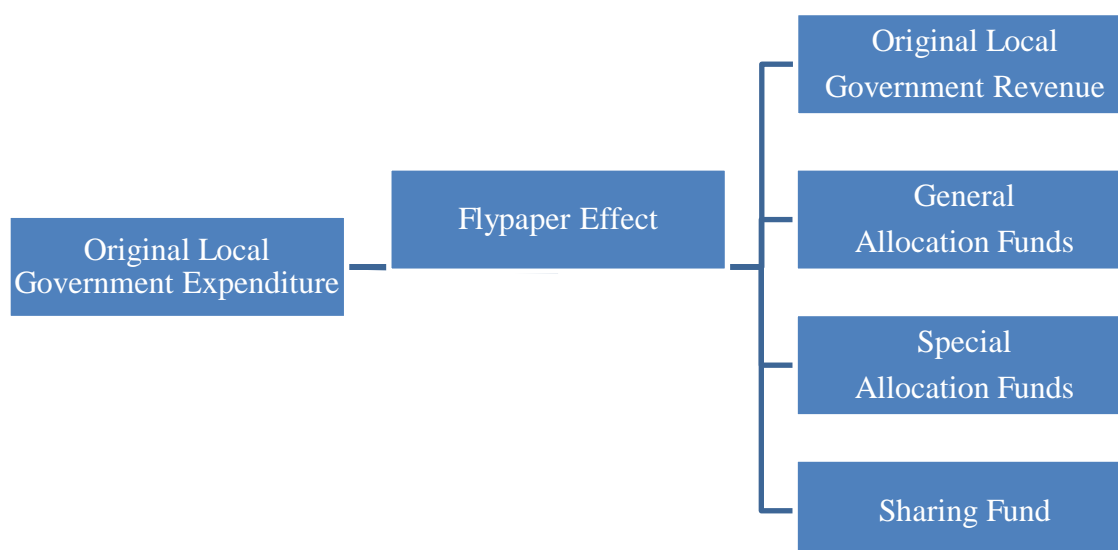
Meanwhile, in Indonesia, Amalia (2017) has examined the effect of the flypaper effect on regional spending and its impact on regional inequality in Indonesia from 2008-2013. By using multiple regression analysis, it is found that the original local government revenue and general allocation funds significantly affect regional spending and disparities in the provinces of East and West Indonesia, so it can be concluded that there has been a flypaper effect in these areas. Armawaddin, Rumbia, & Afiat (2017) also revealed that the flypaper effect in Sulawesi's regencies and cities originated from special allocation funds, during general allocation funds and sharing funds.

Different research results were conducted by Iskandar (2012) who examined the flypaper effect on unconditional grants in West Java province. A total of 13 regencies and six cities became the population in this study. The result is that the original local government revenue coefficient value is more significant than unconditional grants, so there is no flypaper effect in the province. Nugroho (2017) focuses his research by identifying the flypaper effect on regional expenditure with samples obtained by five regencies and cities in Yogyakarta Province during the 2006-2015 period. The results found were that there was no flypaper effect on expenditures on goods and services because the government tended to meet expenditures on goods and services.

Hypothesis

H1: There is a flypaper effect on the relationship between original local government revenue and a balanced budget on local government expenditure in West Kalimantan Province.

Figure 1. Research Framework



Source: Processed Author Data (2020)

METHOD

The data in this study are annually secondary data covers 14 regions, namely Sambas, Bengkayang, Landak, Mempawah, Sanggau, Ketapang, Sintang, Kapuas Hulu, Sekadau, Melawi, Kayong Utara, Kubu Raya, Pontianak, and Singkawang from West Kalimantan Province obtained from Indonesian Statistic Publication and Finance Ministry Publication between 2013 and 2019. This research focuses on examining the effect of original local government revenue and a balanced budget on local government expenditure in West Kalimantan Province.

This study's dependent variable is local government expenditure, defined as each region's total spending in Indonesian rupiah (IDR). In contrast, the explanatory variables are original local government revenue, the total amount of general allocation fund, special allocation fund, and sharing fund by each region in the IDR, respectively. This research uses panel regression to analyze to utilize this objective.

Several advantages are using panel data. Firstly, using panel data can give a large number of observations and increase the degree of freedom. Second, it also benefits to reduce the collinearity within the independent variables, therefore, improve the estimation of the variables. Third, panel data controls the individual heterogeneity. Fourth, it is suitable to study the dynamics of adjustment. Fifth, It can recognize and determine effects better than detected in pure time series or cross-sectional data. It allows us to build and test more complex behavioral models. Sixth, the data generated in panel data makes it possible to obtain more precise predictions for individual results than time-series data alone. However, panel data also has some disadvantages: heterogeneity bias, selectivity bias, and cross-section dependence (Baltagi, 2005; Hsiao, 2003; Klevmarken, 1989). Although it has some limitations, panel data is the most suitable for use in this model as it combines both cross-section and time-series to analyze the objective.

Panel Regression Model

Baltagi (2005) described the panel regression model which can be written as:

$$Y_{it} = \alpha_i + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it} \quad (1)$$

Panel data in this study can be inscribed as:

Explanation:

- Y : the total of local government expenditure
 α_i : Constant
 β_1 : original local government revenue
 β_2 : general allocation fund
 β_3 : specific allocation fund
 β_4 : the revenue sharing fund, respectively
i : i 14 regions in West Kalimantan, Indonesia (i = 1, ..., 14)
t : tth time period, i = 1, ...,t (2013-2019).

Fixed and Random Effect Models

Panel data dissimilar from a regular time-series or cross-section regression, where needed to used several estimations to address the inference problems (heteroscedasticity and autocorrelation) because of a combination of time series and cross-section. There are several estimations used, which are the fixed effects model (FEM) or the least-squares dummy variable (LSDV) model and the random-effects model (REM) or error components model (Croissant & Millo, 2008; Muhammad, Zulham, Sapha, Fitriyani, & Saputra, 2019).

The fixed-effects model is satisfactorily fit if we are concerning on a specific set of observations. Nevertheless, there are enormous standards in the fixed effects model, and the loss of degrees of freedom can be avoided if μ_i , hence a random effect must be assumed (Baltagi, 2005; Pillai, 2016). Hausman & Taylor (1981) built the Hausman test to select the proper model between fixed and random effects. The model was developed based on the comparison between groups and GLS estimators.

Flypaper Effect

In this study, we also analyze the flypaper effect to calculate whether local government expenditure is more defined by the transfer than the original local government revenue. Dollery & Worthington (1995) stated that “flypaper effect defined as a decrease in donor (federal) non-grant expenditures as a result of an increase in the tax price of federal expenditures would provide prima facie evidence of fiscal illusion at the level of the recipient (state).”

Determined the flypaper effect can be obtained by calculated the coefficient or value of the independent variables. If the balanced fund's value is greater than the original local government revenue, and both are significant, we can assume that the flypaper effect has happened. The flypaper effect also exists if the original local government revenue's p-value is not significant (Amalia, 2017; Iskandar, 2012; Prakosa, 2004; Solikin, 2016).

RESULTS AND DISCUSSION

The first phase of the analysis was to represent the descriptive statistic of all variables used in this study. Then it is vital to determine the most suitable panel model in this research by using the Hausman test. Afterward, the panel regression analysis is necessary to be investigated. The results in Table 2 summarize the descriptive statistic about all variables used in this model.

Table 2. Descriptive Statistic of Variables

Variable	Mean	Std. Dev.	Min	Max
Local Government Expenditure	1,223,729,054,857.53	430,374,325,379.58	506,115,481,760.00	2,348,730,048,602.00
General Allocation Fund	686,879,911,928.57	194,268,083,578.94	370,981,961,000.00	1,149,675,156,000.00
Sharing Fund	43,374,245,652.00	39,456,896,437.59	13,769,864,978.00	308,899,951,000.00
Special Allocation Fund	180,868,415,166.52	104,407,644,598.82	7,885,510,000.00	486,448,33,858.00
Original Local Government Revenue	105,131,423,830.57	94,618,111,496.40	10,735,591,000.00	478,790,894,895.00

Source : Processed Research (2020)

Average local government expenditure in 14 regions in West Kalimantan Province from 2013-2019 has amounted to Rp1,223,729,054,857. The maximum expenditure is about Rp2,348,730,048,602 while the minimum is about Rp506,115,481,760. The average sharing fund received by West Kalimantan Province is the lowest among four other explanatory variables, which amounted to Rp43,374,245,652. On the contrary, the government's highest average of transfer is the general allocation fund amounted to Rp686,879,911,928. Original local government revenue ranges from Rp10,735,591,000.00 to Rp478,790,894,895 with an average of Rp105,131,423,830. Similarly, the average special allocation fund amounts to Rp180,868,415,166. It shows that there is inequality in generating their income. Some regencies find difficulty in optimizing their original local government revenue while others not.

Afterwards, hausman test will be conducted. Baltagi (2005); Hsiao (2003) explain that Hausman & Taylor (1981) suggested comparing β Within and β GLS. The null hypothesis $H_0: E(u_{it} | X_{it}) = 0$ while the alternative hypothesis $H_a: E(u_{it} | X_{it}) \neq 0$, which means the null hypothesis implies that the estimators of FEM and REM do not differ and vice versa.

Table 3. Hausman test

Variables	Fixed	Random	Difference	Standard Error
General Allocation Fund	2.215218	1.367121	0.8480975	0.2826568
Sharing Fund	0.0969941	0.3480615	-0.2510674	0.0873672
Special Allocation Fund	1.262016	1.29479	0.0327745	0.1578651
Original Local Government Revenue	0.2501852	1.079388	-1.329573	0.2982633

Test: H_0 : difference in coefficients not systematic $\chi^2(4) = (b-B)'[(V_b-V_B)^{-1}](b-B) = 32,81$
Prob> $\chi^2 = 0.0000$

Source : Processed Research (2020)

The results in Table 3 imply that the p-value $\text{prob} > \chi^2$ of 0.0000 is less than 0.05 (5% significant). It rejects the null hypothesis and confirms that random-effect would be inconsistent, and the fixed effect is most suitable for this model. Borenstein, Hedges, Higgins, & Rothstein, (2010) stated that one proper effect size underlies all the studies in the analysis using the fixed-effect model. All observed effects are due to sampling error.

Table 4. Fixed Effect Regression Results

Table 4. Fixed Effect Regression Results						
Group variable: panelid					Number of obs	98
R-sq:					Number of groups	14
within = 0.8718					Obs per group:	
between = 0.8960					min	7
overall = 0.8735					avg	07.00
					max	7
					F(4,80)	135.97
corr(u_i, Xb) = -					Prob > F	0.0000
0.6765						
Local Government Expenditure	Coef.	Std. Err.	t	P> t 	[95% Conf. Interval]	
General Allocation Fund	2.215.218	0.3003123	7.38	0.000	1.617.578	2.812.859
Sharing Fund	0.0969941	0.3574259	0.27	0.787	--6.143061	0.8082943
Special Allocation Fund	1.262.016	0.2136483	5.91	0.000	0.846842	1.687.189
Original Local Government Revenue	-0.2501852	0.3259345	-0.77	0.445	-0.8988154	0.3984451
Constanta	504000000000	176000000000	2.86	0.005	855000000000	154000000000
rho	0.7984357				(fraction of variance due to u_i)	
F test that all u_i=0:	F(13, 66) = 3.04				Prob > F = 0.0011	

Source: Processed Research (2020)

Table 4 shows the fixed effect regression in this research. From the results of the constant regression test, both general allocation funds and special allocation funds have a positive effect on local government expenditure with a p-value (0.000) smaller than 0.05. Likewise, the coefficient of both is 2.215218 and 1.262016 respectively, which means that an increase of 1 unit will increase local government expenditure by around 2.215218 and 1.262016 units. This research is in line with previous research (Amalia, 2017; Iskandar, 2012; Pradiatmi & Wibowo, 2017; Prakosa, 2004; Solikin, 2016). This shows how dependent the local government is on the balancing budget from the central government to finance their local government expenditures.

On the other hand, the sharing fund does not effect on local government expenditure where the p-value (0.787) is greater than 0.05. This shows that an increase in profit sharing by 1 unit is not significant in increasing the local government expenditure by 0.0969941 units. These results are in line with the research of Mundiroh (2019); Prastiwi, Nurlaela, & Chomsatu (2016).

Likewise, original local government revenue does not effect where the p-value (0.445) is greater than 0.05. This means that an increase in original local government revenue by 1 unit will not reduce local government expenditure by -0.2501852 units. It is based on the theory of fiscal federalism that that achieving economic growth can be done by implementing regional autonomy and fiscal decentralization. Original local government revenue is one measure of the

success of local governments in increasing regional autonomy. However, in reality, referring to the results of the study, it does not affect on local government expenditure. The original regional income has not made a significant contribution to the regional budget so that regional governments still depend on central government transfer funds to finance their local government expenditures.

The Flypaper effect is calculated by the coefficient or value of the independent variables. If the coefficient value of a balanced budget is greater than the original local government, and both are significant, it can be assumed that a flypaper effect occurs. The results obtained in Table 4 show that the general allocation fund coefficient of 2.215218 and special allocation fund 1.262016 is more dominant than the original local government revenue coefficient of -0.2501852, thus indicating a flypaper effect on the management of regional expenditures in regencies/cities in West Kalimantan Province. Simultaneously, sharing fund did not find a flypaper effect because it has a coefficient value of 0.0969941, which is smaller than the original local government revenue coefficient. This study is in line with several findings Amalia (2017); Dollery & Worthington (1995); Solikin (2016). It shows that the dependence between regions and cities in West Kalimantan on the central government is still relatively high. Likewise, the p-value of original local government revenue is not significant (p-value $0.445 > 0.05$) indicating that the flypaper effect exists in West Kalimantan Provincial, as concluded by Amalia (2017); Iskandar (2012); Prakosa (2004); Solikin (2016).

The general allocation funds received by the West Kalimantan Provincial government have an enormous compared to the original local government revenue. So that if the amount of this fund is reduced, it will affect the reduction in local government revenues. Likewise, the special allocation funds are almost entirely higher in value than the original local government revenue. The regional government should adequately utilize the balancing fund provided by the central government to improve the provision of community services, stimulate the regional economy, and maximize the potential of the region to increase the original regional income. However, unfortunately, the use of these transfer funds was not effective because the funds were mostly used to meet routine expenditures rather than capital expenditures, and this happened repeatedly. This allocation of funds also had a negative effect, namely that it increased the dependence of local governments on the central government, which eventually led to the flypaper effect phenomenon.

The lack of optimal local government in creating and maximizing its economic potential will impact local revenue, which is difficult to increase. If this continues, the aim of regional autonomy in realizing fiscal independence will also be hampered. The regional government will continue to expect equal funding assistance from the central government. To reduce this flypaper effect, it would be better if the central government should pay more attention to the allocation of balancing funds, especially general allocation funds and special allocation funds to local governments. The management used for regional spending must be right on target and following the expected goals. Also, the central government is expected to strictly evaluate the use of these funds to meet the minimum limit in capital spending. On the other hand, local governments must work hard in increasing sources of regional income, such as increasing taxes, user fees, and encouraging investment into the West Kalimantan region.

CONCLUSION

The flypaper effect is a condition in which local governments tend to be responsive to funds provided by the central government rather than the original regional income itself in financing regional expenditures. This study finds that the flypaper effect phenomenon has

occurred during the period 2013-2019 in local government expenditure, which comes from general allocation funds and special allocation funds in regencies/cities in West Kalimantan Province. Meanwhile, original local government revenue and sharing funds do not show a flypaper effect. The amount of allocated funds given each year, especially the general allocation funds, proves that local governments have not been able to meet their expenditures independently so that the level of dependence on the central government is still very high. The flypaper effect also shows that local governments have not maximally exploited their regional economic potential to increase original local government revenue.

Suggestion

This research's limitation is that the data taken is only seven years, and the sample used is limited to West Kalimantan. Likewise, the observed variables only use original local government revenue, general allocation funds, special allocation funds, and sharing funds. Thus, it is hoped that further research can expand the period of observation and the object of research so that it not only presents data for one province but can even compare the flypaper effect phenomenon that occurs in other countries. The dependent variable in local government expenditure can also be more specified in certain types of expenditure.

REFERENCES

- Acar, Y. (2019). Does Flypaper Effect Exist? New Evidence from Turkish Municipalities. *Sosyoekonomi*, 27(39), 55–68. <https://doi.org/10.17233/sosyoekonomi.2019.01.03>
- Amalia, F. (2017). Flypaper Effect of Regional Expenditure and It's Impact to Regional Inequality in Indonesia. *Signifikan: Jurnal Ilmu Ekonomi*, 6(1), 125–138. <https://doi.org/10.15408/sjie.v6i1.3293>
- Aragon, F. M. (2013). *Local Spending, Transfers, And Costly Tax Collection*. 66(June), 343–370.
- Armawaddin, M., Rumbia, W. A., & Afiat, M. N. (2017). Analisis Flypaper Effect Belanja Daerah Kabupaten/Kota di Sulawesi. *Jurnal Ekonomi Dan Pembangunan Indonesia*, 18(1), 77–91. <https://doi.org/10.21002/jepi.v18i1.773>
- Baltagi, B. H. (2005). *Econometric Analysis of Panel Data* (Third Edit). John wiley & Sons, Ltd.
- Bodman, P., & Hodge, A. (2010). What Drives Fiscal Decentralisation? Further Assessing the Role of Income. *Fiscal Studies*, 31(3), 373–404. <https://doi.org/10.1111/j.1475-5890.2010.00119.x>
- Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2010). A basic introduction to fixed-effect and random-effects models for meta-analysis. *Research Synthesis Methods*, 1(2), 97–111. <https://doi.org/10.1002/jrsm.12>
- Croissant, Y., & Millo, G. (2008). Panel data econometrics in R: The plum package. *Journal of Statistical Software*, 27(2), 1–43. <https://doi.org/10.1186/1478-7954-4-13>
- Cruz, T., & Silva, T. (2020). Minimum Spending in Education and the Flypaper Effect. *Economics of Education Review*, 77, 102012. <https://doi.org/10.1016/j.econedurev.2020.102012>
- Dollery, B., & Worthington, A. (1995). Federal Expenditure And Fiscal Illusion: An Australian Test Of The Flypaper Hypothesis. *Publius: The Journal of Federalism*, 25(1), 23–34.
- Fikri, F., Pudjihardjo, M., & Sakti, R. K. (2020). Flypaper Effect Analysis on Regional Expenditure in East Java Province, Indonesia. *Jurnal Ekonomi & Studi Pembangunan*, 21(2), 249–257. <https://doi.org/10.18196/jesp.21.2.5045>

- Hausman, J. A., & Taylor, W. E. (1980). Panel Data and Unobservable Individual Effects. *Econometrica*, 1377–1398.
- Hsiao, C. (2003). Analysis of Panel Data Second Edition. In *Cambridge University Press*.
<https://doi.org/10.5771/9783845289892-15>
- Inayati, N. I., & Setiawan, D. (2018). Fenomena Flypaper Effect Pada Belanja Daerah Kabupaten/Kota Di Indonesia. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, 1(2), 220–239. <https://doi.org/10.24034/j25485024.y2017.v1.i2.2062>
- Iskandar, I. (2012). *Flypaper Effect Pada Unconditional Grant*. 13(2005), 113–131.
- Klevmarcken, N. A. (1989). Panel Studies: What We Can Learn from them? Introduction. *European Economic Review*, 33(2–3), 523–529. [https://doi.org/10.1016/0014-2921\(89\)90131-1](https://doi.org/10.1016/0014-2921(89)90131-1)
- Kunst, R. M. (2013). *Econometric Methods for Panel Data Based on the books by Baltagi : Econometric Analysis of Panel Data and by Hsiao : Analysis of Panel Data Outline Introduction Tests in panel models Poolability tests Testing for the presence of random effects The Hausman*. 1–20.
- Muhammad, S., Zulham, T., Sapha, D., Fitriyani, & Saputra, J. (2019). Investigating the public spending and economical growth on the poverty reduction in Indonesia. *Industrial Engineering and Management Systems*, 18(3), 495–500. <https://doi.org/10.7232/iems.2019.18.3.495>
- Mundiroh, S. (2019). Pengaruh Pertumbuhan Ekonomi Daerah, Pendapatan Asli Daerah (PAD), Dana Alokasi Umum (DAU) Dan Dana Bagi Hasil (DBH) Terhadap Alokasi Belanja Modal Daerah. *Jurnal Akuntansi Berkelanjutan Indonesia*, 2(1), 104. <https://doi.org/10.32493/jabi.v2i1.y2019.p104-122>
- Nasir, M. S. (2019). Analisis Sumber-Sumber Pendapatan Asli Daerah Setelah Satu Dekadeotonomi Daerah. *Jurnal Dinamika Ekonomi Pembangunan*, 2(1), 30. <https://doi.org/10.14710/jdep.2.1.30-45>
- Nugroho, M. R. (2017). Flypaper Effect of Regional Expenditures in Yogyakarta. *Shirkah: Journal of Economics and Business*, 2(3), 353–374. <https://doi.org/10.22515/shirkah.v2i3.168>
- Pillai, V. (2016). Panel Data Analysis with Stata Part 1 Fixed Effects and Random Effects Models. *Munich Personal RePEc Archive*, 70986, 1–56.
- Pradiatmi, I. N., & Wibowo, H. (2017). Pengaruh Kinerja Keuangan Dan Belanja Modal Terhadap Pertumbuhan Ekonomi Pada Kabupaten/Kota Di Jawa Tengah. *Jurnal Reviu Akuntansi Dan Keuangan*, 5(2), 759–768. <https://doi.org/10.22219/jrak.v5i2.5152>
- Prakosa, K. B. (2004). Analisis Pengaruh Dana Alokasi Umum (DAU) Terhadap Prediksi Belanja Daerah (Studi Empirik di Wilayah Propinsi Jawa Tengah dan DIY). 8(2), 101–118.
- Prastiwi, Ayu, Nurlaela, S., & dan Chomsatu, Y. (2016). Pengaruh Pendapatan Asli Daerah, Dana Perimbangan Dan Belanja Pegawai Terhadap Belanja Modal Pemerintah Kota Surakarta. *Seminar Nasional IENACO-2016*, 872–879.
- Sari, I. A. C. Y., & Supadmi, N. L. (2016). Pengaruh Pendapatan Asli Daerah Dan Belanja Modal Pada Peningkatan Indeks Pembangunan Manusia. *E-Jurnal Akuntansi Universitas Udayana*, 15(3), 2409–2438.
- Serrasqueiro, Z., Mendes, S., & Nunes, P. M. (2008). Companies' Investment Determinants: Comparison of Different Panel Data Estimators. *South African Journal of Economic and Management Sciences*, 11(4), 475–493. <https://doi.org/10.4102/sajems.v11i4.283>
- 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>
- Sour, L. (2013). the Flypaper Effect Inmexican Local Governments. *Estudios Economicos*, 28(1), 165–186.
- Suyanto, S. (2015). Flypaper Effect Theory Dalam Implementasi Kebijakan Desentralisasi Fiskal. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, 11(1), 69. <https://doi.org/10.23917/jep.v11i1.335>
- Syathi, P. B. ;Fitriyani. E. (2020). Block Grant (DAU) and Poverty Alleviation In Indonesia. *Ekonomi Dan Kebijakan Publik Indonesia*, 6(2), 203–214.
- Thornton, J. P. (2012). Flypaper Nonprofits: Federal Grants and Nonprofit Expenditures. *SSRN Electronic Journal, February 2011*. <https://doi.org/10.2139/ssrn.1868227>
- Vegh, C. A., & Vuletin, G. (2015). Unsticking the flypaper effect in an uncertain world. *Journal of Public Economics*, 131(April), 142–155. <https://doi.org/10.1016/j.jpubeco.2015.09.001>
- Zainuddin, Z., & Batubara, M. A. R. (2020). Dampak Flypaper Effect Dana Alokasi Umum Dan Flypaper Effect Pendapatan Asli Daerah Terhadap Pertumbuhan Ekonomi. *Jurnal Serambi Akademica Jurnal Pendidikan, Sains, Dan Humaniora*, 8(8), 1311–1319.