



Fiscal Illusion and Asymmetric Response of Regional Financial Performance

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Article Information Abstract

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Purpose of this research is to prove whether there is a fiscal illusion in the regional financial performance of districts/cities in West Papua and to capture asymmetric response of regional spending. Period in this research from 2010-2019 in West Papua Province which consists of nine districts/cities considering the availability of data, data sources from the Central Statistics Agency (BPS) and the Ministry of Finance (KEMENKEU) Dependent variable is regional financial performance as measured by regional spending and independent variable consists of general allocation funds, special autonomy funds, regional gross domestic product, population, local taxes, local retribution and dummy variables. Analysis methods is panel data regression fixed effect approach, fiscal illusion detection refers to the model developed by Borcherding and Deacon, and response asymmetry refers to the Gennari and Messina model. Findings/Originality: Proving the existence of fiscal illusions and asymmetry responses in a panel data model, results show that there are fiscal illusions in the regional financial performance of districts/cities in West Papua Province as seen from the negative and significant correlation of regional spending with local taxes. There is an asymmetrical response to regional spending in increasing the balancing fund, seen from the negative and significant dummy variable value in the model.

INTRODUCTION

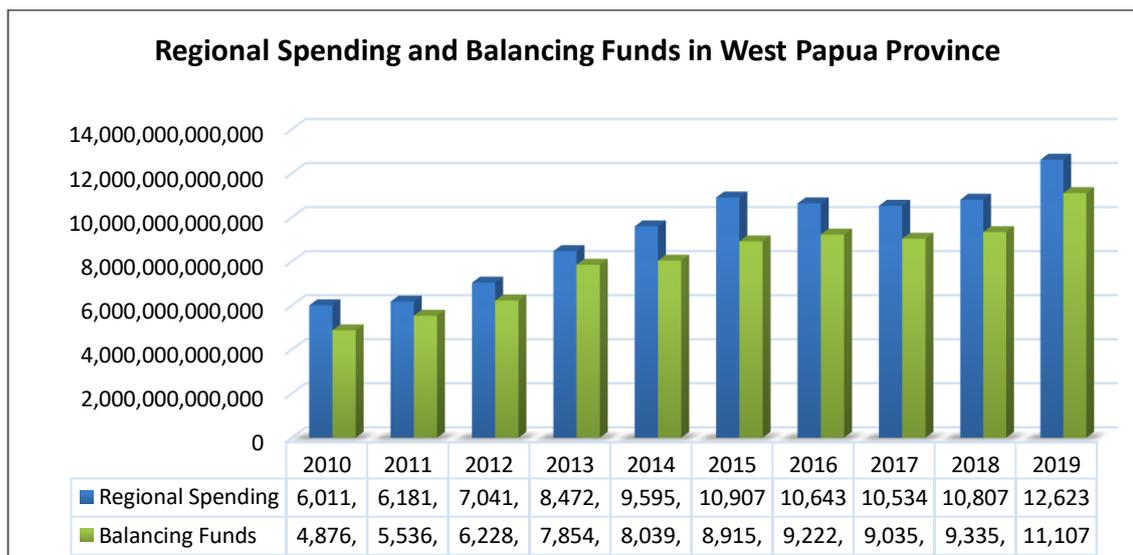
Act Number 32 of 2004 concerning regional governance states that regions are given rights, powers and obligations to independently regulate and manage government for the benefit of local community. In essence, regions are given greater authority including budget management. Sow and Razafimahefa (2015) that fiscal decentralization can improve the efficiency of public services with an adequate political and institutional environment, sufficient expenditure seems necessary to obtain favourable outcomes and adequate revenue. Optimization of regional potential, both human resources and other resource wealth, has opportunity to push the region towards a better direction and will have a positive impact on regional independence and development. This condition indicates that more developed a region, the lower level of dependence on the central government is assumed.

Makreshanska and Petrevski (2019) revealed that fiscal decentralization in terms of regional expenditures is important to be adjusted to the size and capacity of the region in order to explore sources of income. Distribution of balancing funds by central government is expected so that regions can increase their own regional income. Oates (2008) that occurrence of a fiscal gap or inequality in regional income and expenditure caused by decreased regional fiscal independence, it is detected that government transfers constitute the largest part of regional revenue. Das and Skidmore (2017) revealed that there tends to be an asymmetric response to central government assistance in supporting regional financial performance, proving that local government spending is greater than central assistance even when economic growth and population decline. Gallo and Dufrechou (2018) in a study in Uruguay concluded that there is an asymmetric response to central government transfers. Responses shown by each region to central government transfers differ in relation to the readiness and ownership of potential revenue sources so that tends to be an asymmetrical

behavior towards central government transfer funds.

In other words, fiscal decentralization is the delegation of fiscal management authority in the context of managing and improving regional performance where in fiscal management there is a tendency for different local government responses. Different ways of responding to the main fiscal indicators can lead to behavior that ends up being symmetrical or asymmetrical, this asymmetrical response causes the phenomenon of fiscal illusions. Heyndels and Smolders (1994) theoretically, fiscal illusions refer to biased perceptions of fiscal parameters, either from the ignorance of the demand side or the misuse of the supply side, the results of research from 302 areas in Flemish show that there is a fiscal illusion. Levaggi and Zanola (2003) analyze whether there is an asymptomatic response to the reduction in grants from the central government to local governments, the findings indicate that there is a stronger asymmetric response from grants while a lower response from local resources means that the government prefers to experience a deficit rather than reduce spending. Gerard and Ngangue (2015) examined the relationship between fiscal illusions and budget policy in 15 countries in Africa, empirical results show that there is a positive and significant relationship between fiscal illusions and public deficits, which means that fiscal illusions affect budget policy. Guziejewska *et al.* (2021) revealed the contribution of external funds to local government expenditures sourced from central government transfers with a larger amount than local government contributions, different income categories tend to affect the response of regional spending.

Further developments, performance of regional financial capacity in Indonesia generally still relies on balancing funds, including the West Papua Province. The performance of regional financial capacity is one indicators to measure the ability of the regions to regional autonomy. The development of regional spending and balancing funds in West Papua Province as follows.



Source: BPS and Kemenkeu, 2020

Figure 1. Regional Spending and Balancing Funds in West Papua Province in 2010-2019

Figure 1 shows that the development of regional spending and balancing funds in West Papua covers 8 districts and 1 city, namely Fakfak District, Kaimana, Teluk Wondama, Bintuni, Manokwari, South Sorong, Sorong, Raja Ampat and Sorong City. Regional spending and balancing funds tend to increase, the average increase for each district and city is 8-14 percent. The highest growth in regional spending and balancing funds was Bintuni District with 14.8 percent and 15 percent. Meanwhile, the lowest was Manokwari District at 5 percent and 6 percent. Share of balancing funds to regional spending reaches 83-91 percent, indicates that districts/cities in West Papua still rely on central assistance in regional financial management or have high dependency. This condition illustrates that local governments are very reactive to central government assistance. The large contribution of balancing funds to West Papua's regional income should be an impulse factor in managing the potential local resources to increase local revenue. The regional economy that tends to increase can be seen through the indicators of gross regional domestic product showing that West Papua has increased every year, meaning that West Papua is able to improve management and performance but this condition is not followed by the

development of West Papua's regional independence which in fact tends to decline, this is indirectly. indicates that the regions have a high dependence on the central government.

Exploration of regional potential in increasing revenue must be carried out in increasing regional independence. Local income is the main indicator that the regional government should focus on to reduce degree of dependence on the center government. In fact, share of local income to regional spending in West Papua Province averaged 4.5 percent for each district/city. The small share of regional spending is not significant for regional independence. According to Soo (2013) revealed that central government grants increased rapidly compared to local tax revenues in the regions. In line, Travis (2017) observes the response of local governments to central government that grants vary between regions and tend to be larger even for areas with less dense populations. With the increase in grants, local governments tend to spend more, asymmetric effect causes local government spending to be inefficient. Growth of local revenue in each district/city of West Papua tends to fluctuate by an average 25 percent per year, with the highest being Manokwari District 37 percent and the lowest Kaimana District 12.5

percent. The significant percentage growth in local revenue indicates that the motivation of the West Papua government to explore regional potential is fairly good. West Papua's regional revenue has increased year to year with the largest contribution from central government transfers through the general allocation fund component. However, it shows that the development of local revenue has fluctuated quite sharply, meaning that it has a large increase or decrease. This phenomenon by Dollery and Worthington (1995) indicates a fiscal illusion. Increasing government spending should benefit in the future with the increase in regional revenues, this condition indicates a symmetrical effect and if the opposite occurs then an asymmetrical effect occurs.

The fiscal illusion was introduced by Amilcare Puviani in 1903, occurs when authorized part in making decisions in an institution creates an illusion in financial preparation so that it is able to direct other parties to respond and assess. Furthermore, Adi and Ekaristi (2009) stated that budget engineering actions were carried out by local governments in order to stimulate and motivate the public to contribute more and encourage a larger allocation of funds from the central government. If there is an asymmetrical response, this indicates a fiscal illusion. Guziejewska (2016) that fiscal illusions arise as a result of decentralization, the budget system between the central government and local governments in Poland supports the occurrence of fiscal illusions, because regional budgets are mostly derived from central government transfers. Baekgaard and Hansen (2016) generally see fiscal illusions through standard arguments about policy objectives based on the value of benefits and costs. By trying the special case of the fiscal illusion attention model where the opinion of this model depends on the importance of policy objectives, it can be concluded that the mechanism behind the occurrence of the fiscal illusion of attention and framing is not incomplete information. Kusuma (2017) in his research in East Java Province in 33 districts/cities obtained the result that there is a fiscal illusion shown by

the elasticity of grants which is higher than local government revenues. Ilmiyyah *et al.* (2020) detected a fiscal illusion in South Sumatra Province in 15 districts/cities that there was a fiscal illusion in South Sumatra both in using the spending approach and the expenditure approach. Onyango-Delewa (2020) using fiscal illusion theory in 182 regions in Northern Uganda, the results obtained that fiscal imbalances, politics, tax inefficiency affect changes in spending efficiency.

If the use of balanced funds by local governments shows inefficiency, it indicates that there is a fiscal illusion. Asymmetry response to budget management will have a negative impact on local government efforts to increase local revenue. Melo (2002) analyzes the asymmetrical response and flypaper effect in Colombia during the decentralization process with different levels of autonomy in managing transfers, tax and debt expenditures, the results show that the flypaper effect occurs when sub-nationals are highly dependent on intergovernmental transfers and asymmetric analysis in responding. transfers show that it attempts to compensate for the reduction in transfers when the percentage of transfers in the income area is high. Deller and Maher (2006) examined the fiscal relationship between state and local governments, the results indicated that there was an asymmetrical relationship. It was proven that there was a fiscal replacement effect. It also found that changes in grant assistance had an impact on different types of expenditure, meaning that if the assistance was reduced there was a tendency for fiscal reimbursement to occur. Sour (2013) analyzes regional transfers in Mexico where it is confirmed that there is an asymmetric effect, meaning that the authorities increase expenditure by a large amount in response to increased transfers and reduce in response to decreased transfers. Bourdeaux and Warner (2015) analyzed the federal government's stimulus funds for education in the face of a recession, but this grant phenomenon found that there was an asymmetry in response to the increase and decrease in the

types of grants between jurisdictions. Olaoye, et.al. (2020) examines the asymmetrical phenomenon of the relationship between government spending and economic growth in ECOWAS (Economic Community of West African States), the results of the analysis reveal that there is evidence of asymmetry in the relationship between government spending and economic growth. Hussain et al. (2020) investigates the asymmetric effect of the fiscal deficit on economic growth in Pakistan, the results show that in terms of public spending there is an asymmetric effect of the fiscal deficit in the short term while in terms of public income there is an asymmetric effect in the short and long term.

The research objective to be achieved is to analyze the presence or absence of fiscal illusions and asymmetrical responses in regional financial performance in West Papua Province. The limitation in this study is that it only includes 9 districts/cities from 13 existing districts/cities, namely Fakfak, Kaimana, Wondama Bay, Bintuni, Manokwari, South Sorong, Sorong, Raja Ampat and Sorong districts. Due to data availability.

RESEARCH METHODS

Data sources from Central Bureau of Statistics and the Directorate General of Fiscal Balance, Ministry of Finance of Indonesia. Type of data in this research is panel data which is a combination of time series data from 2010 - 2019 and a cross section of 9 districts/cities in West Papua Province. Some advantages using data panels are being able to overcome individual heterogeneity, providing more complete information and capturing data dynamics and efficiency (Gujarati, 2003). Hsiao (2014) revealed that panel data increases degree of freedom, data variability is greater and reduces collinearity between independent variables. Using panel data regression, the detection of fiscal illusions with revenue enhancement refers to Borcharding and Deacon model (1972) where the model in this research formulated in form of the following natural logarithmic equation.

$$\ln Y_{it} = \alpha_0 + \alpha_1 \ln X_{1it} + \alpha_2 \ln X_{2it} + \alpha_3 \ln X_{3it} + \alpha_4 \ln X_{4it} + \alpha_5 \ln X_{5it} + \alpha_6 \ln X_{6it} + \alpha_7 A_{it} + e_{it} \dots\dots (1)$$

where: Y_{it} = regional spending; X_{1it} = general allocation funds; X_{2it} = special autonomy funds; X_{3it} = gross domestic regional product; X_{4it} = population; X_{5it} = local tax; X_{6it} = local retribution; α_0 = constant; $\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6, \alpha_7$ = regression coefficient, and; e = error term. A_{it} to determine asymmetry response. Furthermore, referring to Gennari and Messina (2014), the A_{it} value could be obtained by equations as follows:

$$A_{it} = D_t(Z_t - Z_{t-1}) \dots\dots\dots (2)$$

D_t is dummy = 1, if central government transfer component is reduced and; 0 otherwise. Null asymmetry hypothesis is rejected ($H_0: \alpha_7 = 0$) proves α_1, α_2 is response of regional spending to an increase in central government transfers, while $(\alpha_1 + \alpha_2) + \alpha_7$ is the coefficient on decrease in central government transfers, if $\alpha_7 < 0$ indicates that there is asymmetry temporary fiscal replacement if $\alpha_7 > 0$ occurs super flypaper effect.

Dependent variable is regional spending, which is the expenditure of the district/city government in West Papua in one fiscal year, in rupiah; Independent variables consist of: X_1 is the general allocation fund for districts/cities in West Papua, which is a fund with aim of equalization to fund regional needs, in rupiah; X_2 is a special autonomy funds, to help fund special activities which are regional affairs, in rupiah; X_3 is gross domestic regional product, in rupiah; X_4 is population; X_5 is local tax, in rupiah; X_6 is a local retribution, in rupiah, and; A is the dummy.

The hypothesis developed in this study that it is assumed that the general allocation fund variable (X_1) has a positive and significant effect on regional spending; it is assumed that the special autonomy fund variable (X_2) has a positive and significant effect on regional spending; it is assumed that the gross regional domestic product variable (X_3) has a significant and positive effect on regional spending; it is assumed that the population variable (X_4) has a positive and significant effect; it is assumed that the variables of regional taxes (X_5) and regional retributions (X_6) have a negative effect on

regional spending, this supports the notion that there is a fiscal illusion; while the balance fund dummy variable is assumed to be negatively correlated, supporting the assumption that there is an asymmetric response.

In panel data regression, there are three approaches to get best panel regression results, namely the common effect, fixed effect and random effect approaches. To determine best approach, results of three approaches will be compared using several tests. Chow test to compare results of common effect with fixed effects, Lagrange Multiplier test to compare common effect results with random effects and Hausman test to compare the results of fixed effect with random effects.

RESULTS AND DISCUSSION

Panel regression testing to get best results. As has been stated in the research methods that in the application of panel data regression, three approaches are used, namely the common effect approach, fixed effect and random effect. Furthermore, it will be tested, which is the best approach among the three approaches which are then used in this study. The test to determine which is the better approach between the common effects approach and the fixed effect approach, the Chow test is used. The criteria for the Chow test are that if the test probability value

is greater than 5 percent then the common effect result is better than the fixed effect, but on the contrary if the Chow test probability value is less than 5 percent then the fixed effect approach is better. Based on the results of the Chow test, it is found that the probability value of 0.0000 is smaller than 5 percent so that it can be concluded that the fixed effect approach is better than the common effect approach.

Because the fixed results on the Chow test results are better, the Lagrange multiplier test, which is a test to compare which is better between the common effects approach and the random effects approach, is deemed unnecessary, so the next step is to carry out the Hausman test. Hausman test was applied to compare the fixed effect approach with the random effect approach, which is the best approach in the panel regression model. The Hausman test criteria in comparing fixed effects with random effects is if the probability value of the Hausman test is less than 5 percent then the best approach is fixed effect and vice versa if the probability value of the Hausman test is greater than 5 percent then the best approach is the random effect approach. Hausman test results show that the probability value obtained is 0.0001 where this value is smaller than 5 percent so that the best approach in this study is the fixed effect approach. The test results can be seen in the following table.

Table 1. Chow test and Hausman test Result

Test	Chi-sq Stats	Probability	Description
Chow test	39,3902	0,0000	< α 5 %, Fixed Effect
Hausman test	29,0902	0,0001	< α 5 %, Fixed Effect

Source: Data Processed, 2021. Eviews

Table 2. Estimation Results of Fixed Effect Approach

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNX1	0.498709	0.060606	8.228674	0.0000
LNX2	0.146169	0.029168	5.011348	0.0000
LNX3	0.030569	0.167524	0.182478	0.8557
LNX4	1.022000	0.486804	2.099405	0.0392
LNX5	-0.002432	0.000917	-2.651423	0.0098
LNX6	-0.001220	0.000637	-1.914991	0.0594
A	-0.055310	0.023358	-2.367968	0.0205
C	-1.311758	2.704719	-0.484988	0.6291
R-squared	0.943274	Durbin-Watson stat		1.532306
F-statistic	82.03419			

Source: Data Processed, 2021. Eviews

Table shows that variables general allocation funds and special autonomy funds have a positive and significant effect 1 percent on regional spending, which means that if the general allocation funds and the special autonomy funds increase, regional spending will also move in the same direction. Ewetan et al. (2020) that fiscal federalism promotes economic development by giving greater responsibility to local governments. Halim (2014) revealed that the general allocation fund is a transfer of funds from the central government in the form of a block grant which indicates that the funds are transferred to the regions and become the full authority of the regions to utilize and allocate in accordance with regional priorities and needs to improve services to the community in the context of regional autonomy.

This condition gives regions the flexibility to implement the use of general allocation funds according to the needs and aspirations of the region. It can be said that the general allocation fund aims for financial equity that can provide continuity and sustainability of providers of basic service providers to the community. The general allocation fund is a component based on the fiscal gap, so that this instrument is to overcome horizontal imbalances allocated for financial equity between regions which serves to reduce inequality in capabilities between regions and seek stimulation in increasing the productivity of regional original income. The average value of the general allocation fund in West Papua Province is 86 percent of the total regional revenue and this value is increasing every year. It can be seen that the regional dependence on the center tends to be high and the increase in regional fiscal capacity tends to be slow, this condition is because the regions are less able to increase the intensification and diversification of local revenue capacity in this case through local revenue so that it has an impact on the delay of West Papua to increase regional independence.

The special autonomy funds variable has a positive impact on regional spending, meaning that it provides a significant additional power of the regional budget in encouraging the acceleration of regional economic movements.

Special autonomy took effect in Papua Province in 2002 based on Act Number 21 of 2001 concerning Special Autonomy for Papua Province, for West Papua Province the implementation of special autonomy was granted through Act Number 35 of 2008 concerning Stipulation of Government Regulations in Lieu of Act Number 1 In 2008 concerning Amendments to Act Number 21 of 2001 concerning Special Autonomy for the Papua Province to become a law, this provides a strong legal basis for the implementation of special autonomy in West Papua which is urgent in accelerating development, especially in the socio-economic sector and infrastructure.

The amount of funds in the implementation of special autonomy is based on statutory regulations, which is equivalent to two percent of the ceiling of the national general allocation fund which in its allocation is prioritized for education and health which is at least 30 percent and 15 percent, respectively, and there is also additional funds for infrastructure which amount determined between the government and the House of Representatives (DPR) every fiscal year to finance infrastructure development.

The value of the special autonomy budget in West Papua tends to fluctuate with an increasing trend considering that this value is not determined based on laws and regulations but through a meeting mechanism between the government and the DPR, the average growth reaches 10 percent and the average contribution to regional spending reaches 12 percent to 15 percent. In the health sector, the poverty severity index in 2012 based on BPS data was 2.65 and this figure was successfully reduced to 2.06 in 2020, the Gini coefficient value which shows the level of income inequality in West Papua in 2012 was 0.43 in 2012. By 2020, the income inequality rate can be reduced to 0.38. In the field of education, the school participation rate, which shows the ratio between the number of high school students and the school-age population, shows an improving trend, in 2012 the high school enrollment rate was 67.18 and in 2020 it

was 81.49. the development of education and health developed positively and significantly.

Local tax variable has a negative effect and significant 1 percent, while local retribution also has a negative effect and significant 10 percent. Based on Act Number 28 of 2009 concerning regional taxes and regional levies, that regional taxes are mandatory contributions made by individuals or entities to the region without any direct, balanced compensation that can be imposed, which is used to finance the administration of regional governments, while levies Regional levies are regional levies as payment for services or the granting of certain permits specifically provided and/or granted by the regional government for personal or corporate interests.

Tax and retribution are variables that theoretically have a positive effect on regional spending because increasing taxes and retribution will increase local revenue and have an impact on financial capacity, especially on regional spending instruments. Condition in West Papua is that with the transfer of central government funds, both balance funds and special autonomy funds, it creates a high dependency, the contribution of regional revenue to regional expenditure is only 3.12 percent while the contribution of tax and retribution to regional expenditure is an average of 0.2 percent.

The small contribution is thought to be correlated with the resulting effects, as expressed by Levaggi and Zanola (2003) that the government prefers to experience a deficit rather than reduce spending. Buettner and Krause (2020) reveal that income redistribution provides incentives for states to increase rather than lower taxes, the allocation of transfer funds to developing countries is generally based on the spending aspect and less focused on local tax collection capabilities. Azolibe (2020) in his research in Asia and Africa found that the population has a significant effect on government spending, in this study the population variable has a significant and positive 5 percent effect on regional spending in West Papua. While gross regional domestic product is not significant. The balanced fund dummy variable has a negative

and significant 5 percent effect on regional spending.

To check whether regression coefficient obtained is significant, t test and F test are used. The t-test aims to see the effect of independent variables individually in explaining variation in dependent variable. Test criterion is to compare the t-statistic with the t-table. At $\alpha = 5$ percent, t-table value is 1.6636, while the estimation results in table 2 show that the t-statistic of the variable general allocation funds, special autonomy funds, population, regional taxes and dummy has a significant effect on $\alpha 5$ percent on regional spending. Meanwhile, the variables of gross domestic regional product and local retribution are not significant at $\alpha 5$ percent of regional spending.

The F test aims to see the effect of all the independent variables in the model together on dependent variable. Test criteria is to compare the value of F-statistic with the F-table. Obtained the F-statistic value is 82.034 while the F-table value is 2.122. Because F-statistic is greater than the F-table with a probability value of 0.000, it is concluded that all the independent variables together significantly affect regional spending. The quality of the empirical model used is able to explain the variation in the dependent variable by 94.3 percent, so the model is good.

As stated previously, the implementation of regional autonomy has direct implications for large budget requirements, so that local governments receive funding grants from the central government for this policy. Delegation of authority is followed by fiscal responsibility which aims to reduce fiscal disparities and finance the authority. A common problem that occurs in the provinces and districts/cities in West Papua Province is the high dependence on the allocation of central government grants in financing capital expenditures and development expenditures, this condition is not accompanied by optimizing the development of local potentials owned by the regions.

This phenomenon is what Dollery and Worthington say is a fiscal illusion which can be described that the greater government spending in this case regional spending, the government

should benefit from increased local government revenues in the coming period, which in the era of decentralization this has an impact on increasing regional independence or can reduce dependence. Results show that there is a fiscal illusion in regional financial performance in West Papua Province. Gemmel et al (1998) argue that if there are variables that are negatively correlated with government spending, it is evident that there is a fiscal illusion, namely an increase in central government transfers but not offset by local revenue receipts. In table 2, there is a negative correlation between local taxes and local retribution with regional spending at significant α 1 percent and 10 percent.

Wagner (1976) in Dollery and Worthington (1995) describes the fiscal illusion in a model that explains that local governments tend to prepare lower revenue budgets than the realization of tax revenues that can be obtained, this condition results in a fiscal illusion where the central government allocates general allocation funds. to meet the needs of regional expenditures, which are not necessarily regional needs, resulting in budget allocations that are greater than what the regions should need. Adi and Ekaristi (2009) show that there is a fiscal illusion in the regional revenue and expenditure budgets of districts/cities in Central Java Province, a negative correlation between regional spending and research variables indicates that utilization of regional revenues is not optimal.

Adi (2007) states that regional expenditure is the dependent variable the amount of which depends on the source of regional financing, both from the balance fund and regional revenue, so that if there is a negative correlation between income variables and regional expenditure, there will be a fiscal illusion. Hapsoro and Yoduke (2019) suggest that the contribution of general allocation funds in Sulawesi, which is greater than local revenue, indicates a fiscal illusion in the form of a flypaper effect on regional spending. Giegiel and Wasiluk (2020) the occurrence of fiscal illusions in most countries in Europe and around the world indicates that the larger the size of the fiscal illusion, the lower the transparency of public finances, which is reflected in

inadequate efficiency and effectiveness. Further that in the long run fiscal illusions have a negative impact on economic performance.

Value of the dummy variable to capture asymmetry response to regional spending for an increase in the balance fund. Results show a negative and significant correlation of α 5 percent, indicating that there is an asymmetry response to fiscal substitutes, namely that the district/city governments in West Papua respond to a decrease in the balance fund by increasing local revenue. In the long term, the asymmetric effect on budget management will have a negative impact on local governments' efforts to increase their own local revenue.

The proportion of general allocation funds which is still high, reaching an average of 86 percent in West Papua Province towards regional expenditures is not in line with the objectives of regional autonomy which from the beginning has encouraged regions to be able to spur local potentials to achieve self-reliance by increasing local revenue. lead to asymmetric behavior in the West Papua regional government. Alderete said that when central government grants are given to regions to increase regional fiscal capacity, there is a tendency to speculate that local government spending responds to changes in transfers asymmetrically.

In West Papua Province, all 9 regencies/cities experienced response movements that tended to be similar, for example when general allocation funds increased by 6 percent, regional expenditures for each district/city responded by experiencing a larger increase, reaching 10 percent or even 15 percent, as well as On the other hand, if the general allocation fund has decreased, for example by 5 percent, the response shown in regional spending will experience a greater decline.

This shows an indication that the high increase in spending is due to the inefficiency of local government spending. It can be seen that the occurrence of asymmetric behavior is partly because the central government does not have or obtain sufficient information about regional capacities and local potentials for optimizing revenues. This condition has prompted local

governments to take advantage of existing opportunities by not maximizing the potential for development and increasing local revenue, this is so that the general allocation funds given remain large which then has an impact on decreasing regional independence.

The general allocation fund is an instrument to meet regional fiscal needs in the context of decentralization and to cover fiscal gaps. Local governments use this instrument as a means or attempt to make grants provided by the central government able to meet the needs of regional expenditures. Levaggi (1991) says that the relationship between the central government and local governments is illustrated like that of a principal and an agent. The central government, in this case described as the principal, will give authority to the local government, in this case described as an agent to provide public goods and services in the area.

The objectives of this grant are, among others, that local governments are able to manage and determine for themselves the most efficient and effective management and utilization of transfers in accordance with regional needs in the context of decentralization. There is a tendency for problems to arise when there is asymmetric information between the central government and local governments, which means that the central government does not have control over the use of the transfer funds. Asymmetric behavior also occurs when local governments receive funds from the center for general allocation funds, which decrease compared to the previous period, local government spending will decrease, but when central government transfers are larger than the previous period, local governments will increase their regional spending, this condition is not accompanied by increasing the utilization of local potential in spurring an increase in local revenue which is expected to be greater.

This is in line with research conducted by Adi (2007) that in the era of decentralization, the contribution of local revenue in funding local spending has decreased. Davey (1988) states that transfers are grants that are not needed by the local government if the local government understands the needs of the region and its local

potential so that regional spending is used efficiently and on target and is more diligent in terms of taxation.

CONCLUSION

The estimation results show that there is a fiscal illusion in the regional financial performance of districts/cities in West Papua Province. This indicates that the district/city government is not optimal in efficiency in budget management. It can be seen from the negative correlation of regional spending with local taxes and local retribution which are significant at α 1 percent and 10 percent. The positive correlation between general allocation funds and special autonomy funds. Asymmetry response that occurs is a type of fiscal replacement, this effect has a negative impact in the long run. Novelty in this study proves that there is a fiscal illusion in regional financial performance as indicated by the negative correlation between regional spending and taxes and the asymmetric response caught from the negative dummy variable.

In determining the amount of balance funds, central government should gather more information in addition to regional fiscal capacity and needs, good communication and transparency with local governments is expected to provide solutions in more efficient, effective and sustainable budget management. Exploring and managing regional potentials such as intensification and extensification of taxes and retribution should continue to be carried out in realizing the spirit of regional independence of districts/cities in West Papua Province.

This study has limitations in the West Papua region by including 9 regencies/cities out of 13 existing urban regencies, this is due to the existence of new expansion areas. Further research can be done by expanding the research coverage area and including variables that have regional characteristics.

REFERENCES

- Adi Priyo H. and Dewi Ekaristi P. 2009. Fiscal Illusion Phenomenon in Local Government Budget Performance. *Indonesian Journal of Accounting and Finance*. Vol.6. Number 1. June. Pp. 1-19.
- Act Number 21 of 2001 concerning Special Autonomy for the Province of Papua. https://www.dpr.go.id/dokjdi/document/uu/UU_2001_21.pdf
- Act Number 32 of 2004 about Regional Government. Jakarta. <https://peraturan.bpk.go.id/Home/Details/40768/uu-no-32-tahun-2004>
- Act Number 33 of 2004 concerning the Financial Balance between the Central Government and the Regional Government. Jakarta. <http://www.djpk.kemenkeu.go.id/?p=367>
- Act Number 35 of 2008 concerning Stipulation of Government Regulations in Lieu of Law Number 1 of 2008 concerning Amendments to Law Number 21 of 2001 concerning Special Autonomy for the Papua Province to become Laws. https://jdih.kemenkeu.go.id/fulltext/2008/35_tahun2008uu.htm
- Act Number 28 of 2009 concerning Regional Taxes and Regional Retribution. https://jdih.kemenkeu.go.id/fulltext/2009/28_tahun2009uu.htm.
- Adi Priyo H. 2007. Regional Financial Capability and Its Relevance to Economic Growth. The 1st International Accounting Conference. Department of Accounting. Faculty of Economics, University of Indonesia. *Jakarta*.
- Azolibe Bernard C. 2020. Panel Data Comparative Analysis on the Influence of Population Age Structure on the Size of Government Expenditure in Africa and Asia. *International of Emerging Market*. www.emerald.com/insight/content/doi/10.1108/IJOEM-04-2020-0440/full/html
- Baekgaard Martin, Hansen Jens Blom and Soren Serritzlew. 2016. Causes of Fiscal Illusion: Lack of Information or Lack of Attention: Causes of Fiscal Illusion. *Public Budgeting and Finance*. 36 (2) June. Pp. 26-44. <https://doi.org/10.1111/pbaf.12091>
- Bourdeaux C. and Warner N. 2015. School District's Expenditure Responses to Federal Stimulus Funds. *Journal of Education Finance*. Published by *University of Illinois Press*. Vol.41. No.1. Pp.30-47. <https://www.jstor.org/stable/24459299>
- Das Biswa and Skidmore M. 2017. Asymmetry in Municipal Government Responses in Growing vs. Shrinking Counties with Focus on Capital Spending. Working Paper WP17BD1. *Lincoln Institute of Land Policy*. Pp. 1-24. https://www.lincolninst.edu/sites/default/files/pubfiles/das_wp17bd1.pdf
- Davey K., J. 1988. *Local Government Financing*. Translation by Amanullah, Hamdani Amin, A.T. Pakpahan, Busrori, Bachrul Elmi; Sutoro Isman's companion. *IU-Press*. Jakarta.
- Deller C. Steven and Maher S. Craig. 2006. A Model of Asymmetries in the Flypaper Effect. Published by Oxford University Press. *Publius Spring*. Vol.36. No.2. Pp.213-229. <https://www.jstor.org/stable/4624742>
- Dolerry Brian and Worthington Andrew. 1995. Federal Expenditure and Fiscal Illusion: An Australian Test of The Flypaper Hypothesis. *Publius: The Journal of Federalism*. 25(1). Pp.23-34. https://www.researchgate.net/publication/27464860_Federal_Expenditure_And_Fiscal_Illusion_An_Australian_Test_Of_The_Flypaper_Hypothesis
- Ekananda Mahyus. 2016. Panel Data Econometric Analysis, complete theory and comprehensive discussion of economic, business and social research. 2nd. Penerbit *Mitra Wacana Media*. Jakarta.
- Ewetan O. O., Matthew O. A., Babajide A. A., Osabohien R., and Urhie E. 2020. Fiscal Federalism and Economic Development in Nigeria: An Auto-Regressive Distributed Lag Approach. *Cogent Social Science*. Vol. 6. Issue 1. <https://www.tandfonline.com/doi/full/10.1080/23311886.2020.1789370>
- Gallo L.M. dan Dufrechou P.A. 2018. Testing Regional Intergovernmental Trasfer Asymmetries in Uruguay. *Munich Personal Repec Archive*. Paper No. 90245. <https://mpra.ub.uni-muenchen.de/90245/>
- Gemmel N.O and Abuzer P. 1998. Taxation, Fiscal Illusion and The Demand of Government Expenditures in The U.K: A Time Series Analysis. *School of Economic Discussion Paper*. 98 (10). 199-224. <https://www.semanticscholar.org/paper/TAXATION%2C-FISCAL-ILLUSION-AND-THE-DEMAND-FOR-IN-THE-Gemmel-Morrissey/cfb35fd574e0403b5cdd9f6c07e942fb5a688e12>
- Gennari Elena and Messina Giovanna. (2014). How Sticky are Local Expenditure in Italy? Assesing the Relevance of the Flypaper Effect through Municipal data. *Int Tax Public Finance*. 21:324-344. DOI

- 10.1007/s10797-013-9269-9.
<https://link.springer.com/article/10.1007/s10797-013-9269-9>
- Gerard Tehouassi and Ngangué Ngwen. (2015) Does Fiscal Illusion Impact Budget Policy? Panel Data Analysis. *International Journal of Economics and Financial Issues*. Vol.5. No.1. Pp. 240-248. <http://www.econjournal.com/index.php/ijefi/article/view/1049>
- Giegiel A. Wildowicz and Wasiluk A. Kargol. 2020. The Phenomenon of Fiscal Illusion from Theoretical and Empirical Perspective: The Case of Euro Area Countries. *European Research Studies Journal*. Vol.XXIII, Issue 2. Pp. 670-693. <https://www.ersj.eu/journal/1615>
- Gujarati, Damodar. 2003. *Basic Econometrics*. Singapore : McGraw Hill.
- Guziejewska Beata. 2016. Theoretical Dimensions of Fiscal Illusion in Local Government Finance. *Journal of Economics, Business and Management*. Vol.4. Number 3. March. <http://www.joebm.com/vol4/393-JB18.pdf>
- Guziejewska B., Majdzinska A., and Zoltazsek A. 2021. The Flypaper Effect and Desirable Legislative Change to Local Government Financing Systems. *Lex Localis, Journal of Local Self-Government*. Vol.19. No.3. [https://doi.org/10.4335/19.3.587-608\(2021\)](https://doi.org/10.4335/19.3.587-608(2021))
- Halim A. 2014. Public Sector Accounting Regional Financial Accounting. Fourth Edition. Salemba Four. Jakarta.
- Hapsoro Dody and Yoduke R. 2019. Fiscal Illusion Detection and Their Effect on Economic Growth in Sulawesi. *Jurnal Economia*. Vol.15. No.2. October. Pp. 172-188. https://www.researchgate.net/publication/338742088_Fiscal_Illusion_Detection_and_Their_Effect_on_Economic_Growth_in_Sulawesi
- Hsiao C. 2014. Analysis of Panel Data. Cambridge University Press. New York.
- Hussain I., Rafiq M., and Khan Zahoor. 2020. An Analysis of the Asymmetric Effect of Fiscal Policy on Economic Growth in Pakistan: Insights from Non-Linear ARDL. *Business Review*. 15(1). 19-49. <https://ir.iba.edu.pk/cgi/viewcontent.cgi?article=1008&context=businessreview>
- Imiyyah M. N., Saftiana Y., dan Wahyudi Tertiarto. 2020. The Empirical Analysis of Fiscal Illusion. Growing Science -Publisher of Distinguished Academic, *Scientific and Professional Journals*. Vol.6. Issue 6. Pp. 1033-1044. <http://growing-science.com/beta/ac/4138-the-empirical-analysis-of-fiscal-illusion.html>
- Kusuma H. 2017. Flypaper Effect : Fiscal Illusion and Bureaucratic Model. *Journal of Development Economics*. Vol.9. No.1. <http://journal.um.ac.id/index.php/jesp/article/view/7606>
- Levaggi Rosella. 1991. Fiscal Federalism and Grants-in-Aid: The Problem of Asymmetrical Information. Avebury. August.
- Levaggi Rosella and Zanola Roberto. 2003. Flypaper Effect and Sluggishness: Evidence From Regional Health Expenditure in Italy. *International Tax and Public Finance*. 10. Pp.535-547. <https://doi.org/10.1023/A:1026118222901>
- Liem, Sang Soo. 2013. Asymmetry in the Flypaper Effect of the Conditional Grants: A Case of Korea. *International Proceedings of Economics Development and Research*. V61.15. <http://www.ipedr.com/vol61/015-ICEFR2013-M10012.pdf>
- Makreshanska S. dan Petrevski M.G. 2019. Financial Decentralization and the Government Size: Evidence from a Panel of European Countries. *Review of Public Economics*. 229-(2/2019): 33-58. https://www.ief.es/docs/destacados/publicaciones/revistas/hpe/229_Art2.pdf
- Melo Ligia. 2002. The Flypaper Effect Under Different Institutional Context: The Columbian Case. *Public Choice, Kluwer Academic Publisher*. Vol.111. No.3/4. June. Pp. 317-345. <https://www.jstor.org/stable/30026069>
- Oates W. E. 2008. On The Evolution of Fiscal Federalism: Theory and Institutions. *National Tax Journal*. 61(2). 313-334. <https://www.jstor.org/stable/41790447?seq=1>
- Olaoye O. Olumide., Oluwole O. Oliwatosin., Ayesha Aziz and Afolabi O. Olugbenga. 2020. Government Spending and Economic Growth in ECOWAS: An Asymmetric Analysis. *The Journal of Economic Asymmetries*. Vol.22. November. <https://www.sciencedirect.com/science/article/pii/S170349492030027X>
- Onyango-Delewa P. 2020. Fiscal Illusion as an Incentive for Local Government Public Expenditure Efficiency: The Influence of Community Sensitization. *Journal of Perspectives of Financing and Regional Development*. Vol.7. No.4. <https://online-journal.unja.ac.id/JES/article/view/8564>
- Sour Laura. 2013. The Flypaper Effect in Mexican Local Government. *Estudios Economicos, Publisher El Colegio de Mexico*. Vol.28.

No.1(55). Pp.165-186.
<https://www.jstor.org/stable/23609654>

Sow Mousse and Razafimahefa I.F. 2015. Fiscal Desentralization and The Efficiency of Public Service Delivery. *IMF Working Paper*. Fiscal Affairs Department. <https://www.imf.org/external/pubs/ft/wp/2015/wp1559.pdf>

Travis Cassidy. 2017. Do Intergovernmental Grants Improve Public Service Delivery in Developing Countries?. *MPRA*. <https://mpra.ub.uni-muenchen.de/109649/>