

## **Fiscal Illusion Detection and Their Effect on Economic Growth in Sulawesi**

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**Abstract:** The purpose of this study is to examine the existence of fiscal illusions in the form of flypaper effects and debt illusions in regional government spending and examine its effect on regional economic growth in Sulawesi. The number of samples is 78 based on the completeness criteria of data and information covered in the consolidated balance sheet of the Ministry of Finance of the Republic of Indonesia. The utilized analytical tool is partial least square analysis assisted by SmartPLS 3.0 software based on the Structural Equation Model (SEM). The results of the study show that there is a fiscal illusion in the form of flypaper effects and the illusion of debt in regional government expenditure. Furthermore, the results of the study show that the existence of fiscal illusions in regional government expenditure has a positive and significant effect on regional economic growth.

**Keywords:** Fiscal illusion detection, economic growth.

## **Keberadaan Ilusi Fiskal dan Pengaruhnya Terhadap Pertumbuhan Ekonomi di Sulawesi**

**Abstrak:** Tujuan penelitian ini adalah untuk menguji keberadaan ilusi fiskal dalam bentuk *flypaper effect* dan ilusi hutang dalam belanja pemerintah daerah dan menguji pengaruh ilusi fiskal terhadap pertumbuhan ekonomi daerah di Sulawesi. Jumlah sampel adalah sebanyak 78 berdasarkan kriteria kelengkapan data dan informasi yang terdapat dalam neraca gabungan Kementerian Keuangan Republik Indonesia. Alat analisis yang digunakan adalah analisis parsial kuadrat terkecil dengan bantuan perangkat lunak SmartPLS 3.0 berdasarkan Structural Equation Model (SEM). Hasil penelitian menunjukkan bahwa ada ilusi fiskal dalam bentuk *flypaper effect* dan ilusi hutang pada belanja pemerintah daerah. Hasil penelitian selanjutnya menunjukkan bahwa keberadaan ilusi fiskal pada belanja pemerintah daerah berdampak positif dan signifikan terhadap pertumbuhan ekonomi daerah.

**Kata kunci:** Deteksi ilusi fiskal, pertumbuhan ekonomi.

### **INTRODUCTION**

Indonesia is the most democratic and decentralized country in the world (Butt, 2010). Olum (2014) argues that decentralization or regional autonomy is a matter that becomes the needs of regional communities and their rights and obligations to carry out management that regulates their own households. Fiscal decentralization is the granting of authority and the application of policies to explore sources of income and the right to determine expenditure in the region itself (Golem, 2010).

The aim of implementing regional autonomy and fiscal decentralization is for regional governments have independent finance. Regional financial independence should be realized through an increase in PAD based on all the rights, authority and obligations that have been submitted by the central government to the regional government.

Local governments in realizing regional financial independence do not experience significant developments, even tend to decline (Adi and Ekaristi, 2009). Decreasing regional

financial independence creates inequality between PAD (fiscal capacity) and regional expenditure (fiscal needs). This condition is called a fiscal gap (Oates, 2008).

Research on the development of the implementation of decentralization states that in developing countries transfer from the central government constitutes the largest share of regional income (Oates, 2008). The receipt and utilization of transfer funds as income which is more dominant than income and financing for regional expenditure in providing public goods and services reduces the pressure on the PAD base.

The condition of regional government dependence on transfer funds raises an interesting thing, namely, there is information asymmetry between the central government as transfer providers and local governments as recipients of transfers. Local governments react irrationally to central government grants. This phenomenon of differences in perception is then referred to as fiscal illusion (Sanandaji and Wallace, 2010).

In the most common form, the fiscal illusion can be interpreted as a condition of the systematic misunderstanding of the benefits and costs of government activities by taxpayers (the public). Then this systematic misunderstanding affects regional spending in certain fiscal jurisdictions which will continue to increase but remain cheap. Oates (2008) concluded that the phenomenon of fiscal illusion can occur through: (1) Complexity of tax structures; (2) Property tax (property or rent); (3) Income elasticity and tax rate; (4) Debt illusions; and (5) effect flypaper.

The most appropriate type of fiscal illusion to explain the response of regional governments to transfers and PAD in fulfilling the regional budget is a flypaper effect (Kusuma, 2017). Flypaper effect is the response of the regional government to grant or transfers from the central government that is used to increase expenditure on public goods and services that exceed PAD in certain jurisdictions (Nugroho, 2017).

Matteo (2010) stated that the misunderstanding of the community was also caused by the community is unsure of the number of tax bills they had to pay for additional services or appropriate tax fees for the consumption of goods and services they received. Research on the response to transfer funds and PAD to regional spending to prove the fiscal illusion of flypaper effects in Indonesia has been widely carried out. Research on the flypaper effect is still interesting to do to show the characteristics of local governments in responding to demands for spending through PAD or transfers from the central government. Ferede and Islam (2015) stated that it is still important to test the flypaper effect phenomenon in a jurisdiction to test the ability of local governments to increase PAD.

In addition to local revenue (PAD) and general allocation funds (DAU), local governments are also given access to debt. Local governments are allowed to have debt or loans to third parties but remain under the supervision of the central government to cover the existing fiscal gap. However, the debt held by regional governments is currently not widely disclosed in the regional government financial reports (Suhardjanto and Yulianingtyas, 2011).

Based on PP No. 71 of 2010 and the attachments therein, should the government, in this case, the regional government be able to provide financial information, including the receipt of debt so that the level of accountability of the financial statements of local

government increases. However, research conducted by Lesmana (2010), Suhardjanto and Yulianingtyas (2011), and Setyaningrum and Syafitri (2012) regarding mandatory disclosure of information by local governments in published regional financial reports found that debt had no effect on mandatory information revealed by the regional government. The findings were then by Suhardjanto and Yulianingtyas (2011), and Setyaningrum and Syafitri (2012) interpreted that local governments did not fully understand the mandatory information that should be disclosed to the public including debt information.

The study conducted by FITRA (2012 and 2017) found that the debt component and its utilization were evident in regional expenditure. Based on the findings of FITRA study, it needs to be examined more closely and carried out a study to find out whether there is a fiscal illusion in the form of debt illusions through the use of debt received from the regions for the provision of goods and services in the regional budget. Detection of debt illusions is important to prevent information imbalances between the public and the regional government for budgeting funding sources for goods and services that are carried out using debt by the local government.

Even though regional expenditure creates a flypaper effect and illusion of debt phenomena, one of the functions of regional spending is to create economic growth. Autonomous regions with good economic growth have the opportunity to increase revenue from PAD. Local governments must be able to empower the economic strengths and resources acquired by the regions to create better economic growth.

Regional autonomy or decentralization is a tool or means to achieve the goal of the state, namely to bring a country closer to the community by providing better services and creating more democratic decision-making processes. Jebessa (2016) stated that regional autonomy implicitly shows an indication of the objectives to be achieved in the realization of a democratic system at the local level, the creation of effectiveness and efficiency in the implementation of regional government and economic development in the region.

Broad fiscal decentralization is the surrender of rights and authority to local governments by the central government to implement fiscal policy as an effort to explore the potential of resources and obtain their own income to support the implementation of their functions in government affairs in their regions. The principle of money follows function is a consequence of the surrender of rights, authority, and obligations in accordance with the definition of regional autonomy or decentralization so that a number of fiscal policies are submitted to regional governments to obtain their own income to finance government affairs in their regions (Kurniawan, 2012).

APBD is a reference for regional government work for a period of one year. In the APBD structure in Indonesia, the budget component consists of income, expenditure, and financing (Abdullah and Rona, 2014). The revenue budget in the APBD is the budget for revenues originating from local revenue (PAD), balanced funds (central government transfers: general allocation funds/DAU, profit sharing funds/DBH, and special allocation funds/DAK), and other income. The source of PAD is from the results of regional taxes, the results of regional levies, the results of management of separated regional wealth, and other income.

According to data released by the Public Relations Secretariat of the Republic of Indonesia Cabinet, President Joko Widodo on October 24, 2017, once expressed his appreciation to the heads of regions whose regions reached the highest economic growth rate in Indonesia. The region that experienced the highest economic growth was Banggai District (Central Sulawesi), which had a growth rate of 37 percent. This was stated by President Jokowi when giving direction to the Governor, Regent, and Mayor who attended the Government Work Meeting (RKP) at the Istana Negara, Jakarta. So far, the development of projects carried out by the central government together with regional governments on the island of Sulawesi has generally been related to the construction of railroads, renovation, and construction of airports and the renovation of seaports. The collaboration has provided many economic benefits for the regions on Sulawesi Island. This shows that Sulawesi Island is an example of an interesting area to be used as material for research studies because Sulawesi Island has a very important contribution to regional economic growth. In addition, this study also added regional debt/liability variables to measure the role and contribution of debt to increase regional economic growth.

The theory that underlies this research is the theory of fiscal decentralization, which specifically describes the transfer of rights and authority by the central government to regional governments to implement fiscal policy as an effort to explore potential resources and obtain their own income to support the implementation of their functions in government affairs in their regions. Implicitly the definition of fiscal decentralization is explained in Law No. 33 of 2004 concerning Financial Balance between the Central Government and Regional Governments.

Research on empirical evidence of the phenomenon of flypaper effect in Indonesia has been carried out among others, such as Adi and Ekaristi (2009), Rusyidi (2015), Rimawan and Badrudin (2017), Pratami and Dwirandra (2017), and Meilya et al. (2018). The studies cited above found that there were or occurred fiscal illusion phonemes in the form of flypaper effects. While the research by Pramuka (2010), in his study did not find the occurrence of the flypaper effect phenomenon in the expenditure of regencies and cities in Java. Based on the above description, there are dominant results on the findings of the phenomenon of fiscal illusions in the form of a flypaper effect on regional expenditure carried out by the regional government. Therefore, in this study the following hypothesis is proposed  $H_1$ : There was a flypaper effect on district/city expenditure in Sulawesi

Debt as a component of income for local governments is still not widely disclosed in the regional government financial reports. Disclosure of incomplete debt information can be used as an indicator of the occurrence of fiscal illusions. The indicator is a misunderstanding between the community and the local government due to inequality and limited access to information on the amount of debt and the management of debt utilization which can distort the rights and obligations of the community in development in the region. Debt utilization that is dominant compared to PAD contributions in regional expenditure indicates the occurrence of debt illusions. This research is initial research that examines the effect of debt on regional expenditure. Based on the description of the findings of incomplete disclosure of debt information in relation to the concept of fiscal illusion which can lead to

information inequality between the regional government, the community, and the central government above, therefore in this study the following hypothesis is proposed H<sub>2</sub>: There is an illusion of debt in district/city expenditure in Sulawesi

Research on debt illusions has not been widely studied in Indonesia. This is because not all regions have debt. Simamora (2014) in his research stated that debt receipts can be used to cover deficits that arise in regional spending. Receipt of debt for local governments can be used as well as PAD and DAU, namely increasing the regional revenue component to carry out functions and roles in the supply of goods and services through regional spending with the ultimate goal of increasing economic growth (Abdullah and Rona, 2014). Based on the above description, therefore in this study, the following hypothesis is proposed H<sub>3</sub>: Regional expenditures that occur flypaper effects and debt illusions have a positive effect on the economic growth of the districts/cities in Sulawesi

## **METHODS**

In this study, the research design was compiled to describe the relationship between regional revenue (PAD, DAU, and Regional Debt) and regional expenditure to increase economic growth. This relationship can be interpreted that the utilization of regional revenues is expected to increase economic growth so that in the end the local government has the opportunity to obtain greater original income (PAD) and increase economic growth in the future.

This research was conducted to detect fiscal illusions in the districts/cities in Sulawesi. The purpose of this study was to examine the effect of the variables of PAD, DAU, and Regional Debt contained in Regional Expenditures on Economic Growth. The selection of districts/cities research subjects on Sulawesi Island is due to not many similar studies using research subjects in the districts/cities on Sulawesi Island.

Similar research has been carried out with the subject of research are areas that exist outside of Sulawesi Island, especially the districts/cities in Java and Sumatra, as was done by Adi and Ekaristi (2009), Kuncoro (2014), Kusumadewi and Rahman (2007), Pramuka (2010), Badrudin and Rimawan (2017). Specifically, similar studies have not been carried out in Sulawesi. This encourages researchers to conduct this research by adding variable local government debt to measure the illusion of debt and simultaneously test its influence on economic growth in the districts/cities in Sulawesi.

The population of this study is all districts/cities on Sulawesi Island. The total number of districts/cities in six provinces on Sulawesi Island is 81 districts/cities. This research uses purposive sampling in sampling. The criteria are the completeness of data and information in the combined balance sheet summarized by the Ministry of Finance of the Republic of Indonesia and the Central Statistics Agency. While the analysis tool used is partial least square analysis with the help of SmartPLS 3.0 software based on the Structural Equation Model (SEM) modeling.

Locally-Generated Revenue (PAD) is all income earned by the region through regional levies based on regional regulations in accordance with applicable laws. In this study, the variable component of PAD is the total amount of income generated by the region

through regional taxes, regional levies, the results of regionally owned companies and management of separated regional assets, and other legitimate income.

The general allocation fund (DAU) is the income earned by an autonomous region originating from the state budget and expenditure (APBN). The use of DAU as a variable to measure flypaper effect is considered appropriate because of its nature as financial aid to local governments (Tasri, 2018). For the purposes of testing the proposed hypothesis, the amount of DAU receipts will be identified and separated from the total amount of balance funds received by each district/city local government on the island of Sulawesi.

The revenue from debt, according to Simamora (2014) can be used to cover the fiscal gap in regional expenditure. In addition to covering the fiscal gap, revenue from debt can be utilized by regional governments in regional government affairs related to the provision of goods and public services through regional expenditure. In this study, debt data are taken from data on total financing receipts, especially the receipt of debt owned by regions per district/city on the island of Sulawesi in the period of 2016.

Regional expenditure is all the obligations of the regional government in the APBD which are a deduction of regional government wealth in the relevant fiscal year. According to Nasution (2016), regional expenditure is a function of each income received from both PAD, transfer funds from the central government, and debts held by local governments. The use of data on overall regional expenditure per district/city without classifying expenditure according to the type or nature of the economy is based on the assumption that the government is a unitary function and role in government affairs. Based on these assumptions, regional expenditure data are used as intervening endogenous variables and are measured by the total amount of regional expenditure in the LRA per district/city on the island of Sulawesi in 2016.

Economic growth is a measure of activity that shows economic activity in order to generate additional income for people in a region in a given period (Ginting and Rasbin, 2010). In this study, economic growth data are used as an endogenous variable, assuming that good economic growth is a condition or condition to be achieved by the local government by utilizing funds received by the regions both from PAD, DAU, and debt.

Data collection in this study was carried out using the cross-section method, which only uses one year/time data. This study uses secondary data published by the Ministry of Finance of the Republic of Indonesia through the website of the Directorate General of Fiscal Balance.

The sampling procedure is done by using a purposive sampling method according to predetermined criteria to measure the research variable. The specified criteria are the complete disclosure of information on local government obligations in the combined balance sheets of the regional government. The sample selection in 2016 is due to this research conducted in 2018, so the publication of the latest/most recent data at that time was 2016 data.

The number of samples used for testing hypotheses based on predetermined criteria is 78 districts/cities out of a total of 81 districts/cities in the Central Sulawesi Island. Table

1 and Table 2 show financial information and economic growth, which are grouped according to sample districts/cities provinces and descriptive statistics.

Table 1. Financial and Economic Growth Information District/City of Each Province on Sulawesi Island (In Millions of Rupiah and Percent)

Province Name	PAD	DAU	Debt	Expenditure	Economic Growth
North Sulawesi	Rp786	Rp7.102	Rp906.294	Rp13.497	90,66
Central Sulawesi	Rp899	Rp7.920	Rp1.082.080	Rp14.825	114,52
South Sulawesi	Rp5.086	Rp15.947	Rp3.844.468	Rp33.400	179,32
Southeast Sulawesi	Rp725	Rp8.192	Rp1.003.478	Rp15.817	114,71
Gorontalo	Rp423	Rp3.066	Rp380.448	Rp5.706	40,96
West Sulawesi	Rp289	Rp3.224	Rp433.452	Rp5.788	37,19
Total	Rp3.124	Rp29.506	Rp3.805.754	Rp55.635	398,04

Source: DJPK and BPS, data processed.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean
PAD2016	78	4.188.750,00	1.545.595.538,00	104.697.303,4872
DAU2016	78	312.716.538,00	1.324.023.135,00	569.334.036,9359
UTG2016	78	956.378.646,00	707.018.095.160,96	98.079.789.302,6249
BD2016	78	532.378.105,00	3.825.221.632,00	1.115.963.641,7564
PE2016	78	1,62	37,12	7,1737

Source: DJPK and BPS, data processed.

The overall economic growth rate of districts/cities on Sulawesi Island has an average value of 7,17%. The number of samples (N) in Table 2 with number 78 shows the number of districts/cities that were used as testing samples based on predetermined criteria. The criterion is the disclosure of complete information in the combined district/city government balance sheet 2016 report.

Table 3. Results of Inner Model Assessment (Goodness of Fit Model)

Algorithm Results		Blindfolding Results			
Variable	R-Square	Variable	SSO	SSE	Q <sup>2</sup> (1-SSE/SSO)
PAD2016	-	BD2016	78,000	16,288	0,791
DAU2016	-	DAU2016	78,000	78,000	-
UTG2016	-	PAD2016	78,000	78,000	-
BD2016	0,914	PE2016	78,000	76,432	0,020
PE2016	0,470	UTG2016	78,000	78,000	-

The assessment of the outer model is not done because the variables used are variables that can be measured directly (Ghozali and Latan, 2015: 31-32). While the inner model assessment is based on the calculation of the Q-square value based on the R-Square value and the blindfolding function available in the SmartPLS 3.0 software. Table 3 shows the results of the algorithm to obtain the R-Square value and blindfolding results to obtain the Q-Square value.

The goodness of fit model in PLS uses Q-Square Stone-Geisser size test in the form of Q-Square value predictive relevance calculated based on R-Square value of each endogenous variable. R-Square intervening endogenous variable (RBD2016<sup>2</sup>) is 0,914 and R-Square dependent endogenous variable (RPE2016<sup>2</sup>) is 0,047, so the Q-Square value predictive relevance for the assessment of goodness fit of the model is calculated as follows:

$$\begin{aligned} Q^2 &= 1-(1- R_{BD2016^2}) (R_{PE2016^2}) & Q^2 &= 1-(1-0,791) (1-0,020) \\ &= 1-(1-0,914) (1-0,047) & &= 1-(0,209) (0,98) \\ &= 1-(0,086) (0,953) & &= 1-0,205 \\ &= 0,92 & &= 0,795 \end{aligned}$$

Based on the Q-Square calculation above, the Q-Square predictive relevance value is 0,92 or equal to 92%. The predictive value of Q-Square according to Jaya and Sumertajaya (2008) will have a good predictive value if the value of Q-Square is close to one. The Q-Square value is 0,92 or 92%. It can be concluded that the model with the PAD, DAU, UTG variables that have been built has a predictive value of 92%, while the other 8% is explained by other variables outside the model.

Furthermore, based on the results of the blindfolding function above, the Q-Square value is obtained for each endogenous variable (intervening and dependent) in the model. SSO in the table is the sum of squares of observation, while SSE is the sum squares of prediction error. The SSE value as a prediction error value is divided by the value in the observation column, which then produces the Q-Square value. In the above calculation, the Q-Square value of 0,795 or 79,5% of the exogenous variable is able to explain changes in endogenous variables, while the remainder is explained by variables outside the model.

## **RESULTS AND DISCUSSION**

Testing the hypothesis in this study was carried out by using the functions available in the SmartPLS 3.0 computer applications called resampling bootstrap. The application of the bootstrap resampling method allows the distribution of data to be freely distributed, does not require the assumption of a normal distribution, and does not require a large sample (but a minimum sample of 30 is recommended). Hypothesis testing and empirical data are done by comparing the value of t-test per exogenous variable (obtained from the original sample value divided by the standard deviation value). If a p-value <0,05 (alpha 5%) is obtained, then it can be concluded that the variable has a significant effect on endogenous variables and vice versa if it exceeds the set p-value then the influence of exogenous variables is considered insignificant.

Based on the predetermined criteria, namely the complete disclosure of information on the combined balance sheet, then out of a total of 81 districts/cities in Sulawesi Island, 78 samples were selected that met the criteria for statistical analysis with the predetermined hypothesis. Statistical testing of the data is meant to answer the formulation of the problem and the hypotheses that have been developed are presented in Table 4.



Table 4. Results of Bootstrap Resampling Testing of Hypotheses

Interaction	Original Sample (O)	Sample Mean (M)	Standard Deviation	T-Statistics (O/STDev.)	P-Values
BD2016->PE2016	0,217	0,227	0,104	2,085	0,038
DAU2016->BD2016	0,842	0,813	0,095	8,883	0,000
PAD2016->BD2016	0,148	0,172	0,125	1,184	0,237
UTG2016->BD2016	0,077	0,074	0,034	2,247	0,025

The comparative model in this study uses capital expenditure which consists of goods expenditure and service expenditure carried out by the district/city government on Sulawesi Island. Capital expenditure is part of the overall regional expenditure, but with the specific purpose of adding capital goods to regional governments.

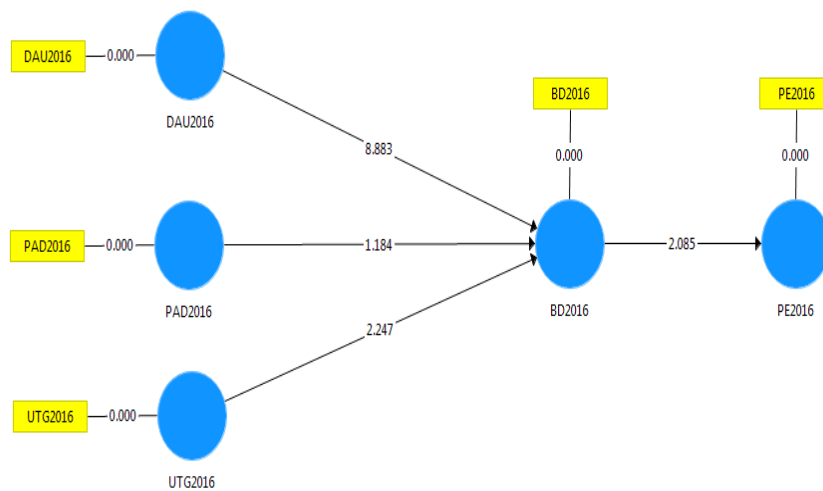


Figure 1. Variable Interaction Model (Bootstrapping)

Based on the above explanation, a comparison model was created with the aim of knowing the efforts of regional governments in providing goods and services in the regions in order to obtain future income from investment through capital expenditure. Comparative model testing is done the same as testing on the model that has been built in this study which includes: (1) descriptive analysis of research data; (2) assessment of the inner model/goodness of fit model; (3) hypothesis testing.

Table 5. Comparative Model Data Description

	N	Minimum	Maximum	Mean
PAD2016	73	4.188.750,00	1.545.595.538,00	110.137.704,9178
DAU2016	73	339.526.201,00	1.324.023.135,00	576.917.029,3562
UTG2016	73	956.378.646,00	707.018.095.160,96	101.394.007.261,4674
BM2016	73	218.664.041.955,00	1.749.721.943.828,00	509.402.491.518,7661
PE2016	73	1,62	37,12	7,2344

The criteria for determining the sample to be used is the complete disclosure of information in the combined balance sheet reports of the district/city governments on Sulawesi Island. Based on these criteria, a sample of 73 districts/cities was obtained from a total of 81 districts/cities in the six provinces of Sulawesi Island. Table 5 is descriptive statistics on districts/cities in Sulawesi.

The assessment of the outer model for the comparison model is not done because the variables used in the comparison model are variables that can be measured directly. While the assessment of inner model is intended to assess the feasibility of the model (goodness of fit model) by calculating Q-Square based on the calculation of R-Square values obtained from the process of running algorithmic functions and blindfolding functions in SmartPLS 3.0. Table 6 contains the R-Square value of the algorithm and Q-Square results of the blindfolding function.

Table 6. Results of Inner Model Assessment (Goodness of Fit Model)

Algorithm Result		Blindfolding Result			
Variable	R-Square	Variable	SSO	SSE	$Q^2 = (1 - SSE/SSO)$
PAD2016	-	BM2016	73,000	28,003	0,616
DAU2016	-	DAU2016	73,000	73,000	-
UTG2016	-	PAD2016	73,000	73,000	-
BM2016	0,735	PE2016	73,000	72,460	0,008
PE2016	0,024	UTG2016	73,000	73,000	-

The results of running algorithm and blindfolding can be used to calculate Q-Square predictive relevance of the comparison model. Q-Square Calculation predictive relevance of Stone-Geisser size based on R-Square results of the algorithm and Q-Square functions based on blindfolding function are as follows:

$$\begin{aligned}
 Q^2 &= 1 - (1 - R_{BM2016}^2) (R_{PE2016}^2) & Q^2 &= 1 - (1 - 0,616) (1 - 0,008) \\
 &= 1 - (1 - 0,735) (1 - 0,024) & &= 1 - (0,384) (0,992) \\
 &= 1 - (0,265) (0,976) & &= 1 - 0,381 \\
 &= 0,74 & &= 0,62
 \end{aligned}$$

Based on the predictive Q-Square relevance calculation above, the value of predictive power based on the R-Square is 0,74 which is included in the good category because it approaches the number one (Jaya and Sumertajaya, 2008). While the value of predictive power based on blindfolding resulted in a value of 0,62 included in the strong category because it is above zero, so it can be said that the model has a good predictive relevance (Ghozali and Latan, 2015: 42).

The testing of variables in the comparative model is intended to determine the efforts of the district/city governments on the island of Sulawesi in investing in capital goods in order to increase local revenue in the future. Table 7 shows the results of bootstrap resampling for the research variables in the comparison model.

Based on the elaboration of points one and two, it can be concluded that the influence or contribution of DAU is greater than the contribution of PAD to capital

expenditure. This result is in line with the testing of the models and hypotheses that have been built. In points two and three, the test is intended to measure the effect of debt on regional expenditure. The test results show a comparison between the effect of a positive directional debt on capital expenditure, but not significant at 1,184. The t-value of the statistical effect of debt is 1,184 smaller than the effect of PAD on capital expenditure, which is equal to 1,858. The t value of the effect of debt statistics on capital expenditure shows that the use of debt is not intended for regional government capital goods.

Table 7. Results of Bootstrap Resampling Hypothesis Testing

Interaction	Original Sample (O)	Sample Mean (M)	Standard Deviation	T-Statistics (O/STDev.)	P-Values
BM2016->PE2016	0,154	0,169	0,096	1,596	0,111
DAU2016->BM2016	0,635	0,572	0,128	4,943	0,000
PAD2016->BM2016	0,296	0,348	0,159	1,858	0,064
UTG2016->BM2016	0,077	0,063	0,065	1,184	0,237

The effect of capital expenditure as an effort of the government to provide capital goods to obtain future income has a positive but not significant effect. The t-value of the statistic of the effect of capital expenditure on capital expenditure is 1,596 and the value of p-value is 0,111 or equal to 11,1% greater than 5%, this result is different from the testing on the research model that has been built.

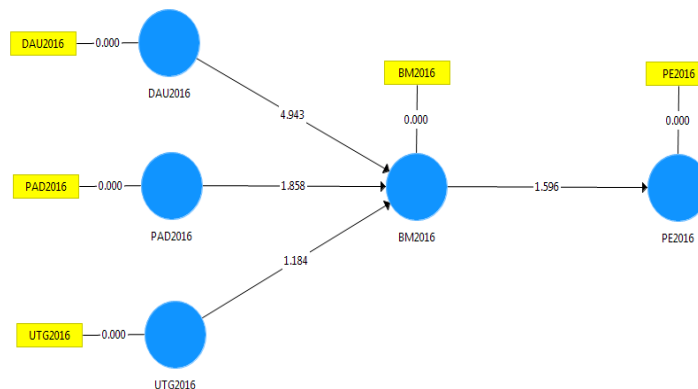


Figure 2. Interaction of Variables Comparison Model (Bootstrapping)

For purposes of discussion, the results of testing hypotheses are summarized and presented in one table. Table 8 is a summary of the results of hypothesis testing in the research model and comparison model.

Table 8. Summary of Results of Research Models and Comparative Models

Research Model (Model A)			Comparative Model (Model B)		
Interaction	T-Statistics	P-Values	Interaction	T-Statistics	P-Values
BD>PE	2,085	0,038	BM>PE	1,596	0,111
DAU>BD	8,883	0,000	DAU>BM	4,943	0,000
PAD>BD	1,148	0,237	PAD>BM	1,858	0,064
UTG>BD	2,247	0,025	UTG>BM	1,148	0,237

The flypaper effect phenomenon can be measured by calculating the ratio of PAD and DAU contributions to regional expenditure. The results of statistical testing on the model that has been built based on empirical data show that the contribution of PAD to regional expenditure is 1,184 with p-value 0,237. The contribution value is smaller than the DAU contribution to regional expenditure with a value of 8,883 with a p-value of 0,000. The test results are in line with the results of testing the data on the comparison model. Statistical test with empirical data on the comparison model show that the contribution of PAD and DAU to the expenditure of each region obtained a value of 4,943 with a p-value of 0,000 and 1,858 with a p-value of 0,064.

Based on the results of statistical testing, it can be interpreted that the regional government is more using the receipt of transfer funds from the central government to carry out the roles and functions in providing public goods and services in the region. The thing that needs to be considered by the regional government is the use of more dominant transfer funds to provide goods and public services in the regions can reduce the PAD base (Oates, 2008). A decrease in the PAD base can cause future income revenues to decline. On the other hand, the public's demand for the supply of goods and public services continues to increase.

Comparison of the test results between the models that have been built (Model A) and the comparison model (Model B) shows interesting things. The interesting thing is that the contribution of PAD in Model A (regional expenditure) is 1,184 and the contribution to Model B (using capital expenditure) is 1,858. Although the synergy value in model B is 0.064 greater than 0.05 (5%), but this shows that the contribution of PAD to capital expenditure is greater than the contribution of PAD to regional expenditure. This contribution can be interpreted that the use of PAD that has been collected by the district/city governments on Sulawesi Island has led to a good policy direction. Local governments utilize PAD revenues for capital expenditure greater than routine expenditures, so it is said that every increase of 1,858 PAD (although not significant) will increase capital goods by 1,858.

This study supports previous studies such as those conducted by Kusumadewi and Rahman (2007), Adi and Ekaristi (2009), Rusyidi (2015), Rimawan and Badrudin (2017), Pratami and Dwirandra (2017). This study resulted in the finding that there was a flypaper effect on regional government spending. The results of this study differ findings with the research conducted by Triyanto et al. (2017). This difference is due to the interpretation of the flypaper effect. Triyanto et al. (2017) use positive-negative contributions to classify their findings, while in this study use a comparison of the magnitude of the PAD and DAU contributions to regional expenditure. Based on the results of testing the model that has been developed and the comparison model it can be concluded that the contribution of DAU is greater than the contribution of PAD to regional expenditure and capital expenditure, so that it can be said that there is a flypaper effect on the expenditure of regencies/cities on Sulawesi Island. This conclusion supports the allegations that have been developed in hypothesis one.

The results of this study indicate that there is a fiscal illusion in the form of the illusion of debt in regional spending by regional governments. The contribution of debt is greater than the contribution of PAD to regional expenditure. Statistical tests show the debt contribution with a value of 2,247 with a p-value of 0,025 ( $<0,05$ ) and PAD in regional expenditure amounting to 1,184 with p-value of 0,237 ( $> 0,05$ ). These results indicate that local governments use debt in regional spending. However, the contribution value generated in testing Model A and Model B is different. The value of the debt contribution to regional expenditure in Model A is 2,247 with a significance of 0,025 ( $<0,05$ ), while Model B has a value of 1.184 with a significance of 0,237 ( $> 0,05$ ). This result shows that debt has a significant positive contribution to regional expenditure, but not significantly to capital expenditure. Based on these results, it can be concluded that there is an illusion of debt in the expenditure of districts/cities in Sulawesi.

Significant use of debt in regional expenditure supports the statements of Ariwibawa (2005), Kuncoro (2014), and Simamora (2014). Ariwibawa (2005) said that debt owned by local governments can be used to cover the fiscal gap in regional expenditure. Kuncoro (2014) in his research stated that the use of debt must be controlled so as not to burden the central government and regional government budget. Funding assistance from the central government needs to be utilized optimally to increase economic growth in the region, without ignoring that transfer funds can be used to pay the obligations of local governments. The results of this study are in line with the research conducted by Simamora (2014). In his research, Simamora (2014) stated that the debt owed by local governments had a positive effect on regional government spending. Overall, the differences in results in Model A and Model B can be concluded that the use of debt by the regional government is not intended for productive programs but is intended to cover the fiscal gap in the APBD.

Regional expenditures that occur flypaper effects and debt illusions have a significant positive effect on economic growth in districts/cities on Sulawesi Island. This can be seen from the results of statistical testing with a regional expenditures path coefficient of 2.085 and a p-value of 0.038 which is smaller than alpha 0.005. The results of this study can be interpreted that regional spending with the use of economic resources such as PAD, DAU, and debt by local governments to increase economic growth in the region.

The results of this study are in line with the results of research conducted by Rimawan and Badrudin (2017). They stated that regional expenditure with the influence of the DAU's dominant contribution compared to PAD in regional expenditure on economic growth was positive. This study supports Adi's (2006) statement that regional expenditure is a function of each regional revenue and economic growth is an excess of the utilization of regional revenues.

The difference in the results of different model A and Model B statistics shows that the value of capital expenditure contributions to economic growth is 1,596 with a significant p-value of 0,111 ( $> 0,05$ ). These results indicate that capital expenditure has a positive effect of 1.596 but is not insignificant towards economic growth in the region. The difference in the contribution of regional revenues to regional expenditures is greater than the contribution of capital expenditure to economic growth can be caused by income

distribution by regional governments. The distribution of income by the regional government is more dominated by pre-existing routine expenditures such as spending on regional employees. This shows that the utilization of transfer funds (DAU), PAD, and debt is not optimal for capital goods investment through the allocation of the capital expenditure budget to increase economic growth in the region.

## **CONCLUSION**

The purpose of this study is to detect fiscal illusions in the form of flypaper effects and the illusion of debt on regional spending and the impact of regional spending with these illusions on the economic growth of the districts/cities on Sulawesi Island. Based on the results of testing statistical empirical data so that some conclusions can be drawn as follows. First, There is a fiscal illusion in the form of a flypaper effect on district/city government spending on Sulawesi Island. The results of statistical tests show that the contribution of DAU is greater than the contribution of PAD to regional expenditure. The contribution of the DAU to larger regional expenditures can be interpreted as a flypaper effect on regional expenditure.

Second, There is an illusion of debt in the expenditure of the district/city governments in Sulawesi. Local governments began to use debt as additional capital in carrying out their roles and functions to provide goods and services in the regions. Third, Regional expenditure that occurs fiscal illusions in the form of flypaper effects and the illusion of debt can affect the economic growth of the districts/cities on Sulawesi Island. The proper use of economic resources owned by the regions can trigger economic growth in the region so that in the future the government can benefit from the value added for goods and services or other economic activities in the region.

Fiscal illusions in the form of flypaper effects and debt illusions can cause information asymmetry. This has been going on for a long time in various regions in Indonesia, making the General Allocation Fund (DAU) a major source of income for a local government. Sidik (2002) and Mardiasmo (2002) said that the provision of funds transfer assistance in the form of DAU should not be the main source of income for a local government, but a stimulus for local governments to increase Regional Original Revenue (PAD). Efforts to increase PAD from the use of transfer assistance from the center should be sufficient to finance the needs of local governments (Simanjuntak, 2003) so that in the end it can reduce the dependence of regional governments on transfers from the central government (Kuncoro, 2014). Whereas the disclosure of the amount and utilization of regional debt should be the concern of the regional government and the community so that it can create intergenerational equity. Disclosure of the amount and utilization of debt by the regional government must be done because the current financing policy will influence the policies that will be taken in the future. The policy of utilizing economic resources, especially long-term debt indirectly will be borne by future generations. From the results of this study, it was revealed that basically, the regional governments had used their rights in accordance with Law No. 33 of 2004 which allows local governments to have debt. Supposedly, regional debt can be an alternative for regional governments to cover the fiscal

gap that arises (Ariwibawa, 2005), but still in the control of local government and its utilization must be clear, such as for financing capital goods, so that it can be used by local governments to pay off debts that arise and can generate income in the future.

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