The Phenomenon of Flypaper Effect In Regencies/Municipality in Lampung Province

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Abstract

The main objective of this research is to provide empirical proof of occurrence the influence of DAU and PAD on local expenditure in regencies/municipality in Lampung. The other objective is to examine existence of different flypaper effect, a condition when regencies/municipality give different respon in determining local expenditure based on centreal goverment transfer compared winth local revenue.

This research is using multiple regression model for analyzing sample data from 10 regencies/municipality. Analyzed data is time series that consist of PAD, DAU and BD which taken from local budget and revenue report for ten years from 1998 until 2007.

Result of analysis indicates that DAU influence toward BD in more significant than the influenced PAD toward BD which mean taht flypaper effect occur in all regencies/municipalities of Lampung. This situation gives the evidence taht local goverment just wait the amount of DAU received before deciding the amount of expenditure (Sukriy & Halim, 2003), so that the upcoming period of expenditure will be greater. The result of this research is merely based on statistical analysis and can't be used as sole measurement of regencies/municipalities of Lampung performance. The result still require confirmation through future researches.

Keywords : DAU, PAD, regional budget report, flypaper effect.

Introduction

Background

UU No. 22 year 1999 about local autonomy and UU No. 25 year 1999 about the balance of central and local finance are changed by UU No. 32 year 2004 and UU No. 33 year 2004, local governance is given authority to manage its own house hold. The policy about local autonomy is expected to be able to answer problems which are occurred in Indonesia, such as ungeneralization and poverty which can trigger disintegration of nation. The policy is also related to decentralization. This system will give challenges and opportunities to local government so that the regions must be able to operate effectively, efficiently, and economically. The realization of decentralization on the other side can cause a problem because the region may not be given an authority to manage the things which used to be done by central government without any attention form central government in relative to its fund. For that, local government gives unconditional grant in the form of block grant and special grant. Beside the unconditional grants, local government also has private income in the form of local private income and other valid income. All of them are intended to develop the ability of local government in giving public services to society (public).

But in fact, the grants from central government become the main income of local

government in financing its daily operational activities which will be reported by local government in APBD. The purposes of this grant is to decrease (if can't remove) the fiscal gap between local governments and guarantee the achievement of minimum standard services all over the nation. (Simanjuntak in Sidik et al, 2002).

Pursuant to the background above, this research will investigate about the influence of PAD and DAU towards local expenditure in Regencies/Municipality in Lampung Province. This research is formulated as follow: Is fly paper effect occurred in Regencies/Municipality in Lampung Province which is showed by the condition of the influenced of DAU towards local expenditure is stronger than the influence of PAD towards local expenditures.

Research Method

Samples and Data Research

Samples in this research are Regencies/Municipality in Lampung Province which consist of eight regencies and two municipalities. Sample selection of ten regencies/ municipalities in Lampung Province with the reasons are as follows:

a. Regencies/Municipality in Lampung Province relatively have the same economic and geographical characteristics, and during the period research from 1998-2007 among 8 provinces in Sumatra Island (outside Java/Bali island), the province which has not been done a regional expansion is Lampung

province so data analyzed is more consistent.

b. It can represent the economic characteristics of local government in Lampung province (outside Java/Bali island). By Halim (2002), the governments of Regencies/Municipality in Java/Bali islands have different economic and geographical characteristics from the governments of Regencies/Municipality outside Java/Bali islands.

One of the considerations in this sample selection technique is the regions have published their realization of Local Income and Expenditure Budgets by Treasury Department. Data analyzed in this research is data from Income and Expenditure Realization Report (APBD) of Regencies/Municipality in Lampung Province during 1998-2007. the data can be obtained from treasury department website: http://www.djpkpd.or.id and BPS in Lampung.

Variable Research

The problem core in this research is flypaper effect, which is a condition where regency/municipality governments respond differently (more extravagantly) in determining local expenditures by using grants from central government in the form of unconditional grants (DAU) than using its ability in the form of local income (PAD). This research uses two variables: dependent variable and independent variable. Dependent variable in this research is local expenditure (BD), and the independent variables

are local income (PAD) and unconditional grants (DAU).

Model Analysis

To test the hypothesis, it will be used a multiple regression analysis in a degree of significance (α) 1%. The purpose of regression analysis is to find out how high the relation between the two variables or more, if it's true that there is a significant relation between the variables (Santoso, 2008). In regression analysis, it will be developed a regression equation, which is a formulation to estimate the value of dependent variable from independent variables. The formulation of hypothesis testing is formulated as follow:

$$Y_i = a + b_1 X_{1i} + b_2 X_{2i} + e \quad .. (1)$$

Y_i = The amount of local expenditure

a = Intercept

b_1, b_2 = regression coefficients

X_{1i} = The amount of local income

X_{2i} = The amount of unconditional grant

The rule to accept or reject the results by using multiple regression (simultaneous test) base on the results of the F test. With α = 1%, F-test can be done by the ways as follows (Kuncoro, 2007):

a. Quick look, if F is more than 4, so Ho can be rejected. In other words, we accept the alternative hypothesis by noting that all independent variables (X) affect dependent variables (Y) significantly).

b. Comparing F by calculation and F by table with the rule as follows:

If F by calculation > F by table or the grade of significance is fewer than α = 0.01, it means that independent variables are related significantly towards dependent variables. If F by calculation < F by table or the grade of significance is more than α = 0.01, it means that independent variables are not related significantly towards dependent variables.

Pursuant to the test above, the results will show the probability about flypaper effect occurs or not. Flypaper effect occurs if the results show one of these conditions:

1) The coefficient of DAU is more than the coefficient of PAD and both of them are significant.

2) PAD is not significant.

Classis Assumption Test

By Gujarati (2003), the important classic assumptions are:

a. It has normal distributions

b. It doesn't happen multicollinearity among independent variables.

c. It doesn't happen heteroscedasticity or the constant disturbance variable variance (homoscedasticity)

d. It doesn't happen autocorrelation among residual in each independent variable.

Data Analysis And Discussion

Data Research

This research uses data from total samples because they are the population of regencies/municipalities in Lampung Province. All the samples are 10 regencies/municipalities which are consist of 8 regencies and 2 municipalities. In this research, data collected and processed are consist of:

1. PAD from budget report/ realization of APBD with budget year 1998-2007.
2. DAU from report/ realization of APBD with budget year 1998-2007.
3. Total local expenditure from report/ realization of APBD with budget year 1998-2007.

Classic Assumption Test

The Classic Assumption Test of linear regression which are done in this research are normality test, autocorrelation test, mulicollinearity test, and heteroscedasticytas test. Classic assumption tests are done so that data used will fulfill the criteria Best Linear Unbiased Estimator (BLUE).

Normality Test

Normality test is to evaluate if in a regression model, there is a disturbance variable or residual has a normal distribution (Ghozali,2005). There are 2 ways to detect if the residual has a normal distribution or not, that is, by using statistical test and graphic analysis. One of the easiest ways to see that the residual has a normal distribution or not, by seeing the normal graphic probability plot, which compares cumulative distribution and normal distribution. Normal distribution will make a straight diagonal line and ploting data residual will be compared by the diagonal line. If the residual data distribution is normal, so the line which is described the real data will follow the diagonal line.

In this research, it is used a statistical test One sample Kolmogorov-Smirnov (K-S) to do the normality test. If the value of Asymp.sig of a variable $> \alpha$ (0.01), so it can be concluded that the variable has a normal distribution. The values of asymp.sig of the normality test in each regencies/municipalities are shown in this table:

Table 1. The results of One sample Kolmogorov-Smirnov Test

No	Kabupaten/kota	Asymp.Sig	Keterangan
1	Kab Lampung Barat	0,955	normal
2	Kab Lampung Selatan	0,490	normal
3	Kab Lampung Tengah	0,887	normal
4	Kab Lampung Utara	0,340	normal
5	Kab Lampung Timur	0,997	normal
6	Kab Tanggamus	0,383	normal
7	Kab Tulang Bawang	0,725	normal
8	Kab Way Kanan	0,991	normal
9	Kota Bandar Lampung	0,915	normal
10	Kota Metro	0,693	normal

Autocorrelation Test

Autocorrelation test is used to know if in a regression model, there is a correlation among the disturbance errors in a period (t) with disturbance errors in earlier period (t-1). If there is a correlation, therefore it is called as autocollenearity. Autocorrelation is also defined as the correlation among the members of observation which is done by time series or cross sectional data. In context to fulfill classic assumption in linear regression, there must not be the correlation. In this research, autocorrelation test id done by Durbin Watson. The reference rule is if du < d< 4-du is achieved, so it can be concluded that there is not positive or negative autocorrelation. With n= 10, k=2 and level of significance= 0.01, so pursuant to Durbin Watson table, it is obtained that dl=0.466 and du= 1.333. From data above, so variables will be free of autocorrelation if 0.466 < d < 2.667 (4-1.333).

Table 2 Durbin Watson Value

No	Kabupaten/kota	nilai d
1	Kab Lampung Barat	1,655
2	Kab Lampung Selatan	1,560
3	Kab Lampung Tengah	1,356
4	Kab Lampung Utara	1,690
5	Kab Lampung Timur	1,754
6	Kab Tanggamus	1,635
7	Kab Tulang Bawang	2,614
8	Kab Way Kanan	2,624
9	Kota Bandar Lampung	2,308
10	Kota Metro	1,421

The table above shows that data in all regencies/municipalities in Lampung province are free of autocorrelation problems.

Multicollinearity Test

In this research, to evaluate if there is multicollinearity or not, it is done by seeing the value of variance inflation factor (VIF) and tolerance (TOL). The guidance for something which is not free of multicollinearity can be seen from the value of TOL <0.10 and value of VIF >10. it means that if TOL of independent variables > 0.10, it menas that there is nor correlation among the independent variables. And if VIF of independent variables < 10, it means that there is not multicollinearity among independent variables in regression model.

Table 3. The results of multicollinearity test

No	Kabupaten/kota	TOL		VIF	
		PAD	DAU	PAD	DAU
1	Kab Lampung Barat	0,199	0,199	5,025	5,025
2	Kab Lampung Selatan	0,290	0,290	7,452	7,452
3	Kab Lampung Tengah	0,217	0,217	4,607	4,607
4	Kab Lampung Utara	0,281	0,281	3,557	3,557
5	Kab Lampung Timur	0,369	0,369	8,539	8,539
6	Kab Tanggamus	0,141	0,141	7,116	7,116
7	Kab Tulang Bawang	0,215	0,215	4,566	4,655
8	Kab Way Kanan	0,402	0,402	2,487	2,487
9	Kota Bandar Lampung	0,187	0,187	5,339	5,339
10	Kota Metro	0,122	0,122	9,824	9,824

Based on the results of multicollinearoty test, it can be concluded that all data in regencies/municipalities in Lampung province are free of multicollinearity problems.

2.1.4 Heteroscedasticity Test

Heteroscedasticity Test is done by gejser test as follows:

Table 4. The results of heteroscedasticity test

No	Kabupaten/kota	Sig	
		PAD	DAU
1	Kab Lampung Barat	0,160	0,840
2	Kab Lampung Selatan	0,510	0,240
3	Kab Lampung Tengah	0,750	0,579
4	Kab Lampung Utara	0,239	0,343
5	Kab Lampung Timur	0,768	0,821
6	Kab Tanggamus	0,680	0,452
7	Kab Tulang Bawang	0,475	0,106
8	Kab Way Kanan	0,126	0200
9	Kota Bandar Lampung	0,631	0,531
10	Kota Metro	0,424	0,778

In table 4 above, we can see that the significance for each independent variable in regencies/municipalities in Lampung province shows unsignificant results towards dependent variable so it can be concluded that all data in regencies/municipalities in Lampung province are free from heteroscedasticity problems.

Hypothesis Test

To do the hypothesis test, which notes that the effect of DAU towards BD is bigger than the effect of PAD towards BD, is done by multiple regression. Both of the income variables are run at a time so that it can be seen the significant

comparison of the two effects towards BD. The results will show the probability if the flypaper effect occurs or not. Flypaper effect occurs if the results show one of these conditions:

1) The coefficient of DAU is more than the coefficient of PAD and both of them are significant.

2) PAD is not significant

Hypothesis test in each regencies/municipalities in Lampung province is as follows:

Table 5. The Result of Hypothesis Test

No	Kabupaten/kota	VALUE	ANOVA		t HITUNG	
		R SQUARE	F VALUE	ρ	PAD	DAU
1	Kab Lampung Barat	0,963	91,005	0,000	0,395	0,000
2	Kab Lampung Selatan	0,960	108,694	0,000	0,687	0,002
3	Kab Lampung Tengah	0,988	284,502	0,000	0,347	0,000
4	Kab Lampung Utara	0,983	200,286	0,000	0,019	0,000
5	Kab Lampung Timur	0,986	252,791	0,000	0,687	0,007
6	Kab Tanggamus	0,981	176,881	0,000	0,786	0,000
7	Kab Tulang Bawang	0,988	290,988	0,000	0,744	0,000
8	Kab Way Kanan	0,979	164,365	0,000	0,062	0,000
9	Kota Bandar Lampung	0,995	696,509	0,000	0,249	0,000
10	Kota Metro	0,978	157,302	0,000	0,049	0,000

Based on the results of the test statistically, it shows that the effect of DAU towards local expenditure is more significant than the effect of PAD. This shows that in all regencies/municipalities in Lampung province, the phenomenon of flypaper effect occurs, so hypothesis Ha_1 – Ha_{10} are accepted. This condition shows that there is a high dependence of local government to central government in financing total local expenditures. Flypaper effect also indicates that local government will spend grants from central government (DAU) more extravagantly than PAD.

CONCLUSIONS AND LIMITATIONS

1. Conclusions

This research analyzes about the effect of local income towards local expenditure in Lampung province in period 1998-2007. The local income consists of PAD and DAU, and local expenditure (BD) is total expenditure of local government in regencies/municipalities in Lampung province for ten years.

Based on the results, so it can be concluded that:

a. On average income PAD all regencies/municipalities in Lampung province, from 10 regencies/municipalities, they can be characterized into two groups: rich regencies/municipalities and poor regencies/municipalities. The rich regencies/municipalities are South Lampung regency, Central Lampung

regency, and Bandar Lampung municipality, and the rest are the poor regencies/municipalities.

b. Flypaper effect occurs in all regencies/municipalities in Lampung Province. This finding is supported by the low contribution of PAD towards BD, that is, on average only 3.16% and the high dependence of all local government in regencies/municipalities in Lampung province which is shown by the high contribution DAU towards BD, that is, 74.10%.

2. The Limitations of Research

This research has some limitations which need improvements for future researches. The limitations are:

Local expenditure, which is taken from data of realization report of APBD, is total local expenditure without differentiating the kinds of expenditures (apparatus expenditure and public expenditure). For future research, it can be done by using per kind of expenditure so that it can be known that which local expenditure (apparatus expenditure and public expenditure) is affected by DAU or PAD.

This research uses secondary data which is obtained from APBD report, therefore the proxy of the behavior of resource allocation by government and local politicians have not described well. The future research can add another approach like using primary data.

Daftar Pustaka

Gamkhar, Shama., Oates Wallance. 1996, Asymetries in response to increase and decrease in intergovermental grants;some empirical findings. National tax journal 501-512.

Ghozali, Imam. 2005, Analisis multivariate dengan program SPSS. Semarang: Badan penerbit Undip.

Gujarati, Damodar N. 2003, Basic Econometries.3th. MC Graw-Hill, Inc. New York.

Halim Abdul. 2002, Akuntansi dan pengendalian keuangan daerah. Penerbit UPP AMP YKPN .

--- 2004, Manajemen keuangan daerah, edisi refisi. Penerbit Bunga Rampai.

---2007, Seri Akuntansi Sektor Publik-Akuntansi Keuangan Daerah. Jakarta, Penerbit salemba Empat.

Kustini.2007, Pengaruh Desentralisasi Fiskal terhadap PAD dan Belanja Aparatur dan Belanja Publik kabupaten/kota di pulau Jawa. Thesis UGM, Yoyakarta.

Mamesah DJ,1995 Sistem administrasi keuangan daerah, Jakarta. Gramedia pustaka utama.

Mardiasmo.2002, Otonomi dan Manajemen Keuangan Daerah. Penerbit Andi, Yogyakarta

Martfianto, Roy. 2007, Pengaruh desentralisasi fiskal terhadap ukuran pemerintah, study kasus pada tingkat pemerintah nasional, pemerintah pusat dan pemerintah daerah di Indonesia. Thesis, UGM Yogyakarta.

Nugrahaeni, Alfiana,Kartika. 2007, Pengaruh DAU dan PAD terhadap belanja pemerintah daerah di lingkup provinsi DIY, Thesis UGM, Yogyakarta.

Purwanta. 2004, Alternatif pendekatan pengukuran kapasitas dan kebutuhan fiskal dalam penentuan tranfer DAU di Indonesia tahun 2001. Thesis UGM, Yogyakarta.

Republik Indonesia. 1999, UU No 22 tahun 1999 tentang Pemerintahan daerah.

---. 1999, UU No. 25 tahun 1999 tentang Perimbangan keuangan antara pemerintah pusat dan daerah.

---. 2000, Peraturan Pemerintah Republik Indonesia No. 105 tahun 2000 tentang pengelolaan dan pertanggungjawaban keuangan daerah.

---. 2002, Keputusan Menteri Dalam Negeri No. 29/2002 tentang pedoman pengurusan, pertanggungjawaban dan pengawasan keuangan daerah serta tata cara penyusunan APBD, pelaksanaan tata usaha keuangan daerah dan penyusunan perhitungan APBD.

---. 2004, Undang-Undang Republik Indonesia No. 32 tahun 2004 tentang pemerintah daerah.

---. 2004, UU No, 33 tentang perimbangan keuangan antara pemerintah pusat dan pemerintah daerah.

---. 2005, Peraturan Pemerintah Rebublik Indonesia No. 58 tahun 2005 tentang pengelolaan keuangan daerah.

---. 2005, UU No. 24 tahun 2005 tentang Standar Akuntansi Pemerintahan.

---. 2006, Peraturan Menteri Dalam Negeri No. 13 tahun 2006 tentang Pedoman Pengelolaan Keuangan Daerah.

Sidik, Machfud, B.Raksasamahi, Robert Simanjutak & Bambang Brojonegoro 2002, Dana Alokasi Umum-konsep,hambatan dan prospek di era otonomi daerah.

Santoso, Singgih. 2008, Panduan Lengkap Menguasai SPSS 16, Penerbit Elex Media Komputindo.

Sukry,Abdullah & Halim, Abdul. 2004, Pengaruh Dana Alokasi Umum (DAU) dan Pendapatan Asli Daerah (PAD) terhadap belanja pemerintah daerah studi kasus kabupaten/kota di jawa bali. Yogyakarta; Jurnal Proceeding Simpisium Nasional Akuntansi (SNA) VI, Surabaya 16-17 Oktober 2003.