REGIONAL REVENUE AND INFRASTRUCTURE EXPENDITURE: IS THERE A FLYPAPER PRACTICES?

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ABSTRACT

The main objective of regional autonomy is *to empower regions in order* to *be more independent financially. However, some researches indicate that local governments still strongly depend* on *fentral government assistance through grant. This research examined flypaperseffect as one of indicators* to *see the effectiveness of regional autonomy.* It *analyzed about howlocal governmentsallocate the available resources* in *terms of revenue that sourced from grantproxied by'General Allocation Fund (GAF) and Revenue Sharing Fund (RSF) otus own income especially for public needs.*

This research used data sample of regional budget realization report of9 regencies and 4 *municipalities in South Sumatera province period* 2008 *until* 2011. *Analysis tool that was used* in *this research is multiple linear regressions.*

The research result shows that GAF, RSF, and Regional Owned Revenue (ROR) have significant influence on infrastructure expenditure partially and simultaneously. Positive coefficient value of GAF and RSF is greater than the coefficient value of ROR which is negative. It implies that effect of grants is greater than the effect of ROR on infrastructure expenditure. This result suggests there has been a Flypaper Effect on *local government's' response of infrastructure expenditure. Local government's' behavior in setting infrastructure expenditure policy is more stimulated by the amount of grant received in the current year trl£lnits regioTl£l1*wn *revenue. Grant encourages local governments use the transfer for increasing their expenditures.*

Keywords: *GAF, RSF, ROR, Infrastructure Expenditure, and Flypaper Effect*

I. INTRODUCTION

Government had officially enacted regional autonomy in Indonesia since 2001. Regional autonomy is authority of autonomous regions to manage local economic resources independently and responsible for the outcome oriented to improve the welfare of the community in the region (Mardiasrrw,2002). To support the implementation regional autonomy, central government will transfer "Balance'Fund" that consists of GAF, Specific Allocation Fund (SAF), and RSF of tax and non-tax (natural resource). The purpose of this grant is to reduce{if it's possible to eliminate) inter- regionaifiscaigapandensure theachievement ofminimumservice standardsin the region (Simanjuntak in Maimunah, 2006).

In order to create the independency in the autonoous region, regional own revenue oecome an important factor. However, reality shows that regional own revenue is only able to pay the highest local government expenditure by 20% (Kuncoro, 2007). The dependence level of local government to central government is still quite high. If the government is too much emphasis on regional own revenue, then society will be burdened with various taxes and levies.Local governments tend to rely more on grant from central government rather than maximizing their regional own revenue. Grant may have substitution effect or stimulus for the local expenditure. Thus, governments in regency/municipality are expected to use these funds more effectively and efficiently for the improvement of services tothe community accompanied by transparency and accountability.

With limited resources, local governments should be able to allocate the revenue gained for local expenditure that is productive. Ifviewed in terms of benefits, the budget allocation for the capital expenditure sector, especially infrastructure which is very useful and productive in providing services tothe public. How ocal government allocates the available resources in terms of revenueis interesting to be researched. Researchersuse a variety of approaches to explain the behavior of local governments in allocating itsfund, whether the fund comingfrom grant (GAF, SAF, or RSF) or fromits regional own revenue.

Revenue sharing fund is aimed to reduc~ vertical fiscal imbalance between central and local government. However, its pattern could potentially sharpen horizontal fiscal imbalance experienced by producing and non-producing regions. Regions that have potential tax and vast natural resources tend to get higher amount of RSF but it is only limited to certain regions. Thus, the role of the general allocation fund lies in its ability to create a distribution of fund based on consideration of the potential fiscal and real needs of each region (Law no.33 of 2004). However, eventough some regions don't posses abundant natural resources but if they could have good economic structure and optimize the potential of tax receipt so that the regions can become rich.

Some researchers found out different responsefrom local governmentin spending grant andits own income. In which, when local revenue derived from grant then the stimulation of expenditure is different with stimulation that comes from regional own revenue and when the response (expenditure) in the regions sourced greater from the grant than the income its self, so it is called Flypaper Effect (Oates, 1999 in Abdullah and Halim, 2003). In other words, Flypaper Effect is the condition where the grant stimulates the increase of the local government expenditure larger than regional own revenue does. Previous researchers such as Maemunah (2006) who studied in Sumatra and Prakosa (2004) who studied in Yogyakarta and Central Java obtained results that ROR and GAF have significant influence on local expenditure. However, ROR has less significant influence than GAf on local expenditure. This means there has been Flypaper Effect.From the explanation above, the researcher was interested in conducting development researchfrom the previous research.

II. LITERATURE REVIEW

Agency Theory

Jensen and Meckling (1976) in Abdullah (2004) defined agency relationship as a contract in which one or more people (principal) to ask the other party (agent) to perform some works on behalf of the principal involves delegating some decision making authority to the agent. In the process of drafting regional budget preparation, the position of local government acts as agent and people/voters, as the principal. Local government should defend the interests of the people, but this often does not happen because the delegation of authority for local government doesn't have the clarity rule of control and consequences. As a result, the executives tend to make budget for their personal or their group. That condition is called as political corruption in the budgeting process. (Garamfalvi, 1997). If this condition occur, the process of drafting budget will result in the resource allocation that is distorted due to opportunistic behavior of private interests and politicians. Agency problems that arise in governance is likely to maximize utility (self-interest) in preparation of the budget allocation, because the politicians and governments have the advantage of information. Darwanto and Yustikasari (2007) stated that authority oflegislative and executive (local government) in the budgeting process give a chance for legislative to "impose" their personal interests. Legislative's position as a supervisor for the implementation of government policy can be used to prioritize the preferences in budgeting. To realize their personal interests, politicians have preferences over the allocation oflucrative opportunities and has long-term political impact. They will recommend to raise the allocation to sectors that support their interests. Allocation of infrastructure and the parliament increased, but the allocation for health and education decreased.In the concept of balanced budget, the local government must submit its budget planned to the legislative prior to the current fiscal year, but it does not regulate how the expenditure should be prioritized or how to specify the components expenditure (Holtz-Eakin et al, 1994 in Abdullah and Halim, 2003).In this case, local government expenditure will be adjusted with changes in local revenue or changes on revenue occur before changes on expenditure.

Asymmetry Information Theory

Asymmetry Information Theory assumes that there are many gaps of information between the management who has direct access to information with the constituents or the people who are outside the management (Kurniawati, 2010). Local governments in regency and municipality of South Sumatra act as the management who have responsibility in managing financial of the region. They need to share the information to the public.In reality, the publication of regionalbudgetrealization that is done by localgovernment through newspaper, internet or other ways has not been a common yet. The policy in spending general ~lIocation fund, revenue sharing fund and regional own revenue should have done based on the principle of transparency and accountabilirv.Budget realization report indicates the level of achievement of targets that had been agreed between the legislative and the executive in accordance with local regulations. Such information is useful for the users in evaluating decisions about the allocation of economic resources and local government performance in terms of efficiency and effectiveness of the budget.

Regional Budget

Government needs to plan its financial which is manifested in the budgetas a guide in eachsteps to implement the State's duty (Ghozali, 1997 in Mardiasmo, 2002) .Budgeting needs some criteria (Mardiasmo, 2002) as follows (a) Transparency and accountability, (b) Budget discipline, (c) Justice of budget, (d) The efficiency and effectiveness of budget and (e) Compiled with the performance approach. Regional budget is local government's financial action plan containing expenditureforecastproposed in one period and the proposed source of revenue to financeexpenditure. The limited fundsowned by local government is the reason why budgeting becomes the most important mechanism for the allocation of resources. Regional budgets used as a tool that plays an important role in increasing public service and therein reflected the needs. of the community with regard to the potential resources of regional wealth.Regional Budget process occurs at the level of executive and legislative.

Regional Own Revenue

In the concept of regional autonomy, each region is given greater freedom in exploring the potential of regional own revenue within the framework of decentralization. More over, it is expected to increase each year.As set out in the explanation of the Law No. 33 of 2004, regional own revenue is the revenue that sourced from the local sector, in terms oflocal taxes, local retribution, the management of separated regional assets and other legitimate revenue.

Local Tax

Local tax is the due that must be paid by an individual/entity to the region without any direct reward that can be enforced by laws and regulations applicable to finance development (Law No. 28 of 200.9 article I}.From the standpoint of levying authority, local taxbroadly livided into twonamely :local taxes levied by governments in the Province (Provincial Tax), and local taxes levied by governments in the Regency/Municipality (Regional Tax),

Local Retribution

Local retribution is levy as payment for services or granting certain permits that are exclusively reserved and/or provided by local governments for the benefit of the individual or entity (Law No. 28 of 2009, article 1). Levies can be divided into severalgroup that described as follow:Levies on general services, Levies on business services, and Levies on certain licensing.

Gain from Managing Separated Local Wealth

Region needs to manage its wealth as optimal as possible to increase revenue. It can be done by managing regional assets in form of natural resources, human resources, and industrial sectors.The law allows local governments to establish local-owned enterprises. These local enterprises along with private sector or the association of regional employers are expected to contribute so as to support local financial independencyand developing the region.

Other Legitimate Revenues

Other legitimate revenue can be pursued by the region in ways that are fair and do not violate regulations to finance its expenditure. Alternatives to earn revenue can be done by having loans from central government, other local governments, and financial or non-financial institutions, lending to the public, and issuing local bonds.

General Allocation Fund

General allocation fund is a type ofintergovernmental grants sourced from state budget which is not tied to specific expenditure programs.The used of this fund is delegated to the regions in accordance with local priorities and needs for improvement of service to the community in implementation of regional autonomy(Kusumadewi and Rahman, 2011). General allocation fund is used to close the gaps that occur because of the need of the region exceeds its potential revenue. General Allocation Fund will provide certainty to the region as sourceof funding to finance expenditure which are responsibility of each regions. The distribution of this fund to regions are held every month. Requirements in allocating GAF according to the provisions are as follows (a) General Allocation Fundis determined at least 29% of domestic revenues specified in the State Budget and (b) General Allocation Fund was set 10% for province and 90%

forregency/municipality from the amount that already determined.According to Law no. 33 of 2004 article 28 (3), components of fiscal needs that are used in calculating GAF consists of: population, land area, human development index (HDI), construction price index (CPI), and gross domestic product (GDP) per capita while the components of fiscal capacity consists of regional own revenue and revenue sharing fund.

Revenue Sharing Fund

Revenue sharingis fund allocated from the state budget to the region based on certain percentage inthe implementation of decentralization (Law No.33 of 2004). The main objective of granting revenue sharing fundis toreduce vertical fiscalimbalancebetween central and localgovernment. Revenue sharing fund consists of two types, namely revenue sharing fund of tax and revenue sharing fund of nontax (naturalresources).

1. Revenue sharing fund of tax derived from (1) Land and Building Tax *(PBB)*, (2) Fee for Acquisition of Rights to Lands and BUildings.(BPHTB), (3) Income Tax Article 21 and Income Tax Article25, 29 *(WPOPDN)*
2. Revenue sharing fund of non tax derived from: Forestry, General Mining, Fisheries, Oil Mining, Natural GasMining, and GeothermalMining.

Infrastructure Expenditure on Capital Expenditure

According to Abdullah and Halim (2003), capital expenditure is an expenditure that benefits exceed one fiscal year and will add to the assets or property and the regions will have consequences that are routinely added expenditures such as maintenance expenses. Local government-as akey organizerof development in the region must be really considerate in allocating capital expenditure in forms of infrastructure. Puspita (2009) stated that infrastructure is a building orphysical facilities that supportsustainable and growth of socialandeconomic in society, so by increasing the allocation of infrastructure expenditure, the region can get benefits of economic and social increased for society in the future.

In term of economic, infrastructure consists of physical and services infrastructure to improve economic productivity and quality of life such as transport, telecommunications, electricity, and irrigation. As an integral part ofnational development, the establishment of infrastructurein the region must be organizedboth in quantity andquality, so it can improve the availability of adequate welfare and promote regional economic growth. Basically, the establishment of adequate and quality infrastructure will provide convenience for its users to be moreproductivein doingactivities. lnfrastructure also takes part inimproving public welfare, for example: the availability of roads (both regular roads and highways) would greatly assist the development of society in a particular region, business activity in a region will be growing along with the best road infrastructure, as an access to the region.

BuildingRoads,Irrigationand Networking expenditure could be categorized as infrastructure expenditure of local government. The poor quality of infrastructure is still a major constraint in doing business in Indonesia KPPOD (2012) stated that in the period of 2007 and 2010 local budget in regency/municipality in Indonesia for infrastructure ranged from 11% - 13%. But in fact the increase in the budget does not lead to significantly improved quality of infrastructure (especially roads), even higher level of damage. Corruption is usually done by executing projects that bribing public officials with the remuneration committee of the winning tender physical infrastructure projects that sacrifice infrastructure quality built.

Flypaper Effect

Flypaper Effect is a condition where the stimulus of local expenditure caused by the change in the number of grants from the central government is bigger than the stimulus caused by changes in regional own revenue. According to the bureaucratic model, flypaper effect is a result of budget maximising behaviour by bureaucrats (local politicians), who more easily spend a grant than ask for a tax increase. McGuire (1973) in Hines & Thaler (1995) called this a greedy politicians model. The flypaper effect possiblly happen in the bureaucratic model because of the bureaucrat's superior knowledge about grants and budget. Legrenzi and Milas (2001) provides empirical evidence of the existence of flypaper by using sample of municipalities in Italy. They stated that *local governments consistenly increase their expenditure more with respect to increase in State transfer rather than increase in own revenues.*

Previous Research Result

Andersson(2002) analyzed the effect of changing of grant systemon local expenditure in Sweden found that the increase in non-matching grant (GAF) will cause an increase in localexpenditure, in contrast with the result of the increa~e in revenue derived from taxes. High tax rate increase causes a decrease in local expenditure. According to Andersson, the effect of non-matching grant is greater than the matching grant (regional own revenue) and this effect depends on the relative decline of non-matching grant for several periods. These results demonstrate the occurrence of flypaper effect.

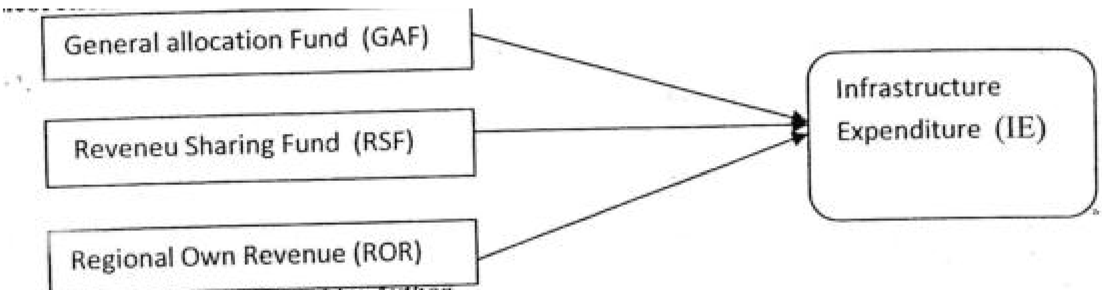
Abdullah and Halim (2003) examined the effect ofGAF and ROR to local expenditure in 90 regencies and municipalities in Java and Bali. It resulted that separately GAF and ROR had significant effect on localexpenditure, with or without lag. When lag was not used, the effect of ROR on expenditure stronger than GAF but when the lag was used, the effect of GAF on expenditure was more powerful/signifficant than the ROR which means there is a flypaperon Government's response of GAF and ROR.

Prakosa (2004) analyzedGAF and ROR's influence and their ability to predict local expenditure in Indonesia by using samples from regency/municipality within the Province of Central Java and DIY. The result showed that the magnitude of expenditure is influenced by the amount of the general allocation fund received from the central government. This study resulted the block grants and regional own revenue influence local expenditure significantly. In local expenditure prediction model, the predictive power of the general allocation fund to local expenditure remained higher than the predictive power of regional own revenue. This suggests there has been flypaper effect.

Maimunah (2006) also studied the occurance of flypaper effect by taking samples in the regency/municipality in Sumatera Island. The result of this research indicates that GAF and ROR had significant influence on local expenditure separately and simultaneously. When it is regressed simultaneously, the effect of GAF stronger than the effect of ROR to local expenditure. This meant there has been a flypaper on expenditures in regencies/municipalities of Surnatera.

Based on the previous research result, it can be concluded that grants from central government that refers to general allocation fund has more signifficant influence to local expenditure than regional own revenue. The stimulation of grants can increase the local expenditure and it shows the occurance of flypaper effect.

Theoretical Framework



Source : data processed by Author

There is significantly effect of GAF on Infrastructure Expenditure

Study Legrensi and Milas (2001), using sample of municipalities in Italy, found empirical evidence transfer has lorig term effect on spending. Specifically, they asserted that the government policy variables in the short term is adjusted with the transfer received, allowing the non-linear response and asymmetric.Gamkhar and Oates (1996) in Maimunah (2006)suggests that a reduction in the number of transfers led to a reduction in local expenditure. It is also not different from the results of research Abdullah&Halim (2004). Based on the explanation, so the hyphotesis formulated is HI: GAF t has significant influence on lnfrasrructure Expenditure t.

There is a significanlv effect of RSF on Infrastructure Expenditure.

Deller, Maher, and Lledo (2002) analyzed the influence of income that is derived from revenue sharing on expenditure and the result also shows the occurance of Flypaper Effect. By using data of 581 cities and villages in Wisconsin, United States, the research result found that for every dollar increase in income per capita, the total expenditure per capita increased by about 12 to 15 cents. But, for every increase in income per capita derived from revenue sharing, increased on expenditure per capita reached 46-55 cents. Deller, Maher, and Lledo (2002) assumed that the response patterns of the region are also affected by the provision of the revenue sharing formula itself. Based on the explanation, so the hyphotesis formulated is H2: RSF t has significant influence on **lnfrastructure Expenditure t.**

There is a significant effect of ROR on Infrastructure Expenditure

Study of the influence of regional own revenue on local expenditure has been done by nany researchers. The hypothesis stated that that regional own revenue (primarily taxes) will influencelocal expenditure known as hvphoresis spend tax (Aziz et al, 2000; Doi, 1998; Von Furstenberg et al, 1998 in Maimunah, 2006). In this case local governmen t expenditure will be adjusted with changes in ROR or changes in revenue occur before changes in expenditure. Based on the explanation, so the hyphotesis formulated is H3: ROR t has significant influence on Infrastructure Expenditure t.

Flypaper Effect

Several studies indicates difference stimulus between grants and regional own revenue does occur. According to Andersson (2002), the effect of non-matching grants greater than matching grants and this effect depends on the relative decline in non-matching grants for some period. This result supports the occurance of Flypaper Effect. Research done by Legrenzi and Milas (2001) stated that *local governments consistenly increase their expenditure more with respect to increase in State transfer rather than increase in* own *revenues.* Flypaper regarded as an anomaly in the rational behavior. If the transfer is considered as an (additional) income so it should be spent in the same way (Hines & Thaler, 1995). Based on the explanation, so the hyphotesis formulated is H4: There is flypaper Effect on infrastructure expenditure, where; the influence of GAFt and RSFt to Infrastructure Expenditure t is more significant than the influence ROR t Infrastructure Expenditure t.

III. RESEARCHMETHODOLOGY

Population and Sample

The population of this research is all Regency and Municipality of South Sumatera that consists of 11 Regenciesand 4 Municipalities. The sampling technique usedin this researchis purposivesampling. Sample criteria of this research are as follows: (a) Regency/Municipality had realization of regional budget report which had been audited and available at BPK RI Sumsel Representative or at the website of www.djpk.depkeu.go.idand (b) Regency/Municipality prepared regional budget based on format of Governmental Accounting Standard.

Variables and Measurement

This research used three independent variables and one dependent variable. Independent variables are General Allocation Fund, Revenue Sharing **Fund,** and Regional Own Revenue, while dependent variable is Infrastructure Expenditure. Those variables is obtained from the post stated in the regional budget realization.

Data Collecting Method

Data used in this research is a secondary data in the form of realization of regional budget report of Regency and Municipality in South Sumatera period 2008-2011. Data can be obtained fromBadan *Pemeriksa Keuangan Republik Indonesia Perwakilan Sumatera Selatan* and also from the website of www.djpk.depkeu.go.id.

Data Analysis Technique

Multiple regression was used to see whether the components of revenue (GAF, RSF, and ROR) influence the infrastructure expenditure signifficantly or not. Regression equation used is as follows:

$$\mathrm{IE} = a + blGAF + b2RSF + b3ROR + \mathrm{e}$$

Determining Flypaper Effect

To determine whether there is flypaper effect or not on infrastructure expenditure , then the effect (coefficient value) of GAF and RSF on infrastructure expenditure must be compared with the effect of ROR on infrastructure expenditure. The conditions for the occurrence of flypaper are: Coefficient value of GAF and RSF is higher than coefficient value of ROR and all independents are signifficant = H4 accepted, or P valuet calculated of ROR is not significant = H4 accepted

IV. DATA SAMPLE

Research Sample

This research used sample of 9 regencies; Lahat, Musi Banyuasin, Musi Rawas, Ogan Komering Ilir, Ogan Komering Ulu, Banyuasin, OKU Timur, OKU Selatan, and Empat Lawang and 4 municipalities; Palembang, Prabumulih, Pagar Alam, and Lubuk Linggau.

	Regency/Municipality			
	2008	2009	2010	2011
GAFmin	EmpatLawang	MusiBanyuasin	MusiBanyuasin	Empat Lawang
RSFmin	EmpatLawang	EmpatLawang	EmpatLawang	OKI
RORmin	EmpatLawang	EmpatLawang	EmpatLawang	OKUS
IEmin	EmpatLawang	OKUT	PagarAlam	Pagar Alam

Source: Result ofdata processing

The minimum of GAF, RSF, and IE are very fluctuated meanwhile the minimum of ROR kept increasing each year. The regions that had lowest amount of GAF are EmpatLawang in 2008 and 2011 and MusiBanyuasin in 2009 and 2010. Within that period, those region were categorized as middle fiscal capacity region. That value could reflect that EmpatLawang and Musibanyuasin had higher independency level than other regency/municipality of South Sumatera because these regions could fund local needs without relying much on grant especially general allocation fund from central government.The regions that had lowest amount of RSF are dominated by EmpatLawang in 2008-2010 and then followed by OKI in 2011. EmpatLawang is a new regency that was officially formed on April 2007. It made this regency was still in the process of optimizing its natural resources and potential tax.The regions that had lowest amount oflE are varied in each year, such as EmpatLawang (2008), OKUT (2009) and PagarAlam (2010 & 2011). The need of infrastructure in each region is different. However, It is very useful in sustaining economic growth, providing services to the public and the benefit can be experienced directly by society. So, regency and municipality are expected to spend its fund more on infrastructure expenditure. For the minimum value of ROR, EmpatLawang had the lowest amount of ROR for 3 years consecutively but its amount increased from year to year. It means that, this regency always tried to maximize the utilization of its local economic resources. The condition changed in 2.011 where the lowest amount of of ROR was gained by OKUS.

	Regency/Municipality			
	2008	2009	2010	2011
GAFmax	Palembang	Palembang	Palembang	Palembang
RSFmax	MusiBanyuasin	MusiBanyuasin	MusiBanyuasin	MusiBanyuasin
RORmax	Palembang	Palembang	Palembang	Palembang
IEmax	MusiBanyuasin	MusiBanyuasin	MusiBanyuasin	MusiBanyuasin

Source: Result of Data Processing

The maximum of GAF, RSF, ROR and IE are gained only by two regions among 13 regions of sample. Palembang had the maximum of GAF and ROR while MusiBanyuasin had the maximum values of RSF and IE. \\1ithin that period, Palembang and MusiBanyuasin were regions that categorized as middle fiscal capacity region.If it is viewed in terms of GAF's purpose as interregional fiscal equalization, the regency/municipality that has high regional own revenue tend to get low general allocation fund and vice versa. But in this case, Palembang had the highest amount of both, GAF and ROR constantly **in** each year. Whether the fiscal needs of region are different due to the width of area, population, gross,domestic product, human development index, and construction cost index but the distortion in distributing GAF to the region also could possibly happen and it can make region get higher amount of GAF than

it should be. The maximum values of RSF and IE are. gained by MusiBanyuasin. As regions that become the fifth largest producer of oil and natural gas in Indonesia (wikipedia.org), it is really advantageous for MusiBanyuasin to get higher revenue sharing fund than other regions.

The allocation of infrastructure expenditure that tends to increase each year could support the velocity of development in this region.

V. RESULT AND DISCUSSION

Table.1 F-Test Result

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.161E23	3	1.054E23	34.642	.000[a]
	Residual	1.460E23	48	3.041E21		
	Total	4.621E23	51			

Source: Result of data processing

The result shows the calculation of F-test statistic is 34.6<:1·2with the probability of 0.000. The probability value ofF calculated is much smaller than degree of signifficance, which is 0.05. It means that GAF, RSF, and ROR have significant influence on Infrastructure Expenditure simultaneously.

Tabel 2. T-Test Result

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.340E10	2.273E10		.590	.558
	GAF	.197	.066	.349	2.984	.004
	RSF	.271	.027	.907	10.099	.000
	ROR	-.544	.193	-.332	-2.817	.007

Source: Result of data processing

The result shows that each independent variable has significant value (0.004,0.000, and 0.007) which is less than the degree of signifficance, 0.05. It means that each independent variable has signifficanr influence on dependent variable. The smaller significantvalueof a variable indicatesthe higher dependence of govemmentregard that revenue for the need of expenditure. So, the hypothesis one, hypothesis two, and hypothesis three can be accepted which stated GAF, RSF, and ROR have signifficant influence on infrastructure expenditure partially.

Determining Flypaper Effect

To determine whether there is fly paper effect or not on infrastructure expenditure then the effect (coefficient value) ofGAF and RSF oninfrastructure expenditure must be compared with the effect of ROR on infrastructure expenditure.

- Coefficient value of GAF and RSF is higherthan the coefficient value of ROR and all variables are significant, or
- Probability value off calculated of ROR is not significant.

The result of test is as followed:

Table 3. The Influence of GAF on IE, RSF on IE, and ROR on IE

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.340E10	2.273E10		.590	.558
	general allocation fund	.197	.066	.349	2.984	.004
	revenue sharing fund	.271	.027	.907	10.099	.000
	regional own revenue	-.544	.193	-.332	-2.817	.007

Source: Result of data processing

Regression result indicates that all independent variables have significant influence on Infrastructure expenditure partially. However, coefficient value of GAF (0,197) and RSF (0,271) is much higher thanthe coefficient value ofROR that has negative mark (-0,544). It can be concluded that the influence of Grant on Infrastructure Expenditure is more significant than Regional Own Revenue. So, the hypothesis four can be accepted which stated that there has been Flypaperliffect on infrastructure expenditure with the criteria coefficient value of GAF and RSF is higherthan the coefficient value of ROR and all variables are significant

The influence of General Allocation Fund on Infrastructure Expenditure

The first hypothesis which stated that general allocation fund has significant influence on infrastructure expenditure is accepted. The result shows that general allocation fund has significant value 0.004 which is less than the degree of significance, 0.05. The smaller

Significant value of a variable indicates the higher dependence of government regard that revenue for the need of expenditure. To see how dominant the influence of GAF on infrastructure expenditure, it can be seen from its coefficient value. GAF has coefficient value of 0,917. It is higher than the effect of ROR but smaller thanthe effect of RSE The positive coefficient valet; implies a positive relationship of GAF on infrastructure expenditure where if there is an increased in GAF then Infrastructure expenditure will increase as well.

The result of this research is consistent with research result conducted by Eakin (1985) in Prakosa (2004). He revealed that there is a very close bond or relationship between transfers from central government with local government expenditure. Gamkhar and Oates (1996) in Maimunah (2006) conducted research regarding the local government's response of changes in the number of transfers from the federal government in the United States for the years 1953~1991. The result stated that a reduction in the number of transfers (cut in federal grants) led to a reduction in local expenditure. This is also in accordance with the principle of balanced budget where the amount of expenditure is adjusted with the existing fund.

Study of Legrenzi and Milas (2001) used sample of municipalities in Italy. Their study found empirical evidence that in long-term, transfer/grant has effect on local expenditure. This could happened in respect of general allocation fund as a for m of grant which is very important as source of funding apart of revenue sharing fund because the proportion of *GAF* of local revenue is still the highest among others. Grant is a consequence of the unequal of fiscal capacity and economic resources of regions. The purpose of GAF is to reduce the financial gap and to create a stabilization of economic activity in the region..This made local government in common would set a regional plan pessimistically but optimistic in setting expenditure plan in order to receive higher amount of general allcation fund (http://www.Balipost.co.id).

The influence of Revenue Sharing Fund on Infrastructure Expenditure

The second hypothesis which stated that revenue sharing fund has significant influence on infrastructure expenditure is accepted. The result shows that revenue sharing fund has significant value 0.000 which is far less than the degree of significance, 0.05. RSF has the smallest significant value of other independent variables. It means that local government is really influenced much by the amount revenue sharing fund to finance infrastructure expenditure. The influence ofRSF on infrastructure expenditure is shown from its positive coefficient value which is 0,271. That value implies a positive relationship ofRSF on infrastructure expenditure where if there is an increased in RSF then infrastructure expenditure will increase as well.

The result of this research is consistent with the research result conducted by Deller, Maher, and LIedo (2002). Their study analyzed the relationship of income that is derived from revenue sharing and local source revenue with expenditure. By using the data of 581 cities and villages in Wisconsin, United States, the research result found that for every increase of dollars in income per capita derived from local source revenue, the total expenditure per capita increased by about 12 to 15 cents. But, for every increase in income per capita derived from revenue sharing, Increased in expenditure per capita reached 46-55 cents. The result of this research also showed the occurance of Flypaper Effect. They assumed that the response patterns was also affected by the provision of revenue sharing formula itself.

LPEM-FEUI (200l) stated that in order to see the readiness of local governments to face of regional autonomy, especially in the financial sector, measured by how financing capability is funded entirely by regional own and revenue sharing fund. Therefore, if the local governments want high amount revenue sharing to fund expenditure, the governments should be able to optimize the potential of regional taxes and natural resources owned by the respective region.

The influence of Regional Own Revenue on Infrastructure Expenditure,

The third hypothesis which stated that regional own revenue has significant influence on infrastructure expenditure is accepted. The result shows that general allocation fund has significant value 0.007 which is less than the degree of significance, 0.05 .. However, wether ROR has significant influence on infrastructure expenditure but the influence ofROR on infrastructure expenditure shows a negative relationship. ROR has coefficient value of
-0,544. Unlike influence of grant (GAF and RSF) which is positive, that negative coefficient value means that the higher amount of regional own revenue, the amount of infrastructure expenditure experiences declining. The result shows that local governments rely much on grant to fund its infrastructure expenditure and be more frugal in spending money that sourced from its own income.

The result of this research is consistent with the research result conducted by Prakosa (2004) which stated that GAF and ROR influence local expenditure significantly. Abdullah and Halim (2003) stated that the problem faced by local government in increasing ROR is generally associated with extracting the sources of taxes and levies as component of regional own revenue. In addition, financial controls in the region are weak.

The region that is supported by adequate infrastructure will affect the level of community productivity and attract investors to invest their capital in the region which will eventually increase regional own revenue. Ideally, the implementation of regional autonomy should be able to reduce dependency on the central government. Increased in infrastructure investment isexpected to improve the quality of public services andin turn can increase the level of participation of public for regional development that is reflected by increase in ROR (Mardiasmo, 2002).

Flypaper Effect Analysis

The fourth hypothesis which stated that there is Flypaper affect on infrastructure expenditure is accepted. GAF, RSF, and ROR have significant influence on infrastructure expenditure partially. However, coefficient value of GAF (0,197) and RSF (0,271) is much higher than the coefficient value of ROR that has negative mark (-0,544). It means there is Flypaper Effect on Infrastructure Expenditure where the influence of Grant on Infrastructure Expenditure is more significant than Regional Own Revenue. The occurrence of flypaper effect showed that the local government's response (infrastructure expenditure) of regency/ mu icipality in South Sumatera sourced greater frorn grant than regional own revenue. The result is consistent with the research result conducted by Legrenzi and Milas (2001) provides empirical evidence of the existence of flypaper in the long run by using sample of municipalities in Italy. They stated that local *governments consistenly increase their expenditure more with respect to increase in state transfer rather than increase in own revenue.*

Research of Abdullah and Halim (2003) also gives result of Flypaper Effect occurance by examining the effect ofGAF and ROR to local expenditure in 90 regencies and municipalities in Java and Bali. Deller, Maher, and Lledo (2002) examined regional expenditure category with a focus of flypaper effect. They found the effect of unconditional grants (GAF) on expenditure categories are more strongly for the needs of non-essential or luxury needs such as parks and recreation, cultural and educational services than normal or essential needs such as security (police) and protection against fire. Maimunah (2006) also tested the occurrence of flypaper effect on local expenditures in Sumatera island. SpesifficaIly, Maimunah examined the occurrence of flypaper on expenditures that related directly to the public. The research result found that flypaper effect occurred on the field of health and public works expenditure. However, for the category of education expenditure, flypaper effect didn't occur. Hines & Thaler (1995) stated that Flypaper regarded as an anomaly in the rational behavior. Transferred of fund/grant should be considered as an additional income just like local taxes so it should be spent in the same way.

Grants are allocated to sustain local government funding local needs. However,different fiscal capacity of each regency and municipality will cause different amount of grant that proxied by RSF and GAF gained by the region. Fiscal capacity is an overview of regional financial ability , reflected through local revenues (excluding the special allocation fund, emergency fund, long term loan, and other revenues which is restricted to fund certain expenses) minus employee expenditure, and related to number of poor people (Article 1 of PP 73/PMK.02/2006) Fiscal capacity of regency and municipality in Sumatera during the period 2008- 2011 are divided into 3 categories:

Table 4. Fiscal Capacity

No	Fiscal Capacity Category		
	Low	Middle	High
1	Lahat	Muba	Prabumulih
2	Mura	OKU	Pagar Alam
3	OKI	Lubuk Linggau	
4	Palembang	OKUS	
5	Banyuasin	Empat Lawang	
6	OKUT		

Source: data calculated based on PMK NO 73/PMK.02/2006

When it is viewed from regional fiscal capacity, those low fiscal capacity regions got higher general allocation fund especially Palembang that got highest amount of it. Empat lawang, Muba and Pagar alam are three regions that received least amount of general allocation fund. The regency that has highest amount of revenue sharing fund is Musi banyuasin while the least amount of revenue sharing fund gained by Empat Lawang however both regions have same fiscal category as middle fiscal capacity region. Grant from central governmet is aimed to create the equal fiscal capacity among regions or reduce fiscal disparity. However, it seems that the distibution of those funds to the region hasn't been run well since the regions that receive higher general allocation/higher revenue sharing fund still categorized as low and middle fiscal capacity.

South Sumatra is one of the provinces that have the potential for a strong economy in Indonesia. It continues to accelerate the development and distribution of welfare for its residents. The increase in welfare due to budget decentralization is often referred to as economic efficiency or locative efficiency (Martinez and McNab, 2001 in MakalahThe 3rd "National Conference UKWM).

Lindaman and Thurmaier (2002) in Sarnekto (2012) revealed that the budget decentralization has positive effect on the achievement of basic. needs for the community, reflected in the Human Development Index. According to the terminology used by Department of Internal Affairs, human development index is a tool used to measure the successfull level of the aspects that are relevant to the implementation of regional autonomy and development as a generic composite index comprised of three main components, namely local government, regional development, culture and society. HOI is an indicator that describes how the residents of region have the opportunity to access the results of a development as part of their rights in income, health, education, and so on.

When it is viewed from its HOI, all regencies and municipalities in South Sumatera are in the middle high level of HDI with the scale between 68 to 76. When it is broken down further, then we could classify those regions into the highest and lowest HOI regions. There are 3 major regions that have the highest HOI. The regions are Palembang, Prabumulih, and Pagar Alam. These figures illustrate that the opportunity for people in those regions to access the results of development is quite high. Thus It can be drawn a conclusion that the development equalization in those regions have run well.

Table 5. Human Development Index (HDI)

Reg/Mun	2008	2009	2010	2011	Average Index	Criteria
Lahat	69,99	70,53	71,3	71,67	70,8725	Middle high
MuBa	70,54	71,13	71,81	72,4	71,47	Middle high
MuRa	66,77	67,33	67,89	68,2	67,5475	Middle high
OKI	69,64	70,06	70,61	70,95	70,315	Middle high
OKU	71,92	72,36	73,14	73,41	72,7075	Middle high
Palembang	75,49	75,83	76,23	76,63	76,045	Middle high
Prabumulih	73,2	73,69	74,27	74,81	73,9925	Middle high
Pagar Alam	72,16	72,48	73,19	73,51	72,835	Middle high
Lubuk Linggau	69,69	70,18	70,56	71	70,3575	Middle high
Banyuasin	69,08	69,45	69,78	70,14	69,6125	Middle high
OKUT	68,88	69,39	69,68	70,24	69,5475	Middle high
OKUS	70,66	71,02	71,42	71,68	71,195	Middle high
Empat Lawang	67,68	68,15	68,61	68,92	68,34	Middle high

Source: sumsel.bps.go.id

The regions that had lowest HDI in South Sumatera achieved by OKU Timur, Empat Lawang and Musi Rawas. These figures indicate that the three regencies are still left in giving opportunity for society to enjoy development result compared to other regions in South Sumatra. Low HDI of these regencies could be happened due to the unprevalence of building the needed infrastructure to serve the needs of society to the rural regions and ineffective implementation of development projects managed by local governments.

Implementation of budget decentralization requires local governments to better identify and meet local needs and resources. This is because local government knows best what the local community wants and needs (Abdullah, 2004). The ability of local government to provide infrastructure is more effective and suit the needs of the community to reflect good performance. It will make society get easier to mobilize and use local resources to improve public services. Mobilization and efficient use of local resources that will enhance the growth of the local economy, which in turn will improve public services (Peterson, 1996 in Hidayatika, 2007)

However, by examining the occurance of flypaper effect, it showed that local governments in South Sumatera tend to increase infrastructure expenditure because there is increasing number of grant. But, when there is increased in regional own revenue, the local governments do not increase the infrastructure expenditure, they will be more frugal in spending the fund that sourced from regional own revenue or even decrease the amount of infrastructure expenditur. The policy in spending fund must be transparent and accountable. It is expected that local government should allocate resources for the achievement of social welfare and reduce the dependency on central government. The availability of good infrastructure could create efficiency and effectiveness in the various sectors that will ultimately increase economic growth.

V. CONCLUSION

Conclusion

Based on the data analysis and discussion, it can be concluded:

- Partial Tests showed that general allocation, revenue sharing and regional own revenue fund have significant influence on infrastructure expenditure. Coefficient values of GAF and RSF are positive, that means the higher number of GAF and RSF then the higher fund allocated for infrastructure expenditure. In contrast with ROR, coefficient value of ROR is negative, that means the higher number of ROR then the less fund allocated for infrastructure expenditure.
- Simultaneous Test showed that general allocation fund, revenue sharing fund, and regional own revenue jointly have significant influence on

infrastructure expenditure.

- Coefficient value of GAF and RSF are greater than the coefficient value of ROR. It means that the influence of grants on infrastructure expenditure is greater than the effect of ROR. This suggests there has been a Flypaper Effect on local government's response of infrastructure expenditure. Local government's behavior in setting expenditure policies more stimulated by the amount of grant received in the current year than their regional own revenue.

Limitation

This research has severallimitationsthat may affect the final result obtained and need improvement forthenext research. The limitation sof this research are:

- Sample used in this research is only limited to certain regions, 9 regencies and 4 municipalitiesof South Sumatera province. This. caused the result of this research just *fit* for the regency and municipality used as research sample.
- *This* research only used secondary data in the form of regional budget realization report. It made the proxy of local government behavior in terms of resource allocation cannot be depicted well. It takes a more feasible approach, for example by conducting *field* research.
- The findings of this research show some theoretical thing that can he understood. However, *in* practical terms, the result still needs to be discussed further.
- This research did not include other aspects which may become important factor, for example; public policy aspect, political aspect, financial management aspect, and budgeting aspect.

Suggestion

From the limitations mentioned previously, this research offer some suggestions to cover it. The suggestions are:

- The variables used for the next research are expected to be more complete and varied. Researcher can use other dependent variable of expenditure types and add other independent variables both size or type of other local government's revenue, as wen as non-financial variables such as government policies, condition of economic, budgeting aspect.
- Further research could take place in another regency/municipality that categorized as rich region or has high fiscal capcity in Indonesia in order to get more assurance of the dependence level of region on central government. Furthermore, it also suggeststaking longer observation period for the better result.

Besides giving suggestion to cover up the limitation, this research also state suggestion related to the research that is: local governments of South Sumatera should pay more attention to the allocation of revenue by considering its positive impact for the community, principally the expenditure allocations for infrastructure and social assistance. They need to facilitate economic development activities, one of them withan opportunity to invest. Infrastructure establishment and other various convenience facilities can be done to increase the attractivenessof investment as wen as to increase revenue (ROR). They need to optimize the level of its regional own revenue. It is also can be done by making regulation of taxes and levies that is more clear and strict and providing opportunity for society to manage/work with parties that can manage regional resources can improve regional own revenue so that dependence level of local government on grants can decrease.

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