

With-without Privilege Funds: Allocative Efficiency and Local Growth Welfare

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ABSTRACT

Regional local income is input in the local economic development. The sectors are local own-source income, fiscal balance transfers from the central government to regions, privilege funds of Yogyakarta and the other local incomes, those are used by the government as capital to raise local economic development to be better. So, this study to analyze the efficiency of local income of cities in Yogyakarta Province. One of results of this study describe that one of cities in the Yogyakarta is inefficient without the privilege fund inputs, but the effect of the allocation of privilege funds is very good for economic development and improving prosperous of societies. Generally, the privilege funds of Yogyakarta can be able to support the local growth welfare and prosperous of societies as output efficiently 100% based on the data envelopment analysis method.

Keywords: Privilege Funds, Local Growth Welfare, Data Envelopment Analysis

JEL Classifications: G2, H6, O1, I3

1. INTRODUCTION

In the process of regional development synergy between stakeholders, private groups and other community groups is needed at different levels to create an innovation by doing business and interdependence and interrelation in terms of physical, social, economic, and other environmental aspects so that new opportunities for improvement the welfare of the local community can be implemented in a sustainable manner in order to improve a better economic level. The Indonesian Government System has dominated various aspects of social life. From the proportional average of the state budget (APBN), around 80% of state revenue has been generated by public sector mechanisms (Wildan et al., 2021). Resources owned by the regions should be empowered to the maximum extent possible to achieve better public sector services, and to be targeted to the community, in other words that the allocation of government spending from various resources produced by the regions must be used efficiently, given that from year to year government spending on development continues to increase and will continue to increase (Chusnahan, 2014).

The Indonesian government has implemented a regional autonomy system since the reform era which has the main goal of achieving efficient government, which is able to empower natural resources (SDA) and human resources to achieve prosperity and economic improvement, besides that the regional autonomy system aims to so that local governments can independently manage the structure of their government, including in the area of financial management, both managing regional revenue sources and in government spending. The legal basis for regional autonomy includes the enactment of Law No. 32 of 2004 concerning regional government and Law No. 33 of 2004 concerning the balance of central and regional finances as amendments to Law No. 22 of 1999 and Law No. 25 of 1999.

In accordance with the provisions stipulated in Minister of Domestic Affairs Regulation No. 13 of 2006 concerning guidelines for regional financial management amended through Minister of Domestic Affairs Regulation No. 21 of 2011, there are six authority functions which mean that local budgets become guidelines for the government

in planning activities in the year concerned, the allocation function implies that the regional budget becomes a guideline for assessing the success or failure of regional governance, then the management function government expenditure from regional income fund sources, namely as a distribution of the budget must be directed in order to solve the problem of unemployment, poverty, inequality and problems in the process of regional economic development, and can be directed in increasing efficiency and effectiveness in order to increase income, improve regional welfare and economy by empowering existing resources in the region to produce optimal output (Statistics Indonesia, 2016).

During the period of regional autonomy, the economic performance of the special Province of Yogyakarta (DIY) showed economic development that continued to strengthen each year. Based on the GDP calculation of constant prices, the economy of DI Yogyakarta in 2016 grew by 5.05%, higher than the previous year which grew by 4.95%. The economy of DI Yogyakarta in 2016 grew impressively because almost sectors grew positively. The electricity and gas procurement sector experienced the highest growth of 74.26%, followed by communication information 8.32%; wholesale and retail trade and repair of cars and motorcycles 6.09% and other services 5.70%. While construction grew negative 4.52%. The value of gross regional domestic product (GRDP) based on the prevailing prices in Yogyakarta in 2016 was recorded at Rp 110,098 million, up 8.53% from the previous year at Rp 101,448 million (Statistics, 2016).

Efficient revenue management is the key to the success of the region to improve the economy, where sources of regional revenues are allocated for economic development and to improve welfare, if inputs managed based on the results of regional revenues are allocated efficiently, the economic and welfare level will increase in line with increased development the economy from the results of regional income that is utilized optimally and efficiently.

Yogyakarta Special Region Province which is one of the regions that has "specialties" in Indonesia where the central government has provided support in the form of Special Funds to the Special Region of Yogyakarta with the aim of economic development and community welfare and realizing the development of regional arts and culture. In every region in the regency/city in DIY it does not show the same number in the revenue of the region or the level of economic growth, even the relatively large difference between regions, this happens because each region has the potential sector and the products different in generating regional income and in allocating it to regional economic development, as well as financial management that is different from each region so as to result in the level of regional efficiency in managing the inputs (resources) contained in each region to produce some output in economic development the optimal (economic growth) varies.

2. LITERATURE REVIEW

2.1. Definition and Concept of Efficiency

Efficiency is the result of a comparison between physical output and physical input. The higher the ratio of output to input, the higher the level of efficiency achieved. Efficiency can also be

explained as achieving maximum output from the use of certain resources. If the output produced is greater than the resources used, the higher the level of efficiency achieved.

2.2. Public Sector Efficiency

Efficiency in public services is needed. The purpose of the efficiency of public services is how the local government manages the resources it has in this case is the source of regional revenue as an input that is managed to then produce a number of outputs or public services and has the goal of achieving prosperity and economic growth (Chusnahan, 2014).

2.3. Economic Development

According to Rostow in Mlynarski et al. (2021), the process of economic development can be divided into 5 stages, namely traditional society (the traditional society), prerequisites for take off (the preconditions for take off), take off (the take-off), towards maturity (towards the drive to maturity), and the age of high mass consumption.

2.4. Regional Economic Development

Regional economic development is a business process of the local government in synergy with the community in processing existing natural resources and forming a partnership pattern between the regional government, the community and the private sector to create new jobs and the development of economic activities (economic growth) in the region (Adisasmita, 2014).

2.5. Economic Growth and GRDP

2.5.1. Economic growth

In macro analysis, the level of economic growth achieved by a country is measured by the development of real income achieved by a country. From one period to another the ability of a country to produce goods and services will increase. This increased capability caused by factors of production will always increase in number and quality (Jeffrey et al., 2015).

2.5.2. GRDP

Macroeconomic indicators that are used to determine the level or condition of the economy in an area in a certain period is to analyze the GRDP. GRDP is the amount of added value produced by all production units in a certain region or is the total value of final goods and services produced by all economic units (Statistics Indonesia, 2016).

2.6. Regional Revenue

Regional revenue is defined as the right of a Regional Government which is recognized as an addition to the net worth in the year period. Regional income consists of:

2.6.1. Local revenue

According to the Central Statistics Agency (BPS), Regional Original Revenue (PAD) is defined as the revenue obtained by the region collected based on regional regulations in accordance with the legislation to collect funds for the needs of the region concerned in financing its activities, PAD consists of:

2.6.1.1. Regional tax

According to Vizek et al. (2020), local taxes are taxes that are levied by the region based on tax regulations established by the region for the benefit of the local government's household financing. The scope of local taxes is only limited to tax objects that have not been imposed by the state (central). In addition, there is a provision that taxes from lower-level regions may not enter tax objects from higher-level regions. Local tax rates are determined by local governments.

2.6.1.2. Regional retribution

A levy is defined by the Central Statistics Agency (BPS) as a regional levy as payment for services or granting certain licenses specifically provided and or given by the Regional Government for the benefit of individuals or entities.

2.6.1.3. Separate regional wealth management results

The results of the management of separated regional assets are regional revenues that come from regionally owned companies and the management of separated regional assets. This is among other things from BPD, regional companies, BPR-BPK dividends and regional capital participation to third parties (Lacheheb and Sirag, 2019).

2.6.1.4. Other legal PAD

Based on Law No. 33/2004 concerning the balance of power between the Central Government and Regional Governments article 6 paragraph 2, Others PAD that is valid includes: Proceeds from the sale of regions that are not separated, current accounts, interest income, gains between foreign exchange exchange rates against foreign currencies and the commission, deductions, or other forms as a result of sales or procurement of goods and/or services by the region.

2.6.2. Balance funds

Balance funds are funds sourced from APBN revenues allocated to the regions to finance their needs in the context of decentralization (Zhao et al., 2016). The balancing fund consists of:

2.6.2.1. Funds for results

Revenue sharing consists of tax revenue (PBB, BPHTB, personal income tax) and non-tax revenue (forestry sector, general mining sector, petroleum and natural gas sector, and fisheries sector).

2.6.2.2. General Allocation Fund (DAU)

The General Allocation Fund is a block grant given to all districts and cities for the purpose of filling the gap between their capacity and fiscal needs, and is distributed with a formula based on certain principles that generally indicate that poor and underdeveloped areas must receive more than more regions rich. In other words, the important purpose of DAU allocation is deep an even distribution framework of the ability to provide public services between local governments in Indonesia. UU No. 25/1999 article 7 outlines that the central government is obliged to distribute at least 25% of its domestic revenues in the form of DAU (Law, 2009).

2.6.2.3. Special Allocation Fund (DAK)

Special Allocation Funds can be allocated from the APBN to certain regions to finance funds in the APBN. What is meant by certain regions are regions that have special needs. The allocation of Special Allocation Funds taking into account the availability of funds in the APBN means that the amount of the Special Allocation Fund cannot be ascertained annually (Adisasmita, 2014).

2.6.2.4. Other legal incomes

Others legitimate income, including grants, emergency funds, regional loans and other revenues in accordance with applicable laws and regulations (Adisasmita, 2014).

2.7. Poverty

Poverty is a condition when people experience various threats that threaten their welfare, such as inadequate food consumption, vulnerability, limited education, and inability to get basic health services (Wildan et al., 2021). Poverty can also be caused by the failure of government infrastructure in providing daily needs, including clean water supply, sanitation and shelter, as well as the lack of opportunities to be able to participate equally with other community groups both in social life and in political life (Jeffrey et al., 2015).

2.8. Human Development Index (HDI)

Statistics Indonesia (2016) says that HDI becomes a composite or composite index that represents the three most basic dimensions of human development, namely the dimensions of health, knowledge and a decent life. the level of community welfare in the regional economic system.

3. PRIOR RESEARCH

Based on the study in the region of Asia-East by Merini (2012) titled “the efficiency analysis of national government expenditure in ASEAN” reviews the technical efficiency of government spending on the public sector in the ASEAN Region. The optimization model used is to minimize input (input-oriented model) which aims to evaluate how much the quality of inputs can be reduced to produce optimal output without changing the amount of output. The input referred to is the variable government expenditure such as government spending, government financing, and investment and the output is public services such as health, education, industry, etc.

In The Jeffrey et al. (2015) research entitled “the efficiency frontier of for-profit hospitals.” The study was conducted at hospitals categorized as large hospitals and small hospitals in the United States by measuring the level of efficiency of income achievement of each hospital in America with Input variables: Operational expenditure, number of patient beds, and number of employees, while variables the output is the number of patients staying overnight, the number of patients just checking in, the number of handling surgery, the profit from hospital operations.

In another study, namely in a study entitled determination of public sector efficiency in economic development in the Province

of Bali in the regencies/cities in the Province of Bali in financial management that is analyzed based on regional income inputs namely PAD, balance funds, and other legitimate income in generating outputs of economic growth seen based on GRDP and outputs of regional welfare seen from HDI, and the number of non-poor population using the data envelopment analysis (DEA) analysis (Xu and Evans, 2007).

4. RESEARCH METHODS

In this study the authors used the DEA research method. According to Mlynarski et al. (2021) see the DEA technique as “such as mathematical programming which can handle large numbers of variables and constraints...” Thus the DEA method can overcome the limitations of ratio and regression methods that cannot use many inputs and outputs. This study uses the assumption of variable return to scale (VRS) so that all units measured will result in changes at various levels of output, in addition to that the technology can also be into VRS opens the possibility that the scale of production affects efficiency. Or the assumption of constrain return to scale so that the addition of one input will be followed by the addition of one output (Damme, 2004).

DEA is an analytical tool based on linear programming techniques to measure the relative efficiency of a set of comparable economic activity units. This method is specifically designed to measure efficiency with many inputs and outputs, which can not be combined. The relative efficiency of a UKE is the efficiency of one UKE compared to other UKEs in the sample (Wildan et al., 2021). The use of DEA as an analysis tool for each sector can determine each weighting and guarantee that the weighting chosen will produce the best measure of efficiency.

DEA has several managerial values. First, DEA results in efficiency for each UKE, relative to the other UKEs in the sample. The results of this efficiency number can be used to identify UKEs that need attention and to plan actions to improve UKE that are not/less efficient. Second, if a UKE is less efficient (<100% efficient) then the DEA can show a number of UKEs that have perfect efficiency (efficient reference set, efficiency = 100%) and a set of multipliers that can be used by agencies to develop improvement strategies. Third, DEA provides cross-efficiency metrics. The cross efficiency of UKE A to UKE B is the ratio of weighted output divided by weighted input calculated using the UKE A level of input and output and the weight of UKE B input and output B.

5. RESEARCH RESULTS

The following is a table of data processing results using the DEA analysis tool (Table 1).

Based on Tables 1 and 2 show the results of data processing based on input and output variables in this study, in Table 1 the results of the analysis are presented not using input privileged funds then in Table 2 the data are processed along with the input of privileged funds. From the results of the analysis using the DEA method, overall in the Special Region of Yogyakarta each region shows

that the management of inputs from regional revenue to produce output in economic development and in an effort to improve welfare and reduce income inequality has reached a relatively efficient level of 100% well before the use of funds privileges into the input or use the privilege input funds as inputs. In the results of the DEA analysis, the level of input efficiency prior to the use of input of special funds in producing output in this study only in Bantul District in 2014 has found that inefficiencies are equal to 98.70%.

Based on the analysis of the DEA method in this study, indications have been shown to be the cause of inefficiency in Bantul District in the management of 2014 regional finances before the use of privileged fund inputs, along with a table to show the causes of inefficiency:

Based on the data processing of the DEA method through the input approach that was used in Bantul District 2014 prior to the use of privileged fund input shows the causes of inefficiency or inefficient financial management in that period, as one example of the causes, namely waste of Rp 4,663,700,000 (four billion six hundred sixty three million seven hundred thousand rupiah) in the use of PAD inputs based on the DEA method data, as well as other variables, Table 3 above explains how many inputs should be used compared to the uses in their realization. Then more details can be shown in the table of results of data processing

Table 1: Efficiency level of financial management without privileged funds by cities in Yogyakarta Province (%)

Regency/city	License level		
	2014	2015	2016
Yogyakarta city	100	100	100
Sleman	100	100	100
Bantul	98.70	100	100
Kulon Progo	100	100	100
Gunung Kidul	100	100	100
Average	99.74	100	100

Source: Data envelopment analysis

Table 2: Efficiency levels of financial management with privileged funds by cities in Yogyakarta Province (%)

Regency/city	License level		
	2014	2015	2016
Yogyakarta city	100	100	100
Sleman	100	100	100
Bantul	100	100	100
Kulon Progo	100	100	100
Gunung Kidul	100	100	100
Average	100	100	100

Source: Data envelopment analysis

Table 3: Efficient use of inputs on output generated and waste in inefficiency regions (million rupiah)

City	Efficient use of inputs		
	LGR	DP	LPS
Bantul	352,747.4	102,310.63	385,329.1
Waste	4,663.7	13,526.6	34,544.1

Source: Data envelopment analysis. LGR: Regional original income , DP: Balance funds, LPS: Other legal incomes

Table 4: Target values

Targets for BANTUL unit efficiency 98.70% radial			
VARIABLE	ACTUAL	TARGET	ACHIEVED (%)
-PAD	357411.1	352747.4	98.7
-DANAPERIMB	1036632.9	1023106.3	98.7
-LAINPENDSAH	419873.2	385329.1	91.8
+GRDP	14851124.1	18389761.4	80.8
+HDI	71.1	76.8	92.6
+INDEXGINE	0.313	0.3	98.7
+EDUCATION	805955.0	805955.0	100.0

*(-)=Input variable, (+)=Output variable

in the case of inefficiency following the achievement in the percentage of each variable in the case of inefficiency, namely in Bantul District, 2014 input data before the use of privileged funds (Table 4).

The actual column presents the input variables or output variables that have been used in real terms and the outputs that have been achieved. Then in the target column is to indicate the use or achievement that should be in management based on the input that has been used in its realization.

Basically, financial management from the proceeds of regional income in the Special Region of Yogyakarta which is distributed by the central government is a privilege fund.

APBN funds according to this study in 2014-2016 were efficient in achieving the outputs of economic improvement seen in the GRDP data, then welfare was seen from the HDI variable, the level of equality seen in the Gini index, and the goal of poverty alleviation in terms of population not poor in this research data, all analysis results using DEA from 2014 to 2016 have reached 100% relative efficiency, but have been compared in this study that before and after the allocation of privileged funds according to the results of data processing shows the results which differs between the inputs by using the privileged funds variable and the privilege funds have not yet been used. It can be concluded that the input of privileged funds has succeeded in helping the Yogyakarta Special Region government program in carrying out economic development in 2014-2016.

6. CONCLUSIONS

Based on the results of data analysis using DEA on the level of efficiency of district/city revenue in the Special Region of Yogyakarta in 2014-2016, it can be concluded that:

- Achievement of the level of efficiency of economic development based on regional income input in each regency/city in the Special Region of Yogyakarta with the distribution of privileged funds making DIY 100% efficient in managing regional inputs to produce outputs of economic development and welfare.
- From the results of the comparison between the use of privileged fund inputs and without the use of privileged fund

inputs in the same period have shown different results, namely that with the privileged funds the outputs achieved have been efficient and without the use of privileged funds, there are still inefficiencies due to achievements not optimal output.

6.1. Implication

In this study shows that in the period 2014-2016 the input of DIY regional income including the allocation of privileged funds has reached 100% relative efficiency, it is expected that the DIY regional government can maintain the level of efficiency in managing its regional finances, but it can also be expected not only to achieve outputs in this study alone, namely HDI, Gini index, increase in GRDP, and poverty alleviation seen from the number of residents not poor but is expected to achieve efficiency and effectiveness in other regional development achievements such as arts and culture, tourism, education and politics as well as other outputs in supporting sustainable regional development.

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