



The Effect of Transfer Funds on District/Municipality Development Performance in West Java Province Indonesia

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ABSTRACT

Regional autonomy intended to enhance the level of community involvement in the development process, the distribution of development outcomes fairly, and pay more attention to the potential and diversity of the region. The implementation of regional autonomy will further accelerate the achievement of development goals because local governments have the authority to plan programs that are tailored to the needs of the community by taking into account the potential in the area. Development performance is the variable used to measure the results of the development process. This study expects to examine the variables of per capita (GDP) gross regional domestic product with constant prices in 2010, open unemployment rate (%), the poverty rate (%), human development index (HDI), and Gini index. The objectives of the present study, to reveal the effect of intergovernmental transfers on district/municipality development performance in West Java Province, the effect of transfer funds is not directly, but through regional spending. Panel data regression analysis used to analyze the indirect effect of transfer funds on regional development performance. The results show that the general block grants (*Dana Alokasi Umum-DAU*) is a transfer fund that has the greatest impact on the performance of regional development, while in terms of expenditure, which has the most significant effect on the performance of regional development is education spending followed by spending on goods and services.

Keywords: Development Performance, Intergovernmental Transfers, Panel Data Regression, Regional Autonomy

JEL Classifications: C33, H11, H50, H76

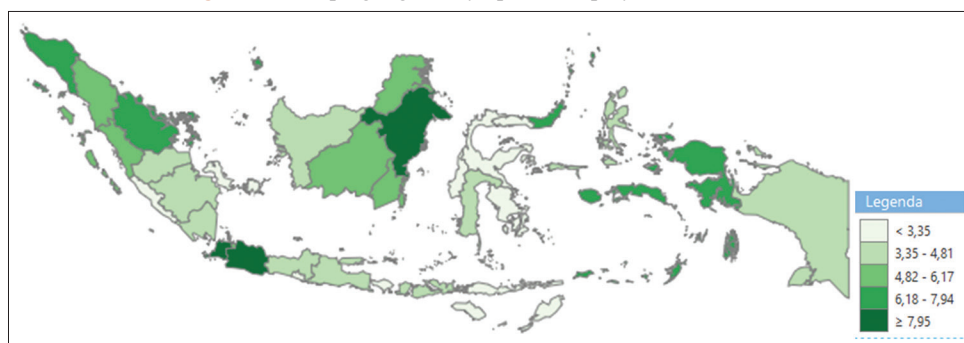
1. INTRODUCTION

More than one and a half decentralization/regional autonomy system has been implemented, many positive results have been received by the community; there are still some shortcomings that must be improved. Regional autonomy is needed to put more emphasis on the principles of democracy, community involvement in the development process, equitable distribution of development results, and more attention to the potential and diversity of the region. The implementation of regional autonomy will further accelerate the achievement of development goals because local governments have the authority to plan programs that are tailored to the needs of the community by taking into account the potential of the region. The results of several studies show that fiscal and

administrative decentralization can increase the responsiveness of local governments to the provision of public infrastructure (Katos and Sjahrir, 2017). Local governments in Indonesia rely heavily on intergovernmental fiscal transfers, general-purpose grants when properly designed, offering a boost to regional fiscal capacity (Sudhipongpracha and Wongpredee, 2016). Economic imbalances between regions in Indonesia are still relatively high, especially between Java-Bali and other regions outside Java-Bali. Redistribution or transfer funds from Java-Bali to outside Java-Bali has not had much influence on the economic role outside the Java-Bali region (Juanda et al., 2017).

Figure 1 shows the open unemployment rate by province. The regions with very high open unemployment rates include West

Figure 1: Grouping regions by open unemployment rate in 2015



Source: BPS 2016

Java Province (8.89%), Banten (8.92%), and East Kalimantan (7.95%). Based on Figure 1, it means that unemployment is one of the severe problems that must be immediately resolved by the Regional Government of West Java Province. In addition to the problem of unemployment, West Java Province is also still faced with a low Human Development Index (HDI), when compared to other provinces in Java, the score is only slightly better when compared to East Java Province. This can be seen in Figure 2.

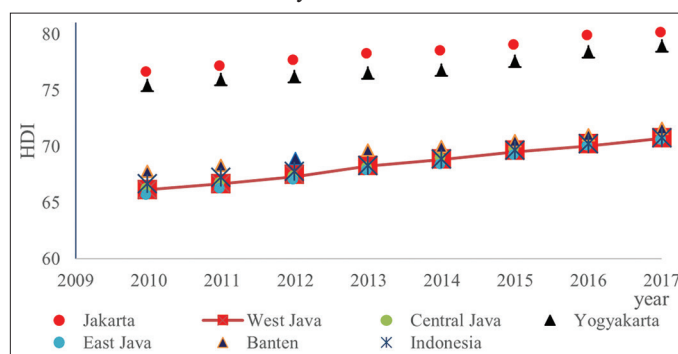
DKI Jakarta and DI Yogyakarta are two provinces in Java Island whose HDI scores are far above the national average. The provinces of West Java and East Java are two provinces on the island of Java whose HDI values are below the national average. HDI can describe the quality of human resources in an area; if the HDI value is high, then the quality of human resources in the area is also high, and vice versa. The availability of superior human resources is the principal capital compared to other development capital, such as natural resources and financial capital. This is very logical because human resources is a subject of development where the progress and decline of a nation are strongly influenced by the quality of human resources in the area (Todaro, 2000).

Based on the above problem, the formulation of the problem in this study are: What is the effect of transfer funds on the performance of district/municipality development in West Java Province? This study aims to analyze the effect of transfer funds on the performance of district/municipality development in West Java Province.

2. LITERATURE REVIEW

Decentralization is the transfer of authority and responsibility from higher to lower levels of government (UU, 1999). Decentralization, including fiscal, political, and administrative changes that have an impact on almost all aspects of development. The structure of intergovernmental relations affects the efficiency and equality of service delivery, social safety nets, and poverty alleviation programs to the development of the financial sector and macroeconomic stability. The division of powers and responsibilities between levels of government also raises issues of institutional capacity (Litvack, 1999). As UU No. 22 of 1999 in which regional governments are given broad authority, which is realized by the regulation, sharing and utilization of resources, as well as the balance of central and regional finances, in accordance with the principles of democracy, community participation, equity, and justice, as well as the potential

Figure 2: Comparison of HDI between provinces in Java and nationally from 2010 to 2017



Source: BPS 2018

and diversity large area to take care of yourself. The focus of fiscal decentralization is decentralization in the transfer of authority on the expenditure side. The transfer of authority must be accompanied by the transfer of funds to the region concerned, this funding is largely in the form of a block grant, so there is discretion to spend it. Money Follows Function is a principle of fiscal decentralization that has been widely practiced in the world. Fiscal decentralization is the granting of authority to the regions to explore sources of income, the right to receive transfers from higher government, in determining routine spending and investment (Litvack, 1999). Regional income is all regional due that are recommended as net worth in the period of the fiscal year. Sources of regional income consist of (UU No 2014): own source revenues (Pendapatan Asli Daerah-PAD), transfer of income, and other valid regional income. specific purpose transfers (*Dana Alokasi Khusus-DAK*); (B) Tax by tax sharing (*Dana Bagi Hasil - DBH*); (c) general block grants/DAU; (d) special autonomy funds; (e) village funds (*Dana Desa-DD*).

HDI; Gini Index; poverty rate; GDP per capita with a constant price of 2010 and the open unemployment rate. HDI is the geometric mean of three dimensions; health dimension, educational dimensions, and decent life dimensions (BPS Jabar, 2016). The Gini Index is reflected by the reflected income distribution benchmarks where the development pie is divided among each community group (Rustiadi et al., 2011). Poverty is a situation where there is an inability to meet basic needs, such as food, clothing, shelter, education, and health. Unemployment is a term for people who do not work at all, are looking for work, work less than two days for a week, or someone who is looking for decent

work (BPS Jabar, 2016). GDP is the market value of all final goods and services needed within a specified period (Mankiw, 2006).

3. DATA DESCRIPTION AND METHODOLOGY

3.1. Data

The data in this study came from 25 districts/municipalities out of a total of 27 districts/municipality in West Java; two of the districts resulting from the division, namely the Pangandaran Regency and West Bandung Regency, were not included in the study because they used complete data. When the time point in this study began in 2010-2016. The data used include regional income, consisting of own local revenue, transfer of funds (general block grants/DAU, specific purpose transfers/DAK and tax by tax sharing/DBH), and other legitimate revenues. Regional expenditure data, issued: capital expenditure, goods, and services expenditure, employee expenditure, education expenditure, health expenditure, and economic expenditure. Regional development performance data consists of GDP per capita, HDI, poverty, unemployment, and the Gini ratio. In general, to answer the problem formulation above, three analysis tools are used, namely: panel regression data analysis, cluster analysis, and discriminant analysis.

3.2. Regression

Regression analysis is a study that determines one variable (dependent variable) with one or more independent variables, intending to estimate or predict the mean value (average) or average (number) of independent variables, seen in terms of settled or fixed values (in taking repeated samples) explaining variables (Gujarati, 2004). A data panel is a data set consisting of individual sample data over a specified period of time, uses as explained as follows:

$$Y_{it} = \alpha_i + \sum_{i=1}^N \beta_i X_{it} + u_{it} \tag{1a}$$

in other notations:

$$y_{it} = \alpha_i + \beta' x_{it} + u_{it} \tag{1b}$$

Where y is the dependent variable, x the independent variable, which is $K-1$, the intercept value for the i -unit in the t -year is written α_i is a disorder originating from the individual (Ekananda, 2016). Green (2010) there is a difference between FEM (Fixed Effect Model) and REM (Random Effect Model): The Fixed Effect

Model assumes there is a correlation between the u_{it} remaining with the free variable x_{it} . The Random Effect Model assumes no correlation between the u_{it} remainder and the free variable x_{it} .

The stages of the model approach used in this study can be illustrated in Figure 3 below. The first is the effect of income on expenditure, and the second stage is the effect of spending on regional output, the third stage is the effect of spending on outcomes both directly and indirectly (through outputs), during the fourth stage of outcomes on regional inequality.

4. RESULTS AND DISCUSSION

4.1. The Panel Data Regression Analysis

The results of the panel data regression analysis of regional income can be Table 1.

Based on Table 1 above, it can be explained that specific purpose transfers (ln_dak), general block grants (ln_dau) and regional own-source revenues (ln_pad) affect all regional expenditures namely: capital expenditure (ln_cap), goods and services expenditure (ln_goods), expenditure employee (ln_unemploy), education expenditure (ln_educ) health expenditure (ln_health) and economic expenditure (ln_econo). Whereas tax by tax sharing (ln_dbh) only affect capital expenditure, village funds (ln_dd) affect capital expenditure, goods and services expenditure, education, and health expenditure while other legitimate income (ln_otherinc) influences capital expenditure, the expenditure of goods and services, employee spending, education spending. From Table 1 above it can also be seen that general block grants have the greatest elasticity in all regional expenditures except for health expenditures, where the most influential variable is local revenue.

Based on Table 2 below, it can be believed that the most influential variable (the greatest elasticity) on HDI and GDP respectively, is the expenditure of goods and services followed by education spending. Education expenditure is one of the spending whose effects cannot be felt in a short time, and the results can only be felt after a few years have passed, for example, 12 years if the count is from primary education to completion of secondary education. While shopping for goods and services is shopping that is relatively instant influence can be felt in a not too long time whereas the most influential variables on unemployment and poverty in the sequence are education and goods and services expenditure.

The equation below shows the regression from output to outcome and from outcome to inequality in the region.

Figure 3: Approach to the research model

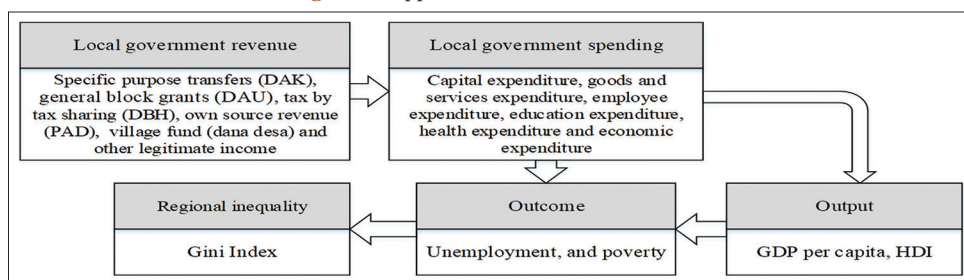


Figure 4: Elasticity value between variables

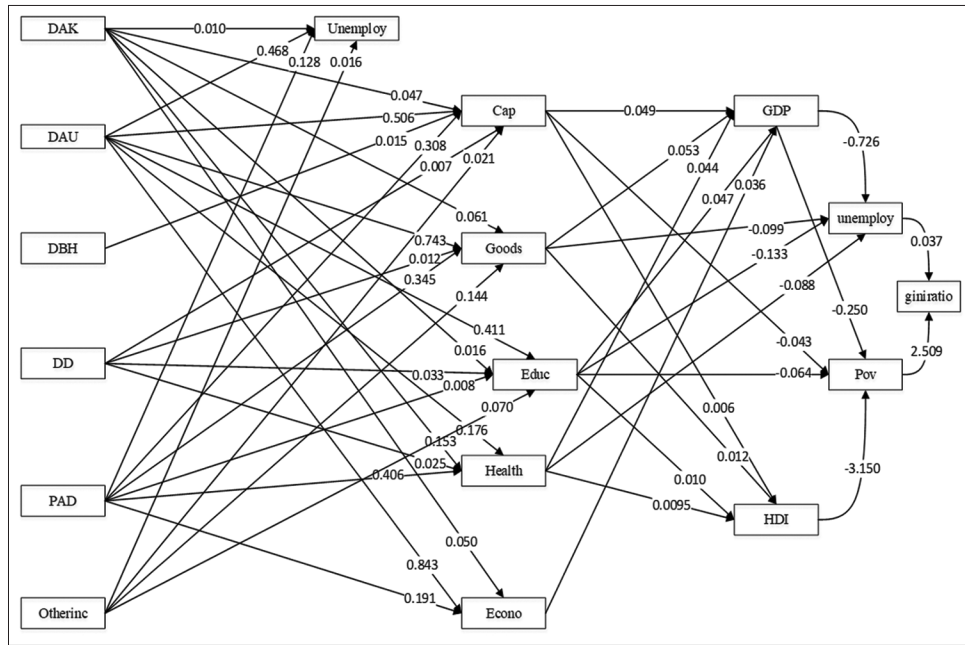


Table 1: Effects of transfer funds on regional expenditure

Variable	ln_cap	ln_goods	ln_employ	ln_educ	ln_health	ln_econo
C	12.706***	-3.014	5.445***	13.487***	3.678	-3.253
ln_dak	0.047***	0.061***	0.010**	0.016**	0.153***	0.050**
ln_dau	0.506***	0.743***	0.468***	0.411***	0.176**	0.843***
ln_dbh	0.015***	-0.114	0.000	-0.073	-	-
ln_dd	0.007**	0.012**	-	0.033**	0.025***	0.003
ln_pad	0.308***	0.345***	0.128***	0.008*	0.406***	0.191***
ln_otherinc	0.021***	0.144***	0.016**	0.070**	-0.041	0.025
AR (1)	-	0.282***	0.344***	-	-	0.286**
Adj. R-squared	0.933	0.954	0.994	0.976	0.857	0.986
Durbin Watson	1.973	1.976	1.829	2.069	-	2.248

*: sig. on $\alpha=10\%$, **: sig. on $\alpha=5\%$, ***: sig. on $\alpha=1\%$

Table 2: Effects of spending on output and outcome

Variable	ln_hdi	ln_gdp	ln_unemploy	ln_pov
C	3.7484***	0.172	4.887***	4.122***
ln_cap	0.0064***	0.049***	0.035	-0.043***
ln_goods	0.0121***	0.053***	-0.099**	-0.031
ln_educ	0.0100***	0.047***	-0.133**	-0.064**
ln_health	0.0095***	0.044***	-0.088**	-0.011
ln_econo	0.0001	0.036***	0.082	0.004
AR (1)	-	-	0.258***	-
Adjusted R-squared	0.9977	0.999	0.898	0.991
Durbin-Watson stat	2.146	2.085	2.232	2.200

*: sig. on $\alpha=10\%$, **: sig. on $\alpha=5\%$, ***: sig. on $\alpha=1\%$

$$\ln_unemploy_{it} = \frac{-3.151}{[0.517]} + \frac{1.767}{[0.171]} \ln_hdi_{i(t-3)} - \frac{0.726}{[0.002]} \ln_gdp_{i(t-1)} + \frac{0.212}{[0.006]} e_{i(t-1)} \quad (2)$$

$$\ln_pov_{it} = \frac{16.226}{[0.000]} - \frac{0.250}{[0.000]} \ln_gdp_{it} - \frac{3.150}{[0.000]} \ln_hdi_{i(t-1)} + e_{it} \quad (3)$$

$$\ln_ginratio_{it} = \frac{-11.746}{[0.000]} + \frac{2.509}{[0.000]} \ln_pov_{it} + \frac{0.037}{[0.104]} \ln_unemploy_{i(t-2)} - \frac{0.132}{[0.079]} e_{i(t-1)} \quad (4)$$

From equation (2) the variables that influence unemployment rate reduction are GDP per capita with constant prices, based on equation (3) variables that influence poverty reduction are HDI and GDP per capita, based on equation (4) the Gini ratio is influenced by poverty rate. If summarized, the elasticity value of the panel regression results will be obtained as shown in Figure 4.

The direct effect is the influence of one independent variable to the dependent variable, without going through another dependent variable. While the indirect effect is the effect of the independent variable on the dependent variable through the intervening variable, to obtain its score by multiplying the path coefficient. The total effect is the sum between the direct effect and the indirect effect.

The central government is certainly very interested in evaluating which of the transfer funds from the central government to the regional government, which transfer funds are most influential on

Table 3: Effect of total regional income on development performance

Variables	ln_cap	ln_goods	ln_employ	ln_educ	ln_health	ln_econo	ln_hdi	ln_gdp	ln_unemploy	ln_pov	ln_giniratio
ln_dak	0.047	0.061	0.010	0.016	0.153	0.050	0.00265	0.01482	-0.03239	-0.01511	-0.0298
ln_dau	0.506	0.743	0.468	0.411	0.176	0.843	0.01801	0.12158	-0.23198	-0.13519	-0.2715
ln_dbh	0.015						0.00010	0.00074	-0.00053	-0.00113	-0.0024
ln_dd	0.007	0.012		0.033	0.025		0.00076	0.00363	-0.01041	-0.00571	-0.0124
ln_pad	0.308	0.345	0.128	0.008	0.406	0.191	0.01008	0.05849	-0.11341	-0.06014	-0.1184
ln_otherinc	0.021	0.144	0.016	0.070			0.00258	0.01195	-0.03224	-0.01649	-0.0351

Table 4: The total effect of spending

Peubah	ln_hdi	ln_gdp	ln_unemploy	ln_pov	ln_giniratio
ln_cap	0.0064	0.049	-0.0356	-0.07541	-0.15978
ln_goods	0.0121	0.053	-0.1375	-0.05137	-0.10072
ln_educ	0.0100	0.047	-0.1671	-0.10725	-0.24579
ln_health	0.0095	0.044	-0.1199	-0.04093	-0.07952
ln_econo	0.0000	0.036	-0.0261	-0.00900	-0.00097

the performance of regional development. Based on Table 3 above, of the many transfer funds to the regions and village/TKDD funds, the biggest influence on the performance of regional development, in general, is the DAU followed by successive special allocation funds, village funds, and DBH sharing funds. However, when it comes to own source revenues, PAD ranks second after DAU. For local governments, there should be attention to the allocation of spending. The complete data can be seen in Table 4.

Based on the above table, the expenditure that has the most influence on HDI and GDP per capita is sequentially spending on goods and services. Whereas expenditure which most influences to decrease poverty, unemployment, and inequality in a sequence is education expenditure.

5. DISCUSSION AND CONCLUSIONS

Transfers reach most levels of government achieving a fiscal balance, ie ensuring that income and expenditure at each level is roughly the same. Fiscal gaps can in principle be covered by transferring revenues from higher levels of government to lower levels of government, thereby increasing regional income (Bird and Smart, 2002). Decentralization depends on increasing autonomy and accountability for low-level entities in one dimension or another (Rodden et al., 2003). Decentralization is able to empower smaller and poorer districts, as well as generate higher local responsiveness to local needs (Katos and Syahrir, 2017).

The general block grants /DAU is a transfer from the central government that is used to provide flexibility to regional governments. Because they like it big enough (Bird and Smart, 2002), (Lewis without years). DAU is a transfer from the central government that has the most influence compared to other transfers, DAU is against education (Faguet, 2004), (Barankay and Lockwood, 2007), capital expenditure, goods and services, employees, economy, increase in human resources, as well as loss, index poverty and this. The general objective can improve the welfare of the local population, then this transfer must be prioritized, because it will increase

regional autonomy (Shah, 2007), and can create appropriate incentives and accountability for responsive and accountable regional management (Shah, 2012). Therefore, DAU in its administration must be simplified.

All regional income, own source revenues/PAD, transfer funds (general block grants /DAU, specific purpose transfers/DAK, and tax by tax sharing/DBH), as well as other legitimate revenues that affect the performance of regional development. If you take into account the total effect, then the three largest sequences are as follows: DAU, PAD, and other legal income.

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