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FACTORS AFFECTING ECONOMIC GROWTH IN EAST JAVA PROVINCE IN 2011 – 2020

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ABSTRACT

This study aims to examine the analysis of the effect of general allocation funds, regional taxes, and population on economic growth in East Java Province from 2011 to 2020. Tax reforms mandated by Law number 28 of 2009 have encouraged local governments to increase equity among regions to reduce regional inequality. The variables used include general allocation funds, Regional taxes, and total population. Using multiple regression analysis with panel data regression for five samples of districts/cities in East Java Province, the results show that General Allocation Fund (DAU) has a positive and significant influence on the economic growth rate. Meanwhile Regional tax and Population has a negative and significant influence on the economic growth rate. As much as 92% of the economic growth variable can be explained by the general allocation fund (DAU), the regional tax, and the population.

1. INTRODUCTION

Fiscal decentralization in Indonesia is intended to enhance regional economic growth and income by devolving financial management responsibilities from the central to local governments (Martinez-Vazquez et al., 2016). This process, however, does not uniformly yield the expected benefits across all regions. Act No. 33 of 2004 specifies the revenue sources for local governments, including the General Allocation Fund (DAU), Special Allocation Fund (DAK), Revenue Sharing Fund (DBH), local loans, and other legitimate revenues (UU Nomor 33 Tahun 2004 Tentang Perimbangan Keuangan Antara Pemerintah Pusat Dan Pemerintah Daerah, 2004). Despite the potential for these funds to improve regional economies, the practical application of fiscal decentralization reveals that economic growth and income increases are not consistent throughout the country (Martinez-Vazquez et al., 2016).

In East Java Province, the outcomes of fiscal decentralization have been relatively positive (Delen et al., 2019), although they remain below their full potential. Local governments in this province rely on both the economic potential of their regions and transfers from the central government to finance growth (Saputra, 2013). While economic growth, as indicated by the regional gross domestic product (GRDP), has been on an upward trend, this growth has not been sufficient to significantly reduce unemployment in the region. The persistence of high unemployment suggests that a more robust growth rate is necessary to enhance macroeconomic performance.

Economic growth in a region can be assessed through several indicators. The Gross Regional Domestic Product (GRDP) reflects the output of regional development, while Regional Real Income (RNR) indicates the adequacy of regional spending. The capacity of local governments to generate revenue (PAD) is crucial for sustaining economic growth. According to (Saragih, 2016), increasing PAD is vital for economic development, as regions with positive economic growth are more likely to experience PAD increases. Therefore, local governments should focus on empowering regional economic strengths rather than merely enacting tax or retribution-related legislation (Wicaksono, 2020)

Population growth is another important factor in regional economic (Piketty, 2015). Classical economic theory suggests that output grows in tandem with population growth (Harris, 2007). However, without effective government policies to manage population growth, the resulting increase can have detrimental effects on regional prosperity. Malthusian theory warns that unchecked population growth can lead to increased misery rather than prosperity, particularly if it outpaces food production and other essential resources (Weil & Wilde, 2009)

Research by Saragih (2016) on the impact of fiscal decentralization on economic growth used econometric methods, including ANOVA, to demonstrate that budgetary decentralization can stimulate regional economic development. However, the study also found that not all regions are equally prepared to implement fiscal decentralization, with 46% of areas lacking the necessary readiness. This underscores the need for tailored approaches to decentralization that consider the specific capacities and challenges of each region.

2. RESEARCH METHODS

The objects of this research are the General Allocation Fund, Regional Taxation, Population, and Economic Growth on 5 selected districts/cities of East Java Province. This research adopts a quantitative descriptive approach. This type of research measures a variable concept, that is, the influence of a free (independent) variable on a bound variable so that it is easier to understand statistically (Sugiyono, 2017).

Variables are defined as the object of observation of the research or the factors that play a role in the events and phenomena to be studied. This study uses two types of variables, which are the dependent variable symbolized (Y) and the independent variable (X). The variables used in this study are Economic growth as dependent variable and General Allocation Fund (DAU), Regional Tax (PD), Population as independent variables.

The type of data used in this study is secondary data. While the data sources used in this research are data obtained from the Central Bureau of Statistics (BPS) , besides, the data source is also acquired through the study of libraries (journals, books, articles, the Internet, and other literature), one of them is access through the Internet with sites, among others; DJPK KEMENKEU, BI, and BPS. The data to be taken is the entire district/city of East Java Province, with the time curtain used from 2011 to 2020. Data analysis techniques in this research is a panel data regression analysis that relates to the dependence of a variable, in other words, a dependent variable, on one or more independent variables. It is used to analyze the second objective, namely, the impact of fiscal decentralization on economic growth.

3. RESULTS AND DISCUSSION

3.1. RESULTS

To increase economic growth, the government should increase the GRDP of each district/city in East Java Province because the GRDP is an indicator of economic development (Cholili & Hardjo, 2013). According to data from the central statistical body of the East Java Provincial GRDP, it has increased yearly while Indonesia's economic growth has fluctuated from year to year.

Based on the formulation of the hypothesis, the factors that are supposed to influence the economic growth of the district/city in the East Java Province are the general allocation fund (DAU), Regional taxes, and the number of people. In order to prove the hypothesis, a double linear regression analysis is needed using the Eviews 9 program.

In this study, panel data is a combination of time series and cross-section data. Using panel data in this study, we can accurately identify the relationship between independent and dependent variables. Three models in panel data regression are Common Effect, Fixed Effect, and Random Effect (Baltagi, 2005). In this paper, the model used is Fixed Effect after selecting the best model. At the test stage, the panel regression model does not perform the Classical Assumption Test, but it is sufficient to perform the Partial Test (t-test) and the Determination Coefficient (R^2).

Table 1. Fixed Effect Model

Variable	Coefficient	t-Statistic	Prob.
C	52.18689	-4.335199	0.0001
LOG(X1)	4.856386	8.662815	0.0000
LOG(X2)	-0.440372	-2.740891	0.0082
LOG(X3)	-7.816775	-4.442941	0.0000
R-Squared	0.922521		

Source: Processed data, (2018)

In Table 1 above, we can find the estimated regression of panel data using the Fixed Effect model. Then from the results can be written:

$$Y = -\ 52.18689 + 4.856386_{LOG(X1)} - 0.440372_{LOG(X2)} - 7.816775_{LOG(X3)} + e$$

From the results of the fixed effect model estimation above, it shows that the constant value is 52.18689, which means that if the general allocation fund (DAU), regional taxes, and population are 0 or constant, then the economic growth rate is 52.18689. When viewed from the coefficient value of the general allocation fund, it indicates a positive and significant influence because it is seen from the probability value of 0.0000 < α (0.05). The coefficient value of the regional taxes, it indicates a negative and significant influence because it is seen from the probability value of 0.0082 < α (0.05). The coefficient value of the population, it indicates a negative and significant influence because it is seen from the probability value of 0.0000 < α (0.05).

General Allocation Fund variables has a positive and significant influence on the economic growth rate, with a coefficient of 4.856386. This means that a 1% increase in general allocation fund will increase economic growth by 4.856386.

Regional tax variables has a negative and significant influence on the economic growth rate, with a coefficient of -0.440372. This means that a 1% increase in regional tax will decrease economic growth by 0.440372.

Population variables has a negative and significant influence on the economic growth rate, with a coefficient of -7.816775. This means that a 1% increase in population will decrease economic growth by 7.816775.

When viewed in general from the results of the fixed effect model, it can be seen that the R-squared value is 0.922521 or 92%, which means 92% of the economic growth variable can be explained by the general allocation fund (DAU), the regional tax, and the population. While the remaining 8% can be explained by other variables outside the model.

3.2. DISCUSSION

The Fixed Effect model's regression analysis shows that the general allocation fund (X_1), regional tax (X_2), and population (X_3) significantly influence economic growth (Y). These findings support the hypothesis that these variables are key drivers of economic development in East Java Province.

The positive and significant impact of the general allocation fund on economic growth is consistent with the theoretical expectation that increased fiscal transfers from the central government can stimulate regional economies. Specifically, a 1% increase in the general allocation fund is associated with a 48.56386 increase in economic growth. This aligns with Brata's (2004) findings that local government revenues, particularly from the general and special allocation funds, are crucial for regional economic development. The substantial impact of the DAU underscores its importance in fostering equitable growth across different regions of East Java Province.

The negative and significant impact on the regional tax on economic growth is consistent with the research by Putri et al. (2019) which stated that the increase of Regional tax will decrease the rate of economic growth in East Java Province. If seen from the results on this study that regional taxes have a negative and significant impact on the rate of economic growth, it is because the local government is not used for regional development, which can give a multiplier effect, but the Regional tax can be used more for consumer things such as subsidy increases, staff salaries or staff expenditure and use to local cultural events. It is expected that the next government will be more accurately targeted in the use of Regional taxes in order to be able to boost economic development and growth. The results of this study are supported by Siagian (2010) which using panel data.

The negative and significant impact on the population on economic growth is consistent with research by Situngkir et al. (2014) which stated that the increase of population will decrease the rate of economic growth in North Sumatra Province. If seen from the results above an increase in population can decrease productivity due to the existence of diminishing returns effect. If the population continues to rise above the maximum and the productivity rate of the population is low, then the population will have a negative impact or cause economic growth to decline. This is in line with Poli's (2002) views. In 2002, a country was said to be facing the problem of overpopulation when the population was much larger compared to the factors of production available. As a result, the marginal output of the population is low. Thus, excessive population will lead to the deterioration of the prosperity of society.

4. CONCLUSION

This research concludes that General Allocation Fund (DAU) has a positive and significant influence on the economic growth rate. Meanwhile Regional tax and Population has a negative and significant influence on the economic growth rate. As much as 92% of the economic growth variable can be explained by the general allocation fund (DAU), the regional tax, and the population.

The findings suggest that policymakers in East Java Province should focus on optimizing the use of the General Allocation Fund (DAU) to enhance economic growth, particularly by investing in infrastructure, education, and healthcare. The negative impact of regional taxes on growth indicates a need to redirect tax revenues towards development-oriented projects rather than non-productive expenditures. Additionally, addressing the challenges of population growth through investments in human capital and effective family planning could help mitigate its negative effects on economic development. Implementing these strategies can lead to more sustainable and inclusive economic growth in the region.

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