

## **Economic Growth in the Special Region of Yogyakarta from 2013 to 2020: The Impact of DAU, DAK, and PAD**

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**Abstract.** *The aim of this research is to demonstrate how the Yogyakarta Special Region's DAU, DAK, and PAD will affect economic growth from 2013 to 2020. The quantitative technique of this study employed a multiple linear regression analysis to ascertain the association between the DAU, DAK, and PAD variables and economic growth in the Special Region of Yogyakarta. The population of the research was the City/Regency in the Special Region of Yogyakarta in the years 2013 to 2020. The results of this analysis show that DAU will negatively affect Yogyakarta's Special Region's economic growth between 2013 to 2020. Between 2013 to 2020, Yogyakarta's Special Region's economy grew favorably as a result of DAK and PAD.*

**Keywords:** *Economic development, DAU, DAK and PAD*

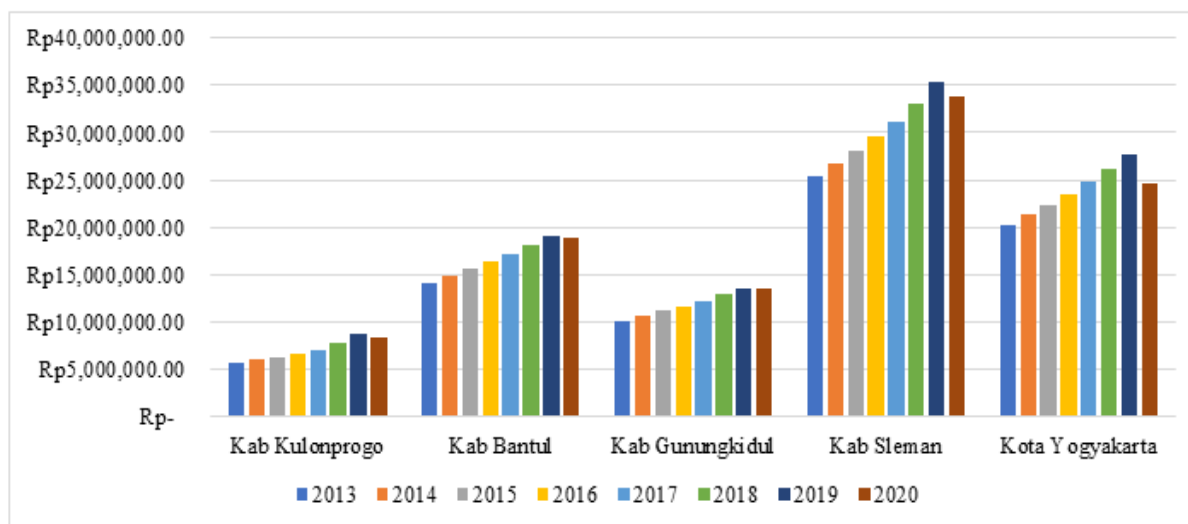
### **INTRODUCTION**

The purpose of development is to promote economic growth in order to enhance human welfare. Economic growth, economic structure, and the degree of inequality between citizens, between regions, and between sectors serve as the yardstick for development success. In addition to achieving the maximum growth, economic development must be able to eradicate or significantly reduce unemployment, income disparity, and poverty. (Todaro, Michael P; Smith 2015). The occurrence of something in a nation or region is the continued rise in per capita income until there is an improvement in the standard of living. Economic growth is one criterion to gauge and assess a location's level of development. Economic growth is the process of a region's economic conditions gradually getting better over a set period of time. Increasing an economy's productive capacity, which in turn stimulates an increase in national revenue, is another way to define economic growth. (Rinaldi and Abd, Jamal; Seftarita 2017). Economic growth gauges how well an economy has developed over time. (Sari et al. 2022). A region's economic growth is deemed successful if it can raise the standard of living for its residents.

There is one municipality, four regencies, 78 subdistricts, and 438 villages/wards in the Special Region of Yogyakarta, each of which possesses benefits that can be used to boost local economic development. We use Gunungkidul Regency as an example, where there is potential for a variety of tourism-related attractions. If the potential of these attractions can be fully realized, this will help the region's economy expand. From graph 1, it is clear that Yogyakarta's Special Region witnessed increase in its economy between 2013 to 2020. Yogyakarta City, Bantul Regency, Gunungkidul Regency, and Sleman Regency have all witnessed greater economic growth than Kulonprogo Regency, which has experienced the least. The Special Region of Yogyakarta can be stated to have unequal growth, despite yearly increases in economic growth. If this situation is not addressed quickly, it will result in injustice between each region. Consequently, the approach used must be purposeful, methodical, and sustainable, demanding weight in terms of both quantity and quality, in order to carry out regional development that is wide, sincere, and accountable. (Ardiyani 2017). Due to this, it is necessary to have access to regional finances, including money from the APBN's DAK and DAU.

According to (UU Nomor 33 Tahun 2004) regarding Financial Balance between the Central Government and Regional Governments, PAD is money obtained from regional taxes, regional levies, segregated regional wealth management results, and other permitted income under the law. According to Article 3, the goal of PAD is to empower local governments to finance regional autonomy in accordance with each region's capacity as a manifestation of decentralization. The bigger the PAD, the more capable a region is of implementing fiscal decentralization. PAD measures the degree of independence of the region of origin from PAD itself. (Rahmawati, Setyowati, and Faridatussalam 2022). A sort of money transfer across tiers of government that is unrelated to a specific spending

plan is the DAU. (Susanti et al. 2016). The General Allocation Fund is a block grant given to every district or city in Indonesia to bridge the gap between their financial resources and physical needs. It is distributed in accordance with certain guidelines, with the idea that poorer and less developed areas should receive more than wealthier ones. (Kuncoro 2014). When regional needs outweigh regional financial prospects, DAU fills the void. (Ferdiansyah, Deviyanti, and Pattisahusiwa 2018). Local governments are free to use the granted General Allocation Fund as long as it is to enhance community services. (Malisan and Fakhroni 2017).



Source: Economic growth report in the Special Region of Yogyakarta

**Chart 1**  
**Economic Growth in the Special Region of Yogyakarta in 2013-2020**

DAK, which come from the federal government and are distributed to local governments, are intended to finance unique activities in the region. (Humania 2022). Based on development priorities and development directions, DAK is distributed to various areas and specific sectors. (Priyono et al. 2020). DAK is divided into two categories: the Physical Special Allocation Fund and the Non-Physical Special Allocation Fund. In line with (UU Nomor 33 Tahun 2004), the government adheres to DAK standards, which encompass fundamental, specific, and technical requirements. In the APBD, technical criteria are defined by the state ministry/technical department, special criteria are determined by taking into account regional characteristics and statutory requirements, and general criteria are determined by taking into account the regional financial capacity.

## METHODS

This study is descriptive, which means it analyzes the data by summarizing or outlining the information as it has been collected, without reaching any broad generalizations or conclusions. (Hasrini Hakim 2021). This study discusses and describes the impact of DAU, DAK, and PAD as independent factors on Economic Growth as the dependent variable. In this study, the methods for gathering data were documentation and literature study. The process of gathering data through notes, books, newspapers, magazines, and other sources is known as documentation method. While using the library is one data collection strategy, another is the literature research method. Reading, interpreting, and documenting reading materials pertinent to the issue are the first steps in conducting research utilizing the literature technique. These materials are then used in practice or applied within a theoretical framework. (Hasrini Hakim 2021).

The Central Statistics Agency for the Special Region of Yogyakarta's website served as the primary online repository for the data used in this study, namely reports on regional financial statistics including General Allocation Funds, Special Allocation Funds, and Regional Original Income. Other data sources in the form of economic growth data for all Regencies/Cities in the Special Region of Yogyakarta were gathered from the website of the Central Statistics Agency for Gunungkidul Regency, Kulonprogo Regency, Bantul Regency, Sleman Regency, and Yogyakarta City. Secondary

data is the kind of data that was used in this investigation. Because the information used has already been acquired and recorded by other parties, secondary data is a source of research information gained indirectly, albeit through intermediary media. (Putra 2019). Secondary data typically takes the form of documentation, historical accounts, or reports that have been compiled in records or archives; some of these are made available to the public while others are not (Supomo 2016).

*Analysis Technique*

Using a panel data analysis tool and the following econometric model, it is possible to determine the direction and size of the impact that DAU, DAK, and PAD will have on economic growth in the Special Region of Yogyakarta between 2013 and 2020:  $Y_{it} = \beta_0 + \beta_1 DAU_{it} + \beta_2 DAK_{it} + \beta_3 PAD_{it} + \varepsilon_{it}$

Where: Y = Economic growth (Million Rp); DAU = General Allocation Fund (Thousand Rp); DAK = Special Allocation Fund (Thousand Rp); PAD = Regional Original Revenue (Thousand Rp);  $\varepsilon$  = Error term;  $\beta_0$  = Constant;  $\beta_1 - \beta_3$  = Independent variable regression coefficient; i = District/City to t; t = Observation year

**RESULT**

**Table 1**  
**Panel Data Regression Model**

Variabel	Koefisien Model		
	CEM	FEM	REM
C	-26461.11	18375833	15106771
DAU	0.006320	-0.01085	-0.007677
DAK	-0.012507	0.006299	0.003354
PAD	0.03567	0.01787	0.020622
R <sup>2</sup>	0.9397	0.99445	0.856438
Prob F	0.000	0.000	0.000
R-Square	0.940	0.994	0.856
F-statistic	187.140	819.343	71.587
Prob-F	0.000	0,000	0.00

Source: Panel data processing using E-views software

A test known as the Chow test is used to determine whether the fixed effect model is superior to the common effect model or the opposite (Ardiyani 2017). Table 1's findings reveal that the F test value is 78.884597 and the Chi-square is 95.405569, with a 0.000 probability for the F test and 0.000 for the Chi-square. The chosen model is a fixed effect if the results of the F test and Chi-square probability are both less than  $\alpha$  0.05. With a 95% confidence level, the Hausman test is used to compare the best fixed effect and random effect models in research (Jannah and Nasir 2018). According to Table 1's findings, the Hausman test probability value is 0.000, which is less than the  $\alpha$  value of 0.05. This result demonstrates that the chosen model is a fixed effect.

**Table 2**  
**Fixed Effect Model Estimation Results**

$Y_{it} = 18375833 - 0.011 DAU_{it} + 0.006 DAK_{it} + 0.018 PAD + \varepsilon_{it}$ (0.006) (0.001) (0.000)
R <sup>2</sup> = 0.994; DW= 1.627; F-statistik= 819.343; Prob F= 0.000

Source: Fixed Effect model output using E-views

The F test is used to evaluate if independent factors have an impact on the dependent variable concurrently or jointly. (Sinaga 2020). If the probability value of the F statistic is less than the alpha value, the independent variables are said to have an effect on the dependent variable collectively. Conversely, if the probability value of the F statistic is greater than alpha, the independent variables collectively have no effect on the dependent variable. According to Table 2's estimation results, the

probability value for the F statistic is 0.000 smaller than the value for the  $\alpha$  statistic (0.05) The Special Region of Yogyakarta's economic growth will be influenced by all independent variables, including DAU, DAK, and PAD in the years 2013 to 2020.

The purpose of the effect validity test is to ascertain whether the independent variable has any impact on the dependent variable. (Saraswati 2018). If the probability value of each independent variable is less than the value of alpha ( $\alpha$ ), then the independent variable is said to have an effect on the dependent variable; however, if the probability value of each independent variable is greater than alpha ( $\alpha$ ), then the independent variable has no effect on the dependent variable. The estimation's findings the correlation between PAD, DAU, and DAK and economic growth is seen in Table 2. Because the DAU probability is less than  $\alpha$  (0.05) and the General Allocation Fund coefficient is negative, the General Allocation Fund has a negative impact on economic growth. The General Allocation Fund's regression coefficient value is -0.011 and its probability value is 0.006. Economic growth will be 0.011 million rupiah lower if the General Allocation Fund is increased by one thousand rupiah. On the other hand, economic growth will rise by 0.011 million Rupiah if the General Allocation Fund falls by 1000 Rupiah.

Because the DAK probability is less than  $\alpha$  (0.05) and the Special Allocation Fund coefficient is positive, the Special Allocation Fund has a positive impact on economic growth. Its regression coefficient value is 0.006 and its probability value is 0.001. Economic growth will rise by 0.006 million rupiah for every 1,000 rupiah increase in the Special Allocation Fund. On the other hand, economic growth will fall by 0.006 million Rupiah if the Special Allocation Fund drops by one thousand Rupiah. The probability of PAD is smaller than  $\alpha$  (0.05) and the regression coefficient of Regional Original Income is positive, indicating that Regional Original Income has a positive impact on economic growth. Regional Original Income has a regression coefficient value of 0.018 and a probability value of 0.000. Economic growth will increase by 0.018 million Rupiah for every 1 thousand Rupiah increase in regional original income. On the other side, economic growth will fall by 0.018 million Rupiah if the Regional Original Income falls by one thousand Rupiah.

DAU, DAK, and PAD had an influence of 0.994 or 99.4% on economic growth in the Yogyakarta Special Region in 2013-2020, according to the findings of the research mentioned above. The remaining 0.6%, or 0.006, is affected by factors beyond the model. The DAU has been shown to have a negative impact on economic growth in the Yogyakarta Special Region between 2013 and 2020 based on the analysis and processing of data. DAU is known to have a regression coefficient of -0.011 and a probability of 0.006. This is in line with research [(Jannah and Nasir 2018) and (Arina, Koleangan, and Engka 2019) with the results of research in which the General Allocation Fund negatively affects economic growth. Budget allocations for development activities, particularly the construction of fundamental physical and non-physical facilities and infrastructure in sectors that can boost economic growth, are poorly planned because of the Yogyakarta Special Region General Allocation Fund's less flexible utilization.

According to study and data processing, the DAK has a regression coefficient of 0.006 and a likelihood of 0.001, indicating that it will have a positive impact on economic growth in Yogyakarta's Special Region between 2013 and 2020. This is consistent with studies (Dwi 2017), (Djazari Siagian 2016) and (Oktafia, Soelistyo, and Arifin 2018) which found that the Special Allocation Fund research's findings had a beneficial impact on economic growth. The Particular Allocation Fund demonstrates that the utilization of the Special Allocation Fund is exactly on target in accordance with special needs in the Special Region of Yogyakarta in 2013-2020. It also has a favorable impact on economic growth. Because the goal of providing Special Allocation Funds is to fund the unique needs of each region by taking into consideration the availability of funds in the State Budget, the allocation of Special Allocation Funds cannot be done arbitrarily in all financing operations.

According to study and data processing, PAD has a regression coefficient of 0.018 and a probability of 0.000, indicating that it will have a positive impact on economic growth in the Special Region of Yogyakarta between 2013 and 2020. This is consistent with studies (Kurniasari 2019), (Ardiyani 2017) and (Oktafia, Soelistyo, and Arifin 2018) which found that regional native income has a beneficial impact on economic growth. Because locations with high PAD potential can contribute financially to the implementation of governmental initiatives, the receipt of PAD in a region can have an impact on the region's economic growth, both high and low. Correctly

implementing government programs will boost local economic activity. An area's economic growth may improve as a result of increased income and spending brought on by an increase in economic activity.

## CONCLUSION

1. DAU has a detrimental impact on economic expansion. It is possible to interpret DAU that has a negative impact on economic growth as follows: for every 1000 Rupiah increase in DAU, economic growth will be reduced by 0.011 million Rupiah. DAU can have a negative impact on economic growth because it is not used to its full potential, which results in poor planning of budget allocation for development activities, particularly the building of essential physical and intangible infrastructure and facilities in sectors that can spur economic growth. The findings here are consistent with studies (Jannah and Nasir 2018) and (Arina, Koleangan, and Engka 2019).
2. DAK fosters economic expansion. According to DAK, which has a beneficial impact on economic growth, an increase in the Special Allocation Fund of 1,000 Rupiah will result in an increase in GDP of 0.006 million Rupiah. DAU contributes to economic growth since it is used appropriately for the local environment's particular requirements. The findings of investigations (Dwi 2017), (Djazari Siagian 2016) and (Oktafia, Soelistyo, and Arifin 2018) support these findings.
3. PAD supports a growing economy. A rise in local revenue of 1,000 Rupiah will, in accordance with PAD, which has a favorable effect on economic growth, lead to an increase in economic growth of 0.018 million Rupiah. PAD has a positive effect on economic growth in both regions of the country: those with strong economic growth rates and those with low growth rates. This is because regions with high PAD potential can financially support the implementation of government projects. Proper program implementation will boost regional economic activity. Because of the rise in income and spending brought on by increased economic activity, a region's economic growth may accelerate. These results are in line with studies (Kurniasari 2019), (Ardiyani 2017) and (Oktafia, Soelistyo, and Arifin 2018).

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