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EXPLORING FISCAL DECENTRALIZATION IN INDONESIA: THE IMPACT OF SPECIAL AUTONOMY FUNDS ON THE ECONOMIES OF ACEH, PAPUA, AND WEST PAPUA

Syahrir Rahman*

Sekolah Arsitektur, Perencanaan, dan Pengembangan Kebijakan (SAPPK), Institut Teknologi Bandung, Jl. Ganesa No. 10, Lb. Siliwangi, Bandung, Jawa Barat, Indonesia; email: syahrirrahman@gmail.com

*Correspondence

Abstract: *Fiscal decentralization represents a pivotal strategy by the Indonesian Government to promote equitable development and alleviate regional disparities. Within this framework, Special Autonomy Funds, integral to the Transfer to Region scheme, act as a critical policy instrument. Despite numerous studies, the definitive role of fiscal decentralization on regional economic dynamics still needs to be solved. This research endeavors to deepen the understanding of fiscal decentralization's impact in Indonesia by examining the effects of the Special Autonomy Funds on the regional economy. Specifically, it assesses how these funds influence the Gross Regional Domestic Product (GRDP) Per Capita at Current Prices (ADHB) across Aceh, Papua, and West Papua provinces. The results show a significant impact of the Special Autonomy Funds on the GRDP Per Capita ADHB, with a high R2 of 94.2% by using panel regression analysis.*

Keywords: *Fiscal Decentralization, Transfer to Region, Special Autonomy Funds, Regression Analysis.*

Abstrak: Desentralisasi Fiskal merupakan salah satu strategi yang dilakukan pemerintah dalam mencapai pemerataan pembangunan dan mengurangi kesenjangan antar daerah. Salah satu bentuk dari implementasi kebijakan ini adalah adanya Dana Otonomi Khusus merupakan bagian dari Dana Transfer ke Daerah yang menjadi salah satu instrumen dalam kebijakan Desentralisasi Fiskal. Berbagai penelitian yang sudah dilakukan sebelumnya belum dapat menyimpulkan bagaimana peran dari desentralisasi fiskal terhadap perekonomian daerah. Penelitian ini bertujuan untuk memperkaya pemahaman terkait desentralisasi fiskal di Indonesia dengan mengidentifikasi pengaruh Realisasi Transfer Dana Otonomi Khusus terhadap Perkembangan Ekonomi di daerah yang dilihat melalui perkembangan Produk Domestik Regional Bruto (PDRB) Per kapita Atas Dasar Harga Berlaku (ADHB). Penelitian ini dilakukan dengan metode kuantitatif menggunakan Analisis Regresi Panel dan hasil analisis menunjukkan bahwa Realisasi Transfer Dana Otonomi Khusus memiliki pengaruh yang signifikan terhadap perkembangan PDRB Per kapita ADHB di Provinsi Aceh, Papua, dan Papua Barat dengan Koefisien Determinasi (R2) sebesar 94,2%.

Kata Kunci: Desentralisasi Fiskal, Transfer ke Daerah, Dana Otonomi Khusus, Analisis Regresi.

I. Introduction

Equitable development is one of the national development missions set by the government through the 2005-2025 Long-Term Development Plan (RPJP). One of the goals of this mission is to enhance regional development, diminish overall social inequality, and ensure

equal community access to various social services, economic facilities, and infrastructure. (Law No. 17/2007). The Republic of Indonesia Government has implemented various policies and programs to achieve equitable development from various eras of government, including through decentralization, which transfers government affairs from the central government to autonomous regions based on regional autonomy. As per Law Number 23/2014 on Regional Government, allowing the regions the broadest autonomy is intended to hasten the attainment of community welfare through enhanced services, empowerment, and community engagement.

One significant implication of implementing autonomy in Indonesia is the transfer of funds to regions. These funds, sourced from the State Budget (APBN), are a portion of state expenditures allocated and channeled to regional governments. It is meant to be locally managed to fund the administration of government affairs under regional authority. A component of the transfer of funds to regions is the Special Autonomy Fund, designated for specific regions to support the implementation of special autonomy. Each region benefiting from special autonomy in Indonesia receives an allocation for the Special Autonomy Fund, which encompasses several strategic programs. These programs include the Village Economic Development Strategic Program (PROSPEK), direct cash assistance to Indigenous Papuans (OAP), initiatives for the empowerment of local economic enterprises, poverty alleviation efforts, and funding for education, social services, and healthcare (Ditjen Perimbangan Keuangan, 2017; Pattinasarany et al., 2021).

According to the Directorate General of Fiscal Balance of Indonesia's Ministry of Finance, nearly IDR 176 trillion in Special Autonomy Funds were transferred to regions from 2014 to 2022 during President Joko Widodo's administration. Aceh Province received IDR 71.6 trillion, Papua Province received IDR 71.1 trillion, and West Papua Province received IDR 33.2 trillion. As an instrument of fiscal decentralization aimed at accelerating development in provinces with Special Autonomy, it is interesting to observe the impact of the Special Autonomy Fund on the economic growth of the receiving province.

Several studies have discussed the impact of fiscal decentralization and autonomy policies on regional development. These studies show that the outcomes of fiscal decentralization in Indonesia vary depending on each region and how the funds are allocated and used. While some studies show positive economic growth and poverty reduction results (Hartati et al., 2016; Muhtarulloh, 2021; Siburian, 2022), other studies show insignificant or even negative results, primarily when funds are not managed effectively or only focused on

infrastructure development without sufficient support for social programs (Isnadi & Fikriah, 2019; Kharisma et al., 2020; Nurhemi & Suryani R, 2015; Swastyardi, 2008).

This research aims to provide additional understanding of the fiscal decentralization implementation in Indonesia by identifying how the realization of the Special Autonomy Fund affects economic growth as reflected in the Gross Regional Domestic Product (GRDP) Per Capita at Current Prices (ADHB) in the provinces of Aceh, Papua, and West Papua as recipients of the Special Autonomy Fund from 2014 to 2022.

II. Literature Review

Fiscal Decentralization

Decentralization is the government's effort to achieve equitable development in Indonesia. It represents a shift of power from the central government to the local government, allowing for the regulation and management of the region based on its specific circumstances (Kaloh, 2022 dalam Mega Christia & Ispriyarso, 2019). *Fiscal decentralization* is a concept related to financial capacity—fiscal decentralization policy results from decisions made by the government of Indonesia regarding decentralization and regional autonomy (Hastuti, 2018).

Fiscal decentralization aims to reduce disparities between regions and ensure the implementation of essential public services in each region to improve people's welfare. The argument is based on the belief that development cannot be achieved solely through market mechanisms; it necessitates the government's active role through its budgetary policies (Nurhemi & Suryani R, 2015). In addition, the closer proximity between the community and the local government, which is more knowledgeable about the region's needs, can encourage government efforts to fulfill needs that will impact economic growth and the welfare of local communities (Fahrudin & Susilo, 2022).

The primary thing is that granting Special Autonomy to certain provinces in Indonesia aims to provide broader authority for provinces to regulate and manage their regions within the Unitary State of the Republic of Indonesia (NKRI) framework. Special Autonomy is a type of decentralization, also known as assimilative decentralization, specifically applied to specific regions to address development gaps and improve community welfare (Pattinasarany et al., 2021). The Special Autonomy Fund is part of the fiscal decentralization policy through Transfers to Regions (TKD) carried out by the Central Government. Each Regional Government receiving the Special Autonomy Fund has the following allocation of funds:

Table 1. Allocation of Special Autonomy Funds in the Provinces

of Aceh, Papua, and West Papua

Province	Allocation
Aceh	The Special Autonomy Funds in Aceh Province are allocated to seven priority areas: a) Infrastructure b) Economic empowerment c) Poverty alleviation d) Education e) Social f) Healthcare g) Aceh Specialty
Papua	Provincial Level: a) Programs in education, healthcare, economy, populism, and infrastructure b) Assistance to religious institutions, Indigenous Papuan organizations, and foundations engaged in education, healthcare, and the people's economy c) Data collection for Special Autonomy (Otsus) planning and development needs. d) Monitoring and evaluation of programs and activities financed by the Special Autonomy Fund e) Improving the financial performance of Otsus f) Operational expenditures for the implementation of the duties and functions of the Papuan People's Assembly District/Municipality Level: a) Education b) Healthcare c) People's economic development d) Infrastructure development e) Affirmative assistance to religious institutions, Indigenous peoples' institutions, and women's groups f) Local government planning and supervision, monitoring and evaluation, and reporting of programs and activities
West Papua	Activity programs funding: a) Education b) Healthcare and nutrition improvement c) Supporting infrastructure to improve the welfare of Indigenous Papuans (OAP) d) Empowerment of people's economic and socio-cultural businesses e) Affirmative Action

Source: Alqarni et al., 2022; Pattinasarany et al., 2021*, processed*

Based on the table above, there are several similarities in the focus of allocating Special Autonomy Funds in Aceh, Papua, and West Papua Provinces, such as in education, healthcare, economic empowerment, and infrastructure. Therefore, research on the influence or impact of decentralization on these areas is engaging. The following section will explain some previous studies on decentralization's influence on regional development.

Decentralization and Regional Development

Several prior studies have sought to create theories about the correlation between the Special Autonomy Fund and the allocation of funds in areas such as education, health, economy, and infrastructure. These projections are usually based on the Human Development Index (HDI). Muhtarulloh (2021) concluded that the Special Autonomy Fund positively and significantly impacts the Human Development Index (HDI) in Papua and West Papua. However, Kharisma et al., (2020) found different results, stating that the Special Autonomy Fund had no significant effect on increasing HDI in Papua Province. Upon further investigation, it was revealed that the research used data from different periods; Mutharulloh (2011) used data from 2002 to 2022, while Kharisma et al. (2020) used data from a shorter period, from 2014 to 2017.

Research by (Isnadi & Fikriah, 2019) on the impact of Special Autonomy on the Human Development Index (HDI) growth rate in Aceh Province reveals that realizing the Special Autonomy Fund has no significant effect on HDI growth. This is attributed to the fund's allocation being predominantly directed towards physical infrastructure development, while non-physical development, which has a more direct impact on HDI, receives minimal attention. Using a different analysis method, Hartati et al., (2016) found different results. They state that receiving the Special Autonomy Fund positively influences HDI in Aceh Province.

It is challenging to come up with a single general conclusion regarding the impact of fiscal decentralization in Indonesia due to the wide variety of transfers, varying transfer values in each province, and the diverse management of transfer funds in the regions. Another study related to TKD funds by Siburian (2022) stated that there is strong evidence that the implementation of fiscal decentralization in Indonesia from 2001 to 2018 contributed significantly to poverty alleviation efforts. However, in a study by Nurhemi and Suryani (2015), comparing the regional economic growth in Indonesia before fiscal decentralization (1990-2000) and after fiscal decentralization (2001-2011), it was found that the impact of fiscal decentralization on economic growth in Indonesia is inconclusive. The differences are because the effects vary in different regions. The study conducted by (Swastyardi, 2008) also showed

that there are different phenomena in the level of inequality in various regions in Indonesia after the implementation of fiscal decentralization in 2001-2006. Some regions, such as Sumatra, Java, and Bali, experienced a decrease in inequality, while others experienced an increase in inequality, such as Kalimantan and Sulawesi.

Therefore, this research will provide new input regarding the effect of TKD as an instrument of Fiscal Decentralization on the regional economy by using Gross Regional Domestic Product (GRDP) Per capita at Current Prices (ADHB) as the dependent variable. GRDP per capita at ADHB is chosen as the dependent variable because it can reflect the level of community welfare in a region, so it aligns with the objectives of implementing fiscal decentralization for improving the economy and community welfare.

III. Research Methodologies
Data

This research utilizes secondary data from TKD fund realization data from the Special Autonomy Fund Transfer in three provinces: Aceh, Papua, and West Papua, spanning from 2014 to 2022. The data is obtained from the Transfer to Regions and Village Funds Information System (SIMTRADA) page managed by the Directorate General of Fiscal Balance of the Ministry of Finance of the Republic of Indonesia through https://djpk.kemenkeu.go.id/simtrada/ and the realization of Gross Regional Domestic Product (GRDP) at Current Prices (ADHB) obtained from the publication of the Central Bureau of Statistics of the Republic of Indonesia. The details of the data requirements for research are as follows:

Table 2. Data Requirements

No.	Name	Year	Data Type	Observation Unit
1	Realization of Special Autonomy Fund Transfer for Aceh, Papua, and West Papua	2014 to 2022	Secondary	Province
2	Gross Regional Domestic Product Per Capita at Current Prices of Aceh, Papua, and West Papua	2014 to 2022	Secondary	Province

Source: Analysis results, 2024

Analysis

This research employs a quantitative approach. Quantitative research deals with the measurement and analysis of variables to obtain results. It involves using and analyzing numerical data using specific statistical techniques to explain issues or phenomena from these numerical data (Apuke, 2017). The analysis method used is Regression Analysis. *Regression analysis* is a mathematical method used to determine the effect of variables in a model and how each factor interacts (Gallo, 2015). Regression analysis can describe the nature of the relationship between variables and the effect of the relationship.

Panel data combines cross-sectional and time-series data, typically involving repeated measurements of specific variables over time on observed units such as individuals, households, companies, cities, and countries (Xu et al., 2007). Therefore, panel regression is a regression analysis that uses panel data to determine the effect between variables. This research uses panel data to analyze the Special Autonomy Fund Transfer Realization variable in Aceh, Papua, and West Papua Provinces from 2014 to 2022.

The dependent variable in this research is the Gross Regional Domestic Product (GRDP) Per Capita at Current Prices (ADBH) in each province studied. In contrast, the independent variable used is the realization of Transfers to Regions in the form of Special Autonomy Fund Transfer Realization.

Table 3. Research Variables

No.	Variables	
1	Special Autonomy Fund Transfer Realization	X (Independent)
2	Gross Regional Domestic Product (GRDP) Per Capita at Current Prices (ADBH)	Y (Dependant)

Source: Analysis results, 2024

Regression Analysis in Panel Data uses three types of estimation models and different approaches to overcome the problem of heterogeneity between data units. The estimation model in question consists of (Zulfikar, 2018):

a) Common Effect Model (CEM)

   CEM is a panel data regression model that combines time-series data with cross-sectional data using a least squares approach and the ordinary least square method. This model assumes that all entities share the same characteristics and does not consider unobserved variables that may vary between entities. Therefore, it can be interpreted similarly to regression analysis, which uses ordinary data (not panel).

b)   Fixed Effect Model (FEM)

FEM is a panel data regression model that has different effects between individuals and uses the least square dummy method. This model considers the specific effects for each entity that do not change over time.

c)   Random Effect Model (REM)

REM is a panel data regression model that provides differentiating effects on variables with a random model. The random effect assumes that the individual effect on each unit is a random variable.

Meanwhile, several tests can be performed to determine the method used in the regression analysis of panel data (Zulfikar, 2018):

a)   Chow Test

The Chow test is used to select the most appropriate model to use in the analysis between the Common Effect Model and the Fixed Effect Model; the test performed is:

If the probability value> 0.05, then the model chosen is the Common Effect Model, but if the probability value <0.05, then the model chosen is the Fixed Effect Model.

b)   Hausman Test

The Hausman test is used to select the most appropriate model to use in the analysis between the Fixed Effect Model and the Random Effect Model*; the* test used is:

If the probability value> 0.05, then the model chosen is the Random Effect Model, but if the probability value <0.05, then the model chosen is the Fixed Effect Model.
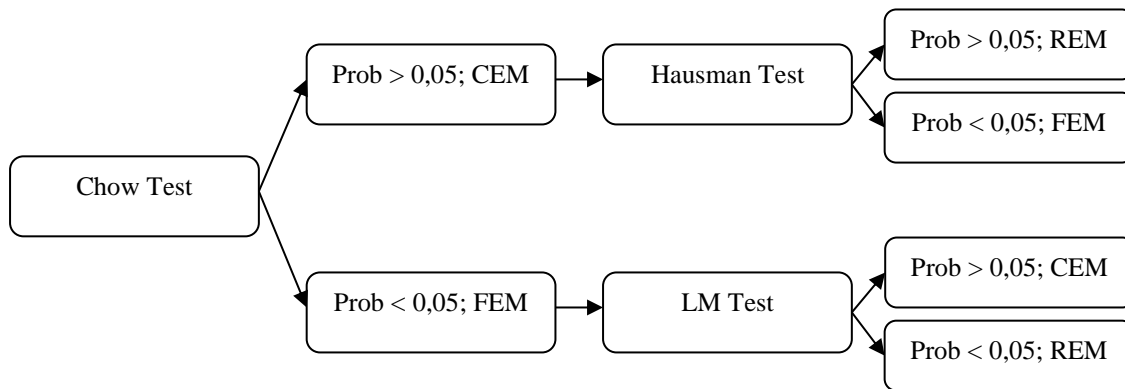
c)   Lagrange Multiplier (LM) Test

The Lagrange Multiplier test selects the most appropriate model to use in the analysis between the Random Effect Model and the Common Effect Model. The test used is:

If the probability value> 0.05, then the model chosen is the Common Effect Model, but if the probability value <0.05, then the model chosen is the Random Effect Model.

The determination test involves initiating the Chow Test first if the probability results indicate that the Fixed Effect Model is chosen. The next test is the Hausman Test, which determines whether to choose the Fixed Effect Model or the Random Effect Model. Suppose the Chow Test results show that the selected model is the Common Effect Model. In that case, the next test performed is the Lagrance Model Test to determine the Common Effect Model or

Random Effect Model to be used in the analysis. Stages of Model Determination in Panel Regression Analysis in more detail in Figure 1:

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                    ┌──────────────────┐     ┌──────────────┐     ┌──────────────────┐
                    │ Prob > 0,05; CEM │ ──→ │ Hausman Test │ ──→ │ Prob > 0,05; REM │
                    └──────────────────┘     └──────────────┘     └──────────────────┘
              ↗                                                    ┌──────────────────┐
┌───────────┐                                                     │ Prob < 0,05; FEM │
│ Chow Test │                                                     └──────────────────┘
└───────────┘
              ↘                                                    ┌──────────────────┐
                    ┌──────────────────┐     ┌──────────────┐     │ Prob > 0,05; CEM │
                    │ Prob < 0,05; FEM │ ──→ │   LM Test    │ ──→ └──────────────────┘
                    └──────────────────┘     └──────────────┘     ┌──────────────────┐
                                                                  │ Prob < 0,05; REM │
                                                                  └──────────────────┘
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Source: Zulfikar, 2018, processed

Figure 1. Modeling Stages in Panel Regression Analysis

As with statistical analysis in general, Panel Regression Analysis also requires statistical tests to test the model and draw conclusions. The tests carried out to determine the feasibility of the model and draw conclusions are as follows (Ningrum et al., 2020):

a) Coefficient of Determination (R^2)

The Coefficient of Determination, or R^2, quantifies the proportion of the variance in the dependent variable that is predictable from the independent variables. A coefficient of determination close to 1 indicates the model's ability to explain the dependent variable better.

b) F-Test (Simultaneous)

The F-test determines the effect of all independent variables in a model to have a joint influence on the dependent variable. Testing can be done by comparing the *calculated Prob F* value with an α value of 0.05. If the *calculated Prob F* is smaller than 0.05, it can be concluded that the regression model is estimated to be feasible. Meanwhile, if the *calculated Prob F* value is more significant than 0.05, it can be concluded that the regression model formed is estimated not feasible.

c) t-Test (Partial)

The t-test is conducted to determine the effect of one independent variable on the dependent variable by assuming other variables are constant. Testing can be done by comparing the *calculated Prob t* value with an α value of 0.05. Suppose the *calculated Prob t* is smaller than 0.05. In that case, it can be concluded that the independent variable significantly affects the dependent variable. In contrast, if the

calculated Prob t value is more significant than 0.05, it can be concluded that the independent variable does not significantly affect the dependent variable.

Panel Regression Analysis also requires a Classical Assumption Test to ascertain whether the equations in the regression model are econometrically acceptable. Below are the standard classical assumption tests that are usually conducted in regression analysis:

a)   Normality Test

The normality test is performed to see if the data is usually distributed. In panel regression analysis, normality can be assessed using a histogram graph and by checking if the probability value of the standardized residual is more significant than 0.05.

b)   Multicollinearity Test

A multicollinearity test determines whether two or more independent variables in the regression model have a perfect or near-perfect linear relationship. This test is only needed for analyses with more than one independent variable.

c)   Heteroscedasticity Test

A heteroscedasticity test is conducted to test the inequality of variance of the residuals generated in the regression model. Heteroscedasticity generally occurs in *cross-section* data. The test can be done by looking at the Prob. value of the test results. If the Prob. value is greater than 0.05, then there is no heteroscedasticity problem in the analyzed data.

d)   Autocorrelation Test

The Autocorrelation test is carried out to determine whether residuals in period t are correlated with errors in period t-1. This test only needs to be done on *time-series* data.

However, based on Basuki and Prawoto in Ningrum et al., (2020) explained that not all Classical Assumption Tests must be performed on Panel Regression Analysis. Panel data is more similar to cross-section data than time-series data. Therefore, assumption tests designed for time-series data, like the Autocorrelation Test, are unnecessary. Testing for autocorrelation on non-time series data would not yield meaningful results. Therefore, the Classical Assumption Tests carried out in this research are the Normality Test and Heteroscedasticity Test. In more detail, the flow of analysis in this research is seen in Figure 2.
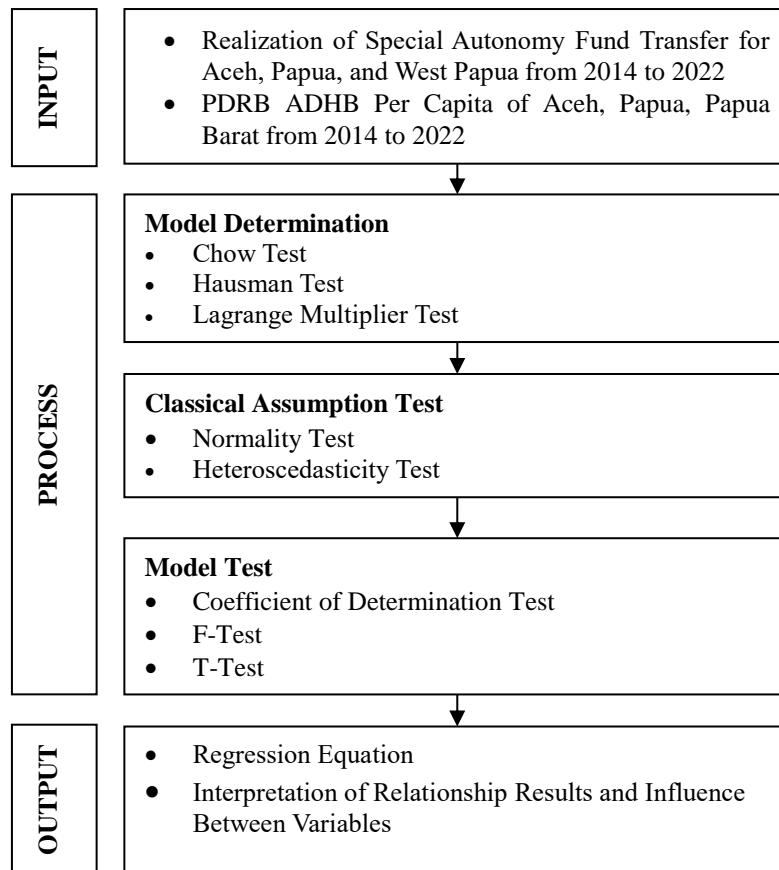
Source: Analysis results, 2024

Figure 2. Analysis Framework

IV. Result and Discussion

Model Determination

Model determination is carried out through the stages of model determination in the Chow, Hausman, and Lagrange Multiplier Test. This test is conducted using the *Econometric Views* or *EViews* program. Based on the results of data processing, the Chow Test results are as follows:

Table 4. Chow Test Results

Effect Test	Statistic	d.f.	Prob.
Cross-section F	74.195965	(2,23)	0.0000
Cross-section Chi-square	54.228385	2	0.0000

Source: Analysis results, 2023

Based on the results of the above calculations, the *Prob.* The value of the *cross-section chi-square* is less than 0.005. Therefore, the fixed-effect model is the choice between the

standard and fixed-effect models. The next step involves conducting a model determination test using the Hausman Test. Based on the data processing, the results of the Hausman Test are as follows.

Table 5. Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section F	6.538829	1	0.0106

Source: Analysis results, 2023

The table above shows that the *Prob.* value on the *Cross-section F* is smaller than 0.05, so the *Fixed Effect Model* is considered more appropriate to estimate panel data in this research compared to the *Random Effect Model.* The Chow Test and Hausman Test results indicate that the *Fixed Effect Model* is a more suitable estimation model than the Common Effect Model and Random Effect Model. Therefore, the Lagrange Multiplier Test will not be conducted, and this research will utilize the Fixed Effect Model for estimation.

Classical Assumption Test

The Classical Assumption Tests carried out in this research are the Normality Test and the Heteroscedasticity Test. A multicollinearity test was not conducted because this research only used one independent variable. While the Autocorrelation Test is not carried out because panel data has properties closer to *cross-section* data, it does not have autocorrelation problems. The Normality Test in this analysis is done through *Residual Diagnostic* analysis in the EViews program. The results of the Normality Test processing produce histogram graphs and *Probability* values as follows:
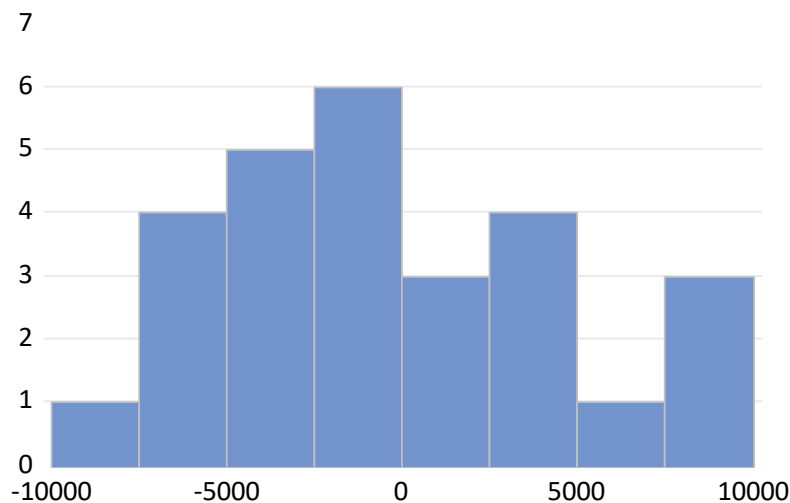
Source: Analysis results, 2023

Figure 3. Normality Test Histogram

The graph above shows that the data tends to spread evenly. Statistically, the *Probability* value on *Standardized Residuals* also shows 0.51907, which is more significant than 0.05, so it can be concluded that the data used is usually distributed.

After the Normality Test, the following test related to the Classical Assumption Test is the Heteroscedasticity Test. The Heteroscedasticity Test results show the following results:

Table 6. Heteroscedasticity Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X	-4.52E-05	0.000268	-0.168565	0.8675

Source: Analysis results, 2023

The table shows that the probability value for the independent variable is 0.8675, indicating no heteroscedasticity issue in the data analysis. Therefore, based on the Classical Assumption Test, the regression equation in the model generated using the current data is econometrically acceptable. Therefore, the analysis can proceed to model testing and conclusion.

Model Test

Model Test in Panel Regression Analysis is seen from the Coefficient of Determination (R^2), F Test, and t-test measurement results. After conducting a series of Panel Regression Analysis in the EViews program, the summary of the analysis results using the Fixed Effect Model to determine the effect of Special Autonomy Fund Transfer Realization on ADHB GRDP Per capita in Aceh, Papua, and West Papua is as follows:

Table 7. Summary of Panel Regression Analysis Model with *Fixed Effect Model*

Dependent Variable: Y
Method: Panel Least Square
Date: 12/10/23 Time: 17:48
Sample: 2014 2022
Periods included: 9
Cross-sections included: 3
Total panel (balanced) observation: 27

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	25199.44	102272.29	2.453.148	0.0222
X	0.004351	0.001569	27.735.564	0.0108
Effect Specification				
Cross-section fixed (dummy variables)				
R-squared	0.942467			
Adjusted R-Squared	0.934963			
Prob(F-Statistic)	0.000000			

Source: Analysis results, 2023

Based on the table above, the Coefficient of Determination (R2) value obtained is 0.942 or 94.2%, indicating that the independent variable can explain 94.2% of the variable value. The F-test, conducted using the Prob (F) Statistic, yielded a value of 0.0000, less than 0.05. This suggests that the regression model in this research is likely to be valid for use, meaning that the model's independent variables collectively influence the dependent variable.

Meanwhile, based on the t-test results for variable X, the probability value is 0.0108, less than 0.05. Therefore, the independent variable has a positive and significant effect on the dependent variable in this research. The positive coefficient value also indicates a positive relationship direction, meaning that positive changes in the independent variable will also provide positive changes to the dependent variable.

Regression Equation and Result Interpretation

Based on the results of the analysis that has been carried out, the regression equation formed in this study is:

$$Y = 25199,44 + 0,004351\,X$$

Based on the above equation, it can be interpreted that any change in Variable X (Special Autonomy Fund Transfer Realization) by one unit will impact Variable Y by 0.004351. The coefficient value for variable X is relatively small because the Special Autonomy Fund Transfer Realization value will significantly differ from the ADHB GRDP Per capita. Despite the small coefficient, the impact is substantial due to the significant amount of funds involved. The positive coefficient suggests a direct correlation between increased autonomy funds and economic growth in Aceh, Papua, and West Papua provinces. These findings validate the

effectiveness of fiscal decentralization in driving regional economic development through targeted financial interventions.

Discussion

According to the data analysis, it is evident that the independent variable in this research, specifically the implementation of Special Autonomy Fund Transfers, significantly impacts the economies of Aceh, Papua, and West Papua Provinces, as indicated by the ADHB per capita GRDP variable. Based on the Coefficient of Determination, the Realization of Special Autonomy Fund Transfers from 2014 to 2022 was able to explain 94.2% of the ADHB per capita GRDP value in these provinces. This figure shows that the Special Autonomy Fund Transfer Realization positively and significantly influences economic development in the recipient region. From 2014 to 2022, during President Joko Widodo's administration, the Special Autonomy Fund was used to improve welfare in Aceh, Papua, and West Papua Provinces. This is positive as the significant funds issued by the Government of Indonesia each year are expected to impact economic development positively.
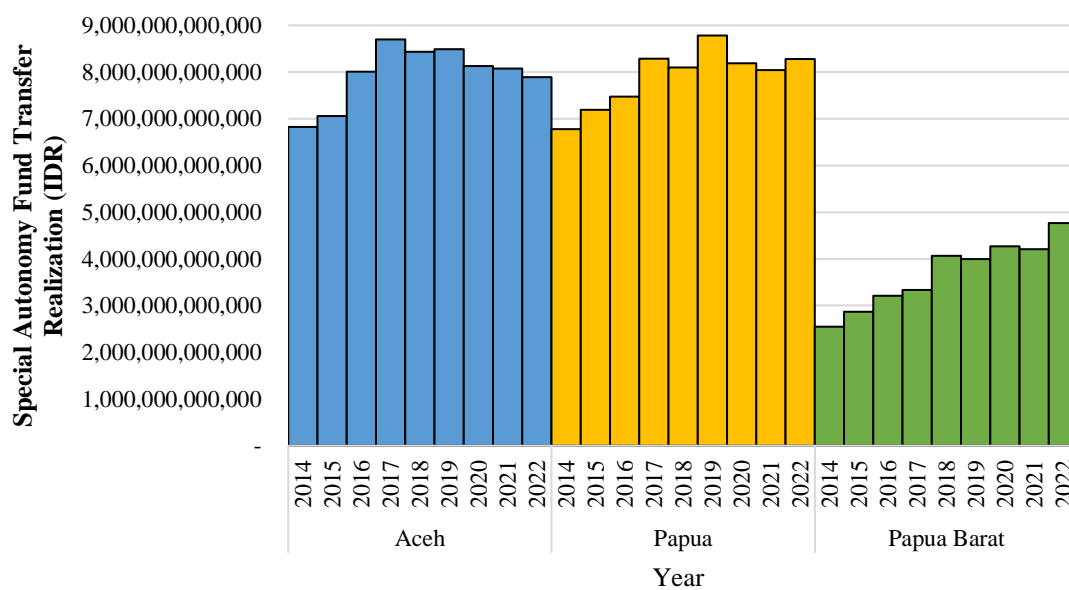
Source: *Directorate General of Fiscal Balance, Ministry of Finance, 2023, processed*

Figure 4. Development of Special Autonomy Fund Transfer Realization

from 2014 to 2022

The results of this research are in line with several previous studies, which show that the Special Autonomy Fund has a positive and significant effect on regional development (Hartati et al., 2016; Muhtarulloh, 2021) and transfers to regions in general, which in turn affects economic development in the regions (Siburian, 2022).

One factor that impacts the size of regional transfer funds in the economy is the management of the funds themselves. As its purpose, transferring funds to the regions is expected to encourage increased economic activity to achieve welfare. Research (Widyastuti & Nusantara, 2022) has shown that the impact of fiscal decentralization on economic growth in several regions of Indonesia needs to be more conclusive. This could be due to the types of transfers being made and the financial management practices in these regions, where a relatively small proportion of funds is allocated to capital expenditure, resulting in a less significant impact on economic growth.

Therefore, it is strongly recommended that transfer funds be used for productive programs to increase the multiplier effect on the economy. Compared with Table 1, some allocations of Special Autonomy Funds in Aceh, Papua, and West Papua have focused on productive activities, including community economic empowerment. Due to the substantial portion of variance that these funds account for in the regression model, future policies should concentrate on refining the allocation process and monitoring their use to maximize economic outcomes. This includes a focus on effectively utilizing transfer funds through productive programs.

V. Conclusion

The Special Autonomy Fund, as an instrument of Fiscal Decentralization policy based on this model, is found to have a positive and significant influence on Gross Regional Domestic Product (GRDP) per capita at current prices (ADHB) in Aceh, Papua, and West Papua Provinces from 2014 to 2022. This discovery is positive because it demonstrates that the policy of fiscal decentralization, through one of its mechanisms, the Special Autonomy Fund, can positively impact the economy of the receiving region. This follows the initial objectives of the Transfer to Regions (TKD) and Fiscal Decentralization policy: reduce disparities between regions and ensure the implementation of essential public services in each region to improve people's welfare.

Recommendations to increase the GRDP per capita ADHB in Aceh, Papua, and West Papua Provinces can be made by boosting the value of the Special Autonomy Data Transfer Realization based on the analysis results. It is crucial to manage TKD funds efficiently and use

them productively to maximize the multiplier effect of the Special Autonomy Fund Transfers on the regional economy. This can be achieved through initiatives such as community empowerment programs. In addition, for less productive activities, the implementation can involve the general public so that the community can directly feel the circulation of funds.

Although this research has achieved its objective of identifying the effect of the Special Autonomy Fund on the regional economy, there are still some limitations that only focus on the effect of the Special Autonomy Fund on GRDP per capita. Other factors affecting regional economic growth, such as government policies, political conditions, and other socio-economic factors, are not analyzed further. Therefore, future studies or research could enrich the analysis by including other variables such as education, health, and infrastructure levels and considering the impact of other government interventions that may be related to the Special Autonomy Fund.

VI. Bibliography

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