

## THE ROLE OF THE SPECIAL AUTONOMY FUND TO IMPROVE THE PUBLIC SERVICE IN THE PAPUA PROVINCE

*(Peranan Dana Otonomi Khusus untuk Meningkatkan Pelayanan Publik di Provinsi Papua)*

**Ari Mulianta Ginting**

Pusat Analisis Keperlemenan Badan Keahlian Setjen DPR RI  
Jl. Gatot Subroto, Gedung Nusantara 1, Jakarta, 10270  
Email: ari.ginting@dpr.go.id

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### **Abstrak**

Tulisan ini mengkaji peran dana otonomi khusus (otsus) terhadap pelayanan publik baik di bidang kesehatan maupun pendidikan di kabupaten/kota di Provinsi Papua. Menggunakan data panel dari 29 kabupaten/kota di Provinsi Papua tahun 2013-2020, temuan kami didasarkan pada data panel. Dana otsus berdampak positif dan signifikan terhadap pelayanan publik baik di bidang kesehatan maupun pendidikan di kabupaten/kota di Provinsi Papua. Selain itu, kami mengidentifikasi desentralisasi fiskal juga berpengaruh positif dan signifikan terhadap pelayanan publik di kabupaten/kota di Provinsi Papua. Dana otsus merupakan prasyarat untuk peningkatan pelayanan publik. Ada persyaratan untuk melaksanakan dana khusus untuk Papua, seperti partisipasi masyarakat dalam menentukan dan mengawasi penggunaan dana khusus, akuntabilitas pemerintah daerah untuk menggunakan dana khusus, sinergi, dan koordinasi para pemangku kepentingan di Papua. Terakhir, pemerintah pusat harus memastikan dana khusus harus dialokasikan untuk pelayanan publik seperti sektor kesehatan dan pendidikan. DPR RI perlu mendorong pengawasan dan evaluasi terhadap dana otonomi khusus di Provinsi Papua agar sesuai dengan tujuan pemberian dana tersebut.

Kata kunci: kebijakan fiskal, ekonomi regional, ekonomi publik, ekonomi regional, Dana Otonomi Khusus Papua

### **Abstract**

*This paper examines the special autonomy fund's role in public service in health and education sector in districts/cities in Papua Province. Using panel data from 29 districts/cities in Papua Province covering 2013-2020, our findings are based on panel data. The special autonomy fund has a positive and significant impact on public service in health and education sector in districts/cities in Papua Provinces. Moreover, we identify that fiscal decentralization also positively and significantly affects public service in districts/cities in Papua Province. A special autonomy fund is a necessary condition for increasing public service. There are requirements to implement the special funding for Papua, such as participation of the people in determining and supervising the use of the special fund, accountability of local government to use the special fund, synergy, and coordination among stakeholders in Papua. Finally, the central government must ensure that special funds must be allocated to public services such as health and education sector. Indonesian Parliament should make an evaluation and monitoring of the special autonomy fund for Papua Province. The evaluation and monitoring of the special autonomy fund are needed in order to fulfill the aims of the fund.*

*Keywords: fiscal policy, public economics, regional autonomy, special autonomy fund, public service*

### **INTRODUCTION**

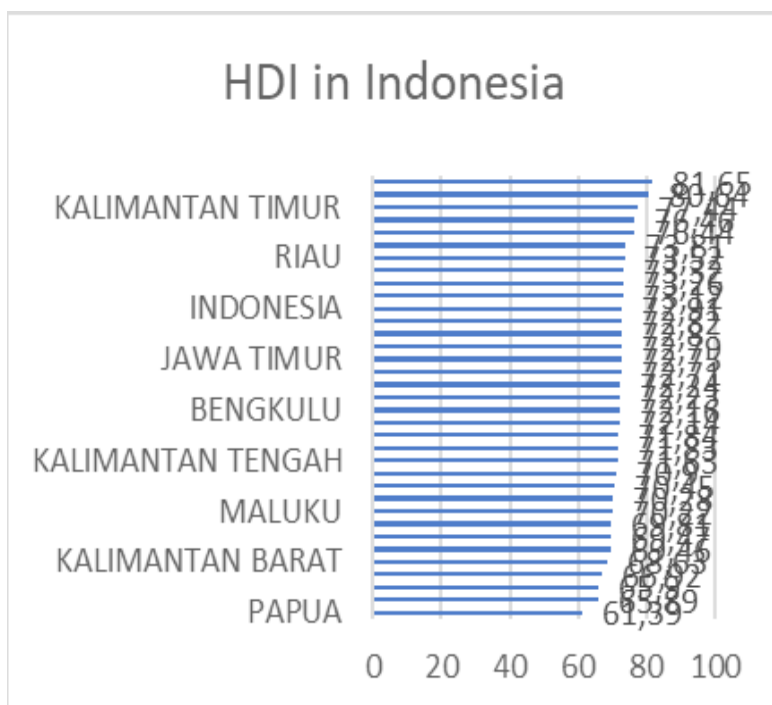
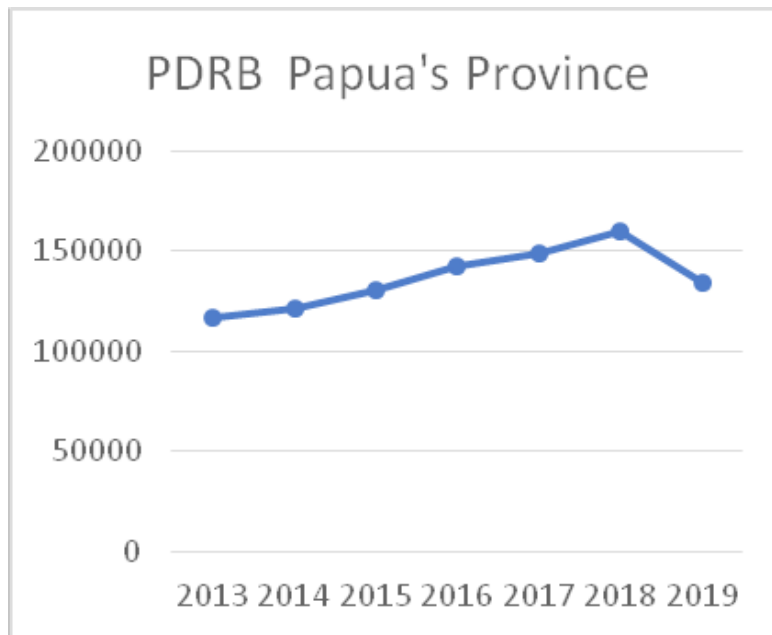
The special autonomy policy is essentially inseparable from efforts to decentralize (political) authority, followed by institutional decentralization and financial (fiscal) assistance via special allocation funds to ensure the special autonomous region's needs are met (Suryani & Pujiono, 2020). The Indonesian constitution protects the administration of special autonomy. The Provinces of Papua and West Papua have garnered significant attention from the central government. The application of special autonomy can be interpreted as a commitment to provide aspects for the advantage of the entire society and to provide special consideration for marginalized groups (Marit & Warami, 2018). With the passage of Law Number 21 of 2001 concerning the Special Autonomy for Papua, the legal basis for implementing special autonomy becomes a legal instrument and provides political guarantees for implementing special governance in Papua (Pratomo, 2021).

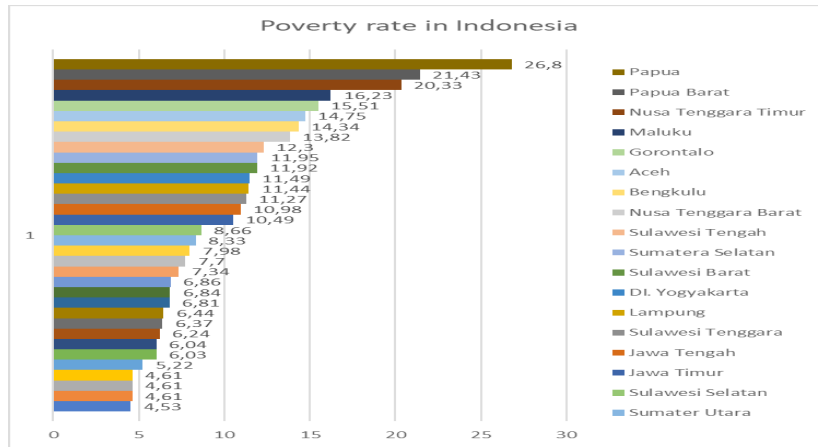
As mentioned before, Papua Province is one of the provinces in Indonesia that has been given to the districts/cities and province special fund besides the fiscal decentralization fund. Based on Law No. 21 of 2001 on Special Autonomy for Papua (*otsus*). The government drafted the Bill of Special Autonomy for Papua, and the Parliament marked a new stage for Papuans. This law gives Papua a special authority in many dimensions, including political, cultural, and economic dimensions, followed by a special revenue. Under this law, article 34 Papua receives special revenues equal to 2 percent of the national general allocation fund. There is also a special fiscal arrangement related to revenue sharing from the oil and gas sector (Ruhyanto, 2016).

The status of granting special autonomy to Papua was motivated by four significant root causes, including: *first*, the integration of the Papua region into Indonesia in 1964. It is believed that many local elites still desire independence. After 1964, separatist movements arose that wanted to break away from the Unitary State of

the Republic of Indonesia (NKRI); *second*, the occurrence of violations of human rights (HAM) committed by the state resulted in prolonged conflicts caused by trauma and vengeance; *third*, the government's failure to develop education, health, and people's economic empowerment; and *fourth*, marginalization and discrimination against migration flows (Mustikawati & Maulana, 2020).

Furthermore, the special autonomy policy has been chosen for the Papua Province because of the dynamic security conditions. Prolonged conflicts have hampered development in Papua, which brought implications for political, economic, social, and aspects of development. The low economic growth, poor education, public health services, and lack of infrastructure and provision of necessary facilities for social mobility are several problems faced by Papua Province before the *otsus* era (Prabowo et.al., 2019). The poverty rate in Papua Province is the highest rate in Indonesia. Also, in HDI Index, Papua Province has the lowest index in Indonesia (see Figure 1).





Source: BPS, 2023.

Figure 1. PDRB in Papua Province, Poverty Rate and HDI in Indonesia

Ratification of the Special Autonomy Law for Papua intended to improve public services and accelerate establishment building utilizing the Papuan population. It also mainly indigenous communities to protect the rights of indigenous Papuan and enhance the quality of life of the people of Papua. The law of special autonomy for Papua has brought the scheme of financing to achieve these achievements obtained from the recomposition devotion of revenue in the central government in the area of resource nature in Papua. However, the conflict caused by natural management problems has a resource not subsidized (Yanuarti, 2002).

Furthermore, Kemitraan (2008) confirms that special autonomy in local government practice is standard in many countries. In political science and government, the pattern of this arrangement is referred to as decentralized asymmetric. In principle, the various form of asymmetrical pattern power is one of the policies over intended to address two fundamental things faced by the central government, namely the issue of political patterns, including those sourced from uniqueness and cultural differences, and the subject of technocratic and managerial designs, namely the lack of fiscal capacity in carrying the essential functions of local government (Wehner, 2000).

Decentralization is a critical instrument for reforming a government's structure. Decentralized fund means changing the pattern of central government relations with local governments. The central government provides authority, resources, and responsibility to the local government (Falleti, 2005). Tiebout (1956) argued that decentralization can have an impact on increasing efficiency in public services provided by local governments. Further, Oates (1972) developed a more comprehensive theory related to fiscal decentralization. There is a trade-off between the government responsiveness level below, in this case, the local government's willingness and capacity of the local government. If the local government is given more fiscal capacity, the government can provide better public services.

White (2011) found that decentralization can generally be divided into three different terms, such as Political Decentralization, Economics Decentralization, and Technological Decentralization. Nevertheless, it has a relationship in the process, namely deconcentration, delegation, and devolution. The decentralized type is categorized as political decentralization, administrative decentralization, and fiscally decentralized type. The political decentralization is the form of decentralization involves the transfer of political power and decision-making authority from central government to regional government. Economical decentralization involves the distribution of economic activities, resources, and decision-making power among different economic actors. Therefore, based on the various past findings, this study focuses on: (a) mapping the local government condition based on special allocation funds and public services in districts and cities in Papua Provinces, and (b) analyzing the impact of special autonomy fund Papua on public service in Papua. This research consists of four main sections; the introduction, the research method used in this study, results and discussion, and the conclusion at the end of this research.

**METHOD**

**Types and Sources of Data**

Data used in this research are based on the districts/cities in Papua Province from 2013 to 2020. This research aims to analyze the impact of special autonomy funds on public service in districts/cities in Papua Province. Based on these aims, this research uses the estimation technique of data panels. The variables that being used in this research can be seen in the table 1

**Table 1.** The Variables of this Research

No.	Variables	Notes	Source of Data
<b>Dependent Variables</b>			
1	HS	Public Service in health sectors from the year 2013 to 2020 in districts and cities in Papua Province	BPS - Statistics Indonesia
2	ES	Public Service in education sectors from the year 2013 to 2020 in districts and cities in Papua Province	BPS – Statistics Indonesia
<b>Independent Variables</b>			
1	DF	Decentralization Fiscal Fund in the districts and cities in Papua Province for the year 2013 to 2020	Directorate General of Fiscal Balance – Ministry of Finance
2	Otsus	Special Autonomy Fund in the districts and cities in Papua Province for the year 2013 to 2020	Directorate General of Fiscal Balance – Ministry of Finance
3	PAD	Regional Original Revenue of districts and cities in Papua Province for the year 2013 to 2020	Directorate General of Fiscal Balance – Ministry of Finance
4	RGDP	Regional Gross Domestic Product in districts and cities in Papua Province for the year 2013 to 2020	BPS – Statistics Indonesia
5	POP	Population in districts and cities in Papua Province for the year 2013 to 2020	BPS – Statistics Indonesia
6	Gkes	Local Government expenditure on Health for the year 2013 to 2020 in districts and cities in Papua Province	Directorate General of Fiscal Balance – Ministry of Finance
7	IF	Inflation in districts and cities in Papua Province for the year 2013 to 2020	BPS – Statistics Indonesia
8	Geduc	Local government expenditure on education for the year 2013 to 2020 in districts and cities in Papua Provinces	Directorate General of Fiscal Balance – Ministry of Finance

### Method Analysis

This research used a quantitative method using regression panel data. The qualitative approach is used in this research to draft facts and data in several steps that consist of data reduction, data presentation, and conclusion drawing. The data reduction, we conduct that data in editing and categorization with problems and objectives. In the next step, we present the result of data reduction and conclusion drawing the data. Regression estimation using the panel data model has several advantages. The advantages, such as the regression of data panels, can accommodate the heterogeneity of variables not inserted into the model. Then it can reduce the collinearity between variables; and estimates using a regression of data panels scent the bias generated by individual aggregation due to more data units (Baltagi, 2008). Baltagi (2008) stated that the panel regression model is often used in three models, such as the fixed effect model (FEM), the random effect model (REM), and the common effect model (CEM). The choice of the model is made based on the Wald test and the Hausman test. Wald test is used to select either the common effect or the fixed effect model. Conversely, the Hausman test determines either the fixed effect or random effect model (Gujarati, 2004).

Further, we use the quadrant method to categorize and map the city and districts into 4 clusters. The mapping is needed to investigate and compare the effect of special allocation funds on public services in districts/cities in Papua Provinces. The quadrants are as followed: Quadrant I is for districts and cities with sizeable special allocation funds and high public services; Quadrant II is for districts and cities with sizeable special allocation funds and low public services; Quadrant III is for the districts and cities with common special allocation fund, but high public services; and Quadrant IV is for districts and cities with low special allocation fund and low public services.

Furthermore, Adam & Delis (2012) found the effect of decentralization funds on public services. The study used data from 21 OECD countries from bases from 1970 to 2000, focusing on public services in health and education. The influence of fiscal decentralization on public service has been carried out by previous studies such as Arzaghi & Henderson (2005), Mitchell & Bossert (2010), and Diaz-Serrano & Rodríguez-Pose (2015). Those studies have found that increasing fiscal decentralization positively and significantly affected the local government's increased public spending. The same was stated by Jia & Zhang (2014), using a sample of the Chinese state from 1997 to 2006, which found an increase in public spending due to the rise in fiscal decentralization funds. This research is based on Jia & Zhang (2014) with modification of the model that was adding variable otsus in the model. So the panel regression model used is as follows:

For public service in the health sector:

$$HS_{it} = a_{it} + b_{it} DF_{it} + c_{it} Otsus_{it} + d_{it} Pad_{it} + e_{it} RGDP_{it} + f_{it} Pop_{it} + g_{it} Gkes_{it} + h_{it} IF_{it} + \epsilon_{it} \dots \dots \dots (1)$$

For public service in the education sector:

$$ES_{it} = a_{it} + b_{it} DF_{it} + c_{it} Otsus_{it} + d_{it} Pad_{it} + e_{it} RGDP_{it} + f_{it} Pop_{it} + g_{it} IF_{it} + h_{it} Geduc_{it} + \epsilon_{it} \dots \dots \dots$$

Where  $HS_{it}$  is public service in the health sector,  $a$  is a constant,  $ES_{it}$  is public service in the education sector,  $b, c, d, e, f, g,$  and  $h$  is a regression coefficient.  $DF_{it}$  is the districts/cities' fiscal decentralization.  $Otsus_{it}$  is a special autonomy fund for Papua,  $POP_{it}$  is population, the  $PAD_{it}$  is local, regional revenue,  $Gkes_{it}$  is local expenditure on health,  $IF$  is inflation,  $Geduc_{it}$  is local expenditure on education, and  $e_{it}$  is the error term.  $i$  is indicating the cross-section, while  $t$  signifies the period from 2013 to 2020 using a cross-section.

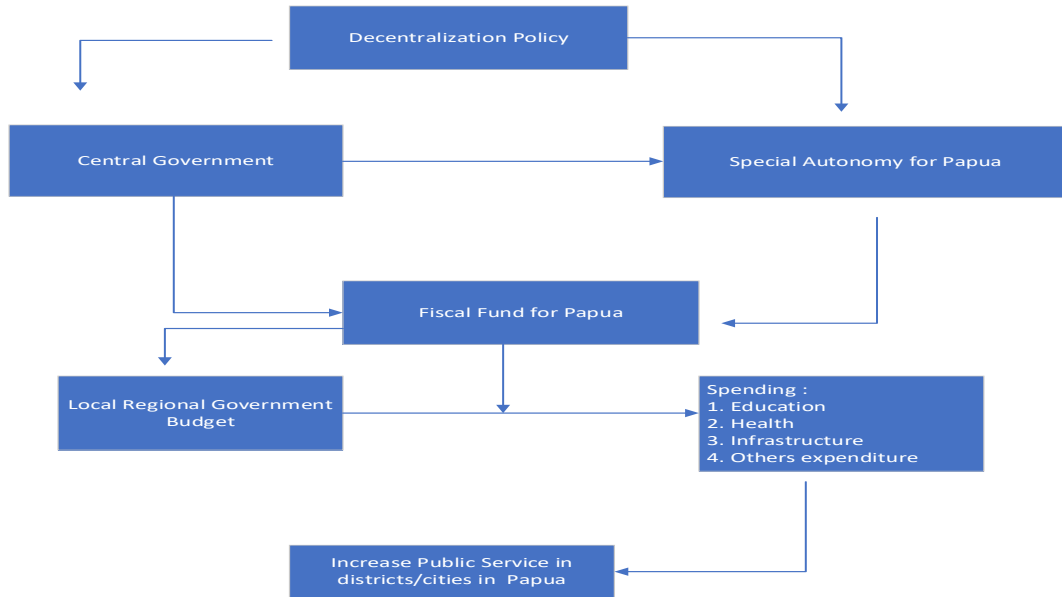
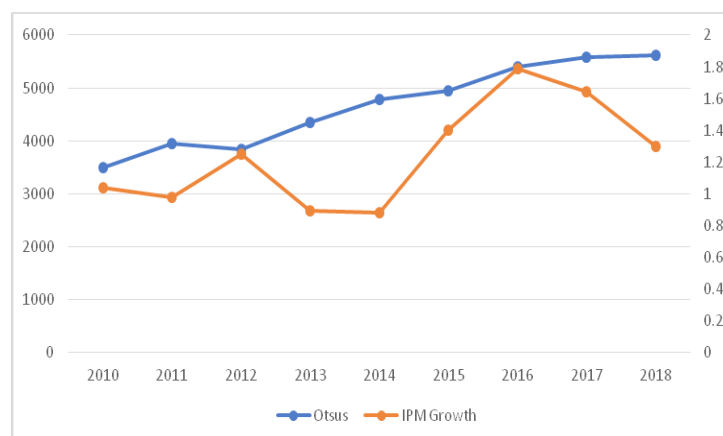


Figure 2. Research Conceptual Framework

Based on the framework in Figure 2, it can be seen that this study attempts to analyze the impact of granting special autonomy funds to public services but focuses only on two public services. These public services are for Education and Health in districts/cities in Papua Province. The results of this study are expected to be able to answer research problems and find results on whether the granting of special autonomy funds has succeeded in encouraging improvements in public services, especially education and health in districts/cities in Papua Province

**RESULTS AND DISCUSSION**

The development of special autonomy funds for Papua for the period of 2010 to 2018 that the government has issued shows an increasing trend from year to year (see Figure 3). In 2010, the number of special autonomous funds transferred to the local government only amounted to Rp3.495 trillion. The special autonomy fund for Papua has grown at an average of 10.6 percent annually until 2018. The fiscal decentralization that has been transferred to the local government reached Rp8.020 trillion. The fiscal decentralization funds have increased by 60.83 percent from 2010 to 2018. Meanwhile, the growth of IPM for Papua Province for the period 2010 to 2018 showed fluctuation and even had a trend decline for the year 2015 to 2018. There is a paradox between the increasing the *otsus* fund and the growth of HDI in Papua Province.



Source: DJPK, Ministry of Finance, 2020.

**Figure 3.** Special Autonomy Fund Papua Development and Growth HDI 2002 – 2018

Special autonomy funds for Papua Province are administered in accordance with Special Regional Regulation (Perdasus) Number 13 of 2016 concerning Amendments to Papua Province Perdasus Number 13 concerning Distribution of Revenue and Financial Management of Special Autonomy Funds, which states in Article 8 paragraph (1) that the Perdasus is used for financing, among other things such as: (1) programs under the control of the province in the domains of education, health, people's economy, and infrastructure; (2) assistance to religious institutions, indigenous peoples' groups in Papua, and foundations working in education, health, and the economy; (3) data organization for the purpose of special autonomous development planning; (4) monitoring and evaluation of special autonomy funds-funded initiatives and activities; (5) financial performance of special autonomy is being improved, and (6) expenditure on operations to carry out the tasks and functions of the Papuan People's Council (MRP).

The special autonomy funds for the district/city section, as referred to in Article 8 paragraph (1) of the Perdasus, are used for a variety of purposes, including: (1) supporting the education sector, with at least 30 percent of the budget allocated to illiteracy, early childhood education, nine-year primary education, secondary education, non-formal education, and higher education; (2) at least 15 percent of the budget is allocated to essential health services, referral health services, disease prevention and eradication, community nutrition improvement, environmental health development, and basic sanitation, as well as health services in disaster situations; (3) financing the development of the people's economy in which at least 25 percent of the budget is allocated for the formation and fostering of professional institutions for the development of small/micro businesses, credit for people's economic businesses, price subsidies for basic material needs, and development of superior commodities; (4) a minimum of 20 percent of infrastructure funding is set aside for the construction of public housing infrastructure, lighting, potable water, and telecommunications; (5) funding affirmation aid to religious institutions, indigenous peoples' organizations, and women's organisations, with a maximum budget allocation of 6 percent; and (6) finance of planning, monitoring, and evaluation of reporting and financial accountability, as well as reporting and activities with a budget of no more than 2 percent.

Collecting the data is the next step in analyzing the impact of the special autonomy fund in Papua to improve the public service in education and health in districts and cities in Papua Province. After collecting the data, we have to test the model that has to be used in the regression. The Wald test is used to decide the fixed effect or common effect of the model. The Wald Test has to be used to define the common effect model (CEM) or fixed effect model (FEM). The result is shown below:

**Table 1.** Wald Test on Panel Regression Model Impact of Special Allocation Fund on Public Services in Districts/Cities in Papua Province

Model	Health Sector	Education Sector
Probability (F)	0.000	0.000
Result	FEM	FEM

Wald test: using a critical value of 1 percent, 5 percent, and 10 percent.

Source: Data Processing, 2022.

The Wald test suggests that the panel model regression used the fixed-effect model (FEM) for public service in the health and education sectors. Furthermore, the Hausman test is needed to choose between the fixed or



random-effect models. Table 2 reports the result of the Hausman test. Based on Table 2, the Hausman test results suggest that the fixed effect model employs the regression panel.

**Table 2.** Hausman Test on Panel Regression Model Impact of Special Allocation Fund on Public Services in Districts/Cities in Papua Province

Model	Health Sector	Education Sector
Probability (F)	0.000	0.000
Result	FEM	FEM

Wald test: using a critical value of 1 percent, 5 percent, and 10 percent.

Source: Data Processing, 2022.

After we decide on the final model that has to be used in the regression model, then the next step is doing the panel regression model. Based on a panel regression model that has been used, the results can be seen in Table 3 below.

**Table 3.** Impact of Special Autonomy Funds on Public Service in Papua

Variable	Health Services	Education Services
Constanta	2.205*	13.669**
Special Authonomy Fund	0.0091**	0.117**
Fiscal Decentralization Fund	0.029	0.073*
Regional Origanl Income	0.281	0.079
Regional Economic Growth	1.404**	2.358**
Inflation	-0.124	-0.391
Government Expenditure on Health	0.165	-
Government Expenditure on Education	-	0.100**
Population	1.451	1.141
Observation	174	174
R-square	0.818	0.619
Adj R <sup>2</sup>	0,768	0.567
Prob F-Stat	0.000	0.000

\*significant at  $\alpha$  10 percent;

\*\*significant at  $\alpha$  5 percent;

\*\*\*significant at  $\alpha$  1 percent.

Source: Data Processing, 2022.

The results of the data panel regression through the panel regression show that the influence of special autonomy funds on public services in the health sector is significant. The probability value *otsus* variable, amounting to 0.000, is less than 5 percent (0.05). The fixed-effect model method shows that the variable special autonomy funds have a positive and significant influence on encouraging the improvement of public services in the health sector in the districts and cities in Papua Province. The study also found that through testing panel regression on the influence of fiscal decentralization funds against public service in the health sector—a probability value of 0.460 is higher than the significance level of 5 percent (0.05). Based on that result, fiscal decentralization does not affect the increase in public service in the health sector. Variable economic growth influences public service in the health sector; it is shown that the probability value of economic growth is lower than the significance level of 0.05. Meanwhile, other variables remain to impact public service in the education sector in all districts and cities in Papua Provinces.

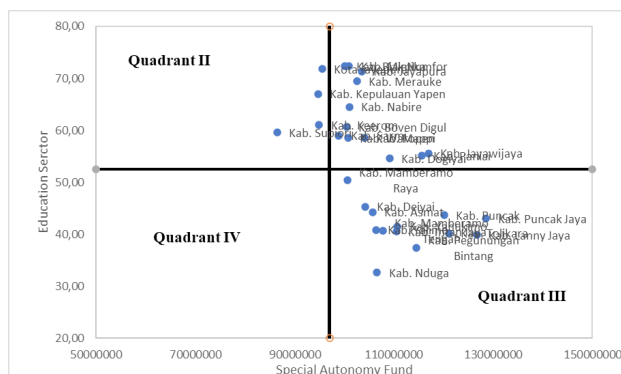
Based on Table 3, the special autonomy fund positively and significantly impacts the education sector in all districts and cities in Papua Province. The probability value *otsus* variable, amounting to 0.002, is less than 5 percent (0.05). The fixed-effect model method shows that the variable special autonomy fund impacts increasing the public service in the education sector in districts and cities in Papua Province. The study also found that fiscal decentralization impacts public service in the education sector in all districts and cities in Papua Province. Variable economic growth and local government expenditure on the education sector positively impact public service in the

education sector in all districts and cities in Papua Province. Meanwhile, other variables remain to impact public service in the education sector in all districts and cities in Papua Province.

The results of this research found that the influence of the fiscal decentralization fund has a positive and significant influence on public service in the education sector, in line with the study conducted by Lessmann (2009), Mitchell & Bossert (2010), and Diaz-Serrano & Rodríguez-Pose (2015). Ebel & Yilmaz (2016) stated that one of the outcomes of implementing fiscal decentralization is the increasing effectiveness of public services. Furthermore, an increase in fiscal decentralization funds causes regional governments to increase their expenditure capacity. Subsequently, this increase boosts improved public services.

The influence of the special autonomy fund has a positive and significant impact on the improvement of public services in the districts/cities in the Papua Province. The panel dynamic regression results in line with the research conducted by Ruhyanto (2016), explaining that the special autonomy fund for districts and cities in Papua Province can improve community welfare through improved public services. However, Jhonny & Maruyani (2018) asserted that the central government's role was necessary to ensure that the allocation of *otsus* funds should be achieved in improving public service in both the education and health sectors of the districts/cities in Papua province. It is further that Prabowo et al. (2019) found that special autonomy grants in Papua should be conducted a thorough evaluation of policies that have been running for more than 20 years. This evaluation is necessary to encourage further the administration of the special autonomy fund to promote public services and promote the economy in the districts/cities in Papua Province.

This study intended to seek special autonomy funds' role in public service, especially in health and education sector. The empirical result demonstrates that special autonomy fund in districts and cities impacts public service in health and education sectors. Below the Quadrant, analysis has been made to mapping public services and special autonomy funds for the districts and cities in Papua Province.



Source: Data Processing, 2021.

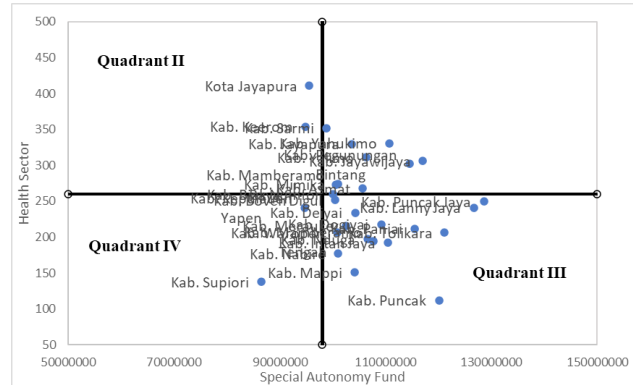
**Figure 3.** The Quadrant Analyzes Special Autonomy Fund and Public Service on Education Sector in Districts and Cities in Papua Province

Figure 3 shows the variable mapping of the public service education sector and special autonomy fund for districts and cities in Papua Province. Figure 3 shows that in Quadrant I, 41 percent of districts and cities with special autonomy funds are high and public service in the education sector is high. Those districts and cities in Quadrant I are Biak, Mimika, Merauke, Nabire, Boven Digul, Sarmi, Jaya Wijaya, and Dogiyai. Quadrant II have four districts and cities with small special autonomy funds and high education sector public service. Among them are Kota Jayapura, Yapen Islands Regency, Kerom, and Supiori. Quadrant IV, 45 percent of districts and cities have special autonomy funds and low education public services sectors. The districts and cities in Quadrant III are Mamberamo Raya, Deiyai, Asmat, Puncak, Puncak Jaya, and Mambramo, Yahukimo, Tolikara, Intan Jaya, Yalimo Lanny Jaya, Mountains Bintang, and Nduga. As for Quadrant IV, there is no district and city in this Quadrant.

The results of this quadrant analysis indicate that numerous regencies/cities in Papua Province still have substandard public services in the education sector, namely those in Quadrant III, despite the fact that special autonomy funds are already significant. However, not all of the province's districts/cities have low levels of public service in the education sector. According to the findings of this quadrant research, around 41 percent of district/city governments provide high levels of public service in the education sector, which is accompanied by a high provision of special autonomy funds. These findings indicate that many district/city administrations have yet to optimize the use of special autonomy funds for expenditure in the education sector. This finding is supported by a study reported by Agus (2020).



Agus (2020) conducted research using data from 19 regencies/cities in Papua Province for the period 2011 to 2015. The results of this study found that there were still many regencies/cities that had not been able to meet the spending allocation for the education sector in the regencies/cities within The Regional Income and Expenditure Budget (APBD) is 20 percent. Even though education sector spending with an allocation of 20 percent is expected to improve the quality of education in districts/cities in Papua Province. The spending allocation for the education sector, which is still small in districts/cities in Papua Province, seems to be unable to increase the HDI.



Source: Data Processing (2021).

**Figure 4.** The Quadrant Analyzes Special Autonomy Fund and Public Service in Health Sector in Districts and Cities in Papua Province

Figure 4 shows the variable mapping of the public service health sector and special autonomy fund for districts and cities in Papua Province. Figure 4 shows Quadrant I for districts and cities with high special autonomy funds and high public service in health. There is 31 percent of districts and cities in Papua Province in this Quadrant, such as Districts Sarmi, Jayawijaya, Pegunungan Bintang, Yahukimo, Mambereno, Mimika, and Asmat. Quadrant II is for districts and cities with low special autonomy funds and high public service in the health sector. There are 6,89 percent of districts and cities in Papua Province in this Quadrant. The districts and cities in this Quadrant, such as the City of Jayapura and Districts Kerom. Quadrant III is for districts and cities with high special autonomy funds. However, there is 55,17 percent of districts and cities in this Quadrant, such as Districts Biak Numfor, Puncak Jaya, Lanny Jaya, Deiyai, and low public service in the health sector Dogiyai, Waropen, Tolikara, Mamberamo, Intan Jaya, Nabira, Mappi, and Puncak. Meanwhile, there are two districts in Quadrant IV, districts and cities with low special autonomy funds and low public service in the health sector, such as Districts Kepulauan Yapen and Supiori.

Based on the Quadrant's findings, analysis of public services in the health sector and special autonomy funds. It was discovered that many districts/cities continue to have inadequate public health services. According to the report, more than 86 percent of districts/cities in Papua Province have insufficient public health services. Agus (2018) used data from 2011 to 2015 to perform a study of 19 districts/cities in Papua Province. According to the findings of this study, there are still many districts/cities in Papua Province with inadequate public health sector services.

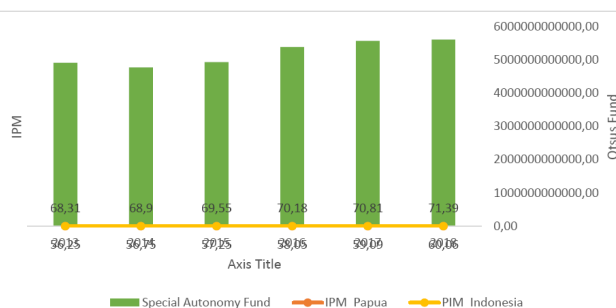
Agus (2018) continued to argue that the low level of public services in the health sector in Papua Province is driven by a number of complex factors. However, the most essential aspect of the problem of low public service in the health sector is the low allocation of the health budget in the APBD in districts/cities. Even though each district/city is given a special autonomy fund, one of the goals is to improve public health services. According to the findings of this study, the expansion of special autonomy funds had a favorable effect but with a very tiny coefficient. This result demonstrates that the expansion of the special autonomy fund has had just a minor impact. This result is consistent with the fact that the budget for special autonomy funds has been provided, but the budget for the health sector remains very tiny and falls short of the 10 percent target.

There is significant authority in implementing the Papua Special Autonomy Law, and it is hoped that it will be a remedy for those marginalized by development. However, as a result of the implementation of the Special autonomy law, numerous development issues emerged as unresolved issues on the ground. According to others, the execution of this policy has had little impact on the performance of government activities such as serve (service), building (development), and community empowerment.

The asymmetric decentralization given by the central government to local governments is a concept considered by some to solve the problems of the relationship between the central and local governments within a country. The asymmetric decentralization applies to Law No. 21 of 2001 on Papua Special Autonomy, which provides a

decentralized asymmetric Papua. The granting of special autonomy funds is an acceptance post in the framework of its equivalent of 2 percent (two percent) of the ceiling of the General Allocation Fund (DAU) for 26 years devoted to financing public services specific to education and health (Rochendi & Saleh, 2017).

Figure 5 below shows that in the period of research from 2013 to 2018, HDI province experienced a trend of increase when compared with the HDI nationally still under the national HDI. Nevertheless, on average, there is an increase of 1.3percent annually. The increase in the HDI is in line with the rise in otsus funds given by the central government. Figure 2. shows that in the period from 2013 to 2018, there was an increase in public services in the Papua province. However, the report issued by the Bureau of Central Statistics (BPS) (2014) shows that the ten districts with the lowest HDI in Indonesia are located in Papua Province. This condition suggests that, in general, it shows improvements in public service in the districts/cities in Papua province. The improvement of HDI in the Papua province, but in reality, indeed, or the fact there are still some obstacles related to public service both in health and education in districts and cities in Papua Province.



Source: Data Processing (2021).

**Figure 5.** The Development of IPM Papua, IPM Indonesia, and Special Autonomy Fund

Public service is the basic needs of the society needed for the people in the districts/cities. According to Mahmudi in Hardiansyah (2011), public services provided by the government, which includes the basic needs of society, can be classified into two categories: health and education. Based on this, the district government in Papua province should also encourage the fulfillment of public services in the health and education sectors. Nevertheless, in its development, the people in the districts/cities in Papua Province still encountered some obstacles.

One of the problems in developing public services in the education sector in the districts/cities in Papua Province is the geographical condition. The learning and teaching activities in the Papua province can be a constraint, that is, the number of schools and teachers who are not being distributed evenly between the districts/cities in Papua province. This condition is exacerbated by the absence of teachers in Papua province, which reaches 33.5 percent. It means that 1 in 3 teachers are absent. Even the attendance level of the headmaster is about 55 percent. In fact, according to research results from Cendrawasih University, Papua State University, Smeru, and the Bureau of Central Statistics (BPS) and UNICEF in 2012, about 45 percent of schools did not learn the process well (Riris, 2018).

Overall, the education sector public service is one of the focuses of Papua Province's special autonomy policy. The Perdasus has authorized provincial, district, and city administrations to spend special autonomy money for education. The education budget must be planned at 30 percent of district and local government budgets. The budget allocation is substantial. However, it does not affect raising the HDI in Papua Province. In fact, Papua Province still has the lowest HDI rating of any province in Indonesia. This is because many districts and cities in Papua Province have not implemented a 30 percent budget allocation for the education sector (Mustikawati and Maulana, 2020).

In line with the previous findings, Malak (2012) stated that education is still a luxury item in Papua, especially in rural areas. Still, the inadequate infrastructure in the world of education, lack of teachers, access to education that is still uneven, library facilities that are still minimal, and procurement of packages that are impoverished parents are one obstacles to public service in Papua. However, the policy of otsus in Law No. 21 of 2001 on special autonomy for Papua province has required the allocation of otsus funds for the education sector by 30 percent. The amount of allocation of funds should improve the public service of education in the districts/cities in Papua province.

Meanwhile, the public service in the health sector in the districts/cities in Papua Province is also experiencing significant constraints due to geographical factors. Research conducted by Riris (2018) found that the development of health services in the mountainous region is still experiencing problems, and the number is still very little compared to the coastal areas. Even the amount of health workers willing to be placed in minimal mountainous regions are ready to be placed in the area. Compared to other provinces in Indonesia, there is a low quality of

health services in the districts/cities in Papua province. However, in the policy of otsus in Law No. 21 of 2001 on Special Autonomy for the Papua Province has mandated that the allocation of otsus funds for the health sector by 15 percent, with the amount of allocation of funds, should be able to increase the public service of health in districts/cities in Papua Province.

The amount of special funds disbursed by the central government to Papua is a strategic step to improve both the economy and public services in Papua. However, the large budget used for public services in the education and health sector is used for other activities by the districts/cities government in Papua Province, which is not a priority. Even poor condition occurs in terms of budget accountability. It is very minimal. The rampant misappropriation of funds is also a problem that constrains districts/cities governments in Papua Province (Nurmasari & Al Hafis, 2019).

Nevertheless, the special autonomy policy accorded to Papua has not yet met expectations. Based on regional, cultural, religious, and historical characteristics, it is anticipated that the special autonomy policy, coupled with a series of stimulating regulations, will be able to actualize equitable social justice and welfare. In contrast, however, special autonomy has not been able to solve Papua's problems. The provinces of Papua and West Papua receive annual fiscal funding from the central government due to their special autonomy status. According to data compiled by the Central Statistics Agency (BPS) from 2002 to 2013, the Special Autonomy Fund (*Dana Otsus*) increased, but the number of poor individuals did not decrease (Imam & Hafis, 2019).

Papua's otsus, especially the fund's special autonomy to local governments, is a relative of the context of the local government in Papua. Nevertheless, it is difficult to dispute that the purpose of the otsus is not fully achieved. It should even be acknowledged that the goal is still far from what can be achieved to date. People were living on the island of Papua, especially those living in areas that are still isolated or difficult to reach because of the geographical and demographic factors in accessing several essential services provided by the local government/city in Papua Province. Many people who live in these areas have difficulty accessing public services, especially the local government's excellent education and health services (Malak, 2012).

The special autonomy fund for the districts/cities in the Papua province has impacted the increased spending of huge expenditures (Permai et al., 2019). The increasing special autonomy fund for Papua must be required several policies that are needed to make sure the policy has reached its goals. Several policies, such as *the first*, central government should ensure that a special autonomy fund has been given to Papua spending to the public services sector. Especially the public services education sector, public services health sector, infrastructure, people economy, and affirmation/other sectors (Jhonny & Maruyani, 2018). *Second*, the need of community participation in the districts/cities in Papua Province to determine and supervise the use of otsus funds from the planning phase to the allocation and implementation of the budget (Ruhyanto, 2016).

*Third*, strict supervision and compliance with the mechanism of financial management following the regulation of *otsus*. The strict supervision and compliance to management and accountability of the funds by the districts/cities government in Papua Province can be more accountable (Agustinus, 2016). *Fourth*, the development budget for public services has already increased in large quantities for Papua. However, the other major problem is to build strong coordination between ministries and institutions and with local governments in Papua, including coordinating and collaborating with international donor agencies with various programs in Papua. So that synergy between all stakeholders who have an interest in Papua can occur (Elisabeth, 2016).

The allocation of special autonomy money to Papua Province's regencies and towns is an absolute and primary prerequisite for enhancing public services, particularly in the education and health sectors. This is consistent with the findings of the panel data regression analysis described above, but providing special autonomy funds to districts and cities in Papua Province has not been deemed sufficient without a number of accompanying policies to pressure and encourage districts and cities to actually increase budget allocations spending in APBD, particularly in the Education and Health sectors. Without an adequate budget allocation in accordance with the prescribed level of spending for both Education and Health, district and city administrations in Papua Province will struggle to provide improved public services in both the Education and Health sectors.

Despite the fact that regulations require district and city governments in Papua Province to allocate 30 percent of public service spending to education and 10 percent to health. The special autonomy funding will have little impact and will make it impossible for districts and cities in Papua Province to develop public services in the education and health sectors. The end goal is to support an increase in public services in the education and health sectors by increasing the supply of special autonomy funds to district and municipal administrations in Papua Province. It is time for the central government to deliver rewards and sanctions to Papua Province's district and city administrations for allocating cash for spending in the education and health sectors. The central government must ensure that the special autonomy funds disbursed are correct and on target with the primary goal of strengthening education and health public sector services in Papua Province districts/cities.

## CONCLUSION

Law No. 21, 2001, on Special Autonomy for Papua, has made a new era of districts/cities in Papua Province. The special autonomy policy has been chosen for districts/cities in Papua because of the low economic growth, poor education, lack of health services, and lack of infrastructure. Based on the true of this law, the goal of the special autonomy fund to the Papua Province is to improve the welfare of people and improve public services, especially in the education and health sector.

The fixed-effect model (FEM) found that special autonomy fund factors positively and significantly influence enhancing public services in the health and education sectors in Papua Province districts/cities. However, the impact coefficient has a very small number. These findings suggest that allocating special autonomy money to district/city governments is a mandatory and key condition for strengthening public education and health services. This means that any rise in special autonomy will promote the improvement of public services in Papua's districts and towns. As indicated in the previous section, there are still many difficulties and hurdles in the education and health sectors in the districts/cities of Papua Province. As a result, special autonomy funds appear to be an absolute requirement for improving public services. Other rules, however, are still required to have a greater impact on public services.

However, awarding special autonomy funds to district and city governments must be accompanied by a number of policies that must be implemented or implemented immediately. To improve public services in Papua Province, the federal and local governments must implement a number of measures. *The first* is the local government's accountability concept in managing the Special Autonomy Fund. *Second*, cooperation between Papua stakeholders in carrying out the program or public service policy in Papua. *Third*, the central government must ensure that special autonomy monies are allocated to local governments for public services, education, and the health sector. *Finally*, the community must be involved in the planning phase until the evaluation of the use of special autonomy funds in Papua Province districts/cities.

Indonesian Parliament (DPR RI) must evaluate and monitor the *otsus* fund for Papua Province. The monitoring and evaluation are needed to ensure that the *otsus* fund fulfills its aims, such as enhancing public sector health and education services, which are the emphasis of special autonomy funds provided to districts and cities in Papua province. Indonesian. In order of in-sight function, the Indonesian Parliament must ensure that districts and cities needed to allocate their budget through adequate budget allocations for the education and health sectors. In the APBD, regency and city governments are required to allocate 30 percent of the education budget. Meanwhile, the APBD requires district and city governments to allocate a 10 percent budget for health sector spending. It is envisaged that allocating expenditures in accordance with the amount will improve public services in the Education and Health sectors in Papua Province's regencies and cities.

## REFERENCES

### Books

- Baltagi, B.H. (2008). *Econometrics* (4th ed.). New York: Springer.
- BPS. (2014). *Indeks pembangunan manusia 2013*. Jakarta: BPS. CBO9781107415324.004
- Gujarati, D.N. (2004). *Basic econometric*. New York: McGraw Hill.
- Hardiansyah. (2011). *Kualitas pelayanan publik*. Yogyakarta: Gava Media.
- Oates, W. (1972). *Fiscal federalism*. New York: Harcourt Brace.
- Riris, K. (2018). *Menakar capaian otonomi khusus Papua* (First). Jakarta: Penerbit Obor.

### Journals & Reports:

- Adam, A. & Delis, M.D.P.K. (2012). Fiscal decentralization and public service sector efficiency: Evidence from OECD countries (No. 36889). Accessed 20 January 2023, retrieved from [https://mpa.ub.uni-muenchen.de/36889/1/MPRA\\_paper\\_36889.pdf](https://mpa.ub.uni-muenchen.de/36889/1/MPRA_paper_36889.pdf).
- Agus, P. (2020). Pengaruh pendapatan daerah terhadap belanja modal dan indeks pembangunan manusia provinsi di Indonesia tahun 2005-2018. *Jurnal Widya Swara Indonesia*, 1(1), 20-36.



- Agustinus, J. (2016). Pengelolaan keuangan yang efektif dan efisien dalam meningkatkan kekuatan ekonomi bagi masyarakat Papua dan Papua Barat di Indonesia. *Jurnal Aplikasi Manajemen*, 14(4), 727–734. <https://doi.org/10.18202/jam23026332.14.4.13>
- Arzaghi, M. & Henderson, J.V. (2005). Why countries are fiscally decentralizing. *Journal of Public Economics*, 89, 1157–1189. <https://doi.org/10.1016/j.jpubeco.2003.10.009>
- Diaz-Serrano, L. & Rodríguez-Pose, A. (2015). Decentralization and the welfare state: What do citizens perceive? *Social Indicators Research*, 120(2), 411–435. <https://doi.org/10.1007/s11205-014-0599-5>
- Ebel, R. & Yilmaz, S. (2016). On the Measurement and Impact of Fiscal Decentralization (World Bank Policy Research Working Paper No. 2809). *World Bank Policy Research Working No*, 2809.
- Elisabeth, A. (2016). Perdamaian dan pembangunan Papua: Problematika politik atau ekonomi? *Jurnal Penelitian Politik*, 9(1), 19–31.
- Falleti, T.G. (2005). A sequential theory of decentralization : Latin American cases in comparative perspective. *American Political Science Review*, 99(3), 327–346.
- Imam, R. & Hafis, A. (2019). Desentralisasi asimetris: Kemiskinan di tengah kelimpahan otonomi khusus Papua. *Jurnal Penelitian Administrasi Publik*, 5(2), 1180-1192.
- Jhonny, A. & Maruyani, S. (2018). The effect of fund allocation of special autonomy of economic growth in West Papua Province. *RJOAS*, 5(77), 188–194.
- Jia, J., Guo, Q., & Zhang, J. (2014). Fiscal decentralization and local expenditure policy in China. *China Economic Review*, 28, 107–122. <https://doi.org/10.1016/j.chieco.2014.01.002>
- Lessmann, C. (2009). Fiscal Decentralization and Regional Disparity: Evidence from cross-section and panel data. *Environment and Planning A: Economy and Space*, 41(10), 2455–2473. <https://doi.org/10.1068/a41296>
- Malak, S. (2012). *Otonomi Khusus Papua. Ar-raafi*. Ar Raafi. Accessed 23 March 2023, retrieved from [https://www.researchgate.net/publication/301348375\\_Otonomi\\_Khusus\\_Papua](https://www.researchgate.net/publication/301348375_Otonomi_Khusus_Papua)
- Marit, E.L., & Warami, H. (2018). Wacana “Papua Tanah Damai” Dalam Bingkai Otonomi Khusus Papua. *Jurnal Ilmu Sosial FISIP Universitas Cenderawasih*, 16(1), 41-46.
- Mitchell, A. & Bossert, T.J. (2010). Decentralization, governance, and health-system performance: "Where you stand depends on where you sit." *Development Policy Review*. <https://doi.org/10.1111/j.1467-7679.2010.00504.x>
- Mustikawati, R. & Maulana, A. (2020). Provinsi papua sebelum dan sesudah 18 tahun pemberian dana otonomi khusus. *Jurnal Public Policy*, 6(2), 81-89.
- Nurmasari & Al Hafis, R.I. (2019). Desentralisasi Asimetris: Kemiskinan ditengah kelimpahan otonomi khusus papua. *Jurnal Penelitian Administrasi Publik*, 5(2), 1180–1192.
- Permai, S.D., Jauri, R., & Chowanda, A. (2019). Spatial autoregressive (SAR) model for the average expenditure of Papua Province. *Procedia Computer Science*, 157, 537–542. <https://doi.org/10.1016/j.procs.2019.09.011>
- Prabowo, P.A., Supriyono, B., & Noor, I. (2019). Special autonomy policy evaluation to improve community welfare in Papua Province, Indonesia. *International Journal of Excellence in Government*, 1(1), 1–17. <https://doi.org/10.1108/IJEG-06-2019-0011>
- Pratomo, R.R. (2021). Sosialisasi tentang dampak otonomi khusus dan potensi pemekaran wilayah Papua kepada masyarakat umum. *Jurnal Pengabdian Masyarakat*, 1(1), 28-35.
- Rochendi, S., & Saleh, K. (2017). Hubungan pemerintah pusat dan daerah dalam otonomi khusus di Provinsi Papua Barat. *Jurnal Politik Universitas Nasional*.
- Ruhyanto, A. (2016). The perils of prosperity approach in Papua. *Peace Review*, 28(4), 490–498. <https://doi.org/10.1080/10402659.2016.1237126>

- Tiebout. (1956). A pure theory of local expenditure. *Journal of Political Economy*, 64(5), 416–424. <https://doi.org/10.1360/zd-2013-43-6-1064>
- Suryani, F. & Pujiono, P. (2020). Pengaruh Partisipasi Anggaran, Kesejlasan Sasaran Anggaran, Desentralisasi dan Akuntabilitas Publik terhadap Kinerja Manajerial. *Journal of Economic, Business and Accounting (COSTING)*, 4(1), 167-181.
- Wehner, J. (2000). Asymmetrical devolution. *Development Southern Africa*, 17(2).
- White, S. (2011). *Government decentralization in the 21st century*. Washington: Center for Strategic and International Studies (CSIS).
- Yanuarti, S. (2002). Kemiskinan dan konflik Papua di tengah sumber daya yang melimpah. *Jurnal Politik Lipi*, 9(1), 33–46.

### Digital Sources

- Kemitraan. (2008). Kebijakan otonomi khusus di Indonesia: Pembelajaran dari kasus Aceh, Papua, Jakarta, dan Yogyakarta. Jakarta: Kemitraan bagi Pembaruan Tata Pemerintahan di Indonesia. Accessed 21 Februari 2023, retrieved from [https://library.kemitraan.or.id/index.php?p=show\\_detail&id=10802](https://library.kemitraan.or.id/index.php?p=show_detail&id=10802)Kebijakan Otonomi Khusus Di Indonesia.pdf.
- Malak, S. (2012). Otonomi Khusus Papua. Ar-raafi. Ar Raafi. Accessed 23 March 2023, retrieved from [https://www.researchgate.net/publication/301348375\\_Otonomi\\_Khusus\\_Papua](https://www.researchgate.net/publication/301348375_Otonomi_Khusus_Papua).