Journal of Asset Management and Public Economy (JAMPE)
Vol. 5, No. 1, pp. 61-72
DOI:10.1298/jampe.v3i2.14475
E-ISSN 2827-9816

The Role of Fiscal Decentralization on Inequality: Evidence from Papua Province

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Abstract
High income inequality is generally accompanied by unequal access to education, job training, and business opportunities, limiting employment opportunities for the poor. One approach that can be applied to resolve this problem is by implementing a fiscal decentralization policy. Papua is one of the regions categorized as 3T (Underdeveloped, Frontier, and Outermost). This condition indicates serious challenges in development in Papua, especially in the aspects of basic infrastructure and fiscal independence. The main contribution of the study is to analyze the role of fiscal decentralization on development in Papua province. Fiscal decentralization plays an important role in promoting regional development, particularly in disadvantaged areas. The study used a panel data approach that combines time-series data (2019-2023) and cross-sectional data (29 regencies and cities) in Papua Province. The results of the study indicate that fiscal decentralization through the General Allocation Fund (DAU) and Special Allocation Fund (DAK) has no effect in reducing inequality rates in Papua Province. It is due to geographical challenges and the unconditional transfer nature of DAU and DAK. In this case, DAU is mostly used for regional routine expenditures, while the DAK has a long-term effect on infrastructure development, which is the major obstacle in reducing inequality in Papua. This research implies that local governments need to improve the effectiveness of DAU and DAK utilization by prioritizing productive sectors.

Article history
Received 2025-09-15
Revised 2025-10-28
Accepted 2025-11-21

Keywords
Fiscal decentralization
Inequality
Panel data
Unconditional transfer

JEL Classification*:
Q42, G32, Q44

Introduction

Economic development is a planned process that optimizes natural and human resources to improve people's standard of living. However, achieving this goal still faces various challenges, particularly income inequality, which reflects the unequal distribution of development outcomes (Konstantinou, 2024). High income inequality is generally accompanied by unequal access to education, job training, and business opportunities, which ultimately hinders employment opportunities for the poor (Putri & Aminda, 2024). Income inequality is particularly pronounced in regions that thrive in capital-intensive sectors but lack labor absorption. This results in unequal income distribution despite economic growth. Therefore, development strategies need to be integrative (Gu & Zhang, 2024).

According to Rasbin (2016), one approach that can be applied to resolve this problem is by implementing a fiscal decentralization policy, which involves delegating financial management authority from the central government to regional governments. This is expected to improve the quality of public services in the regions and reduce disparities between regions. Regional governments have the power to manage the Regional Revenue and Expenditure Budget (APBD). One component of the APBD is through Transfers to Regions (TKD), which is made up of several types of funds, one of which is the Balancing Fund, which includes the General Allocation Fund (DAU), Special Allocation Fund (DAK), and Revenue Sharing Fund (DBH). These funds are expected to reduce income inequality (Latifah & Rahayu, 2019). The DBH is the smallest component of the balancing fund, with an annual tendency to decrease. The researcher assumes that DBH has limitations in the income inequality model, while the open unemployment rate, particularly in Papua Province, has a limited influence. Therefore, the analysis focuses on the General Allocation Fund (DAU) and the Special Allocation Fund (DAK), whose contributions are larger and more stable (Directorate General of Fiscal Balance, 2024).

Various studies have confirmed that fiscal decentralization has a strategic role in supporting equitable development, particularly by reducing income inequality. Fiscal instruments such as the DAU and DAK enable regions to obtain greater funding to expand public services, build basic infrastructure, and create jobs. Anggraeni et al. (2022) state that fiscal decentralization contributes significantly to reducing income inequality and poverty in Indonesia, particularly through increasing the DAU and DAK, which encourages interregional resource redistribution supported by effective regional spending that can reduce interregional disparities and stimulate local economic activity, which has a direct impact on employment and a more equitable income distribution (Siburian, 2020). Marlin & Hukom (2023) stated that fiscal decentralization has a positive impact on job creation, particularly in regions with good fiscal capacity and effective financial governance. This affects not only employment, but also interregional income inequality. Borissov & Hashimzade (2022) stated that this will provide space for regions to grow independently through the management of strategic sectors such as infrastructure. This policy encourages investment and allows regions to design more contextual economic strategies, resulting in increased economic activity and equitable development.

There are pros and cons regarding the role of fiscal decentralization on inequality. Fiscal decentralization policies are considered to encourage economic growth and equitable development in some regions (Madakarah & Makaliwe, 2023). However, some other studies indicate the contrary. Ashfahany et al. (2020) and Zhang et al. (2025) stated that the implementation of fiscal decentralization actually increases income inequality between regions. According to Shahbaz et al (2022), income inequality in Papua remains very high, with the Gini Index consistently higher than the national average. Furthermore, the open unemployment rate remains relatively stagnant, resulting in low local labor absorption. According to the Ministry of Finance data, TKD has a positive correlation with rising poverty. Furthermore, more than 85% of General Allocation Fund Transfers are allocated to cities or districts, reinforcing the suspicion that fiscal decentralization is more focused on urban areas. Papua's inequality is spatial in nature, with urban areas being more developed than inland and mountainous areas. A study in Papua by Burdam & Laka (2022) emphasizes that special autonomy funds and other transfer funds are more concentrated in provincial and district capitals.

The challenges of conducting research in the 3T (Underdeveloped, Frontier, and Outermost) regions are worth investigating, particularly the role of fiscal decentralization in inequality and its role as a research gap. Previous studies have examined the role of fiscal decentralization in all provinces in Indonesia, as well as several provinces in Java and disadvantaged regions. This study focuses on the role of fiscal decentralization in Papua Province, which is classified as a 3T region. It also focuses on the role of fiscal decentralization in reducing inequality in Papua Province, which has not received much attention in previous studies. Papua is one of the regions categorized as a 3T region. This condition indicates substantial challenges to Papua's growth, particularly in terms of basic infrastructure and fiscal independence. Despite receiving considerable transfer amounts from the central authority through the Special Autonomy Fund (Otsus), DAU, and DAK, development achievements remain stagnant. Income inequality remains high, and the open unemployment rate has not decreased significantly, as evidenced by regional connectivity and unequal quality of public services (Umar et al., 2021). Fiscal allocations in the form of DAU and DAK, as part of the balancing fund mechanism, remain the primary source of regional financing in Papua (Melmambessy, 2022). This dependency reflects the region's weak fiscal capacity, which also hampers Papua's ability to independently fund infrastructure development and public services. The real picture of Papua's fiscal dependence is seen in the following graph, which shows the contribution of PAD to the total APBD of districts/cities in Papua. The contribution of the research is related to the development of fiscal decentralization studies in a broader context on a national scale in Indonesia, Papua, as a 3T region, faces challenges not only in terms of large budgets, but also from global geopolitical challenges, geographical conditions, and economies that are different from other regions. Infrastructure lag and high dependence on central funds make the challenge even more difficult because the role of fiscal decentralization not only faces technical issues, but also has to adapt to situations that are often unstable.

Literature Review

Theoretically, the effects of decentralization policies on inequality yield inconclusive conclusions. Stigler (1998) believes that the government's role in raising funds through taxation and flexible budget allocation can help to reduce inter- and intra-regional inequality. Canavire-Bacarreza et al. (2020) emphasize that decentralization supports smaller government sizes both in terms of expenditure and revenue as well as higher inequality among individuals, ultimately leading to higher intra-regional income inequality. In contrast, research by Zhang et al. (2025) found that fiscal decentralization exacerbates inequality due to the greater allocation of public resources to urban areas. Winchester & King (2018) explain that a country's restricted budget can worsen inequality by reducing transfer funding to regions and providing fewer public goods.

Research on the link between fiscal decentralization and inequality in Indonesia has been developed, such as in the study by Huynh et al. (2023) which explains that the reduced share of the mining sector has an impact on the spatial distribution of the manufacturing sector, causing inequality in Sumatra and Kalimantan. Jakarta shows strong dominance supported by urbanization, globalization, and financial and trade liberalization, causing increasing intra-regional inequality, especially in the Java-Bali region. Aulia & Sari (2025) show evidence of decreasing inequality (Williamson Index) in Indonesian provinces during the period 2000–2022, despite short-term fluctuations. Rachmawati et al. (2025) explained that the growth of gross regional domestic product per capita also widens inequality in Indonesia. Fiscal decentralization presents new issues as economic instability, budget inefficiency, and national political influence grow. According to Putri et al. (2023), found that the level of fiscal decentralization variable was not significant on income inequality between provinces in Sumatra, while other factors such as economic growth and economic openness had different impacts on regional disparities. Fiscal decentralization aims to empower regional governments, particularly district governments, to manage education, health, and public works (Hyunh & Nguyen, 2020). Indirectly, district governments have the authority to improve public welfare through education and health, and decentralization policies are expected to effectively bring the government closer to the community. Each district or city has a different population, natural resources, infrastructure, and economic activity, resulting in varying fiscal revenues. Based on the results of previous studies, a hypothesis can be developed stating that fiscal decentralization can reduce inequality in Papua Province. All of the studies used show that there are still inconclusive conclusions regarding the role of fiscal decentralization in inequality. This study focuses on the role of fiscal decentralization in inequality in Papua Province, which is classified as a 3T region.

Method

The study used a quantitative approach, combining time-series and cross-sectional data. The time-series data used covers the years 2019-2023, and the cross-section consists of 29 regencies and cities in Papua Province. Panel data regression was applied because it can integrate information from two data dimensions: time series and cross-section (between individuals or regions). This model enables researchers to observe relationships between variables in the context of changes over time as well as differences between entities (such as districts/cities, countries, companies, or individuals) (Ilyasa et al., 2025). The use of panel data has the advantage of addressing heterogeneity issues and providing more efficient estimation results (Baltagi, 2021). The variables used in this study are explained in the Table 1.

Table 1. Definition of Variables

No	Variable	Definition	Source
1	Gini Ratio (Gini)	The Gini ratio is a coefficient that measures the degree of inequality.	BPS
2	General Allocation Fund (DAU)	DAU is a fund sourced from the APBN, which is allocated for the purpose of equalizing financial capacity between regions to fund regional needs in the context of implementing decentralization.	Ministry of Finance
3	Special Allocation Fund (DAK)	DAK is a fund allocated in the state revenue and expenditure budget (APBN) to certain regions to help fund special physical activities that are regional affairs in accordance with national priorities.	Ministry of Finance
4	Road Infrastructure (RL)	Road length infrastructure is the total length of roads, including district and city roads, to measure the level of transportation infrastructure development in a region.	BPS
5	Gross Regional Domestic Product (GRDP) of the mining sector (GRDPM)	GRDP uses constant prices specifically for the mining sector	BPS

This study examines the relationship between independent variables, specifically the DAU and DAK variables, as part of decentralization policies, and inequality in Papua Province. Other independent variables, RL and GRDPM, serve as control variables in the model. The equation developed in this study is as follows:

$$gini_{it} = \alpha_0 + \beta_1 DAU_{it} + \beta_2 DAK_{it} + \beta_3 RL_{it} + \beta_4 GRDPM_{it} + \varepsilon_{it} \quad (1)$$

The research also applies the interaction between the DAU and DAK variables as a proxy for fiscal decentralization, so the research equation becomes:

$$\mathbf{gini_{it} = \alpha_0 + \beta_1 DAU_{it} + \beta_2 DAK_{it} + \beta_3 DAU * DAK_{it} + \beta_4 RL_{it} + \beta_5 GRDPM_{it} + \varepsilon_{it}} \quad (2)$$

Filippetti & Sacchi (2016) explain how the government implements a fiscal decentralization policy by increasing its capacity for state spending and revenue to reduce inequality. According to Causa & Hermansen (2018), government engagement in the redistribution of resources through taxes and social payments can play a significant role in escalating inequality. Porta et al. (2022) explain that increasing inequality within a country is a major driver of the rise of populism in various parts of the world. In order to reduce inequality, a nation's fiscal capacity which is utilized for transfers to regions—becomes an essential policy (Hayat et al., 2023).

Result and Discussion

Descriptive Statistics

Descriptive statistics are used to provide a general summary of the characteristics of the research data. Table 1 reveals that the income distribution inequality, or the value of the Gini index, has an average of 32.96%, with a standard deviation of 0.64%, indicating significant imbalances in income distribution between regions. The large standard deviation suggests significant variations in the level of inequality across regions, with some regions experiencing income concentration in certain groups, while others show a more equal distribution. High income inequality has the potential to impact economic stability, such as limited public access to economic resources. Furthermore, this inequality might limit opportunities for social mobility and increase the potential for social conflict due to perceptions of economic injustice.

Table 2. Descriptive Variables

Variable	Min	Max	Mean	St. Dev
Gini	13.500	46.000	32.964	0.648
DAU	19.876	32.779	27.487	2.938
DAK	17.739	32.458	25.817	3.783
RL	4.796	13.421	8.279	1.279
GRDPM	13.451	18.519	14.857	10.976

DAU has an average of 27.48 billion rupiah with a standard deviation of 2.93 billion rupiah, reflecting the inequality in the budget distribution received by each region. Some regions may receive larger funds depending on their fiscal needs. This variation in the DAU indicates the differences in capacity levels between regions in managing fiscal resources. Poorer or developing regions may require more funds to develop properly and catch up with more developed regions. This imbalance can affect the speed and quality of development in each region.

The average of DAK is 25.81 with a standard deviation of 3.78. This figure indicates variation in fund distribution. This standard deviation indicates that the DAK received by each region is not the same, but is adjusted to the specific needs of each region. Generally, regions with limited infrastructure or basic public services tend to receive larger allocations. This variation also reflects differences in physical development priorities between regions, demonstrating the government's efforts to adjust budget distribution based on objective conditions and the urgency of development in each region. Table 3 shows that DAU does not affect reducing income inequality in districts/cities in Papua Province; rather, it tends to increase income inequality between regions. The significant DAU allocation is intended to balance the gap between fiscal capacity and regional funding needs. Geographical challenges are a major obstacle because Papua Province has mountainous and coastal areas, with coastal areas being more developed than mountainous areas. Santoso & Mukhlis (2021) explain that the DAU is an unconditional transfer; hence, it is used for routine spending rather than productive development programs. Adriana (2024) stated that the DAU depends on good governance in the regions. If its management is not transparent, it will not have a significant impact on improving public services, which ultimately leads to a significant impact on reducing inequality.

Panel Data Estimation

DAK, as a special allocation fund, has shown no significant impact on inequality in Papua. The large budget allocation has not been optimally managed by the regional government, and it does not fully align with its original purpose of funding special development in accordance with national priorities. The uneven distribution of funds, along with the lack of adjustment to the specific needs of each region, particularly mountainous regions with significantly more complex structural challenges, requires larger funds than coastal areas. Furthermore, the DAK is not specifically designed for income redistribution. Sari (2025) explains that the DAK's ability to reduce inequality is determined by a region's geographic conditions, sectoral advantages, and economic activity. In regions with high geographic challenges, the DAK plays a minor role in income redistribution.

Table 3. Result of Panel Data

Variable	CEM	FEM	REM	CEM	FEM	REM
DAU	0.002 (0.77)	0.001 (0.30)	0.004 (1.78)	-	-	-
DAK	0.003 (1.55)	0.004*** (2.75)	0.003 (1.92)	-	-	-
RL	0.003 (0.64)	0.003 (0.88)	0.0001 (0.03)	0.025 (0.64)	0.030 (0.86)	0.001 (0.04)
GRDPM	0.013*** (3.07)	0.115*** (3.87)	0.018** (2.48)	0.130*** (3.06)	1.131*** (3.76)	0.172** (2.44)
DAU*DAK	-	-	-	0.0006 (0.08)	-0.005 (-0.78)	-0.005 (-0.80)
Cons	-0.131 (-0.15)	-1.539 (3.52)***	-0.110 (-0.95)	0.418 (0.06)	-1.922*** (2.92)	-1.748*** (3.18)
F-stat		19.62			20.18	
Hausman test		0.0547			0.1521	

Table 3 presents the panel data regression results examining the effects of fiscal transfers, road length, and economic growth on income inequality across districts/cities in Papua Province. The findings indicate that road length (RL) has no significant effect on income inequality in these regions. Although infrastructure is important to support economic growth, mobility of goods and services, and access to markets in the Papua region, road infrastructure has little impact on the economy with Papua's difficult geographical conditions that must pass through mountains, swamps, and dense forests causing road infrastructure development to be uneven and more concentrated in urban areas that are more easily accessible while the interior is still left behind and has not felt the same benefits. In addition, this condition has an impact on high logistics costs in remote areas, resulting in increased income inequality (Nie et al., 2024).

GRDPM as the gross the domestic product of the mining sector on income inequality with a coefficient value of 0.018 with a t-statistic of 2.48, a significant effect at the 1% level. These results indicate that the mining sector affect income inequality in the districts/cities of Papua Province, GRDP as the proxy for economic growth with a significant contribution from the mining sector is not followed by income equality across all levels of society. The majority of the benefits of this sector are concentrated in specific areas, such as coastal districts and city centers with active mining sectors. As a result, mountainous areas continue to fall behind in terms of access to and participation in economic activity. Indrawati et al. (2020) stated that the increase in GRDP of the mining sector has a significant effect on poverty levels in Papua. Economic growth is uneven and is more managed by certain groups that depend on the mining sector, while poor areas and sectors such as agriculture receive less benefit. Therefore, economic growth is not effective in reducing poverty as a whole, eventually increasing inequality (Liu & Dong, 2025).

According to Table 3, the interaction of DAU and DAK does not affect income inequality in districts or cities in Papua Province. Although fiscal decentralization aims to provide more authority in managing funds to the Papua regional government, the practice has not shown that the allocation of these funds is in accordance with the target of reducing inequality in Papua Province. Fiscal decentralization through intergovernmental transfers remains problematic due to low local tax ratios, inefficient regional spending, and weak fiscal coordination between central and regional governments (Basia et al., 2025). Chandra et al. (2017) argue that balancing funds do not significantly affect income inequality because they are not allocated based on regional needs, resulting in indirect overall impacts.

Table 4. Intercept Value for each district

No.	Regency/City	Code	Intercept
1.	Jayawijaya	2	-1.7197
2.	Jayapura	3	-1.66265
3.	Nabire	4	-1.69007
4.	Kepulaun Yapen	5	-1.81747
5.	Biak Numfor	6	-1.80162
6.	Paniai	7	-1.81555
7.	Puncak Jaya	8	-1.91194
8.	Mimika	9	-1.41663
9.	Boven Digoel	10	-1.83367
10.	Mappi	11	-1.90867
11.	Asmat	12	-1.87686
12.	Yahukimo	13	-1.87497
13.	Pegunungan Bintang	14	-1.8906
14.	Tolikara	15	-1.90214
15.	Sarmi	16	-1.90456
16.	Keerom	17	-1.88561
17.	Waropen	18	-1.88675
18.	Supiori	19	-1.94336
19.	Mamberamo Raya	20	-1.87434
20.	Nduga	21	-1.8183
21.	Lanny Jaya	22	-1.82899
22.	Mamberamo Tengah	23	-1.87995
23.	Yalimo	24	-1.90883
24.	Puncak	25	-1.83888
25.	Dogiyai	26	-1.89732
26.	Intan Jaya	27	-1.887
27.	Deiyai	28	-1.85865
28.	Kota Jayapura	29	-1.51995

The intercept in a linear regression model represents the initial value or baseline of the dependent variable when all other independent variables are zero. In other words, the intercept indicates the average prediction of the outcome variable without any influence from other factors included in the model. Analysis of the intercept value is important because it can provide a general overview of the baseline conditions of each region or observation unit before considering other variables (Moundigbaye et al., 2018). Table 4 shows that the highest intercept was found in Mimika Regency with a value of -1.41663, while the lowest intercept was recorded in Supiori Regency with a value of -1.94336. This intercept value indicates the average value of the dependent variable of income inequality in each district/city when all independent variables are assumed to be zero. In other words, the intercept represents the initial condition or baseline of each region before the influence of the explanatory factors in the model (Tang & Sun, 2022). These differences in values are crucial to analyze because they provide a general overview of the initial position or basic tendencies of each region in the context of the indicators being observed, whether in the social, economic, educational, or public service fields.

Mimika Regency has the highest intercept value, indicating that this region tends to have a higher initial value than other regencies/cities in Papua. This suggests that structural advantages or better underlying conditions in Mimika, for example, are due to infrastructure development, concentration of economic activity, or stronger policy support. Conversely, Supiori Regency's low intercept value reflects less favorable initial conditions, which could be caused by limited access, geographic remoteness, or a lack of basic facilities. This intercept analysis can provide the basis for formulating more equitable and targeted region-based policies, particularly in efforts to achieve equitable development and improve welfare in eastern Indonesia (Siburian, 2022). Previous studies also highlight that variations in regional fiscal performance and the effectiveness of public financial management significantly influence development outcomes at the local level (Erica et al., 2025). A'yun et al. (2022) further demonstrate that local taxes, regional levies, and investment play a crucial role in strengthening original local government revenue (PAD) in Indonesia, emphasizing the importance of regional fiscal capacity in supporting local development.

Furthermore, Zhang et al. (2025) emphasize that decentralized fiscal policy strengthens inequality due to biased public resource allocation more to urban than rural areas. Moreover, local governments' dependence on transfers from the central government makes them vulnerable, as they lack sufficient resources to increase their revenue, which causes them to fall further behind. According to Song (2013) and Feld et al (2021) fiscal decentralization is neither always equalizing nor anti-equalizing; nonetheless, how fiscal decentralization is pushed is significant in determining how it affects regional inequality.

Conclusion

High income inequality in Papua Province reflects persistent disparities in access to education, employment, and economic opportunities, particularly in 3T (Underdeveloped, Frontier, and Outermost) regions, despite substantial fiscal transfers from the central government through the Special Autonomy Fund (Otsus), General Allocation Fund (DAU), and Special Allocation Fund (DAK). The results indicate that fiscal decentralization through DAU and DAK has not been effective in reducing income inequality, largely due to geographical constraints, the unconditional nature of DAU transfers, the dominance of routine expenditures, and the long-term orientation of DAK toward infrastructure development, which limit their immediate impact. These findings imply that regional governments should enhance the effectiveness of DAU and DAK utilization by prioritizing productive sectors and infrastructure projects that generate multiplier effects on employment and regional connectivity. Overall, this study demonstrates that fiscal transfers alone are insufficient to address inequality in remote regions without improvements in spending efficiency and development strategies, and future research is encouraged to incorporate institutional capacity, governance quality, and sectoral expenditure efficiency to better explain inequality dynamics.

Acknowledgment

The authors expressed their gratitude to the Department of Economic Development of Universitas Ahmad Dahlan for providing the collaboration of joint research with the Faculty of Humanities and Social Science, Khon Kaen University, Khon Kaen, Thailand, and University WSB Merito Poznan, Poland.

Declarations

Author contribution	:	The authors contributed equally to this research.
Funding statement	:	This research received no external funding.
Conflict of interest	:	The authors declare no conflict of interest.
Ethics declaration	:	The authors confirm that this study was conducted in accordance with ethical research standards.
Additional information		No additional information is available for this paper.

References

A'yun, I. Q., Vianti, W. O., & Zalina, Z. (2022). Determinants of original local government revenue (PAD): Case studies of 34 provinces in Indonesia. *Journal of Asset Management and Public Economy (JAMPE)*, 1(2). https://doi.org/10.12928/jampe.v1i2.6046

Adriana, M. (2024). Determinasi ketimpangan wilayah Kabupaten/Kota Provinsi Jawa Tengah (2010-2020). *Jurnal Ekonomi Trisakti*, *4*(1), 805-818. https://doi.org/10.25105/jet.v4i1.17448

Anggraeni, R. M., Khusaini, M., & Prasetyia, F. (2022). Fiscal decentralization and its effect on poverty alleviation: Case study of Indonesia. *Bulletin of Islamic Economics*, *1*(2), 35-48. https://doi.org/10.14421/bie.2022.012-04

Ashfahany, A. E., Djuuna, R. F., & Rofiq, N. F. (2020). Does fiscal decentralization increases regional income inequality in Indonesia? *Jambura Equilibrium Journal*, *2*(2), 68-80. https://doi.org/10.37479/jej.v2i2.6866

Aulia, H. H., & Sari, D. R. P. (2025). Provincial Economic Convergence in Post-Decentralization Indonesia: A Panel Analysis from 2000 to 2022, *Jurnal Ekonomi Pembangunan, 14*(3), 73-85. https://doi.org/10.23960/jep.v14i3.4269

Baltagi, B. H. (2021). *Econometric Analysis of Panel Data*. 6th Edition. John Wiley & Sons.

Basia, L., Afriyanti, & Kurniawan, M. L. A. (2025). Pengaruh DAK, DAU, PAD, DBH, UMR & Angkatan Kerja Terhadap Belanja Modal Di Provinsi Jawa Tengah. *Jurnal Ilmiah Raflesia Akuntansi*, *11*(1), 465–474. https://doi.org/10.53494/jira.v11i1.883

Borissov, K., & Hashimzade, N. (2022). Fiscal policy and inequality in a model with endogenous positional concerns. *Journal of Mathematical Economics*, *103*, 102765. https://doi.org/10.1016/j.jmateco.2022.102765

Burdam, J., & Laka, B. M. (2022). Efektivitas dana otonomi khusus dalam menjawab kebutuhan masyarakat asli Papua di Kabupaten Biak Numfor. *Jurnal Inovasi Penelitian*, *2*(12), 4219–4228. http://doi.org/10.47492/jip.v2i12.1530

Canavire-Bacarreza, G., Martinez-Vazquez, J., & Yedgenov, B. (2020). Identifying and disentangling the impact of fiscal decentralization on economic growth. *World Development*, *127*, 104742.

https://doi.org/10.1016/j.worlddev.2019.104742
Causa, O., & Hermansen, N. M. (2018). *Income redistribution through taxes and transfers across OECD countries*. No. 729, LIS Working Paper Series).
Chandra, D., Hidayat, S., & Rosmeli. (2017). Dampak dana perimbangan terhadap pertumbuhan ekonomi dan ketimpangan antar daerah di Provinsi Jambi. *Jurnal Paradigma Ekonomi*, *12*(2), 67–76. https://doi.org/10.22437/paradigma.v12i2.3942
Direktorat Jenderal Perimbangan Keuangan. (2024). *Alokasi dan realisasi dana transfer ke daerah tahun 2014–2024*. Kementerian Keuangan Republik Indonesia.
Erica, D., Ratiyah, R., & Shah, S. M. A. R. (2025). Analysis of public sector financial performance with the value for money approach in Bogor Regency. *Journal of Asset Management and Public Economy (JAMPE)*, 4(1), 17–29. https://doi.org/10.12928/jampe.v4i1.11566
Feld, L. P., Frey, C., Schaltegger, C. A., & Schmid, L. A. (2021). Fiscal federalism and income inequality: An empirical analysis for Switzerland. *Journal of Economic Behavior & Organization*, *185*, 463–494. https://doi.org/10.1016/j.jebo.2021.02.028
Filippetti, A., & Sacchi, A. (2016). Decentralization and economic growth reconsidered: The role of regional authority. *Environment and Planning C: Politics and Space*, *34*(8), 1793-1824. https://doi.org/10.1177/0263774X16642230
Gu, C., & Zhang, J. (2024). Fiscal decentralization, audit supervision and responsiveness of subnational governments: empirical evidence from Fiscal expenditure of municipal governments to meet basic living needs. *Finance Trade Economy*, *45*, 21–37. https://cmjj.ajcass.com/waf_text_verify.html
Hayat, N. Z., Kurniawan, M. L. A., & Wong, W.-K. (2023). The role of inequality in Indonesia: Does fiscal decentralization matter? *Jurnal Ekonomi Dan Studi Pembangunan*, *15*(2), 111–120. https://citeus.um.ac.id/jesp/vol15/iss2/2/
Huynh, C. M., Nguyen, T. L., & Lam, T. H. T. (2023). Fiscal decentralization and income inequality in OECD countries: does shadow economy matter? *Eurasian Economic Review*, *13*, 515–533. https://doi.org/10.1007/s40822-023-00241-z
Hyunh, C. M., & Nguyen, T. L. (2020). Shadow economy and income inequality: new empirical evidence from Asian developing countries. *Journal of the Asia Pacific Economy*, *25*(1), 175–192. https://doi.org/10.1080/13547860.2019.1643196
Ilyasa, W. N., Kurniawan, M. L. A., Lubis, F. R. A., & Salim, A. (2025). The role of credit for poverty alleviation in Indonesia: Evidence from panel data analysis. *Integrated Journal of Business and Economics*, *9*(2), 203–217. http://dx.doi.org/10.33019/ijbe.v9i2.1101
Indrawati, I. (2020). Analisis pengaruh pertumbuhan ekonomi, ketimpangan distribusi pendapatan dan indeks pembangunan manusia terhadap tingkat kemiskinan Provinsi Papua tahun 2014-2019. *Dinamic*, *2*(4), 1068–1080. http://doi.org/10.31002/dinamic.v2i4.1446
Konstantinou, P. T. (2024). Fiscal consolidations and income inequality: Evaluating the evidence. *The Quarterly Review of Economics and Finance*, *97*, 101880. https://doi.org/10.1016/j.qref.2024.101880
Latifah, L., & Rahayu, D. (2019). Pengaruh desentralisasi fiskal dan pertumbuhan ekonomi terhadap ketimpangan antar daerah. *Jurnal Ilmu Ekonomi Dan Pembangunan*, *2*(4), 983–994. https://jiep.ulm.ac.id/index.php/jiep/article/view/2387
Liu, Y., & Dong, C. (2025). Digital finance, social welfare investment, and urban–rural income inequality: moderating role of regional economics and regional disparities. *Finance Research Letters*, *77*, 107077. https://doi.org/10.1016/j.frl.2025.107077
Madakarah, N. Y., & Makaliwe, W. A. (2023). Efektivitas kebijakan desentralisasi fiskal pada pertumbuhan ekonomi dan ketimpangan pendapatan antardaerah. *Jurnal Manajemen Bisnis Dan Keuangan*, *4*(2), 158-169. https://doi.org/10.51805/jmbk.v4i2.132
Marlin, W., & Hukom, A. (2023). Pengaruh kemandirian dan desentralisasi fiskal terhadap

penyerapan tenaga kerja di Provinsi Kalimantan Tengah. *Jurnal Ekonomi Integra*, *13*(1), 154-163. https://doi.org/10.51195/iga.v13i1.236

Melmambessy, D. (2022). Analisis kinerja keuangan pemerintah Kota Jayapura ditinjau dari rasio kemandirian daerah, ketergantungan daerah, desentralisasi fiskal dan efektivitas. *Jurnal Ekonomi & Bisnis Sekolah Tinggi Ilmu Ekonomi Port Numbay Jayapura*, *13*(2), 154-163. https://doi.org/10.55049/p341e341

Moundigbaye, M., Rea, W. S., & Reed, W. R. (2018). Which panel data estimator should I use?: A corrigendum and extension. *Economics*, *12*, 1–31. https://doi.org/10.5018/economics-ejournal.ja.2018-4

Nie, C., Wang, H., & Feng, Y. (2024). Urban-biased policy, government intervention and urban-rural income gap: evidence from provincial government work reports in China. *Kybernetes: The International Journal of Cybernetics, Systems and Management Sciences*, *53*(11), 4929–4947. https://doi.org/10.1108/K-01-2023-0084

Porta, D. D., Galbraith, J., & Pianta, M. (2022). Introduction to the special issue 'The political consequences of inequality.' *Structural Change and Economic Dynamics*, *60*, 389–390. https://doi.org/10.1016/j.strueco.2021.11.019

Putri, D. Y., & Aminda, R. S. (2024). Analisis faktor-faktor yang mempengaruhi ketimpangan pendapatan di provinsi Daerah Istimewa Yogyakarta. *Journal of Development Economic and Digitalization*, *3*(1), 87–108. https://doi.org/10.59664/jded.v3i1.7667

Putri, H. T., Susetyo, D., Marissa, F., & Sukanto, S. (2023). *The effect of economic growth, fiscal decentralization, fiscal stress, and economic openness on regional inequality*. *Jurnal Ekonomi Pembangunan, 20*(2), 181–192. https://doi.org/10.29259/jep.v20i2.19113

Rachmawati, L. N., Lubis, F. R. A., & Azzakiyyah, N. A. (2025). Regional income disparities in Indonesia: Insights from the Williamson index and panel data analysis. *Optimum: Jurnal Ekonomi Dan Pembangunan*, *15*(2), 264–271. https://doi.org/10.12928/optimum.v15i2.12953

Rasbin. (2016). Desentralisasi fiskal dan stabilitas makroekonomi: Studi kasus di Indonesia. *Kajian*, *21*(1), 17–35. https://doi.org/10.22212/kajian.v21i1.765

Santoso, F. D. P., & Mukhlis, I. (2021). Ketimpangan pendapatan dan faktor-faktor yang mempengaruhi pada masa sebelum dan pada saat pandemi COVID-19 di Indonesia. *Jurnal Ekonomi, Bisnis Dan Pendidikan*, *1*(2), 146-162. https://doi.org/10.17977/um066v1i22021p146-162

Sari, Y. P. (2025). Dapatkah dana alokasi khusus, dana alokasi umum dan dana bagi hasil menurunkan ketimpangan pendapatan di Indonesia? *Jurnal Ekonomi Al-Khitmah*, *7*(1), 13–25. https://doi.org/10.36378/khitmah.v7i1.4061

Shahbaz, M., Rizvi, S. K. A., Dong, K., & Vo, X. V. (2022). Fiscal decentralization as new determinant of renewable energy demand in China: The role of income inequality and urbanization. *Renewable Energy*, *187*, 68–80. https://doi.org/10.1016/j.renene.2022.01.064

Siburian, M. E. (2020). Fiscal decentralization and regional income inequality: evidence from Indonesia. *Applied Economics Letters*, *27*(17), 1383–1386. https://doi.org/10.1080/13504851.2019.1683139

Siburian, M. E. (2022). The link between fiscal decentralization and poverty – Evidence from Indonesia. *Journal of Asian Economics*, *81*, 101493. https://doi.org/10.1016/j.asieco.2022.101493

Song, Y. (2013). Rising Chinese regional income inequality: The role of fiscal decentralization. *China Economic Review*, *27*, 294–309. https://doi.org/10.1016/j.chieco.2013.02.001

Stigler, G. J. (1998). The tenable range of functions of local government. *International Library of Critical Writings in Economics*, *88*, 3–8. https://www.econbiz.de/Record/the-tenable-range-of-functions-of-local-government-stigler-george/10002858875

Tang, L., & Sun, S. (2022). Fiscal incentives, financial support for agriculture, and urban-rural inequality. *International Review of Financial Analysis*, *80*, 102057. https://doi.org/10.1016/j.irfa.2022.102057

Umar, H. B., Ngutra, R. N., & Maga, L. (2021). Analisis dampak kebijakan pemerintah terhadap perkembangan perekonomian pada wilayah adat Mamta Provinsi Papua. *Jurnal Kajian Ekonomi Dan Studi Pembangunan*, *8*(2), 1-6. https://doi.org/10.56076/jkesp.v8i2.2108

Winchester, M. S., & King, B. (2018). Decentralization, healthcare access, and inequality in Mpumalanga, South Africa. *Health & Place*, *51*, 200–207. https://doi.org/10.1016/j.healthplace.2018.02.009

Zhang, F., Guo, P., & Fan, X. (2025). Can fiscal support reduce the income gap between urban and rural residents? An analysis based on heterogeneity and threshold effects. *Finance Research Letters*, *80*, 107353. https://doi.org/10.1016/j.frl.2025.107353

Zhang, X., Zhu, Y., & Hou, A. (2025). Fiscal decentralization and urban-rural inequality of income acquisition opportunities: Micro evidence from China. *Finance Research Letters*, *85*(Part A), 107859. https://doi.org/10.1016/j.frl.2025.107859