

Analysis of Economic Improvement to Reduce Poverty in 2016-2020

Dewi Fatmasari¹, Dikdik Harjadi², Abas Hidayat^{3*}

¹ Faculty of Islamic Economics and Business, IAIN Syekh Nurjati Cirebon, Indonesia

² Master Management Program, University of Kuningan, Indonesia

³ Sekolah Tinggi Ilmu Kesehatan Cirebon, Indonesia

*Corresponding Author E-mail: abasstikescirebon@gmail.com

Abstract

Being helpless, unwelcome, and lacking a sense of freedom are the three characteristics of poverty. A country that is said to be prosperous can be seen from high economic growth. Economic growth influences reducing the problem of poverty. The lower the level of poverty will cause various kinds of socio-economic problems in a country. This study aims to find the direct and indirect effect of the independent variables, namely the effect of the General Allocation Fund (DAU), Regional Original Income (PAD), and Special Allocation Fund (DAK) on Poverty through Economic Growth. The research is a quantitative study using the regression analysis method by combining cross-section and time series data using Eviews 9.0 Software. This study took the object of research in 29 regencies in West Java Province for the period 2016 - 2020. Panel data source from the provincial annual report, Director General of Balance, Ministry of Finance, West Java BPS. The results of the study show that general allocation funds have a significant effect on economic growth. Special allocation funds have a significant effect on economic growth. However, local revenue does not have a significant effect on economic growth. This study contributes that the economic improvement plays an important role in reducing poverty.

Keywords: Balance Fund; Economic Growth; Poverty.

Abstrak

Menjadi tidak berdaya, tidak disukai, dan tidak memiliki rasa kebebasan adalah tiga ciri kemiskinan. Suatu negara yang dikatakan makmur jika mempunyai pertumbuhan ekonomi dengan kategori tinggi. Pengurangan masalah kemiskinan berpengaruh terhadap pertumbuhan ekonomi. Semakin rendah tingkat kemiskinan akan menimbulkan berbagai macam masalah sosial ekonomi di suatu negara. Penelitian ini bertujuan untuk mengetahui pengaruh langsung dan tidak langsung variabel bebas yaitu pengaruh Dana Alokasi Khusus (DAK), Pendapatan Asli Daerah (PAD) dan Dana Alokasi Umum (DAU), yang berkaitan dengan pertumbuhan ekonomi melalui faktor kemiskinan. Metode yang digunakan adalah analisis regresi dengan menggabungkan data cross section dan time series dengan menggunakan Software Eviews 9.0. Kajian ini mengambil objek penelitian di 29 kabupaten di Provinsi Jawa Barat periode 2016 - 2020. Sumber data panel dari Kementerian Keuangan, BPS Jabar, Dirjen Perimbangan dan laporan tahunan provinsi. Hasil penelitian menunjukkan pertumbuhan ekonomi secara signifikan dipengaruhi oleh dana alokasi umum. Pertumbuhan ekonomi secara signifikan dipengaruhi oleh dana alokasi khusus. Namun, pertumbuhan ekonomi secara signifikan tidak dipengaruhi oleh pendapatan asli daerah. Penelitian ini berkontribusi bahwa berdasarkan analisis data, pertumbuhan ekonomi berperan penting untuk mengurangi tingkat kemiskinan.

Kata kunci: Dana Perimbangan, Pertumbuhan Ekonomi, Kemiskinan.

INTRODUCTION

Economic growth can measure a country's economic development's success (Khan, 2019; Manzoor et al., 2019). Economic development consists of changes in economic growth rate, poverty eradication, and income inequality reduction (Erlando et al., 2020). One indicator of a country's growth is seen from gross regional domestic product to measure economic growth (Coscieme et al., 2020; Stoica et al., 2020). Reflects the amount of added value generated from all production activities in the economy (Moutinho et al., 2020). Economic infrastructure that is used to facilitate economic growth, increase resources and increase economic productivity provided by the government (Wang et al., 2022). Government spending is more associated with accelerating economic growth and greater poverty reduction (Ahmad et al., 2019).

Regional economic growth must receive support from the Government, for this a policy is needed. In Indonesia, supported policies regarding regional autonomy are mentioned in Law no. 33 of 2014 (Nachrawi et al., 2022). According to Onafowora and Owoye (2019), the law states that the central government gives local governments the freedom to manage their own households.

The ability to reduce poverty is one of the indicators of a country's success (Kwilinski et al., 2020). The problem of poverty can be an obstacle to development in the future. Hunger, homelessness, and lack of money for medical care are all signs of poverty (Jamieson & van Blerk, 2022). Poor people frequently struggle to read because they cannot attend school, lack employment, fear the future, or lose their children to disease. Poverty means being helpless, unwelcome, and without a sense of independence (Bray et al., 2020).

A country that is said to be prosperous indicates high economic growth. In other words, economic growth influences reducing the problem of poverty (Dhrifi et al., 2020). The poverty rate tends to rise in the early phases of economic development and progressively declines as the process concludes. Poverty and economic growth are strongly associated (Erlando et al., 2020). The better the economic development in a region (reflected by, among other things, a high GRDP growth rate with a low level of inequality in income distribution), the lower the poverty rate in the region *ceteris paribus*, other factors that also affect directly or indirectly the level of poverty do not change or are constant.

Local governments must adhere to the public accountability, transparency, democracy, and community engagement ideals of regional autonomy. Broad, genuine, accountable, and appropriate responsibility is granted to local governments for managing national resources, allocating them among themselves, and balancing national and local budgets. Regional economic development is a process in which local governments and every aspect of the community work together to manage available resources, foster the growth of local businesses, and create new employment (Avdikos & Merkel, 2020).

The ability of local governments to manage their finances is stated in the Regional Revenue and Expenditure Budget (APBD) either directly. Mallick and Fukumi (2021) say that the source of these funds is listed in the APBD, which includes the transfer of balancing funds from the central government. This reflects the government's ability in independent in each region by looking at the income side, namely Special Allocation Fund (DAK), Regional Original Income (PAD), General Allocation Fund (DAU), and Development Expenditures. Therefore, the assessment of economic growth on overcoming the poverty gap in the regions can be minimized for equitable distribution of economic development.

The goal of development is to bring about positive change. Development is essentially a multifaceted process that involves different fundamental adjustments to social structures, societal perceptions, and institutional frameworks while pursuing quicker economic development, addressing income disparity, and reducing poverty (Liu et al., 2017). Because one of the national priorities is to

suppress or reduce poverty. The problem of poverty in West Java is the high poverty rate in Indonesia. Therefore, for West Java to serve as a benchmark for the government's efforts to combat poverty, it is vital to seek factors that may impact the degree of poverty there.

A country is said to be prosperous can be seen from high economic growth or in other words economic growth has an influence in reducing the problem of poverty. Poverty and economic growth are closely related, in the early stages of a process of economic development the poverty rate tends to increase and as the number of poor people is approaching the final stage, the number of poor people gradually decreases. The better the economic development in a region (reflected by, among other things, a high GRDP growth rate with a low level of inequality in income distribution), the lower the poverty rate in the region *ceteris paribus*.

Table 1 GDP Growth Rate

Year	GDP Growth Rate
2016	7.35
2017	9.14
2018	4.64
2019	7.37
2020	-15.72

Source: BPS, West Java GRDP Growth Data (2021)

Table 1 describes the growth rate of PDRD in the province of West Java from 2016-2020. In the table, the percentage of GRDP growth in West Java province from 2016 to 2021 has fluctuated. Local governments must adhere to the public accountability, transparency, democracy, and community engagement ideals of regional autonomy. The regulation, sharing, and utilization of national resources as well as the balance of central and regional finances are all tasks that fall under the wide, genuine, accountable, and appropriate power that local governments are granted.

Omar and Inaba (2020) investigated poverty reduction through inclusion impacts. It was found that maximizing social welfare can be done by using financial services through marginalized segments of the population. Collin and Weil (2020) researched poverty alleviation through improving the human capacity sector. Folarin and Adeniyi (2020) said reducing poverty can be done through improving the quality of institutions. In contrast to this research, the novelty is connecting poverty reduction and economic improvement.

THEORETICAL REVIEW

Economic growth

Regional economic growth is measured using GRDP (Canavire-Bacarreza et al., 2020). The gross added value produced by production units in a region during a specific period may be seen using GRDP. One indication that may be used to evaluate the effectiveness of a region's development is the growth of GRDP value. In other words, an area's economic development may be shown in the increase in GRDP value (Guru & Yadav, 2019).

The GRDP of one year is compared to the prior year using ADHK to determine the rate of economic growth (Wilantari et al., 2022). Economic growth may be broadly defined as the expansion of

economic activities that lead to a rise in the quantity of goods and services generated in society as well as the well-being of its citizens (Surya et al., 2021). The word "economic growth" refers to or assesses an economy's success and development.

Economic growth refers to a country or region's capacity to meet the community's demand for products and services in large quantities, hence enabling long-term increases in living standards and declines in unemployment rates that will influence lowering poverty.

Poverty

Individuals or groups, including men and women, who cannot exercise their fundamental rights to preserve and advance a decent existence are in poverty (Nisak & Sugiharti, 2020). Chambers' theory explains that poverty is divided into four types: relative, absolute, structural, and cultural. Eliminating poverty may never be possible. It is possible to drastically reduce it if influential professionals take an active role in society, develop stronger relationships with poor individuals, understand more about their experiences, and act on what they discover (Chambers, 2007).

The community's fundamental rights include the ability to meet its requirements for food, shelter, water, land, and other natural resources, and it is needed for health, education, employment, and participation in socio-political affairs. One measure of a nation's success is its capacity to reduce poverty (Kwilinski et al., 2020). The issue of poverty may hamper future development. Poverty can be identified by hunger, homelessness, and a lack of funds for necessary medical treatment (Jamieson & van Blerk, 2022). Because they are unable to attend school, are unemployed, are afraid of the future, or have lost children to illness, poor individuals commonly fail to read. Being poor entails being dependent, undesired, and without a sense of freedom (Bray et al., 2020).

RESEARCH METHOD

The research is a quantitative study using the regression analysis method by combining cross-section and time series data. This study took the object of research in 29 regencies in West Java Province for the period 2016 - 2020. Panel data source from the provincial annual report, Director General of Balance, Ministry of Finance, West Java BPS. In this study, researchers tried to find the direct and indirect effect of the independent variables, namely the effect of DAU, PAD. and DAK on Poverty through Economic Growth. Panel data source from the provincial annual report, Director General of Balance, Ministry of Finance, West Java BPS. Analysis of research data using the help of Eviews 9.0 Software.

RESULTS AND DISCUSSION

This study combines cross-sectional and time series data in a panel data regression analysis method utilizing Eviews 9.0 software. The common effect model, fixed effect model, and random effect model are the three regression models that may be employed in panel data regression.

To see the effect on the two models, we used regression analysis of fixed effect estimation panel data on model 1 and estimation of common effects on model 2. The following table 2 displays the outcomes of the regression analysis performed using the Eviews 9.0.

Table 2 Panel Data Regression Analysis Model 1

Variable	Regression Coefficient	t-Stat	Prob
Model 1 (Y=Economic Growth)			
<i>Constant</i>	-597,350	-13,764	0.000
DAU	16,524	10,681	0.000
PAD	-0.005	-0.010	0.992
DAK	5,912	4.457	0.000

Based on Table 2, it is possible to formulate an equation for the panel data regression model that describes the value of the regression coefficient on the independent variables. This equation states that the dependent variable's value is expected to increase if the independent variable is projected to increase by one unit while the other independent variables remain constant or equal to zero. It may increase or decrease depending on the direction of the independent variable's regression coefficient. The constant value in model one is -597.350 according to the panel data regression equation above, meaning the dependent variable.

The average value of the dependent variable (Y), if it is not affected by the independent variable (X), will be -597.350. The general allocation and special allocation funds have a positive regression coefficient for the independent variables in the model, indicating a one-way relationship between general allocation and special allocation funds and economic growth. Accordingly, for every unit increase in general allocation and special allocation funds, economic growth will increase following the value of the coefficient on each variable.

In the model for local original income, a negative value indicates that there is a unidirectional relationship between local original income and economic growth, meaning that for every one unit increase in local original income, it will cause a decrease in economic growth according to the coefficient value of local original income.

Table 3 Panel Data Regression Analysis Model 2

Variable	Regression Coefficient	T-Stat	Prob
Model 2 (Y=Poverty)			
<i>Constant</i>	389,372	5.334	0.000
Economic growth	0.197	1.438	0.153
DAU	-1.757	-0.642	0.522
PAD	-6.918	-17.493	0.000
DAK	-5.722	-3.045	0.003

The panel data regression model's equation, which describes the value of the regression coefficients on the independent variables and describes what happens when the value of one independent variable is estimated to increase by one unit while the values of the other independent variables are estimated to remain constant or equal to zero, can be developed based on the data in Table 3 above. Depending on the direction of the independent variable's regression coefficient, it may increase or decrease. The constant value in model two is 389,372 according to the panel data regression equation above, meaning if the dependent variable

If the dependent variable (Y) is not affected by the independent variable (X), the average value will be -389,372. The regression coefficient for the economic growth independent variable in model 2 is positive, showing a unidirectional association between economic growth and poverty, which means that

for each unit of economic growth, poverty will rise in proportion to the economic growth coefficient's value.

In the model for general allocation funds, local original revenues and special allocation funds have a negative value indicating that there is a unidirectional relationship between general allocation funds, regional original revenues and special allocation funds with poverty, meaning that for every increase in general allocation funds, regional original revenues and the special allocation fund of one unit will cause poverty reduction in accordance with the coefficient values for each of the variables of general allocation funds, regional original income and special allocation funds.

Developing countries must develop efficient plans to fight poverty (Khan, 2019). Fighting poverty through several sectors, one of which is support from the economic sector (Leal Filho et al., 2020). The use of regional funds is a pillar for reducing poverty. Although the results of the study show PAD does not show any effect on economic growth to reduce poverty. However, in general the allocation of regional funds contributes to reducing the poverty rate. The correct allocation of regional funds contributes to reducing poverty (Purwaningsih et al., 2022). Regional economic development is a process in which local governments and every aspect of the community work together to manage available resources, foster the growth of local businesses, and create new employment (Avdikos & Merkel, 2020).

CONCLUSION

Economic Growth and the General Allocation Fund (DAU), the general allocation fund variable, as determined by statistical analyses, has a probability value of less than 0.05 (= 5%). Therefore, the general allocation fund has a significant impact on economic growth. Economic Growth and Regional Original Income (PAD), the regional original income variable, has a probability value larger than 0.05 (= 5%) based on statistical analyses. It leads to the conclusion that special allocation funds has no significant impact on economic expansion. Economic Growth and the Special Allocation Fund (DAK), the special allocation fund variable, according to the statistical analysis findings, has a probability value of less than 0.05 (= 5%). Therefore, special allocation funds have a significant impact on economic growth. The economic improvement plays an important role in reducing poverty

REFERENCES

- Ahmad, F., Draz, M. U., Su, L., Ozturk, I., Rauf, A., & Ali, S. (2019). Impact of FDI Inflows on Poverty Reduction in the ASEAN and SAARC Economies. *Sustainability*, 11(9), 2565. <https://doi.org/10.3390/su11092565>
- Avdikos, V., & Merkel, J. (2020). Supporting open, shared and collaborative workspaces and hubs: recent transformations and policy implications. *Urban Research & Practice*, 13(3), 348–357. <https://doi.org/10.1080/17535069.2019.1674501>
- Bray, R., de Laat, M., Godinot, X., Ugarte, A., & Walker, R. (2020). Realising poverty in all its dimensions: A six-country participatory study. *World Development*, 134, 105025. <https://doi.org/10.1016/j.worlddev.2020.105025>
- 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>
- Chambers, R. (2007). Participation and Poverty. *Development*, 50(2), 20–25. <https://doi.org/10.1057/palgrave.development.1100382>

- Collin, M., & Weil, D. N. (2020). The Effect of Increasing Human Capital Investment on Economic Growth and Poverty: A Simulation Exercise. *Journal of Human Capital*, 14(1), 43–83. <https://doi.org/10.1086/708195>
- Coscieme, L., Mortensen, L. F., Anderson, S., Ward, J., Donohue, I., & Sutton, P. C. (2020). Going beyond Gross Domestic Product as an indicator to bring coherence to the Sustainable Development Goals. *Journal of Cleaner Production*, 248, 119232. <https://doi.org/10.1016/j.jclepro.2019.119232>
- Dhrifi, A., Jaziri, R., & Alnahdi, S. (2020). Does foreign direct investment and environmental degradation matter for poverty? Evidence from developing countries. *Structural Change and Economic Dynamics*, 52, 13–21. <https://doi.org/10.1016/j.strueco.2019.09.008>
- Erlando, A., Riyanto, F. D., & Masakazu, S. (2020). Financial inclusion, economic growth, and poverty alleviation: evidence from eastern Indonesia. *Heliyon*, 6(10), e05235. <https://doi.org/10.1016/j.heliyon.2020.e05235>
- Folarin, O., & Adeniyi, O. (2020). Does Tourism Reduce Poverty in Sub-Saharan African Countries? *Journal of Travel Research*, 59(1), 140–155. <https://doi.org/10.1177/0047287518821736>
- Guru, B. K., & Yadav, I. S. (2019). Financial development and economic growth: panel evidence from BRICS. *Journal of Economics, Finance and Administrative Science*, 24(47), 113–126. <https://doi.org/10.1108/JEFAS-12-2017-0125>
- Jamieson, L., & van Blerk, L. (2022). Responding to COVID-19 in South Africa – social solidarity and social assistance. *Children's Geographies*, 20(4), 427–436. <https://doi.org/10.1080/14733285.2021.1924359>
- Khan, S. A. R. (2019). The nexus between carbon emissions, poverty, economic growth, and logistics operations-empirical evidence from southeast Asian countries. *Environmental Science and Pollution Research*, 26(13), 13210–13220. <https://doi.org/10.1007/s11356-019-04829-4>
- Kwilinski, A., Vyshnevskiy, O., & Dzwigol, H. (2020). Digitalization of the EU Economies and People at Risk of Poverty or Social Exclusion. *Journal of Risk and Financial Management*, 13(7), 142. <https://doi.org/10.3390/jrfm13070142>
- Leal Filho, W., Brandli, L. L., Lange Salvia, A., Rayman-Bacchus, L., & Platje, J. (2020). COVID-19 and the UN Sustainable Development Goals: Threat to Solidarity or an Opportunity? *Sustainability*, 12(13), 5343. <https://doi.org/10.3390/su12135343>
- Liu, Y., Martinez-Vazquez, J., & Wu, A. M. (2017). Fiscal decentralization, equalization, and intra-provincial inequality in China. *International Tax and Public Finance*, 24(2), 248–281. <https://doi.org/10.1007/s10797-016-9416-1>
- Mallick, J., & Fukumi, A. (2021). Globalisation and regional income growth disparity in India and the People's Republic of China (PRC). *Indian Growth and Development Review*, 14(2), 172–198. <https://doi.org/10.1108/IGDR-04-2019-0041>
- Manzoor, F., Wei, L., Asif, M., Haq, M. Z. ul, & Rehman, H. ur. (2019). The Contribution of Sustainable Tourism to Economic Growth and Employment in Pakistan. *International Journal of Environmental Research and Public Health*, 16(19), 3785. <https://doi.org/10.3390/ijerph16193785>
- Moutinho, V., Madaleno, M., & Elheddad, M. (2020). Determinants of the Environmental Kuznets Curve considering economic activity sector diversification in the OPEC countries. *Journal of Cleaner Production*, 271, 122642. <https://doi.org/10.1016/j.jclepro.2020.122642>
- Nachrawi, G., Robekha, J., & Fitrianingtyas Sukarno, E. (2022). Tinjauan Yuridis Pemberian Izin Kegiatan Penanaman Modal Dalam Persfektif Otonomi Daerah. *Fundamental: Jurnal Ilmiah Hukum*, 11(1), 14–25. <https://doi.org/10.34304/jf.v11i1.59>
- Nisak, S. S., & Sugiharti, L. (2020). Gender inequality and women poverty in Indonesia. *International Journal of Innovation, Creativity and Change*, 11(9), 375–387.

- Omar, M. A., & Inaba, K. (2020). Does financial inclusion reduce poverty and income inequality in developing countries? A panel data analysis. *Journal of Economic Structures*, 9(1), 37. <https://doi.org/10.1186/s40008-020-00214-4>
- Onafowora, O., & Owoye, O. (2019). Public debt, foreign direct investment and economic growth dynamics. *International Journal of Emerging Markets*, 14(5), 769–791. <https://doi.org/10.1108/IJOEM-01-2018-0050>
- Purwaningsih, F., Zumaeroh, Z., Purnomo, S. D., Adhitya, B., Retnowati, D., Winarto, H., & Kencana, H. (2022). Pengaruh Pengelolaan Alokasi Dana Desa terhadap Indikator Ekonomi di Provinsi Jawa Tengah. *MidYear National Conference and Call for Paper*, 1(01).
- Stoica, O., Roman, A., & Rusu, V. D. (2020). The Nexus between Entrepreneurship and Economic Growth: A Comparative Analysis on Groups of Countries. *Sustainability*, 12(3), 1186. <https://doi.org/10.3390/su12031186>
- Surya, B., Menne, F., Sabhan, H., Suriani, S., Abubakar, H., & Idris, M. (2021). Economic Growth, Increasing Productivity of SMEs, and Open Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 20. <https://doi.org/10.3390/joitmc7010020>
- Wang, J., Wang, W., Ran, Q., Irfan, M., Ren, S., Yang, X., Wu, H., & Ahmad, M. (2022). Analysis of the mechanism of the impact of internet development on green economic growth: evidence from 269 prefecture cities in China. *Environmental Science and Pollution Research*, 29(7), 9990–10004. <https://doi.org/10.1007/s11356-021-16381-1>
- Wilantari, R. N., Latifah, S., Wibowo, W., & Al Azies, H. (2022). Additive mixed modeling of impact of investment, labor, education and information technology on regional income disparity: An empirical analysis using the statistics Indonesia dataset. *Data in Brief*, 45, 108619. <https://doi.org/10.1016/j.dib.2022.108619>