

## The Realization of Village, Education, and Health Funds to Reduce Poverty in Eastern Indonesia

By:

Helena Louisa Andriani Tamba, Ming Shen, Siwi Nugraheni, Ely Elprida Sigiro, Ferinda Nafisa<sup>\*)</sup>

Faculty of Economics, Parahyangan Catholic University

<sup>\*)</sup>Corresponding author: [ferindanafisa@gmail.com](mailto:ferindanafisa@gmail.com)

Submission: February 21, 2024; Accepted: June 21, 2024

**ABSTRACT:** Village funds are used to improve the welfare of rural communities and develop various regions in Indonesia, including the 3T (frontier, remote, and disadvantaged) areas in Eastern Indonesia. Therefore, this study uses the Panel Least Square method to see the consequence of village, education, and health funds on poverty levels, especially in 7 provinces in Eastern Indonesia using yearly data 2017-2022. The realization of village funds, education funds, and health funds are used as independent variables, while the percentage of poor people is used as a dependent variable. The study results show that village fund and health fund significantly reduce poverty rates in Eastern Indonesia. Meanwhile, the education fund did not significantly reduce poverty in Eastern Indonesia. Although village and health funds can reduce poverty in Eastern Indonesia, the government should prioritize improving the education level of the region's people to significantly alleviate poverty.

**Keywords:** Village Funds, Education Funds, Health Funds, Poverty, Eastern Indonesia

**ABSTRAK:** Dana desa digunakan untuk meningkatkan kesejahteraan masyarakat desa dan membangun berbagai daerah di Indonesia, termasuk daerah 3T (terdepan, terpencil, tertinggal) di Indonesia Timur. Oleh karena itu, penelitian ini bertujuan melihat besar pengaruh dana desa, dana pendidikan, dan dana kesehatan terhadap tingkat kemiskinan khususnya di Indonesia Timur dengan metode Panel Least Square menggunakan data 7 provinsi di Indonesia timur dengan tahun 2017 - 2022. Realisasi dana desa, dana pendidikan, dan dana kesehatan digunakan sebagai variabel independen. Persentase penduduk miskin digunakan sebagai variabel dependen. Hasil penelitian menunjukkan bahwa dana desa dan dana Kesehatan secara signifikan menurunkan tingkat kemiskinan di Indonesia Timur sedangkan dana pendidikan tidak secara signifikan dapat menurunkan tingkat kemiskinan di Indonesia Timur. Meskipun dana desa dan dana kesehatan dapat menurunkan kemiskinan di Indonesia Timur, pemerintah perlu memprioritaskan tingkat pendidikan masyarakat setempat untuk menurunkan tingkat kemiskinan secara signifikan.

**Kata Kunci:** Dana Desa, Dana Pendidikan, Dana Kesehatan, Kemiskinan, Indonesia Timur

**INTRODUCTION**

In this era, poverty alleviation remains an unresolved global obstacle, predominantly affecting rural regions, especially in developing countries. The poverty rate in Indonesia has decreased but still higher when compared to some other developing countries (Figure 1). By international standards, poverty is measured by an individual's expenditure of \$2.15 per day. When looking at the Indonesian standard of an individual expenditure of Rp.535,547/month, the international and national standards reflect similar figures (Figure 2). Indonesian data also shows that the poverty rate in villages is about 5% higher than in cities. This can certainly lead to social turmoil in villages such as inter-regional jealousy, increased crime rates, and even decreased productivity. Relatively high poverty can also trigger inequality, unemployment, malnutrition, and lack of quality education (Saragi, Muluk, & Sentanu 2021). To address these issues, the implementation of targeted social welfare programs should be stipulated to manage rural poverty and improve rural welfare (Rammohan & Tohari 2023).

In Indonesia, the government is trying to address the poverty gap between villages and cities by issuing a village fund program. The program implementation would be better if it involved village government. The village plays a crucial function as a government organizational unit that directly interacts with the local community that have various backgrounds and needs (Mahmud, Prayogo, Susilowati, Handayani, & Mardi, 2023). Based on Ministry of Villages Regulation No. 11/2019, village funds aim to reduce poverty and improve quality of life, welfare, and public services. Rammohan & Tohari (2023) found that the implementation of the village fund program effectively reduced rural poverty in general, and more specially improved welfare in the sub-sample of poor rural households.

Village funds were launched in 2015 and have increased every year (20.76 trillion Rupiah in 2015 to 55.44 trillion Rupiah in 2022). These funds are the central government's commitment to local governments through fiscal decentralization with a transfer mechanism from the *Anggaran Pendapatan dan Belanja Negara* (APBN) or central government budget to the Regency/City (APBD/*Anggaran Pendapatan dan Belanja Daerah*) or local government budget. Through fiscal decentralization, the economic capacity of a region can increase which in turn improves the welfare of the community (Sandjaja, Nafisa, & Manurung 2020). This central government assistance is expected to reduce poverty by meeting basic needs (health and education), building facilities and infrastructure (sanitation, irrigation, and infrastructure), and developing local economic potential (entrepreneurship and expansion of community economic scale). The allocation of the amount of village funds is differentiated based on several criteria, namely population, poverty rate, area, and the level of geographical difficulty of the village. Each criterion has its own weight in the order of 10:50:15:25.

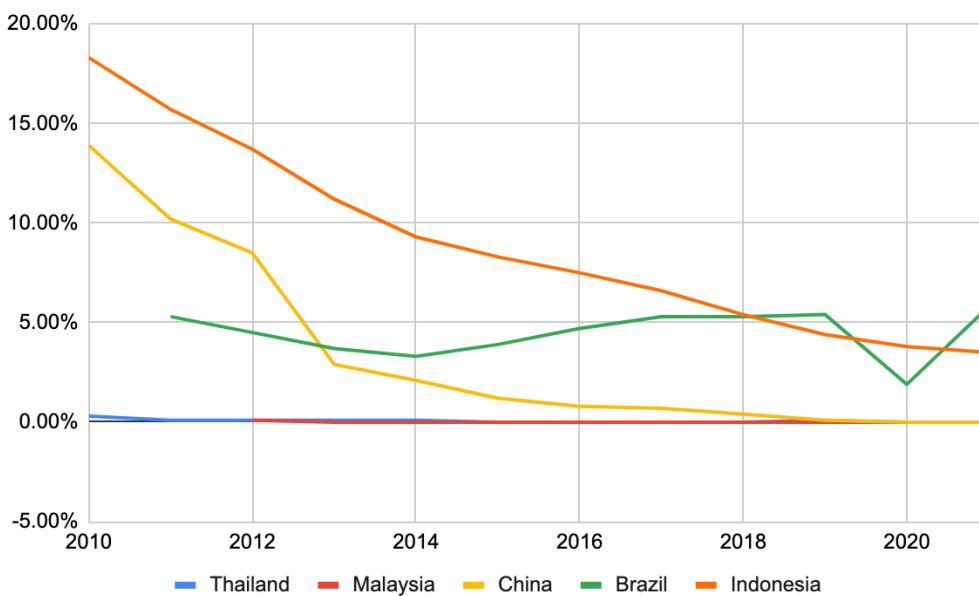


Figure 1. Poverty Levels of Some Developing Countries  
Source: World Bank

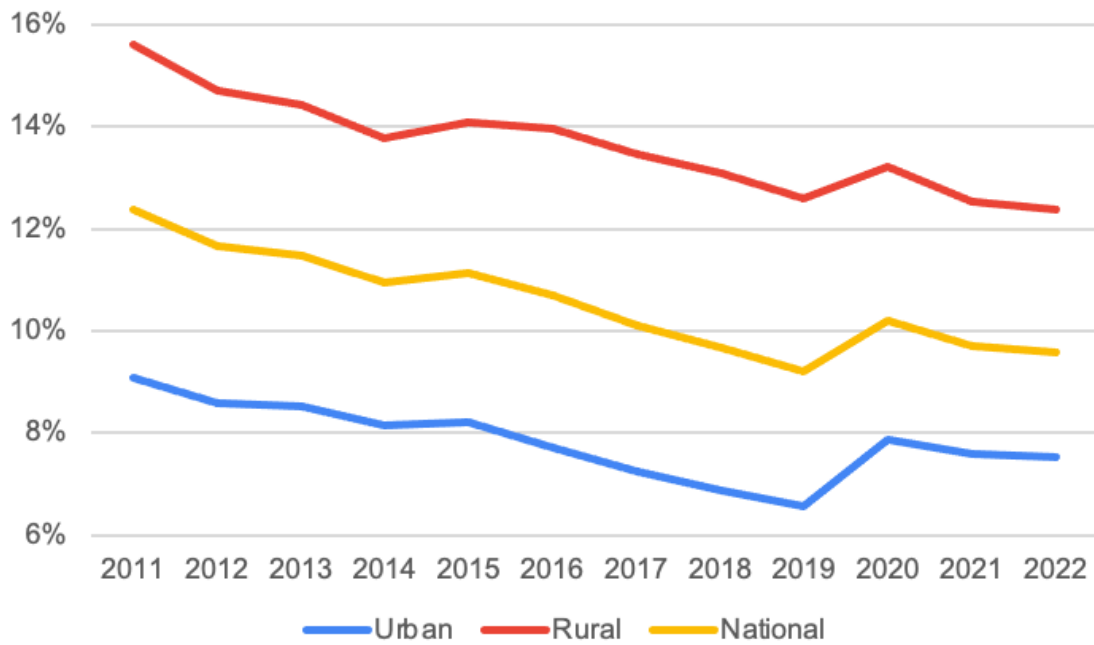


Figure 2. Urban and Rural Poverty Levels in Indonesia  
Source: Central Bureau of Statistics

Other funds that can reduce the poverty are education fund and health fund. Xie, Sarntisart, & Uddin (2023) stated that education can be one of the best solutions to reduce poverty. The particular reasons for this circumstance are education can enhance human capital and increase the quality of the societies, education is an essential way to encourage the development of individual freedom, and education can be a crucial tool to break the intergenerational transmission of poverty. Awan, Malik, Sarwar, & Waqas (2011) found that in the period time of 1998-1999 and 2001-2002 the possibility of a person in Pakistan not being poor increased as their degree of education rises. In addition, according to the World Bank (2016) as cited in Rangongo & Ngwakwe (2019), education is an investment in growing the economy because it empowers natural resources with various skills to foster new ideas for new products, services and technologies. In order to comprehend this, education also needs to be followed by health in order to achieve superior and quality human resources. This is because health is the source of human welfare. Health also plays an important role in labor productivity that can drive economic growth (Bloom & Canning, 2008). Cognitive ability is not the only dimension of human capital that counts, healthier people tend to be more productive and eventually move out of poverty. Moreover, poor health condition can contribute to the production of extreme poverty (Song, Cai, Wang, & Khan, 2022). The Indonesian government's commitment to education and health can be seen from education and health spending through transfers to regions and central government spending.

Several studies prove that village funds can reduce poverty. Sigit & Kosasih (2020) and Saragi et al. (2021) proved that an increase in village funds can reduce poverty in 34 provinces in Indonesia in 2015-2019. This is also in line with Manurung, et al (2022) which found that village funds not only fight hunger, but can also reduce poverty in more than 80,000 villages in Indonesia in 2018-2020. Some other studies that also have similar results are Arham & Hatu (2020) and Ernawati, Tajuddin, & Nur (2021). This happens because village funds are allocated to two things, namely local government operations (30% of village funds) and community and community empowerment (70% of village funds). The forms of empowerment include facility development, infrastructure, health, education, community economic empowerment, village-owned enterprises (BUMDes), increasing village economic potential, and funding village institutions.

This study aims to prove the effect of village fund, education fund, and health fund on poverty alleviating in Eastern Indonesia. The uniqueness of this study is that it focuses on Eastern Indonesia, especially those categorized as 3T areas (frontier, remote, and underdeveloped). This is because the central government distributes village funds higher in proportion, but the poor population in Eastern Indonesia is higher than in the West. Moreover, previous studies focused on national scope or in one

province in Indonesian or focused on several provinces in Western Indonesia such as Taruno (2019); Arham & Hatu (2020); Sigit & Kosasih (2020); Ernawati, Tajuddin, & Nur (2021); Nawawi, Tamar, & Anwar (2021); Saragi, Muluk, & Sentanu (2021); Manurung, Maratno, Permatasari, Rahman, Qisthi, & Manurung (2022); Suharno & Badriah (2022); Rammohan & Tohari (2023). The method in this research is used Panel Least Square (PLS) with data from seven provinces between 2017 and 2022. This research contributes to the advancement of the empirical result of the role of village, education, and health funds on poverty alleviation in Eastern Indonesia. In addition, the findings of this research are expected to provide the insights for the officials in developing a strategy to decrease poverty utilizing fiscal funds.

The rest of this study is structured in four parts: The first part is introduction. The next part presents the research methodology, analysis technique and the definition of used variables. The third part is empirical result and discussion of the findings. The last section reports conclusion including summary of the study and suggestion for officials and further researchers.

**METHODS**

This study uses the Panel Least Square (PLS) method to answer the research objectives. The secondary data used is sourced from the Directorate General of Fiscal Balance of the Ministry of Finance of the Republic of Indonesia and the Central Bureau of Statistics. The scope of this study is 7 provinces in Eastern Indonesia, including 3T with annual data from 2017 to 2022. We refer to Presidential Regulation of the Republic of Indonesia Number 63 of 2020 concerning the determination of underdeveloped regions for 2020-2024 to determine which provinces in Eastern Indonesia that are classified as 3T regions. The seven provinces are Papua, West Papua Maluku, North Maluku, East Nusa Tenggara, West Nusa Tenggara, and Southeast Sulawesi. Based on our research purpose, this study uses the percentage of poor people as the dependent variable while the realization of village fund measured in billion *rupiah*, realization of education fund (Edu) measured in billion rupiah, and realization of health fund (Health) measured in billion rupiah are the independent variables. Since the implementation of education requires support from various aspects, this research tries to use more complete indicators to reflect the funds used to encourage the implementation of education. The realization of education fund is constructed from the sum of school operational assistance fund, special allowance fund for region government employees (PNSD) teachers in special regions, and region government employees (PNSD) teacher professional allowance fund. The model used in this study modifies the research of Ernawati et al. (2021). This research does not use several variables as in Ernawati's research because it focuses on finding the effect of village funds on poverty. The results of the modification model are as follows:

$$Pov_{it} = \beta_0 + \beta_1 VF_{it} + \beta_2 Edu_{it} + \beta_3 Health_{it} + \varepsilon_{it} \dots\dots\dots (1)$$

Descriptions:

- $Pov_{it}$  = The percentage of poor people province i in the t-year
- $VF_{it}$  = The realization of village fund province i in the t-year
- $Edu_{it}$  = The realization of education fund i in the t-year
- $Health_{it}$  = The realization of health fund i in the t-year
- $\varepsilon_{it}$  = Error term province i in the t-year

Panel Least Square (PLS) requires testing the best model and classical assumption tests. Chow test is conducted to determine the best model between Fixed Effect Model (FEM) and Common Effect Model (CEM). If the chow test prob <0.05, then FEM is better than CEM. Hausman test is conducted to determine the best model between Fixed Effect Model (FEM) and Random Effect Model (REM). If the prob of Hausman test <0.05, then FEM is better than CEM. Lagrange test is conducted to determine the best model between CEM and REM. If the Lagrange test prob <0.05, then REM is better than CEM. This research also conducted a classical assumption test to obtain an estimator that is BLUE (Best Linear Unbiased Estimator).

**RESULTS AND DISCUSSIONS**

To begin with, this study had done the robustness test with the classical assumption test. The result show that this study is free from multicollinearity and normality problems, but not heteroscedasticity. The normality test results show that the probability is greater than alpha (10%), meaning that the data is normally distributed. In the multicollinearity test, there wasn't a considerable relationship between the independent variables, i.e., village fund, education fund, and health fund. It can be seen from the number of correlations among the independent variables are lower than 0,8. Besides multicollinearity test, we also do the heteroscedasticity test. This test aims to test whether in the regression model there is an inequality of variance from the residual one observation to other observations (Ghozali, 2018). Based on the heteroscedasticity test, our data have different variance of residual one observation to another observation remains. Therefore, this study uses cross-section weight to treat heteroscedasticity. In addition, based on the model testing that have been carried out namely Likelihood (Table 1) and Hausman Test (Table 2) showed that the most appropriate model to use to analyze the data is Fixed Effects Model (FEM). Therefore the estimation results table below (Table 3) is the result of the Fixed Effect Model estimation with Cross-section weight.

Table 1. Likelihood Test

Effect Test	Satistic	Probability
Cross-section F	428.5756	0.0000
Cross-section Chi-square	184.7520	0.0000

Source: Statistics outcome, Author's calculation

Table 2. Hausman Test

Test Summary	Chi-Sq. statistic	Probability
Cross-section Random	9.3623	0.0248

Source: Statistics outcome, Author's calculation

The estimation of the regression results (Table 3) shows that generally village fund, education fund, and health fund can reduce poverty in seven provinces of Eastern Indonesia but the effects of these funds are various. Merely village and health funds which are significantly reduce village poverty in the 7 provinces of Eastern Indonesia while the education fund insignificantly reduce village poverty. An increase in the realization of village funds by 1 billion Rupiah can reduce poverty by 0.000481% and an increase in the realization of the health funds by 1 billion Rupiah can reduce poverty by 0.000161%, ceteris paribus. The number of R-Squared of the regression results shows 0.99752. This means that the independent variables can explain the dependent variable by 99.75% and for 0.25% can be explained by other variables to decrease the poverty in Eastern Indonesia.

Table 3. Estimation Results of Panel Least Square

Variable	Coefficient	Probability
C	24.48357	0.0000
Realization of Village Fund	-0.000481	0.0844*
Realization of Education Fund	-0.000758	0.2319
Realization of Health Fund	-0.000161	0.0000*
R-Squared		0.99752

\*) indicates significant at  $\alpha=10\%$

**Realization of Village Fund**

The result of the study regarding the effect of the realization of village fund on poverty alleviation is in line with the research of Sigit & Kosasih (2020) and Saragi et al. (2021) which state that an increase in village funds can reduce poverty in Indonesia. The success of village funds in Indonesia can be

measured by the Village Development Index (IDM). The IDM is a combination of three indices, namely the Social Resilience Index (education, health, social capital, and settlements); the Economic Resilience Index (diversity of community production, access to trade centers and markets, access to logistics, access to banking and credit, and regional openness); and the Ecological/Environmental Resilience Index (environmental quality, potential natural disasters, and disaster response). IDM data for 7 provinces in Eastern Indonesia in 2016, 2018 - 2022 (Figure 3) shows an increasing trend every year, along with the increasing of the realization of village funds. The increasing in IDM shows that the province is not only able to improve environmental quality, but also to reduce poverty and improve community welfare. This can occur because of the use of village funds which intended to increase community productivity through several programs for instance cash labor-intensive, BUMDes empowerment, productive economic business development, and tourism village development (Sigit & Kosasih, 2020). This makes the community's monthly per capita expenditure continue to increase every year (Figure 4). Some villages tend to experience an increase in IDM, but there are also villages that experience a decrease in IDM (Papua). This shows that not all villages continue to experience development, and there is even an indication of regression.

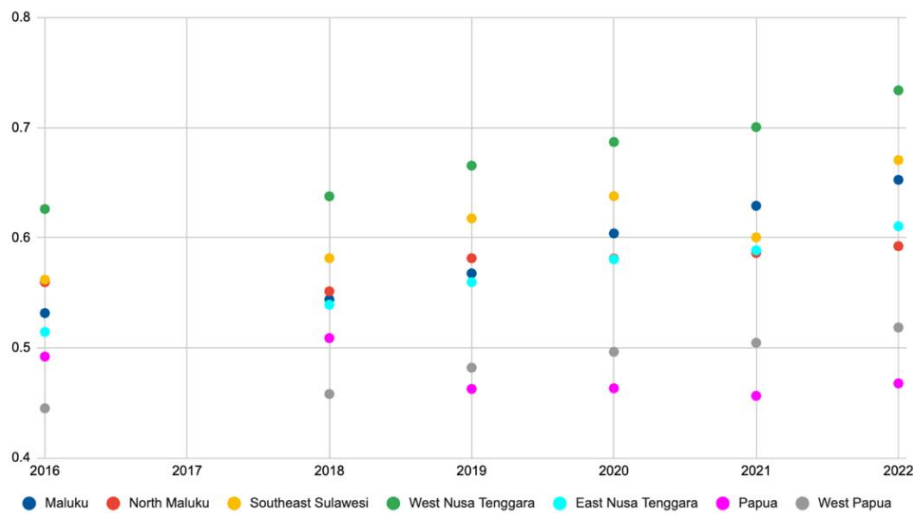


Figure 3. Village Development Index in 7 Provinces in Eastern Indonesia  
Source: Ministry of Villages, Development of Disadvantaged Regions, and Transmigration

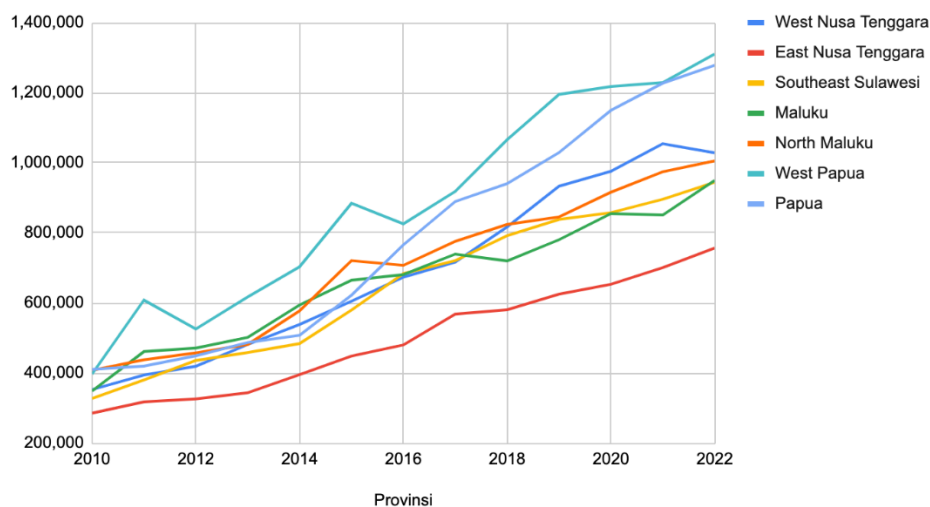


Figure 4. Average Monthly Per Capita Expenditure in Rural Areas (IDR)  
Source: Central Bureau of Statistics

The central government in collaboration with the Papua Provincial Government held a Papua development conference in 2019. The purpose of the conference is to equalize development

specifically in Papua because there has been a decline in development (especially villages). The real steps of the central and regional governments are reflected in policies and initiatives for the development of Papua in terms of human resources to be more qualified, specifically in the fields of education and health. Not only the government, academics, observers, and other government agencies also participated in formulating steps to advance Papua.

Based on data on the realization of village funds, village governments are focusing on improving existing public services (Directorate General of Financial Balance, 2018). This can certainly reduce poverty because adequate facilities and infrastructure can increase community productivity so that they can live more prosperously. Increased productivity through BUMDes and other economic activities is certainly needed, but wider employment opportunities are also needed by the community. This is the particular reason for the small effect of village funds on poverty, because village funds are allocated mainly for the development or improvement of village facilities and infrastructure which does not directly and instantly become a medium to add employment opportunities in a short term. The effect of improving infrastructure facilities will take a long time to has a multiplier effect to increase employment opportunities that eventually will lead to poverty alleviation. Moreover, according to the Deputy for Coordination of Social Welfare Improvement stated that there are approximately 3.3 million people in extreme poverty, predominantly in Eastern Indonesia<sup>1</sup>. The use of village funds in the 2015-2019 period had an impact on reducing poverty, where every one percent increase in village funds per capita was able to reduce the poverty rate by 0.002 percent nationally (Handra, 2022). However, in Eastern Indonesia, we found that an increase in the realization of village funds by 1 billion Rupiah can reduce poverty by 0.000481%, ceteris paribus. This influence may appear negligible when considering the highest incidence of extreme poverty in Eastern Indonesia. The table below illustrates that while the percentage of impoverished individuals has decreased in 7 provinces, the reduction is relatively minimal.

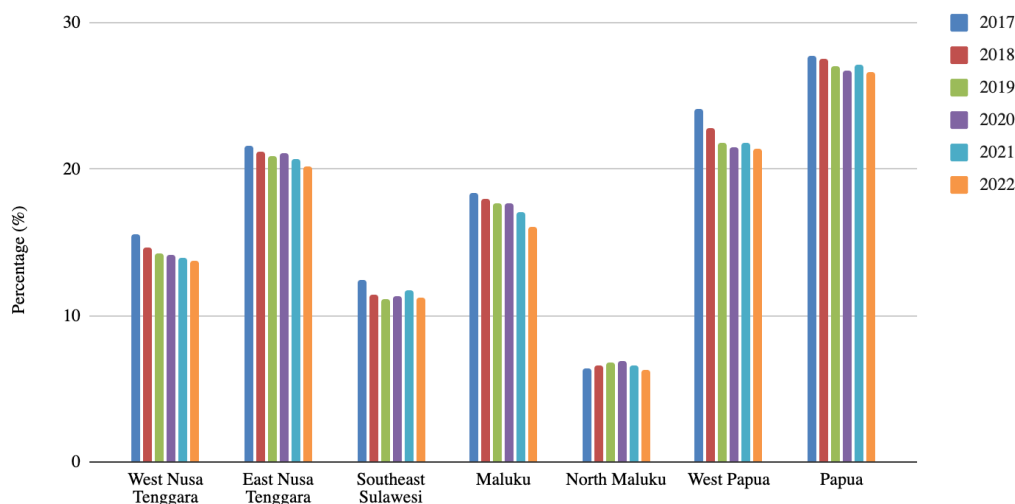


Figure 5. The Percentage of Poor People in 7 Provinces in Eastern Indonesia

Source: Central Bureau of Statistics

### Realization of Education Fund

Referring to the estimation results, in contrast to the effect of village funds on poverty alleviation, the increase in the realization of education funds can reduce village poverty in 7 provinces in Eastern Indonesia but the effect is insignificant. This result is contradictive with the findings of Taruno (2019) and Suharno & Badriah (2022) which found that the effect of education spending which is issued by government significantly reduce poverty both in Indonesia as nationally and district/cities in Central Java. The Directorate of Primary Schools (2019) explains that the problems of education in the 3T areas

<sup>1</sup> <https://nasional.kompas.com/read/2023/08/23/23540381/33-juta-warga-masuk-kategori-miskin-ekstrem-didominasi-indonesia-timur>

include: the lack of availability of education services in some 3T areas, especially secondary education that is affordable or close to the place of residence (Figure 5); lack of access to education services because they are not evenly distributed; the number of educators to support the learning process is minimal and uneven; school enrollment rates are still low; the number and quality of school facilities and infrastructure are inadequate.

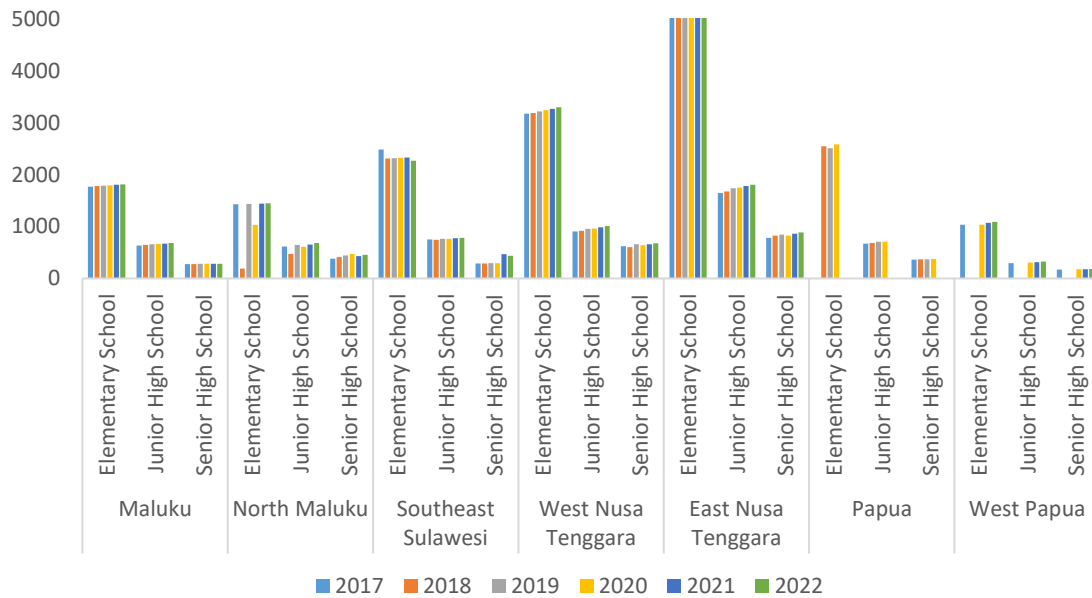


Figure 6. Number of Schools by Education Level  
Source: Central Bureau of Statistics (processed by the author)

According to UNICEF (2019)<sup>2</sup>, children and adolescents from poor families, people with disabilities, and those living in remote and disadvantaged areas are at higher risk of dropping out of school. Primary school completion rates in the 7 eastern provinces of Indonesia are higher than in other provinces (Figure 6). This makes the workforce in Eastern Indonesia dominated by workers with primary school education (Figure 7). The low education of the labor force ultimately makes the wages received relatively lower than workers with higher education. This is because elementary school graduates have limited abilities so that productivity is considered low. If the wages received are lower, then the community will have difficulty meeting their needs and can be categorized as poor. Efforts to improving education quality such as through increased spending for education also will difficult influence the societies if there is a lack of the participation from the societies' itself in education. In other words, funds for establishing school buildings, school operational assistance, allowances for teachers, and other appropriate equipment cannot boost the improvement of the quality of human resources significantly. Eventually, change towards a better income and life is more difficult to achieve. Therefore, the low completion of education is also one of the possible factors that cause the realization of education funds to have no significant effect in reducing the percentage of poor people.

<sup>2</sup> <https://www.unicef.org/indonesia/id/pendidikan-dan-remaja>



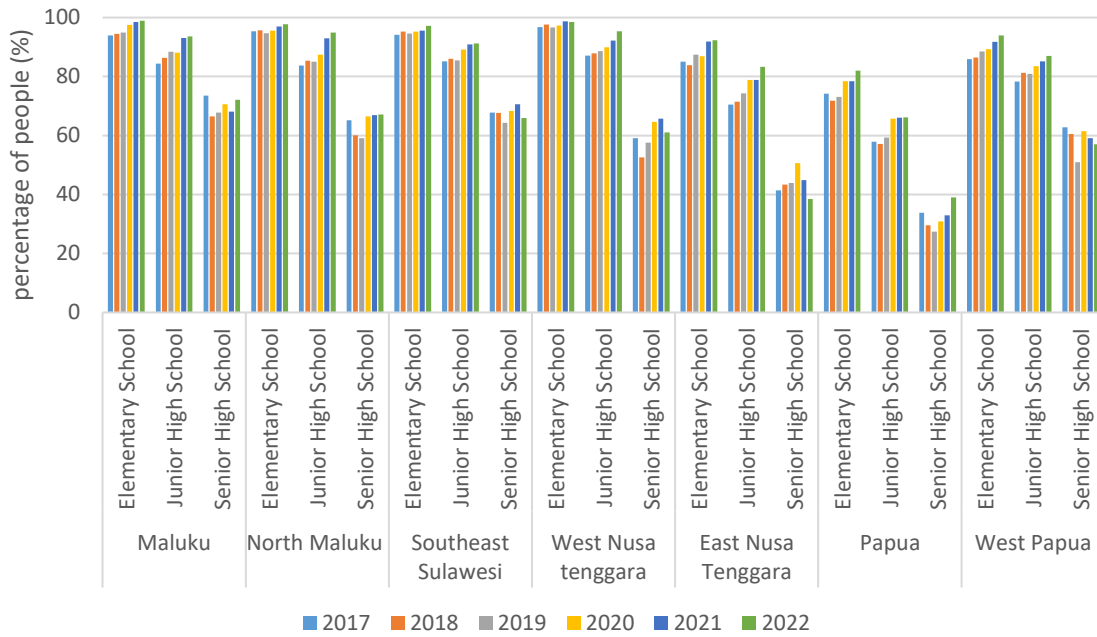


Figure 7. Completion of Education Levels in 7 Eastern Indonesian Provinces  
Source: Central Bureau of Statistics

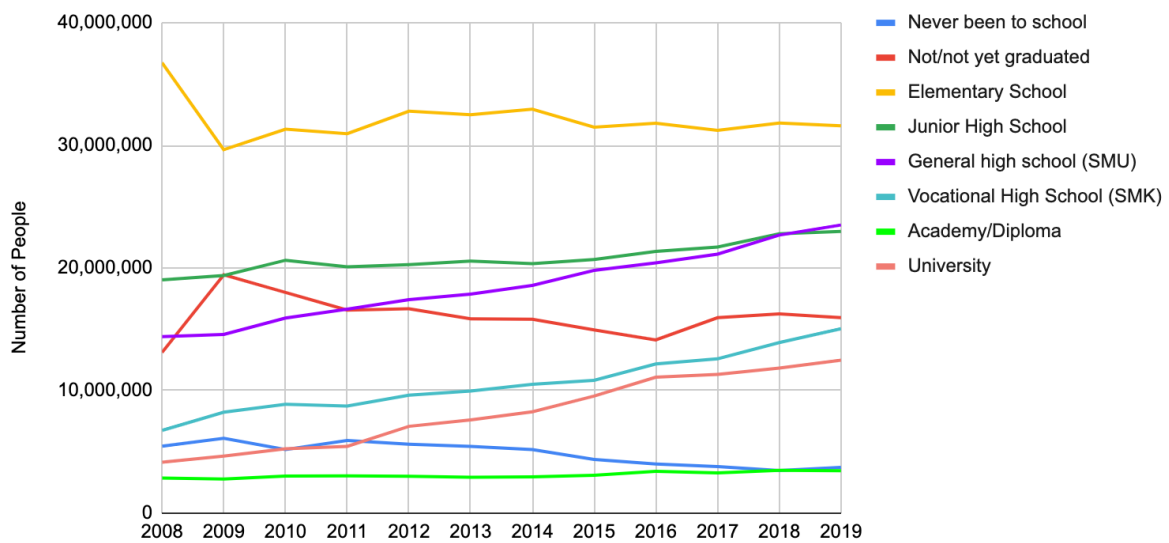


Figure 8. Number of Workers in 7 Eastern Indonesia Provinces by Highest Education  
Source: Central Bureau of Statistics

**Health Fund Realization**

Apart from education, health is also an important aspect in efforts to reduce poverty levels. A healthy body condition has certainly become a prior need for all individuals. Without good health conditions, humans will find it strenuous to carry out productive activities. Madi & Hussain (2007) explained the nexus between poverty and health as a causal relationship. Initially, income level will influence individuals' ability to afford basic health conditions, such as shelter and food. People with low incomes as a poor may not have a sufficient sanitary place to live and cannot purchase necessities such as a healthy diet. In consequences, they can get sick and suffer malnutrition. This condition can certainly affect the declining in productivity. Low productivity may reduce the income that can be generated which makes people poor (Madi & Hussain 2007). This explanation is accordance with (Aurelya,

Nurhayati, & Purba 2022) which stated that population health will lead to increase productivity and family income.

Since health and productivity very closely related, thus improving health condition has become Indonesia government attention to alleviate poverty. The Ministry of Finance of the Republic of Indonesia formulated short-term and long-term strategies to reduce the percentage of poverty in Indonesia<sup>3</sup>. One of the strategies implemented by the government to make this happen is through budgeting special allocation funds for health. This fund is allocated to regions for financing operational activities in health sector which are regional affairs to improve access and quality of health services in region. The realization of health funds in Indonesia is among other things, intended to equalize access to health services (Suratman, 2022), so that poor people also have the same opportunity to access healthcare facilities.

Referring to the estimation output, the realization of health fund statistically has negative effect on poverty. It means, the increase in the realization of health fund can reduce poverty level significantly in 7 selected provinces in Eastern Indonesia. This finding is accordance with the research from Suharno & Badriah (2022) which found that during the 2017 – 2019 period, government spending on health had been dropping the poverty level in central Java. Moreover, Taruno (2019) used panel data from districts and cities in 31 provinces from 2009 to 2018 found that spending allocation on health and education had significant effects to reduce poverty rate in rural areas. Government spending in the health sector has a significant impact on a person's health status. The particular reason for this circumstance is people increasingly using and maximizing health facilities. Healthier society can support productivity so that they can continue working and meet their needs (Anand & Ravallion, 1993; Hojman, 1996; and Ravalion & Bidani, 1994 as quoted from Haile & Niño-Zarazúa, 2018).

In order to alleviate poverty, the utilization of health fund depends on access, availability and affordability of health facilities. Based on central bureau of statistics data, the number of villages equipped with healthcare facilities in 7 provinces in Eastern Indonesia increased from year to year, 2011 to 2018 (Figure 8). Generally, the number of villages which have medical center facilities increased over the year. Public Health Center (PHC) or PUSKESMAS had become the most widespread healthcare facilities in villages in 7 provinces in Eastern Indonesia compared to other healthcare facilities. It is due to PUSKESMAS aims to provide affordable and equitable basic health services to the community at the village or urban village and district. The number of villages with the highest number of PUSKESMAS was in East Nusa Tenggara and Papua while the smallest number of villages was in North Maluku and West Papua. The second highest number of widespread medical center was the pharmacy and followed by hospital. The number of Villages in 7 provinces in Eastern Indonesia which had hospital as a medical center tend to be very small.

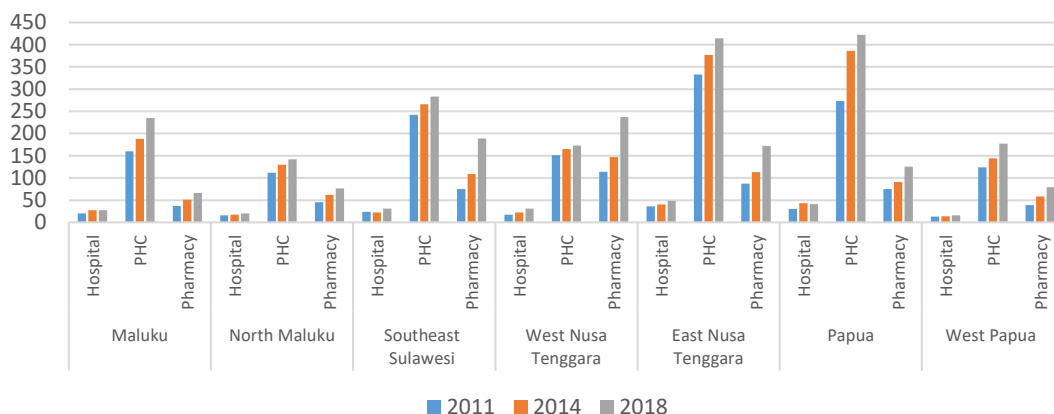


Figure 9. Number of Villages with Health Facilities  
Source: Central Bureau of Statistics

<sup>3</sup> <https://djp.kemenkeu.go.id/kanwil/sulteng/id/data-publikasi/berita-terbaru/2830-memahami-kembali-strategi-pengentasan-kemiskinan-di-indonesia-sebagai-sumber-penerimaan-negara.html>

The poor tend to find it difficult to access health facilities due to their low ability to pay. As a solution, the government issued a National Health Insurance policy (Jaminan Kesehatan Nasional/JKN) to ensure that people can possess health facilities, especially the poor. According to Bappenas (2019)<sup>4</sup>, there is two programs of national health insurance in Indonesia, i.e., Health Social Security Administrator (BPJS health) and Regional Health Insurance (Jamkesda/*Jaminan Kesehatan Daerah*). Based on premium payments, BPJS Health is categorized into two groups. First is BPJS Health is national insurance program that is paid by each beneficiary and second is BPJS PBI (Fee Assistance Recipients). This national insurance program whose funding comes from the state budget (APBN). There is also a regional health insurance program called Jamkesda (*Jaminan Kesehatan Daerah*)/Regional Health Insurance. This insurance program is funded from regional income and expenditure budget (APBD/*Anggaran Pendapatan dan Belanja Daerah*) to cover the shortage of Jamkesmas (*Jaminan Kesehatan Masyarakat*) beneficiaries in a region. Based on the data, government-provided health insurance does not cover the entire population in the 7 Eastern Indonesian provinces (Figures 9 and 10). JKN participants (as a whole) tend to increase every year, the total number of JKN participants in the 7 Eastern Indonesian provinces in 2017 was 61% and continues to increase to 72% in 2021. Southeast Sulawesi experienced the highest increase, followed by NTB and Papua in the second and third positions. However, West Papua experienced a decrease in JKN participants by 1.5%. The increase in JKN participants is expected to continue to increase so that the people become healthier and can get out of poverty because they are more productive.

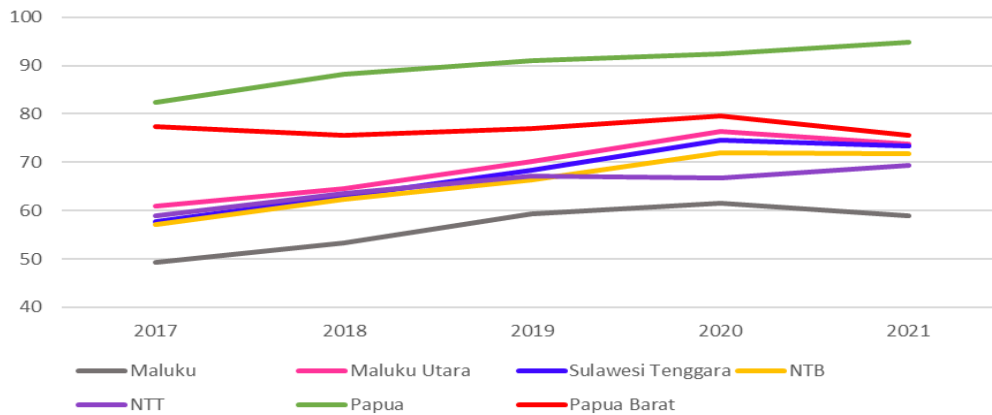


Figure 10. Percentage of Population Who Have Health Insurance

Source: Central Bureau of Statistics

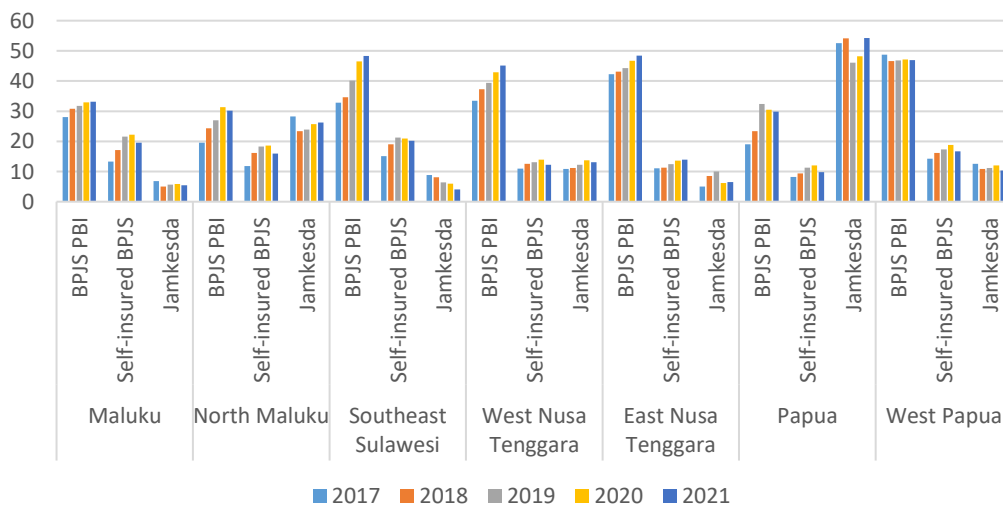


Figure 11. Percentage of Population Who Have Health Insurance Based on Programs

Source: Central Bureau of Statistics

<sup>4</sup> [https://sepakat.bappenas.go.id/wiki/Kepemilikan\\_Jaminan\\_Kesehatan](https://sepakat.bappenas.go.id/wiki/Kepemilikan_Jaminan_Kesehatan)

The increase in the number of health facilities and the proportion of the societies participation on using national health insurance varies in each province. At the same time, this increase occurred with an improvement of health condition in 7 selected provinces in Eastern Indonesia which is reflected through the increase of Human Development Index (HDI), especially in health dimension, i.e., life expectancy (Figure 11). This finding indicates that the government effort to improve human capital by improving health services is achieved. Easy access to health services ultimately will improves the level of public health which is expected to encourage the community's ability to produce more output and earn more income. Thus, the poverty alleviation will be accomplished.

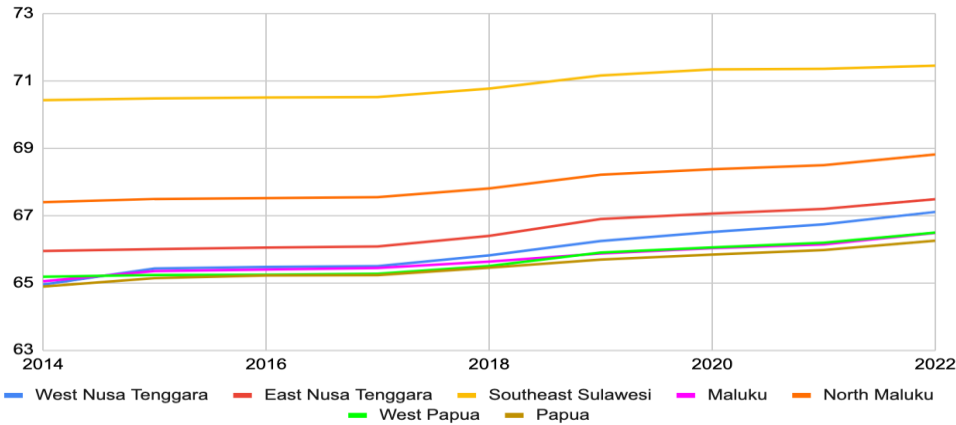


Figure 12. Life Expectancy in 7 Provinces in Eastern Indonesia  
Source: Central Bureau of Statistics

**CONCLUSION**

Using annual data from 2017-2022 and Panel Least Square method, this study found that the realization of village fund and health fund significantly reduced poverty in 7 Eastern Indonesian provinces which are classified as 3T category. The use of village funds used to increase productivity could increase community per capita expenditure, meaning that community welfare was increasing every year. This was also shown by the IDM which continues to increase every year, which means that there was an increasing community productivity, a decreasing in poverty and an increasing in community welfare. Similarly, the health fund used to improve access and quality of health services in region, so poor people also have the same opportunity to access healthcare facilities. When health communities improve, it will improve their productivity and lead to increase their income and decrease communities' poverty. This research also found that education could reduce poverty but the effect was not significant. The possible reasons of this finding were because the majority of beneficiaries of the realization of education funds were at the primary school level. If the wages received are lower, then the community will have difficulty meeting their needs and can be categorized as poor. In other words, the low completion of education is also one of the possible factors that cause the realization of education funds to have no significant effect in reducing the percentage of poor people. Efforts to accelerate poverty reduction should not only focus on increasing quantity in the education sector. However, quality improvement also needs special attention. Future research needs to use longer annual data and cover not only 7 provinces in Eastern Indonesia. Future research can also compare the effect of village funds on poverty between western and Eastern Indonesia. The variables used can also be added and more specific such as the realization of village funds for productivity, the interaction of health and education funds, village original income, financial assistance from the province, and others.

**REFERENCES**

Arham, Muhammad Amir, and Rauf Hatu. 2020. "Does Village Fund Transfer Address the Issue of Inequality and Poverty? A Lesson from Indonesia." *Journal of Asian Finance, Economics and Business* 7(10): 433–42. doi:10.13106/jafeb.2020.vol7.no10.433.

- Aurelya, Tasya, Nurhayati Nurhayati, and Samuel Fery Purba. 2022. "Pengaruh Kondisi Sektor Kesehatan Terhadap Pertumbuhan Ekonomi Di Indonesia." *Jurnal STEI Ekonomi* 31(02): 83–92. doi:10.36406/jemi.v31i02.752.
- Awan, Masood Sawar, Nouman Malik, Haroon Sawar, and Muhammad Waqas. 2011. "Impact of Education on Poverty Reduction." *International Journal of Academic Research* 3(1): 659–64. <https://www.researchgate.net/publication/215867059>.
- Bloom, David E, and David Canning. 2008. Population Health and Economic Growth Commission on Growth and Development. [www.growthcommission.org/contactinfo@growthcommission.org](http://www.growthcommission.org/contactinfo@growthcommission.org).
- Dhiya, A., Kathya, K., & Mingshen, M. (2021). Endogenous Growth Theory: The Impact of government expenditures in education and health on the economy. *Jurnal Keuangan dan Anggaran Negara Indonesia*, 3(1), 20-38.
- Directorate General of Financial Balance. 2018. 2 Buku Pintar Dana Desa: Dana Desa Untuk Kesejahteraan Rakyat.
- Directorate of Primary Schools (Direktorat Sekolah Dasar). 2019. "Majalah Sekolah Dasar Cerdas Berkarakter: Rembuk Bersama Para Pemangku Kepentingan." Direktorat Pembinaan Sekolah Dasar, Direktorat Jendral Dikdasmen Kemendikbud: 1–74.
- Ernawati, Ernawati, Tajuddin Tajuddin, and Syamsir Nur. 2021. "Does Government Expenditure Affect Regional Inclusive Growth? An Experience of Implementing Village Fund Policy in Indonesia." *Economies* 9(4). doi:10.3390/economies9040164.
- Ghozali, Imam. 2018. Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25. Semarang: Badan Penerbit Universitas Diponegoro.
- Haile, Fiseha, and Miguel Niño-Zarazúa. 2018. "Does Social Spending Improve Welfare in Low-income and Middle-income Countries?" *Journal of International Development* 30(3): 367–98. doi:10.1002/jid.3326.
- Handra, H. (2022). Analisis Kebijakan Dampak Dena Desa Terhadap Kemiskinan, Perekonomian, Pengangguran, dan Pelayanan Publik Periode 2015-2019. Jakarta: Kompak.
- Madi, Haifa Husni, and Jaffar Syed Hussain. 2007. "The Role of Health Promotion in Poverty Reduction." *Eastern Mediterranean Health Journal* 13(6): 1249–55.
- Mahmud, Amir, Dedy Prayogo, Nurdian Susilowati, Bestari Dwi Handayani, and Mardi Mardi. 2023. "Analyzing the Effects of System Quality on the Net Benefits of the Village Financial System (Siskeudes): Information Quality and User Satisfaction as Mediating Variables." *MANAGEMENT AND ACCOUNTING REVIEW* 22(1): 105–27.
- Manurung, Elizabeth T., Sylvia F.E. Maratno, Paulina Permatasari, Arif B. Rahman, Reifa Qisthi, and Elvy M. Manurung. 2022. "Do Village Allocation Funds Contribute towards Alleviating Hunger among the Local Community (SDG#2)? An Insight from Indonesia." *Economies* 10(7). doi:10.3390/economies10070155.
- Nawawi, Juanda, Muhammad Tamar, and Sakaria Anwar. 2021. Analysis of The Utilization of Village Fund In Poverty Alleviation in Wajo Regency During The Covid-19 Pandemic.
- Rammohan, Anu, and Achmad Tohari. 2023. "Rural Poverty and Labour Force Participation: Evidence from Indonesia's Village Fund Program." *PLoS ONE* 18(6). doi:10.1371/journal.pone.0283041.
- Rangongo, Mamoloko F, and Collins C Ngwakwe. 2019. "Human Capital Investment and Economic Growth: A Test of Endogenous Growth Theory in Two Developing Countries." *Acta Universitatis Danubius.Oeconomica* 15(1): 92–107.
- Sandjaja, Ferensky Regina, Ferinda Nafisa, and Ita Nurmanti Manurung. 2020. "The Impact of Fiscal Decentralization on Welfare in Selected Provinces in Indonesia." *Jurnal Bina Praja* 12(1): 21–31. doi:10.21787/jbp.12.2020.21-31.
- Saragi, Novita Briliani, M.R. Muluk, and I Gede Eko Putra Sri Sentanu. 2021. "Indonesia's Village Fund Program: Does It Contribute to Poverty Reduction?" *Jurnal Bina Praja*: 65–80. doi:10.21787/jpb.13.2021.65-80.
- Sigit, Tri Angga, and Ahmad Kosasih. 2020. "Pengaruh Dana Desa Terhadap Kemiskinan: Studi Tingkat Kabupaten/Kota Di Indonesia." *Indonesian Treasury Review: Jurnal Perbendaharaan, Keuangan Negara dan Kebijakan Publik* 5(2): 105–19.

- Suharno, Suprih Handayani, and Lilis Siti Badriah. 2022. "The Effectiveness of Local Government Spending on Poverty Rate Reduction in Central Java, Indonesia." *EKO-REGIONAL* 17(1): 1–8. doi:10.20884/1.erjpe.2022.17.1.1848.
- Taruno, Hendrawan Toni. 2019. "Public Spending and Poverty Reduction in Indonesia: The Effects of Economic Growth and Public Spending on Poverty Reduction in Indonesia 2009-2018." *The Indonesian Journal of Planning and Development* 4(2): 49–56. doi:10.14710/ijpd.4.2.49-56.
- Xie, Xiaowen, Saran Sarntisart, and Md. Nasir Uddin. 2023. "The Impact of Education Investment on Regional Poverty Alleviation, Dynamic Constraints, and Marginal Benefits: A Case Study of Yunnan's Poor Counties." *Economies* 11(2): 42. doi:10.3390/economies11020042.