



Do Fund's Village, Economic Growth, Inequal Income Distribution, Unemployment Rate, and Human Development Index Affect Poverty in Indonesia?

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Abstract. This study aims to determine the influence of the linkage of the fund's village program, economic growth, inequality of income distribution, unemployment rate, and human development index on poverty alleviation in Indonesia in the short and long term. The method used in this research is to use the panel data regression and Generalized Methods of Moment (GMM). The data used is secondary data with a cross-section (provinces) and time series (years) data. The cross-section data used is from 33 provinces in Indonesia. The time series data used is annual data from 2017 to 2022. The results showed that the fund's village, unequal income distribution, and unemployment had a significant positive effect on poverty in Indonesia partially. In comparison, economic growth and the human development index had a significant negative effect on poverty. Poverty decreases in Indonesia as economic growth and HDI both rises. The interaction of the fund's village and the human development index, in contrast, has a negative and significant impact on the poverty rate, according to the findings of the GMM System. When fund's villages are used to build human resources, the poverty rate is reduced.

Keywords: Poverty; Fund's Village, Economic Growth, Income Distribution Inequality, Human Development Index.

1 INTRODUCTION

Every nation, but particularly developing nations, struggle with poverty and unemployment as obstacles to economic progress. A nation's ultimate purpose is to alleviate poverty and foster prosperity for its citizens. The level of poverty in a nation or region serves as an indicator of the general welfare of its citizens; the greater the percentage of the population who live in poverty, the less prosperous the area is; and the lower the percentage of the population who live in poverty, the greater the prosperity of the area.

The rising birth rate in Indonesia is a sign of the country's growing population. The difficulty in supplying the country's food demands is a result of Indonesia's high degree of poverty. This is consistent with studies (Damanik & Sidauruk, 2020), which claims that as population grows, so does the number of the impoverished. Every person who

resides in a particular region is the in-question resident. Population growth is impacted by migration, mortality, and fertility. The labor force will increase due to population growth.

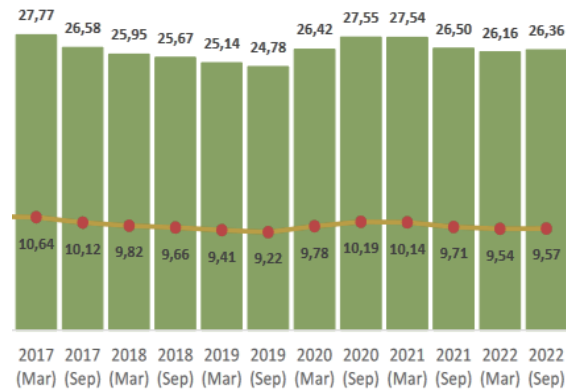


Fig. 1. Number (in million people) and Percentage of Poor Population

The number of poor people in Indonesia in September 2022 reached 26.36 million people. Compared to March 2022, the number of poor people increased by 0.20 million people. The percentage of poor people in September 2022 was recorded at 9.57 percent, an increase of 0.03 percentage points from March 2022.

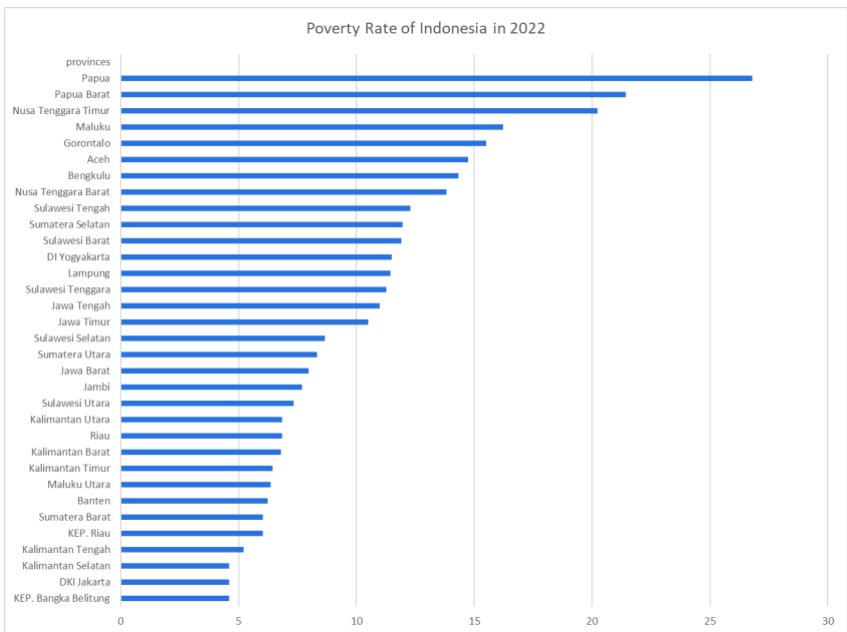


Fig. 2. Percentage of Poverty of Indonesia's Provinces in 2022

Based on the figure 2 above, there are 16 provinces in Indonesia or 47 percent that have a poverty rate above the average (10,37%) in 2022. They are Papua, West Papua, East Nusa Tenggara, Maluku, Gorontalo, Aceh, Bengkulu, West Nusa Tenggara, Central Sulawesi, South Sumatra, West Sulawesi, DI Yogyakarta, Lampung, Southeast Sulawesi, Central Java, and East Java. It increased by approximately 3 percent from 2021 of 44 percent.

Two key elements determine whether a nation has high or low levels of poverty: the level of national income (economic growth) and the disparity in income distribution. No matter how high a country's per capita national income may be, as long as the income distribution is unequal, the poverty rate in that nation will unquestionably remain high. Contrarily, poverty will also be more pervasive if the average amount of national income is low, regardless of how evenly the distribution of money is within a nation. *Ceteris paribus*, economic expansion without a corresponding increase in work possibilities will lead to income distribution inequality, which will raise unemployment and poverty levels. It takes time to match workers with jobs, which is one of the causes of unemployment. Worker preferences and skills vary, and different jobs require different qualities. Therefore, a key factor in lowering unemployment and poverty is the human development index, created from three basic dimensions, one of which is knowledge.

The Nawacita program, which includes a program targeted at eliminating rural poverty, essentially developing Indonesia from the periphery, is one of the Jokowi government's initiatives to achieve so. To close the gap between rural and urban people, one of the projects is the Fund's Village, which was launched in 2015. Each village in each district receives a specific amount through this program. These monies are being utilized to construct labor-intensive basic infrastructure, and it is anticipated that they will be able to boost local economic development. Fund's Village are APBN funds budgeted annually for villages that are transferred through the district/city APBD and are intended to strengthen village communities as development subjects, improve public services in villages, reduce poverty, advance the village economy, and overcome development gaps between villages.

Based on the description that has been provided, the purpose of this study is to examine the impact of the fund's village program, economic growth, income distribution inequality, unemployment rate, and human development index on reducing poverty in 33 Indonesian provinces from 2017 to 2022.

2 LITERATURE REVIEW

Putra et al (2023) stated the village fund allocated turned out to have a positive impact on poverty in Banjarnegara district. This could happen because the village fund allocations that are used more are aimed at the maintenance of the village government. The expenditure of village funds on each village in Banjarnegara district used to enhance the empowerment of the village community, belongs to the least in comparison with other expenditures, so not optimal. The village funds in Banjarnegara district are much used for operational allocations and administration of the village government

such as office writing equipment, other supporting tools as well as routine expenditures for village equipment.

The research results by Sigit (2020) showed that the Village Fund had a negative impact on poverty. The distribution of the Village Fund can have an impact on reducing poverty even though there are records that its role is not maximized and still needs to be enhanced.

According to the traditional hypothesis of the trickle-down effect, increased economic activity should result in lower rates of unemployment, poverty, and income distribution inequality. The Kuznets curve hypothesis is refuted by a study that examined twenty-eight African nations between 2001 and 2016 and found a negative correlation between economic growth and wealth disparity in those nations while finding a positive correlation between unemployment rates (Abada et al., 2021).

The growth-poverty-inequality trilemma in Sub-Saharan African, Latin American, and Caribbean nations is examined, and it is discovered that while economic growth lowers poverty, it also causes inequality to rise (Adeleye et al., 2020). A U-shaped association between the number of poor people and per capita income, as well as an inverse U-shaped relationship between income distribution inequality and economic growth, is found when the growth-inequality-poverty (GIP) triangle is tested in sixteen nations between 1990 and 2014. Okun's Law, which shows a significant inverse relationship between economic growth and unemployment, can be used to explain how growth affects unemployment. According to Louail and Benarous (2021), Okun's Law applied to the Algerian economy from 1991 to 2019. For instance, in Mauritius, a 4% shift in the GDP growth rate resulted in a 1% decline in unemployment (Chuttoo, 2020). On the other hand, a study done in Nigeria found that from 1997 to 2019, the growth rates of the agricultural, oil, manufacturing, and service sectors all raised rural unemployment, but only the growth rate of the merchandise sector decreased it in the short run (Ezindu et al., 2021).

It is demonstrated by Zaman and Bashir (2013) in their study titled "The Relationship Between Growth-Inequality-Poverty Triangle and Pro-Poor Growth Policies in Pakistan: The Twin Disappointments" that high economic growth alone will be less effective in eradicating poverty because poverty is a multidimensional issue. Poverty is primarily caused by a number of other problems, including poor governance, income distribution inequality, slow growth, and rapid population expansion. In Pakistan, high economic growth performance also helped to lower the number of the poor, but it had little effect on how wealth was distributed.

Based on the literatur reviews and previous studies, then the hypothesis in this study are as follows: 1). The fund's village variable has a negative relationship to the level poverty. The higher the fund's village issued, the poverty level will be getting lower. 2). The human development index moderates negatively the relationship between fund's village and poverty. The higher the interaction between human development index and fund's village, the poverty level will be getting lower. 3). The economic growth variable has a negative relationship to poverty level. The higher the economic growth, the poverty rate will get lower. 4). The income inequality variable has a positive relationship to poverty level. The higher the income inequality, the poverty level will be higher. 5). The open unemployment rate variable has a positive relationship to the

poverty level. The higher the unemployment rate, the rate poverty will be higher. 6). The human development index variable has a negative relationship to the poverty level. The higher the human development index, poverty rate will be lower.

3 RESEARCH METHODOLOGY

Economic growth, inequality of income, unemployment rate, Human Development Index (HDI), and fund's village (FUND) are the five independent variables used in this study. The poverty rate, or the proportion of the population who live in poverty, is the dependent variable. Secondary data from 33 Indonesian provinces with annual time series for the years 2017 to 2022 were used in this study. The Central Statistics Agency (BPS) and the Directorate General of Fiscal Balance (DJPk) of the Ministry of Finance provided the information. Transformed into panel data, which combines cross sectional data (provinces) with time series data (years).

The primary estimation method in this work was the Dynamic Panel of Generalized Method of Moments (GMM). The sample of provinces in this study were greater than the time-series observations, making this GMM estimator more suitable and usable for panel data with large cross-section observations and small time-series observations. First, the GMM estimator's superiority to static panel estimators such as the Pooled OLS model, Random Effect model, and Fixed-effect model was the basis for choosing it for this investigation. Accordingly, GMM addresses issues and problems of endogeneity, specific effect, avoiding dynamic panel bias, and the possibility of obtaining consistent parameter estimates even in the presence of measurement errors and endogeneity of regressors (Bond et al., 2001). The inclusion of the lagged dependent variable renders the coefficient estimate biased and inconsistent. Due to its capacity to handle the correlation between lagged dependent variables and the unobserved residuals of the model, the GMM estimator is favored when it comes to the nature of these variables, which demonstrates the dynamic link among them.

The model used in this study consists of a baseline model and an interaction model.
Baseline Model:

$$POV_{it} = \alpha_0 + \alpha_1 POV_{it-1} + \alpha_2 GROWTH + \alpha_3 INEQUAL_{it} + \alpha_4 UNEMP_{it} + \alpha_5 HDI_{it} + \alpha_6 FUND_{it} + \theta_i + \mu_t + \varepsilon_{it} \quad (1)$$

In the following equation, POV stands for poverty, economic growth is Gross Regional Domestic Product (GRDP) measures the economic performance of a region at constant prices, INEQUAL is income distribution inequality (Gini index), UNEMP is the open unemployment rate, HDI is the human development index, FUND is fund's village, μ_t represents time-specific effect, θ represents province-specific effect, and ε represents the error term, while i represents the observations of all panel data members at time t . The full presentation of the empirical model is given below.

Interaction Model:

$$POV_{it} = \alpha_0 + \alpha_1 POV_{it-1} + \alpha_2 GROWTH + \alpha_3 INEQUAL_{it} + \alpha_4 UNEMP_{it} + \alpha_5 HDI_{it} + \alpha_6 FUND_{it} + \alpha_7 (FUND * HDI)_{it} + \theta_i + \mu_t + \varepsilon_{it} \quad (2)$$

4 RESULT / FINDING

The factors utilized to analyze the effects of economic growth, income distribution inequality, unemployment rate, HDI, and fund's village on poverty are shown in Table 1. With a standard deviation of 5.45, poverty has a mean of 10.78(%). Economic growth has a standard deviation of 3.98 and an average value of 4.023(%). With a standard deviation of 0.056, income distribution inequality has an average value of 0.278. The average unemployment rate is 4.739 percent, whereas the HDI is 70.63 (with a standard deviation of 3.628). The fund's village has an average value of 3.03(%) and a standard deviation of 2.874.

Table 1. Decriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
Poverty	198	10.77985	5.451492	3.78	27.76
Growth	198	4.022677	3.982019	-15.74	22.94
Inequality	198	0.277798	0.0558252	0.182	0.459
Unemployment	198	4.738535	1.722285	0.88	9.91
HDI	198	70.63232	3.628054	59.09	80.64
Fund's Village	198	3.030366	2.874061	0.3064229	11.94742

Based on the proportion of poverty levels and the percentage of fund's village in each Indonesian province, the Klassen typology mapping, which is depicted in Figure 3, is used to place each province in a Cartesian diagram of four quadrants. The province of 1th quadrant has a high rate of poverty and large amount of fund's village. A province called 2nd quadrant has a large amount of fund's village and a low proportion of poverty. The province of 3rd quadrant has a high rate of poverty and a little amount of fund's village. Provincial poverty rates and fund's village amounts are low in 4th quadrant. Overall, from 2017 to 2022, there haven't been any appreciable differences between the quadrants.

According to Figure 3, the average fund's village distributed to each province in 2022 will account for 3.03% of all regional fund transfers, while the average poverty rate for Indonesian provinces will be 10.47%. Aceh, South Sumatra, Lampung, Central Java, East Java, East Nusa Tenggara (NTT), and Papua are the provinces of 1th quadrant. The provinces in 2nd quadrant are South Sulawesi, West Java, and North Sumatra. West Sumatra, Riau, Jambi, Kep. Bangka Belitung, Kep. Riau, Banten, Bali, East Kalimantan, South Kalimantan, North Kalimantan, North Sulawesi, and North Maluku are the provinces of 3rd quadrant. In 4th quadrant are the provinces of West Papua, Maluku, Bengkulu, DIY, NTB, Central Sulawesi, Southeast Sulawesi, Gorontalo, and West Sulawesi.

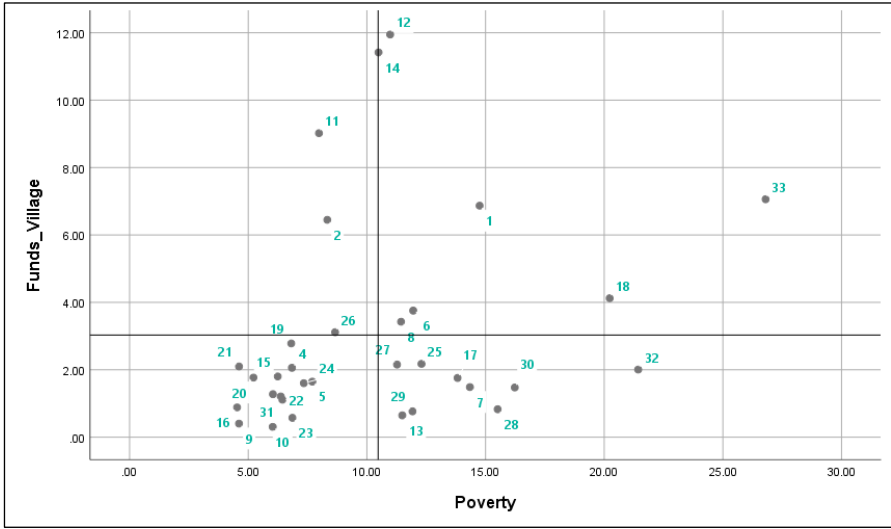


Fig. 3. Mapping of Indonesian Fund’s Village and Poverty 2022

The following is a description of the province number in fig. 3:

- | | | |
|-------------------------|------------------------|------------------------|
| 1. Aceh | 12. Central Java | 23. North Kalimantan |
| 2. South Sumatera | 13. DI Yogyakarta | 24. North Sulawesi |
| 3. West Sumatera | 14. East Java | 25. Central Sulawesi |
| 4. Riau | 15. Banten | 26. South Sulawesi |
| 5. Jambi | 16. Bali | 27. Southeast Sulawesi |
| 6. South Sumatera | 17. West Nusa Tenggara | 28. Gorontalo |
| 7. Bengkulu | 18. East Nusa Tenggara | 29. West Sulawesi |
| 8. Lampung | 19. West Kalimantan | 30. Maluku |
| 9. KEP. Bangka Belitung | 20. Central Kalimantan | 31. North Maluku |
| 10. KEP. Riau | 21. South Kalimantan | 32. West Papua |
| 11. West Java | 22. East Kalimantan | 33. Papua |

Table 2 shows the results of the correlation between poverty as the dependent variable and the independent variable. Economic growth in this study has a negative correlation with poverty. Income distribution inequality and the fund's village have a positive correlation with poverty. Unemployment and HDI have been shown to have a negative correlation with poverty.

Table 2. Matrix of Correlation

Variables	1	2	3	4	5	6
Poverty (1)	1					
Growth (2)	-0.0297	1				
Inequality (3)	0.1889*	0.1102	1			
Unemployment (4)	-0.1955*	-0.0471	0.0907	1		
HDI (5)	-0.6502*	-0.0633	0.1196	0.2684*	1	
Fund’s Village (6)	0.2764*	-0.0349	0.1088	0.1313	-	1
					0.1668*	

*** p<0.01, ** p<0.05, * p<0.1

4.1 Generalized Method of Moment

Table 3, columns 1-4, reports the baseline dynamic panel estimations for the difference generalized method of moments (Diff GMM) and the system generalized method of moments (Sys GMM). Lagged education's importance supported the use of dynamic estimation, the GMM technique, as well as the difference and system created by Arellano and Bond (1991) and Arellano and Bover (1995), which avoided unobserved effects by employing instruments.

The difference GMM estimator has a number of serious flaws. Because it employs instruments derived from differential equations that account for time-invariant variables, it is inaccurate and prejudiced. Furthermore, because time-invariant variables in level regressions exist in panel regressions and are taken into account in the estimation, there are few tools available to correct them. As a result, this makes it necessary to calculate the corresponding coefficients using the difference GMM estimator (Blundell & Bond, 1998).

The study used the system GMM approach, which provided unbiased and effective estimates by combining the regressions in levels and regressions in differences into a single system to overcome any potential biases and inefficiency related to the difference GMM estimator (Arellano & Bover, 1995; Blundell & Bond, 1998). Additionally, it used extra instruments to address the problems with the time-invariant variables, which were created by the inclusion of lagged differences of independent variables.

Three tests were also run as part of this study to ensure the consistency of the GMM estimator. The p-value of the Sargan test of over-identifying limitations indicated that the instruments used in this investigation had a validity of 10% significance level or robust. The term robust here refers to resistance to nonstandard error-covariance structures, such as a robust variance-covariance matrix. This note is shown regardless of the p-value that was found. The findings supported the null hypothesis, which claimed that there was a first-order serial correlation in the differenced residuals but that it could not be rejected. The main emphasis is on the second-order AR(2) test, where it can be shown that all sample specifications passed the tests and that the serial correlation in the residuals is not of order two, as shown by the p-value. The models seem to be sufficiently described since the Hansen test did not reject the null that the tools employed are correct.

The baseline model findings of the GMM system (table 3) revealed that economic growth and HDI were statistically negative and significant at the one percent significance level. The results reveal that a one percent increase in economic growth and HDI reduce poverty in Indonesia by 0.03% and 0.345%, respectively. Meanwhile, income distribution inequality and fund's village positively and significantly affect poverty. A one percent increase in income distribution inequality and fund's village, respectively, increases poverty in Indonesia by 3.97% and 0.337%.

The interaction model of the GMM system shows that a one percent increase in economic growth and HDI results in a reduction in poverty in Indonesia of 0.034% and 0.237%, respectively. It indicates that economic growth and HDI play an essential role in poverty alleviation in Indonesia. These results align with the findings (Abada et al., 2021; Adeleye et al., 2020). Meanwhile, Inequality and Fund's Village positively and

significantly affect poverty. A one percent increase in Inequality and Fund's Village resulted in an increase in poverty in Indonesia of 4.168% and 3.36%, respectively. The two methods (Diff GMM and Sys GMM) show that the interaction between fund's village and the human development index negatively and significantly affects the poverty rate. The poverty rate is lower when fund's village are used to develop human resources. The interaction model of the GMM system shows that a one percent increase in the interaction of the fund's village and HDI results in a 0.04% reduction in poverty in Indonesia.

Table 3. Dynamic Model (GMM)

Variables	Baseline Model		Interaction Model	
	Diff GMM	Sys GMM	Diff GMM	Sys GMM
Lagged Poverty	0.1736955*** (0.0633449)	0.768336*** (0.0403869)	0.1776564*** (0.0611852)	0.7576393*** (0.0384421)
Growth	-0.0187262*** (0.0053086)	-0.0298992*** (0.0049717)	-0.0203083*** (0.0052147)	-0.0343234*** (0.0056909)
Inequality	3.143103*** (0.6683049)	3.972*** (0.648489)	3.240047 (0.6503921)	4.168581*** (0.6565517)
Unemployment	0.0941783** (0.0368848)	0.0688302 (0.045649)	0.0958287*** (0.0357778)	0.0683677 (0.0452546)
HDI	-0.3306043*** (0.0545855)	-0.344664*** (0.0550236)	-0.2146054*** (0.0695327)	-0.2371871*** (0.0627314)
Fund's Village	-0.3989298** (0.2007231)	0.3377745*** (0.0857121)	2.083271*** (0.5985713)	3.3596*** (0.5994842)
FUND* HDI			-0.032868*** (0.0076904)	-0.040848*** (0.0088369)
Constant	31.11099*** (4.500576)	24.5024*** (4.034566)	22.28521*** (5.459318)	16.52683*** (4.602406)
AR(1)	Prob>z=0.0028	Prob>z=0.0048	Prob>z=0.0124	Prob>z=0.0054
AR(2)	Prob>z=0.1529	Prob>z=0.7834	Prob>z=0.3300	Prob>z=0.7632
Sargan Test	Chi2=19.6128	Chi2=25.3506	Chi2=19.06473	Chi2=25.77324
	Prob>chi2=0.0205	Prob>chi2=0.0208	Prob>chi2=0.0246	Prob>chi2=0.0182
Number of Obs	165	165	165	165
Number of Provinces	33	33	33	33

*** p<0.01, ** p<0.05,
*p<0.1

4.2 Robustness Check

This section presents the results of the robustness check. Robustness testing is an econometric technique for determining how differently the main regression coefficient estimates react when the regression specifications are changed in some way, for example, by adding or removing regressors. If the coefficient does not change much from the main empirical results, it is evidence that the research results are robust and can be interpreted reliably (Lu & White, 2014). Therefore, to ensure the robustness of the main results of this study, we use alternative econometric methodologies by adding a regressor of interaction term to examine further the impact of the fund's village on poverty.

Firstly, the robustness check is conducted with basic OLS regressions in Table 4, columns 1-2. Depending on the interaction model, one percent increase in economic

growth and HDI decrease poverty by 0.102 and 0.539 percentage points, respectively. One percent increase in income distribution inequality and fund's village increase poverty by 22.79 and 10.308 percentage points, respectively. Interaction between the fund's village and HDI decreases poverty by 0.14 percentage points.

Secondly, the robustness check is conducted with basic Random Effect Model regressions in Table 4, columns 3-4. Depending on the interaction model, one percent increase in economic growth and HDI decrease poverty by 0.02 and 0.426 percentage points, respectively. One percent increase in income distribution inequality and fund's village increase poverty by 4.237 and 1.37 percentage points, respectively. Interaction between the fund's village and HDI has a negative but insignificant effect on poverty.

Lastly, the robustness check is conducted with basic Fixed Effect Model regressions in Table 4, columns 5-6. Depending on the interaction model, one percent increase in economic growth and HDI decrease poverty by 0.017 and 0.399 percentage points, respectively. One percent increase in income distribution inequality and fund's village increase poverty by 3.589 and 0.849 percentage points, respectively. In comparison, the interaction between the fund's village and HDI has a negative but insignificant effect on poverty.

Table 4. Static Model

Variables	OLS		REM		FEM	
	Baseline	Interaction	Baseline	Interaction	Baseline	Interaction
Growth	-	-0.101728	-	-0.0198875**	-	-
	0.1344938*	(0.064465)	0.019276**	(0.0078941)	0.016775**	0.0170641**
	(0.0687416)		(0.007844)		(0.007667)	(0.0076769)
Inequality	26.11919**	22.7916**	4.152009***	4.236936***	3.55897***	3.589754***
	*	*	(0.8581389	(0.8622539)	(0.8530064	(0.8540414)
	(4.969008)	(4.67986)))))
Unemployment	-0.2224309	-0.1278646	0.0643454	0.0653076	0.0835852*	0.0846696**
	(0.1661655)	(0.1561203	(0.0424304	(0.0426834)	*	(0.0418034)
))		(0.041768)	
HDI	-	-0.53928***	-	-	-0.4289***	-
	0.969596**	(0.109157)	0.46993***	0.4260524**	0.0493681	0.399389***
	*		(0.0490066	*		(0.0587991)
	(0.0800627))	(0.0590903)		
Fund's Village	0.2757934***	10.30805***	0.1773978	1.370234	0.0855946	0.8496432
	(0.0980725)	(1.856778)	(0.1270549	(0.8358125)	(0.1449941	(0.8388049)
))))
FUND * HDI	-	-	-	-0.0162368	-	-0.0103232
		0.14119**		(0.0112978)		(0.0111625)
		*				
		(0.0261)				
Constant	72.76807**	42.29325***	42.0537***	38.76139***	39.49705**	37.27683***
	*	(7.652757)	(3.456729)	(4.233019)	*	(4.170138)
	(5.54784)				(3.408234)	
R-squared	0.5269	0.5898	0.4828	0.5085	0.4779	0.5025
Observations	198	198	198	198	198	198
Number of Provinces	33	33	33	33	33	33

*** p<0.01, ** p<0.05, * p<0.1

5 DISCUSSION

Based on the statistical results presented in the previous section, increased fund's village leads to a increase in poverty. On the other hand, increased the interaction between fund's village and human development index leads to a decrease in poverty. If fund's village are channeled to a village, we cannot be sure this will reduce community poverty. It depends on how fund's village are distributed. This implies that considering interaction effects is very important. When we have a statistically significant interaction effect, we cannot interpret the effect of the primary independent variable without considering the interaction. In the example of the statistical results above, we cannot answer the question of whether fund's village will reduce poverty without knowing the use of these fund's village. Again, "it depends on what the fund's village are used for." If fund's village are used for corruption or misused, there will be an imbalance in the distribution of funds, limited infrastructure, and capacity. The expected positive impact of increasing fund's village will not be achieved. Funds that should be used to reduce poverty are misused by irresponsible parties or used for personal gain, so they don't reach needy people. If fund's village are channeled to unemployed people without being given knowledge and skills, then this also cannot reduce poverty and can even increase poverty due to economic dependence. Suppose villages only rely on fund's village as their primary source of income and need to develop other sustainable economic sectors. When fund's village decrease or stop, these villages will experience more significant economic difficulties. However, if fund's village are used to develop infrastructure or increase knowledge and skills in managing fund's village, the benefits will be optimal in reducing poverty. Therefore, it is essential to carry out a more in-depth and contextual analysis of the specific situations that might occur to understand the relationship between fund's village and poverty in Indonesia, considering the interaction of fund's village with other variables. This is in line with research conducted by Putra et al (2023) which stated the village budget allocated to empower the villagers belongs to the smallest expenditure compared to the other. But these results are not consistent with the research by Sigit (2020).

Based on the results, increased economic growth leads to a decrease in poverty, increased HDI leads to a decrease in poverty, and increased income distribution inequality leads to an increase in poverty in Indonesia. This finding has been supported by robustness checks which show consistent results. These results in line with Abada et al (2021), Adeleye et al (2020), and Zaman and Bashir (2013).

6 CONCLUSION AND RECOMMENDATION

The GMM system's baseline model results showed that economic growth and HDI were statistically significant at the one percent level and statistically negative. According to the findings, poverty decreases in Indonesia as economic growth and HDI both rise. The impact of Fund's Village and income distribution inequality on poverty is both positive and significant. The study also demonstrates how the GMM system's interaction model for enhancing economic growth and HDI results in a decrease in

Indonesian poverty. In the meantime, poverty is positively and significantly impacted by income distribution inequality. This demonstrates how economic growth and HDI are crucial to Indonesia's efforts to reduce poverty.

The interaction of fund's village and the human development index, in contrast, has a negative and significant impact on the poverty rate, according to the findings of the GMM System technique. When fund's village are used to build human resources, the poverty rate is reduced. The advantages are demonstrated to be ideal in reducing poverty. Fund's village are utilized to develop the knowledge and skills of human resources in managing village money.

The best piece of advice is to always expect the government to work toward making the fund's village more pro-poor. Additionally, the regulations that have been created create a system for managing Fund's village that is effective, efficient, and responsible, enabling the Government to achieve its objectives through the distribution of fund's village. For this reason, it is essential to develop institutional capacity and human resources, as well as openness, accountability, and oversight in the management of fund's village and finances, for village officials, the community, and village support employees. It is important to analyze the budgeting for fund's village in a few provinces that have high poverty rates but receive low amounts of fund's village and low poverty rates but receive high amounts of fund's village so that the fund's village distributed can be efficient and on target. The government is also anticipated to be able to enhance the availability of facilities that promote development, such as those for education, health, and employment, which can enhance the standard of living for the Indonesian populace. Additionally, it is hoped that the government will host skills training programs that can improve the employability of workers who lack access to quality education, such as counseling for micro, small, and medium-sized enterprises, instruction on turning waste into products with added value, and building infrastructure that is on target outside of the city center, which is also anticipated to be one of the solutions so that high economic standards are maintained.

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