



# Maqashid Shariah Indicators Impact on Poverty Eradication in Java Island

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## Abstract

Understanding poverty from both economic and Islamic ethical perspectives is essential to formulating inclusive development strategies that align with societal values. This study aims to analyze the determinants of poverty rate in Java Island during the period 2014–2023. The method used in this study is panel data analysis. Panel data is a combination of time series data and cross section data. The analytical method used for panel data is panel data regression. It allows observation of the dynamics of changes in variables over time as well as comparisons between regions. Data obtained from the Central Statistics Agency and other official sources. A panel data analysis model is used to evaluate the influence of each variable on the poverty rate. The research results show that education (*hifzul 'aqal*) and population (*hifzul nasl*) has a negative and significant effect on poverty rate, while the unemployment rate shows a positive and significant influence. Test Simultaneous confirms that these three variables work together makes a significant contribution to poverty on the island of Java. The coefficient of determination obtained was 0,5533, indicating that around 55,33% of poverty rate was influenced by education, population, and unemployment, while the rest was influenced by other factors not analyzed. The novelty of this study is the measurement of the impact of the maqasid shariah indicators, namely *hifzul 'aqal*, *hifzul nasl*, and unemployment that is contrary to *hifzul maal* in a simple way on the poverty rate eradication in Java. This study tries to open the new perspective that Maqasid Shariah has been realized in Javanese society with various modern indicators, so that a process of synchronization and alignment of understanding is needed so that the impact of Maqasid Shariah can be measured.

**Keywords:** Maqashid, Poverty, Education, Population, Unemployment

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## I. Introduction

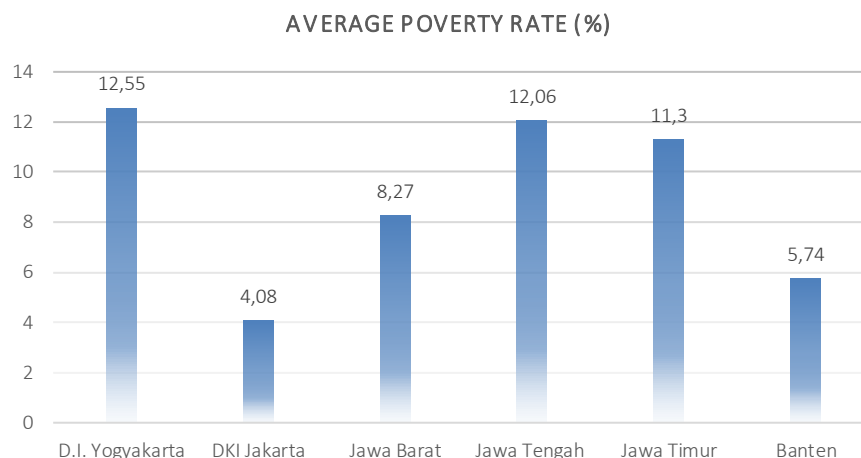
One important indicator of a person's welfare and adequacy of life is the economic development of the country where they live (Sultan et al., 2023). The prosperity of society is generally achieved through various development efforts that focus on economic development. The goal of economic development is to create equitable prosperity among the community by overcoming various problems that arise, such as unemployment and poverty (Arfianto & Balahmar, 2014; Lakner, et.al., 2022; Maskur, 2023). Poverty is a profound economic problem and needs to be addressed in a serious and comprehensive manner. It is a complex and multidimensional issue, covering various aspects of human life, including health, education, employment, and the social environment. Addressing poverty requires a comprehensive approach involving various integrated strategies and policies, with a focus on improving overall welfare (Ferreira, et.al., 2016; Jolliffe, et.al., 2021). Poverty occurs when individuals or groups fail to achieve the level of economic welfare that is considered the minimum standard for a decent life (Susanto et al., 2018). To overcome poverty effectively, coordination is needed between the government, non-governmental organizations, the private sector, and society itself, even religion. These efforts must include improving access to education, health services, employment opportunities, and social protection, as well as support to improve individual skills and capacities.

Islam prioritizes human welfare both in this world and in the hereafter. Islam in defining human welfare does not eliminate the material aspect, especially individual income as one of its indicators. Islam wants society to be economically prosperous so that they are able to carry out their religious obligations perfectly (Kuyateh & Mustapha, 2022)

In Islam, there are basic needs that must be possessed by every Muslim. These needs are based on the five Maqashid Shariah, namely maintaining religion (Hifdzu Din), soul (Hifdzu Nafs), reason (Hifdzu `Aql), descendants (Hifdzu Nasl) and property (Hifdzu Maal) (Mili, 2014). These five parts are elements of human welfare that must be protected for the benefit of humanity, otherwise it will threaten human existence both individually and in groups. The five objectives of Maqashid Shariah are quite ideal indicators of welfare because they not only include material aspects but also focus on spiritual and moral values.

Indonesia is the largest Islamic country in the world today, with a Muslim population of approximately 207 million people or around 87% of the total population in Indonesia. The Directorate General of Population and Civil Registration of the Ministry of Home Affairs recorded that the population in 6 provinces on the island of Java reached 154.34 million people in June 2022. Java has the largest Muslim population in Indonesia and the world, with most of its population being Muslim. In 2022, around 96.02% or 148.19 million people on the island of Java were Muslim. West Java is recorded as the province with the largest Muslim population on the island of Java, reaching 47.34 million people. Followed by East Java with 40.01 million people, Central Java with 36.48 million people, Banten with 11.52 million people, DKI Jakarta with 9.43 million people, and the Special Region of Yogyakarta with 3.41 million people. The poverty rate in the Java Island area is still relatively high, especially in the Province of D.I. Yogyakarta. This problem is a major challenge for the government in its efforts to improve people's welfare. The

results of efforts to overcome poverty in Yogyakarta show fluctuations, as seen in the following Figure.



**Figure 1.** Percentage of Poor Population in Java Island Province 2014-2023

From the figure 1 above, the Province of D.I. Yogyakarta has the highest poverty rate in Java with an average of 12.55%. Central Java is in second place with an average poverty rate of 12.06%. East Java Province is in third place with a poverty rate of 11.30%. West Java is in fourth place with a poverty rate of 8.27%, while Banten is in fifth place with an average poverty rate of 5.74%. Finally, DKI Jakarta is in sixth place with a figure of 4.08%.

The increase in poverty rates in 2020 was caused by the spread of the Covid-19 virus. Cases of this virus began to emerge in late 2019, and on March 11, 2020, the World Health Organization (WHO) officially declared a pandemic. WHO gave the pandemic status because in the three months since its emergence, this virus had infected 126 thousand people in 123 countries. The pandemic has had a significant impact on economic activity (Scott, et al., 2020; Espitia, 2020; Deb, et.al., 2021). The industrial sector has been disrupted due to a shortage of imported raw materials, decreased exports, delays in the distribution of raw materials and production results, and a reduction in the number of workers and working hours due to the implementation of physical distancing. Activities in the construction sector have been hampered, the supply of goods in the trade sector has been disrupted, and many places in the tourism sector have had to close, followed by other sectors facing similar problems. As a result, many people have experienced a decrease in income or lost their jobs (Lustig, et. al., 2021). With the cost of daily necessities to be met, those who were previously above the poverty line with a mediocre income are at risk of falling into the poor category (Karjono, 2021; Deaton, 2021; Bundervoet, et.al., 2022; Narayan, et.al., 2022). Therefore, this study aims to provide a better understanding of how key factors such as education, population growth, and unemployment, when viewed through the lens of Maqashid Shariah can guide more effective and value-aligned poverty reduction strategies in Java Island.

## II. Literature Review

### Overview of Maqashid Shariah

Poverty eradication is the government's primary responsibility in an effort to improve the quality of life of the community. From an Islamic perspective, the government is expected to not only provide legal protection, but also ensure a decent life for its citizens, including in dealing with poverty issues. To achieve this goal, the government has launched various community empowerment programs and various other forms of assistance. In addition, it is very important to identify factors that influence poverty levels, such as education levels, population, and unemployment rates.

One way to improve the quality of human resources in Islam is through education (hifzu 'aql). Education (hifzu 'aql) provides in-depth knowledge that is very useful in the future, especially in the world of work (Pratiwi, et. al., 2014; Suropto, & Subayil, 2020). In addition, education (hifzu 'aql) is considered a very important long-term investment in economic development (Abdah, et al., 2023). Its crucial role in economic growth has made education a major focus in efforts to improve welfare and reduce poverty (Arsyad, 2010; Nugroho, 2015; Susanto, et al., 2019). Education is an indicator of Maqashid Shariah in this research because it is the most effective way to maintain and develop human reasoning abilities during the history of human life.

In the concept of Maqashid Shariah, the population, if balanced with high quality human resources (HR) (hifzu nasl), can be an asset in development. Conversely, low quality HR can be a burden on development and has the potential to increase poverty. The increasing population growth can increase the need for necessities such as clothing, food, and shelter (Ibrahim, D., Musa, I., & Amasu, G. J., 2015). This has the potential to increase the burden on the limited government budget for the provision of public services (Usman & Diramita, 2018; Agustina, et al 2018). High unemployment rates can hamper economic activity (Purbadharmaja, 2015; Makaringe, 2018). In this study, the total population is becoming an indicator of maqasid sharia because it is evidence that humans still maintain the sustainability of human existence and avoid extinction. While the relationship with poverty is a conclusion of human quality and the success of religious understanding, mental and physical health and educational patterns that have been implemented. This is usually caused by a lack of jobs or layoffs (Shahid, 2007). Unemployment results in reduced or no income to meet daily needs, and if this problem is not addressed immediately, poverty can increase (Ishak, 2018). Unemployment is one thing that is contradictory to Maqashid Shariah in the aspect of hifzu maal.

The novelty of this study is the measurement of the impact of the Maqashid Shariah indicators, namely hifzul 'aql, hifzul nasl, and unemployment that is contrary to hifzul maal) in a simple way on the poverty rate in Java. In this study, there are only three indicators of Maqashid Shariah were used considering that the research period was in the Covid-19 era, so the hifzu nafs indicator (protecting the soul) was not categorized as a research indicator. While hifzu din (protecting the religion) was considered constant and there was no secondary data that could be used as a proxy for the hifzu din indicator.

Java is an island in Indonesia whose majority population is Muslim. Therefore, the practice of Islamic values in realizing the Maqashid Shariah is an urgent consideration. This study tries to open the new perspective that Maqashid Shariah has been realized in Javanese society with various modern indicators, so that a process of synchronization and alignment of understanding is needed so that the impact of Maqashid Shariah can be measured.

### III. Methodology

#### Data

The data used in this study is the poverty rate of all provinces in Java Island from 2014 to 2023. The data used comes from the Central Statistics Agency. The data is a combination of time series and cross section data which is called panel data. This data will be modeled using panel data regression. The dependent variable used in this study is the poverty rate while the independent variables used are School Enrolment Rate (SER) as proxy of education (hifzul 'aql) as  $X_1$  in percent, the total of population (hifzul nasl) as  $X_2$  in nominal, and the the unemployment rate as  $X_3$  in percent. Panel data regression is one of the developments of regression analysis methods. Panel data regression is a regression technique that combines cross section data and time series data, so of course there will be more observations compared to cross section data or just time series data. In general, the use of panel data can provide many advantages statistically and in economic theory. One of them is that panel data is able to explicitly account for individual heterogeneity by allowing individual-specific variables to be used in econometric equations.

By combining mathematical modeling, theoretical analysis, and empirical validation strategies, this study provides a robust framework for understanding the strategic and ethical implications of AI adoption in Islamic finance. The findings offer actionable insights for practitioners, regulators, and policymakers, ensuring that AI-driven innovations enhance efficiency, compliance, and financial inclusion while maintaining Sharia compliance.

#### Method

The general model of panel data regression is expressed in the following equation:

$$Y_{it} = \alpha + \beta_1 \text{SER}_{it} + \beta_2 \text{TP}_{it} + \beta_3 \text{UR}_{it} + \varepsilon_{it} \quad (1)$$

with  $i = 1, 2, \dots, n$  is the number of cross section data and  $t = 1, 2, \dots, T$  is the amount of time series data,  $\alpha$  is the intercept coefficient,  $\beta_1, \beta_2, \dots, \beta_k$  is the slope coefficient with the predictor variable and  $\varepsilon_{it}$  is the regression error from the  $i$ -th data at the  $t$ -th time.

Before carrying out data analysis using the panel data regression model, a multicollinearity test was first performed. This test aims to determine whether in the regression model there is a perfect or near perfect linear relationship between some or all the predictor variables. This test is carried out by calculating the VIF (Variance Inflation Factor) value for each variable. After carrying out the multicollinearity test, modeling was then carried out with panel data regression. There are three methods that can be used to estimate the parameters of the panel data

regression model. The CEM method always uses the same  $\alpha$  for each individual and, in other words, the behavior of data for each individual is the same in various time periods. The regression equation using the CEM approach can be stated as follows:

$$Y_{it} = \alpha + \beta_1 SER_{it} + \beta_2 TP_{it} + \beta_3 UR_{it} + \varepsilon_{it} \quad (2)$$

To estimate parameters in the CEM method, the Ordinary Least Square (OLS) method is used.

The FEM method can be expressed by the equation:

$$Y_{it} = \alpha_1 + \sum_{k=2}^N \alpha_k D_{ki} + \beta X_{it} + \varepsilon_{it} \quad (3)$$

This method assumes that the interception is different for each individual while the slope remains the same between individuals. In distinguishing one individual from another, a dummy variable is used. This model is often called the least square dummy variables (LSDV) model.

The REM method assumes that there are differences in intercept for everyone. So that there are two components of error, namely the overall model error and individual error. The overall model error is a combination of time series data and cross section, while individual errors are errors from each cross-section data. This method can be expressed by the equation:

$$Y_{it} = \alpha + \beta_1 SER_{it} + \beta_2 TP_{it} + \beta_3 UR_{it} + \varepsilon_{it} + \mu_i \quad (4)$$

Where  $\mu_i$  is the error component of the cross-section data. To estimate the random effects model parameters can use Generalized Least Squares (GLS).

Selection of the panel data regression model with the best approach is determined by using the Chow test, Hausman test, and Lagrange multiplier test. The Chow test is used to select the two models between the Common Effect Model and the Fixed Effect Model. Chow test statistics are expressed by the equation:

$$F_{hitung} = \frac{(SSE_1 - SSE_2)(nT - n - K)}{SSE_2(n - 1)} \quad (5)$$

$SSE_1$  is the sum square error of the common effect model,  $SSE_2$  is the sum square error of the fixed effect model,  $n$  is the number of individuals,  $nT$  is the number of multiplications of the time series by cross section, and  $K$  represents the number of independent variables. The hypothesis used is:

$H_0: \alpha_1 = \alpha_2 = \dots = \alpha_n = 0$  (this indicates a suitable CEM model)

$H_1: \alpha_i \neq 0; i = 1, 2, \dots, n$  (this indicates a suitable FEM model)

with the rejection criteria, reject  $H_0$  if  $F_{count} > F_{table}$

This test is a follow-up test that is used to find out which FEM model or REM model is the most appropriate after carrying out the chow test. The test statistics are:

$$W = \hat{q}' [\text{var}(\hat{q}')]^{-1} \hat{q}$$

$$W = (\beta_{MET} - \beta_{MEA})' [\text{var}(\beta_{MET} - \beta_{MEA})]^{-1} (\beta_{MET} - \beta_{MEA}) \quad (6)$$

where  $\beta_{MET}$  is the slope estimation vector of the fixed effect model and  $\beta_{MEA}$  is the slope estimation vector of the random effects model. The hypothesis used is:  $H_0$ : Appropriate REM model  $H_1$ : Corresponding FEM model with the rejection criterion reject  $H_0$  if  $W > \chi^2(\alpha, K)$ .

When the Chow test and Hausman test cannot provide the most suitable model conclusion, the Lagrange Multiplier test is carried out with the test statistical equation:

$$LM = \frac{nT}{2(T-1)} \left[ \frac{\sum_{i=1}^n (\sum_{t=1}^T e_{it})^2}{\sum_{i=1}^n \sum_{t=1}^T e_{it}^2} - 1 \right]^2 \quad (7)$$

Testing using the hypothesis:

$H_0$ :  $\sigma_u^2 = 0$  (this shows CEM is better than REM)

$H_1$ :  $\sigma_u^2 \neq 0; i = 1, 2, \dots, n$  (this shows REM is better than CEM)

with the rejection criteria  $LM > \text{chi-square table}$ , this  $H_0$  rejection indicates that the REM model is better than CEM.

## IV. Results and Discussions

### Result of Model Selection

Various analysis methods are used in this study. Some methods include classical assumption tests, which include normality, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests. In this study, the classical assumption test is considered to be normally distributed and does not contain multicollinearity, heteroscedasticity, and autocorrelation. Below is a panel data regression analysis consisting of three different effect models: Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Chow, Hausman, and Lagrange Multiplier (LM) tests are some of the test techniques used. This study also uses hypotheses, which include partial, simultaneous, and coefficient of determination tests.

Table 1. Chow Test Results

Variable	Coefficient	Std. Err.	t	P> t	[95% conf. interval]	
Education	-.5607829	.0724953	-7.74	0.000	.7063234	-.4152425
Log_Population	-.1783302	.0447309	-3.99	0.000	-.2681313	-.0885292
Unemployment Rate	.1976143	.0910538	2.17	0.035	.0148162	.3804124
_cons	51.36918	5.494786	9.35	0.000	40.33794	62.40042
sigma_u	7.3477684					
sigma_e	62561561					
Rho	.99280274	(fraction of variance due to u_i)				
Prob > F	0.0000					
R-squared	0.5533					

From table 1 above it can be seen that the results of Prob. > F = 0.0000, which means Prob. F < 0.05. It can be concluded that Fixed Effect is better than Common Effect. Therefore, further testing is needed to test whether the Fixed Effect model is better than Random Effect.

**Table 2.** Hausman Test Result

Variable	Coefficients			sqrt(diag(V_b-V_B)) Std. err.
	(b) Fe	(B) re	(b-B) Difference	
<i>Education</i>	-.5607829	-.4152843	-.1454986	..03672
<i>Log_Population</i>	-.1783302	-.1449665	-.0333637	.0079994
<i>Unemployment Rate</i>	.1976143	.1095201	.0880942	..0207678
chi2(3) =	(b-B)'[(V_b-V_B)^(-1)](b-B)= 18.70			
Prob > chi2 =	0.0003			

From table 2, it can be seen that the results of Prob. > chi2 = 0.0003, which means Prob. Chie2 < 0.05. It can be concluded that Fixed Effect is better than the Random Effect. Therefore, the research data will be tested using Fixed Effect.

### Education Variable

The coefficient of -0.5607829 indicates that assuming other variables remain constant, then every one unit increase in education level, such as increasing years of education, is expected to reduce the poverty rate by around 0.56 units. This shows that education significantly affects poverty. In addition, this result is considered very statistically significant with a p-value of 0.000.

### Total Population Variable

The coefficient of -0.1783302 indicates that, assuming other variables remain unchanged, every one percent increase in population is expected to reduce the poverty rate by about 0.18 units. This indicates that there is a negative correlation between population growth and poverty when viewed through a logarithmic scale. In addition, this result is also statistically significant, as indicated by the p-value of 0.000.

### Unemployment Rate Variable

The coefficient of 0.1976143 indicates that, assuming other variables remain constant, every one-unit increase in the unemployment rate is expected to increase the poverty rate by about 0.20 units. This suggests that unemployment has a positive effect on poverty, with higher unemployment rates being proportional to poverty rates. Furthermore, this result is considered statistically significant, with a p-value of 0.035, but with a lower level of significance compared to the previous two variables.

**Table 3.** T-Tets Result

Variable	Coefficient	Std. Err.	t	P> t	[95% conf. interval]	
<i>Education</i>	-.5607829	.0724953	-7.74	0.000	.7063234	-.4152425
<i>Log_Population</i>	-.1783302	.0447309	-3.99	0.000	-.2681313	-.0885292
<i>Unemployment Rate</i>	.1976143	.0910538	2.17	0.035	.0148162	.3804124
_cons	51.36918	5.494786	9.35	0.000	40.33794	62.40042
sigma_u	7.3477684					
sigma_e	62561561					



Variable	Coefficient	Std. Err.	t	P> t	[95% conf. interval]
Rho	.99280274	(fraction of variance due to u_i)			
Prob > F	0.0000				
R- squared	0.5533				

From table 3 above, the F test shows that the probability of  $F < 0.05$ , and the probability value of  $F > 0.0000$ . It is possible that all independent variables affect the poverty rate simultaneously. And the value of determination is 0.5533, it can be concluded that education, population, and unemployment rates correlate with poverty rates of 55.33%. The rest is influenced by other variables or other factors.

## Discussions

Through in-depth analysis using the path analysis calculation method supported by Stata software version 17, this study has produced various significant findings. Based on the results of the analysis, the following is a discussion of the results obtained in this study:

### The Influence of Education on Poverty Rate

Data analysis and hypothesis testing conducted in this study indicate that the Education variable (X1) has a significant negative effect on the Poverty Level. The probability obtained is lower than 0.05 ( $0.000 < 0.05$ ), and the t-value of the Education variable is -0.560783. Causing  $H_0$  to be rejected, while  $H_1$  is accepted, indicating that the education variable has a significant negative impact on the Poverty Level. The results of this study indicate that there is a relationship between education and poverty levels. These results are in line with research conducted by Nugroho (2018), which also found that education has an impact on poverty levels. Pratiwi & Sutrisna (2014) supports this study, stating that education affects poverty levels. However, the findings of Suropto & Subayil (2020) state that education does not have a significant effect on poverty levels.

Poverty rates are influenced by education as reflected in school participation rates. Education is essential to increasing economic growth and reducing poverty because it provides people with good knowledge and skills for well-being. Without education, people will experience backwardness, which has the potential to reduce welfare levels, and ultimately increase 'poverty. 'Education is often referred to as the great equalizer: It can open the door to jobs, resources, and skills that help a person not only survive, but thrive. In fact, according to UNESCO, if all students in low-income countries had just basic reading Skills (nothing else), an estimated 171 million people could escape extreme poverty. If all adults completed secondary education, we could cut the global poverty rate by more than half.

Education is the best way out of poverty in part because it is strongly linked to economic growth. A 2021 study co-published by Stanford University and Munich's Ludwig Maximilian University shows us that, between 1960 and 2000, 75% of the growth in gross domestic products around the world was linked to increased math and science skills. "The relationship between...the knowledge capital of a nation, and the long-run [economic] growth rate is extraordinarily strong," the study's authors conclude. This is just one of the most recent studies linking education and economic growth that have been published since 1990.

This interaction between education and technology has played an important role in generating income gains for poor people worldwide. Without technological progress, education would have had significantly lower effects on economic growth. At the same time, without educational expansion, technological change would have generated little growth, and this growth would have benefited a much narrower set of skilled workers, especially in low-income countries. In a world with growing interdependence between skills and technology, education and innovation policy should go hand in hand. In other words, it is not so much that education has driven economic growth significantly more than technological change, trade globalization, or other factors (Gethin, 2023; Khanna, 2023). Rather, the combination of schooling and other major economic transformations has been the key to reducing extreme poverty.

### **The Influence of Population Variable on Poverty Rate**

Population has a significant negative effect on Poverty Level, according to data analysis and hypothesis testing conducted in this study. The probability obtained is lower than 0.05 ( $0.000 < 0.05$ ), and the t-value of the Population variable is -0.1783302. Therefore,  $H_0$  is rejected and  $H_2$  is accepted, indicating that the Population variable has a significant negative effect on Poverty Level. The results of this study indicate that there is a relationship between population and poverty level. This finding is in line with research conducted by Umaruddin & Diramita (2018), which also found that population affects poverty level. However, research findings (Agustina et al., 2018) show that population does not have a significant effect on poverty rate.

Every province in Java with the highest poverty rate has a negative effect on poverty rate. This shows that the government's efforts to overcome poverty through population management have been successful and have had a positive impact. Population trends and dynamics can have an enormous effect on prospects for poverty reduction and sustainable development. Poverty is influenced by and influences population dynamics, including population growth, age structure, and rural-urban distribution. All of this has a critical impact on a country's development prospects and prospects for raising living standards for the poor. Investments in better health, including reproductive health, are essential for individual security and for reducing mortality and morbidity, which in turn improve a country's productivity and development prospects.

Access to sexual and reproductive health, including family planning, can affect population dynamics through voluntary fertility reduction and reductions in infant and maternal mortality. Improved reproductive health also helps individuals, particularly young women, break out of intergenerational cycles of poverty. When women and couples are empowered to plan whether and when to have children, women are better enabled to complete their education; women's autonomy within their households is increased; and their earning power is improved. This strengthens their economic security and well-being and that of their families. Cumulatively, this contributes to development progress and poverty reduction. Reproductive health programs in Indonesia include several main components, including maternal and child health programs, family planning, adolescent reproductive health, and prevention and control of sexually transmitted diseases (STDs) (Amalia, et.al., 2021; Djunaedi & Sulistyorini, 2021). One important program is "Better Sexual and Reproductive Health and Rights for All in Indonesia (BERANI)", which seeks to improve the quality of life of women and girls in Indonesia.

A country's economic growth is often shaped by overarching demographic trends (Han & Lee, 2020). 'Developing countries with large youth populations and declining fertility rates could see their economies soar, provided they invest heavily in young people's education and health and protect their rights, according to The State of World Population 2014. Potential economic gains could be realized through a demographic dividend, which can occur when a country's working age population grows larger relative to dependent populations, the report shows. Family planning is an important part of this process because many countries have large youth populations that will almost ensure continued rapid population growth unless fertility declines, which is what offers the possibility of the demographic dividend.

Indonesia will receive a demographic bonus in 2020 to 2030, a phenomenon where the population structure is very beneficial in terms of development because the number of productive age population is very large, while the proportion of young people is getting smaller, and the proportion of elderly people is not much. In the 2030s, Indonesia will experience the peak of the demographic bonus where 68.3% of the total population of Indonesia is of productive age (BPS, 2022). The demographic bonus is marked by a decrease in the dependency ratio or the ratio of the dependency of the number of non-productive age population to the number of productive age population.

### **The Influence of the Variable Unemployment Rate on the Poverty Rate**

Based on data analysis and hypothesis testing conducted in this study, it is proven that the unemployment rate has a positive and significant impact on the poverty rate. The probability obtained is less than 0.05 ( $0.035 < 0.05$ ), and the t-value of the unemployment rate variable is 0.1976143. Therefore,  $H_0$  is rejected and  $H_3$  is accepted, indicating that the unemployment rate variable has a significant positive impact on the poverty rate.

This study shows that there is a relationship between the unemployment rate and the poverty rate. Prasetyoningrum (2018) found that unemployment affects the poverty rate, supporting this finding. Anggraini (2023) stated that unemployment has a significant effect on the poverty rate. The unemployment rate is the percentage of people who are unemployed. The increasing unemployment rate increases the number of poor people, which has a negative impact on people's welfare and causes higher poverty.

The major consequence of unemployment in the labor market is loss of income, an important resource necessary for life in market economies and lack of money (poverty) is a major social determinant of health (Mc-Kee, 2005; Krueger, 2021). Social epidemiologic evidence supports the hypothesis that poverty, loss of income or financial strain mediates the relationship between unemployment and health. Poverty leads to poor physical and mental health via multiple material and psychosocial pathways.

Decades of research have amassed abundant evidence on the adverse impacts of unemployment on poverty-related outcomes, as well as individual health status. Studies examining poverty-related outcomes report that the unemployed have a higher risk of experiencing poverty and material deprivation due to the loss of income and work-related benefits. This financial strain

experienced by the unemployed consequently manifests itself as a mechanism that can lead to damaging health outcomes. Evidence shows that unemployment affects health status in a myriad of ways. For instance, unemployment has been associated with an increase in unhealthy coping behaviors (e.g. smoking and poor diet), lower self-esteem and increase psychological distress. The stress experienced during spells of unemployment is due to a number factors, including, the loss of income (also referred to as an economic need for employment), the stigmatization (i.e. being out of work is considered an undesirable social position), the psychosocial need for employment (e.g. structured days and consistent schedules), a social norm to work, the loss of one's role and social network, and/or, the search for a new job.

So, the problem of poverty is a very problematic issue in society, including in Javanese society, which is sensitive to social problems, so the solution must come from external parties such as the state or from within society which must be supported by a strong will to change the situation for the better.

## V. Conclusion and Recommendation

Understanding poverty from both economic and Islamic ethical perspectives is essential to formulating inclusive development strategies that align with societal values. To overcome poverty effectively, coordination is needed between the government, non-governmental organizations, the private sector, and society itself, even religion. These efforts must include improving access to education, health services, employment opportunities, and social protection, as well as support to improve individual skills and capacities. Islam prioritizes human welfare both in this world and in the hereafter. Islam in defining human welfare does not eliminate the material aspect, especially individual income as one of its indicators. Islam wants society to be economically prosperous so that they are able to carry out their religious obligations perfectly. The empirical analysis, based on panel regression model in Java Island the period 2014–2023, shows that education (*hifzul 'aql*) and population (*hifzul nasl*) has a negative and significant effect on poverty rate, while the unemployment rate shows a positive and significant influence.

Based on the analysis of the hypotheses and the findings of this study, several recommendations are proposed to help reduce poverty levels in Java Island. First, considering the strong relationship between education and poverty rates from 2014 to 2023, the government is encouraged to strengthen programs that prevent school dropouts, as education plays a vital role in breaking the poverty cycle. Second, the government should actively implement programs aimed at improving and developing the quality of human resources through skill-based training. Such initiatives will support communities in becoming more innovative and self-reliant, enabling them to create employment opportunities independently. Third, given the significant relationship between unemployment and poverty rates during the same period, it is important for the government to focus on expanding job opportunities and equipping the workforce with practical skills through targeted training programs. These steps are crucial to supporting economic resilience and reducing poverty across provinces in Java.

### Author Contributions

*Conceptualization, A.F.; Methodology, A.F.; Investigation, M.W.; Analysis, A.F.; Original draft preparation, A.F.; Review and editing, M.R.; Project administration, M.R.*

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### Conflicts of Interest

*This research was conducted by a research team from the UMY Economics study program and was carried out scientifically, academically and professionally, so that there was no conflict of interest in this research.*

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