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Income Distribution in Islamic Economics: An Analysis of Inequality and the Role of Islamic Philanthropy

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Abstract

This study aims to analyze the effect of zakat collection, zakat distribution, Gross Regional Domestic Product (GRDP), and the number of poor people on income distribution in Indonesia from an Islamic economic perspective. This study uses a quantitative approach with panel data regression methods, using data from 34 provinces in Indonesia during the period 2022–2024. The type of data used is secondary data sourced from the Central Statistics Agency (BPS) and the National Zakat Agency (BAZNAS). The analysis was conducted using EViews 13, through three model approaches, namely the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The results of the Chow, Hausman, and Lagrange Multiplier tests show that the best model used is the Random Effect Model (REM). In addition, classical assumption tests were conducted to ensure the validity of the estimation results, namely the Multicollinearity test and the Heteroscedasticity test. The coefficient of determination (R^2) value of 0.1909 indicates that the four independent variables explain 19.09% of the variation in income inequality. The results of the study confirm the importance of optimizing the zakat function in income distribution, as well as the need to strengthen the distribution mechanism so that the benefits of zakat are more evenly distributed in society.

Keywords: Income Distribution; Zakat; GRDP; Poor Population; Random Effect; Islamic Economics.

INTRODUCTION

Poverty is a structural challenge for developing countries, including Indonesia, driven by non-inclusive economic growth, wide income disparities, and low human development indices (Kartika et al., 2021). In the conventional economic framework, welfare is measured solely by Gross Domestic Product without considering the fairness of wealth distribution, so that economic progress is often not in line with an equitable improvement in people's living standards (Deleon Sidauruk et al., 2024).

The Islamic economic system offers comprehensive solutions through the values of justice, proportional distribution of wealth, and sharia philanthropy mechanisms. The instruments of zakat, infaq, sadaqah, and waqf are designed as effective tools for wealth redistribution in reducing poverty and strengthening social welfare based on the concept of maqashid sharia, which aims to protect the five basic human needs: religion, life, intellect, lineage, and wealth (Aini & Suryadi, 2025). This study aims to analyze the effect of zakat collection, zakat distribution, gross regional domestic product (GRDP), and the number of poor people on income distribution in Indonesia through a panel data regression approach, thereby providing policy recommendations for optimizing the function of zakat in achieving economic justice.

Literature Review

The Concept of Income Distribution in Islamic Economics

The main principle of income distribution in Islam is to increase the circulation of wealth so that it is distributed evenly, not just circulating among certain groups. Meanwhile, according to Anas Zarqa, distribution is the transfer of wealth between individuals through exchange (via the market) or by other means, such as inheritance, charity, waqf, and zakat (Lubis, n.d.)

In the production process, Islamic economics applies the principles of justice (al-'adl), honesty (sidq), transparency, and respect for the rights of all parties (Nikma Yunita & Mutafarida, 2025). This is in line with QS Al-Hashr verse 7 "Whatever (wealth obtained without warfare) Allah has bestowed upon His Messenger from the inhabitants of several lands is for Allah, the Messenger, his relatives, orphans, the poor, and travelers. (This is so) that the wealth does not circulate only among the rich among you. Accept what the Messenger gives you, and refrain from what he forbids you. Fear Allah. Indeed, Allah's punishment is severe".

Maqasid Sharia as the Foundation of Islamic

Maqashid al-sharia (the objectives of sharia) serve as a normative framework in Islamic economics to protect five basic human needs: religion, life, intellect, lineage, and property (Aini & Suryadi, 2025). In the context of income distribution, maqashid syariah ensures that every member of society has minimal access to basic needs, prevents the concentration of wealth, and encourages collective social responsibility (Umer, 2010). This approach distinguishes Islamic economics from conventional systems that prioritize market efficiency without considering the dimension of social justice.

Sharia Philanthropy in Islam

Islamic philanthropy is an activity that improves the quality of life of the community through the transfer of wealth certified by Sharia law. Zakat, as the main pillar, has two functions: purification of wealth and purification of the soul (tazkiyah al-nafs). Recent research shows that optimizing the collection and distribution of zakat can reduce income inequality by 15-20% in countries with high zakat penetration such as Malaysia and Indonesia (Beik & Arsyianti, 2023). Waqf has also been proven effective as a long-term instrument for community economic empowerment (Faozan & Amin, 2021).

Comparison of Islamic Economics and Conventional Economics in Income Distribution

Conventional economic models rely on market mechanisms and post-production redistributive policies (progressive taxation, social transfers). In contrast, Islamic economics integrates distributive justice into the primary production and distribution processes through the principles of partnership (musyarakah), profit-sharing, and social obligations (fardlu kifayah) (Kahf, 2020). Empirical studies in Bangladesh and Pakistan show that the implementation of a formal zakat system increases the effectiveness of redistribution compared to conventional tax-transfer policies because it has a strong moral-spiritual basis and a wider reach to informal circles (Alamgir & Kibria, 2022).

Economic Inequality and the Gini Ratio

The Gini Ratio is a standard indicator for measuring income inequality on a scale of 0-1, with a value of 0 indicating perfect equality and 1 indicating maximum inequality. Indonesia has an average Gini Ratio of 0.384 (2022-2024), indicating that inequality is still high compared to other Southeast Asian countries (Thailand: 0.365; Vietnam: 0.352) (BPS, 2024). The influencing factors are the concentration of asset ownership, access to education, and the effectiveness of redistribution programs.

The Effect of GRDP on Income Distribution

GRDP reflects the regional economic capacity to generate prosperity. However, the relationship between GRDP and inequality is not always linear. The Kuznets curve predicts that inequality initially increases with GRDP growth, then decreases in the advanced stages of development. Research in Indonesia shows regional variations: provinces with high GRDP but a centralized economic structure (oil and gas, manufacturing) tend to have higher inequality, while provinces with a diversified economy (agriculture, SMEs) show lower inequality (Widodo et al., 2021).

The Effect of Poverty Levels on Income Distribution

Poverty levels and income inequality are interrelated in a dialectical relationship: high poverty indicates poor distribution, while high inequality hinders poverty reduction. Longitudinal studies show that the effectiveness of anti-poverty programs depends on the quality of distribution: well-targeted cash transfer programs can reduce inequality by 5-10%, but without addressing structural inequality, their impact is limited (World Bank, 2022).

METHOD

This research method uses a quantitative approach based on the positivism paradigm, where the data used is numerical data that can be measured objectively and analyzed using statistical tools. This approach is used to explain the relationship between economic variables in the context of income distribution and the role of Islamic philanthropy in Indonesia. The type of data used in this study is secondary data, which is data obtained indirectly from official institutions. Data sources include publications from the Central Statistics Agency (BPS) and the National Zakat Agency (BADAN AMIL ZAKAT NASIONAL, n.d.), which include the Gini Ratio, zakat collection, zakat distribution, Gross Regional Domestic Product (GRDP), and the number of poor people in the 2022–2024 period for all provinces in Indonesia.

In this study, the criteria used were provinces that had complete data related to zakat indicators, income inequality, GRDP, and poverty rates during the research period. The data analysis method used was panel data regression analysis, because the data used was a combination of cross-sectional data and time series data. The analysis was conducted using three model approaches, namely the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The selection of the best model was carried out through the Chow test, Hausman test, and Lagrange Multiplier (LM) test.

RESULT AND DISCUSSION

The selection of the panel data regression model aims to choose the best model from the three regression models, namely the Common Effect Model, Fixed Effect Model, and Random Effect Model. In selecting the best panel data regression estimation model, the following tests can be used:

Chow Test

The Chow test is used to determine which model is better to use, namely between CEM or FEM (Firman Alamsyah et al., 2022).

Table 1. Chow test results

Redundant Fixed Effects Tests			
Equation: Untitled			
Test: Cross-section Fixed Effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.145042	(33,63)	0.0046
Cross-section Chi-square	76.064085	33	0.0000

Based on the Chow test results, the probability value is 0.0000 < 0.05, so the FEM model is more accurate than the CEM.

Hausman Test

The Hausman test is used to determine which model is better to use, namely FEM or REM (Firman Alamsyah et al., 2022).

Table 2. Hausman test results

Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.440709	4	0.2450

Based on the Hausman test results, the probability value obtained was 0.2450 > 0.05, which means that the Random Effect model is more appropriate to use.

Legrange Multiplier (LM) Test

Lagrange Multiplier (LM) is a test to determine whether the Random Effect model or the Common Effect (OLS) model is the most appropriate to use.

Table 3. Lagrange Multiplier test results

Lagrange Multiplier Tests for Random Effects
Null hypothesis: No effects
Alternative hypotheses: Two-sided (Breusch–Pagan) and one-sided (others) alternatives

	Cross-section	Time	Test Hypothesis Both
Breusch–Pagan	6.044678 (0.0139)	-0.022112 (0.8818)	6.066790 (0.0138)
Honda	2.458593 (0.0070)	0.148702 (0.4409)	1.843636 (0.0326)
King–Wu	2.458593 (0.0070)	0.148702 (0.4409)	0.732107 (0.2321)
Standardized Honda	2.655673 (0.0040)	0.662085 (0.2540)	-2.557750 (0.9947)
Standardized King–Wu	2.655673 (0.0040)	0.662085 (0.2540)	-1.543398 (0.9386)
Gourieroux, et al.	-	-	6.066790 (0.0189)

Based on the Lagrange Multiplier test results, the Breusch-Pagan probability value is 0.0139 (< 0.05), so the REM model is more appropriate to use than the CEM.

Based on the results of the Chow test, Hausman test, and LM test, the best model in this study is the Random Effect Model (REM), which is consistent with the characteristics of panel data with individual heterogeneity but the assumption that specific individual effects are not correlated with independent variables. (Gujarati & Porter, 2021).

Random Effect Test

Table 2. REM model

Panel EGLS (Cross-Section Random Effects)			
Dependent Variable: Y			
Method: Panel EGLS (Cross-section random effects)			
Date: 11/08/25 Time: 19:25			
Sample: 2022–2024			
Periods included: 3			
Cross-sections included: 34			
Total panel (unbalanced) observations: 101			
Swamy and Arora estimator of component variances			

Coefficient Estimation Results			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
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C	0.089136	0.077026	0.897568	0.3717
X1	-0.001087	0.008838	-0.123698	0.9507
X2	0.007219	0.008314	0.868339	0.3874
X3	0.008117	0.005072	1.612287	0.1102
X4	0.003598	0.000938	3.836556	0.0002

Effects Specification		
Component	S.D.	Rho
Cross-section random	0.022011	0.2788
Idiosyncratic random	0.035582	0.7232

Weighted Statistics			
R-squared	0.190986	Mean dependent var	0.233871
Adjusted R-squared	0.167274	S.D. dependent var	0.039680
S.E. of regression	0.035845	Sum squared resid	0.123347
F-statistic	6.857727	Durbin-Watson stat	2.072193
Prob(F-statistic)	0.000388		

Unweighted Statistics			
R-squared	0.219448	Mean dependent var	0.341683
Sum squared resid	0.170809	Durbin-Watson stat	1.498152

The REM model shows that the four independent variables (zakat collection, zakat distribution, GRDP, and number of poor people) collectively explain 19.09% of the variation in income inequality (R^2 = 0.1909). Although the R^2 value is relatively moderate, this result is consistent with the complexity of the income distribution phenomenon, which is influenced by many unobserved structural variables (institutions, culture, non-fiscal policies).

Multikolinearitas Test

Table 3. Multikolinearitas Test Result

	X1	X2	X3	X4
X1	1.000000	0.95311725	0.72007185	-0.3892106
X2	0.95311725	1.000000	0.70230814	-0.3106312
X3	0.72007185	0.70230814	1.000000	-0.4083116
X4	-0.3892106	-0.3106312	-0.4083116	1.000000

The results show that the VIF values for all variables are below 10, indicating no multicollinearity issues. This confirms that the independent variables are mutually independent in explaining the Gini Ratio, making the coefficient estimates reliable.

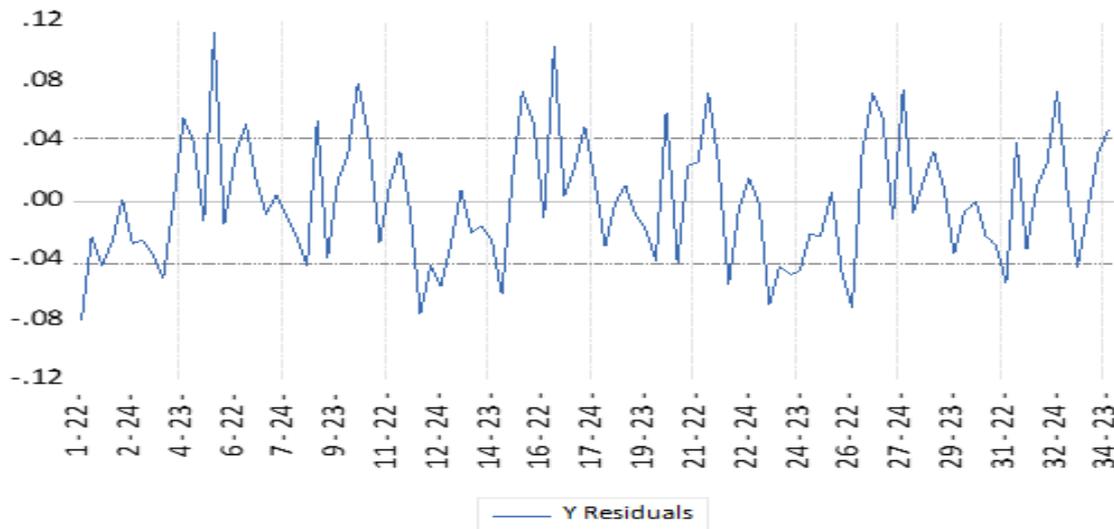**Heteroskedastisitas Test**

Figure 1. Heteroskedastisitas Test Result

Based on the table above, it can be seen that the residual values fluctuate around the zero line, indicating that the model is quite good at predicting the Gini Ratio based on the variables of zakat collection, zakat distribution, GRDP, and the number of poor people. However, there is a visible pattern of repeated fluctuations, which indicates the possibility of autocorrelation and seasonal factors that have not been fully captured by the model.

This shows that the effect of zakat on income inequality is dynamic and not constant between periods, in line with the concept of Islamic economics which emphasizes the importance of continuity and equitable distribution of zakat in achieving social justice (maqāṣid al-syarī'ah).

CONCLUSTION

This study confirms that zakat is not only a spiritual instrument in Islam, but also a powerful economic mechanism in creating a more equitable and inclusive income distribution. In the context of Indonesia, optimizing zakat collection, improving distribution mechanisms, and integrating zakat into regional development planning can contribute significantly to reducing income inequality and achieving more equitable community welfare.

However, the effectiveness of zakat in redistribution cannot stand alone; synergy between zakat institutions, the government, the market, and the community is needed to create a supportive economic ecosystem. Further in-depth research with model specifications and institutional variable integration will provide a more comprehensive understanding of the complexity of income distribution and the role of zakat in creating an equitable economy in accordance with Islamic values and global sustainable development goals.

REFERENCES

Aini, F. N., & Suryadi, N. (2025). Peran Distribusi Kekayaan Dalam Meningkatkan Kesejahteraan Publik: Pendekatan Ekonomi Mikro Syariah. Jurnal Penelitian Ilmu-Ilmu Sosial, 02 Nomor 11, 339–344. https://doi.org/https://doi.org/10.5281/zenodo.15564449

BAZNAS. (2024). Annual Report 2023: Zakat collection and distribution in Indonesia. Jakarta: Badan Amil Zakat Nasional.

Beik, I. S., & Arsyianti, L. (2023). Islamic social finance and poverty reduction: Evidence from Southeast Asia. Journal of Islamic Finance, 12(2), 112-135.

BPS. (2024). Gini Ratio Menurut Provinsi dan Daerah Tahun 2022-2024. https://www.bps.go.id/id/statistics-table/2/OTgjMg==/gini-ratio-menurut-provinsi-dan-daerah.html

BPS. (2024). Persentase Penduduk Miskin (P0) Menurut Provinsi dan Daerah Tahun 2022-2024. https://www.bps.go.id/id/statistics-table/2/MTkyIzI=/persentase-penduduk-miskin--p0--menurut-provinsi-dan-daerah.html

BPS. (2024). Produk Domestik Regional Bruto Atas Dasar Harga Berlaku Menurut Provinsi (miliar rupiah) Tahun 2022-2024. https://www.bps.go.id/id/statistics-table/3/WkdVMWRYVnBkMnBvVEhKSVkyWXhNblZtTjJSbmR6MDkjMw==/produk-domestik-regional-bruto-atas-dasar-harga-berlaku---menurut-provinsi--miliar-rupiah---2022.html?year=2022

BPS. (2024). Statistik kesejahteraan rakyat 2022-2024. Jakarta: Badan Pusat Statistik.

Deleon Sidauruk, A., Ketimpangan Pendapatan dan Indeks Pembangunan Manusia, P., Belcha Ananda, D., Wahyu Nugrahadi, E., Novri Regina, E., Febyanti, I., & Azzahraini Siregar, S. (2024). MANTAP: Journal of Management Accounting, Tax and Production E.

Faozan, A., & Amin, M. (2021). Waqf as a sustainable development mechanism in Islamic societies: A systematic literature review. International Journal of Islamic Economics and Finance Research, 4(1), 23-48.

Firman Alamsyah, I., Esra, R., Awalia, S., Andi Nohe, D., Matematika, J., & Matematika dan Ilmu Pengetahuan Alam, F. (2022). Prosiding Seminar Nasional Matematika, Statistika, dan Aplikasinya Terbitan II.

Gujarati, D. N., & Porter, D. C. (2021). Basic econometrics (6th ed.). New York: McGraw-Hill.

Kahf, M. (2020). Islamic economics: Theory and practice (Revised edition). Cairo: Al-Azhar Press.

Kartika, D. A. F. C., Viphindrartin, S., & Diartho, H. C. (2021). Impact of Government Expenditure on Poverty Rate Reduction in East Java Province. Wiga : Jurnal Penelitian Ilmu Ekonomi, 11(2), 120–127. https://doi.org/10.30741/wiga.v11i2.606

Khan, A. R., & Mirakhor, A. (2020). Islamic financial services. Singapore: World Scientific Publishing.

Lubis, A. T. (n.d.). Distribusi Pendapatan dalam.

Muda, R., Muda, I., & Harahap, A. (2022). Zakat, Islamic governance, and state legitimacy: Insights from Malaysia. Asian Journal of Islamic Studies, 7(2), 156-179.

Nikma Yunita, E., & Mutafarida, B. (2025). PRINSIP DISTRIBUSI PENDAPATAN PADA PRODUKSI MENURUT ISLAM. In Penelitian Ekonomi dan Bisnis Islam | (Vol. 8, Issue 1).

Widodo, S., Setiawan, B., & Rahman, A. (2021). Regional economic disparities and inequality in Indonesia: A spatial econometric analysis. Regional Science and Urban Economics, 89, 103-125.

World Bank. (2022). Poverty and equity global practice updates: Southeast Asia region 2021-2022. Washington DC: World Bank Group.

Zarqa, M. A. (2021). Islamic distributive schemes. Amman: Jordan Institute of Islamic Finance