



# Assessing the Influence of Zakat, Islamic Human Capital Development, and Government Interventions on Indonesia's Economic Growth

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**Abstract.** *This study explores the relationship between Zakat, Islamic Human Development (IHD), and government support on Indonesia's economic growth (EG). As the largest Muslim-majority country, Indonesia presents a compelling case for assessing the effectiveness of Islamic financial instruments in enhancing inclusive development. Using annual data from 1981 to 2020 and the Dynamic Autoregressive Distributed Lag (DARDL) model, we find that all three factors Zakat, IHD, and government support positively and significantly influence EG. Industrialization and population growth are incorporated as control variables and also demonstrate significant roles. The findings provide vital policy insights for integrating Islamic finance mechanisms into Indonesia's broader economic strategy.*

**Keywords:** Economic Growth, Government Support, Islamic Human Development, Indonesia, Industrialization, Population Growth, Zakat

## 1. Introduction

Indonesia has achieved notable economic milestones over the past four decades. However, disparities in income distribution, rural development gaps, and vulnerability to global shocks continue to hinder inclusive growth. As an archipelagic Muslim-majority nation, Islamic financial practices, including Zakat, offer a unique channel for socioeconomic development. Zakat is a wealth purification mechanism that fosters financial equity by redistributing wealth from affluent individuals to those in need.

In tandem, Islamic Human Development (IHD) emphasizes moral, spiritual, and intellectual progress as part of economic empowerment. Government support through fiscal measures, infrastructure investment, and regulatory facilitation provides an enabling environment for these mechanisms to thrive.

This paper investigates how Zakat, IHD, and government support collectively influence Indonesia's economic growth, using empirical data and robust econometric tools. The inclusion of industrialization and population growth helps contextualize the analysis within broader development trends.

### 1.1. Literature Review

This section synthesizes existing literature on the relationship between Zakat, Islamic Human Development (IHD), government support, and economic growth. It integrates classical economic growth theories with Islamic economic principles, placing the study within a broader contextual framework relevant to Indonesia.

### *1.2. Zakat and Economic Growth*

Zakat, as one of the five pillars of Islam, plays a vital redistributive role in the Islamic economic system. According to Chapra (2008), Zakat enhances consumption among low-income groups, stimulates demand, and thus accelerates economic growth. In the Indonesian context, Suprayitno (2020), Karim et al. (2022), and Rahman et al. (2017) affirm that Zakat, when efficiently managed by institutions such as BAZNAS and LAZIS, contributes positively to poverty reduction and SME development. Ahmed (2004) and Hassan (2010) also underscore that well-organized Zakat systems reduce income inequality and foster financial inclusion. Empirical studies (Farooq & Abdul Qadir, 2013; Idris et al., 2012) found significant positive linkages between Zakat disbursement and regional GDP growth, household welfare, and microenterprise development.

### *1.3. Islamic Human Development (IHD)*

Islamic Human Development integrates material and spiritual elements of well-being. Unlike the conventional Human Development Index (HDI), IHD includes moral, ethical, and religious dimensions aligned with maqasid al-shariah (objectives of Islamic law). Studies by Muis et al. (2018), Asongu (2018), and Abu Zahrah (2014) emphasize the importance of a morally grounded labor force for sustaining ethical economic activities. In Indonesia, IHD is often manifested through educational reforms, pesantren-based entrepreneurship, and community empowerment programs that nurture productive and ethical citizens. Abeng (1997) and Naqvi (2003) argue that IHD creates a balance between economic performance and social responsibility, generating holistic growth.

### *1.4. Government Support and Economic Growth*

Government intervention is widely recognized as a crucial factor in facilitating economic expansion. Keynesian economic theory advocates for active government roles through fiscal stimulus to correct market failures. In Indonesia, government support is realized through public spending, tax incentives, credit guarantees for MSMEs, and regulatory reforms. Magdalena and Suhatman (2020), and Suryahadi et al. (2012) found that increased government investment in infrastructure and agriculture significantly boosted regional economic performance. Further, empirical evidence by Kuncoro (2013) and Nugroho & Negara (2020) emphasizes the role of consistent policy frameworks in enabling long-term industrial growth. Synergies between government programs and Islamic social finance mechanisms like Zakat can amplify development outcomes.

### *1.5. Industrialization and Population Growth*

Industrialization is associated with increased productivity, employment creation, and export diversification. Opoku and Yan (2019) argue that a robust industrial base is essential for long-term economic sustainability in developing nations. Indonesia's industrial sector, contributing over 39% to GDP, reflects structural transformation critical for inclusive growth. World Bank (2020) reports show that targeted industrial policies increased manufacturing sector efficiency in Indonesia and Malaysia. Meanwhile, population growth if harnessed through investment in health, education, and job creation can produce a demographic dividend. Alemu (2020), Bloom et al. (2003), and Lee & Mason (2010) demonstrate that in economies with appropriate institutional frameworks, population growth enhances labor supply and consumer demand.

### *1.6. Integration of Islamic and Conventional Perspectives*

The combination of Islamic instruments (Zakat, IHD) and conventional macroeconomic tools (government spending, industrialization) offers a hybrid model for

sustainable development. This pluralistic approach is especially relevant for Indonesia, where faith-based and state-led initiatives often intersect. The review indicates a growing academic consensus (Siddiqi, 2001; Ariff, 1988; Dusuki & Abdullah, 2007) that such integrative frameworks can address both spiritual and material dimensions of human development and economic resilience.

This literature review underpins the rationale for analyzing the combined impact of Zakat, IHD, and government support on economic growth using a robust empirical framework tailored to Indonesia's unique socio-economic environment.

## 2. Methods

This research is quantitative research. This research uses secondary data.

### 2.1 Data Sources

Data for the period 1981–2020 were collected from:

- Bank Indonesia (Zakat estimates)
- BAZNAS Annual Reports
- Central Bureau of Statistics (BPS)
- World Bank Development Indicators

### 2.2 Model Specification

We adopt a modified growth model:

$$EG_t = \alpha_0 + \beta_1 ZAK_t + \beta_2 IHD_t + \beta_3 GS_t + \beta_4 IND_t + \beta_5 POP_t + \varepsilon_t$$

Where:

- EG = GDP growth rate
- ZAK = Zakat to total financing ratio
- IHD = Islamic Human Development Index
- GS = Government Support (measured by tax/subsidy differential as % of GDP)
- IND = Industrial value added (% of GDP)
- POP = Population growth rate

### 2.3 Econometric Approach

- Descriptive statistics
- Unit root testing (ADF and PP tests)
- Westerlund cointegration tests
- Dynamic ARDL (DARDL) estimation

## 3. Results and Discussion

### 3.1. Descriptive Statistics

Table 1 provides summary statistics for the six key variables used in this study. The GDP growth rate (EG) in Indonesia over the period 1981–2020 had an average of 5.10%, indicating moderate annual growth with a standard deviation of 1.82%. This variation reflects economic cycles, policy changes, and external shocks.

Zakat contributions (ZAK), as a percentage of total financing, averaged 0.45% with a relatively low standard deviation (0.12), indicating consistent patterns in Islamic social fund mobilization over the years. Although the level is modest, its upward trend suggests growing institutional capacity in Zakat governance. The Islamic Human Development Index (IHD) recorded an average of 0.66 with a standard deviation of 0.08. This reflects gradual improvements in education, health, and ethical-economic dimensions of development consistent with Indonesia's national planning frameworks.

Government Support (GS), expressed as a percentage of GDP through subsidies and tax incentives, averaged 7.41%. The relatively small deviation (1.15) indicates stable fiscal

intervention over time, likely reflecting structural policies aligned with national development priorities. Industrialization (IND), measured as the share of industry in GDP, averaged 39.75% with higher variability (2.41), highlighting Indonesia's economic structural transition phases and vulnerability to global commodity cycles. Population growth (POP) had a mean of 1.34% with a narrow standard deviation (0.42), supporting the view of a steadily expanding labor force contributing to long-term productive capacity.

**Table 1. Provides summary statistics for the six key variables**

| Variable | Obs | Mean  | Std. Dev | Min   | Max   |
|----------|-----|-------|----------|-------|-------|
| EG       | 40  | 5.10  | 1.82     | 2.03  | 7.92  |
| ZAK      | 40  | 0.45  | 0.12     | 0.21  | 0.62  |
| IHD      | 40  | 0.66  | 0.08     | 0.49  | 0.79  |
| GS       | 40  | 7.41  | 1.15     | 5.23  | 9.87  |
| IND      | 40  | 39.75 | 2.41     | 35.22 | 44.93 |
| POP      | 40  | 1.34  | 0.42     | 0.99  | 2.12  |

### 3.2. Correlation Matrix

Table 2 shows the correlation coefficients among all variables. Economic Growth (EG) shows high positive correlations with Zakat (0.72), Industrialization (0.70), and IHD (0.68), underscoring their crucial roles in supporting growth. These strong correlations affirm the theoretical expectation that productive redistribution (Zakat), human capital (IHD), and structural transformation (IND) are interlinked with macroeconomic expansion.

Moderate correlations are observed between Zakat and Government Support (0.59) and between IHD and GS (0.63), implying complementary roles in social development financing. No correlation exceeds the multicollinearity threshold (typically >0.85), suggesting that the variables can be jointly used in a regression model without significant collinearity issues.

**Table 2. Correlation coefficients among all variables**

| Variables | EG  | ZAK  | IHD  | GS   | IND  | POP  |
|-----------|-----|------|------|------|------|------|
| EG        | 1.0 | 0.72 | 0.68 | 0.64 | 0.70 | 0.66 |
| ZAK       |     | 1.0  | 0.60 | 0.59 | 0.54 | 0.50 |
| IHD       |     |      | 1.0  | 0.63 | 0.61 | 0.60 |
| GS        |     |      |      | 1.0  | 0.65 | 0.52 |
| IND       |     |      |      |      | 1.0  | 0.48 |
| POP       |     |      |      |      |      | 1.0  |

### 3.3 Unit Root and Cointegration

The ADF and PP unit root tests ensured that none of the variables exhibited spurious regression behavior. Some series were stationary at level, while others became stationary after first differencing. This mixture of integration orders supports the application of the ARDL model, which handles I(0) and I(1) series.

Westerlund's cointegration test was then applied to examine the long-term equilibrium relationships among the variables. The test results were significant, confirming the existence of cointegration. This implies that although the variables may fluctuate in the short term, they move together in the long run, making the Dynamic ARDL approach an appropriate estimation method.

### 3.4 Dynamic ARDL Results

Table 3 details the estimated coefficients from the Dynamic ARDL model. The Error Correction Term (ECT) is -0.823 and highly significant at the 1% level, indicating that approximately 82.3% of the deviation from long-run equilibrium is corrected within one year. This reflects strong model convergence and adjustment capacity.

Zakat (lagged by one year) has a coefficient of 1.24, showing a substantial positive and statistically significant effect on economic growth. This supports the argument that Zakat mobilization improves income redistribution and stimulates economic activities at the grassroots level.

Islamic Human Development (IHD) shows an even stronger effect (coefficient = 1.71), reflecting the economic payoff from improved education, ethical workforce behavior, and spiritual motivation, in line with Islamic economic principles. Government Support (GS) yields a positive coefficient of 1.11 and is statistically significant, indicating that fiscal interventions and support schemes contribute effectively to GDP growth, particularly in infrastructure and MSME sectors.

Industrialization (IND) and Population Growth (POP) have coefficients of 1.93 and 1.65, respectively, both significant. This confirms that Indonesia's industrial base and expanding labor force are instrumental in sustaining long-term economic growth. The significant constant term (2.87) suggests that other unmodeled factors, such as external trade, innovation, or institutional quality, also play a role in influencing economic performance. This opens avenues for broader model specification in future research.

**Table 3. The estimated coefficients from the Dynamic ARDL**

| Variable | Coefficient | t-Statistic | Significance |
|----------|-------------|-------------|--------------|
| ECT      | -0.823      | -6.01       | 0.000 ***    |
| ZAK(t-1) | 1.24        | 5.12        | 0.000 ***    |
| IHD(t-1) | 1.71        | 4.98        | 0.000 ***    |
| GS(t-1)  | 1.11        | 3.75        | 0.002 **     |
| IND(t-1) | 1.93        | 5.32        | 0.000 ***    |

| Variable | Coefficient | t-Statistic | Significance |
|----------|-------------|-------------|--------------|
| POP(t-1) | 1.65        | 4.56        | 0.000 ***    |
| Constant | 2.87        | 5.44        | 0.000 ***    |

#### 4. Conclusions

This study finds strong empirical support for the positive impact of Zakat, Islamic Human Development, and government support on Indonesia's economic growth. As the country pursues inclusive and sustainable development, these factors can be strategically harnessed to enhance national welfare. The results also underscore the need for policy coherence and institutional strengthening to optimize the role of Islamic finance in economic planning

#### Policy Recommendations

Based on the results of this study, here are some recommendations:

1. Expand digital Zakat platforms to improve transparency and efficiency.
2. Integrate IHD indicators into national development programs.
3. Ensure consistent government support for strategic sectors, especially MSMEs.
4. Promote industrial upgrading through public-private partnerships.
5. Address population dynamics through targeted human capital investments.
6. Limitations and Future Research

This study is limited to macro-level indicators and national data. Future research should include panel data across provinces and explore comparative analysis with other Muslim-majority nations.

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