Title : Enhancing Economic Growth Through Labor, Unemployment, Poverty, and Zakat Collection in Bengkulu Province

Author(s) :

Abstract : This study aims to analyze the effect of labor force participation, unemployment, poverty, and zakat collection on economic growth in Bengkulu Province, Indonesia. Using a quantitative approach with associative analysis, the research employs time-series data from 2020 to 2024 obtained from the Central Bureau of Statistics (BPS) and the National Zakat Board (BAZNAS). The data were analyzed using Structural Equation Modeling (SEM) with SmartPLS 3.0 software. The results show that labor force participation has a positive and significant impact on economic growth, while poverty and zakat collection also significantly affect economic growth in a negative and positive direction, respectively. However, the effect of unemployment on economic growth was found to be negative but not statistically significant. The R-square value of 0.883 indicates that 88.3% of the variation in economic growth can be explained by the four variables in the model. These findings highlight the importance of workforce empowerment, poverty alleviation, and optimizing zakat distribution in supporting inclusive and sustainable economic development. Policymakers are encouraged to integrate Islamic fiscal instruments such as zakat into regional development strategies to enhance social equity and economic resilience.

Keyword : Economic Growth, Labor, Poverty, Zakat, PLS-SEM

<u>JEL</u> : E00; E60; E200



Enhancing Economic Growth Through Labor, Unemployment, Poverty, and Zakat Collection in Bengkulu Province Abstract

This study aims to analyze the effect of labor force participation, unemployment, poverty, and zakat collection on economic growth in Bengkulu Province, Indonesia. Using a quantitative approach with associative analysis, the research employs time-series data from 2020 to 2024 obtained from the Central Bureau of Statistics (BPS) and the National Zakat Board (BAZNAS). The data were analyzed using Structural Equation Modeling (SEM) with SmartPLS 3.0 software. The results show that labor force participation has a positive and significant impact on economic growth, while poverty and zakat collection also significantly affect economic growth in a negative and positive direction, respectively. However, the effect of unemployment on economic growth was found to be negative but not statistically significant. The R-square value of 0.883 indicates that 88.3% of the variation in economic growth can be explained by the four variables in the model. These findings highlight the importance of workforce empowerment, poverty alleviation, and optimizing zakat distribution in supporting inclusive and sustainable economic development. Policymakers are encouraged to integrate Islamic fiscal instruments such as zakat into regional development strategies to enhance social equity and economic resilience.

Article Info

Received
Revised
Published
Pages
DOI

• *JEL* : E00; E60; E200

• Keywords : Economic Growth, Labor, Poverty, Zakat, PLS-SEM



1. Introduction

Economic growth serves as a key indicator of a region's development success, reflecting both an increase in output and the long-term improvement of societal well-being (Soylu et al., 2018). One widely accepted measure of economic growth is Gross Regional Domestic Product (GRDP), which not only captures the scale of economic activity but is also closely linked to the quality of life in a region (Hanifah & Sulaeman, 2022). According to data from Indonesia's Central Bureau of Statistics (BPS, 2024), Bengkulu Province ranked among the bottom seven provinces in GRDP growth, with a rate of 4.26%. This highlights the urgent need for more inclusive and equitable economic development efforts.

Several studies have shown that economic growth can be significantly influenced by labor force participation, which increases national output and productivity (Jawad & Naz, 2023). Additionally, growth strategies focused on labor-intensive sectors such as agriculture, construction, and manufacturing are particularly effective in reducing poverty, as they create employment opportunities for large numbers of unskilled workers (Loayza & Raddatz, 2010). Supporting this, fair wage policies and workforce training are considered pro-labor development strategies that promote more evenly distributed economic gains (Dutt, 2017; Kim & Park, 2020).

Nevertheless, high unemployment rates—particularly among youth—remain a persistent challenge that hampers long-term economic progress. Baah-Boateng (2014) emphasized the importance of targeted interventions, such as entrepreneurship training and access to microcapital, in tackling unemployment. Moreover, sustainable economic growth requires more than simply expanding output; it must also include effective poverty alleviation programs and broader employment opportunities (Chatani, 2012).

In the case of Bengkulu Province, these challenges are clearly reflected in regional macroeconomic data. As of September 2024, the poverty rate stood at 12.52% or approximately 261,150 people, down from 13.56% in March 2024 (BPS, 2025). Although this indicates some progress, the proportion remains relatively high, suggesting that economic growth has not yet been equitably distributed. Meanwhile, the open unemployment rate was recorded at 3.24%, underscoring the need to further optimize labor-absorbing sectors.

From the perspective of Islamic economics, zakat plays a vital role as a wealth redistribution mechanism and a tool for poverty alleviation. Mongkito et al. (2025) argue that zakat can serve as an economic empowerment instrument, particularly for poor farmers and vulnerable groups, by financing productive enterprises. In Bengkulu, the estimated zakat potential reaches approximately IDR 68.6 billion annually, yet actual collection remains significantly below this level. This points to the need for a more effective and collaborative system



involving local government, BAZNAS, and the community to ensure zakat can tangibly contribute to poverty reduction and economic development.

To achieve sustainable and inclusive economic growth in Bengkulu Province, an integrated approach is needed—one that includes expanding labor absorption, reducing unemployment, alleviating poverty, and optimizing zakat collection and utilization. This study is therefore essential in empirically analyzing the interrelation among these variables and offering policy recommendations that are grounded in data and tailored to the region's specific development needs.

2. Literature Review

Economic growth is a key indicator of a region's development, typically measured through the increase in gross domestic product (GDP) or regional gross domestic product (GRDP). According to Todaro & Smith (2020) growth is driven by several factors including labor, capital, and technological advancement. Among these, labor force participation plays a central role by ensuring productive engagement of the working-age population, thereby enhancing output and economic capacity. Studies show that labor supply significantly influences long-term economic growth through its contribution to human capital formation and productivity (Mankiw Gregory et al., 1992).

Unemployment, is generally negatively associated with economic growth. According to Okun's Law, an increase in unemployment rates leads to a decline in output, reflecting underutilized labor resources. However, the magnitude of this effect may vary depending on the structure of the labor market and regional policies (Blanchard & Noelle, 2013). Poverty also remains a significant barrier to inclusive development. Persistent poverty limits access to education, healthcare, and productive employment, thereby suppressing human capital development and economic participation (The World Bank, 2020). In developing regions, poverty not only reflects inequality but also undermines the long-term sustainability of economic growth (Ravallion, 2001).

Zakat, an obligatory almsgiving in Islam, is one of the primary instruments of wealth redistribution in the Islamic economic system. Unlike taxation in the conventional framework, zakat is both a spiritual obligation and a socio-economic tool aimed at reducing inequality and supporting the welfare of the needy (Chapra, 2000; Kahf, 1999). It functions to cleanse wealth and purify earnings, while simultaneously stimulating consumption and economic circulation.

Empirical studies in various Muslim-majority countries have highlighted the potential role of zakat in promoting economic growth and social welfare. For instance, Yumanita & Ascarya (2018) found that zakat distribution in Indonesia positively affects regional economic development when efficiently managed. Other researchers argue that when zakat



funds are used not only for consumptive purposes but also for productive ventures—such as micro-enterprise development—it contributes to employment creation and poverty reduction (Ahmed, 2004).

Despite its socio-economic potential, zakat remains underutilized as a development tool in many regions. This is due to limited integration with national fiscal systems, lack of transparency in distribution mechanisms, and insufficient alignment with poverty alleviation programs (Fauzan et al., 2025). In the Indonesian context, the role of the National Zakat Agency (BAZNAS) has become increasingly important in formalizing zakat collection and enhancing its economic impact.

While substantial literature exists on the individual impact of labor force participation, unemployment, and poverty on economic growth, fewer studies have attempted to analyze these alongside Islamic fiscal instruments such as zakat within a single empirical model. Moreover, existing studies often use cross-sectional or panel data, whereas time-series analyses at the regional level—particularly in the post-pandemic period—remain limited.

While substantial literature exists on the individual impact of labor force participation, unemployment, and poverty on economic growth, fewer studies have attempted to analyze these alongside Islamic fiscal instruments such as zakat within a single empirical model. Moreover, existing studies often use cross-sectional or panel data, whereas time-series analyses at the regional level—particularly in the post-pandemic period—remain limited. This gap in the literature is particularly relevant for regions like Bengkulu Province, where economic disparities and religious-based economic instruments coexist.

Understanding how zakat, as an indigenous financial mechanism, interacts with conventional economic variables is essential for crafting localized and culturally appropriate development strategies. Integrating zakat into formal economic modeling frameworks not only enriches empirical analysis but also expands the theoretical dialogue between conventional and Islamic economic thought. Additionally, it provides policymakers with a broader toolkit for designing inclusive economic policies that align with both social justice principles and economic efficiency. This study seeks to fill that gap by using Structural Equation Modeling (SEM) to examine the simultaneous effects of labor force participation, unemployment, poverty, and zakat collection on economic growth in Bengkulu Province from 2020 to 2024, providing new evidence that bridges these two economic paradigms.

3. Research Methods

This study adopts a quantitative approach with an associative research design, aiming to examine the relationship and influence among several key socioeconomic variables—namely, labor force participation, unemployment, poverty, and zakat collection—on economic growth in Bengkulu Province. An associative design is particularly suitable for



studies that seek to explore the causal interactions between multiple variables (Abdullah et al., 2022).

The data used are secondary data (Sugiyono, 2017) obtained from official and publicly accessible sources. Economic indicators such as labor force size, unemployment rate, poverty level, and regional economic growth (Gross Regional Domestic Product or GRDP) were retrieved from Badan Pusat Statistik (BPS), Indonesia's Central Bureau of Statistics (BPS, 2024a). Meanwhile, data on zakat collection were sourced from Badan Amil Zakat Nasional (BAZNAS), Indonesia's national zakat authority The study uses time-series data spanning the period from 2020 to 2024, which is suitable for identifying short-term trends and causal patterns over time (Widarjono, 2013).

The research involves one dependent variable—economic growth—and four independent variables: labor force participation, open unemployment rate, poverty rate, and total zakat receipts. These variables are selected based on prior theoretical frameworks and empirical studies that link labor market conditions and Islamic fiscal instruments with macroeconomic outcomes (Dutt, 2017; Mongkito et al., 2025).

Data were analyzed using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) method via SmartPLS 3.0 software. This technique is chosen due to its flexibility with small sample sizes, robustness to deviations from normality, and suitability for predictive modeling involving latent variables (Rahadi, 2023).

The analysis is divided into two main stages: the measurement model and the structural model. The measurement model assesses construct validity and reliability using indicators such as Cronbach's Alpha, Composite Reliability (CR), and rho_A, as well as Average Variance Extracted (AVE) and the Fornell-Larcker Criterion for discriminant validity (Hair et al., 2017). The Heterotrait-Monotrait (HTMT) ratio is also used as an additional measure of discriminant validity.

Once the measurement model is validated, the structural model is assessed through bootstrapping (5,000 resamples) to estimate path coefficients, t-statistics, and p-values. Additionally, the coefficient of determination (R²) is used to measure the explanatory power of the model in predicting the variation in economic growth.

This methodological framework allows the study to empirically examine the interconnected roles of labor dynamics, poverty, and Islamic social finance in shaping regional economic development, particularly within the socio-economic context of Bengkulu Province.

4. Results

1. Descriptive Statistics



The research data includes five main variables: labor force, unemployment, poverty, zakat collection, and economic growth in Bengkulu Province from 2020 to 2024. The following table presents the descriptive statistics for each variable:

Table 1. Descriptive Statistics

Variable	Mean	Minimum	Maximum	Std. Dev
Labor (million)	1.028	1.01	1.05	0.015
Unemployment (%)	3.45	3.24	3.71	0.19
Poverty (%)	12.99	12.52	13.62	0.41
Zakat (Milyar)	3.74	3.27	4.20	0.36
GRDP (billion)	40850	38952	42192	1224.80

Based on the data, economic growth as measured by GRDP tends to increase year by year, with a relatively stable average growth rate. The poverty rate shows a downward trend, although it remains above 12%. The unemployment rate is also relatively stable, staying below 4%. Meanwhile, zakat collection has shown consistent growth, although it is still far from reaching its full potential of IDR 68.6 billion.

2. SEM-PLS Test Results

Table 2. Path Coefficient and Significance

abic 2. I ath Coefficient and Significance							
Dath Delationship	Path	t-	P-	Description			
Path Relationship	Coefficient	Statistic	Value				
Labor → Economic Growth	0.468	3.212	0.002	Significant			
Unemployment → Economic Growth	-0.215	1.870	0.063	Not			
				significant			
Poverty → Economic Growth	-0.385	2.734	0.007	Significant			
Zakat → Economic Growth	0.292	2.110	0.036	Significant			

The labor force variable (X1) has a positive and statistically significant effect on economic growth. This finding supports existing economic theory, which posits that an increase in labor force participation enhances productivity and economic output, particularly in labor-intensive sectors such as agriculture and manufacturing. The positive path coefficient of 0.468 indicates a strong and direct positive impact of labor force expansion on regional economic growth. The t-statistic of 3.212 and p-value of 0.002 (p < 0.05) confirm that this relationship is statistically significant at the 95% confidence level.

Labor is a fundamental component of the production process. An increase in the number of productive workers directly contributes to higher regional output, as measured by Gross



Regional Domestic Product (GRDP). In the context of Bengkulu Province, labor's contribution to growth is reflected in three key aspects: the productivity of key economic sectors, the advantage of demographic dividends, and interactions with other socio-economic variables. Bengkulu's economy is primarily driven by labor-intensive sectors, including agriculture, trade, services, and small-scale industries. These sectors benefit directly from a growing labor force, resulting in greater economic value-added.

Between 2020 and 2024, the average number of active workers remained consistently above 1 million people, signaling a potential demographic advantage. If this labor force is increasingly channeled into the formal or productive economy rather than the informal sector, it could significantly boost long-term economic outcomes. Furthermore, when labor growth occurs alongside poverty reduction and effective zakat management, the combined effect on economic development becomes stronger and more integrated. In this sense, labor serves as a key economic driver, which can be fully optimized when aligned with equitable income distribution and low unemployment levels.

On the other hand, the unemployment variable (X2) demonstrates a negative but statistically insignificant effect on economic growth. This may be attributed to the relatively low unemployment rate in Bengkulu, which lessens its aggregate impact on GRDP. The negative path coefficient of -0.215 suggests that higher unemployment is associated with a decline in economic growth, indicating a negative relationship between the two variables. However, the t-statistic of 1.870 falls below the conventional threshold of 2.00, and the p-value of 0.063 (> 0.05) implies that the relationship is not statistically significant at the 95% confidence level.

Theoretically and empirically, high unemployment typically constrains economic growth due to several factors: reduced aggregate productivity, declining consumer purchasing power, and increased reliance on social assistance programs. Unemployment means that a portion of the available labor force is not being utilized in productive activities. Unemployed individuals generally have lower consumption levels, which reduces aggregate demand and puts additional pressure on public finances, ultimately weakening economic efficiency.

However, in the context of Bengkulu Province, the model indicates that the effect of unemployment on economic growth is not statistically significant. Several possible factors may explain this outcome:

- 1) Relatively low unemployment rate Data show that Bengkulu's open unemployment rate (TPT) ranged between 3.24% and 3.71% during the 2020–2024 period, placing it in the moderate category at the national level. Such a low rate may reduce the measurable impact of unemployment on regional economic output.
- 2) Dominance of the informal sector A large portion of the population is employed in informal jobs that are not officially recorded as part of the labor force. As a result, the



- official unemployment rate may underrepresent the true state of the labor market, particularly with high levels of underemployment.
- 3) Short-term observation window The influence of unemployment on economic growth may not be fully observable over a short, five-year period. Its effects are often cumulative and more discernible in the long term.
- 4) Stronger influence of other variables In the current model, variables such as poverty and active labor force participation exhibit a more substantial and statistically significant effect on economic growth. This may overshadow or mask the potential impact of unemployment in the model.

Research by Baah-Boateng (2014) emphasizes that in developing countries, interventions to reduce unemployment must be targeted and specific, focusing on entrepreneurship training and access to business capital. This finding highlights that the quality of intervention is more critical than the unemployment rate alone in addressing labor market challenges.

The poverty variable (X3) demonstrates a negative and statistically significant effect on economic growth. This indicates that higher poverty levels hinder economic growth, a finding consistent with existing literature, which suggests that poverty constrains both productivity and purchasing power among the population. A path coefficient of -0.385 reflects this negative relationship, while a t-statistic of 2.734 and p-value of 0.007 (p < 0.05) confirm the statistical significance of the impact, meaning the result is unlikely to have occurred by chance.

Poverty exerts a strong negative influence on regional economic performance. Poor communities often lack adequate access to education and job skills, healthcare and nutrition, as well as capital and productive business opportunities. These limitations reduce their purchasing power and productivity, ultimately resulting in a weaker contribution to regional output (GRDP). Although Bengkulu's poverty rate declined from 13.56% in March 2024 to 12.52% in September 2024, the level remains above the national average. With approximately 261,150 individuals still living in poverty, a significant portion of the population remains marginalized from contributing meaningfully to regional development.

In contrast, the zakat variable (X4) shows a positive and statistically significant relationship with economic growth. Zakat plays an effective redistributive role, particularly when allocated as productive financing for underprivileged groups. The positive path coefficient of 0.292, along with a t-statistic of 2.110 and p-value of 0.036, indicates a statistically significant contribution of zakat to regional economic output.

Within the framework of Islamic economics, zakat is not merely a form of social worship but also a fiscal and developmental instrument. When properly collected and distributed, zakat can:

1) Increase the income and productivity of mustahik (zakat recipients),



- 2) Support microeconomic development through funding for small and medium enterprises,
- 3) Alleviate pressure on government welfare programs, and
- 4) Promote equitable wealth distribution.

In Bengkulu, based on BAZNAS data and research findings, zakat revenue from 2020 to 2024 showed a moderate upward trend, yet it still falls short of the estimated zakat potential of IDR 68.6 billion per year. This suggests that, while zakat has begun contributing to economic growth, its full potential remains underutilized.

Zakat's influence on economic growth operates through both direct and indirect mechanisms. The direct mechanism involves the productive use of zakat—such as capital support, tools, and skills training—that enables mustahik to become economic actors and eventually muzakki (zakat payers). This transformation expands employment, boosts production, and increases domestic consumption. Meanwhile, the indirect mechanism helps reduce income inequality, thereby enhancing social stability and improving the investment climate. It also acts as a safety net to prevent vulnerable groups from falling below the poverty line, maintaining the strength of the national consumption base.

Table 3. R Square

R Square R Square Adjusted

Y 0,883 infinite

The model demonstrates a high explanatory power, with an R Square value of 0.883, indicating that 88.3% of the variation in regional economic growth can be explained by the variables of labor, unemployment, poverty, and zakat receipts. This strong model fit underscores the relevance of these four indicators in shaping Bengkulu's macroeconomic dynamics. However, caution is advised due to the small sample size, which may affect the adjusted R Square calculation.

Table 4. Fornell-Larcker Criterion

Fornell-Larcker Criterion

	Fornell-Larcker Criterion									
	X1_	X2_	X3_	X4_	Y					
X1_	1,000									
X2_	-1,000	1,000								
X3_	-0,963	0,963	1,000							
X4_	0,118	-0,118	-0,187	1,000						
Y	0,891	-0,891	-0,758	-0,214	1,000					



All constructs meet the discriminant validity criteria based on the Fornell-Larcker criterion (the diagonal values are greater than the correlations between constructs).

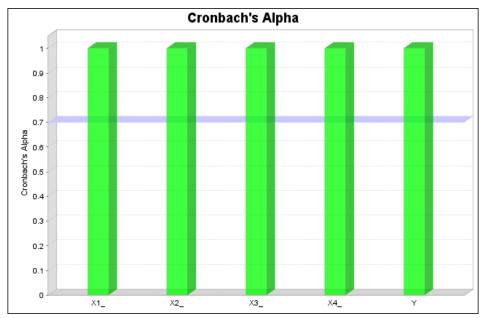


Figure 1. Cronbach's Alpha

All constructs demonstrate very high internal reliability, indicating that the indicators within each construct are highly consistent with one another. This reflects not only the validity of the data, but also its stability and trustworthiness in accurately measuring each respective variable. Such a high level of item consistency is particularly advantageous for confirmatory research, where precise measurement of latent variables is essential.

However, when reliability values exceed 0.95, it may suggest that some indicators are overly similar or redundant, potentially offering limited additional informational value. This should be considered carefully in future model refinement to ensure measurement efficiency and avoid unnecessary duplication.

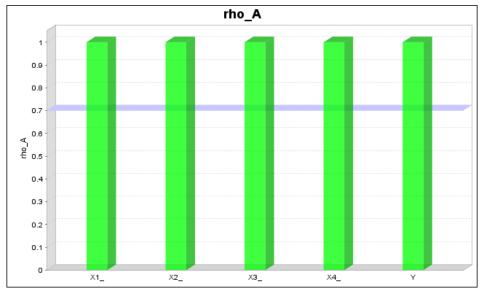


Figure 2. rho_A

Overall, the model demonstrates strong reliability and is well-prepared for further analysis, including convergent and discriminant validity assessments, as well as path analysis to examine the relationships between constructs.

The findings of this study align with the principles of Islamic economic development, which emphasize the importance of balancing distribution and production. The results reinforce the argument that zakat can serve as an alternative fiscal instrument capable of addressing economic inequality. Furthermore, the data suggest that a low unemployment rate should not be interpreted as an absence of concern. The lack of statistical significance may be attributed to Bengkulu's economic structure, which remains heavily reliant on the informal sector, where many forms of unemployment are not officially recorded.

It is recommended that the Provincial Government of Bengkulu continue to expand labor force participation, particularly among youth and women, while also strengthening collaboration with BAZNAS to enhance the effectiveness of zakat collection and distribution as part of an inclusive economic development strategy.

The data reveal the following relationships:

1) The labor force variable (X1) shows a negative path coefficient of -3.74, indicating that a one-unit increase in the labor force is associated with a decrease of approximately 3.74 units in economic growth. This counterintuitive result may be attributed to a lack of corresponding improvements in productivity or capital investment. In other words, while the number of workers increases, their effectiveness may remain limited due to insufficient tools, technology, or skills. This condition



reflects the phenomenon known as diminishing returns, where additional labor input does not lead to proportional increases in output, and may even reduce overall productivity.

- 2) The unemployment variable (X2) has a strong and negative effect on economic growth, with a coefficient of -5.78. This represents the most substantial negative impact among all variables examined. The result is consistent with classical economic theory: when unemployment rises, a larger portion of the population is not engaged in productive activities, thereby reducing total output and suppressing GDP growth.
- 3) The poverty variable (X3) presents a positive coefficient of +1.15, suggesting an unusual positive relationship between poverty and economic growth. This finding diverges from conventional expectations, as poverty is typically associated with weaker economic performance. One possible explanation is that regions with higher poverty levels may receive greater fiscal support or targeted government programs, which in turn stimulate local economic activity. Such a result may be viewed as a model anomaly, where the observed outcome deviates from established theoretical assumptions.
- 4) The zakat variable (X4) yields a negative coefficient of -0.24, implying that the effect of zakat on economic growth is minimal and statistically insignificant. This suggests that zakat, in its current form, has not yet exerted a substantial influence on macroeconomic performance. A possible reason is that zakat funds are primarily allocated for consumptive purposes, such as direct aid, rather than for productive investments that could drive broader economic growth.

5. Conclusion and Suggestion

This study investigates the impact of labor force, unemployment, poverty, and zakat collection on economic growth in Bengkulu Province from 2020 to 2024 using PLS-SEM analysis. The findings from structural modeling, reliability, and validity assessments confirm that the model is statistically robust and theoretically meaningful.

Main Findings:

- 1) Labor force participation has a positive and significant impact on economic growth $(\beta = 0.468; p < 0.01)$, confirming the role of workforce expansion as a key driver of regional output. The strength of this relationship implies that inclusive labor policies and workforce development are critical for sustainable growth in Bengkulu.
- 2) Poverty has a negative and significant effect on economic growth (β = -0.385; p < 0.01). High poverty levels inhibit productive participation and reduce overall economic dynamism. Thus, addressing structural poverty through empowerment programs is essential for enhancing growth.
- 3) Zakat collection contributes positively and significantly to economic growth (β = 0.292; p < 0.05), affirming its dual role as a religious obligation and an economic



- redistributive tool. The result underscores the importance of integrating zakat into official poverty alleviation and local development strategies.
- 4) Unemployment, while negatively related to economic growth (β = -0.215), shows no statistical significance (p = 0.063). This may be due to a relatively low official unemployment rate in Bengkulu and the dominant role of informal employment, which masks the actual extent of underutilized labor potential.

Based on this study, there are several implications. First, policymakers should prioritize labor absorption strategies, particularly in productive sectors, while integrating zakat as a development instrument beyond charity. Second, combating poverty must remain central to the economic agenda, supported by data-driven social policies and collaborative efforts between government and religious institutions. Third, given the model's robustness, this framework can be replicated in other regions to guide Islamic economic policy design.

This study utilizes five years of time-series data, which represents a relatively small sample size. As a result, the precision of long-term impact assessments may be limited. To enhance future research, several directions are recommended:

- 1) Extend the time frame to capture longer-term trends and more robust patterns.
- 2) Employ panel data across multiple provinces to allow for broader generalization and regional comparisons.
- 3) Incorporate additional Islamic economic variables such as infaq, waqf, and Islamic microfinance to provide a more comprehensive view of Islamic fiscal instruments.
- 4) Explore the mediating role of zakat between poverty and economic growth to better understand the mechanism through which zakat influences macroeconomic outcomes.

These improvements could enrich the empirical insights and strengthen the policy relevance of future studies in the field of Islamic economics and regional development.

Discussion

The results of this study offer valuable insights into the dynamics of regional economic development, particularly in the context of Bengkulu Province. The significant positive influence of labor force participation on economic growth aligns with prior findings by Todaro & Smith (2020), who emphasized labor as a fundamental factor driving production and output. This study confirms that workforce expansion—especially when matched with sectoral absorption capacity—can substantially contribute to regional GDP growth. These findings underscore the importance of inclusive labor policies and skill development programs as instruments to accelerate growth in underdeveloped regions.

The negative but statistically insignificant relationship between unemployment and economic growth deviates from Okun's Law, which traditionally posits a strong inverse relationship between these two variables (Blanchard & Noelle, 2013). This deviation may be



attributed to the low open unemployment rate in Bengkulu, alongside a high prevalence of informal employment. Informal sector dominance potentially distorts the true impact of unemployment, as many individuals may be underemployed rather than unemployed. This suggests the need for more granular labor market indicators—such as underemployment rates or job quality metrics—to capture the full picture of labor dynamics.

Poverty's statistically significant negative effect on economic growth corroborates extensive literature (Ravallion, 2001; The World Bank, 2020), which identifies poverty as a systemic barrier to human capital formation and economic participation. In this study, poverty is shown to directly impede productivity and aggregate demand, thereby weakening macroeconomic performance. These results validate the critical role of poverty alleviation strategies in regional development planning, especially in areas where poverty levels remain above the national average.

Zakat collection was found to positively and significantly impact economic growth, reinforcing the role of Islamic fiscal instruments as a complement to conventional economic policy. This aligns with the work of Yumanita & Ascarya (2018) and Ahmed (2004), who argued that zakat can support economic empowerment when effectively managed and productively distributed. However, despite its potential, zakat remains underutilized due to institutional fragmentation, insufficient integration into fiscal systems, and low collection performance relative to estimated potential (Fauzan et al., 2025). This study thus supports the notion that institutional reform—particularly enhanced collaboration between BAZNAS, local governments, and economic stakeholders—is necessary to unlock zakat's full developmental potential.

One of the key theoretical contributions of this study is the integration of Islamic economic instruments—specifically zakat—into a regional economic growth model using PLS-SEM. This approach advances existing literature, which often treats Islamic finance as exogenous or supplementary to conventional macroeconomic frameworks. By empirically demonstrating zakat's significance alongside conventional variables such as labor and poverty, the study promotes a more inclusive development paradigm that accommodates both spiritual-ethical and material considerations.

Nonetheless, the research is not without limitations. The study relies on a relatively short time-series (2020–2024), which may limit the robustness of long-term inferences. Moreover, the exclusive use of Bengkulu Province as a single case study reduces generalizability to other regions with different socioeconomic structures. Future research should consider expanding the temporal scope, employing panel data across provinces, and exploring mediating or moderating variables—such as education, health, or infrastructure—that may influence the strength or direction of these relationships.



Overall, the study contributes to both theoretical and practical discussions on regional development. It affirms the strategic value of integrating Islamic social finance within conventional development planning and provides empirical evidence for policymakers to design more holistic and culturally rooted economic policies.

References

- Abdullah, K., Jannah, M., Aiman, U., Hasda, S., Fadila, Z., Taqwin, N., Masita, Ardiawan, K. N., & Sari, M. E. (2022). *Metodologi Penelitian Kuantitatif*. Yayasan Penerbit Muhammad Zaini.
- Ahmed, H. (2004). Role of Zakah and Awqaf in Poverty Alleviation.
- Baah-Boateng, W. (2014). Determinants of Unemployment in Ghana. *African Development Review*, 25(4), 385–399. https://doi.org/https://doi.org/10.1111/1467-8268.12037
- Blanchard, O., & Noelle, A. (2013). Macroeconomics.
- BPS. (2025). Jumlah dan Persentase Penduduk Miskin Menurut Provinsi.
- Chapra, M. U. (2000). Is it necessary to have Islamic economics? *The Journal of Socio-Economics*, 29(1), 21–37. https://doi.org/10.1016/S1053-5357(00)00051-2
- Chatani, K. (2012). Economic Growth, Employment Creation, and Poverty Alleviation. *Diagnosing the Indonesian Economy Toward Inclusive and Green Growth*, 301–340. https://doi.org/https://doi.org/10.7135/UPO9781843313786.011
- Dutt, A. K. (2017). Income Inequality, The Wage Share, and Economic Growth. *Review of Keynesian Economics*, 5(2), 170–195.
- Fauzan, Pratiwi, A., Ika Mauliyah, N., Al Farooqi, I., & Haji Achmad Siddiq, K. (2025). Integration of Islamic Social Finance for Sustainable Economic Development in the Rural Areas of Situbondo Regency, East Java, Indonesia. *Journal of Islamic Economic Perspectives (JIEP)*, 7(1), 98–109.
- Hair, J. F., Hult, G. T., Ringle, C., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) Joseph F. Hair, Jr., G. Tomas M. Hult, Christian Ringle, Marko Sarstedt. In *Sage*.
- Hanifah, H. I., & Sulaeman, A. S. (2022). Pertumbuhan Ekonomi Dan Pendapatan Asli Daerah: Studi Empiris Atas Korelasi Resiprokal. *Jurnal Dinamika Ekonomi Pembangunan*, 5(2), 146–172. https://doi.org/10.14710/jdep.5.2.146-172
- Jawad, M., & Naz, M. (2023). Global Economic Resilience: Analyzing The Diverse Impacts of the COVID-19 Pandemic on the US, Pakistan, and The World. *Journal of Public Affairs*, 24(1). https://doi.org/https://doi.org/10.1002/pa.2899
- Kahf, M. (1999). the Performance of the Institution of Zakah in Theory and Practice Monzer Kahf.
- Kim, Y. M., & Park, K. S. (2020). Labour Share and Economic Growth in OECD Countries. *Global Economic Review*, 49(1), 1–22. https://doi.org/10.1080/1226508X.2019.1699847
- Loayza, N. V., & Raddatz, C. (2010). The Composition of Growth Matters for Poverty Alleviation. *Journal of Development Economics*, 93(1), 137–151.



- https://doi.org/https://doi.org/10.1016/j.jdeveco.2009.03.008
- Mankiw Gregory, N., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. *Quarterly Journal of Economics*, 107(2), 407–437. https://doi.org/10.2307/2118477
- Mongkito, A. W., Samdin, Gamsir, Sariadi, L. O., Balaka, M. Y., Lapipi, Harafah, L. O. M., Irmawatty, Alwahidin, & Nusantara, A. W. (2025). The Role of Zakat in Poverty Alleviation and Farmer Welfare; the Theoretical Review. *Journal of Global Innovations in Agricultural Sciences*, 13(1), 285–296. https://doi.org/10.22194/JGIAS/25.1427
- Rahadi, D. R. (2023). Pengantar Partial Least Aquares Structural Equation Modeling (PLS-SEM). Lentera Ilmu Madani.
- Ravallion, M. (2001). Growth, Inequality and Poverty: Looking Beyond Averages. *World Development*, 29(11), 1803–1815. https://doi.org/10.1016/S0305-750X(01)00072-9
- Soylu, Ö. B., Çakmak, İ., & Okur, F. (2018). Economic growth and unemployment issue: Panel data analysis in Eastern European Countries. *Journal of International Studies*, *11*(1), 95. https://doi.org/10.14254/2071-8330.2018/11-1/7
- Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualittataif, Dan R&D. Alfabeta.
- The World Bank. (2020). Poverty and Shared Prosperity 2020: Reversals of Fortune. In Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics). Washington, DC: World Bank. https://doi.org/10.1596/978-1-4648-1602-4
- Todaro, M. P., & Smith, S. C. (2020). Economic Development. Thirteenth Edition. In *Pearson* (Issue 13th Edition). https://www.mkm.ee/en/objectives-activities/economic-development
- Widarjono, A. (2013). Ekonometrika: Pengantar dan Aplikasinya. Ekonosia.
- Yumanita, D., & Ascarya. (2018). Analisis Rendahnya Pengumpulan Zakat di Indonesia dan Alternatif Solusinya. *Bank Indonesia*, 4. https://publication-bi.org/repec/idn/wpaper/WP92018.pdf

