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Does zakat impact poverty alleviation in Indonesia during Covid-19?

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Abstract: Zakat functions as a crucial instrument for achieving developmental goals, including the improvement of individual welfare. This study aims to analyse the effect of zakat, as measured by the National Zakat Index (NZI), on poverty alleviation in Indonesia during the Covid-19 pandemic. This research utilizes panel data from 32 Indonesia provinces covering the period from 2020 to 2022, employing the Fixed Effect Model (FEM) analysis method. The current analysis has not found a statistically significant effect of the National Zakat Index on the decrease of poverty rates in Indonesia. A major element to the enduring poverty in Indonesia is the inadequate collection of national zakat money. The Covid-19 pandemic has led to a significant rise in the number of individuals living in poverty, thereby decreasing zakat payment collections. The NZI is an extensive index that encompasses both macro and micro aspects. The NZI is expected to function as an objective metric for assessing the efficacy of zakat administration in Indonesia. The establishment of efficient zakat management is anticipated to enhance poverty reduction efforts. The policy consequence derived from the findings is to enhance zakat management organizations. This study contributes to the relationship between zakat and poverty reduction from a macro-level perspective, unlike earlier research that focuses on micro-level data.

Keywords: National Zakat Index (NZI); Poverty Alleviation; Covid-19; Indonesia

JEL Classification: I32; H53; O15; Z12; C33



Introduction

Zakat serves as a significant mechanism for attaining development objectives, encompassing the enhancement of individuals' well-being. Through effective management, zakat, infaq, and sadaqah (ZIS) and endowments provide significant potential to address a wide range of economic and social challenges faced by the nation (Lestari, 2015; Erliyanti, 2017). Zakat, infaq, and sadaqah contribute significantly to the provision of assistance to individuals experiencing poverty (Dirie et al., 2024).

Zakat serves as a significant mechanism for attaining development objectives. It encompasses the enhancement of individuals' well-being. Through effective management, zakat, infaq, and sadaqah (ZIS) and endowments provide significant potential. They can address a wide

range of economic and social challenges faced by the nation (Erliyanti, 2017). Zakat, infaq, and sadaqah contribute significantly to the provision of assistance to individuals experiencing poverty (Dirie et al., 2024).

The term "zakat" appears 32 times in the Qur'an, spread across 29 surahs, with 3 instances in the indefinite form ("nakirah") and the remaining 29 in the definite form ("knowledge"). Of these verses, 10 are Makkiyah and 22 are Madaniyah (Najed, 2015). Etymologically, "zakat" is derived from the root word "zaka," which conveys meanings of growth, holiness, and blessings. Shiddieqy (2001) explains that zakat encompasses the concepts of growth, purification, and blessings. In Islamic jurisprudence, zakat is defined as an obligatory financial contribution taken from certain assets, which is distributed according to specific criteria to designated groups. It is recognized as an Islamic levy on an individual's property (Glasse, 1999). M. Syuhudi Ismail in Najed (2015) further defines zakat as a specific portion of property voluntarily given by its owner. For the payer, zakat serves to purify both the individual and their possessions from impurities, as well as a means to seek blessings from God and promote social responsibility in practical terms. In practice, zakat is sometimes referred to by alternative terms such as shadaqah, infaq, haqq, and 'afw (Shiddieqy, 2001).

Zakat instruments serve as a crucial safeguard for the economy, preventing it from succumbing to crisis situations when there is a stagnation or underutilization of spending potential. The implementation of zakat ensures the sustenance of the economy at a foundational level by ensuring the provision of essential necessities through the administration of baitul mal by the state. During the Covid-19 epidemic, there was a notable rise in the number of individuals experiencing poverty (Herianingrum et al., 2024). Zaenal et al. (2022) highlight that the role of zakat in poverty alleviation is enshrined in Law No. 23 of 2011, which specifies that the primary goal of zakat administration, as outlined in Article 3 of the law, is to promote societal well-being and reduce poverty. As such, all actions and initiatives that utilize zakat funds must be focused on improving the welfare of society and addressing poverty. The main purpose of zakat is to enhance the quality of life for those categorized as mustahik (the eligible recipients). One effective approach to meeting the basic needs of individuals with limited financial resources involves creating a mechanism that redistributes wealth from the more affluent to those in need. This initiative aims to reduce economic disparities and provide essential support to individuals who are unable to meet their basic needs (Buchari, 2019).

Furthermore, this perspective acknowledges the importance of non-governmental institutions in accelerating poverty alleviation efforts, recognizing that tackling poverty is not solely the responsibility of the government. Instead, it requires the active involvement of private and non-profit organizations, reflecting a spirit of altruism and shared responsibility in improving the welfare of the community. Consequently, there was a pressing necessity for the distribution of zakat to ensure that the basic consumption requirements of the impoverished population were adequately met. A study of Ascarya (2022), demonstrates that Islamic social finance, specifically zakat, infaq, and waqf, possess the potential to contribute towards the government's efforts in revitalising the economy amidst a crisis. Several contributions have been made in response to the current

situation. Firstly, social safety nets have played a crucial role in economically and socially supporting households. Secondly, financial and business assistance has been provided to save small and medium-sized enterprises (UMKM). Lastly, the development of waqf, along with the adoption of fintech, has been instrumental in safeguarding financial institutions. The role of zakat as a mechanism for mitigating poverty has been established in accordance with the provisions outlined in Law No. 23 of 2011, which pertains to the administration of zakat. According to legal provisions, the purpose of management of zakat is to promote societal welfare and alleviate poverty. Hence, it is imperative that all actions and derivative endeavours utilising zakat donations are directed towards the amelioration of societal poverty (BAZNAS, 2023). Numerous empirical research have also demonstrated the advantageous effects of zakat in terms of alleviating poverty. By employing the fuzzy method, Bouanani & Belhadj (2020) demonstrate the potential of zakat as a means to alleviate poverty in Tunisia. Likewise, Rini et al., (2020) indicate that the allocation of zakat in Indonesia has a notable and favourable impact on poverty reduction. However, it is worth noting that the current distribution of zakat mostly focuses on consumptive purposes rather than productive utilisation. Additional research has demonstrated that zakat has the potential to enhance the effectiveness of wealth distribution in accordance with Islamic teachings, as well as facilitate the implementation of financial inclusion within society (Razak, 2020).

As of 2022, the cumulative sum of cash collected for zakat, infaq, and sadaqah (ZIS) has reached Rp 22.43 Trillion. The observed numerical value exhibited a substantial increase in comparison to preceding years. The observed rise can be attributed to the collective endeavours undertaken by zakat institutions, operating at both national and regional scales, to disseminate awareness regarding zakat duties and enhance the efficacy of diverse fundraising tactics employed by zakat institutions. These efforts have demonstrated progressive improvement over time. According to the data presented in figure 1, it is evident that the poverty rate in Indonesia experienced an upward trend during the Covid-19 pandemic. Additionally, the economic growth rate exhibited a decline, reaching a value of -2.07%.

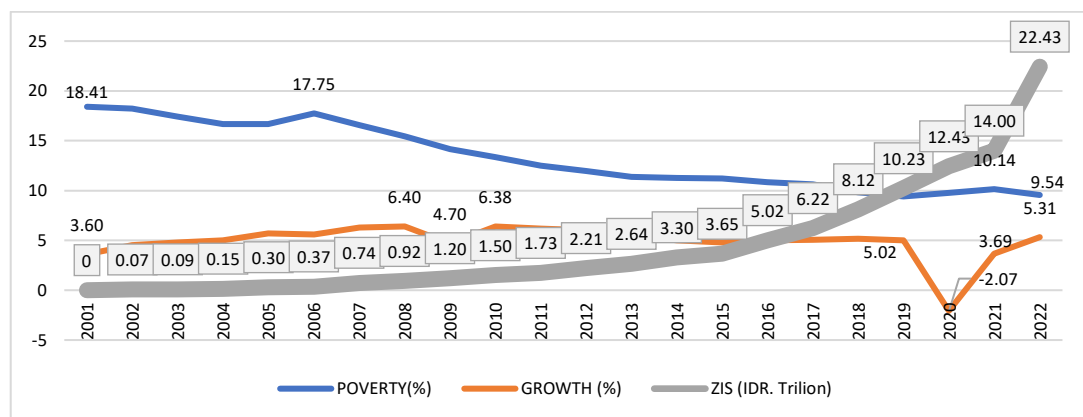


Figure 1 Development of Poverty Rate, Economic Growth, and ZIS Funds in Indonesia Period 2001-2022.

Source: National Zakat Statistics & Indonesian Zakat Outlook various years.

In addition to prioritising the augmentation of zakat funds, the National Zakat Board (BAZNAS) in Indonesia also places significant emphasis on the administration and governance of zakat. It is anticipated that through improving the management of zakat, the allocation of zakat funds will provide enhanced societal welfare outcomes. The results of the study by Suteki & Putri (2019), demonstrate the efficacy of an efficient zakat management system in achieving positive outcomes in poverty reduction. BAZNAS has recently unveiled the National Zakat Index (NZI) as a metric for evaluating the efficacy of national zakat administration. The NZI measurement is conducted with the objective of capturing and assessing the zakat management endeavours undertaken by BAZNAS and Lembaga Amil Zakat (LAZ) at several hierarchical levels, including the national/central, provincial, and district/city levels. In the year 2022, NZI measurements will be conducted at 26 Provincial BAZNAS and 208 Regency/Municipal BAZNAS that have completed the questionnaire, allowing for comprehensive data processing. In order to finalise the report, BAZNAS conducts an analysis of the nationwide measurement findings of NZI and its impact assessment.

In addition, numerous studies have explored the impact of zakat on poverty in Indonesia, with a significant focus on local and provincial levels. Katman et al. (2023) found that the implementation of productive zakat had a substantial positive impact on the well-being of mustahik in Bulukumba Regency. Similarly, Santika & Zulkifli (2021) asserted that zakat, social assistance, and income had a beneficial and statistically significant effect on the well-being of the population in Gayo Lues Regency. Damanhur & Nurainiah (2016) also revealed that zakat significantly impacted the well-being of individuals in North Aceh Regency. On a national level, Rini et al. (2020) identified a notable positive impact of zakat on poverty reduction in Indonesia, although its allocation is primarily focused on consumptive zakat.

Moreover, the zakat empowerment program has proven effective in enhancing the well-being of mustahik and fostering the growth of their entrepreneurial ventures (Widiastuti et al., 2021). Zakat community empowerment has thus emerged as a viable approach to mitigate poverty, promote equity, and eradicate poverty within Indonesia. Mawardi et al. (2023) highlighted that zakat empowerment programs and business support positively influence the growth of mustahik's enterprises, thereby improving their overall well-being. However, they also noted that the well-being of individuals is not significantly influenced by macroeconomic factors (Mawardi et al., 2022). Other studies have shown a statistically significant positive correlation between organizational support and the success of mustahik empowerment programs, further contributing to the effectiveness of poverty reduction efforts. Karuni (2020) demonstrated that productive zakat programs yield favorable outcomes by increasing business revenue and enhancing both the material and spiritual well-being of mustahik. The rise in welfare can be analyzed through the Maqashid Al-Syari'ah framework, which emphasizes the preservation of religion, the soul, reason, progeny, and wealth (Ad-Diin, An-Nafs, Al-Aql, An-Nasl, Al-Maal).

However, studies by Efendi & Fathurrohman (2021) and Mubarakah et al. (2018), using the Center of Islamic Business and Economic Studies (CIBEST) model, suggest that while productive zakat programs may improve material welfare and reduce poverty, they have

a limited impact on the spiritual well-being of mustahik. On a global scale, cross-country studies utilizing a fuzzy approach have provided empirical evidence that zakat can alleviate poverty, such as in Tunisia (Bouanani & Belhadj, 2020). Abdullah (2017), using the Zakat Effectiveness Index (ZEIN), examined zakat's role in mitigating poverty and inequality in Malaysia. Furthermore, Widiastuti et al. (2022), in a cross-country study of 39 OIC member states, found a statistically significant inverse correlation between zakat practice and poverty prevalence. Abdelmawla (2014) also demonstrated zakat's substantial role in reducing poverty levels in Sudan, recommending an increase in zakat allocation to the impoverished to reduce income inequality. Junaidi et al. (2023) and Rozikin & Sofwani (2023) emphasize that poverty alleviation requires inclusive collaboration between society and government to ensure sustainable development through effective zakat management. This analysis is based on the average NZI value observed across all BAZNAS in Indonesia. Therefore, the present study aims to examine the impact of the National Zakat Index (NZI) on the mitigation of poverty in Indonesia amidst the Covid-19 pandemic.

Research Method

The present study aims to examine the potential impact of the National Zakat Index (NZI) on poverty reduction in Indonesia. The acronym of NZI denotes the manner in which zakat management is executed. A higher NZI number, approaching 1, indicates a more effective handling of Zakat. The estimating process incorporates a collection of control variables commonly observed in poverty-related studies (Poverty), including Economic Growth (Growth), Inflation, Economic Openness (Openness), Government Expenditures (Gov), Per Capita GRDP (PDRBCAP), and Quality of Human Resources (HDI). The models employed in this study are as follows;

$$\text{Poverty}_{it} = \alpha_0 + \alpha_1 \text{INZI}_{it} + \alpha_2 \text{Growth}_{it} + \alpha_3 \text{Inflation}_{it} + \alpha_4 \text{PDRBCAP}_{it} + \alpha_5 \text{Gov}_{it} + \alpha_6 \text{Openness}_{it} + \alpha_7 \text{HDI}_{it} + \mu_{it}$$

The variables in question are as follows: Poverty represents the provincial poverty rate expressed as a percentage, NZI denotes the National Zakat Index, Inflation refers to the inflation rate expressed as a percentage, Growth is the economic growth rate expressed as a percentage, and PDRBCAP represents the Gross Regional Domestic Product (GRDP) per capita at current prices, measured using the natural logarithm (ln). The variable "Gov" refers to the proportion of government expenditure in the Public Revenue and Expenditure Database (PRDB), expressed as a percentage. "Openness" denotes the ratio of exports to Gross Regional Domestic Product (GRDP). Lastly, "HDI" stands for the Human Development Index, which serves as a measure of the quality of human resources.

This analysis employs panel data including 32 provinces in Indonesia over the Covid-19 pandemic period from 2020 to 2022. The Papua region was not included in the model due to significant data variations, which resulted in the presence of outliers. These fluctuations can be attributed to the region's economic reliance on PT. Freeport Indonesia. Multiple interconnected studies typically perform similar tasks. The data

utilised in this study were sourced from the Central Statistics Agency (BPS) and other pertinent agencies. The primary sources of data were accessed from the official website of BPS (www.bps.go.id) and reports from BAZNAS Republic of Indonesia (RI).

In relation to the utilisation of panel data, there exist a minimum of three analytical methodologies that can be employed, specifically Common Pooled Regression (Ordinary Least Squares), Fixed Effect Model, and Random Effect Model. In order to select a suitable estimating technique for analysing panel data, formal tests were conducted, including the F test, Hausman test, and LM test (Damodar & Porter, 2009; Greene, 2012).

Result and Discussion

In general, the National Zakat Index of Indonesia stands at 0.6, indicating that it falls within the category of satisfactory performance. The province of Jakarta attained the highest score on the NZI scale, registering a value of 0.81, so placing it inside the "very good" category. It is noteworthy that Jakarta was the sole province to achieve this classification. In contrast, the provinces of Bali and West Papua have the lowest NZI scores, placing them inside the unfavourable group. Based on the figure 3, it is evident that there are 15 provinces that have achieved a favourable score ranging from 0.61 to 0.80. Additionally, there are another 15 provinces that fall within the category of rather good performance, with scores ranging from 0.41 to 0.60. This finding further underscores the need for enhanced management of national zakat in Indonesia in order to optimise its societal and economic benefits.

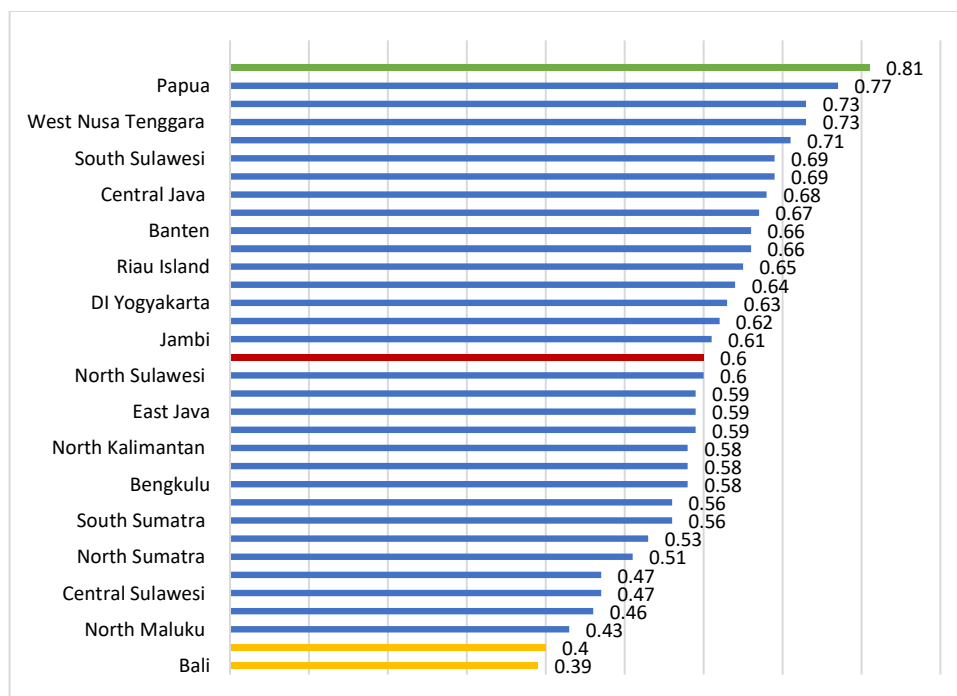


Figure 2 National Provincial Zakat Index in Indonesia in 2022
(Source: BAZNAS (2023b), data is processed)

Moreover, according to table 1, the outcomes of the model testing process aimed at selecting an estimation technique among Ordinary Least Squares (OLS), Fixed Effects (FE), and Random Effects (RE) revealed that the FE model exhibited the highest suitability for estimating the relationship between the National Zakat Index (NZI) and the poverty rate in Indonesia, shown by the highest R^2 compared to other models. Therefore, the analysis would take parameters obtained from the results shown by the FE model. In addition, the Hausman probability cross random is less than 5% (0,000). It means that the fixed effect is consistent and better used.

According to FE result shown in table 1, the findings of the study indicate that there is no substantial impact of the National Zakat Index on the mitigation of poverty in Indonesia within the covid period. The efficacy of zakat management in Indonesia in addressing poverty, particularly in the context of the Covid-19 pandemic, appears to be limited. One of the points pertaining to this matter is that the Covid-19 pandemic has resulted in a significant growth in the impoverished population in Indonesia. It has been observed that since 2020, the percentage of individuals living below the poverty line in Indonesia has risen to 9.78 percent, surpassing the previous year's figure of 9.41 percent. It is projected that the poverty rate will persistently rise to 10.14 percent in the year 2021. The substantial rise in the poverty rate cannot be adequately addressed by the current allocation of zakat funds, as they remain relatively limited in quantity. During the COVID-19 pandemic, the study did not find a significant impact of Zakat on the poverty rate in Indonesia. This result differs from previous studies such as (Fathoni et al., 2021; Handayani et al., 2024). The increase in the number of poor people during the COVID-19 pandemic has caused the effectiveness of zakat in reducing poverty to be suboptimal.

Furthermore, the accumulated zakat, infaq and sadaqah (ZIS) funds have not yet reached their full potential. By the year 2022, the total amount of ZIS collected has reached Rp 22.43 trillion. Despite seeing a notable surge in comparison to preceding timeframes, the accumulated ZIS funds remained considerably distant from the inherent ZIS capacity. Based on the report published by BAZNAS RI, it has been determined that the annual potential for zakat, infaq, and sadaqah (ZIS) in Indonesia amounts to Rp. 327 trillion. Therefore, the money collected by the ZIS remain at around 6.85 percent of the total possible amount. further (BAZNAS, 2023a) The author contends that the efforts aimed at eliminating poverty in Indonesia are still far from achieving their desired outcomes. This finding was likewise observed in the study conducted by Umar et al. (2021). According to the authors, the efficacy of the Business zakat in mitigating poverty in Kano, Nigeria is limited as a result of the inadequate collection of zakat from business operations. The occurrence of inadequate zakat payment in economic endeavours has led to minimal alleviation of poverty, despite the inherent capacity of Zakat as a means for societal empowerment. These findings may also lend assistance to the investigation of Umar et al. (2022). Zakat exhibits a limited direct impact of positive nature, although it yields a substantial indirect influence through the oriental ethical moderation effect in the context of poverty reduction amidst the COVID-19 pandemic.

Ultimately, these findings serve to validate the outcomes of the study (BAZNAS, 2023b). The distribution of zakat has been observed to lead to a reduction in poverty levels, while

the total impact remains very modest. The BAZNAS/LAZ's contribution ratio to national poverty alleviation stands at 1.44%. The current level of success falls short of the aim established in the BAZNAS Strategic Plan for the year 2021.

Table 1 Estimation Effect of the National Zakat Index on Poverty Alleviation

Variable	Dependent Variable: Poverty		
	OLS	FE	RE
C	45.526 *** (4.524)	99.967 *** (3.062)	77.952 *** (4.248)
NZI	8.740 ** (2.446)	0.521 (0.788)	0.690 (1.320)
GROWTH	0.021 (0.178)	0.081 *** (4.739)	0.079 *** (4.929)
INFLATION	-0.044 (-0.233)	-0.082 * (-1.708)	-0.075 ** (-2.608)
PDRBCAP	-1.493 * (-1.862)	-5.602 *** (-2.972)	-3.972 *** (-3.319)
GOV	0.260 *** (4.492)	0.153 * (1.735)	0.171 *** (3.249)
OPENNESS	-0.017 (-1.450)	0.010 ** (2.264)	0.008 * (1.877)
HDI	-0.235 * (-1.797)	0.062 (0.193)	-0.027 (-0.165)
R-squared	0.474	0.997	0.560
Adjusted R-squared	0.431	0.996	0.524
S.E. of regression	3.040	0.254	0.253
F-statistic	11.080	612.991	15.645
Prob(F-statistic)	0.000	0.000	0.000
Number of Observation	94	94	94
Prob. LM Test/ F Test / Hausman Test	0.000	0.000	0.489

Note: t -statistics in parentheses. (*) indicates statistical significance at the 10% level, (**) at 5%, and (***) at 1%.

In contrast to the findings of the general investigations, several control factors exhibited divergent outcomes. The variable of inflation exerts a noteworthy adverse impact on the reduction of the poverty rate. In the present context, there exists an inverse relationship between the inflation rate and the poverty rate, whereby a greater inflation rate is associated with a lower poverty rate. However, it is worth nothing that prevailing literature and economic references generally posit that low inflation is anticipated to mitigate poverty. Nevertheless, it is crucial to acknowledge that the findings of this study are inherently intertwined with the temporal context in which it was conducted, specifically during the period of the Covid-19 pandemic spanning from 2020 to 2022. It is noteworthy that this period was characterised by a remarkably low inflation rate and even instances of deflation in certain locations. The obtained results align with the existing economic literature, which suggests that maintaining a certain amount of inflation serves as a necessary incentive for businesses to expand their capacity and foster economic growth. These results are not in line with previous studies such as the study by Hasibuan

et al. (2023) and Khan et al. (2023). During times of crisis, inflation rates tend to be low while, on the other hand, poverty rates increase significantly.

The findings from the estimation of the economic growth variable yielded unexpected outcomes, as it was observed that the economic growth variable exhibited a statistically significant positive impact on the escalation of the poverty rate. There exists a positive correlation between economic growth and the incidence of poverty, whereby an increase in economic growth is associated with a corresponding increase in poverty levels. A plausible rationale for this outcome can be attributed to the Covid-19 epidemic, wherein the technology sectors exhibited growth while labor-intensive sectors or those reliant on human labour encountered contractions and reduced production as a consequence of economic activity constraints. This phenomenon hinders the achievement of inclusive economic growth and leads to a decline in the well-being of a majority of workers and the broader community. These results indicate that during the Covid-19 pandemic, the expected trickle-down effect mechanism in Indonesia's economic growth, as stated by (Akinci, 2017; Gai & Zhou, 2022), could not function.

There exists a positive correlation between the variables of Government Expenditure (Gov) and Economic Openness (Openness) and the poverty rate. There is a positive correlation between increased government spending and economic openness and the occurrence of increasing poverty rates. One factor contributing to the correlation between Government Expenditures and direction is the significant reduction in the government's budget, mostly due to the allocation of funds towards addressing the Covid-19 pandemic. Consequently, several areas of development are unable to be executed to their fullest potential. Furthermore, there is ongoing dispute regarding the efficacy of resource allocation in managing the Covid-19 pandemic. This result differs from previous studies such as (Nkamnebe, 2023; Pateda et al., 2019; Adegboyo, 2020). The impact of the pandemic, which caused a significant reduction in budget allocation, has pressured the government's ability to address the widening poverty levels during the crisis, and economic openness has further exacerbated the poverty levels during the crisis. This is also in line with the opinion of (Onakoya et al., 2019) that in some cases, economic openness will worsen poverty if not managed properly.

Regarding the variable of openness, it is evident that regions characterised by significant economic openness will encounter a heightened incidence of poverty amidst the Covid-19 pandemic. The aforementioned circumstances can be comprehended due to the numerous limitations imposed on the movement of individuals and commodities between different regions and nations, significantly impacting both economic operations and the well-being of individuals. The variable of Gross Regional Domestic Product (GRDP) per capita regularly exhibits a strong impact on poverty reduction in Indonesia. There exists an inverse relationship between the level of Gross Regional Domestic Product (GRDP) per capita and the incidence of poverty. This result shows that the increase in real per capita income can significantly contribute to reducing the poverty rate. The importance of striving for inclusive economic growth, so that growth not only improves economic welfare but also creates a more just and sustainable society. (Aslam & Saeed, 2023; Fosu, 2017). While HDI has a weakly significant negative effect on the dependent

variable. This means that an increase in HDI tends to decrease the dependent variable, albeit with weak significance. These results are not in line with the studies (Amaluddin et al., 2018; Hasanah & Lia, 2024). Pressure on budget allocation for improving HDI, especially in the fields of education, health, and infrastructure, is one of the arguments for the lack of impact of HDI on reducing poverty rates during the COVID-19 pandemic.

In general, during the COVID-19 pandemic crisis, the influence of Zakat and macroeconomic variables did not function as they should have. Some variables show anomalies or inconsistencies with the literature or previous studies. Nevertheless, Zakat remains an important instrument in improving the welfare of society, especially for economically weak groups, both in the form of consumptive and productive zakat. To strengthen its impact, the capacity for zakat management must be further maximized. In a post-COVID-19 zakat impact study, (Kato, 2022) found that the enforcement of justice and social equity principles in Islamic economics has the potential to effectively reduce poverty, especially in the post-COVID-19 global context (Kato, 2022).

Conclusion

The National Zakat Index (IZN) of Indonesia, with an overall score of 0.6 categorized as "fairly good", does not demonstrate a statistically significant impact on poverty alleviation, particularly during the Covid-19 pandemic. Despite the strategic importance of zakat in Islamic social finance, its practical contribution remains limited, as evidenced by the fact that only DKI Jakarta achieved a "very good" rating, while provinces like Bali and West Papua fell into the "poor" category. The Fixed Effects (FE) model, chosen to assess the relationship between IZN and poverty, confirmed the lack of significant influence, largely due to the surge in the number of people living in poverty during the pandemic—beyond the financial capacity of zakat to address effectively. The realization of zakat, in the form of ZIS (Zakat, Infaq, and Sadaqah), reached merely 6.85% of its estimated potential, signaling a vast underperformance in zakat collection. Additionally, macroeconomic variables such as inflation, economic growth, government expenditure, and economic openness yielded inconsistent outcomes when compared to conventional economic theory, underscoring the disruption caused by the Covid-19 crisis on trickle-down mechanisms and fiscal distribution. Consequently, zakat management institutions such as BAZNAS and LAZ need to intensify efforts to mobilize zakat, especially by engaging potential muzakki from business sectors, in order to expand collection and fulfill zakat's true socioeconomic potential. The challenge of eradicating poverty thus remains substantial, necessitating more rigorous, inclusive, and innovative approaches to position zakat as a central pillar in sustainable poverty alleviation strategies in Indonesia.

Author Contributions

Conceptualisation, A.Z and D.B.W; Methodology, N.A ; Investigation, A.Z and N.A; Analysis, D.B.W; Original draft preparation, A.A; Review and editing, D.B.W ; Visualization, A. A. All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest

The authors of the study declare that they have no competing interests. The funders had no control over the study's design, data collection, analysis, and interpretation, paper authoring, or decision to publish the results.

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