Long term nexus between digitalization and macroeconomy on zakat collection in Indonesia

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Article Info

Abstract

Purpose – This study aims to investigate the long-term and short-term impacts of digitalization and macroeconomic factors on zakat collections in Indonesia. It explores and validates the successful use of the Internet and a country's economic conditions to maximize zakat collection.

Methodology – This study employs annual time series data from 1991 to 2024 to examine zakat collections in Indonesia, with digitalization and macroeconomic performance as the key exogenous variables. The selected period captures major economic disruptions, including the Asian Financial Crisis, 2008 global financial crisis, and post-pandemic recovery. The Autoregressive Distributed Lag (ARDL) model was applied to assess the long-short dynamic relationship effect among the variables.

Findings – This study addresses hypothesis by empirically confirms that the integration of digitalization and macroeconomic improvements plays a pivotal role in enhancing zakat collections in Indonesia. The findings reveal a favorable long-term and short-term impact of digitalization on zakat collection, and long-term positive effects and short-term negative effects of macroeconomic conditions.

Implications – This study provides critical insights for BAZNAS and other zakat institutions in designing and implementing sustainable digital strategy policies that enhance zakat mobilization and management efficiency. By integrating digital transformation initiatives with a forward-looking approach to future economic dynamics, zakat organizations can strengthen transparency and improve donor engagement.

Originality – This research presents a unique contribution by addressing the scarcity of studies on zakat collections that incorporate both long-term and short-term analyses. Furthermore, research incorporating macroeconomics and digitalization as external factors in the study of zakat remains limited.

Cite this article:

Introduction

Social finance is essential for the organization and management of welfare services. In this context, social finance not only facilitates the implementation of welfare policies but also complements the

government's limitations in addressing various social issues (Ferrell et al., 2016). Social finance serves as an alternative approach to addressing market failures in tackling complex and urgent social issues, including poverty and inequality (Andrikopoulos, 2020). The primary challenge in social finance is achieving a balance between revenue generation from business activities and maintaining focus on social objectives (Ferrell et al., 2016). This dilemma frequently results in tensions between economic efficiency and adherence to social missions, necessitating that financial organizations operate sustainably while maintaining their social impact.

Indonesia, as the world's largest Muslim-majority country, reflects a deeply entrenched philanthropic tradition. Data from the World Giving Index 2024, published by the Charities Aid Foundation, reveal that 90% of Indonesians are willing to make monetary contributions, placing the nation as the second largest global donor after Myanmar (Charities Aid Foundation, 2024). This strong philanthropic tendency is largely shaped by Islamic principles, which emphasize that charitable giving serves as a means to avert potential adversities (Faza & Indriani, 2022). Zakat, as a compulsory almsgiving obligation imposed upon Muslims who meet nisab and haul thresholds (Muzakki), exemplifies this commitment (Widiastuti et al., 2022). With approximately 87% of its population adhering to Islam, Indonesia has substantial potential for zakat collection.

Statistik Zakat National from the National Amil Zakat Agency (Badan Amil Zakat Nasional, BAZNAS) revealed the trajectory of zakat collection in Indonesia between 2002 and 2022, illustrating a significant long-term expansion shaped by post-crisis economic recovery. Starting at IDR 68 billion in 2002, just a few years after the Asian Financial Crisis, the zakat sector benefited from improved macroeconomic stability and growing public awareness of Islamic philanthropy. Collections rose steadily throughout the 2000s, exceeding IDR 1,500 billion by 2010, and continued to accelerate with the implementation of structured zakat management policies and the initial adoption of digital payment systems, ultimately peaking at IDR 9,055 billion in 2019.

However, this upward trend was disrupted by the Covid-19 pandemic in 2020, which caused a sharp contraction to IDR 6,442 billion (–28.86% growth rate) as household incomes declined and economic activity slowed. Although partial recovery was observed in 2021 (IDR 7,143 billion), supported by the expansion of online zakat services and renewed economic growth, this momentum was not sustained, with collections dropping again to IDR 5,254 billion in 2022 (–26.44% YoY). The historical trajectory underscores that the zakat sector has been sensitive to macroeconomic shocks, yet it has also proven capable of growth during periods of recovery, particularly when supported by institutional reforms and digitalization. Strengthening the integration of digital zakat infrastructure with broader economic recovery policies remains critical for enhancing zakat mobilization in the post-pandemic period.

A decrease in zakat collection is a significant concern that necessitates prompt action. Sarea (2020) states that zakat plays a crucial role in sustainable economic development by alleviating poverty and promoting social equality. It is vital to support society's welfare and sustain development in Muslim countries. Furthermore, the role of zakat in enhancing welfare aligns with the fifth Maqashid Syariah, referred to as "*hifz al-mal*" or "safeguarding wealth." This principle also contributes to the attainment of various objectives within the Sustainable Development Goals (SDGs), specifically Targets 1, 3, 8, and 10.

BAZNAS, as a non-structural government institution, has been mandated by the Constitution to implement national zakat management. Based on Article 4, paragraph 2 of the National Amil Zakat Agency Regulation Number 5 of 2018 concerning Financial Management of Zakat, it is stated that the receipt of funds is not only done through the zakat management counter, but also through electronic payment systems through Islamic banking. Technological advancement offers an expansion of public access to pay zakat through digital payments, such as QRIS, Transfer, and Crowdfunding (Arif et al., 2024). In recent years, the emergence of digital payment systems has become important in improving the efficiency, transparency, and accessibility of zakat management, especially as people become more tech-savvy (Tang et al., 2021; Yli-Huumo et al., 2016). This transformation is not only technological, but also socio-economic, aligning the zakat collection process with broader trends in economic development and social welfare (Ferreira & Perry, 2019). Various studies have also highlighted the role of digital platforms in facilitating more

accessible zakat payments, especially in contexts such as Indonesia, where the integration of such systems has had a significant impact (Beik et al., 2023; Komala, 2023).

However, concerns about the security and privacy of digital transactions pose widespread barriers. These challenges suggest that while digitalization offers numerous benefits, its implementation must be carefully tailored to the socioeconomic contexts of different regions (Ghofar et al., 2024). To address these challenges, the integration of macroeconomic factors into the analysis of zakat collection dynamics provides a comprehensive approach to improving zakat systems.

The convergence of digitalization and zakat collection was identified in the 2019-2024 Sharia Economic Master Plan as an opportunity to advance innovation in Islamic Social Finance. By analyzing macroeconomic variables in conjunction with digitalization initiatives, zakat organizations can formulate more flexible plans to optimize donations during times of economic growth. Consequently, the convergence of digitalization and macroeconomic elements provides a means to improve the efficiency and effectiveness of zakat management.

This study investigates the long- and short-term impacts of digitalization and macroeconomic factors on zakat collection in Indonesia. This study provides critical insights for BAZNAS and other zakat institutions in designing and implementing sustainable digital strategy policies that enhance zakat mobilization and management efficiency. By integrating digital transformation initiatives with a forward-looking approach to future economic dynamics, zakat organizations can strengthen transparency, improve donor engagement, and ensure more resilient donation streams. This research presents a unique contribution by addressing the scarcity of studies on zakat collection that incorporate both long- and short-term analyses. Furthermore, research incorporating macroeconomics and digitalization as external factors in the study of zakat remains limited.

Literature Review

Zakat as welfare tools

Zakat is a fundamental pillar of Islam and a mandatory charitable contribution that plays a crucial role in promoting social justice and economic equity among Muslims. As a religious obligation, zakat is not merely a voluntary act of charity; it is a structured system of wealth redistribution designed to alleviate poverty and support community welfare of the community (Daud et al., 2025). The effectiveness of zakat as a tool for poverty alleviation is further supported by empirical studies demonstrating its positive impact on income distribution and social welfare. For instance, Widodo (2019) indicated that integrated Islamic commercial and social finance can significantly reduce income inequality in Indonesia, highlighting the role of zakat in addressing wealth disparities.

Furthermore, the obligatory nature of zakat requires both individuals and enterprises to allocate a specific portion of their wealth, thereby establishing a consistent and sustainable source of funding for social development initiatives, such as farmer empowerment (Mongkito et al., 2025; Saputra & Tanjung, 2024), disaster management (Arifin & Anwar, 2021; Hulwati et al., 2024; Sulistyowati, 2018), specifically targeting poor women (Anis & Kassim, 2016), and the impact on socioeconomic improvement at the local level (Al-Haddad et al., 2024). This mandate is deeply rooted in Islamic principles that advocate for the support of the underprivileged and the promotion of economic justice. Consequently, zakat functions as a critical instrument for addressing social welfare issues, particularly in developing economies, such as Indonesia, where income inequality remains pronounced.

Digitalization as a booster of zakat collection

Digital payment systems have emerged as a transformative force that facilitates zakat contributions, particularly as populations worldwide become increasingly digitally literate. The integration of digital tools into zakat collection processes enhances the convenience of donations and improves the overall efficiency of zakat management (Nuriyah & Fakhri, 2022). For instance, the development of online platforms and mobile applications by organizations such as BAZNAS in Indonesia has streamlined the zakat payment process, allowing donors to easily contribute from their devices (Madia, 2023).

This shift towards digitalization is crucial in attracting younger generations who are more inclined to engage with technology, thereby increasing zakat participation rates.

Furthermore, the integration of digital tools into Zakat management enhances transparency and accountability, which are essential for building donor trust. Research indicates that systematic transparency in Zakat fund financial reports significantly influences donor confidence and willingness to contribute (Syamsuri, 2024). By utilizing digital platforms, zakat institutions can provide real-time tracking of donations and detailed reports on fund utilization, thereby fostering a sense of accountability among donors. This is particularly important in addressing concerns about mismanagement or the misuse of funds, which have historically undermined public trust in zakat institutions.

H_1: Digitalization has a positive and significant impact on Zakat Collection in Long and Short Term.

Theories of voluntary giving behavior and macroeconomy

The relationship between economic growth and zakat collection is multifaceted, with macroeconomic factors playing a significant role in shaping charitable giving behavior. (Meer & Priday, 2021). Within the budget line framework, the allocation between zakat payments and the consumption of other goods by muzakki is constrained by income, which serves as the principal determinant of the model (Durohman et al., 2023). Consequently, limited income imposes a constraint on both the amount of zakat payable and level of consumption.

In general, numerous cross-temporal studies have demonstrated that an increase in income leads to higher donations (Hood et al., 1977; Isa et al., 2015; Kitchen & Dalton, 1990; Okten & Weisbrod, 2000; Ranganathan & Henley, 2008). Thus, economic growth often leads to increased disposable income, which can enhance individuals' capacity and willingness to fulfill their zakat obligations (Muin et al., 2024). As the economy expands, more individuals and businesses become financially capable of meeting their zakat responsibilities, thereby increasing the overall zakat collection.

H_2: Macroeconomy has a positive and significant impact on Zakat Collection in Long and Short Term.

Research Methods

Research variables

This study employs annual time series data covering 1991 to 2024, strategically selected to capture major macroeconomic shocks and structural adjustments in Indonesia. The chosen timeframe encompasses major crises such as the Asian Financial Crisis (1997–1998), the 2008 global financial crisis, and the subsequent post-pandemic recovery phase, thereby providing a comprehensive basis for assessing both short-term and long-term economic trajectories.

Table 1. Data and Measurement

Variables	Abbreviation	Description	Unit	Source	Role
Zakat Collection	ZKT	The aggregate amount of zakat funds collected.	IDR Billions	Statistik Zakat National BAZNAS	Endogenous Variables
Digitalization	DIG	The aggregate number of individuals accessing the internet.	Thousands	World Bank	Exogenous Variables
Macroeconomy	ECO	The annual economic growth rate (percentage) reflecting the year-on-year expansion or contraction of a country's overall economic output.	Percentage	World Bank	Exogenous Variables

Source: Authors' own (2025)

To ensure methodological rigor and clarity, this study provides a precise definition of all the variables utilized along with their respective data sources. In this analysis, zakat collection was designated as the endogenous variable representing the primary outcome of interest. Digitalization and macroeconomic factors were treated as exogenous variables, reflecting key external determinants that potentially influence the level and efficiency of zakat collection. The selection of these variables was guided by both theoretical considerations and the availability of reliable data, ensuring that the model captured the essential dimensions of the phenomena under investigation. A comprehensive description of each variable, including its description, measurement approach, and corresponding data sources, is presented in Table 1.

As outlined in Table I, the zakat collection (ZKT) is quantified in IDR billions, representing the aggregate funds mobilized through zakat, an obligatory form of Islamic almsgiving. This variable captures the magnitude of wealth redistribution within society and reflects the effectiveness of zakat as a socioeconomic instrument for alleviating poverty, reducing inequality, and fostering social welfare. Digitalization (DIG) is measured as the total number of individuals accessing the Internet, expressed in thousands. This indicator illustrates the degree of digital penetration within a population, highlighting the increasing role of information and communication technologies in shaping economic and social interactions. The macroeconomy (ECO) is represented by the annual economic growth rate, expressed as a percentage, which reflects the year-on-year expansion or contraction of national output. This indicator serves as a benchmark for assessing the overall resilience of an economy, encompassing aspects such as production, employment, and income generation. Sustained economic growth generally contributes to improved living standards, expanded fiscal capacity, and greater opportunities for both individuals and enterprises, which can in turn influence zakat contributions.

Research design

This study utilizes an Autoregressive Distributed Lag (ARDL) regression model. Ekananda (2016) asserts that the Autoregressive Distributed Lag (ARDL) model integrates autoregressive (AR) and distributed lag (DL) techniques, with "lag" denoting the utilization of historical values to forecast future values. The AR approach employs one or more historical values of the exogenous variable, whereas DL incorporates regressions that involve both the current and past values of endogenous variables.

The ARDL bound test was chosen for this study because of its robustness in analyzing the cointegration relationships among variables, regardless of whether they are stationary at level I(0), first difference I(1), or a combination of both (Mohammed Idris et al., 2022; Nor & Yusof, 2025; Salan et al., 2025). This flexibility in accommodating mixed orders of integration is particularly advantageous for the dataset employed in this study, which includes variables with diverse stationarity characteristics. The ARDL approach also enables a comprehensive examination of both short- and long-term dynamics while being suitable for small sample sizes, thus enhancing the reliability of the estimates (Kautish et al., 2025; Lorato et al., 2025).

The regression model of this study is as follows:

$$ZKT_t = f(DIG_t, ECO_t) \tag{1}$$

Considering the time lag in zakat collection, this study selected an ARDL model to study the influence of digitalization and macroeconomy. The cointegration test ARDL model was used to test whether there was a long-term causal relationship between variables. The following model was established (Kautish et al., 2025; Nor & Yusof, 2025):

$$\Delta ZKT_t = \beta_0 + \sum_{i=1}^{n} \beta_1 \Delta ZKT_{t-i} + \sum_{i=1}^{n} \beta_2 \Delta DIG_{t-i} + \sum_{i=1}^{n} \beta_3 \Delta ECO_{t-i} + \lambda_1 ZKT_{t-1} + \lambda_2 DIG_{t-1} + \lambda_3 ECO_{t-1} + \varepsilon_t \tag{2}$$

where n is the lag length, ε_t is a white noise error term (other variables that influence the model used), and Δ is the first difference operator. In equation 2, the terms with summation represent short-run dynamics, whereas the terms with λ indicate long-run relationships among the variables.

We then estimate the error correction model (ECM) to determine the speed of adjustment required to return to long-run equilibrium after a short-run shock. The ECM can be written as follows (Kautish et al., 2025):

$$\Delta ZKT_t = \beta 0 + \sum_{i=0}^{p1} \beta 1\, \Delta ZKT_{t-1} + + \sum_{i=0}^{p2} \beta 2\, \Delta DIG_{t-1} + \sum_{i=0}^{p3} \beta 3\, \Delta ECO_{t-1} + \lambda ECM_{t-1} + \varepsilon_t \qquad (3)$$

All the variables in Equation 3 have been defined previously, and the ECM is obtained by estimating the long-term relationship.

Results and Discussion

The first step is to check the stationarity of the variables using the Unit Root Test. Table 2 shows that the three variables are stationary at level, and one variable is stationary at the first difference level. These three variables fulfill the stationarity requirements in ARDL analysis, which require different order levels to test variable stationarity (Ekananda, 2016).

Table 2. Unit root test results

Variables	t-statistics	Level	t-statistics	First difference	Order of integration
ZKT	-1.972464	0.5950	-6.020123	0.0001*	I(1)
DIG	-0.019356	0.9943	-3.695559	0.0395*	I(1)
ECO	-4.219702	0.0108*	-5.911025	0.0002*	I(0)

Source: Authors' own (2025)

The following are the results of the AIC test to determine the maximum lag of ARDL, namely (5,5,5) for each of the three variables in Figure 1:
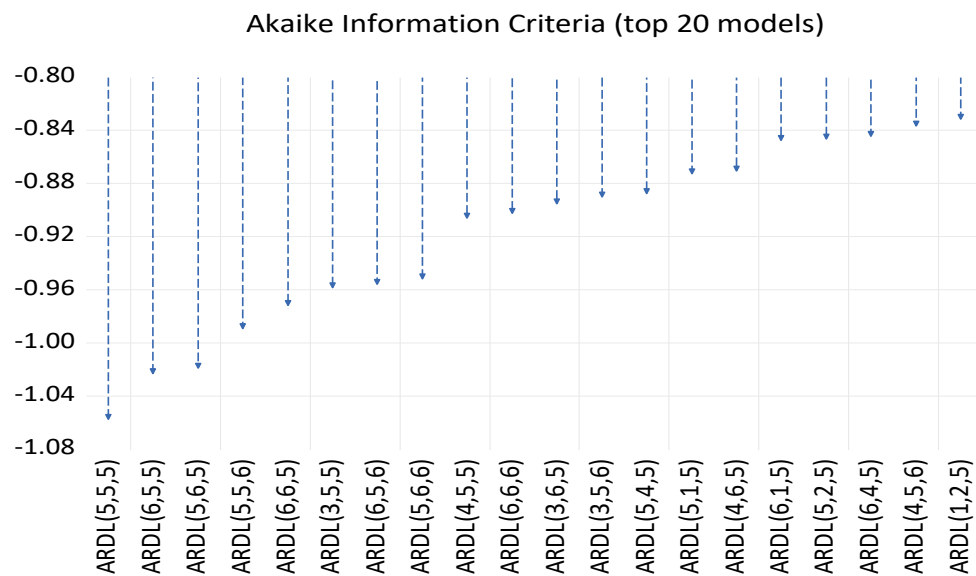
Figure 1. ARDL's Lag Optimum
Source: Authors' own (2025)

As illustrated in Figure 1, the optimum lag employed in this study is (5,5,5), which corresponds to the autoregressive distributed lag (ARDL) model specification. This notation represents the selected lag structure for the endogenous and exogenous variables. Specifically, the first value (5) indicates that the endogenous variable includes five lagged terms, thus capturing its past effects on current values. The second value (5) denotes that the first exogenous variable lagged by five periods. Finally, the third value (5) denotes that the second exogenous variable also lagged by five periods. The selection of this lag structure is based on model selection criteria, such as the Akaike Information Criterion (AIC), which ensures the most appropriate dynamic specification for the ARDL model.

The next step is to analyze the long-term balance of exogenous variables with endogenous variables. The ARDL bounds-testing procedure yielded an F-statistic of 7.291667. This value exceeds the upper critical bounds (I(1)) at all conventional significance levels of 10%, 5%, and 1% for both the finite sample size of 30 and asymptotic case. Specifically, for a sample size of 30, the upper bounds at the 10%, 5%, and 1% levels are 3.695, 4.428, and 6.265, respectively, while the corresponding asymptotic critical values are 3.350, 3.870, and 5.000, respectively. Given that the computed F-statistic surpasses these thresholds, the null hypothesis of no long-run relationship between the variables is rejected. This outcome provides robust statistical evidence in favor of cointegration, thereby validating the existence of a stable long-run equilibrium relationship within the specified ARDL framework.

ARDL model results

The estimation results for the long- and short-term effects of the exogenous variables on the endogenous variable, as presented in Table 3, reveal significant findings.

Table 3. ARDL Model Estimation Results

Variables	Coefficient	Standard Error	t-Statistics	Prob.
Long Term Results				
log(DIG)	1.113025	0.160846	6.919810	0.0000***
Log(ECO)	0.573460	0.137628	4.166743	0.0003***
C	-14.91349	3.335769	-4.470779	0.0001
Short Term Results				
Dlog(DIG)	0.295139	0.150314	1.963483	0.0732*
Dlog(ECO)	-0.129155	0.032661	-3.954424	0.0019***
COINTEQ	-0.392155	0.064947	-6.038074	0.0000***
R-Squared	0.876456			

*,**, and *** denote significance at 10%, 5%, and 1% levels, respectively
Source: Authors' own (2025)

In the long term, digitalization demonstrates a statistically significant positive effect on zakat collection in Indonesia, indicating that higher levels of Internet usage contribute to improved zakat mobilization. Likewise, macroeconomic performance exerts a positive influence, suggesting that sustained economic growth supports the enhancement of zakat collections. Moreover, the negative slope observed in the constant term (-14.91349) highlights the critical role of these exogenous variables. In the absence of these factors, zakat collection would experience a marked decline, emphasizing the importance of digital and economic drivers in ensuring long-term sustainability and enhancement of zakat collection.

In the short term, the estimation results reveal that digitalization exerts a significant positive effect on zakat collection in Indonesia, indicating that an increase in Internet usage is associated with enhanced zakat collection, albeit at a significance level of 10%. Conversely, the macroeconomic variable exhibits a negative and highly significant impact on the zakat collection in the short run. This negative association could reflect the immediate adverse effects of economic downturns, such as reduced disposable income or weakened business performance, which may limit the capacity of individuals and institutions to fulfill their zakat obligations in the short term.

The CointEq (-1) coefficient represents the error correction term (ECT), which captures the speed of adjustment toward long-term equilibrium following a short-term deviation or shock. Based on the estimation results, the CointEq (-1) coefficient was -0.392155, with a p-value of 0.0000, indicating a high level of statistical significance at the 1% confidence level. The negative sign confirms the presence of a valid correction mechanism within the model, meaning that any short-term disequilibrium in the zakat collection will gradually converge back to its long-run path. Specifically, the coefficient of -0.392155 suggests that approximately 39.22% of the disequilibrium is corrected in each period, implying a relatively faster pace of adjustment compared with models with a smaller coefficient. Thus, while short-term shocks may temporarily disrupt zakat collection,

the system demonstrates a strong capacity to restore equilibrium within a few periods, reflecting the stability of the relationship between digitalization, macroeconomic performance, and zakat collection in Indonesia.

Discussions

The impact of digitalization to boost zakat collection

The findings indicate that digitalization has the largest coefficient, signifying that it is the most influential factor affecting zakat collection in this study. In the general context of digitalization, Artificial Intelligence (AI) and blockchain can enhance regulatory compliance and supervision, making it easier to adhere to complex Shariah frameworks (Arsyad et al., 2025; Asya'bani et al., 2025; Kismawadi, 2025; Susanto et al., 2025). Specifically, this research validates and demonstrates how digitalization contributes to maximizing zakat collections.

Digitalization has a long- and short-term positive impact on zakat collection due to its potential to expedite operations, improve accessibility, and foster transparency in zakat management. A surge in Internet users following the Covid-19 pandemic is evident, with usage rates increasing from 47% in 2019 to 66% in 2022, followed by a slight increase to 69% by 2023. For instance, Beik et al (2023) asserted that the implementation of digitalization has markedly enhanced the efficiency of zakat institutions, especially during the Covid-19 pandemic, by streamlining the collection and distribution of zakat contributions. This finding aligns with Rahman et al (2025), which indicates that the synchronization of zakat collection processes with digital programs enhances the overall management of zakat, making it more responsive to community needs. The Covid-19 pandemic has acted as a catalyst for many zakat institutions to adopt digital solutions, thereby ensuring continuity in their operations, while adapting to the changing landscape of charitable giving.

Moreover, the long-term benefits of digitalization are underscored by research conducted by Komarudin et al. (2023) who noted that the implementation of digital systems in zakat fund collection has led to substantial improvements in the management of zakat funds. The transition to digital platforms not only facilitates easier access for donors but also allows for better tracking and reporting of zakat contributions. The integration of technology in zakat collection processes has the potential to engage younger generations, particularly millennials, who are more inclined to utilize digital platforms for their charitable contributions (Beik et al., 2024; Indarningsih et al., 2023).

In addition to improving operational efficiency, digitalization fosters transparency and accountability in zakat management. Haryanto (2023) discussed how digital literacy and technological factors significantly influence online zakat payments, suggesting that increased transparency through digital platforms can enhance donor trust. This trust is crucial for encouraging more individuals to fulfill their zakat obligations, as transparency in fund management reassures donors that their contributions are being utilized effectively. Moreover, research conducted by Mansour (2021) indicates that the Covid-19 pandemic has accelerated the adoption of digital transactions, prompting governments and organizations to promote digital means of payments to stimulate economic activities. This shift not only benefits zakat institutions, but also aligns with broader trends in financial inclusion and economic resilience. Furthermore, the interplay between digitalization and zakat literacy is critical for maximizing the potential of digital zakat collections. Research by Kasri and Yuniar (2021) indicate that higher zakat literacy correlates with greater intention to use digital payment systems for zakat. Therefore, increased Internet access will broaden public access to zakat literacy and awareness, ultimately leading to an increase in zakat collections.

Navigating macroeconomy to strength zakat collection

Enhancements in macroeconomic conditions, indicated by economic growth, have been demonstrated to substantially increase zakat collection in Indonesia over the long term but decrease in the short term. The short-term results were rejected, as macroeconomic factors were found to

have a significant negative rather than a positive effect on zakat collection. Economic progress in the long term typically results in the augmentation of disposable income, and as income increases, individuals are more inclined to contribute to philanthropic endeavors, including zakat. Research has shown that during times of economic growth, individuals have an increased willingness to donate, feel more financially secure, and are able to support social initiatives (Osili et al., 2019). This corresponds to wider changes in perspectives on philanthropy that frequently occur alongside enhanced economic situations, indicating that individuals are more predisposed to participate in charitable activities when they view their financial circumstances as secure (Su & Wan, 2018).

The cyclical relationship between economic conditions and charitable giving, including zakat, is well-documented. As economic conditions improve, individuals are more likely to engage in charitable giving, fostering a philanthropic culture that can further stimulate economic growth (Su & Wan, 2018). This dynamic operates through mechanisms such as increased disposable income, which encourages higher charitable contributions. Additionally, the concept of 'warm glow' giving, where individuals derive satisfaction from the act of giving, becomes more pronounced during prosperous times (Nakamoto, 2017). In the short term, this effect may lessen as muzakki prioritizes fulfilling their daily needs, which subsequently evolves into a wealth redistribution through zakat. As financial growth increases, motivation for charitable giving often shifts from necessity to altruism, enhancing the willingness to contribute. This psychological dimension is critical because it suggests that improved economic conditions foster a more generous mindset, leading to increased zakat contributions (Tieffenbach, 2025).

Cultural context also plays a vital role in shaping charitable behavior. Economic prosperity can strengthen social responsibility and community engagement as individuals feel a moral obligation to return to their communities. This cultural shift not only benefits zakat recipients, but also contributes to a more cohesive society, which in turn can stimulate further economic growth (Wiepking & Heijnen, 2011).

Conclusion

This study addresses its objectives by empirically confirming that the integration of digitalization and macroeconomic improvements plays a pivotal role in enhancing zakat collections in Indonesia. The findings reveal a favorable long-term and short-term impact of digitalization on zakat collection, and long-term positive effects and short-term negative effects of macroeconomic conditions. These results provide robust evidence that digital transformation not only enhances efficiency, accessibility, and transparency in zakat management, but also operates synergistically with economic growth to sustain and expand zakat collection over time.

From a practical standpoint, this research offers significant value for amil zakat institutions in designing and implementing strategic frameworks to increase their fundraising potential. Investing in advanced digital platforms, particularly user-friendly mobile applications and integrated donation-tracking systems, will facilitate ease of contribution, enhance transparency, and foster greater public trust. Furthermore, collaboration with policymakers and private sector stakeholders' CSR is essential to create enabling macroeconomic conditions that indirectly increase disposable income and stimulate charitable participation. From a theoretical perspective, this study advances the discourse on Islamic social finance by establishing empirical linkages between technological diffusion, economic performance, and faith-based charitable giving, thereby enriching existing models of zakat mobilization in developing economies.

Nevertheless, several limitations of this study warrant consideration. First, the zakat collection data from 1991 to 2001 were reconstructed using scientifically reasoned estimations based on 2002 benchmarks, which may have introduced minor approximation bias. Second, this study focuses exclusively on Indonesia, and its findings may not be fully generalizable to other contexts. Comparative studies with Muslim-majority countries such as Malaysia and Brunei Darussalam, as well as minority-Muslim countries like Thailand and the Philippines, would provide broader regional insights. Future research should extend this analytical scope by incorporating additional exogenous variables, including governance quality, political will, and corruption control, to assess how institutional and political dynamics shape zakat fundraising mechanisms. Exploring

the influence of political and economic factors on zakat mobilization in Indonesia may yield critical policy lessons for fostering long-term resilience and equity in Islamic social finance.

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