

The Effect Of Zakat, Infaq And Alms (Zis) On Indonesia's Economic Growth: Ardl Method

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Article Info	Abstract (Bahasa Inggris)
Article history: Received : 01 Agustus 2021 Revised : 28 September 2021 Accepted : 27 Oktober 2021 Keywords: ARDL Economic Growth, Method, ZIS	<i>Zakat, Infaq and Sadaqah (ZIS) is an instrument of Islamic philanthropy that has an important role in society and can encourage economic growth through income redistribution and reduction of social inequality in Indonesia. For a Muslim, it is obligatory to pay zakat, while spending money on infaq and alms is sunnah. ZIS funds are expected to be channeled to the poor who need (mustahik) to improve their welfare in order to achieve economic growth of the Indonesian people. The period in this study is ZIS and Economic Growth in Indonesia 2002-2019. This research uses the Autoregressive Distributed Lag (ARDL) method. This type of research is quantitative research with data analysis techniques using the Autoregressive Distributed Lag (ARDL) method and data processing using the Eviews 10 application. The results showed that Zakat, Infaq, and Alms (ZIS) in the long run had an effect on Economic Growth in Indonesia that expected to be a policy for the government in managing ZIS funds.</i> Abstrak (Bahasa Indonesia) Zakat, Infaq dan Sadaqah (ZIS) merupakan instrumen filantropi Islam yang mempunyai peran penting dalam masyarakat dan dapat mendorong pertumbuhan ekonomi melalui redistribusi pendapatan dan pengurangan kesenjangan sosial di Indonesia. Bagi seorang muslim wajib mengeluarkan zakat, sedangkan mengeluarkan uang untuk infaq dan sedekah adalah sunnah. Dana ZIS diharapkan dapat disalurkan kepada masyarakat miskin yang membutuhkan (mustahik) untuk meningkatkan kesejahteraannya guna mencapai pertumbuhan ekonomi masyarakat Indonesia. Periode dalam penelitian ini adalah ZIS dan Pertumbuhan Ekonomi di Indonesia 2002-2019. Penelitian ini menggunakan metode Autoregressive Distributed Lag (ARDL). Jenis penelitian ini adalah penelitian kuantitatif dengan teknik analisis data menggunakan metode Autoregressive Distributed Lag (ARDL) dan pengolahan data menggunakan aplikasi Eviews 10. Hasil penelitian menunjukkan bahwa Zakat, Infaq, dan Sedekah (ZIS) dalam jangka panjang berpengaruh terhadap Pertumbuhan Ekonomi di Indonesia sehingga diharapkan dapat menjadi kebijakan pemerintah dalam mengelola dana ZIS.

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1. PENDAHULUAN

Gross Domestic Bruto (GDP) for traditional economists used as a measure to determine the welfare of a country and is a widely used benchmark for national progress (Martinez-Galarraga, et. al., 2020; Beltrán & Lavado, 2021). GDP which is used as an indicator for measuring economic growth is also the strength of the national economy (Ikhwanuddin et. al., 2021; Akarsu, 2023). The nexus between economic growth and national income is very critical driven by the nation's growth performance and its citizens' improvement standard of living, because the point of economic growth is to result in a growth of output per capita and increase the standard of living (Stoica, et. al., 2020; Ali, et. al., 2021; Chen, et. al., 2021). Economic growth theories integrate capital into mathematical equations and national income computations, showcasing the tight linkage between economic growth and national income (Ridlo et. al., 2021; Castro & Lopes, 2022).

National income become an essential macroeconomic gauge forms a primary pillar guiding economic policies, underscoring its role as a benchmark for a nation's prosperity and policy formulation in the economic sector (Aprelia & Arif, 2023; Islami, et. al., 2023; Koengkan, et. al., 2023). According to Keynes' general theory revealed that national economic income over short periods was dictated by household and government expenditures (Keynes, 1997; Johnson, 2017; Marglin, 2021). To increase productivity in the economy, Islam presents its unique viewpoint on national income from various channels such as zakat, infak, shadaqah and waqf (Mahri et. al., 2021; Al Faruqi, 2022; Djalaluddin, et. al., 2023).

The significance of zakat, infak, and shodaqah (ZIS) lies in its role as social security for the impoverished, fostering balanced economic growth and has significant potential to overcome various challenges in Indonesia (Mardalis et al., 2023; Riduwan, et. al., 2023; Saad, et. al., 2023). In essence, ZIS redistributes wealth from the have to the needy to ensure fair provision of basic needs to individuals or groups (Malecki, 2021; Widiastuti, et. al., 2021). The increased collections aided communities affected by the pandemic (BAZNAS, 2022). Based on ZIS growth data from 2010 to 2020, the upsurge in 2020, surpassing 40%, notably amid the COVID-19 pandemic, marked a significant milestone (Amirudin & Sabiq, 2021; Sulaeman et. al., 2021; Hakim, & Noviyanti, 2022). ZIS growth elucidates its role as a form of consumption in Islam (Lisnawati, 2019).

Comparatively, Indonesia's economic growth in 2021 reached 16,970.8 trillion IDR based on GDP at constant prices (BPS, 2022). In the same year, ZIS collections totaled 517.5 billion IDR (BAZNAS, 2022), constituting 0.000030% of Indonesia's economic growth. Previous research examined the national income calculation model from an Islamic perspective and how zakat becomes an instrument in increasing economic growth (Hakim, et. al., 2020; Suriani, et. al., 2020; Akmal, et. al., 2021; Anwar et. al., 2022;

Millatina, et. al., 2022). Zauro, et. al., (2020) implores Islamic societies to use Zakat, Sadaqah and Qardhul Hassan as instruments that encourages wealth redistribution that promotes efficient and effective wealth redistribution. While Akmal, et. al., (2021) and Mawardi, et. al., (2023) revealed that zakat empowerment programmes and business assistantships positively impact the growth of zakah recipient's businesses, beneficial to their well-being. Nevertheless, their well-being is unaffected by the proxy of the macroeconomy. Further, Widiastuti, et. al., (2021) and Saad, et. al., (2023) found there are three components of input required in the zakat transformation: environment, resources and history.

On the other hand, Anggadini et. al., (2020), Purwanti (2020), Ridlo & Wardani (2020), Qoyyim & Widuhung (2020), Nawawi et. al., (2021), Safitri et. al., (2021) and Siswantoro & Ikhwan (2023) examined the influence of ZIS and other variables on economic growth. While Anjelina et. al., (2020), Syamsiyah et. al., (2022) examined the influence of ZIS and other variables on community welfare and empowerment. Despite the interesting discussion of previous research above, this study aims to analyze the role of zakat, infaq and shadaqah in Indonesia's economic growth by the national income calculations from the Islamic perspective. By delving into these calculations, this study not only unravel the nuances of ZIS impact on economic growth but also shed light on its significance within the broader framework of national income.

2. METODE PENELITIAN

The research methodology employed in this study adopts a quantitative approach with a descriptive method (Syahrums & Salim, 2012). Quantitative research involves processing numerical data to establish empirical foundations and rational hypotheses. Through the descriptive method, this research systematically illustrates aspects related to the subjects and objects of the study (Abdullah, 2015). The data utilized consist of a 20-year time series from Indonesia, spanning from Quarter I of 2001 to Quarter II of 2021, sourced from the National Amil Zakat Agency (BAZNAS) and the Central Statistics Agency (BPS).

Table 1. Types and Sources of Research Data

No	Variable	Operational Definition	Type	Data Source
1	National Income (Y)	National Income	Quarterly	BPS
2	Consumption (C)	Household Consumption Expenditure	Quarterly	BPS

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3	Investment (I)	Inventory Changes	Quarterly	BPS/Bank Indonesia
4	Government Expenditure (G)	Government Consumption Expenditure	Quarterly	BPS
5	Export-Import (X-M)	Export-Import	Quarterly	BPS
6	Altruistic Expenditure (A)	ZIS (Zakat, Infak, and Shadaqah)	Quarterly	BAZNAS

Sourcer: data is processed

Table 1 delineates the types and sources of data utilized in the study. These data serve as the primary foundation for analyzing the role of Zakat, Infak, and Shadaqah (ZIS) in Indonesia's economic growth. A model of national income from an Islamic perspective is employed to depict the relationships between the involved economic variables. The simultaneous equation model used allows for an explanation of the intricate interactions among endogenous and exogenous variables, highlighting the impact of ZIS on economic growth. In selecting interrelated variables, accuracy is required.

The characteristics of each economic variable are independent, but on the one hand, these variables can also be dependent variables. To obtain accurate estimates, it is necessary to accommodate every variable in the economic field. The regression model has a model that can accommodate variables that have a relationship with each other. This method is the 2SLS (Two-Stage Least Square) method or better known as the simultaneous equation model (Ekananda, 2019; Yusuf et. al., 2021).

The 2SLS method is a method used to obtain estimates of structural coefficients from reduced form equation coefficients estimated in overidentified structural equations (Halima & Kusri, 2022) by using EViews 12. The analysis in this research begins with model specifications to determine the relevant variables for applied in research. The model specification applied in this research is a model simultaneous equation that has two structural equations with two endogenous variables and five exogenous variables. The specifications for the simultaneous equation model formed are:

$$Y_t = a_0 + a_1C_{it} + a_2I_{it} + a_3G_{it} + a_4NX_{it} + a_5A_{it} + e_{it} \dots\dots\dots (1)$$

$$C_t = \beta_0 + \beta_1C_{oit} + (\beta_2Y_{it} - \beta_3A_{it}) + u_{it} \dots\dots\dots (2)$$

Where:

Y = National Income

C = Expenditures for consumption

I = Expenditures for investment

G = Government expenditure

Co = Basic consumption

A = Altruistic expenditure (Zakat, Infaq, and Sadaqah)

The next stage is an identification test carried out to determine whether the simultaneous equations to find out the parameters of the structural equation can be through the estimation results of the reduced equation. This research model

Identification was carried out in two ways, namely by order condition and rank condition with the identification results obtained:

Table 2. Simultaneous Equation Identification Results

Endogenous Variables	m k K	(K-k) > (m-1)	Rank Condition	Order Condition
National Income (Y)	2 1 5	4 > 1	Overidentified	Overidentified
Consumption (C)	2 1 3	2 > 1	Overidentified	Overidentified

Sourcer: data is processed

Based on the identification test above, the two equation used were overidentified, in this case the appropriate way to estimate the parameters of the existing equations is to use Two-Stage Least Squares (2SLS) method. The next step is simultaneity testing to determine whether there is a relationship simultaneity between equations (Gujarati & Porter, 2009). Meanwhile, classical assumption tests like normality, autocorrelation, and heteroskedasticity are used to examine the reliability of the model used in analyzing the relationships between economic variables. All analysis processes are grounded in the time series data presented in the table, providing a robust foundation for explaining the complexities of Indonesia's economic growth from the perspective of Islamic-based national income.

3. PEMBAHASAN

The development of economic growth and national zakat, infaq and shadaqah (ZIS) collection growth in Indonesia when viewed from the last 20 years (2001-2020) in Figure 1, has positive trend even it has a positive growth value for its slowdown in the ZIS collection rate. The highest economic growth occurred in 2011 where economic growth was 6,50 percent and 2020 was the lowest at 2,07 percent. Meanwhile, the growth in ZIS collection in the same year reached the highest growth in 2007 at 98,30 percent and in 2001-2002 the lowest growth reached 0 percent, because that year was the first year of BAZNAS's establishment (BAZNAS, 2022; BPS, 2022).

Based on the results of classical assumption tests, namely: normality test, heteroscedasticity test, and autocorrelation test, it shows that empirically there is a simultaneous relationship between structural equations in a system of equations. The normality test using Jaque Bera resulted in the conclusion that the structural equation of economic growth and consumption met the normality assumption. The heteroscedasticity test and autocorrelation test are based on the detection results, all variables in both structural equations have a Prob value of more than 0.05. Therefore, both equations fulfill the assumptions of homoscedasticity and non-autocorrelation.

The estimation results based on the parameters of the simultaneous equation model using the 2SLS method are obtained in the table 3 as follows:

Tabel 3. Simultaneous Equation Model Estimation

Simultaneous Equation Model	R-Square
$Y_{it} = -54614,04 + 1,8542 C_{it} - 0,0002 I_{it} + 0,0342 G_{it} - 0,0717 NX_{it} + 237,849 A_{it} + e_{it}$	99,95%
$C_{it} = 27395,08 + 0,5325 Y_{it} - 102,09 A_{it} + u_{it}$	99,95%

Source: EViews 12

The significance of the model was also tested by looking at the value of the adjusted R-Square in the economic growth equation produces a value of 0,9995 which indicates that the proportion of variation in economic growth is explained through the variables in the equation is 99,95 percents and other can be explained through variables outside the equation. In the consumption equation, the value of adjusted R-Squared produces the same value of 0,9995 which show the proportion variation in consumption is explained through the variables in the equation is 99,95 percents and other can be explained through variables outside the equation.

Tabel 4. Partial Test Results (t-test) Economic Growth

Simultaneous Equation of National Income to Economic Growth (1)				
Variabel	Coefficient Value	Calculated t Value	t(0,05;1,665)	Probability
Constant	-54614,04	-8,578	1,665	0,0000
C_{it}	1,8542	98,587	1,665	0,0000
I_{it}	-0,0002	-0,1075	1,665	0,9144
G_{it}	0,0342	0,487	1,665	0,6261
NX_{it}	0,0717	0,936	1,665	0,3501
A_{it}	237,85	2,546	1,665	0,0115

Source: EViews 12

Based on descriptive statistical analysis of each variable, the analysis in Table 4 provides a significant picture of the dynamics of the Indonesian economy from 2001 to 2021. Initially, this study confirmed the existence of a strong positive correlation between consumption and overall economic growth. This strong relationship, highlighted in the economic growth equation (1) and consumption equation (2), underscores the important role of consumption in driving economic expansion over the study period. This finding is supported by previous research which shows the positive and significant influence of consumption on economic growth, with the results of Prob. value $0,000 < 0,05$. Alper & Oguz, (2016), Azam et. al., (2015), Ichvani & Sasana (2019) and Safitri et. al., (2021) emphasized that household consumption significantly impacted economic growth, aligning with the theory that short-term economic growth relies on household consumption, corporate activities, and government spending.

According to Keynes, the size of people's consumption expenditure will influence the level of economic growth, because if there is an increase in people's consumption it will increase the level of demand for the production of goods and services. However, in contrast the result does not show a significant positive

relationship between investment and economic growth, with the results of Prob. value $0,9144 > 0,05$, therefore investment may not have been the main influence on economic growth in the period.

This result in line with research by Prasasti (2022) which shows that there is an insignificant negative influence between investment and economic growth. In order for investment to have a significant positive impact on economic growth, equal distribution of investment and not depending on natural disaster, because investment is considered the main driver of economic growth which increases the production of goods and services needed in the economy (Todaro & Smith, 2011). An examination of government spending shows an insignificant relationship with economic growth, with the results of Prob. value $0,626 > 0,05$, indicating that government spending may not have been the main driver of significant economic expansion in certain periods.

This finding is in line with research by Azwar, (2016), Koyongian et. al., (2019) and Magdalena & Suhatman (2020) found that partial government spending does not have a significant effect on Indonesia's economic growth. On the other hand, net exports variable do not show a positive correlation with Indonesia's overall economic growth from 2001-2020, with the results of Prob. value $0,350 > 0,05$. This result in line with research by Asbiantari et. al., (2018) and Huang & Khan (2022) which revealed that both general and sectoral side did not have a significant impact on the economic growth due the negative impact of domestic exports. Furthermore, the relationship between Zakat, Infaq, and Sedekah (ZIS) and economic growth unveiled complex dynamics. Although ZIS showed a significant positive relationship with economic growth with the results of Prob. value $0,011 > 0,05$.

This is consistent with research by Qoyyim & Widuhung (2020), Nawawi et. al., (2021), Safitri et. al., (2021) and Siswantoro & Ikhwan (2023) who found that zakat, infaq and shadaqah have a significant impact on the economic growth. Chapra (1996) emphasized that there are five main elements that are efforts to achieve economic equality. The roots of good zakat, infaq and alms management will maximize the increase in community welfare, prosperity, benefit and equal distribution of income, which is better known as the concept of economic growth with equity (Anik & Prastiwi, 2019).

Based on equation table 5, the result of t-test consumption the following results are obtained as follows;

Tabel 5. Partial Test Results (t-test) Consumption

Simultaneous Equation of National Income to Economic Growth (1)				
Variabel	Coefficient Value	Calculated t Value	t(0,05;1,665)	Probability
Constant	27395,08	11,794	1,665	0,0000
Y _{it}	0,5325	327,16	1,665	0,0000 _t
A _{it}	-102,098	-2,297	1,665	0,0225

Source: EViews 12

Based on result found that economic growth shows positive and significant influence on consumption with the results of Prob. value $0,000 < 0,05$. This result in line with previous research by Ichvani & Sasana (2019) and Zhang, et. al., (2021) Shahbaz, et. al., (2020) and Zhang, et. al., (2021) found that public consumption will increase along with increasing economic growth in a country. On the other hand, economic growth shows negative and significant influence of zakat, infaq and shadaqah on consumption, with the results of Prob. value $0,022 < 0,05$. This result in line with Al Arif (2010), Saputro & Sidiq (2020), Shahbaz, et. al., (2020) and Ridlo, et. al., (2021) found that ZIS able to increase people's consumption levels which causes to increase an economic growth. contrast with the level of consumption and other economic factors. Generaly, ZIS and consumption significantly contributed to economic growth from several variables like net exports, investment, and government during 2001-2020.

4. KESIMPULAN DAN SARAN/REKOMENDASI

4.1 Kesimpulan

This study aims to find out that the inclusion of Zakat, Infaq, and Sadaqah (ZIS) within the framework of national income calculations from an Islamic perspective, by validates the model and also demonstrates the substantial role ZIS plays in fostering economic growth of Indonesia. The result revealed the critical role of consumption in driving economic expansion, evident through a robust positive correlation with overall economic growth. Surprisingly, investment and government spending didn't have significant relationships with economic growth, while net exports showed have significant relationship by high import variable. The intricate dynamics between ZIS and economic variables highlighted significant relationship on economic growth, in

4.2 Saran/Rekomendasi

However, this study acknowledge limitations in focusing solely on ZIS and restricted data. Future research should add a wider range of Islamic national income instruments.

5. UCAPAN TERIMA KASIH (JIKA ADA)

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