

The Nexus Between Zakat Performance, COVID-19 crisis and Islamic Banks' Profitability: Empirical evidence from Indonesia

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ABSTRACT

This paper aims to empirically analyse the nexus between zakat performance, the COVID-19 crisis, and Islamic banks' profitability in Indonesia from 2015 to 2021. This study applied a quantitative method from the panel data regression model. The secondary data was used with a total sample of 10 selected Indonesian Islamic commercial banks. Based on the empirical findings, zakat performance is the primary determinant of Islamic banks' profitability in Indonesia. This is proven that zakat contributes significantly to increasing Islamic banks' profitability, namely ROA, ROE, and NPM. Further, another finding regarding the dummy crisis variable, the COVID-19 crisis (COVID-19), finds a strong effect on the Islamic banks' profitability in Indonesia, namely ROA and NPM. Our empirical study provides implications for developing literature and directing policy recommendations for zakat institutions such as BAZNAS, LAZ, and Islamic banks management. Further research is needed to observe the zakat performance and the longer period of the COVID-19 crisis impact on Islamic banks' profitability in Indonesia.

Keywords: *Islamic Bank's Profitability, Zakat Performance, COVID-19 Crisis Indonesia.*

INTRODUCTION

Zakat is a financial tool in Islam that is crucial for improving social justice and economic growth for the poor. Moreover, zakat becomes the essential foundation of the financial framework of the Islamic economy (Sari et al., 2019). Specifically, zakat, distributed by a firm institution, has a more significant impact on increasing the standard of living for the underdeveloped community because it not only directly gives fresh money for consumption purposes but also involves an empowerment program that results in sustainable development. Hence, zakat can be used to help meet public needs, which can help lower the number of Muslims living in poverty (Alshater et al., 2021), particularly in the time of crisis period.

The government has organized zakat in Indonesia, which has the largest Muslim population. Every qualified Muslim citizen of

Indonesia and every entity owned by a Muslim is required to pay zakat, including Islamic banking institutions. Globally, an Islamic bank is cited as the dominant financial institution in terms of asset distribution which reached 70% and was worth US\$ 2.349 Billion in 2020, compared to other financial institutions, such as Sukuk, Islamic funds, and takaful (Thomson Reuters, 2021). At the national level, the Indonesian Islamic Bank has shown positive growth, as indicated by the increasing market share from 4.87% in 2015 to 6.24% in September 2020 (Financial Authority Service, 2020). Moreover, in September 2020, the same report also stated that Indonesia's 14 Islamic banks, 20 Islamic windows, and 162 Islamic rural banks contributed to the expansion of Islamic banking in Indonesia, totalling Rp. 575.85 trillion in total assets. Hence, the massive development of Islamic banking is expected to contribute to the zakat collection nationally.

Banking performance and its stability are a necessity for sustained economic expansion. As a financial intermediary, banks connected the deficit parties to the surplus parties, accelerating national economic activity. However, the bank's performance is influenced by various factors, including financial and non-financial issues such as customers' perspectives towards the bank. Notably, in Islamic banking, the customer's perspective towards Islamic banks is also affected by the bank's sharia compliance, which is measured by the fulfilment of sharia obligations, for instance, the payment of zakat. Tuan Ibrahim et al. (2020) described that ethical value also represents the bank's performance. Unethical behaviour is deemed to have bad management, which, in turn, affects the willingness of depositors and investors to deposit or invest in the bank. Therefore, it is essential to ensure that the activities performed by Islam are economically, socially, and religiously responsible.

Indonesian government shows comprehensive support for the development of Islamic banking (Sukmana & Kholid, 2013), as stated in Financial Authority Service's report (2020), the government designated to optimize zakat funds by strengthening the integration of the social function of Islamic banks by providing the Islamic banking products that offer spiritual benefits which geared toward customer needs and life cycle, hence, Islamic banking would become the most preferred option for customers. As a result, it will maintain the existing customers and attract potential customers, and lead to the improvement of Islamic bank performance. In short, the management of Zakat is one area where Islamic banking could be optimized. Several previous studies have proven that the payment of Zakat by Islamic banks positively and significantly affects the bank's performance. Empirical evidence from

Yemen, Al-Homaidi et al. (2020) revealed that zakat information from Islamic bank prompt the profit after tax higher. Similarly, Tuan Ibrahim et al. (2020) also reported that zakat disclosure is positively linked to Malaysian Islamic bank performance. In the Indonesia and Malaysia context, Poon et al. (2021) demonstrated that Zakat is one of the indicators that shows the contribution of Islamic banks; hence, the more Zakat provided, the more driven Islamic banks are to promote their work, which leads to an increase in Islamic bank financial performance.

Aligning with the prior finding, a study by Menne (2016) also portrayed that embracing zakat enhances Islamic banks' financial performance in Indonesia. Moreover, Javaid & Al-Malkawi (2018) show a favourable association between zakat and non-financial companies' profitability on the Saudi Arabia stock market. Recent research from Riani & Rusydiana (2022) also found that zakat has a crucial impact on escalating the financial performance of Islamic banks in Indonesia. Furthermore, Nomran & Haron (2022) also suggested that the zakat ratio becomes one of the accurate indicators to measure Islamic banking performance.

Aside from the significant contribution of zakat disclosure by Islamic banks to their financial performance, the unprecedented phenomenon, and the most recent global health crisis, COVID-19, also required urgent investigation because the pandemic has caused uncertainty and led to a global economic recession for both developed and developing countries. The COVID-19 crisis caused a tremendous impact on business performance in various fundamental sectors of the Indonesian economy (Hudaefi & Beik, 2020), including Islamic banking institutions. Various existing studies, Haider & Mohammad (2022), El-Chaarani et al. (2022), and Kasanah et al. (2022) have reported that COVID-19 significantly affected Islamic bank performance.

Based on the background explanation, this study aims to empirically analyze the nexus between zakat performance, the COVID-19 crisis, and the profitability of Islamic banking in Indonesia. Most previous studies measured Islamic bank profitability using single indicators; this study attempts to fill the gap by utilizing three indicators of Islamic bank profitability. Specifically, the return on assets (ROA), return on equity (ROE), and net profit margin (NPM) of ten Indonesian Islamic banks. The research results are expected to be useful for policymakers and Islamic banking circles. First, for Islamic banks, it can be used as input for policies aimed at improving financial performance and risk management in dealing with various possible financial risks that will be faced so that profitability can be achieved. Second, the government can use research results to formulate policies for achieving sustainable development goals and economic and social recovery programs after the COVID-19 pandemic.

LITERATURE REVIEW

Concept of Zakat in Islamic Bank

According to Hafidudin (2002), zakat implies blessing, rise, and peace (praise). Like Al-Qaradawi (2011), zakat symbolizes cleanliness, progress, blessing, and praise. Zakat also means purifying things, according to Wahab, Rahim, & Rahman (2011). In Shariah or Islamic law term, Qaradawi (2011) defines zakat as the portion of wealth that God prescribes to be distributed to those categorized as the poor, needy, amil or zakat administrator, muallaf or people inclined toward Islam, slaves, debtors (due to actual needs), fii sabilillah (in the service of Allah), and the wayfarers (Pamuncak et al., 2021; Wahab & Rahman, 2011).

Islamic Bank as institutions from Islamic Perspective should pay zakat (Ismail et al., 2010), this is because the activities

carried out by Islamic banks are business activities that generate profits as zakat obligations to companies that have these activities so that zakat on these banking institutions include corporate zakat (Hafidhuddin, 2002), besides that Islamic Banks are entities that carry out business operational activities so that according to sharia law and positively, especially in Indonesia, they must pay zakat maal as recorded in Law no. 3 of 2011 (Afandi, 2019). More explicitly, Indonesian Presidential Regulation No. 3 of 2014 provides instructions to business entity institutions that are also required to carry out zakat collection activities both in the form of employee zakat and corporate zakat (Afandi, 2019).

Zakat in Islamic Banking has an extensive purpose, in a business activity-based institution such as banking, zakat has a role in purifying the resulting assets (Al-Qaradawi, 2011), and following the basic concept of zakat also functions to grow assets and develop them into valuable assets and increase the capacity and profitability of an institution and even reflect the health of the institution (Al-Nasser Mohammed & Muhammed, 2017).

In addition, zakat as a rule of law that was born from Islam also has a role in maintaining the resilience of an institution from various harms (mudharat) because it has a strong basis and was born from maqashid sharia to protect (hifdz) essential elements that exist in an Islamic banking institution (Arsad et al., 2014; Mustafida, 2020). In a social context, zakat is closely related to the function of welfare for society, in several studies, it is known that zakat is categorized as social responsibility (Riani & Rusydiana, 2022)

Hypothesis Development and Research Framework

- *Zakat Performance and Islamic Bank Profitability*

Previous studies have empirically confirmed that zakat affects profitability. In a global scope, Javaid & Al-Malkawi (2018) explain that zakat in general has a robust and positive correlation with the profitability of an institution, this is evidenced by its research on 107 companies registered in Saudi Arabia during 2004-2013. This study states that zakat will encourage an increase in company value and profit because it has a dual responsibility function, both business and social. More specifically, Nomran & Haron (2022) who examined 37 Islamic banking institutions in several countries such as Malaysia, Indonesia, Bahrain and Saudi Arabia during the 2007-2015 period explained that zakat instrument is a measuring tool that has high validity and can be used as a reference in measuring the profitability of a banking institution, especially Islamic banks where zakat can reflect the profitability status of the Islamic banking institution. In addition, research by Abd Samad *et al* (2018) on 16 Islamic banks in Malaysia in 2010-2015 also proves that zakat positively affects the profitability of Islamic banking institutions. This study uses ROA, ROE and total assets proxies with details that the significant effect of zakat has the most excellent effect on total assets while ROA and ROE are still not significant.

Within the scope of Indonesia, research on the role of zakat on profitability is quite a lot and shows positive and significant results on the profitability of Islamic banks (Fauziah, 2019; Jummaini *et al.*, 2019; Prayogo & Eka Yudiana, 2022; Rhamadhani, 2017; Riani & Rusydiana, 2022). Some research does show results that are still not significant (Faturohman *et al.*, 2021; Purwati, 2022) but the reason is due to the influence of other combined control variables which make the value effect more minor such as intellectual capital variables and profit sharing ratios (Purwati, 2022), in addition, this insignificant result is caused by data limitations and the minimal tendency for

banking institutions to transparent their zakat data (Faturohman *et al.*, 2021). Thus, in general, the zakat performance of Islamic banking institutions significantly influences the profitability of these Islamic banks.

H1. Zakat performance is significantly associated with the Islamic bank's profitability in Indonesia

- *COVID-19 Crisis and Islamic Bank Profitability*

COVID-19 is a multidimensional crisis that is different from other forms of financial crises in general and has a broad impact on both the formal and informal sectors of the economy, this is because COVID-19 is an epidemic and has roots in public health problems which ultimately affect many dimensions of life including the economy (Pitoyo *et al.*, 2020). Several studies have tried to explore the impact of COVID-19 as a multidimensional crisis on economic activity, especially in the banking sector.

In the context of the global crisis impact Haider & Mohammad (2022) who examined around 500 public banking institutions spread across Asia and Europe based on data for 2016 -2021 concluded that COVID-19 in the general model affected banking institutions, but viewed based on regional character, COVID-19 has had a more negative impact on developing countries, while in developed countries pandemic conditions also have positive opportunities, however, statistically, all models show that COVID-19 has partially harmed the performance of banking institutions. El-Chaarani *et al* (2022) tried to make a comparison between conventional and Islamic banking institutions in several countries that are members of the Gulf Cooperation Council (GCC) such as Qatar, Saudi Arabia, UAE, Oman, Kuwait and Bahrain also concluded that the COVID-19 crisis had a significant impact on the profitability of both Islamic and conventional banks. However, the study stated

that Islamic banking institutions were more affected due to the weaker financial structure than conventional banking. In line with this, Rehman (2021) also explained that COVID-19 had a very negative and significant impact on Islamic banking institutions in the GCC area due to stringent restrictions on social activities.

In the Indonesian context, empirically COVID-19 also harms the profitability performance of Islamic banks because it decreases business activity and reduces the financial growth of Islamic banks (Kasanah et al., 2022). In addition, a quantitative study of Islamic banks' time series from 2015-2021 carried out by Fajri *et al* (2022) on monthly data for Islamic banking institutions also shows that in the long term COVID-19 affects profitability significantly and negatively.

What is interesting is, even though COVID-19 has had a significant effect, based on research data conducted by Al monifi, Rehman, & Gulzar (2021) on Islamic banks in Saudi Arabia, it shows that Islamic banks are still able to avoid the enormous impact of the COVID-19 pandemic because banks Islam also has a fast response to this Pandemic condition. Thus, a hypothesis can be drawn that COVID-19 is a crisis that significantly impacts the Profitability of Islamic Banking institutions.

H2. COVID-19 is significantly associated with the Islamic bank's profitability in Indonesia

Based on the relevant theoretical and previous studies, the research framework is illustrated in Figure 1.

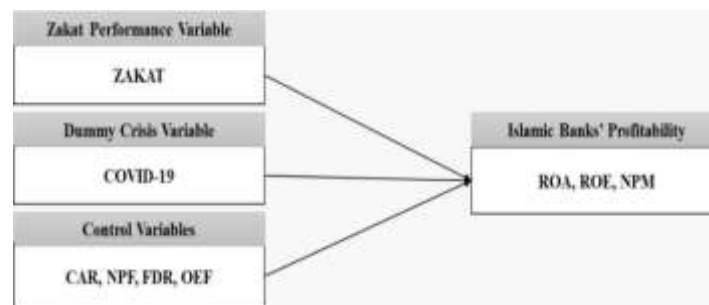


Figure. 1. Conceptual Framework

RESEARCH METHODOLOGY

Research Methods and Process

This study uses the panel data regression models used by Mondol & Wadud (2022). Thus, the research method applies a quantitative approach. Panel data regression method based on the econometrics guidelines by Gujarati & Porter (2012). There are three

models of static panel data, namely: Pooled Least Square (PLS), Fixed Effect Model (FEM), dan Random Effect Model (REM). To select the best estimation of panel data regression model, we use Chow test, Hausman test, and LM test to know the best estimation model in this study according to Pindyck & Rubinfeld, 1998 dan Wooldridge (2001). Furthermore, in the process of this research, we illustrate in the Figure 2.

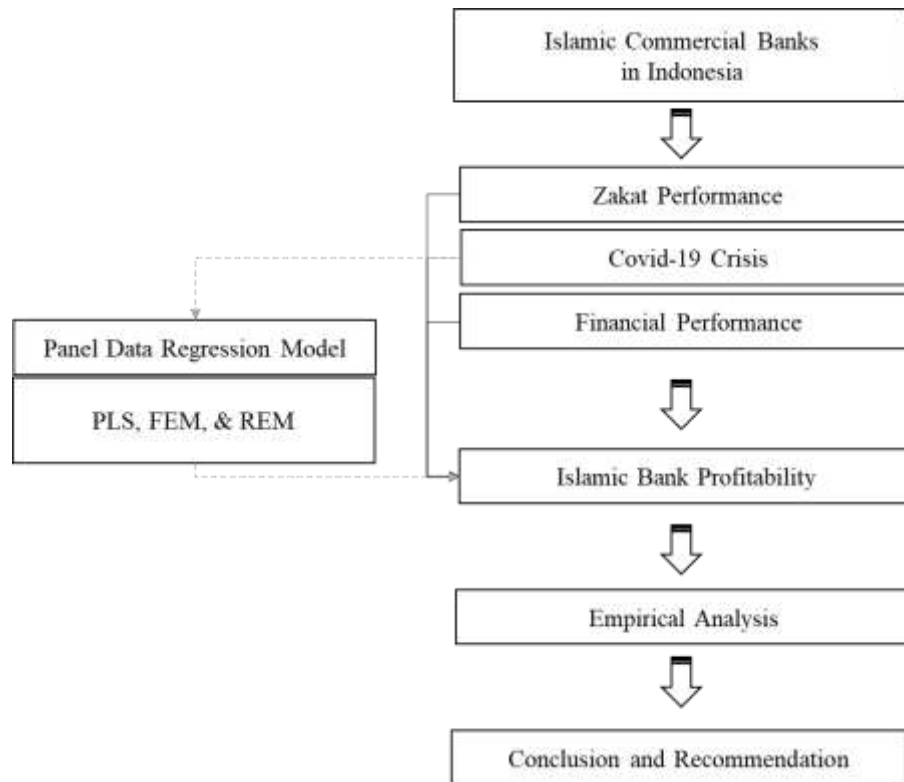


Figure. 2. Research Process

Data and Variable Description

The data used in this study is secondary data from the annual report of all Islamic commercial banks in Indonesia from the period 2015 to 2021. However, the sample of this research is only 10 (out of 14) Islamic commercial banks based on the completed data and registered banks in Bank Indonesia. The ten Islamic commercial banks in this

study are *Bank Mega Syariah*, *Bank Muamalat Indonesia*, *Bank Negara Indonesia (BNI) Syariah*, *Bank Nusa Tenggara Barat (NTB) Syariah*, *Bank Panin Dubai Syariah*, *Bank Rakyat Indonesia (BRI) Syariah*, and *Bank Syariah Mandiri (BSM)*. We followed Syahri & Harjito, (2020) for the selection of sample. The explanations of the individual variables are summarized in Table 2.

Table 2. Data and Variable Description

Variables	Indicator	Exp. Sign
Dependent Variables		
Islamic Banks Profitability	ROA	Return on assets (ROA) is defined as the net profit after tax to total assets
		n/a

Variables	Indicator	Exp. Sign
Dependent Variables		
	ROE	Return on equity (ROE) is the other alternative measure of profitability which is the ratio of net profit after tax and total shareholder's equity n/a
	NPM	Net profit margin (NPM) is referred to as the net profit sharing margin to total assets. n/a
Independent Variables		
Zakat Performance	ZAKAT	Zakat performance is defined as the result of net income times 2.5% zakat (+)
	CAR	Capital adequacy is defined as the ratio of shareholder's equity to total assets (+)
Financial Performance	NPF	Non-performing financing is defined as the ratio of financial risk to total financing (+)
	FDR	A financing deposit is defined as the ratio of financing to third-party funds (+)
	OEF	Operating efficiency is computed as the ratio of total operating cost to total operating income of banks (-)
Dummy Variable		
Novel Coronavirus Diseases 2019	COVID-19	Measuring Crisis 0 = Pre Covid-19 1 = Post Covid-19 (-)

Panel Data Regression Model

Panel data regression model conducted by Mondol & Wadud (2022) is one of the references for research on the determinants of banking profitability. Meanwhile, the determinants of Islamic bank profitability using a panel data regression approach have been carried out by Achsani & Kassim (2021); Anisa & Anwar (2021); Hasanah &

Hariyono (2022); Iman & Umiyati (2022); Imsar & Harahap (2022); Laili & Bawono (2022). In this study, this study also includes an important variable in influencing the profitability of Islamic banks in Indonesia, namely the zakat performance variable as research conducted by Iman & Umiyati (2022). The COVID-19 crisis variable is used as a determinant of the profitability of Islamic banks in Indonesia as research conducted by

Pamuncak & Wijaya (2022). Moreover, consistent with earlier research, the regression model of this study included CAR, NPF, FDR, and OEF as the control variables (Khansa & Violita, 2021; Riani & Rusydiana, 2022). The specification model of panel data regression model in this study is as follows:

$$ROA_{it} = \alpha_0 + \alpha_1 ZAKAT_{it} + \alpha_2 COVID - 19_{it} + \alpha_3 CAR_{it} + \alpha_4 NPF_{it} + \alpha_5 FDR_{it} + \alpha_6 OEF_{it} + \varepsilon_{it}$$

$$ROE_{it} = \alpha_0 + \alpha_1 ZAKAT_{it} + \alpha_2 COVID - 19_{it} + \alpha_3 CAR_{it} + \alpha_4 NPF_{it} + \alpha_5 FDR_{it} + \alpha_6 OEF_{it} + \varepsilon_{it}$$

$$NPM_{it} = \alpha_0 + \alpha_1 ZAKAT_{it} + \alpha_2 COVID - 19_{it} + \alpha_3 CAR_{it} + \alpha_4 NPF_{it} + \alpha_5 FDR_{it} + \alpha_6 OEF_{it} + \varepsilon_{it}$$

Where α is intercept terms; the profitability of Islamic banks is measured by ROA, ROE and NPM; The zakat performance variables of Islamic banks are ZAKAT and financial performance specifically CAR, NPF, FDR, and OEF, and dummy crisis variables Covid-19 (a value of 0 indicates before the Covid-19 pandemic and a value of 1 during or after the COVID-19 pandemic).

RESULTS

Classical Assumption Test

Table 3 demonstrated the classical assumption test for each model. The table shows that all three models are free from multicollinearity, autocorrelation, and heteroskedasticity.

Table 3. Classical Assumption Test

No.	Test	Indicators	Model (1) ROA	Model (2) ROE	Model (3) NPM
(1)	Multicollinearity	Centered VIF < 10	2.14	2.14	2.14
(2)	Autocorrelation	P-value > 0.05	8.386(0.020)	3.893(0.0839)	13.238(0.0066)
(3)	Heteroscedasticity	P-value > 0.05	2394.82(0.000)	1447.80(0.000)	2385.06(0.000)

Note: (1) Variance Inflation Factors (VIF); (2) B-G Serial Correlation LM Test; (3) Breusch-Pagan-Godfrey Test

Empirical Results

Based on the estimation of the panel data model processed in this study, it is known that in general zakat performance has a significant effect on the profitability of Islamic banks in all models, all in the ROA, ROE and NPM models. In the asset model with the independent proxy variable ROA, the zakat performance coefficient is 0.1996 with a significance of 0.0180 with the FEM approach. Meanwhile, in the equity model with the independent proxy variable ROE the coefficient values are 1.7633 and 0.9936 with significance values of 0.0090 and 0.0490 with the FEM and REM approaches respectively. Furthermore, in the NPM model, zakat performance has a significant

impact on the net profit margin of Islamic banking institutions in the PLS and REM approaches at the coefficient values of 0.7539 and 0.3821 with a significance level of 0.000 and 0.0180 respectively. Thus, in the three models of increased profitability ROA, ROE and NPM it can be concluded that zakat performance has a significant effect with a positive coefficient value. Based on this H1, the three models are supported and accepted.

This study empirically shows that COVID-19 in general has a significant impact on the profitability of Islamic banks in all models except for the equity profitability model with an independent proxy for the ROE variable. In the ROA profitability

model, the COVID-19 coefficient is negative in both the PLS, FEM and REM approaches with values of -0.3546, -0.2576 and -0.3225 with significance levels of 0.0180, 0.0690 and 0.0150 respectively. Meanwhile, in the equity profitability model with the ROE proxy, the estimation results show that COVID-19 has no significant effect with a significance value still above 20%. Sequentially the COVID-19 coefficient values in this ROE model are -1.5206, -1.0871 and -1.2923 in the PLS, FEM and REM models. Meanwhile, the COVID-19 variable significantly affects the net profit of

Islamic banks in the NPM model with coefficients -0.8960, -0.7436 and 0.7925 with significance values of 0.0350, 0.0130 and 0.0080 in the PLS, FEM and REM models respectively. Based on the empirical results of this model, it can be concluded that the ROA and NPM models support H2 and the ROE model does not. However, in general, H2 it can be accepted that COVID-19 has a significant adverse effect on the profitability of Islamic banks.

Table 4 demonstrated the result of panel regression for each mathematic model.

Table 4. Panel data regression results

No.	Hypothesis	Relationship Tested	Coefficient	Regression Result	Decision
Zakat Performance → Islamic Banks' Profitability					
1	H1	Zakat → ROA	0.1996**	(+) Significant	Supported
		Zakat → ROE	0.9936**	(+) Significant	Supported
		Zakat → NPM	0.7539***	(+) Significant	Supported
Covid-19 Crisis → Islamic Banks' Profitability					
2	H2	COVID-19 → ROA	-0.0903***	(-) Significant	Supported
		COVID-19 → ROE	-1.2923	(-) Insignificant	Not Supported
		COVID-19 → NPM	-0.7436**	(-) Significant	Supported
Financial Performance → Islamic Banks' Profitability					
3	H3	CAR → ROA	0.0103	(+) Insignificant	Not Supported
		CAR → ROE	-0.1385	(-) Insignificant	Not Supported
		CAR → NPM	-0.0132	(-) Insignificant	Not Supported
4	H4	NPF → ROA	0.0242	(+) Insignificant	Not Supported
		NPF → ROE	0.3767	(+) Insignificant	Not Supported
		NPF → NPM	0.1221	(+) Insignificant	Not Supported
5	H5	FDR → ROA	0.0020	(+) Insignificant	Not Supported
		FDR → ROE	0.0045***	(+) Significant	Supported
		FDR → NPM	0.0144*	(+) Significant	Supported
6	H6	OEF → ROA	-0.0903***	(-) Significant	Supported
		OEF → ROE	-0.6239***	(-) Significant	Supported
		OEF → NPM	0.0136	(+) Insignificant	Not Supported

Notes: ***, **, * denote the significance of coefficients at 1 %, 5 %, 10 % levels, respectively.

DISCUSSION

Zakat Performance and Profitability

The findings in this study indicate that zakat performance affects profitability in several ways, based on the fundamental aspect of the existence of zakat as a social instrument that plays a vital role in improving the community's economy will make the role of Islamic banks more trusted in society as an institution that actively participates in creating social justice, welfare and equality of life in the community (Javaid & Al-Malkawi, 2018; Rosman et al., 2019; Sharofiddin et al., 2019).

From the ROA point of view, assets are one of the benchmarks for Bank Size and an essential factor in viewing the development of a banking institution, thus the obligation of zakat on assets owned by Islamic banks can also be used as a standard to view the development status of an Islamic Bank (Nomran & Haron, 2022).

Meanwhile, from the equity side, zakat will increase the interest of investors to invest and save funds in Islamic banks due to the better image of Islamic banks (Prayogo & Eka Yudiana, 2022; Rosman et al., 2019). Zakat Performance will further enhance the image and reputation of Islamic banks, increase customer loyalty, and ultimately improve the performance and profitability of Islamic banks (Fauziah, 2019; Javaid & Al-Malkawi, 2018). This image and reputation can be built with transparency in the reporting and disclosure of zakat by Islamic banks and this is one of the determinants that can be used in viewing the achievement of zakat performance in Islamic banks (Al-Homaidi *et al.*, 2021; Nurmalia & Ardana, 2020), thus implementing, reporting and transparency of zakat to the public is needed to achieve better profitability for Islamic banks.

In previous studies, it was known that zakat can boost equity financing and reduce debt-based financing, besides that the

existence of zakat as an aspect of social responsibility will reduce business stress and financial distress. After all, it reduces the risk of low debt repayments because it generates more revenue and profit-sharing-based financing activities (Azura B.T. Sanusi, 2014). Furthermore, the greater the zakat, the greater the profit that becomes the *nisab* or basis for calculating zakat, and the greater the motivation to pay zakat, which will also encourage institutional motivation to continue to increase the profits of Islamic banks (Nomran & Haron, 2022). This study's results align with previous empirical research which concluded that the performance of zakat is very influential and has a significant positive impact on stimulating the profitability of Islamic banks

COVID-19 and Profitability

COVID-19 as a health crisis that has a broad impact has proven to have a significant negative impact on Islamic banking institutions based on the findings of this study. The impact of COVID-19 on ROA and NPM is evident due to a decrease in business activities carried out by banking institutions when the pandemic occurred (Kasanah et al., 2022) in addition to government regulations in the context of preventing COVID-19 such as lockdowns, quarantines, the establishment of social distancing regulations and prohibition of offline business activities which ultimately reduces the cost efficiency of Islamic banking institutions which ultimately results in a decrease in the profitability of Islamic banks (Mansour et al., 2021; Rehman, 2021).

What is interesting about the findings of this study is that when COVID-19 did not have a significant impact on ROE at Islamic banks, this indicated that the primary return on capital and equity from investors was more influenced by factors outside of crisis conditions, such as image and reputation (Al-Homaidi et al., 2021) as well as the ability of

banks to overcome and maintain resilience in dealing with this crisis (Al monifi et al., 2021). Based on the theory in the banking world, when a financial crisis occurs, what is done to maintain the condition of equity and the stability of investor behaviour is to regulate interest rates (Fajri et al., 2022) but in Islamic banks increasing equity can be maintained by increasing equity financing which focuses on the business sector and minimize the risk of low debt-based financing payments (Azura B.T. Sanusi, 2014) as well as maintaining stability and increasing resilience when crisis conditions occur (Gholami et al., 2021).

In general, this research is in line with the findings of previous empirical research which explained that COVID-19 had a significant negative effect on the profitability of Islamic banks (Fajri et al., 2022; Haider & Mohammad, 2022) and explained that this condition is a condition which is detrimental and makes profitability decrease, but Islamic banks with different strategies are still able to maintain resilience and make a quick recovery after this crisis has passed (Al monifi et al., 2021).

CONCLUSION AND IMPLICATION

Conclusion

Based on research results, zakat performance is a critical element for an Islamic banking institution in increasing its profitability, enhancing the image of Islamic banks and encouraging investors to invest thereby strengthening the institution's capital structure, assets and profits.

The conditions of the COVID-19 crisis that have occurred have had a significant effect on the profitability conditions of Islamic banking institutions in Indonesia, these crisis conditions will have a negative impact both in the form of instability and weakening of profitability and provide

adverse shocks to the assets and profits of Islamic banking institutions

Implications

This paper provides implications for developing literature and directing policy recommendations in several contexts. From previous studies, it is known that the attention of Islamic banking institutions to the urgency of implementing banking institution zakat performance is still shallow (Abd Samad et al, 2018), through this research it is highly recommended that Islamic banking institutions must pay attention to the implementation of institutional zakat in the context of developing profitability and increasing resilience and sustainability of better institutions accompanied by reporting transparency and disclosure of zakat to Islamic banks (Nurmalia & Ardana, 2020).

Based on the regulatory system in Indonesia regarding zakat which is under the authority of BAZNAS, based on research it is also recommended for BAZ and Islamic Banking Institutions to establish and build a solid and good communication and collaboration system so that zakat implementation of Islamic banking institutions in Indonesia can be carried out correctly (Apsari et and under the regulations and the zakat system that apply in Indonesia Based on many studies and analyses that the economic crisis in its various forms will continue to recur and will result in shocks to the profitability of Islamic banking institutions, the conclusion can also be drawn based on the research results that one of the crucial alternatives to prevent the impact of the crisis on Islamic banks and maintain the stability of their profitability in the future is to carry out zakat institutions to the maximum increasing transparency (Nurmalia & Ardana, 2020) and participate in carrying out social functions (Javaid & Al-Malkawi, 2018; Jummaini et al., 2019) to protect institutions internally and society socially.

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Based on the regulatory system in Indonesia regarding zakat which is under the authority of BAZNAS, based on research it is also recommended for BAZ and Islamic Banking Institutions to establish and build a solid and good communication and collaboration system so that zakat implementation of Islamic banking institutions in Indonesia can be carried out correctly (Apsari et al., 2022) and under the regulations and the zakat system that apply in Indonesia.

Based on many studies and analyses that the economic crisis in its various forms will continue to recur and will result in shocks to the profitability of Islamic banking institutions, the conclusion can also be drawn based on the research results that one of the crucial alternatives to prevent the impact of the crisis on Islamic banks and maintain the stability of their profitability in the future is to carry out zakat institutions to the maximum (Al-Nasser Mohammed & Muhammed, 2017) increasing transparency (Al-Homaidi et al., 2021; Nurmalia & Ardana, 2020) and participate in carrying out social functions (Javaid & Al-Malkawi, 2018; Jummaini et al., 2019) to protect institutions internally and society socially.

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APPENDIX

Appendix 1. Summary of Panel Data Regression Results

Model (1) ROA									
Methods	Constant	Variables					COVID-19	F/WALD TEST	R2
		ZAKAT	CAR	NPF	FDR	OEF			
PLS	10.3630	0.0004	0.0037	0.0057	0.0022	0.1045***	-0.3546**	41.9900	0.8065
	0.0000	0.9940	0.7220	0.8990	0.5820	0.0000	0.0180	0.0000	
FEM	6.3281	0.1996**	0.0086	0.0538	0.0020	0.0793***	-0.2576*	14.9500	0.7526
	0.0010	0.0180	0.5960	0.3300	0.5890	0.0000	0.0690	0.0000	
REM	8.2469	0.0854	0.0103	0.0242	0.0020	0.0903***	-0.3225**	142.1500	0.8130
	0.0000	0.1680	0.4020	0.6120	0.5860	0.0000	0.0150	0.0000	
Model (2) ROE									
Methods	Constant	Variables					COVID-19	F/WALD TEST	R2
		ZAKAT	CAR	NPF	FDR	OEF			
PLS	83.3741	0.1960	0.2594***	0.2513	-0.0070	0.7902***	-1.5206	31.6600	0.7818
	0.0000	0.6400	0.0040	0.5010	0.8290	0.0000	0.2100	0.0000	
FEM	42.1803	1.7633***	-0.0690	0.4773	0.0045***	0.5295***	-1.0871	12.4200	0.7076
	0.0030	0.0090	0.5910	0.2760	0.0045	0.0000	0.3260	0.0000	
REM	58.8482	0.9936**	-0.1385	0.3767	-0.0019	0.6239***	-1.2923	110.2800	0.7590
	0.0000	0.0490	0.1630	0.3280	0.9460	0.0000	0.2210	0.0000	
Model (3) NPM									
Methods	Constant	Variables					COVID-19	F/WALD TEST	R2
		ZAKAT	CAR	NPF	FDR	OEF			
PLS	0.8881	0.7539***	0.0150	0.0987	0.0248**	-0.0427	-0.8960**	14.4200	0.6201
	0.8280	0.0000	0.6130	0.4460	0.0310	0.1670	0.0350	0.0000	
FEM	1.8527	0.1984	-0.0132	0.1221	0.0105	0.0136	-0.7436**	3.3300	0.0839
	0.6030	0.2470	0.6960	0.2890	0.1790	0.5930	0.0130	0.0084	
REM	0.3835	0.3821**	0.0052	0.0920	0.0144*	0.0076	0.7925***	21.8500	0.4604
	0.9160	0.0180	0.8680	0.4200	0.0730	0.7720	0.0080	0.0013	