







# “Do corporate governance implementation and bank characteristics improve the performance of Indonesian Islamic banking? Before-COVID-19 pandemic analysis”

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# DO CORPORATE GOVERNANCE IMPLEMENTATION AND BANK CHARACTERISTICS IMPROVE THE PERFORMANCE OF INDONESIAN ISLAMIC BANKING? BEFORE-COVID-19 PANDEMIC ANALYSIS

## Abstract

Islamic banking has existed in Indonesia since 1992. The performance of Islamic banking is interesting for further analysis. This study aims to analyze the impact of good corporate governance (GCG) implementation and bank characteristics on the performance of Islamic banking in Indonesia before the COVID-19 pandemic. Profitability is a measure of banking performance and is proxied by return on assets (ROA) and return on equity (ROE). The research sample consists of Islamic commercial banks that published financial and annual reports between 2011 and 2019. The data collection method used is documentation. Multiple regression analysis was used for data analysis. The results indicate that the implementation of GCG has no significant impact on performance (probability values of 0.425 and 0.420 on ROA and ROE with coefficients of 0.016 and 0.019). The P-value of the non-performing loans (NPF) variable is  $< 0.001$  on ROA and ROE, which means that NPF has a significant negative impact on ROA and ROE. Third-party funds only have a significant impact on ROE with a p-value of 0.046. Meanwhile, the size of a bank has not been shown to have a significant impact on the performance of Islamic banking in Indonesia. Efforts to maintain NPF are critical for banks to achieve good performance (profitability). NPF demonstrates the risk of nonpayment of Islamic bank financing.

## Keywords

profitability, performance, governance, financing, fund, size

## JEL Classification

G21, G34, M41

## INTRODUCTION

Islamic banks have been operating in Indonesia since 1992. Islamic banks run their business based on the Law of the Republic of Indonesia No. 21 of 2008 concerning Islamic banking. Islamic banks are financial institutions that conduct their operations in accordance with Sharia principles. They are classified into two types: Islamic Commercial Banks and Sharia People's Financing Banks. Islamic Commercial Banks are Islamic banks that provide payment-transaction services based on Sharia principles.

The development of Islamic banks in Indonesia can be seen from the growth in the number of Islamic commercial banks (ICB). There were 12 ICBs in 2015 and 14 ICBs in 2020. The number of offices has also increased significantly. There were 1,990 offices in 2015, and there were 2,034 by 2020 (BPS, 2021). The financial performance indicators, specifically profitability as measured by ROA (return on as-

sets), show that developments in Islamic banks fluctuate. In 2012, Islamic banks' ROA was 2.14, but it fell dramatically to 0.49 in 2015. The ROA of Islamic banks was only around 1.40 in 2020, after increasing positively in 2018.

The performance (profitability) of Islamic banking is worth further investigation. In 2021, the state-owned Islamic banks merged into BSI (Bank Syariah Indonesia/Islamic Bank Indonesia). This merger is undoubtedly intended to broaden and improve products and services, allowing them to perform better. The study of the factors influencing profitability is an important and extensive study. The pandemic has made it extremely difficult for any business, including Islamic banking operations. Therefore, this study focuses on performance before the pandemic.

## 1. LITERATURE REVIEW AND HYPOTHESES

Agency theory and signaling theory are the basic theories in this study. In the study of agency theory, the implementation of good corporate governance has an impact and is a solution to problems that arise between agents and principals (Jensen & Meckling, 1976). Agency problems will be minimized by increasing the role of managers and shareholders to produce symmetrical information. A company's performance is also getting better.

Meanwhile, signaling theory refers to the occurrence of information asymmetry from companies and investors. Managers should be able to send signals to information users based on their individual interests. Through the exposure of a company's financial performance ratios in financial reports and annual reports, it is expected to be able to provide signals regarding the condition of the company concerned (Connelly et al., 2011). The information presented contains financial information and an overview of the company in the past, present, and future. Thus, information is an important element for investors and other users.

Islamic banks are financial institutions that were established to introduce and expand the use of Islamic principles and traditions in financial transactions, banking, and other economic activities. Thus, Islamic banks must follow Sharia law to demonstrate good performance to shareholders (Zarrouk et al., 2016).

Bank profitability is defined as the ability of a bank to earn a profit in relation to its sales, assets, or equity. There are several financial ratios to measure profitability, including ROA (return on assets), ROE (return

on equity), NIM (net interest margin), EPS (earnings per share) (Hery, 2020). Profitability is one of the financial indicators that can be used to assess bank performance. ROA can be defined as a bank's ability to profitably manage its assets. This is like ROE, which can be defined as a bank's ability to manage equity to maximize profit. According to Bank Indonesia Circular Letter No. 9/24/DPbS 2007, ROA ranging from 0.5% to 1.25% is considered healthy. ROA of less than 0.5% can be considered unhealthy.

Corporate governance is a factor that can affect the profitability of Islamic banks. Good governance will ensure that the organs of Islamic banks carry out their duties as efficiently and as legally as possible (including Sharia compliance). GCG ensures that the organs of Islamic banks can carry out their duties while adhering to existing Sharia rules (Nurkhin et al., 2018). Adoption of poor GCG by Islamic banks will cause complicated bank operations and possibly cause losses (Mamatzakis et al., 2023). Corporate governance has been shown to have a positive and significant effect on profitability in manufacturing companies listed on the IDX (Manu et al., 2019).

The importance of this study is the use of GCG implementation measures with self-assessment scores. A low self-assessment rating indicates that the quality of GCG implementation in Islamic banks is improving. GCG implementation has a positive impact on profitability (Ferdyant et al., 2014). Other findings indicate that corporate governance has a significant impact on ROA and ROE (Manu et al., 2019). Board quality as a GCG proxy is found to positively affect the financial performance of an Islamic bank (Haddad, 2022). The proportion of shariah supervisory board (SSB) as Islamic governance component has a significant impact on Islamic banking

performance (Virk et al., 2022). In addition, corporate governance efficiency can improve the performance of Islamic banking in Indonesia (Kusuma & Ayumardani, 2016).

Other factors that determine bank profitability are non-performing financing (NPF), third-party funds (TPF), and bank size. NPF is a ratio marker of bank health. The smaller the NPF ratio, the better the bank's health. A small NPF indicates that the bank can manage financing well, with few problematic loans. The distribution of financing carried out by Islamic banks will determine the level of profit sharing. This means that if financing can be distributed in a healthy manner, Islamic banks' profitability will improve. The low level of NPF indicates this. If the NPF is too large, the level of profitability will be reduced. Previous study indicates that NPF has a significant impact on ROA (Kinanti & Purwohandoko, 2017). Non-performing loans (NPL) have a negative impact on ROA (Saif-Alyousfi & Saha, 2021). NPF has not been shown to have a significant impact on ROA and ROE (Hidayat et al., 2021).

Third-party funds (TPF) are bank funds sourced from the public. TPF can be used by banks to increase business activities by channeling it to debtors. The greater TPF allows a bank to increase the level of financing provided to customers. Thus, potential profits can be obtained by the bank. TPF is defined in Islamic banking as funds obtained from the public (both individuals and businesses) in Rupiah and foreign currencies using various savings instruments owned by Islamic banks. TPF consists of Wadia savings, Mudarabah savings, Mudarabah current accounts, and Mudarabah deposits (Salman, 2021). The amount of third-party funds means that the bank will have more funds to channel to debtors, increasing the possibility of profit (Parenrengi & Hendratni, 2018). Empirical evidence shows that TPF has a positive and significant effect on ROA (Kinanti & Purwohandoko, 2017). The amount of savings has a positive impact on ROA (Teixeira et al., 2021). The results of previous studies found the level of savings would reduce profitability (Al-Harbi, 2019).

Bank size is also a determinant of profitability. Bank size can be measured by the amount of assets or other proxies. Bank size can show the growth of the bank continuously. There are many advantages by using the assets of a bank. The large number of assets

gives banks the flexibility to expand their business (Al-Sartawi & Reyad, 2019). Products and services will be more diverse and of higher quality. The size of a bank has a significant effect on profitability, according to empirical evidence (Alharbi, 2017). One of the determinants of the profitability of Islamic banking in MENA (Middle East and North Africa) is the size of a bank (Khasawneh, 2016). Other findings confirm that the size of Islamic banks influences their ROA in a positive and significant way (Gati et al., 2020).

Other results show that bank size is significantly positively related to banks' ROA in Bahrain (Elseoud et al., 2020). Similar empirical evidence finds a significant effect of size on ROE (Hidayat et al., 2021), and bank margins (Shawtari, 2018). Size has a positive and significant effect on ROA and ROE (Teixeira et al., 2021). Meanwhile, other results show that bank size has no significant effect on ROA (Al-Harbi, 2019) and ROE (Hakimi et al., 2018). Size has a negative and significant effect on ROA (Saif-Alyousfi & Saha, 2021). Within the framework of Islamic banks and conventional banks, a significant effect of bank size on ROA was discovered (Khan et al., 2021).

The impact of GCG implementation on the performance of Islamic banking in Indonesia is still being studied. The novelty of this study is the measurement of GCG implementation in Islamic banks using the GCG self-assessment score reported in the GCG report or a bank's annual report. This is an uncommon unit of measurement. The GCG self-assessment score shows the quality of GCG implementation in each bank. Many studies have examined the impact of GCG on profitability with various proxies and measures.

The purpose of this study is to examine the impact of GCG implementation on the ROA and ROE of Islamic banks in Indonesia. In addition, this study also analyzes the impact of bank characteristics on the ROA and ROE of Islamic banks in Indonesia.

The hypotheses developed in this study are as follows:

- H1: *The implementation of GCG has an impact on Indonesian Islamic banking's ROA.*
- H2: *The implementation of GCG has an impact on Indonesian Islamic banking's ROE.*

- H3: *Non-performing financing has an impact on Indonesian Islamic banking's ROA.*
- H4: *Non-performing financing has an impact on Indonesian Islamic banking's ROE.*
- H5: *Third-party funds have an impact on Indonesian Islamic banking's ROA.*
- H6: *Third-party funds have an impact on Indonesian Islamic banking's ROE.*
- H7: *Bank size has impact on Indonesian Islamic banking's ROA.*
- H8: *Bank size has impact on Indonesian Islamic banking's ROE.*

Bank Muamalat, Bank Victoria Syariah, Bank BRI Syariah, Bank BNI Syariah, Bank Syariah Mandiri, Bank Mega Syariah, Bank Panin Syariah, Bank Syariah Bukopin, and Bank BCA Syariah.

The profitability of Islamic banks, as measured by ROA and ROE, is the dependent variable in this study. ROA is obtained from the ratio of net income before tax divided by the average total assets. ROE is calculated from the comparison of net income before tax divided by total equity. The independent variables are the implementation of GCG, TPF, NPF, and bank size. The GCG self-assessment score is used to assess GCG implementation. TPF is calculated from the amount of demand deposits plus time deposits and savings. NPF is calculated from the ratio of total non-performing financing divided by total financing. Meanwhile, bank size is measured by the total assets owned by the bank.

## 2. METHOD

This study uses a causal approach to analyze the impact of GCG implementation on the profitability of Islamic banks. In addition, this study investigates the impact of third-party funds, NPF, and bank size on the ROA and ROE of Islamic banks in Indonesia before the COVID-19 pandemic.

The research population consists of 14 Islamic commercial banks (ICB) in Indonesia that are registered with the Financial Services Authority (OJK). Purposive sampling was used in the sampling method. The criteria were ICBs registered with OJK as of December 2020 and publishing annual reports and/or GCG reports between 2011 and 2019. Nine ICBs met the criteria, namely,

GCG self-assessment is an assessment of the Islamic banking institution's implementation of GCG (Tjondro & Wilopo, 2011). According to the Financial Services Authority Circular Letter No. 10 of 2014 concerning the Assessment of the Health of Islamic Commercial Banks and Sharia Business Units, there are eleven factors for assessing GCG implementation, as shown in Table 1. The bank must report the results of the GCG implementation assessment to Bank Indonesia and publish them in the bank's Published Financial Report for the relevant period. Table 2 shows an assessment of the self-assessment results based on the Financial Services Authority Circular Letter No. 10 of 2014.

**Table 1.** GCG self-assessment indicators in Islamic banking

No.	Factor	Weight (%)
1	Implementation of the Board of Commissioners' duties and responsibilities	12.50
2	Implementation of the Board of Directors' duties and responsibilities	17.50
3	Completeness and implementation of the Committee's duties	10.00
4	Implementation of the Sharia Supervisory Board's duties and responsibilities	10.00
5	Sharia principles are being implemented in fundraising and the distribution of funds and services	5.00
6	Managing Potential Conflicts of Interest	10.00
7	Managing the bank's compliance function	5.00
8	Internal audit function implementation	5.00
9	Implementation of the external audit function	5.00
10	Maximum Funds Disbursement	5.00
11	Transparency of Islamic Commercial Banks' financial and non-financial conditions, reports on Good Corporate Governance implementation, and internal reporting	15.00
Composite Score		100.00



**Table 2.** Composite rating of GCG self-assessment implementation results

Composite Score	Composite Rating	Composite Predicate
Composite Score < 1.5	1	Excellent
1.5 ≤ Composite Score < 2.5	2	Good
2.5 ≤ Composite Score < 3.5	3	Adequate
3.5 ≤ Composite Score < 4.5	4	Not Quite Good
4.5 ≤ Composite Score < 5.0	5	Not Good

Documentation was the data collection method used. The data were obtained from each bank's annual report and/or GCG report from 2011 to 2020. Descriptive statistics and multiple regression analysis were used to analyze the data. WarpPLS was the software used.

### 3. RESULT

The model test begins by examining several indicators, including the average path coefficient (APC), average R-squared (ARS), and average adjusted R-squared (AARS). If these three indicators are met, then the model in the analysis can be declared fit. The test results show that the P-value (probability) for APC is 0.013, ARS and AARS < 0.001. Thus, the research model is declared fit. Validity and reliability tests were also carried out by looking at combined loading and cross loading, as well as Cronbach's alpha and composite reliability values. All variables can be declared valid because they have an outer loading value above 0.7.

Furthermore, all variables can be declared reliable because their Cronbach's alpha and composite reliability values are greater than 0.7.

Table 3 shows the descriptive statistics of the research variables. Table 4 shows the average performance (ROA and ROE) of Islamic banking before the pandemic. The average ROA and ROE were 0.71 and 5.79, respectively. The lowest values of ROA and ROE were -10.77 and -94.01, which were achieved by Bank Panin Syariah in 2017. Bank Mega Syariah achieved the best average performance of ROA and ROE in 2011–2019, which was 1.59 and 14.70. The average GCG is 1.84, which shows that Islamic banking in Indonesia implements GCG with good quality. BCA Syariah obtained the best GCG implementation with the lowest average composite score of 1.33 in the good category. A low composite value indicates a better quality of GCG implementation. The average NPF is 3.48 which is still in the very good category. This means that Islamic banking financing in Indonesia is still considered safe and controlled.

**Table 3.** Descriptive statistics

	ROA	ROE	GCG	NPF	Third-party funds	Size
Minimum	-10.77	-94.01	1.00	0.10	419.77	642.03
Maximum	3.81	57.98	3.00	12.52	99,810.00	112,291.87
Average	0.71	5.79	1.84	3.48	18,948.15	22,726.33
Std. deviation	1.59	15.01	0.58	2.23	22,517.81	26,026.39

**Table 4.** Performance and implementation of GCG in Indonesian Islamic banking before the pandemic (2011–2019)

Bank Name	ROA	ROE	GCG
Bank Muamalat Indonesia	0.58	10.36	2.22
Bank Syariah Mandiri	1.13	11.94	1.56
BNI Syariah	1.43	11.26	1.78
BRI Syariah	0.62	4.89	1.78
Bank Mega Syariah	1.59	14.70	1.89
Bank Victoria Syariah	-0.28	-1.56	2.11
Bank Panin Syariah	-0.08	-6.90	1.78
Bank Bukopin Syariah	0.41	3.86	2.11
BCA Syariah	1.02	3.59	1.33

**Table 5.** Hypotheses testing results

Hypotheses	Path Coeff.	P-value	Decision
GCG → ROA	0.016	0.425	Rejected
GCG → ROE	0.019	0.420	Rejected
NPF → ROA	-1.292	< 0.001	Accepted**
NPF → ROE	-1.214	< 0.001	Accepted**
Third-party funds → ROA	0.553	0.323	Rejected
Third-party funds → ROE	2.206	0.046	Accepted**
Size → ROA	-0.287	0.406	Rejected
Size → ROE	-1.838	0.083	Accepted*

Note: \*\* significance at 5%, \* significance at 10%.

The highest third-party fund was 99.810 billion rupiah, which was achieved by Bank Syariah Mandiri. Furthermore, Bank Syariah Mandiri is Indonesia's largest Islamic bank, with assets totaling 112,291.87 billion rupiah.

The results of hypotheses testing are presented in Table 5. The P-value of the GCG variable on ROA and ROE is greater than 0.05, implying that GCG implementation had no effect on the performance of Islamic banking in Indonesia before the pandemic. The P-value of NPF on ROA and ROE is less than 0.05, indicating that non-performing financing had a significant impact on the performance of Islamic banking in Indonesia before the pandemic. Third-party funds have a P-value greater than 0.05, whereas ROE has a P-value less than 0.05. Thus, third-party funds only have a significant impact on ROE. Another result is that the P-value of size is not less than 0.05, which means that there is no significant impact of size on ROA and ROE. However, the P-value size is less than 0.10, which means that the size can also have a significant impact on the ROA of Islamic banking in Indonesia before the pandemic.

## 4. DISCUSSION

The study's results show that the implementation of GCG has no significant impact on the profitability of Islamic banking in Indonesia, both in terms of ROA and ROE. The results contradict the general theory, which states that the implementation of GCG will improve banking performance. This finding is also inconsistent with previous studies that found significant evidence of GCG implementation on ROA and ROE (Manu et al., 2019). The quality of GCG implementa-

tion will improve business management to the point where it will have an impact on profitability (Ferdyant et al., 2014). GCG as measured by the CG index only has a small impact on ROA (Farooq et al., 2022). Ofoeda (2017) measures GCG with the GCG mechanism and finds a significant relationship between GCG and profitability. Boachie (2021) also proves the significant influence of the GCG structure on the ROA and ROE of banks in Ghana. Another finding indicates that two governance variables, board meetings and remuneration, explain the profitability of public sector banks, while only duality explains the profitability of private sector banks (Narwal & Pathneja, 2016). Another study explains that there is a significant relationship of board size (as a measure of GCG) to ROA of family firms in Jordan (Saidat et al., 2019).

Another factor, non-performing financing (NPF), influences the performance of Islamic banking in Indonesia. This study found significant evidence of the effect of NPF on ROA and ROE. NPF has a negative effect, which means that the smaller the NPF, the ROA and ROE of Islamic banking will increase. Bank Indonesia regulations state that a healthy NPF is less than 5%. From 2011 to 2019, the average NPF of Islamic banking in Indonesia was 3.48%. The significant effect of NPF on ROA and ROE is in accordance with the findings of previous researchers (Saif-Alyousfi & Saha, 2021). However, some findings indicate that NPF has no effect on profitability (Lisa, 2016).

The results also show the significant impact of third-party funds on ROE. However, third-party funds have no impact on ROA. The amount of TPF managed by Islamic banks will create oppor-

tunities for wider financing distribution. Islamic banks will be able to profit from the financing provided to customers. The significant impact of TPF on profitability has been proven by many researchers (Lisa, 2016). The amount of savings collected by a bank will have an impact on increasing profitability (Teixeira et al., 2021). Business loans are a statistically significant determinant of bank profits (Ekpu & Paloni, 2016). However, some researchers believe that TPF has no effect on bank performance (Salman, 2021). A bank cannot manage the amount of existing TPF, so it has no significant impact on the bank's profitability.

This study also found no evidence of a significant effect of bank size on performance. Bank size has no significant effect on ROA and ROE. Bank size only has a significant effect on ROE with a significant level of 10% and a negative coefficient. The amount of assets owned by Islamic banks is not able to be managed properly and is not able to determine the level of bank profitability. This finding contradicts the findings of previous studies, which found empirical evidence of a significant effect of size on ROA (Khasawneh, 2016) and a significant effect of

size on ROE (Shawtari, 2018). Fidanoski et al. (2018) also discovered a significant and positive impact of bank asset size on profitability. In addition, Boachie (2021) proves the significant effect of bank size in Ghana on profitability. ROA and ROE of Islamic banks proved to be significantly influenced by size (Tarek Al-Kayed et al., 2014). Ali and Puah (2019) found empirical evidence that bank size is a determinant of profitability.

NPF has been shown to have a significant impact on the performance of Islamic banking in Indonesia. Therefore, Islamic banking should pay serious attention to NPF. Bank Indonesia regulations have provided guidelines for Islamic banks to manage existing NPFs. The NPF of Islamic banks cannot exceed 5% for them to be considered healthy. If the NPF has exceeded 5%, the Islamic bank must immediately take a strategic decision to control the NPF. NPF represents the risk that the bank may face if it fails to pay a variety of financing. NPF is an indicator of substandard, doubtful, or non-performing financing that requires special attention. NPF is an important indicator of a bank's health.

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## CONCLUSION

This study aims to analyze the impact of GCG implementation on the performance of Islamic banking in Indonesia. GCG implementation is seen from the results of self-assessment conducted by each bank to measure the quality of GCG implementation. Meanwhile, performance is measured by profitability (ROA and ROE). The results show that Islamic banking can implement GCG well. Between 2011 and 2019, the performance of Islamic banking was good. The results of hypotheses testing indicate the insignificant impact of GCG implementation on ROA and ROE. Good GCG does not guarantee good bank performance. NPF had a significant negative impact on ROA and ROE. The lower the NPF of Islamic banks, the higher the ROA and ROE.

The amount of TPF also has a significant impact on ROE. The amount of TPF managed by Islamic banks will allow Islamic banks to be creative in distributing financing. Bank size has not been shown to predict Islamic bank profitability. The number of assets owned by Islamic banks cannot be managed properly to generate profits. Islamic banks must be more creative in their business management to meet the current challenges.

The limitation of this study is the measurement of the variables in this study. The implementation of GCG has been widely studied with various measures, such as the GCG index or the GCG mechanism. The measurement of the bank size variable has also been widely proven by previous researchers. Therefore, future researchers must experiment with different methods of measuring research variables to obtain potentially different results. Macroeconomic variables such as inflation and others can also be included in the analysis of profitability determinants.



## AUTHOR CONTRIBUTIONS

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