

The Role of Financing Risk in Moderating the Relationship between Bank Size and Health in Islamic Commercial Banks for the Period 2021-2023

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Abstract

This study was conducted to explore and examine the nature of the ability of Islamic Commercial Banks to stabilize the level of bank health as proxied by the Capital Adequacy Ratio (CAR) by considering the value of bank size, which in this case is studied in more depth by using financing risk as a moderating variable and operations efficiency as a control variable in Islamic Commercial Banks for the period 2021-2023. This study uses secondary data from quarterly financial reports published by each Islamic Commercial Bank with a sample size of 10 Islamic Commercial Banks. A sampling technique using purposive sampling was used. The data analysis used is panel data regression using the Random Effect Model (REM). The data analysis technique used is the Moderated Regression Analysis (MRA) panel data test. The results of this study indicate that Size has a significant negative effect partially on Bank Health (CAR). Financing Risk moderates the impact of Size on CAR. The interaction of financing risk (NPF) with Size moderates the effect of Size on bank health (CAR). The results show this study's role of financing risk as a quasi-moderation.

Key Word: *Bank Health, Size, Financing Risk, Operational Efficiency*

BACKGROUND

The banking sector fully supports the development of the Indonesian economy, especially in the financial industry. As an intermediary institution, Indonesian banking is divided into two types of banks based on their principles: conventional and Islamic banks. Based on data from the Directorate General of Population and Civil Registration (Dukcapil) of the Ministry of Home Affairs, the population of Indonesia reached 275,344,166 people in December 2022, and according to data from the Indonesian Ministry of Religion, 241,699,189 people (88%) are Muslim. These data illustrate that the majority of the population of Indonesia is Muslim, but what is in the spotlight is the percentage of the market share of Islamic Banking to National Banking based on banking statistics released by the Financial Services Authority, seen from the total assets in 2023, it was only 7.05%, which means that Islamic banking has not been able to achieve maximum market share in the banking world.

Seeing the market potential is certainly a challenge for Islamic banking in Indonesia and is interesting to follow up on. Thus, in this study, the object of focus is Islamic Commercial Banks, which are Banks with a focus on providing services in payment traffic and business

activities in the form of collecting funds in the form of Deposits in the form of Giro, Savings, Deposits, and Investments in the form of Deposits, or other forms that are equated with that and the distribution of financing based on sharia principles. This research object considers that BUS has a more complete function compared to other forms, such as Islamic Rural Credit Banks, which are not allowed to carry out fund collection activities in the form of giro and do not participate in payment traffic. Meanwhile, in comparison with UUS, Islamic commercial banks are fully institutionalized (full-pledged) in contrast to UUS, which are work units of Conventional Banks.

Along with the rapid development of the financial system, Islamic banks require a more advanced and accurate approach to assess the level of bank health. In this regard, Bank Indonesia has established a risk-based General Bank Health Level assessment system as regulated and stipulated in Bank Indonesia Regulation No. 13/1/PBI/2011, which states that the scope of the bank health assessment includes risk profile, Good Corporate Governance (GCG), Earnings and Capital, (www.ojk.go.id).

In the regulation, one of the focal points of the bank's Health level assessor is the capital and risk profile. Bremus & Ludolph, (2021) Capital plays an important role for banks as financial institutions in order to maintain the stability of the financial system because it not only supports the bank's operational activities but also convinces stakeholders in the industry as an assessment of the sustainability of the bank's activities and existence. Banks always hold extra capital to maintain business stability and anticipate possible risks (J. Marcus, 1984).

Indonesian banking describes the capital aspect as the obligation to fulfill minimum capital, which is stated in the capital adequacy ratio or capital adequate ratio (CAR). However, comparing CAR values between BUS and BUK from 2016-2023 shows that BUK is always superior to BUS. Based on this business phenomenon, it is necessary to see indicators that can strengthen or weaken the relationship between size and BUS Health, which is proxied by the capital adequacy ratio. However, comparing CAR values between BUS and BUK from 2016-2023 shows that BUK is always superior to BUS. Based on this business phenomenon, it is necessary to look at indicators that can strengthen or weaken the relationship between Size and BUS Health, which is proxied by the capital adequacy ratio. According to Acikalin et al., 2015 the capital adequacy ratio is closely related to the internal performance of the Bank, one of which is the Size of the Bank. Previous research revealed conflicting results regarding the relationship between Size and CAR as documented in the studies Etudaiye-Muhtar & Abdul-Baki, (2021); Ben Salah Mahdi & Boujelbene Abbes, (2018); Susy Muchtar, (2021) which obtained positive results between Size and CAR. Contrary to research conducted by Harkati et al., (2020); Hadjixenophontos & Christodoulou-Volos, (2018); Perdana, (2022); Linh et al., (2018) which found a negative relationship between Size and CAR. However Talumantak, (2021) documented that Size does not affect CAR.

Based on the inconsistency of existing research, we believe that there are other variables that can strengthen or weaken the relationship between these variables, so we decided to add a moderating variable to improve the accuracy of the analysis of the role of Size on CAR. The moderating variable added is Financing Risk which is proxied by Non-Performing Financing (NPF) because Financing Risk is an essential topic in carrying out the function of a bank as an intermediary institution because it will affect performance, operational activities, and even banking reputation. According to Djuwita & Muhammad, (2016), a high NPF value will have an

impact on the health level of the Bank, which reflects that Financing is not managed professionally. This study proposes that Financing Risk strengthens the negative relationship between Size and CAR because the higher the size of the bank, the smaller the CAR because the bank is diversifying, has good management, and has easy access to finance. When the NPF value is high, the capital capacity of a large bank will be lower because large banks tend to have broader Financing, so the capital reserved will be less because the capital is used to overcome the financing risk. This study provides an essential contribution to the banking world by complementing previous literature through the use of NPF as a moderating variable and using analysis to distinguish the forms of effects in the study.

METHODOLOGY

Population and Sample

The population in this study is 13 Islamic Commercial Banks registered with the OJK for the 2021-2023 period. Meanwhile, the sample selection technique used is the purposive sampling method with the criteria of Banks that have been registered as Islamic Commercial Banks with the Financial Services Authority since 2021-2023, Islamic Commercial Banks that have published quarterly reports since 2021-2023, and Quarterly financial reports that are published clearly and accurately. Based on these criteria, 10 bank samples meet the requirements. The data used is secondary data from the quarterly financial reports of each Islamic Commercial Bank for the 2021-2023 period, with data collection methods in the form of documentation research and library research.

Operational Variable

The type of research conducted is associative causality to examine the causal relationship between two or more variables with the bank's health value, with the measurement of the bank's health variable proxied by the Capital Adequacy Ratio (CAR) as the dependent variable, size as the independent variable, financing risk proxied by Non-Performing Financing (NPF) as a moderating variable, and operational efficiency proxied by BOPO as a control variable. The measurement method used is as follows:

$$\text{CAR} = (\text{Capital}/\text{RWA}) \times 100\%$$

$$\text{Size} = \text{Ln}(\text{Total Assets})$$

$$\text{Financing Risk} = \text{NPF} = (\text{Non-performing Financing}/\text{Total Financing}) \times 100\%$$

$$\text{Operational Efficiency} = \text{BOPO} = (\text{Operating Expenses}/\text{Operating Income}) \times 100\%$$

Analysis Techniques

This study uses descriptive analysis to provide an empirical description based on the data collected in the form of average values (mean), standard deviation, and maximum and minimum variance. This study uses panel data regression so that the best model test is needed using the Chow Test, Hausman Test, and Lagrange Multiplier Test to estimate panel data regression, which is carried out through the Common Effect, Fixed Effect, or Random Effect approaches. In its analysis, using Moderated Regression Analysis (MRA) analysis because it uses moderator variables, so the panel data regression equation for the moderator variable uses the MRA equation. The regression equation is as follows:

$$\text{CAR}_{it} = \beta_0 + \beta_1 \text{LnTA}_{it} + \beta_2 \text{BOPO}_{it} + e^1$$

$$CAR_{it} = \beta_0 + \beta_1 LnTA_{it} + \beta_2 NPF_{it} + \beta_3 BOPO_{it} + e^2$$

$$CAR_{it} = \beta_0 + \beta_1 LnTA_{it} + \beta_2 LnTA * NPF_{it} + \beta_3 BOPO_{it} + e^3$$

Hypothesis Development

The Influence of Size on Bank Health (CAR)

Studies conducted on bank health or Capital Adequacy Ratio have indeed been widely explored in previous literature and research. A more comprehensive study shows that the performance factors implied in the performance ratio are very important in maintaining the stability of bank health.

Harkati et al., (2020) investigated the effect of the Capital Adequacy Ratio (CAR) specified in Basel III on the risk-taking behavior of Islamic and conventional commercial banks in Malaysia. The study revealed that large banks have a lower risk level than small banks, so large banks tend to have lower capital reserves. The results are in line with the study Alraheb et al., (2019), which investigated the effect of the institutional environment on the capital ratio of banks in the Middle East and North Africa region for the period 2004-2014 that large banks tended to have lower capital reserves because in adverse conditions large banks can increase capital faster than small banks. Sudiyatno et al., (2019) revealed that large banks maintain capital reserves at low levels because they have long-term deposits to finance risky assets. Maji & Hazarika, (2018) revealed that large banks have easy access to finance, so they do not require large capital reserves.

(Etudaiye-Muhtar & Abdul-Baki, 2021) provide an understanding that banks operating in less competitive markets with good regulatory quality do not need to engage in excessive risk-taking activities that would require an increase in capital levels, and in the development of research objects on listed Commercial Banks that large banks need to provide capital exceeding the reserves specified by regulations to maintain a good financing rating. This result is reinforced by research Jiang & Zhang, (2017), which shows that excess retained capital is a cushion to absorb adverse financial shocks. Obeid, (2023) emphasized that large banks require large CARs to anticipate their systemic impact.

Despite the various research variations from the empirical studies mentioned above, we have a firm explanation to justify the negative relationship between Size and Bank Health as proxied by the Capital Adequacy Ratio. Large banks tend to have relatively lower CAR values, as stated in the Too Big To Fail theory. This is because banks are too big to fail. Large-scale banks have more significant business and capital capacity and more comprehensive diversification to reduce operational risk, so in this case, large banks minimize their CAR values. Hadjixenophontos & Christodoulou-Volos, (2018) implies effective and efficient management and easy accessibility to finance produce an inverse relationship between size and CAR. Finally, we argue that large size will negatively affect bank health (CAR) because economies of scale and diversity of financial instruments, better access to finance, more advanced financing risk control techniques, and better portfolio risk make large banks tend to reserve lower capital. Based on these arguments, we propose the following hypothesis:

H₁: Size has a negative effect on bank health (CAR)

The Impact of Financing Risk on Bank Health (CAR)

Non-performing financing is an important issue to discuss because the NPF value is related to the quality of customer financing. Kurnianingsih et al., (2021) analyzed the capital buffer at Islamic Commercial Banks in Indonesia and stated that when the NPF value is high, the bank will handle losses or financing risks through bank capital, thus illustrating suboptimal financing management and eroding existing capital. Nurhikmah & Farah Wulandari Pangestuty, (2020) Investigated the determining factors of capital buffers in conventional banks in Indonesia because of the Basel III provisions to provide capital buffers as an effort to strengthen bank capital from risks that may arise; in his study, it was stated that high credit values will also cause the ATMR value to increase and cause a decrease in income so that banks experience a shortage of funds for operational activities and cause banks to reduce capital buffers. This is confirmed by Acikalin et al., (2015) in evaluating the impact of bank and environmental dimensions on bank capital adequacy ratios in the Southeastern Europe (SEE) region, which results in banks with a high-risk profile considering equity financing as a more favorable option. They are more likely to use more debt financing in this situation. This results in an increase in the portion of RWA and, in turn, lower CAR for riskier banks.

In the research conducted Siagian, (2020) to see the effect of Credit Disbursement and Non-Performing Loans on the Capital Adequacy Ratio (CAR) in National Banking, there were differences in the results where in the study, when non-performing loans occurred, banks intensively added capital to cover credit risk. In line with the research conducted Bukian & Sudiartha, (2016), which examined the effect of asset quality on the Capital Adequacy Ratio in banking companies listed on the Indonesia Stock Exchange, it was stated that when the NPF value was high, there was an increase in bank capital in several components of CAR, namely bank capital such as core capital and supplementary capital, so that even though non-performing loans increased, losses could still be covered by the additional funds.

Although the research results are varied based on the empirical studies mentioned above, we have a firm explanation to justify the negative relationship between Financing Risk and Bank Health as proxied by the Capital Adequacy Ratio. According to the Moral Hazard Theory, banks with high Financing Risk (NPF) values will reduce the Capital Adequacy Ratio (CAR) value. In conditions of high financing risk, the buffer capital will be less due to moral hazard because the bank does not uphold the principle of prudence in distributing financing so in this case, the bank must reduce the capital buffer to mitigate this risk (Kurnianingsih et al., 2021). Kablay & Gumbo, (2021) categorize the non-performing financing ratio as a driver of CAR in a negative direction because it can reduce income and cause banks to use the capital they have to fund their operational activities (Oktaviana & Syaichu, 2016). Finally, we argue that if the Financing Risk (NPF) value increases, it will affect the Capital Adequacy Ratio (CAR) value because the high financing risk (NPF) reflects inefficient financing management and risk control. This condition ultimately contributes to a decrease in bank income, so the availability of funds for operational activities is limited. It also disrupts financial stability, where banks should be able to allocate more reserves to meet CAR. However, because of the NPF, banks need to prioritize the sustainability of their operational activities. Thus, the hypothesis proposed is stated in Hypothesis 2 (H_2).

H_2 : Financing Risk has a negative effect on bank health (CAR)

The Influence of Financing Risk in Moderating Size on Bank Health (CAR)

Banking as an intermediary institution is undoubtedly closely related to financing risk; researchers believe there is a complexity in the relationship between Size and Bank Health, which is proxied by CAR. In a study conducted by Barua, (2018) in analyzing macroeconomic factors against the capital adequacy ratio of commercial banks in India, it was found that a higher level of non-performing assets would increase risk-weighted assets and further reduce the capital adequacy ratio; this occurs because the management of financing carried out by the bank is not optimal. This study aligns with that conducted by Acikalin et al. (2015), which shows that high credit risk will reduce the CAR value.

Previous research emphasizes that size will be influenced by financing risk, as explained by Djuwita & Muhammad, (2016) that the higher the NPF value, the higher the losses experienced by the bank, which will later erode the bank's profits if the bank's profits decrease, the total assets will also decrease. This is emphasized by research conducted by Firdiyanti et al., (2021), the higher the bank's NPF value will indicate a high level of debtors who default in the form of margins or profit sharing to Islamic banks, thus potentially reducing bank income and the bank's health level which will result in a decrease in the bank's total assets. In this case, banks with low asset quality have a very low number of problematic productive assets compared to the total productive assets owned.

Although no research results clearly explain the role of Financing Risk in moderating the Size of CAR, we have a firm explanation to justify the role of financing risk in strengthening the negative relationship between Size and Bank Health as proxied by the Capital Adequacy Ratio. Banks with high Financing Risk (NPF) values will reduce the Capital Adequacy Ratio (CAR) value according to Moral Hazard Theory. In conditions of high financing risk, buffer capital will be less due to moral hazard because banks do not uphold the principle of prudence in distributing financing. In this case, the bank must reduce the capital buffer to mitigate this risk (Kurnianingsih et al., 2021). The relationship between financing risk and bank size as proxied by total assets is described by Signaling Theory because a company shows its ability to provide a strong signal so that other companies are willing to invest resources in the company (Kharouf et al., 2020). High financing risk value will indicate higher losses experienced by the bank and impact the erosion of bank profits, reducing the total value of bank assets (Djuwita & Muhammad, 2016). Finally, increasing the Financing Risk (NPF) value will strengthen the negative relationship between Size and Capital Adequacy Ratio (CAR). Suppose the financing risk (NPF) value is high, even though large banks are more effective and efficient in managing their operations. In that case, they are still vulnerable to potential defaults because financing is needed for them to grow, so in this case, the CAR condition will worsen because it will be eroded by the losses faced. Thus, the hypothesis proposed is stated in Hypothesis 3 (H₃).

H₃: Financing Risk strengthens the negative relationship between Size and bank health (CAR)

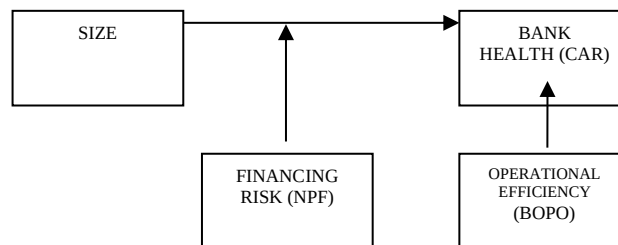
The Influence of Operational Efficiency on Bank Health (CAR)

Operational efficiency is an essential factor in banking activities; in its implementation, operational efficiency is described by the BOPO ratio in the performance structure; the higher

the BOPO, the more inefficient a bank is. In maintaining its stability, banks must balance cash inflows and outflows. Hence, banks need to keep an appropriate level of capital because the market needs to take advantage of profit opportunities and face unexpected losses (Etudaiye-Muhtar & Abdul-Baki, 2021). Hisan & Septiarini, (2020) in their research discussing the flow of fundamental and macroeconomic factors on Sharia Bank reserve funds, stated that the high BOPO value illustrates the increasing inefficiency of banks in obtaining income through their operational costs, so an increase in the CAR ratio is needed to mitigate possible risks.

In the research conducted there are differences in results, where Hamidah et al., (2021) stated that those who have been efficient in their operational processes and can control their operational costs will increase profits and obtain maximum earnings so that the excess will increase bank capital to increase CAR so that if the BOPO value is low, the CAR value will increase. In line with research conducted by Septiano & Pratama, (2022) that the BOPO ratio is inversely proportional to the Capital Adequacy Ratio, where if BOPO increases, the capital adequacy ratio will decrease. Vice versa, this illustrates that a bank has been efficient in its operational processes, the company's profit will increase so that it will encourage banks to increase CAR. Although there are differences in the results of the research conducted based on the literature review above, we have a firm explanation to justify the positive relationship between BOPO and the Capital Adequacy Ratio (CAR) based on the Capital Buffer Theory that banks need to maintain an appropriate level of capital because of market needs to be able to take advantage of profit opportunities and face unexpected losses, one of which is operational losses (Etudaiye-Muhtar & Abdul-Baki, 2021). So, if the high BOPO value indicates that the bank is less efficient in its operational control because the incoming income cannot cover the existing costs, the Bank needs to increase the CAR value to mitigate the operational risks that may occur. Thus, the hypothesis proposed is stated in Hypothesis 4 (H4).

H₄: BOPO has a positive effect on bank health (CAR)



Gambar 1. Model Penelitian

RESULTS AND DISCUSSION

Descriptive Statistics

From 120 observations in the study, it can be seen that the average value (mean) of Bank Health proxied by the BUS Capital Adequacy Ratio (CAR) value during the 2021-2023 period is 60,263 with a standard deviation of 100,478. The lowest CAR value in the study period was Bank Muamalat in the 1st quarter of 2021 at 15.06%, while the highest CAR value

in the study period was Bank Aladin Syariah in the 2nd quarter of 2022 with a CAR value of 506.43%.

Table 1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
CAR (%)	120	60.263	100.478	15.06	506.43
Total Asset (Dalam Triliun Rupiah)	120	44.79	83.01	1.18	353.62
BOPO (%)	120	103.612	70.868	56.81	497.13
NPF (%)	120	1.217	1.424	0	4.94

The size proxied by the Total Asset value of Islamic Commercial Banks for the 2021-2023 period has an average value (mean) of IDR 44.79 (in trillion rupiah) with a standard deviation of IDR 83.7 (in trillion rupiah). This study's lowest Total Asset value was Bank Aladin Syariah in Quarter 3 of 2021, IDR 1.18 (in trillion rupiah), while the highest Total Asset value in this study was Bank Syariah Indonesia in Quarter 4 of 2023. Financing Risk proxied by the Non-Performing Financing (NPF) value of Islamic Commercial Banks for 2021-2023 has an average value (mean) of 1.217% with a standard deviation of 1.424%. The lowest NPF value in this study was 0.00%, namely at Bank Aladin Syariah during the research period and Bank Victoria Syariah in quarters 1-3 of 2023. Meanwhile, the highest NPF value in this study was Bank Bukopin Syariah in Quarter 1 of 2021 at 4.94%. Meanwhile, Operational Efficiency, proxied by the value of Operating Expenses and Operating Income (BOPO) of Islamic General Banks for the 2021-2023 period, has an average value (mean) of 103.612% with a standard deviation of 70.868%. The lowest BOPO value in this study was 56.81%, namely at Bank BTPN Syariah in Q2 of 2021, while the highest BOPO value in this study was at Bank Bukopin Syariah in Quarter 1 of 2022.

Box-cox Transformation

The descriptive results show diverse data variations in CAR, size, NPF, and BOPO. This can interfere with the results of the model estimation so that a Box-Cox transformation is carried out to obtain data that is normally distributed and free from heteroscedasticity with the lambda value obtained as follows:

Table 2. Lambda Values of Each Variable

No	Variabel	Lambda
1	CAR	-0.7881957
2	Ln_TA	-0.014131
3	NPF	-0.0131802
4	BOPO	0.0001276

Best Model Test

This study uses a combination of cross-section and time series, so the hypothesis testing uses panel data regression. So that in estimating this panel data regression, the best model test is needed to choose to use the common effect, fixed effect, or random effect

approach. The best model selection in this study was carried out using the Chow test, the Husman test, and the Lagrange multiplier test.

Based on the Chow Test carried out, the results obtained are that in equations (1) and (2), the Probability is 0.0000 less than 0.05, so the model selected in this test is the Fixed Effect Model. Furthermore, based on the Hausman Test carried out, the results obtained are that in equations (1) and (2), the Probability value > F is 0.72491, 0.165, and 0.5429 greater than 0.05, so the model selected in this test is the Random Effect Model. Then, based on the different Chow Tests and Huasman Tests, the Lagrange Multiplier Test is needed to estimate the model. The results obtained are that in equations (1) and (2), the Probability value < F is 0.0000, which is smaller than 0.05, so the model selected in this study is the Random Effect Model. According to (Gujarati, 1999) Gujarati and Porter, 2005, the model estimated using the Random Effect Model (REM) uses the Generalized Least Square (GLS) method, which has the advantage of not requiring classical assumptions because GLS is nothing other than OLS applied to a transformed model that meets classical assumptions.

Baseline Model

Based on the baseline model table, the regression equation of the relationship between SIZE and the level of bank health moderated by financing risk and BOPO as a control variable can be formulated, namely as follows:

$$\text{CAR it} = 1.323828 - 0.009076 \text{ LnTA it} + 0.0000405 \text{ BOPO it} + \text{eit}^1 \dots \dots \dots (1)$$

$$\text{CAR it} = 1.491581 - 0.018463 \text{ LnTAit} - 0.012826 \text{ NPFit} + 0.000019 \text{ BOPO it} + \text{eit}^2 \dots \dots (2)$$

$$\text{CAR it} = 1.409947 - 0.013188 \text{ LnTAit} - 0.001181 \text{ LnTA*NPFit} + 0.000022 \text{ BOPO} + \text{eit}^3 \dots (3)$$

Table 3. Baseline Model

	CAR	CAR	CAR
ln_ta	-.00907669** (.00458304)	-.01846395*** (.00374158)	-.01318804*** (.00355512)
npf		-.01282662*** (.00134887)	
ln_taXnpf			-.00118137*** (.00013371)
bopo	.00004047 (.00003614)	.0000196 (.00002718)	.00002249 (.00002575)
_cons	1.3238277*** (.07585292)	1.4915806*** (.06222541)	1.4099466*** (.05859066)
Observations	120	120	120
Pseudo R ²	.Z	.Z	.Z

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 3 shows the basic regression results of the hypothesis testing conducted. Column (1) shows the results of equation 1 of the relationship between SIZE (ln_ta) and bank health (CAR) and BOPO as a control variable. The test results produce a negative Size

coefficient (0.009076) and significant at the 0.05% level so that hypothesis 1 is accepted or the null hypothesis is rejected. Then in column (2) the relationship between SIZE ($\ln_ta$) and bank health (CAR) by adding the Financing Risk (npf) and BOPO variables as control variables, the test results produce a negative SIZE coefficient (0.018463) and significant at the 0.001% level, the Financing Risk coefficient is negative (0.12826) and significant at the 0.001% level, so that the null hypothesis is rejected or hypothesis 2 is accepted. Furthermore, column (3) shows equation (3) the relationship between Size and bank health, with the interaction between SIZE and financing risk ($\ln_ta*npf$) as a moderator, and BOPO as a control variable. The test results produce a negative Size coefficient (0.013188) and significant at the 0.001% level, the $\ln_ta*npf$ interaction coefficient is negative (0.001181) and significant at the 0.001% level, so hypothesis 3 is accepted or the null hypothesis is rejected.

DISCUSSION OF RESEARCH RESULTS

The Effect of Size on Bank Health (CAR)

The study results show a negative and significant relationship between size and bank health (CAR). The results of this study are in line with previous research conducted by Linh et al., (2018); Alraheb et al., (2019); Harkati et al., (2020); Hadjixenophontos & Christodoulou-Volos, (2018). The results also follow the Too Big To Fail Theory, which states that banks with large sizes will prefer to create lower capital buffers. Large banks tend to be more stable and diversified by having many types of products, assets, and investments as a form of resource distribution in different lines or sectors and more reliable risk control to minimize possible risks. This situation means large banks may not need to reserve their capital levels too high to face potential losses due to the diversification and ease of financial access.

The Effect of Financing Risk (NPF) on Bank Health (CAR)

The study results show a negative relationship between financing risk and bank health (CAR). The results show that NPF as an independent variable significantly negatively affects bank health. This study's results align with previous research conducted by Chen, (2018); Kurnianingsih et al., (2021). The results are also relevant to the moral hazard theory that the lack of selectivity of management in selecting prospective debtors can be detrimental and increase financing risk (NPF) because banks channel financing to risky customers to generate higher returns (Mustafa & Mumtaz, 2022). Banks with high financing risk (NPF) indicate less than optimal management and risk management of banks in distributing financing, which will affect income and lack of funds for operational activities and, erode bank capital to finance their operations.

The Role of Financing Risk in Moderating the Relationship between Size and Bank Health (CAR)

The study results show a negative relationship between $\ln_ta*npf$ interaction and bank health (CAR). This result is built through moral hazard theory. The results of this study are also in line with previous studies conducted by Kurnianingsih et al., (2021); Nanda Arum Fauzia, (2016); Kharouf et al., (2020); Djuwita & Muhammad, (2016). The results of this study indicate that the higher financing risk and the potential to reduce the size of the company (SIZE) have implications for the decline in bank health (CAR). The higher financing risk (NPF) indicates

less than optimal financing management, so there is a risk of reducing the scale of the business, which will erode existing capital, and the bank becomes vulnerable to losses in its operations, thus significantly reducing the bank's health.

CONCLUSIONS

Based on the results of the study conducted in analyzing the Role of Financing Risk in Moderating the Relationship between Size and Bank Health in Islamic Commercial Banks for the 2021-2023 Period, the following conclusions can be drawn Size has a significant negative effect on CAR. Banks with large sizes tend to reserve less capital due to business scale, diversification, and ease of access to finance. In addition, large banks have better risk control techniques, so they do not require large capital reserves because the existing funds are prioritized to be invested to obtain potential profits. It is understandable that the larger the size of the bank, the lower the CAR will be. Financing Risk/Non-Performing Financing (NPF) significantly negatively affects CAR. Banks with high non-performing financing (NPF) values will indicate less than optimal financing management and risk mitigation (risk management efforts). High NPF will reduce the value of income obtained because it has to cover the losses faced. This will impact the reduction of funds owned to meet its business activities, eroding the capital owned to finance its operations, thereby reducing the Bank's Health (CAR). The increasingly high Financing Risk (NPF), which has the potential to reduce the scale of business (SIZE), has implications for the decline in bank health (CAR). A high NPF value accompanied by an estimated decrease in SIZE will reduce existing capital because the bank will be vulnerable to potential losses which can threaten the bank's health level.

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