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Indonesian Sharia Commercial Bank: Taking into Account from the Ratio of Rentability, Liquidity, Company Size and Capital Adequacy

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ABSTRACT
The capital adequacy ratio of a bank is a ratio used to assess a bank's ability to raise capital to finance its operations. This capital assessment is accomplished through an examination of the capital ratio as defined by the CAR (Capital Adequacy Ratio). The researcher uses the independent variables profitability, liquidity, and bank size to determine whether or not these ratios have an effect on the dependent variable (Capital Adequacy Ratio). This is a quantitative study utilizing secondary data. This study examines Islamic Commercial Banks that were registered with the Financial Services Authority between 2015 and 2020. This study analyzed a total of 15 businesses. The findings of this study indicate that a bank, as a profit-oriented institution, must have a strong capital base, as this will aid in maintaining and developing the bank in the future, and with sufficient capital, customers will feel more loyal and the level of trust will be higher.

Keywords: *Profitability, Liquidity, Bank Size, Capital Adequacy Ratio*

1. INTRODUCTION

In Indonesia, financial and banking institutions contribute to the country's economic development. Banking is perceived as a steam engine of economic development, and the government continues to make measures to strengthen economic growth by improving bank performance. Banking, as defined by [15], is a business entity that collects funds from the public in the form of savings and distributes them to the public in the form of credit and or other forms in order to improve people's living standards. This comprehension is also a function of the bank's role as a financial intermediary. The improvement of people's living standards will further stimulate the growth of businesses in Indonesia, which will have an effect on the banking industry as a financial intermediary institution. According to Law No. 10 of 1998, banking is divided into two types based on operational principles: conventional banks that operate on the principle of interest and Islamic banks that operate on sharia principles [18]. In accordance with [16] the definition of sharia bank is a bank that carries out its business activities based on sharia principles or Islamic legal principles regulated in the fatwa of the Indonesian Ulema Council such as the principles of justice and balance ('adl wa tawazun), benefit (maslahah), universalism (natural), and does not contain gharar, maysir, usury, injustice and unlawful components. The Financial Services Authority, as an institution that regulates, supervises, and protects banks, is currently providing credit relaxation to the public in order to rehabilitate the Indonesian economy, as stated in [8], which could be extended to 2021.

According to information on the news by [10], the current state of the banking sector during the Covid-19 pandemic, according to the Director of Economist Research at the Center of Reform on Economics (CORE), the banking sector's current state is still stable, as evidenced by the ratio of non-performing loans (NPL) and the national banking capital adequacy ratio. Meanwhile, in Islamic banking, the Financial Services Authority's Deputy Commissioner for Banking Supervision (OJK) stated that the growth of Islamic Commercial Banks, while slower than conventional

banks, was supported by data on loan growth (PYD), asset growth, and fund growth. In May, Islamic banks received an increase in third-party deposits. Given that the majority of Indonesians are Muslims, it is unsurprising that people would rather save their money in Sharia Commercial Banks. This is because Sharia Commercial Banks adhere to Islamic Sharia principles, which prohibit usury. On the other hand, there are reasons to switch to Islamic banks. Islamic banking is a system that incorporates aspects of justice; it is founded on the principle of mutual support, in which profits and risks are shared equally. Additionally, Islamic banks' commitment to banking involvement in the development of the real sector with a financing to debt ratio greater than 100%. However, not all Muslim communities in Indonesia choose Islamic Commercial Banks; according to M. Luthfi Hamidi in the journal Business Development and Management (2008), the quality of financial management services offered by Islamic commercial banks is still inadequate. The researcher uses Islamic Commercial Banks as an object in this study to determine whether their performance is truly appropriate and superior to that of conventional banks. According to [7], a bank's health can be determined through an assessment that considers capital (capital), asset quality (asset quality), management (management), profitability (earnings), liquidity (liquidity), and sensitivity to market risk (sensitivity to market risk). The profitability and liquidity ratios are used in this study to determine the bank's health and their impact on the capital adequacy ratio (CAR).

According to experts, the capital adequacy ratio is a ratio of bank performance used to determine the bank's capital adequacy and ability to support risky assets. Capital is critical in this case because it enables the bank to cover risks such as credit risk, operational risk, and market risk. Banks that are capable of mitigating risk will avoid significant losses. Based on the background and findings of previous studies, this research will fill a research gap by testing and developing [2] research entitled "The Effect of Profitability, Efficiency, and Liquidity on the Capital Adequacy of Islamic Commercial Banks." While previous studies used ROA, BOPO, and FDR as proxies, researchers now use Net Operating Margin (NOM), Return On Assets (ROA), Return On Equity (ROE), Operating Expenses and Operating Income, Financing to Deposit Ratio (FDR), and bank size as proxies. In addition, there are also differences in the period, specifically during the 2015-2020 period, this was because in 2015 until almost the end of 2019 the economy was not too volatile, but at the end of 2019 precisely in December to the end of 2020 there were unexpected conditions hence the economic involved in the turmoil, the Covid-19 pandemic. Therefore, researchers will examine the financial statements of Islamic banks for 6 years to find out how the condition of Indonesian Islamic general banking is.

2. RESEARCH METHODS

This study was conducted to ascertain the independent variable's effect on the dependent variable. The population comprised of all Islamic Commercial Banks that have filed financial statements with the OJK between 2015 and 2020, and the author examined 15 Islamic commercial banks. This study analyzed secondary data. The researcher's data collection technique was documentation. Financial reports, in the form of company records or documents that contain the required data and information for the 2015-2020 period, were obtained from the OJK (Financial Services

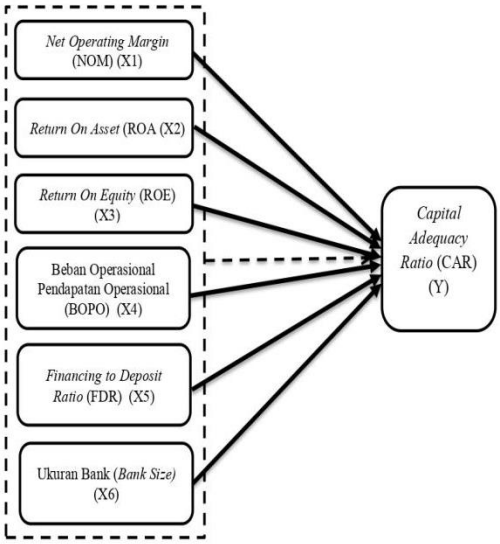

Figure 1 *Research Method*

Authority) website or from the official website of each company. To illustrate this, the following is a design drawing of the study's population.

Figure 1 Research Design

Meanwhile, the research sample only focuses on Indonesian Islamic banking which was active during the 2015-2020 observation period as follows:

Table1. Research Sample

No	Bank Name
1	Bank BRI Syariah
2	Bank BCA Syariah
3	Bank BNI Syariah
4	Bank BTPN Syariah
5	Bank Jabar Banten Syariah

6	Bank Mandiri Syariah
7	Bank Mega Syariah
8	Bank NTB Syariah

No	Bank Name
9	Bank Muamalat
10	Bank NET Indonesia Syariah
11	Bank Perkreditan Rakyat Syariah
12	Bank Panin Dubai Syariah
13	Bank Syariah Bukopin
14	Bank Victoria Syariah
15	Bank Aceh

3. RESULT & DISCUSSION

The following are the results of multiple regression analysis and hypothesis testing:

Based on Table 2 below, the equation model used can be obtained as follows:

CAR = 10.317 + 0.251 NOM +0.354 ROA - 0.034 ROE + 0.102 BOPO + 0.000 FDR + 0.000 Company Size + e

As a result of the findings above, it is clear that the Constant 10.317 indicates that if the Profitability variables (NOM, ROA, ROE, BOPO), Liquidity (FDR), and Company Size are all zero or constant, the dependent variable CAR is 10.317. Net Operating Margin (NOM) has a coefficient of 0.251 and a significance level of 0.223. The significance level exceeds 0.05. Thus, the NOM variable has no bearing on the Capital Adequacy Ratio (CAR). The Return On Asset (ROA) constant has a coefficient of 0.354 and a significance level of 0.339. As a result, the significance level exceeds 0.05. Then there is no effect of the ROA variable on the Capital Adequacy Ratio (CAR).

Table 2 Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std.Error	Beta		
(Constant)	10,317	3,016		3,420	0,001
NOM	0,251	0,205	0,056	1,228	0,223
ROA	0,354	0,368	0,049	0,962	0,339
ROE	0,034	0,038	-0,045	0,903	0,369
BOPO	0,102	0,027	0,175	3,713	0,000
FDR	0,000	0,000	0,863	20,051	0,000
Bank Size	0,000	0,000	-0,018	-0,443	0,659

While the coefficient for the Return On Equity variable is -0.034 with a significance level of 0.369. The significance level obtained is greater than 0.05, indicating that the ROE variable has no effect on the Capital Adequacy Ratio (CAR). The Operating Income Operating Expenses (BOPO) constant has a coefficient of 0.102 and a significance level of 0.000. The significance level is less than or equal to 0.05. BOPO has a measurable beneficial effect on the Capital Adequacy Ratio (CAR). One can assert that for every 1% increase in the BOPO value, the CAR increases by 10.2%. The constant 0.000 has a coefficient value of 0.000 and a significance value of 0.000 for the variable Financing to Deposit Ratio (FDR). Because the significance level is less than 0.05, the FDR variable has a significant positive effect on the Capital Adequacy Ratio (CAR). Thus, for every 1% increase in the FDR value, the CAR increases by 0.1 percent. The Bank Size constant has a coefficient of 0.000 and a significance level of 0.659. The obtained significance level is greater than 0.05. Thus, the firm size variable has no effect on the capital adequacy ratio (CAR).

Table 3. Hypothesis Testing

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta		
(Constant)	10,317	3,016		3,420	0,001
NOM	0,251	0,205	0,056	1,228	0,223
ROA	0,354	0,368	0,049	0,962	0,339

ROE	-0,034	0,038	-0,045	-0,903	0,369
BOPO	0,102	0,027	0,175	3,713	0,000
FDR	0,000	0,000	0,863	20,051	0,000
Bank Size	0,000	0,000	-0,018	-0,443	0,659

As shown in the table above, profitability as measured by (NOM) and bank size have no effect on the Capital Adequacy Ratio (CAR). While profitability as measured by ROA, ROE, and BOPO, as well as liquidity as measured by the Capital Adequacy Ratio (CAR), all have an impact. Due to the fact that Net Operating Margin (NOM) has no effect on Capital Adequacy Ratio (CAR), H0 is rejected. This occurs because income from profit-sharing funds owned by Islamic Commercial Banks is not the only factor that contributes to a bank's capital structure, but can also be influenced by productive assets such as funds placed in other banks or with third partie in accordance with Islamic Commercial Banks' principles and theories. Additionally, there is a negative NOM value, which is the result of operational costs exceeding the value of income from profit sharing rights obtained, implying that the bank has lost money in certain years. This study contradicts the findings of [4] who found that NOM has a significant detrimental effect on CAR. Furthermore, contrary to the findings of [9], NIM has a significant positive effect on CAR.

Due to the fact that Return on Assets (ROA) has no effect on Capital Adequacy Ratio (CAR), H0 is rejected. This is because the ROA value in this study is not constant; in some years, the ROA value is negative, indicating that the company incurs a loss and does not earn a profit. Nonetheless, each year, numerous Islamic Commercial Banks remain earning profit. Although profit is an element that affects the capital structure, but the profit is not stored in reserve capital, not only that CAR can also come from capital deposits from Islamic Commercial Bank owners so that profit is not the only factor that affects CAR because there are other factors. which can affect compliance with [6], and can also be proven in this study when high ROA does not prove that the CAR value will also high and vice versa. The findings of this study corroborate previous research [19], which concluded that ROA had no effect on CAR. Then, contrary to [3], this study's findings indicate that the ROA value has a beneficial effect on CAR. Additionally, according to research conducted by [2], the ROA value has a detrimental effect on CAR.

Return On Equity (ROE) has no effect on the Capital Adequacy Ratio (CAR) therefore H0 is rejected. This occured because the profit after tax (EAT) at Islamic Commercial Banks for three years experienced a loss or showed negative results. Profits obtained by Islamic Commercial Banks could be a factor to increase and decrease the capital structure, but the size of the ROE value cannot affect the size of the CAR value, this happens because the paid-up capital by the bank is not the only influence for increasing capital but is also supported by other aspects such as general reserves, retained earnings, paid-in capital and others which refer to [6]. The results of this study are in accordance with research conducted by [12] which has the result that ROE has no effect on CAR. However, this study contradicts research conducted by [1] which explains that ROE has a significant negative effect on CAR. And this research is contrary to research conducted by [13] which states that the ROE value has a significant negative effect on CAR.

Operating Expenses Operating Income (BOPO) has a significant positive effect on the Capital Adequacy Ratio (CAR) therefore H0 is accepted. The positive influence of FDR is influenced by the existence of high enough financing hence the BUS is able to return and disburse its funds to customers, if the financing is high enough then the BUS will strengthen its capital side so that capital will be high, the risk will be reduced therefore the CAR value will also be high The results of this study are in line with previous research conducted by [2] and also research conducted by [14] that BOPO has a positive effect on the Capital Adequacy Ratio (CAR).

Financing to Deposit Ratio (FDR) has a significant positive effect on the Capital Adequacy Ratio (CAR) so that H0 is accepted. The high FDR value can be caused by the financing activities carried out quite high. High financing will increase customer loyalty to the bank, with a high level of loyalty it will increase profits on the BUS, and also these profits are allocated to capital therefore high FDR has a significant positive effect on CAR. In addition, the risk that occurs when Islamic Commercial Banks are able to increase financing is the strengthening of the capital they have in which the strengthening serves as a risk cushion, accordingly, later the value of capital, especially in complementary capital which can encourage total capital in the capital structure, will increase. The results of this study are in line with previous research conducted [1] whose results showed that FDR had a significant positive effect on the Capital Adequacy Ratio (CAR). However, this study contradicts the research conducted by [2] where the results of this study are that FDR has a significant negative effect on CAR.

Because the size of the bank has no effect on the Capital Adequacy Ratio (CAR), H0 is rejected. Banks with a large asset base do not always indicate a large size and profitability. It can be seen that when a bank has a large amount of assets, it can expand in the hope of increasing profitability, but on the other hand, expansion increases the costs to be used and also increases the risk that occurs. Additionally, as stated in [6], the amount of assets is not a factor that can affect the capital structure.

The findings of this study corroborate previous research [4] indicating that company size has no effect on CAR, as well as research [5] indicating that bank size has no effect on CAR. This study, however, contradicts previous research [11], which found that the value of firm size has a significant negative effect on CAR. Furthermore, contrary to research conducted by [17], bank size has a significant negative effect on CAR. Additionally, the profitability, liquidity, and bank size variables all have an effect on the Capital Adequacy Ratio (CAR), as the proxies used to explain the independent variables are representative.

4. CONCLUSION

Economic conditions in Indonesia deteriorated during the study year, owing to the previous year's inflation rate of 8.36 percent. Until 2017, the economy gradually improved, owing to a variety of external and internal factors, but in 2020, the Indonesian economy experienced another slowdown as a result of the Covid-19 pandemic. Economic conditions will have an effect on the performance of Islamic Commercial Banks and thus on the ratio under examination. As demonstrated in this study, the profitability ratio, as measured by Net Operating Margin (NOM), has no effect on the Capital Adequacy Ratio (CAR). This occurs because income from profit sharing funds owned by Islamic Commercial Banks is not the only factor that contributes structure. capital to a bank, but can also be influenced in terms of productive assets, such as investing in other banks or third parties that adhere to Islamic Commercial Banks' principles and theories. Although profit is a factor affecting the capital structure, profit is not stored in reserve capital, and CAR can also come from capital deposits from Islamic Commercial Bank owners, indicating that profit is not the only factor affecting CAR, as there are additional factors that may affect those in accordance with Bank Indonesia Regulation Number 7/13/PBI/2005. However, as the BOPO increases, the bank's activities expand, such as opening new branches and recruiting new employees, and the costs associated with these activities increase, affecting the BOPO. With this expansion, the bank hopes to earn high profits/profits, and with high profits comes high profits/profits. This will have an effect on the capital-to-debt ratio. Increased customer loyalty benefits the bank, which results in increased profits on the BUS, as well as profits allocated to capital. Additionally, when Islamic Commercial Banks are able to increase financing, the risk is that their capital will be strengthened, acting as a risk cushion, resulting in an increase in the value of capital, particularly complementary capital, which can encourage total capital in the capital structure. It can be seen that when a bank has a large asset base, it can expand in the hope of increasing profitability; however, when expanding, the costs associated with the expansion will increase, as will the risks associated with the expansion.

REFERENCES

[1] Andhika, Y. D., & Suprayogi, N. (2016). *Faktor-Faktor Yang Mempengaruhi Capital Adequacy Ratio (CAR) Bank Umum Syariah Di Indonesia*. 312–323

[2] Fatimah, S. (2014). Pengaruh Rentabilitas, Efisiensi Dan Likuiditas Terhadap Kecukupan Modal Bank Umum Syariah. *Al-Iqtishad: Journal of Islamic Economics*, *6*(1), 42–58. https://doi.org/10.15408/ijies.v6i1.1368.

[3] Kurniasari, R. (2017). Analisis Return On Assets (ROA) dan Return On Equity Terhadap Rasio Permodalan (Capital Adequacy Ratio) Pada PT Bank Sinarmas Tbk. *Jurnal Akuntansi Dan Keuangan*, *4*(2), 150–158.

[4] Margaretha, F., & Setiyaningrum, D. (2011). Pengaruh Resiko, Kualitas Manajemen, Ukuran dan Likuiditas Bank terhadap Capital Adequacy Ratio Bank-Bank yang Terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi Dan Keuangan*, *13*(1), 47–55. https://doi.org/10.9744/jak.13.1.47-56

[5] Masood, U., & Ansari, S. (2016). Determinants of Capital Adequacy Ratio. Pakistani Banking Sector. *International Journal of Economics, Commerce, and Management*, *IV*(7), 149–162.

[6] Peraturan Bank Indonesia Nomor 7/13/PBI/2005 Tentang Kewajiban Penyediaan Modal Minimum Bank Umum Berdasarkan Prinsip Syariah, 28 (2005).

[7] Peraturan Bank Indonesia Tentang Sistem Penilaian Tingkat Kesehatan Bank Umum, Pub. L. No. 6/10/PBI/2004 (2004).

[8] Peraturan OJK Tentang Stimulus Perekonomian Nasional Sebagai Kebijakan Countercyclical Dampak Covid-19, (2020).

[9] Raharjo, P. G., Hakim, D. B., Manurung, A. H., & Maulana, T. N. A. (2014). Determinant of Capital Ratio: a Panel Data Analysis on State-Owned Banks in Indonesia. *Buletin Ekonomi Moneter Dan Perbankan*, *16*(4), 395–414. https://doi.org/10.21098/bemp.v16i4.19

[10] Ramli, R. R. (2020). *Enam Bulan Pandemi, Bagaimana Kondisi Perbankan Nasional?* Kompas.com. https://money.kompas.com/read/2020/09/17/153400226/enam-bulan-pandemi-bagaimana-kondisi-perbankan-nasional-?page=all

[11] Runtu, F., Saerang, D., & Pangemanan, S. (2017). Factors Influencing Banks Capital Adequacy Ratio in Indonesian Banks: Case Study At Commercial Bank Listed Period 2010-2015. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *5*(3), 3915–3925. https://doi.org/10.35794/emba.v5i3.18196

[12] Setiono, B. A. (2017). Pengaruh Return on Asset (ROA) dan Return on Equity (ROE) Terhadap Capital Adequacy Ratio (CAR) Sektor Perbankan yang Terdaftar di Bursa Efek Indonesia (Influence of Return on Asset (ROA) and Return on Equity (ROE) to Capital Adequacy Ratio (C. *Jurnal Aplikasi Pelayaran Dan Kepelabuhanan*, *7*(2), 117–129.

[13] Shingjergji, A., & Hyseni, M. (2015). The Determinants of the Capital Adequacy Ratio in the Albanian Banking System During 2007 - 2014. *International Journal of Economics, Commerce and Management*, *3*(1), 1–10.

[14] Susilo Dwi Cahyono, H., & Anggraeni, A. (2015). Pengaruh likuiditas, kualitas aktiva, sensitivitas pasar, efisiensi, dan profitabilitas terhadap CAR pada bank devisa yang go public. *Journal of Business & Banking*, *5*(1), 113. https://doi.org/10.14414/jbb.v5i1.476

[15] Undang Undang Nomor 10 Tahun 1998 tentang Perbankan, 63 (1998). http://www.komnasham.go.id/sites/default/files/dokumen/UU NO 39 TAHUN 1999 HAM_0.pdf

[16] Undang Undang Nomor 21 tentang Perbankan Syariah, (2008).

[17] Usman, B., Lestari, H. S., & Puspa, T. (2019). Determinants of capital adequacy ratio on banking industry: Evidence in Indonesia Stock Exchange. *Jurnal Keuangan Dan Perbankan*, *23*(3), 443–453. https://doi.org/10.26905/jkdp.v23i3.2981

[18] Utomo, K. U. & S. B. (2017). *Perbankan Syariah (Dasar-dasar dan DInamika Perkembangannya di Indonesia* (1 (ed.)). Rajawali Indonesia.

[19] Yuliani, K. P., Werastuti, D. N. S., & Edy, S. (2015). Pengaruh Loan to Deposit Ratio (LDR), Non Performing Loan (NPL) , Return on Asset (ROA) dan Opersional terhadap Pendapatan Operasional (BOPO) terhadap Capital Adequacy Ratio (CAR) (Studi Pada Bank Umum Swasta Nasional (BUSN) Devisa). *E-Journal Ak S1 Universitas Pendidikan Ganesha*, *3*(1), 1–11