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THE IMPACT OF MACROECONOMICS AND CORPORATE FUNDAMENTALS ON THE BUSINESS PERFORMANCE OF SHARIA BANKING IN INDONESIA

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Abstract

The aim of this research is to examine the impact of macroeconomic factors and company fundamentals on the Business Performance of Sharia banking in Indonesia. The study analysed monthly data from BI, OJK, and BPS for the years 2019-2023 using regression tests. The method used is regression analysis, with data drawn from the Sharia banking industry and macroeconomic indicators over the period from 2019 to 2023. The independent macroeconomic variables included inflation, exchange rate, and GDP, while company fundamentals were represented by FDR, CAR, BOPO, DPK, and NPF. Business Performance, as the dependent variable, was measured by Return on Assets (ROA). The results showed Indonesia experienced fluctuating economic conditions from 2019 to 2023, with low inflation and a varying exchange rate. Islamic banking in Indonesia showed strong fundamentals, with a healthy average ROA of 0.85% and a robust CAR of 16.48%; however, BOPO negatively and significantly impacts ROA, while CAR and FDR have minimal effects on ROA in Islamic banking. Inflation negatively affects ROA by increasing production costs, reducing overall banking profitability. To sustain growth, banks should focus on financing SMEs and leveraging digital technology for improved efficiency. This study focuses on the Sharia banking sector in Indonesia and incorporates both company fundamentals and macroeconomic variables. The findings will be valuable for policy-making and research in the field of Sharia banking in Indonesia.

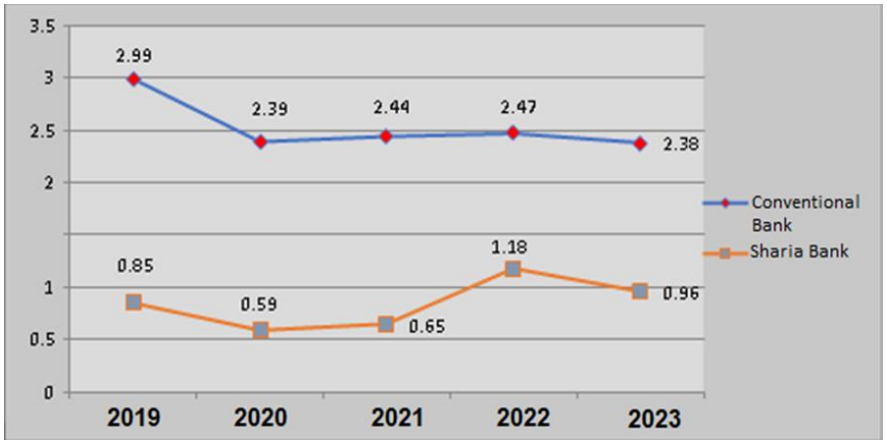
Keywords: *Business Performance, Corporate fundamentals, Macroeconomics, Sharia Banking*

A. INTRODUCTION

Banking plays a major role in the success of a country's economy (Soekapdjo et al., 2018). This contribution is closely tied to its function as part of the financial system, serving as an intermediary to facilitate economic activities (Nugroho et al., 2017). To support this, the government established a dual system in the banking sector, consisting of both conventional and Sharia banking. The strong presence of Sharia banking indicates growing public trust in these institutions, largely due to the predominantly Muslim population, who seek to manage their funds in accordance with Sharia principles (Soekapdjo et al., 2019). Sharia banking is well-suited to meet these needs by offering Islamic financial products.

Although Sharia banks were established after conventional banks beginning with Bank Muamalat Indonesia (BMI) on May 1, 1992 their Business Performance has been commendable. However, Sharia banks have a lower Return on Assets (ROA) compared to conventional banks, though they have shown a positive trend. The average ROA for conventional banks from 2019 to 2023 was 2.53 percent, while Sharia banks averaged 0.85 percent. Conventional banks recorded their highest ROA in 2019 at 2.99 percent and the lowest in 2021 at 2.38 percent. Sharia banks, on the other hand, had their lowest ROA in 2020 at 0.59 percent and the highest in 2022 at 1.18 percent.

Figure 1. ROA (Returns on Assets) of Sharia and Conventional Banks in Indonesia in 2019-2023



Source: OJK and BI-2023

As banking in Indonesia continues to evolve, competition has become increasingly intense. This competition not only occurs between conventional and Sharia banking but also with the

emergence of fintech (Tribudhi and Soekapdjo, 2019). Consequently, the challenge of maintaining public trust has become more difficult. To address this, banks need to maintain strong Business Performance to uphold their credibility while also managing the risks they face. Financial reports, particularly financial ratios, can serve as benchmarks for assessing the success of banking operations. While there are many financial ratios within the CAMELS framework covering capital, asset quality, management, earnings, liquidity, and sensitivity to market risk profitability is often used as a key indicator of company Business Performance (Suryani, 2018).

Bank management's ability to generate profits from the assets they manage can be measured using the earnings ratio, specifically Return on Assets (ROA). Improved asset management typically leads to higher ROA (Gunanty, 2018). In the era of globalization, the increasing economic interconnection between countries has made them more susceptible to macroeconomic fluctuations, which, in turn, affect the Business Performance of national banks.

Macroeconomic factors and company fundamentals play a significant role in banking Business Performance. Macroeconomic impacts can cause fluctuations in financing for both society and banks, while microeconomic changes influence the ability and quality of financing activities within the banking sector. Therefore, research is necessary to explore the influence of macroeconomic factors and company fundamentals on the Business Performance of Sharia banking in Indonesia.

B. LITERATURE REVIEW

In Islamic principles, money is not considered a commodity and therefore cannot generate interest, as interest involves usury. Instead, the principle of profit-sharing applies, viewing clients as partners in investment and trade (Choudhury, 1997). Consequently, Sharia banking aligns with Keynes' theory (1936) by linking the monetary and real sectors, ensuring that money benefits the economic sector, which in turn enhances people's welfare and promotes banking growth.

However, to improve their Business Performance, banks must also manage risks by sharing them with partners and avoiding investments that involve elements of gharar (uncertainty), maysir (gambling), najsy (deception), and haram (forbidden) goods (Huda and Edwin, 2007). This mutual trust strengthens the Business Performance and loyalty of both partners and banks, as the success of the partners' businesses directly contributes to the progress of Sharia banking. This approach helps to mitigate agency theory issues, as proposed by Jensen and Meckling (1976), by addressing conflicts between management and owners regarding Business Performance. It also aligns with signalling theory from Spence (1973) to reduce asymmetric information.

Company Business Performance can be assessed through profitability, as it provides crucial information for evaluating changes in cash flow from the utilization of resources to achieve company effectiveness (Ramdhiyanti et al., 2018). Profitability ratios reflect the combined effects of liquidity, asset management, and debt management, which result from operations (Brigham and Houston, 2019). Business Performance appraisals are essential for motivating employees to meet company standards (Evita et al., 2017). Moreover, a strategic Business Performance assessment system can function as a tool to evaluate employee activities (Yuliansyah and Jermias, 2018).

Bank Indonesia Regulation No. 9/1/PBI/2007 mandates the use of the CAMELS method for assessing bank Business Performance, with Return on Assets (ROA) being a key profitability indicator. Other important metrics include CAR for capital adequacy, FDR for liquidity, BOPO for operational efficiency, NPF for credit risk, and TPF for gaining public trust. In addition to company fundamentals, banking Business Performance is also influenced by macroeconomic factors such as inflation, exchange rates, and GDP, particularly because Sharia banking is based on the real sector rather than the financial sector. Thus, events in the real sector significantly impact Sharia banking Business Performance.

Several studies have explored banking Business Performance. Wardana and Widyarti (2015) found that BOPO has a negative and significant effect on ROA. Supriyono and Herdhayinta (2019) identified a positive and significant effect of FDR on ROA and a negative and significant impact of inflation on ROA. Khalifaturofi'ah and Nasution (2016) revealed that NPF negatively and significantly affects ROA. Widyaningrum and Siswantoro (2014) reported that CAR and GDP positively and significantly influence ROA. Astuty and Rahman (2015) found that TPF has a positive and significant effect on ROA, while exchange rates have a negative and significant impact on ROA. **The framework for thinking is as follows:**

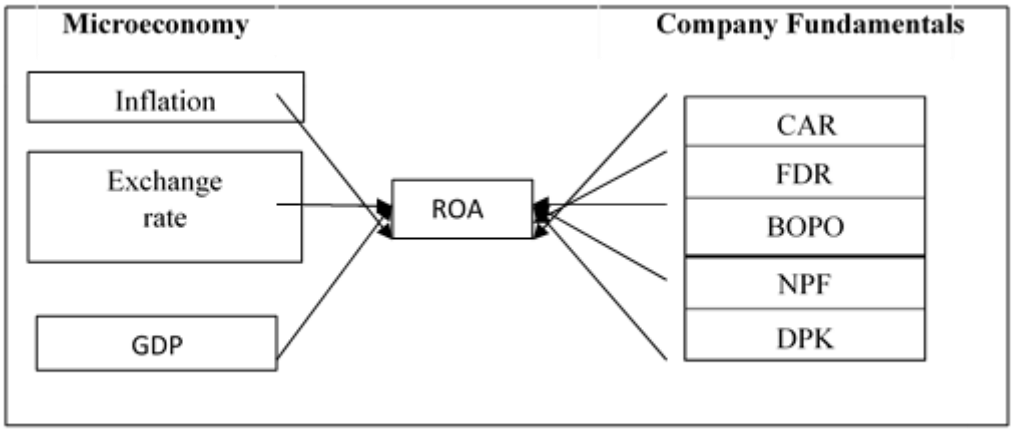


Figure 1. Research Rationale Framework

A high CAR indicates sufficient banking capital. This increases a bank's ability to bear the risks associated with the financing it provides, thereby creating opportunities for the bank to extend more loans, which in turn enhances banking Business Performance. Thus, H1: CAR has a positive and significant effect on ROA.

A high FDR suggests that a bank's distribution of financing will be higher. This occurs because the increased collection of public funds by the bank leads to higher expenditures. If the FDR remains within an ideal range, the greater distribution of funds will improve banking Business Performance. Thus, H2: FDR has a positive and significant effect on ROA.

A high BOPO indicates rising operational costs for the bank. As a result, the bank's operational costs may exceed its income, leading to a decline in banking Business Performance. Thus, H3: BOPO has a negative and significant effect on ROA.

A high NPF indicates an increasing risk burden for the bank. This condition requires the bank to allocate more funds for reserves against productive assets, leading to a decline in banking Business Performance. Thus, H4: NPF has a negative and significant effect on ROA.

An increase in TPF indicates that the bank is collecting more public funds. This allows the bank greater freedom to extend loans, thereby improving its Business Performance. Thus, H5: TPF has a positive and significant effect on ROA.

High inflation leads to an increase in the price of goods. This raises production costs, resulting in higher prices for products, which can decrease public demand. As a consequence, company profits decline, and entrepreneurs may reduce production, decreasing the public's demand for bank loans and negatively impacting banking Business Performance. Thus, H6: Inflation has a negative and significant effect on ROA.

A depreciating exchange rate can reduce banking Business Performance. To remain competitive, companies may cut production and export costs, but this often results in reduced profits. Consequently, banks may limit funding to these companies, hindering their expansion and increasing their debt burden, further reducing banking Business Performance. Thus, H7: The exchange rate has a negative and significant effect on ROA.

An increasing GDP indicates that economic conditions are stabilizing. This leads to higher public consumption and savings, which enhance the role of banks as intermediaries. As demand for loans increases to support production growth, banking Business Performance improves. Thus, H8: GDP has a positive and significant effect on ROA.

C. RESEARCH METHODOLOGY

This research aims to determine the influence of macroeconomic factors and company fundamentals on the Business Performance of Sharia banking in Indonesia. The method used is regression analysis, with data drawn from the Sharia banking industry and macroeconomic indicators over the period from 2019 to 2023, obtained from BI, BPS, and OJK. The dependent variable is company Business Performance, proxied by ROA. The independent macroeconomic variables include the exchange rate, inflation, and GDP, while the company's fundamental variables are represented by CAR, FDR, BOPO, NPF, and DPK. The models used are as follows:

ROA t=β0+β1 CAR+ β2 FDR+ β3 BOPO+β4 NPF+β5 DPK+β6 Inf +β7 GDP+β8 Exchange Rate +εt

Information:

ROA = Return on Assets (Percent).

CAR = Capital adequacy ratio (Percent).

FDR = Funding to deposit ratio (Percent).

BOPO = Operational expenditure to operational income (Percent).

NPF = Non-Performing Financing (Percent).

DPK = third party funds (Rp. billion).

Inf = Inflation (Percent).

GDP = Gross Domestic Product (Rp. trillion).

Exchange rate = Rupiah exchange rate against USD (Rupiah).1,5.

D. RESULT AND DISCUSSION

Indonesia's macroeconomic conditions from 2019 to 2023 experienced a fluctuating trend. Inflation remained low, averaging below 2%, with the highest rate at 2.46% in December 2019 and the lowest at -0.45% in April 2021. The average exchange rate was IDR 13,267.48 per USD, with the weakest exchange rate recorded at IDR 15,227 per USD in January 2022 and the strongest at IDR 11,361 per USD in March 2019. The average GDP was IDR 2,365.186 trillion, with the highest value recorded at IDR 2,683.21 trillion in Q4 2023 and the lowest at IDR 2,057.83 trillion in Q1 2019.

Islamic banking fundamentals are in a healthy condition. The average ROA is 0.85%, which falls into the "quite good" category, with the highest value at 1.407% (good category) and the lowest at 0.08% (poor category). The CAR averages 16.48%, indicating a very adequate condition, with a peak value of 21.39% and a low of 14.09%, both classified as very adequate. The FDR stands at an average of 87.36%, indicating fairly good conditions, with a maximum of 102.22% (poor category) and a minimum of 77.63% (good category). The average BOPO is 91.42%, which is categorized as very good, with the highest score of 71.76% (very good category) and the lowest at 99.04% (not good category). The NPF has an average of 4.72%, which is considered good, with the highest value of 6.17% (quite good category) and the lowest of 3.01% (good category). For DPK, the average is IDR 260,979.33 billion, with the highest value at IDR 371,828 billion in December 2023, and the lowest at IDR 177,930 billion in January 2019.

Table 1. Macroeconomics and Company Fundamentals in 2019.1-2023.12

	ROA	**CAR**	**FDR**	**BOPO**	**NPF**	**DPK**	**INFLASI**	**KURS**	**PDB**
Mean	0.8484	16.4817	87.3616	91.4233	4.7167	260970.33	0.350833	13267.48	2365.186
Maximum	1.407	21.393	102.221	99.041	6.168	371828	2.46	15227	2683.21
Minimum	0.08	14.09	77.634	71.762	3.007	177930	-0.45	11404	2057.83
Std. Dev.	0.32596	1.97209	7.16557	6.23468	0.6903	57232.74	0.456517	868.7126	176.9938

Source: Processed Result Data (2023)

The results of the model fit test yielded an adjusted R^2 value of 0.667, indicating that the variation or behavior of the independent variables—CAR, FDR, BOPO, NPL, DPK, inflation, exchange rate, and GDP—explains 66.7% of the variation in the dependent variable, ROA. The remaining 33.3% is attributed to other independent variables that influence ROA but were not included in the model. These results suggest that the ROA model for conventional banks has a fairly good goodness of fit. The global test (F-test) results show a probability F value of 0.000, which is less than 0.05, indicating that at least one independent variable has a significant effect on ROA.

Table 2. Processed data results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13.43719	3.385182	3.969414	0.0002
CAR	0.044729	0.038578	1.159448	0.2518*
FDR	-0.062568	0.017432	-3.589377	0.0008*
BOPO	-0.040831	0.007751	-5.268078	0.0000*
NPF	-0.095206	0.075303	-1.264312	0.2120*
DPK	-0.007067	0.002906	-2.431841	0.0186*
INFLASI	-0.081966	0.061468	-1.333478	0.1884**
EXCHANGE RATE	-1.20E-05	6.51E-05	-0.185043	0.8539*
PDB	0.000602	0.000559	1.075466	0.2873*
R-squared	0.711801	Mean dependent var		1.108622
Adjusted R-squared	0.665690	S.D. dependent var		0.388938
S.E. of regression	0.224883	Akaike info criterion		-0.006907
Sum squared resid	2.528607	Schwarz criterion		0.310005
Log likelihood	9.203756	Hannan-Quinn criter.		0.116803
F-statistic	15.43643	Durbin-Watson stat		1.598050
Prob(F-statistic)	0.000000			

*=alpha 5%

**=alpha 10%

Source: processed data

The influence of CAR on ROA shows a coefficient value of 0.0447, indicating that CAR has a positive effect on ROA. An increase in CAR leads to a higher ROA, while a decrease in CAR results in a lower ROA. The t-statistic value is 1.1595, with a probability of 0.1259 (0.2518/2), which is greater than 0.05, indicating that the influence of CAR on ROA in Islamic banking is not statistically significant.

For FDR, the coefficient value is -0.063, suggesting that an increase in FDR decreases ROA, and a decrease in FDR increases ROA. The t-statistic value is -3.589, with a probability of 0.0004 (0.0008/2), which is less than 0.05. Although FDR is significant in relation to ROA, its negative direction contradicts the theoretical expectation, meaning FDR is not proven to have a positive effect on ROA.

The impact of BOPO on ROA reveals a coefficient value of -0.041, indicating that an increase in BOPO leads to a decrease in ROA, and a decrease in BOPO increases ROA. The t-statistic value is -5.268, with a probability of 0.0000 (0.0000/2), confirming that BOPO has a proven negative and significant effect on ROA.

Regarding NPF, the estimated coefficient is -0.0952, meaning that an increase in NPF reduces ROA, while a decrease in NPF increases ROA. The t-statistic value is -1.2643, with a probability of 0.106 (0.212/2), indicating that the negative effect of NPF on ROA is not statistically significant.

For TPF, the estimated coefficient is -0.007, suggesting that an increase in TPF reduces ROA, and a decrease in TPF increases ROA. The t-statistic value is -2.4318, with a probability of 0.0093 (0.0186/2), meaning that although TPF is significant to ROA, its negative direction contradicts the theoretical expectation, so TPF is not proven to have a positive effect on ROA.

The influence of inflation on ROA shows an estimated coefficient value of -0.0819, indicating that increasing inflation decreases ROA, while decreasing inflation increases ROA. The t-statistic value is -1.333, with a probability of 0.0942 (0.1884/2), which is less than 0.1, proving that inflation has a negative and significant effect on ROA.

For the exchange rate, the estimated coefficient is -0.000012, meaning that a depreciation of the rupiah decreases ROA, while an appreciation increases ROA. The t-statistic value is -0.1850, with a probability of 0.42695 (0.8539/2), indicating that the exchange rate is not proven to have a significant negative effect on ROA.

The influence of GDP on ROA shows an estimated coefficient value of 0.000602, suggesting that an increase in GDP raises ROA, while a decrease in GDP lowers ROA. The t-statistic value is 1.0754, with a probability of 0.1436 (0.2873/2), indicating that GDP is not proven to have a statistically significant positive effect on ROA.

Inflation negatively impacts ROA as rising inflation leads to higher production costs for companies, reducing profits. In severe cases, it can cause companies to incur losses or even shut down, leading to liquidity issues and increased risk, which in turn reduces banking profitability.

Additionally, the experience of the monetary crisis, which led to the closure of many conventional banks, has increased public trust in Islamic banks. This is because, under the profit-sharing system, risk is shared between the partner and the bank. BOPO, a fundamental company factor, negatively affects ROA because Islamic banking fulfills its mandate effectively, leading to increased efficiency, reduced costs, and ultimately, higher banking profitability.

CAR does not affect ROA because banks invest selectively and prioritize business continuity. This cautious approach reduces risk but also limits profitability. FDR's impact on ROA is negligible because sharia banking, being relatively new, has not yet stabilized. As a result, financing distribution is suboptimal, with some funds diverted into assets. DPK's lack of effect on ROA is due to the varied composition of collected funds—such as current accounts, savings, and deposits—each with different cost and liquidity implications. NPF does not influence ROA because sharia banking employs a strict prudential system and shares risks with partners, eliminating the need for excess reserve funds and thus boosting profitability. GDP's lack of impact on ROA is attributed to government interventions, like the 13th salary and holiday bonuses (THR), which increase aggregate demand but are used for consumption rather than savings. The exchange rate has no effect on ROA because the funds disbursed by banks are directed toward the real sector, which relies heavily on local content, making it less sensitive to exchange rate fluctuations.

To ensure the sustainability of sharia banking, several measures should be taken to enhance Business Performance and support profitability. Macroeconomic conditions should be stable, with controlled inflation, steady exchange rates, and GDP growth driven by increased productivity and competitiveness. For company fundamentals, banks should maintain the CAMELS ratio in a favourable range, balancing profitability with risk management. They should also focus on financing small and medium enterprises (SMEs), which are resilient to economic crises and have significant growth potential. Additionally, banks should innovate and leverage digital technology to improve efficiency.

E. CONCLUSION & RECOMMENDATIONS

Sharia banking plays a crucial role in supporting development in Indonesia. To maintain public trust, it is essential to enhance Business Performance, as indicated by profitability metrics such as ROA. The Business Performance of sharia banking is influenced by macroeconomic conditions and company fundamentals. Among these, inflation (a macroeconomic factor) and BOPO (a company fundamental) have a negative and significant impact on ROA, while the exchange rate, GDP, CAR, NPF, DPK, and FDR do not show a significant effect. Therefore, the

government should proactively manage rapid macroeconomic changes in the era of globalization, while banks should innovate, leverage digital technology for greater efficiency, and focus on channelling funds to productive sectors, particularly small and medium enterprises (SMEs).

Recommendations for Banks:

1. Banks should closely monitor inflation, exchange rates, and GDP growth. Maintaining stability in these areas will support the overall profitability and performance of Islamic banking.
2. Banks should ensure that their Capital Adequacy Ratio (CAR), Asset Quality, Management, Earnings, Liquidity, and Sensitivity to Market Risk (CAMELS) are well-balanced. This helps in managing risks effectively while maintaining profitability.
3. Banks should prioritize the financing of small and medium enterprises (SMEs). SMEs are resilient to economic downturns and have significant growth potential, making them a key area for sustainable business growth.
4. Innovating and adopting digital technology is crucial for improving efficiency. This can help banks reduce operational costs and enhance service delivery, thereby boosting profitability.
5. Banks should continue to invest selectively, prioritizing long-term business continuity over short-term gains. This cautious approach helps in reducing risks while ensuring stable returns.

Recommendations for Companies:

1. Companies should implement strategies to manage production costs effectively during inflationary periods. This will help maintain profitability and reduce the risk of losses or business closures.
2. Companies should focus on improving their operational efficiency to reduce costs. This includes optimizing processes and adopting technologies that streamline operations, ultimately leading to better financial performance.
3. Companies should be prepared to adapt to changes in consumer behaviour driven by government interventions, such as increased spending during holidays. Understanding these patterns will help in better managing liquidity and resource allocation.
4. Although the direct impact of exchange rates on ROA is minimal, companies should still manage their exposure to currency fluctuations, particularly if they are involved in international trade.
5. Companies should focus on using local resources and content to minimize the impact of exchange rate fluctuations on their operations. This approach not only supports local industries but also reduces dependency on imported goods.

This research focused on the Islamic banking industry in Indonesia, analyzing company fundamentals and macroeconomic variables. To gain a comprehensive understanding, it is recommended to also study the conventional banking industry for Business Performance comparison. Additionally, exploring the issues and variables from different perspectives could further support the advancement of sharia banking.

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