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The Effect of Macroeconomic and Microeconomic Variables on the Profitability of Sharia Commercial Banks in Indonesia

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Abstract:
This study aims to determine the influence of macro and microeconomic variables on the profitability of Sharia Commercial Banks in Indonesia. The sample determination in this study used purposive sampling techniques and produced seven samples of Sharia Commercial Banks used in this study. The dependent variables used consist of inflation, interest rates, Gross Domestic Product (GDP), Non-Performing Financing (NPF), Financing to Deposit Ratio (FDR), and Operating Expense to Operating Income (OEOI). The data analysis method used is panel data regression with e-views software version 12. The results of this study show that interest rate, GDP, and OEOI variables partially have a significant effect on the profitability of Sharia Commercial Banks, while inflation, NPF, and FDR variables partially do not have a significant effect on the profitability of Sharia Commercial Banks in Indonesia in 2017-2021. Meanwhile, based on the results of simultaneous tests, it was found that the variables of inflation, interest rates, GDP, NPF, FDR, and OEOI had a significant effect on the profitability of Sharia Commercial Banking 2017-2021.

Keywords: Macroeconomics, Microeconomics, Profitability, Sharia Commercial Banks, Inflation

JEL Classification Code: F62, G21, G28

1. Introduction

A country's banking system is an economic benchmark. Banking can also be considered a development sector for a country, as well as one of the backbones of the economy in the financial sector (Lovett, 1997). The better the state of a bank, the better the country's economic condition. The 2008 financial and economic crisis severely damaged the economy, particularly in the Indonesian banking system. Most financial organizations, especially banks, have difficulty managing their finances. However, despite the economic crisis, Sharia banks survived (Rivai & Arifin, 2010).

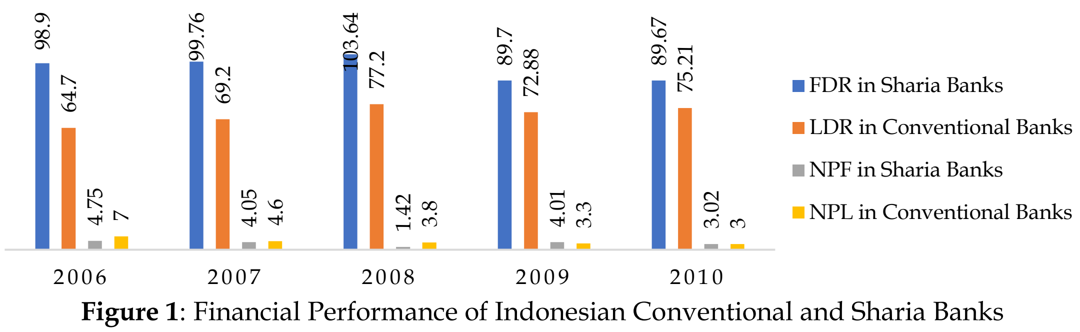

Figure 1: Financial Performance of Indonesian Conventional and Sharia Banks

The figure shows that the performance of Sharia banks was relatively unaffected by the global economic crisis that occurred in 2008; therefore, it can be said that Sharia bank operations can run normally. The level of bad financing in 2008 was also relatively low compared to the years before and after the global economic crisis, while asset growth was running optimally. Financing in Sharia banking also contributes to its strong resilience of Sharia banking to the effects of the global economic crisis.

A bank's success in running its Sharia Commercial Bank can be observed in its financial performance. Financial performance is a form of implementing the bank's ability to operate its Sharia Commercial Bank in accordance with applicable regulations (Tumandung et al., 2017). One indicator that affects financial performance is the profitability ratio. The profitability ratio is the banking ratio used to measure net income. The level of profitability can be seen as Return on Assets (ROA) in banking financial statements.

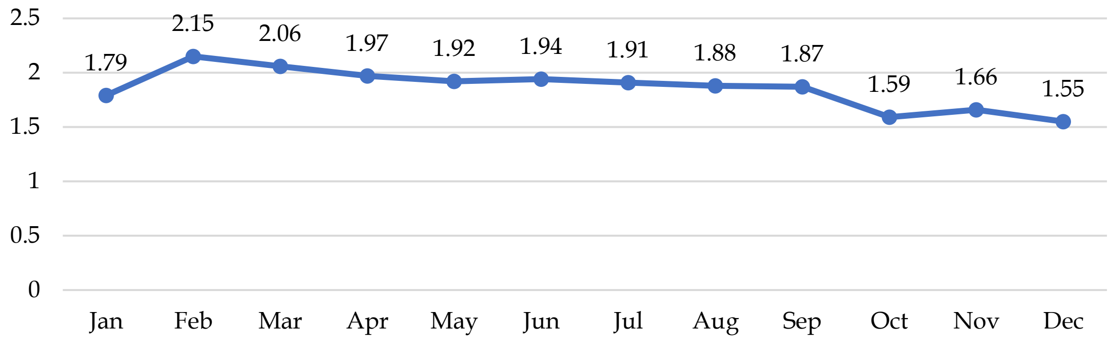

Figure 2: The Return of Asset (ROA) of Sharia Commercial Banks in Indonesia Year 2021

The figure shows the percentage of ROA at Sharia Commercial Banks in Indonesia in 2021, which changed every month since the beginning of the year. ROA reflects how well a bank performs and how well management can make money from managing its assets. February 2021 had the largest ROA (2.15%), whereas December had the lowest ROA (1.55%). Lipunga (2014) explained that if the level of ROA in a bank increases, it can be said that banking profitability will also increase. Ongore (2013) also emphasize that profitability is always the ultimate goal of all banking operations, so that all strategies designed for banking operations aim to obtain or realize banking profitability.

States that there are several factors that can affect high and low levels of profitability, one of which is macroeconomic and microeconomic. According to, macroeconomics is an economic science that comprehensively studies the economy, including inflation, interest rates, and Gross Domestic Product (GDP). States that microeconomics is a science that discusses how individuals and companies make decisions and interact in certain markets. The aspects analysed in microeconomic theory include demand theory, elasticity, market models, production theory, price, and resource management.

2. Literature Review

Sharia Commercial Banks collect and distribute funds and provide credit and other services in their operations based on Sharia principles (Jaya & Kholilah, 2020). Meanwhile, according to Law No. 21 of 2008 concerning Sharia Banking, Sharia banks carry out Sharia Commercial Bank activities guided by Sharia principles. The birth of Sharia banking was based on a Muslim's belief regarding the element of *riba* in conventional banking. *Riba* is the addition of income in goods exchange transactions, savings, and loan transactions run by banks (Jaya, 2020).

defined macroeconomics as economics that examines the relationship between global economic activity and various economic growth issues. Observations of macroeconomic activities include the actions of producers and consumers as a whole, government economic activities, and foreign economic activities (Oktaviana et al., 2021). Indicators such as inflation, interest rates, and Gross Domestic Product (GDP) can be measured in macroeconomics.

Inflation is an event that increases the price of goods or services continuously due to an increase in demand for goods or services compared to supply in the market (Sukirno, 2004). According to Indonesia's Central Bureau of Statistics (2023), the inflation rate greatly affects changes in the Consumer Price Index (CPI) (El Islami & Jaya, 2022). The (CPI) is a measure of changes in the prices of goods and services over time (Latumaerissa, 2015).

Interest rates are a form of remuneration provided by banks and intended for customers. High and low interest rates affect bank financing that occurs in banks (Hidayat & Aspiani, 2020). Bank Indonesia has authority to regulate interest rates in Indonesia. Bank Indonesia will lower interest rates to stimulate economic activity (Aulia & Jaya, 2022). Conversely, the Central Bank of Indonesia will raise interest rates to slow economic activity too quickly to suppress inflation (Latumaerissa, 2015).

GDP is the sum of the added value of goods and services produced in a particular region of a country in a certain period (Samuelson et al., 2004). GDP measures the total income of an economy, and measures the total expenditure for an economy in a country. GDP is an economic statistic that is highly valued by a country. This is because the GDP is used as a reference to determine the welfare of people in a country (Jaya & Kholilah, 2020).

Amin & Jaya (2024) stated that microeconomics is a branch of science that conducts scientific studies related to individuals, households, and companies in making economic decisions. Microeconomics also functions as an analytical tool related to economic behavioural decision-making that can affect the demand and supply of goods or services. This analysis can then determine the price, demand,

and supply of goods or services in the market. There are microeconomic variables that can affect profitability in a company, such as the Production Sharing Rate, NPF, FDR, and Operating Expense to Operating Income (OEOI).

Yanti (2020) stated that NPF is a financial ratio used to measure the extent to which banks' ability to manage non-performing loans in banks can be fulfilled by their productive assets. Meanwhile, according to Bank Indonesia Circular Letter No. 3/30DPNP 2001, the ratio of bad loans to the total amount of bank loans was used to calculate the NPF value. Therefore, a high NPF number increases the bank's burden and the risk of bank losses.

Based on Bank Indonesia Circular Letter No. 12/11/DPNP/2010, FDR is used to compare funds owned by third parties with financing provided by banks. FDR demonstrates a bank's ability to return customer deposits by relying on disbursed payments as a source of liquidity. If the value of FDR is high, it indicates that the bank is less able to manage the liquidity of the bank concerned. However, it can also show that Sharia banks are increasingly optimal in channelling public deposit funds well. Lack of ability in bank liquidity management affects bank profitability (Almunawwaroh & Marliana, 2018).

OEOI is a comparison of the operational costs incurred with the operating income obtained. This figure is used to measure the capacity of banks and their level of efficiency in carrying out operational activities (Rivai & Arifin, 2010). If the resulting OEOI ratio value is lower, it means that bank management is improving at carrying out its operations (Herli Setyowati, 2019).

3. Research Methods

Types of quantitative research. This study utilizes available external and internal data as secondary sources of information, namely, in the form of financial statements of Sharia Commercial Banks that were registered with the OJK between 2017 and 2021. This study used a purposive sampling method. Purposive sampling is a technique that uses certain considerations and criteria. Based on the research criteria, seven Sharia Commercial Banks in Indonesia met the research criteria: Bank Muamalat Indonesia, Bank KB Bukopin Syariah, Bank Jabar Banten Syariah, Bank Aceh, Bank BCA Syariah, Bank Mega Syariah, and Bank Victoria Syariah. This study uses panel data estimation to examine the effect of independent macroeconomic variables (X), namely Inflation, Interest Rates, and GDP, on the dependent variable (Y), namely the profitability of Sharia Commercial Banks. This study also tested the effect of independent microeconomic variables (X), namely NPF, FDR, and OEOI, on the dependent variable (Y), namely, the profitability of Sharia Commercial Banks.

4. Finding and Discussion

Based on previous tests, namely the chow test and Hausman test, the panel data regression model that corresponds to this study is the random-effects model. Based on the regression results using the Random Effect Model in the table, the regression model between the dependent variable, namely profitability, and the independent variables, namely Inflation, Interest Rate and GDP, are as follows:

Table 1: First Model of Regression Results in Random Effect Model

Variables	Coefficient	T-statistic	Prob.	Information
C	0.633725	2.705162	0.0110	-
Inflation	0.041266	0.229946	0.8196	Rejected
Interest Rate	0.275795	2.474249	0.0190	Accepted
GDP	0.097101	2.064174	0.0475	Accepted
R-squared	0.425387			
F-statistic	7.649795			
Prob (F-statistic)	0.000575			

Source: Data processed by E-views 12

The results of the T test on the variable inflation have prob. 0.8196 or > 0.05, indicating that the inflation variable does not have a significant effect on the profitability of Sharia Commercial Banks. The results of the T test on the Interest Rate variable have prob. 0.0190 or < 0.05, indicating that variable interest rates have a significant influence on the profitability of Sharia Commercial Banks. The results of the t-test for the GDP variable have a prob. 0.0475 or < 0.05, which means that GDP does not have a significant effect on the profitability of Sharia Commercial Banks. Then, it is known that the calculated F-statistic is 7.649795 while the F table with a level = 0.05 is 6.59. Therefore, F then calculates> F table or 7.649795 > 6.59. Then, based on the F test table, it is also known that the value of Prob. It is 0.000575, so < 0.05. Based on these results, the variables of inflation, interest rate, and GDP simultaneously have a significant effect on the profitability of Sharia Commercial Banks. Moreover, the R-squared value is 0.425387. This shows that the percentage of influence of the independent variable on the dependent variable was 42.53%. It can also be interpreted that the independent variable used in this study explained 42.53% of the independent variables. The remaining 57.47% were influenced by other factors outside the regression model. Furthermore, this study conducted tests on the second model based on tests that have been carried out before, namely the chow test and Hausman test, and the panel data regression model in accordance with the Fixed Effect Model as follows.

Table 2: Second Model of Regression Results in Fixed Effect Model

Variable	Coefficient	t-statistic	Prob.	Information
C	-3.963679	-5.179109	0.0000	-
NPF	5.101312	1.501019	0.1459	Rejected
FDR	0.228508	0.477751	0.6370	Rejected
OEOI	-2.227720	-3.225787	0.0035	Accepted
R-squared	0.936526			
F-statistic	40.98434			
Prob (F-statistic)	0.000000			

Source: Data processed by E-views 12

The results of the T test for the NPF variable have a prob. 0.1459 or > 0.05, indicating that the NPF variable does not have a significant effect on the profitability of Sharia Commercial Banks. The results of the t-test for the FDR variable had a prob. 0.6370 or > 0.05, indicating that the FDR variable does not have a significant effect on the profitability of Sharia Commercial Banks. The results of the T test for the OEOI variable have a prob. 0.0035 or < 0.05, indicating that the OEOI variable has a significant influence on the profitability of Sharia Commercial Banks. Based on the table, it is known that the calculated F-statistic is 40.98434 while the F table with a level = 0.05 is 6.59. Therefore, F then calculates> F table or 40.98434 > 6.59. Then, based on the F test table, it is also known that the value of Prob. Is 0.00000 so < 0.05. Based on these results, it can be concluded that the NPF, FDR, and OEOI variables simultaneously have a significant effect on the profitability of Sharia Commercial Banks. Based on the table, the R-squared value is 0.936526. This shows that the percentage of influence of the independent variable on the dependent variable was 93.65%. It can also be interpreted that the independent variable used in this study explained 93.65% of the independent variables. The remaining 6.35% were influenced by other factors outside the regression model.

The results of the R-squared test show that several macroeconomic and microeconomic variables have a significant effect. Tests on macroeconomics show that the independent variables, namely Inflation, Interest Rates and GDP, can explain the independent variable, namely Sharia Commercial Bank profitability. Meanwhile, microeconomic testing shows that the independent variables in microeconomics, namely NPF, FDR, and OEOI, can also explain independent variables.

Inflation is an event that continuously increases the price of goods or services due to an increase in demand for goods or services compared to supply in the market (Sukirno, 2004). Based on the T test of the effect of inflation on the profitability of Sharia Commercial Bank, the hypothesis that inflation has a significant effect on the profitability of Sharia Commercial Bank is rejected. So, it can be concluded that inflation does not have a significant effect on the profitability of Sharia Commercial Banks in Indonesia. These results are similar to those reported by (Kirana et al., 2021) .The inflation rate does not affect Sharia

Commercial Banks because the profit-sharing system in Sharia banks uses a ratio or profit-sharing system (Kirana et al., 2021).

Interest rates are a form of remuneration provided by banks and intended for customers. High and low interest rates affect bank financing that occurs in banks. Based on the t-test of the effect of interest rates on the profitability of Sharia Commercial Bank, the hypothesis that inflation has a significant effect on the profitability of Sharia Commercial Bank is accepted. So, it can be concluded that the Interest Rate has a positive and significant effect on the profitability of Sharia Commercial Banks in Indonesia. These results are similar to those reported by Hidayat & Aspiani (2020). The decrease in interest rates affects the increase in financing at Sharia banks, thereby increasing profitability at Sharia Commercial Banks Hidayat & Aspiani (2020).

GDP is the sum of the added value of goods and services produced in a particular region of a country in a certain period (Samuelson et al., 2004). Based on the t-test of the effect of GDP on the profitability of Sharia Commercial Bank, the hypothesis that inflation has a significant effect on the profitability of Sharia Commercial Bank is accepted. Thus, the GDP has a positive and significant effect on the profitability of Sharia Commercial Banks in Indonesia (Said & Ali, 2016). An increase in GDP value can increase profitability in Sharia banking, with additional third-party funds as a form of investment funds.

Inflation is an event that continuously increases the price of goods or services due to an increase in demand for goods or services compared to supply in the market (Sukirno, 2004). Inflation also affects the GDP. This is because, if there is an increase in inflation, the price of goods or services will also soar, which can cause the real value of GDP to fall (Silitonga, 2021). An increase in inflation and falling GDP will affect the profitability of Sharia banking in Indonesia. This is because people will flock to take money at the bank, which will also affect assets at the bank and reduce their profitability (Rizal & Humaidi, 2019).

Bank Indonesia has authority to regulate interest rates in Indonesia. Bank Indonesia lowers interest rates to stimulate economic activities. Conversely, Bank Indonesia will raise interest rates to slow economic activity too quickly and suppress inflation. Based on test F on the simultaneous effect of Inflation, Interest Rate, and GDP on the profitability of Sharia Commercial Bank, the hypothesis is that Inflation, Interest Rate, and GDP have a significant effect on the profitability of Sharia Commercial Bank. Therefore, it can be concluded that inflation, Interest Rate, and GDP simultaneously have a significant effect on the profitability of Sharia Commercial Banks in Indonesia.

NPF is a financial ratio used to measure the extent to which banks' ability to manage non-performing loans in banks can be fulfilled by their productive assets (Amin & Jaya, 2024). Based on the t-test on the effect of NPF on Sharia commercial bank profitability, the hypothesis that NPF has a significant effect on Sharia commercial bank profitability is rejected. So, it can be concluded that NPF has a positive but not significant effect on the profitability of Sharia Commercial

Banks in Indonesia. The results of this study are the same as those of research conducted by Fatah & Rahadian (2018). The increase in NPF value does not affect the profitability of Sharia Commercial Banks because if Sharia Commercial Bank has good operational performance, the increase in NPF will not have an impact Fatah & Rahadian (2018).

FDR is the ratio used to compare funds owned by third parties with financing provided by banks. FDR demonstrates a bank's ability to return customer deposits by relying on disbursed payments as a source of liquidity. Based on the t-test of the effect of FDR on Sharia Commercial Bank profitability, the hypothesis that FDR has a significant effect on Sharia Commercial Bank profitability is rejected. So, it can be concluded that FDR has a positive but not significant effect on the profitability of Sharia Commercial Banks in Indonesia. The FDR value has no effect on Sharia banks if they are able to disburse credit in accordance with the agreed limits Fatah & Rahadian (2018).

OEOI is a comparison between operating costs incurred and operating income obtained, which is used to measure the capacity of banks and the level of efficiency in carrying out operational activities (Rivai & Arifin, 2010). Based on the t-test on the effect of OEOI on Sharia Commercial Bank profitability, the hypothesis stating that OEOI has a significant effect on Sharia Commercial Bank profitability is accepted. Thus, it can be concluded that the OEOI has a negative but significant effect on the profitability of Sharia Commercial Banks in Indonesia. The results of this study are the same as those of research conducted by Al Iqbal & Budiyanto (2020). A decrease in the value of OEOI can be a sign that the management performance of Sharia banks is of good quality Fatah & Rahadian (2018).

Sharia banking must maintain stable FDR and OEOI values. This is because the values of FDR and OEOI greatly affect the value of NPF and profitability in Sharia banking (et al., 2020). The values of FDR and OEOI are usually used by Sharia banks to make decisions regarding the distribution of large amounts of financing aimed at increasing banking profitability: the better the values of FDR and OEOI, the better the value of NPF (et al., 2020)..

Based on the F test on the effect of NPF, FDR, and OEOI simultaneously on the profitability of Sharia Commercial Banks, the hypothesis that NPF, FDR, and OEOI have a significant effect on the profitability of Sharia commercial banks is accepted. Therefore, it can be concluded that NPF, FDR, and OEOI simultaneously have a significant effect on the profitability of Sharia Commercial Banks in Indonesia.

5. Conclusions

The results of testing the influence of macro and microeconomic variables, including inflation, interest rates, GDP, NPF, FDR, and OEOI on the profitability of Sharia Commercial Banks in Indonesia can be drawn partially, and the inflation variable does not have a significant effect on the profitability of Sharia Commercial Banks in Indonesia. The inflation rate does not affect Sharia Commercial Banks because their profit-sharing system at Sharia banks uses a ratio or profit-sharing system, and it can be concluded that partially variable interest rates have a significant effect on the profitability of Sharia Commercial Banks in Indonesia. The decrease in interest rates affects the increase in financing at Sharia banks, thereby increasing profitability at Sharia Commercial Banks; it can be concluded that partially the GDP variable has a significant effect on the profitability of Sharia Commercial Banks in Indonesia. An increase in GDP can affect the increase in profitability in Sharia banking with additional third-party funds as a form of investment funds, and it can be concluded that the variables of Inflation, Interest Rates, and GDP have a significant effect on the profitability of Sharia Commercial Banks in Indonesia. In addition, it can be concluded that partially the NPF variable does not have a significant effect on the profitability of Sharia Commercial Banks in Indonesia. The increase in NPF value does not affect the profitability of Sharia Commercial Bank, because if Sharia Commercial Bank has good operational performance, the increase in NPF will not have an impact. Moreover, the FDR variable did not have a significant effect on the profitability of Sharia Commercial Banks in Indonesia. The FDR value has no effect on Sharia banks as long as they can disburse credit in accordance with the agreed limits, and the OEOI variable has a significant effect on the profitability of Sharia Commercial Banks in Indonesia. A decrease in the value of OEOI can be a sign that the management performance of Sharia banks is of good quality. Based on the test results, it can be concluded that the NPF, FDR, and OEOI variables have significant effects on the profitability of Sharia Commercial Banks in Indonesia.

References

Al Iqbal, M. H., & Budiyanto, I. (2020). Analisis Pengaruh Kewajiban Penyediaan Modal Minimum (KPMM), Beban Operasional Pendapatan Operasional (BOPO), Financing To Deposit Ratio (FDR), dan Inflasi Terhadap Return On Asset (ROA) Pada Bank Umum Syariah di Indonesia Periode 2016-2019. *MALIA: Journal of Islamic Banking and Finance*, *4*(1), 1. https://doi.org/10.21043/malia.v4i1.6887

Almunawwaroh, M., & Marliana, R. (2018). Pengaruh Capital Adequacy Ratio, Non Performing Financing dan Financing to Deposit Ratio Terhadap Profitabilitas Bank Syariah Di Indonesia. *Amwaluna: Jurnal Ekonomi Dan Keuangan Syariah*, *Vol 2*(1), 1–18.

Amin, S. M. M., & Jaya, T. J. (2024). The Effect of Bank Performance and Macroeconomics on the Profitability of Indonesian Sharia Commercial Banks. *Al-Muamalat: Jurnal Ekonomi Syariah*, *11*(1), 95–114. https://doi.org/10.15575/am.v11i1.34141

Aulia, N., & Jaya, T. J. (2022). Analysis Of Differences In Returns Of Sharia Stocks

Before And After The Announcement Of The Covid-19 Pandemic In Indonesia. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah*, *7*(4), 1434–1448.

El Islami, M. F., & Jaya, T. J. (2022). Effect of Inflation Rate, Non Performing Financing (Npf), and Number of Branch Offices on Murabahah Financing At Bank Muamalat Indonesia. *Al Iqtishadiyah Jurnal Ekonomi Syariah Dan Hukum Ekonomi Syariah*, *8*(1), 21. https://doi.org/10.31602/iqt.v8i1.6876

Fatah, S. S., & Rahadian, D. (2018). Pengaruh Capital Adequacy Ratio (CAR), Non Performing Financing (NPF), Financing To Deposit Ratio (FDR), Dan Efisiensi Operasional (BOPO) Terhadap Profitabilitas (ROA) Perbankan. *E-Proceeding of Management*, *5*(1), 268–275.

Herli Setyowati, D. (2019). Pengaruh Efisiensi Operasional Terhadap Return On Assets Pada Bank Umum Syariah Di Indonesia. *Jurnal Masharif Al-Syariah*, *4*(2), 40.

Hidayat, I., & Aspiani, T. (2020). The Effect Of Inflation, Interest Rate, And Gross Domestic Products On The Profitability Of Sharia Banking In Indonesia (Sharia Banking Financial Reports 2014-2018). *Journal Industrial Engineering & Management Research (Jiemar)*, *1*(4), 2722–8878.

Jaya, T. J. (2020). Branding Perbankan Syariah Melalui Produk-Produk Pendanaan. *Islamic Banking : Jurnal Pemikiran Dan Pengembangan Perbankan Syariah*, *6*(1), 69–80. https://doi.org/10.36908/isbank.v6i1.133

Jaya, T. J., & Kholilah, K. (2020). Effect of Gross Domestic Regional Bruto, Provincial Minimum Wage, and Investment on Labor Absorption. *Jurnal Ekonomi Bisnis Dan Kewirausahaan*, *9*(3), 236–249. https://doi.org/10.26418/jebik.v9i3.42642

Kirana, Y. G., Hariyani, D. S., & Sari, P. O. (2021). Pengaruh Makro Ekonomi Dan Mikro Ekonomi Terhadap Profitabilitas Pada Bpr Syariah Di Indonesia. *Business Management Analysis Journal (BMAJ)*, *4*(2), 54–66. https://doi.org/10.24176/bmaj.v4i2.6642

Latumaerissa, J. R. (2015). *Perekonomian Indonesia dan Dinamika Ekonomi Global* (1st ed.). Mitra Wacana Media.

Lipunga, A. M. (2014). Corporate Governance Practices in Commercial Banking Sector of Malawi: Evidence from Annual Reports. *Journal of Applied Finance and Banking*, *4*(5), 115–133.

Lovett, W. A. (1997). *Banking and Financial institutions Laws* (Third edit). St Paul.

Oktaviana, U. K., Jaya, T. J., & Miranti, T. (2021). The Role of Islamic Social Reporting, Islamic Corporate Governance and Maqashid Syariah Index on Firm Value with Firm Size as Moderation Variable. *Proceedings of the International Conference on Engineering, Technology and Social Science (ICONETOS 2020)*, *529*(Iconetos 2020), 195–201. https://doi.org/10.2991/assehr.k.210421.028

Ongore, V. O. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, *3*(1), 237–252.

Rivai, V., & Arifin, A. (2010). *Islamic Banking: Sebuah Teori, Konsep, dan Aplikasi*. Bumi Aksara.

Rizal, F., & Humaidi, M. (2019). Dampak Makroekonomi terhadap Profitabilitas Perbankan Syariah di Indonesia. *El-Barka: Journal of Islamic Economics and Business*, *2*(2), 300. https://doi.org/10.21154/elbarka.v2i2.1800

Safitri, M., Ismawanto, T., & Kusno, H. S. (2020). Pengaruh FDR Dan BOPO Terhadap NPF Pada Bank Syariah Anak Perusahaan BUMN. *Jurnal Bisnis Dan Kewirausahaan*, *16*(3), 201–207. https://doi.org/10.31940/jbk.v16i3.2192

Said, M., & Ali, H. (2016). An analysis on the factors affecting profitability level of Sharia banking in Indonesia. *Banks and Bank Systems*, *11*(3), 28–36. https://doi.org/10.21511/bbs.11(3).2016.03

Samuelson, P. A., Nordhaus, W. D., Gretta, & Sumaryati, M. (2004). *Ilmu Makroekonomi*. Media Global Edukasi.

Silitonga, D. (2021). Pengaruh Inflasi Terhadap Produk Domestik Bruto (Pdb) Indonesia Pada Periode Tahun 2010-2020. *ESENSI: Jurnal Manajemen Bisnis*, *24*(1), 111–122.

Sukirno, S. (2004). *Pengantar Teori Makroekonomi*. PT Raja Grafindo Persada.

Tumandung, C., Murni, S., & Baramuli, D. (2017). Analisis Pengaruh Kinerja Keuangan terhadap Harga Saham pada Perusahaan Makanan dan Minuman yang Terdaftar di Bei Periode 2011 – 2015. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *5*(2), 1728–1737. https://doi.org/https://doi.org/10.35794/emba.5.2.2017.16376

Yanti, T. A. (2020). Analisis Pengaruh Risiko Kredit Terhadap Profitabilitas Bank Syariah Sumatera Utara. *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, *1*(2), 93–99. https://doi.org/https://doi.org/10.47065/ekuitas.v1i2.103