Effect of Operating Expenses of Operating Income, Loan to Deposits Ratio, Non Perfoming Loan on Profitability with Capital Adequacy Ratio as a Moderating Variable

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Abstract. The purpose of this research was to obtain empirical evidance about Effect of Operating Cost to Operating Income, Loan to Deposits Ratio, Non Perfoming Loan toward Profitability With Capital Adeqaucy Ratio as the Moderating Variable In Banking Companies Listed On the Indonesia Stock Exchange for the period 2015-2019. The method used in this research is a descriptive analysis method and verification. The population research is 44 banks listed on the Indonesia Stock Exchange. The sampling technique used quota sampling with samples used of 175 financial statements from 35 banks for 5 years. The analysis technique used is panel regression analysis and moderated regression analysis (MRA) with the application e-views 9. The results showed that the Operating Costs Operating Income, Loan to Deposits Ratio, Non Perfoming Loan simultaneously affect on profitability, and Operating Costs Operating Income has a negative and significant effect on profitability, Loan to Deposits Ratio has a positif and significant effect on profitability, Non Perfoming Loan has a negative and significant effect on profitability, Capital Adequacy Ratio is able to moderated the effect of Operating Cost to Operating Income on Profitability, Capital Adequacy Ratio is able to moderated the effect of Loan to Deposits Ratio on Profitability, Capital Adequacy Ratio is able to moderated the effect of Non Perfoming Loan on Profitability.

Keyword: Operating Costs Operating Income; Loan to Deposits Ratio; Non Perfoming Loan; Profitability and Capital Adequacy Ratio.

1 Introduction

Financial institutions are one of the important aspects in the economy of one of the banks. A bank is a financial institution that has a very important role in the economy of a country. The role of banking has never been spared in encouraging economic growth in Indonesia. Because of the main function of the bank itself as a financial intermediary, namely collecting and channeling public funds that aim to support the implementation of national development in order to increase equitable development. The Bank is also an intermediation institution is certainly one of the trigger factors for economic movements throughout the sector.

The level of good bank health can be seen from the bank's ability to generate profits and improve overall efficiency. Because Bank Indonesia is more concerned with its assessment

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based on the size of a bank company's profit or profitability with the Return On Assets (ROA) indicator as measured by the assets of most of its funds collected from public deposits. Profitability is a ratio used to measure a company's ability to profit from its business activities.

This profitability is very important to evaluate the effectiveness and efficiency of the company's management in managing all assets owned by the company. According to (Kasmir 2018:201) *Return on Assets* (ROA) Is a ratio that shows the yield on the amount of assets used in the company. The higher the profitability value of a company shows the greater the company's ability to use its sources of funds derived from internal companies in the form of profits from the company's operations. Profitability in this study is Return On Assets (ROA).

In accordance with the Circular Letter issued by Bank Indonesia namely SE No.13/24/DPNP dated October 25, 2011, the provision for the ideal minimum ROA for banks is 1.5%. This means that if the bank earns a profit below the value set by Bank Indonesia then the bank is still not optimal in managing its assets. The profitability value with the ROA indicator in 44 banking companies listed on the Indonesia Stock Exchange, is still not ideal. Because there are 29 companies whose ROA value is still below 1.5% and the remaining 15 companies are above 1.5%. In the sense that the value of ROA is not in accordance with the provisions of the Bank Indonesia Regulation, where the figure is due to the lack of management role in managing the company to get maximum profit. According to (Wulandari, 2015) He said that factors that affect profitability with the Return On Assets (ROA) indicator are Operating Expenses of Operating Income (BOPO), Liquidity or Loan to Deposits Ratio (LDR), problematic credit with Non Perfoming Loan (NPL) ratio and capital adequacy ratio (CAR).

The first factor is Operating Expenses of Operating Income (BOPO). According to (Malik, 2017) BOPO is an efficiency ratio used to measure a bank's management ability to control operating costs to its operating income. Where the higher the value of the BOPO ratio, the more inefficient a bank is in carrying out its operational activities. According to research conducted by (Fajari & Sunarto, 2017) BOPO has a negative and significant effect on profitability. This is in line with (Kristina, 2020). While according to (Yusuf, 2017) and (Aprianti, 2019) It shows that BOPO has a positive and significant effect on profitability.

The second factor is the Loan to Deposits Ratio (LDR). According to (Kasmir 2018:225) *Loan to Deposits Ratio* Is a ratio that aims to measure the composition of the amount of credit given compared to the amount of public funds and capital itself used. Credit in the company is the main source of income so the higher the amount of credit it will increase the profits obtained. So that the higher the credit value channeled, the bank will experience an increase in profit and profitability will increase. According to the results of the study (Vifolin et al., 2020) and (Nuryanto et al., 2020) Loan to Deposits Ratio (LDR) has a negative and significant effect on profitability. While according to (Ambarawati & Abundanti, 2018) and(Aprianti, 2019) It shows that the Loan to Deposit Ratio (LDR) has a positive and significant effect on profitability.

The third factor is non-perfoming loan (NPL). Non Perfoming Loan according to (Kasmir, 2018a) Is credit in which there are obstacles caused by 2 elements, namely from the banking in analyzing and from the customer who intentionally or unintentionally in his obligation not to make payments. The high value of NPL means that the credit quality of a bank is bad which can cause losses. The smaller the credit score that cannot be billed, it will increase the amount of profit that will be obtained. According to (Fajari & Sunarto, 2017) and (Vifolin et al., 2020) NPL has a positive and significant effect on profitability. While the results of the study (Budi, 2020) and (Ardiansyah, 2020) NPL has a negative and insignificant effect on profitability.

The fourth factor is the Capital Adequacy Ratio (CAR). According to the Indonesian Bankers Association (IBI) with banker association for risk management or BARa (2017) capital adequacy ratio (CAR) is a capital adequacy ratio owned by banking companies where this ratio is measured through a comparison between the amount of capital of banking companies with assets weighted by risk or ATMR. According to research (Atmoko et al., 2018) Capital Adequacy Ratio (CAR) is able to moderate the effect of Operating Expenses (BOPO) Non Perfoming Loan (NPL) and Loan to Deposits Ratio (LDR) on Profitability. This is in line with the research. (Adhim, 2018). While according to (Dahlan et al., 2020) CAR is unable to moderate the effect of BOPO, LDR, NPL on Profitability.

2 Method

The method used in this research is a descriptive analysis method and verification. The population research is 44 banks listed on the Indonesia Stock Exchange. The sampling technique used quota sampling with samples used of 175 financial statements from 35 banks for 5 years. The analysis technique used is panel regression analysis and moderated regression analysis (MRA) with the application e-views 9.

3 Results and Discussions

Table 4.1. Fixed Effect Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BOPO?	-0.200422	0.275918	-5.726382	0.0000
LDR?	0.755716	0.855601	4.614833	0.0000
NPL?	-4.373520	0.669831	-2.626955	0.0096
C	8.933454	0.793628	14.46390	0.0000

Source: Output Eviews 9

Table 4.2. Moderated Regression Analysis Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.327436	0.366325	3.623655	0.0004
BOPO_CAR	-0.005192	0.001860	-2.791679	0.0058
LDR_CAR	0.014461	0.007899	1.830874	0.0089
NPL_CAR	-0.045765	0.016660	-2.746952	0.0067

Source: Output Eviews 9

3.1. Effect of Operating Expenses of Operating Income (BOPO) on Profitability

The results of hypothesis testing showed that Operating Expenses of Operating Income (BOPO) negatively and significantly affect Profitability with Return On Assets (ROA) as an indicator on banking companies on the Indonesia Stock Exchange. With significant results, the results of this study can be generalized to all members of the sample**.** Negative coefficient means that there is a negative relationship between BOPO and profitability, meaning that the decreased the value of BOPO, the more profitability value increases. This indicates that the bank is increasingly efficient in the use of resources in the bank's operational activities. Because in carrying out its operational activities, a company must incur various costs. However, not all costs that occur effectively sometimes there are costs incurred but actually the benefits are not there. So that in the end it has an impact on the level of profitability that will be obtained.

The results of this study are in accordance with the signal theory, which states that a company has more information than other parties, in this case it is investors and creditors who cause information asymmetry or information inequality, with the disclosure of information carried out by a company is considered to give signals to the recipient of information. In addition, this research is also in accordance with the theory of agency, where the main principle of this agency theory is to state the existence of a working relationship between the authorizing party that is the investor and the party who receives the authority (agency) that is the manager. Investors or customers want to know things related to the use of company resources. In order not to occur information asymmetry, managers disclose their financial statements to stakeholders in order to set decisions and provide policies properly. The results of this study are in line with the research conducted by (Prasetyo & Darmayanti, 2015), (Muttaqin, 2017), (Stevani & Sudirgo, 2019), (Nuryanto et al., 2020), and (Vifolin et al., 2020) which shows the results that BOPO has a negative and significant effect on profitability.

3.2. Effect of Loan to Deposits Ratio (LDR) on Profitability

Results from hypothesis testing showed that the Loan to Deposits Ratio (LDR) had a positive and significant effect on the profitability of banking companies on the Indonesia Stock Exchange. With significant results, the results of this study can be generalized to all members of the sample. Positive coefficient means that there is a positive relationship between LDR and profitability**,** This means that the increasing value of LDR will increase the value of profitability. This indicates that the bank company with a high LDR ratio indicates that the bank company has an effective and efficient management performance in terms of credit distribution, thus causing the company's profit or profitability to increase. Judging from the bank's management, LDR is one of the main factors in operational activities in obtaining profits. The better the performance will increase public confidence in the bank. Increasing public confidence can increase the number of LDR ratios collected by a bank, in addition, the public is also encouraged to use bank services and products such as loans or credit. The high ratio of LDR and community contribution to bank products is expected to increase profitability.

Loan to Deposit Ratio is a ratio to measure the composition of the amount of credit given compared to the amount of public funds and capital itself used. In accordance with the agency theory, this theory explains that agency relationships arise when one or more people (principals) hire another person (agent) to carry out activities that then delegate decision-making authority to the agent. In this case it refers to the bank customer as the principal and the banking party as its agent. Where the bank will distribute funds that have been accommodated properly, but if the use of debt fails will be able to cause agency problems. In addition, the results of this study are in accordance with stakeholder theory. The existence of stakeholders is a very important existence for bank companies. This is due to the influence of stakeholders in making investment decisions on the company's performance in obtaining profits, because the higher the value of LDR will increase the value of the company's profitability. The results of this study are in line with the research conducted by (Agustiningrum, 2017), (Kisman, 2017), (Ambarawati & Abundanti, 2018), (Yusriani, 2018) and (Suardana et al., 2018) which shows results that LDR has a positive and significant effect on profitability.

3.3. The Effect of Non Perfoming Loans (NPL) on Profitability

Results from hypothesis testing showed that Non Perfoming Loan (NPL) negatively and significantly affected the profitability of banking companies on the Indonesia Stock Exchange. With significant results, the results can be generalized to all members of the sample. Negative coefficient means that there is a negative relationship between NPL and profitability**,** meaning that the decrease in the value of NPL, the more profitability will increase. The higher the credit risk experienced by banking companies shows that the quality of credit channeled is poor. Therefore, the bank must bear losses in its operations, so it will affect the decrease in profit or profitability obtained by the bank.

The results of this study are in accordance with the signal theory, based on the bank's signal theory that tends not to disclose performance information means the bank gives a bad signal to interested parties. When a bank's performance is poor, it tends not to disclose much information about its performance in financial statements. It can be concluded that companies that have a high NPL ratio value then the disclosure rate will be low meaning that the company will give a bad signal to stakeholders. In addition to the results of research in accordance with the agency theory, the agency theory assumes that managers as agents of the company know the potential and prospects of the company at a later time compared to the shareholders as principals, Because shareholders do not have enough information to see the agent's kineja so do not know how the action is carried out by the manager. Therefore the manager compiles financial statements that contain financial ratios such as Non Perfoming Loans. The lower the value of NPL in the financial statements can be used as one of the reference materials to assess the health condition of the company. The results of this study are in line with the research conducted by (Prasetyo & Darmayanti, 2015), (Agustiningrum, 2017), (Adhim, 2018), (Nuryanto et al., 2020), and (Dewi, 2019) which shows the results that NPL has a negative and significant effect on profitability.

3.4. Effect of Operating Expenses of Operating Income (BOPO) on Profitability with Capital Adequacy Ratio as Moderation

Results from moderated regression analysis (MRA) testing showed that the Capital Adequacy Ratio (CAR) was able to mediate bopo's influence on profitability with the ROA indicator. This means that the decrease in the value of the BOPO ratio will increase profitability. This shows that banking companies that can reduce their operating costs, the better the bank's performance, because the company can minimize unsusalized expenses so that profitability obtained by banks increases and ultimately has an impact on increasing bank capital.

The results of this research are in accordance with stakeholder theory, stakeholder theory explains that the company is not an entity that only operates for the benefit of the company and is oriented to seek profit only, but must also be able to provide benefits to stakeholders. Low levels of cost efficiency will make management tend to continue to improve their performance and disclose the company's financial statements. The good relationship between the company and stakeholders is something that needs to be considered as a form of certainty for investors that the company will not face problems involving the community due to the company's activities that can reduce the prosperity of shareholders and can threaten the sustainability of the company.The results of this study are in line with the research conducted by (Atmoko et al., 2018), (Adhim, 2018), and (Haini, 2019) which shows the results that CAR is able to moderate the influence of BOPO on Profitability.

3.5. Effect of Loan to Deposits Ratio (LDR) on Profitability with Capital Adequacy Ratio as Moderation

Results from moderated regression analysis (MRA) testing showed that the Capital Adequacy Ratio (CAR) was able to mediate bopo's influence on profitability with the ROA indicator. This means that the higher the value of the LDR ratio, the more the value of profitability and capital distribution**.** This shows that effective credit distribution will increase the profit earned so that it will increase also in the distribution of capital. Because how high the capital of a bank shows that the role of the bank as an intermediation institution is successful and with high capital the bank can more freely invest in the form of credit, so that the volume of credit increases which ultimately has an impact on the increasing profitability of the bank.

The results of this study are in accordance with the signal theory, that the higher the liquidity value or LDR ratio indicates the strong financial condition of bank companies, profitability increases because liquidity is the main source of income. This causes the company tends to give a broader signal to show the credibility of the company that is getting stronger so that in the future investors want to invest their capital. In addition, the results of this study are in accordance with the agency theory, that reporting accountability of company activity information to the principal is very important to do because through the report provided by the agent can be used as a basis for evaluating the company's financial performance. Principals can use information provided by agents, especially financial statements, that can be used by interested parties to view the company's financial performance. With a high LDR can improve financial performance in earning profits and will attract investors to invest in the company.The results of this study are in line with the research conducted by (Septiani & Lestari, 2016), (Atmoko et al., 2018), and (Adhim, 2018) which shows the results that CAR is able to moderate the effect of LDR on Profitability.

3.6. Effect of Non Perfoming Loan (NPL) on Profitability with Capital Adequacy Ratio as Moderation

Results from moderated regression analysis (MRA) tests show that the Capital Adequacy Ratio (CAR) is able to moderate the effect of NPL on profitability with the ROA indicator. This means that the smaller the value of the NPL ratio, the more it increases the profitability of the bank, and of course this has a good impact on the increase in the bank's capital inventory**.** Because bank capital acts as a buffer to protect banks from various risks in operational activities, especially credit risk so that the lower the risk borne by bank companies and will have an impact on increasing profitability. However, the greater the level of Non Performing Loans indicates that the bank is unprofessional in its credit management, At the same time give an indication that the level of risk on lending to banks is high enough in line with the high non-performing loan (NPL) faced by the bank so that the bank must bear the risk that will reduce the profit obtained and the level of capital distribution.

The results of this study are in accordance with the signal theory, because the signal theory proposes about how a company should signal to users of financial statements. The low value of the NPL ratio will cause the quality of the company's financial reporting to reflect that the company's performance is good. Because when the NPL value is low it will increase profitability. This is a positive signal that can affect the opinion of interested parties for investment decision making in the future.The results of this study are in line with the research conducted by (Ariwidanta, 2016), (Atmoko et al., 2018), and (Adhim, 2018) which shows the results that CAR is able to moderate the effect of NPL on Profitability.

4 Conclusion

Based on the results of research operational expenses operating income (BOPO), Loan to Deposits Ratio (LDR), and Non Perfoming Loan (NPL) affect profitability together. This means that the change in value in profitability is influenced by changes in the interrelationship between BOPO, LDR, and NPL. Operating Expenses (BOPO) negatively and significantly affect profitability. This means that the decreased the value of BOPO, the more profitability value increases. Loan to Deposits Ratio (LDR) has a positive and significant effect on profitability. This means that the increasing the value of LDR, the more profitability will increase. Non Perfoming Loan (NPL) negatively and significantly affects profitability. This means that the decreased the value of NPL, the more profitability increases. *Capital Adequacy Ratio (CAR) is able to moderate bopo's influence on profitability. This means that CAR is able to strengthen BOPO's relationship to profitability. Capital Adequacy Ratio (CAR) is able to moderate the effect of LDR on Profitability. This means that CAR is able to strengthen the LDR relationship to profitability. Capital Adequacy Ratio (CAR) is able to moderate the effect of NPL on Profitability. This means that CAR is able to strengthen the NPL relationship to profitability.*

Reference

[1] Adhim, C. (2018). Pengaruh Risiko Kredit, Risiko Likuiditas, Efisiensi Manajemen Terhadap Profitabilitas Melalui Permodalan. *Jurnal Bisnis Dan Manajemen*, *5*(1), 1–10. https://doi.org/10.26905/jbm.v5i1.2323

[2] Agustiningrum, R. (2017). *Analisis pengaruh car, npl, dan ldr terhadap profitabilitas pada perusahaan perbankan*. 885–902.

[3] Ambarawati, I. G. A. D., & Abundanti, N. (2018). PENGARUH CAPITAL ADEQUACY RATIO , NON PERFORMING LOAN , LOAN TO DEPOSIT RATIO TERHADAP RETURN ON ASET. *E-Jurnal Manajemen Unud*, *7*(5), 2410–2441.

[4] Aprianti, N. R. (2019). *ANALISIS PENGARUH RASIO KEUANGAN PERBANKAN TERHADAP PROFITABILITAS PADA BANK UMUM KONVENSIONAL DI INDONESIA*. *1*(1), 41–57.

[5] Ardiansyah, R. M. (2020). *Analisis Pengaruh Rasio NIM, BOPO, NPL Terhadap Profitabilitas Bank Yang Terdaftar Di Bursa Efek Indonesia (BEI)*. *01*, 48–56.

[6] Ariwidanta, T. K. (2016). *PENGARUH RISIKO KREDIT TERHADAP PROFITABILITAS DENGAN KECUKUPAN MODAL SEBAGAI VARIABEL MEDIASI*. *5*(4), 2311–2340.

[7] Atmoko, A. S., Amboningtyas, D., & Fathoni, A. (2018). Effect of LDR, NPL and BOPO on Profitabilities Based on CAR (Case Study on Banking Companies Listed on the Indonesia Stock Exchange Period 2013-2017). *Journal of Management*, *4*(4), 1–17.

[8] Budi, F. S. (2020). *PENGARUH RISIKO LIKUIDITAS RISIKO KREDIT RISIKO PASAR DAN RISIKO OPERASIONAL TERHADAP PROFITABILITAS PADA BANK UMUM SWASTA DEVISA NASIONAL GO PUBLIC*. *43*(1), 7728.

[9] Dahlan, Lewangka, O., & Menne, F. (2020). *PENGARUH NON PERFOMING LOAN, LOAN*

DEPOSIT TO RATIO, BEBAN OPERASIONAL PENDAPATAN OPERASIONAL DAN BANK SIZE TERHADAP PROFITABILITAS MELALUI CAPITAL ADEQUACY RATIO. *2*(2), 71–77.

[10] Dewi, N. V. (2019). *FAKTOR-FAKTOR YANG MEMPENGARUHI PROFITABILITAS PERBANKAN*. *4*(September), 223–237.

[11] Fajari, S., & Sunarto. (2017). Pengaruh CAR, LDR, NPL, BOPO terhadap Profitabilitas Bank (Studi Kasus Perusahaan Perbankan yang Tercatat di Bursa Efek Indonesia Periode Tahun 2011 sampai 2015). *Prosiding Seminar Nasional Multi Disiplin Ilmu & Call for Papers UNISBANK Ke-3*, *3*(Sendi_U 3), 853–862.

[12] Haini, D. A. N. (2019). Pengaruh rasio keuangan terhadap profitabilitas dengan capital adequancy ratio sebagai variabel moderating pada bank umum syariah tahun 2014-2018. *Artikel Skripsi*, 1–136.

[13] Kasmir. (2018a). *Analisis Laporan Keuangan*. Rajawali.

[14] Kasmir, D. (2018b). *Manajemen Perbankan*. Rajawali.

[15] Kisman, Z. (2017). *MODEL FOR OVERCOMING DECLINE IN CREDIT GROWTH (CASE STUDY OF INDONESIA WITH TIME SERIES DATA 2012M1-2016M12)*. *22*(3).

[16] Kristina. (2020). *PENGARUH CAPITAL ADEQUACY RATIO , BIAYA OPERASIONAL TERHADAP PENDAPATAN OPERASIONAL , DAN LOAN TO DEPOSIT RATIO TERHADAP RETURN ON ASSET (Studi Empiris Sub Sektor Perbankan yang Terdaftar di BEI Tahun 2015-2018)*.

[17] Malik, A. (2017). *PENGARUH RESIKO KREDIT DAN LIKUIDITAS TERHADAP PROFITABILITAS DIMEDIASI OLEH TINGKAT EFISIENSI*. Universitas Kuningan.

[18] Muttaqin, H. F. (2017). PENGARUH CAR, BOPO, NPL dan LDR TERHADAP ROA PADA BANK KONVENSIONAL DI INDONESIA. *Journal Administrasi Bisnis*, *2*(4), https://tafsirweb.com/1045-quran-surat-al-baqarah-.

[19] Nuryanto, U. W., Salam, A. F., Sari, R. P., & Suleman, D. (2020). Pengaruh Rasio Kecukupan Modal, Likuiditas, Risiko Kredit dan Efisiensi Biaya Terhadap Profitabilitas Pada Bank Go Public. *Moneter - Jurnal Akuntansi Dan Keuangan*, *7*(1), 1–9. https://doi.org/10.31294/moneter.v7i1.6777

[20] Prasetyo, D. A., & Darmayanti, N. P. A. (2015). Efisiensi Operasional Terhadap Profitabilitas. *E-Jurnal Manajemen Unud*, *4*(9), 2590–2617.

[21] Septiani, R., & Lestari, P. V. (2016). PENGARUH NPL DAN LDR TERHADAP PROFITABILITAS DENGAN CAR SEBAGAI VARIABEL MEDIASI PADA PT BPR PASARRAYA KUTA. *Journal of Chemical Information and Modeling*, *05*(01), 1689–1699.

[22] Stevani, & Sudirgo, T. (2019). Analisis CAR, BOPO, NPL, dan LDR Terhadap ROA Perusahaan Perbankan. *Jurnal Multiparadigma Akuntansi*, *I*(3), 863–871.

[23] Suardana, I. B. R., Astawa, I. N. D., & Martini, L. K. B. (2018). Influential Factors towards Return On Assets and Profit Change. *International Journal of Social Sciences and Humanities (IJSSH)*, *2*(1), 105–116. https://doi.org/10.29332/ijssh.v2n1.100

[24] Vifolin, R., Aini, Q., Manajemen, P. S., Ekonomi, F., Bisnis, D. A. N., & Surakarta, U. M. (2020). *Analisis Pengaruh Capital Adequacy Ratio (Car), Non Performing Loan (Npl), Biaya Operasional Pada Pendapatan Operasional (Bopo) Dan Loan To Deposit Ratio (Ldr) Terhadap Profitabilitas*.

[25] Wulandari, D. K. (2015). *PENGARUH EFISIENSI OPERASIONAL, KECUKUPAN MODAL DAN LIKUIDITAS TERHADAP PROFITABILITAS PADA PERUSAHAAN PERBANKAN DI BURSA EFEK NDONESIA TAHUN 2012-2013*. 2013–2015.

[26] Yusriani. (2018). Pengaruh CAR, NPL, BOPO dan LDR Terhadap Profitabilitas Pada Bank Umum Milik Negara Persero di Bursa Efek Indonesia. *Jurnal Riset Edisi XXV*, *4*(002), 1–17.

[27] Yusuf, M. (2017). Dampak Indikator Rasio Keuangan terhadap Profitabilitas Bank Umum Syariah di Indonesia. *Jurnal Keuangan Dan Perbankan : ISSN 1829-9865*, *13*(2), 141–151.