The Role of Good Corporate Governance in Reducing Credit Risk in Banks Going Public on the Indonesia Stock Exchange

Dika Zanuar Virgantara
Faculty of Economics, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail:Dikazanuarvirgantara@std.unissula.ac.id

Abstract.*This study aims to analyze and provide empirical evidence regarding the role of Good Corporate Governance (INSOWN) in reducing Credit Risk (NPL) in banking companies listed on the Indonesia Stock Exchange for the period 2008-2021. This study also examines the effect of Good Corporate Governance (INSOWN) as a moderating variable on the relationship between Credit Risk (NPL), Loan to Deposit Ratio (LDR); Capital Adequacy Ratio (CAR); Inflation and Gross Domestic Product (GDP). The sample in this study was 308 sample data obtained from 22 banking sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2008 - 2021. The findings of the data analysis show that the Loan to Deposit Ratio (LDR) has an effect on Credit Risk (NPL) and Capital Adequacy Ratio (CAR) and Inflation and Gross Domestic Product (GDP) have no effect on Credit Risk (NPL). In addition, it can also be seen that Good Corporate Governance (INSOWN) will strengthen the influence of the Loan to Deposit Ratio (LDR) in reducing Credit Risk (NPL) and Good Corporate Governance (INSOWN) weakens the influence of the Capital Adequacy Ratio (CAR) in reducing Credit Risk (NPL).*

Keywords: *Banking Sector; Capital Adequacy Ratio (CAR); Credit Risk (NPL); Good Corporate Governance (INSOWN); Gross Domestic Product (GDP); Inflation; Loan to Deposit Ratio (LDR); Moderation.*

1. Introduction

Credit risk can be interpreted as the failure of a company to fulfill obligations that have been given by the bank. While risk has the meaning of failure due to an event. Credit risk is one of the risks that banks will face in operational activities. According toThe JewelsCredit risk is the risk resulting from the failure of debtors and/or other parties to fulfill their obligations to the bank. A good company is a company that has low credit risk..[1]WhereasMutamimah et alsaid

[1]Permatasari, I. (2020). Does corporate governance affect bank risk management? Case study of Indonesian banks. *International Trade, Politics and Development*, *4*(2), p.127–139.https://doi.org/10.1108/itpd-05-2020-0063.

that corporate governance is a basic framework for reducing risk effectively. In this study, credit risk is measured using the Non Performing Loan (NPL) ratio.[2]

*Non Performing Loan (NPL)*is the ratio of non-performing loans with substandard, doubtful, and bad quality. Non Performing Loan also refers to a condition where the debtor cannot pay his obligations to the bank, namely the obligation to pay the promised installments. And Non Performing Loan (NPL) can be interpreted as one of the indicators that shows the health of a financial institution's assets. So the higher the Non Performing Loan (NPL) ratio, the worse the quality of bank credit which causes the number of non-performing loans to increase, then the possibility of a bank in an increasingly problematic condition. According toAyuvisda & Madethat the high Non Performing Loan (NPL) is inseparable from the performance of loan collection that is not optimal, which results in the company having to be able to improve the performance of its employees. A good Non Performing Loan (NPL) is a Non Performing Loan (NPL) that has a value below 5%.[3]Non Performing Loan (NPL) reflects credit risk, the smaller the Non Performing Loan (NPL) the smaller the credit risk borne by the bank. WhileGunawan et al.said that the lower the Non Performing Loan (NPL), the more profit the bank will experience, conversely, if the Non Performing Loan (NPL) level is high, the bank will experience losses due to the level of bad credit returns.[4]

PT Bursa Efek Indonesia which has 11 stock sectors including: Energy, Basic Materials, Industrials, Consumer Non-Cyclicals, Consumer Cyclicals, Healthcare, Financials, Properties & Real Estate, Technology, Infrastructures and Transportation & Logistic. In the Financial Sector, there are several company sectors, namely: Banks Sector, Financing Service Sector, Investment Service Sector, Insurance Sector and Holding & Investment Companies Sector. Of the several company sectors, one of the indexes that is currently quite interesting for the author is the Banking Sector because the author wants to know how Credit Risk affects the independent variable and how important Good Corporate Governance (INSOWN) strengthens or even weakens as a moderating variable and previous research mostly uses companies that are abroad and in manufacturing companies. According toBhattaraisaid that Non Performing Loan (NPL) is a major problem in the banking industry. Therefore, the author is interested in researching in the Banking Sector.[5]

---

[2]Mutamimah, M., Tholib, M., & Robiyanto, R. (2021). Corporate Governance, Credit Risk, And Financial Literacy For Small Medium Enterprise In Indonesia. *Business: Theory and Practice*, *22*(2), p.406–413. https://doi.org/10.3846/btp.2021.13063.

[3]Ayuvisda, S. A., & Made, N. I. (2019). The Mediation Effect Of Work Stress On Workload, Work Condition, And Loan Collection Performance. *Russian Journal of Agricultural and Socio-Economic Sciences*, *86*(2), p.288–296. https://doi.org/10.18551/rjoas.2019-02.36.

[4]Gunawan, I., Purnamasari, E. D., & Setiawan, B. (2020). Pengaruh CAR, NPF, FDR, and BOPO terhadap Profitabilitas (ROA) pada Bank Syariah Bukopin Periode 2012-2018. *Jurnal Manajemen SDM Pemasaran, And Keuangan*, *01*(01), p.19–36.

[5]Bhattarai, B. P. (2020). Effects Of Non-Performing Loan On Profitability Of Commercial Banks In Nepal. *European Business & Management*, *6*(6), p.164. https://doi.org/10.11648/j.ebm.20200606.15.

The Banking Sector Supervision Sector has the function of organizing an integrated regulatory and supervisory system in the banking sector. In carrying out its functions, the Banking Sector Supervision Sector carries out the following main tasks: first, conducting research in order to support bank regulation and the development of a bank supervision system; second, regulating banks and the banking industry; third, preparing a bank supervision system and provisions; fourth, conducting coaching, supervision, and inspection of banks; fifth, enforcing the law on regulations in the banking sector; sixth, conducting special inspections and investigations into irregularities suspected of containing criminal elements in the banking sector; seventh, implementing remedial and resolution of banks that have unhealthy conditions as a follow-up to the results of normal bank supervision; eighth, developing banking supervision; ninth, providing technical guidance and evaluation in the banking sector; and tenth, carrying out other tasks assigned by the Board of Commissioners. In Law Number 10 of 1998 concerning Banking, a Bank is stated as a business entity that collects funds from the public in the form of deposits and distributes them to the public in the form of credit and/or other forms in order to improve the standard of living of the community.[6]

2. Research Methods

According to Sugiyono, the Explanatory Research method is a research method that explains the influence between one variable and another and the position of the variables that have been studied. This research is a type of explanatory research, which tests the influence between variables, namely independent variables, moderating variables and dependent variables. This explanatory research is used by researchers to measure the level of success of the Loan to Deposit Ratio (LDR); Capital Adequacy Ratio (CAR); Inflation and Gross Domestic Product (GDP) in influencing Credit Risk (NPL), as well as the role of Good Corporate Governance (INSOWN) in moderating.[7]

3. Results and Discussion

3.1. Credit Risk,*Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Inflation, and Gross Domestic Product (GDP).*

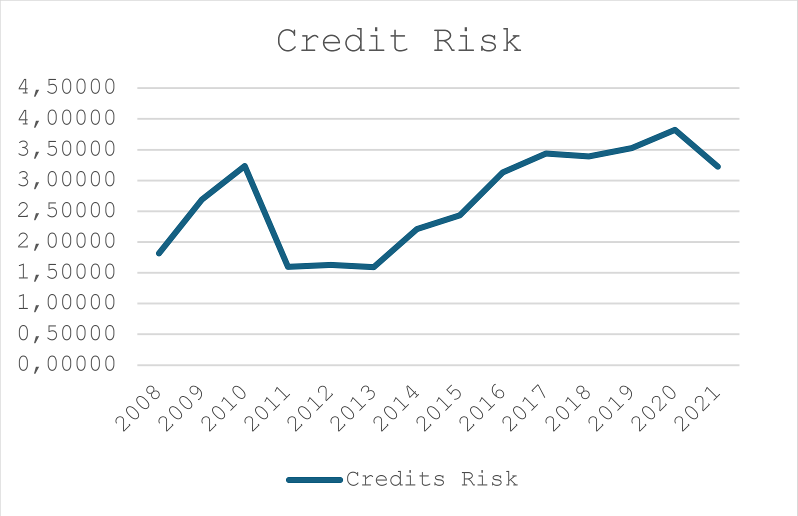
3.1.1.Credit Risk

Credit risk is one of the risks that banks will face in their operational activities. However, the Covid-19 conditions that occurred in Indonesia resulted in a significant increase in Credit Risk, this can be seen in the phenomenon that occurred showing that the average Credit Risk recorded at the average value at the end of the year in succession, from 1.82; 2.69; 3.24; 1.60; 1.63; 1.59; 2.21; 2.43; 3.13; 3.44; 3.39; 3.53; 3.83 and 3.22 for consecutive years, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020 and 2021. Credit Risk can be described as follows:[8]

---

[6]Law Number 10 of 1998 concerning Banking.
[7]Sugiyono, P. D. (2015). *Cara Mudah Menyusun: Skripsi, Tesis, and Disertasi.*
[8]Korompis, R. R. N., Murni, S., & Untu, V. N. (2020). Pengaruh Risiko Pasar (NIM), Risiko Kredit (NPL), And Risiko Likuiditas (LDR) Terhadap Kinerja Keuangan Perbankan (ROA) Pada Bank Yang Terdaftar Di LQ45 Periode 2012-

Figure 3.1.1Credit Risk Ratio Image of Financial Reports of Companies in the Banking Sector for the Period 2008 – 2021.



From figure 3.1.1, companies registered in the banking sector give a bad signal to investors, which results in new investors not wanting to invest in the banking sector because Credit Risk continues to increase. Therefore, this study tries to addGood Corporate Governance variable proxied by Institutional Ownership (INSOWN) as a moderating variable with the hope of reducing Credit Risk conditions in Indonesia so that if Credit Risk conditions decrease it will attract new investors to invest in the banking sector.[9]

If there are many new investors, it will cause companies in the banking sector to grow because a lot of capital comes in with the development of companies in the banking sector will increase the company's profit so that it will reduce the risk of bankruptcy according to the trade off theory, increasing the profit of banking companies will result in a decrease in the total debt owned by banking companies. Debt that is too high will increase financial risk and can cause financial difficulties for the company. The total debt decreases, the profit obtained will automatically increase the adequacy of capital which functions to accommodate the risk of loss that may be faced by the bank, besides also increasingthe volume of credit distributed by the bank and the amount of funds received from various sources. When capital adequacy is high, it means that the total capital and reserves of the bank are greater than their total assets.[10]

2018. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis And Akuntansi*, *8*(1), p.175–184.

[9]Kumar, R. R., Stauvermann, P. J., Patel, A., & Prasad, S. S. (2015). Determinants Of Non-Performing Loans In Banking Sector In Small Developing Island States: A Study Of Fiji. *Accounting Research Journal*, *31*(2), p.192–213. https://doi.org/10.1108/ARJ-06-2015-0077.

[10]Gadzo, S. G., Kportorgbi, P. K., & Gatsi, J. G. (2019). Credit Risk And Operational Risk On Financial Performance Of Universal Banks In Ghana: A Partial Least Squared Structural Equation Model (PLS SEM) Approacp. *Cogent Economics and Finance*, *7*(1). https://doi.org/10.1080/23322039.2019.1589406.

However, in distributing credit must be very careful because if the credit volume increases indicates that Credit Risk also increases, do not let investors leave the banking company, this is Good Corporate Governance (INSOWN) is very necessary to reduce the occurrence of Agency problems. The existence of Good Corporate Governance can eliminate asymmetric information and credit risk can be reduced. Good Corporate Governance can reduce credit risk and corporate governance reduces credit risk.[11]

3.1.2. Loan to Deposit Ratio (LDR)

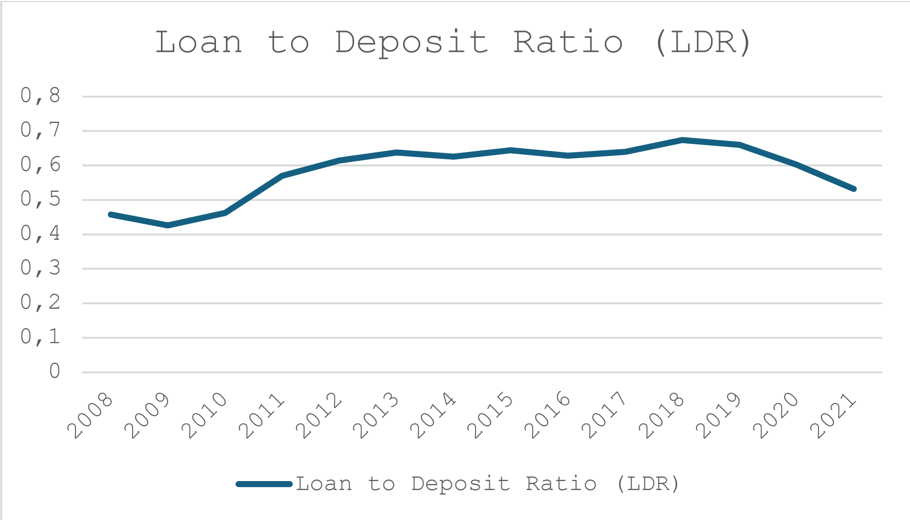
*LDR*is the ratio between the total volume of credit distributed by the bank and the amount of funds received from various sources. The source of bank funds generally comes from third party funds collected by the bank and then distributed in the form of credit. A low LDR ratio indicates a lot of idle funds that have not been distributed in credit, but the quality of liquidity is good. Conversely, if the LDR ratio is high, it means that the distribution of funds in the form of credit is optimal, but the bank's liquidity capacity is poor. The LDR level is an indicator of the health of the bank in carrying out its operations. LDR is a ratio that measures the ability to return funds withdrawn with credit as a source of liquidity.[12]LDR is the maximum limit of the ratio of bank loans to bank deposits in each traditional bank. In line with previous research that has been carried out on LDR, this was carried out by(Mawarti et al., 2022;Fauziah & Rafiqoh, 2021;Princess & Wiksuana, 2021).[13] In this study, the LDR phenomenon of financial reports that occurred in the Banking Sector for the period 2008 - 2021 can be described as follows:

[11]Dao, B. T., & Pham, P. (2015). Corporate Governance And Bank Credit Risk: Default Probability, Distance To Default. *SSRN Electronic Journal*, *June*, p.2–22. https://doi.org/10.2139/ssrn.2708994.

[12]Sofyan, M. (2019). Analysis Financial Performance Of Rural Banks In Indonesia. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, *3*(03), p.255–262. https://doi.org/10.29040/ijebar.v3i03.588.

[13]Mawarti, W., Negoro, D. A., & Syah, T. Y. R. (2022). The Effect Of Financial Ratio In Determining Company Value: (Empirical Study On Banking Companies Listed On The Indonesia Stock Exchange For The 2015-2019 Period). *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, *5*(1), 3001–3013. https://doi.org/10.33258/birci.v5i1.3942 3001.

GFigure 3.1.2 LDR Ratio Figure of Financial Reports of Companies in the Banking Sector for the Period 2008 – 2021.



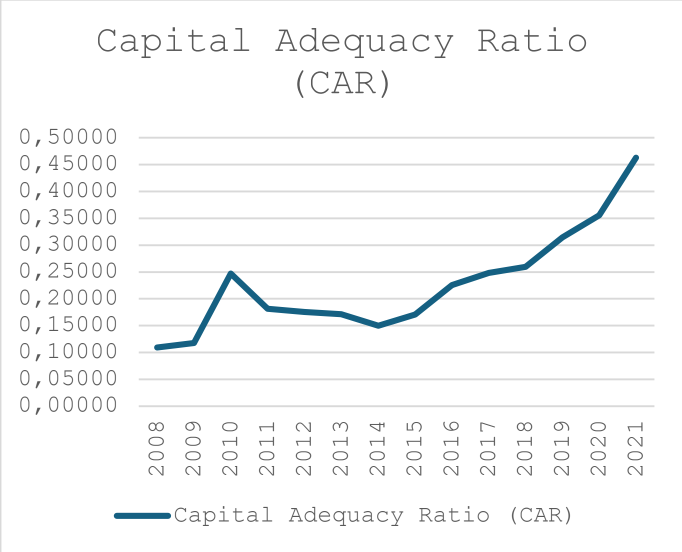
From figure 3.1.2, the phenomenon of companies registered in the banking sector as a whole has seen an increase.*LDR*which shows that the condition of credit distribution provided by the bank is increasing, so that if the bank distributes a lot of credit, it means that the funds owned by the bank are mostly in the hands of debtors, which will ultimately result in the credit risk borne by the bank increasing.

3.1.3. Capital Adequacy Ratio (CAR)

*CAR*which is the ratio used to measure the bank's ability to provide minimum capital, which is always maintained as a certain proportion of total weighted assets. CAR is the proportion of the bank's own equity in relation to the risk of exposure. When CAR is high, it means that the bank's total capital and reserves are greater than their total assets.[14] *CAR*is an indicator of the bank's ability to cover the decline in its assets as a result of bank losses caused by risky assets. Another study argues that CAR is a ratio that takes into account how much of all bank assets contain risks financed from its own capital, funds from sources outside the bank, such as the community, loans. CAR is the calculation of capital needed to control risk based on the value of bank assets.[15] In this study, the CAR phenomenon in financial reports that occurred in the Banking Sector for the period 2008-2021 can be described as follows:

[14]Kusumastuti, W. I., & Alam, A. (2019). Analysis Of Impact Of CAR, NPF, BOPO On Profitability Of Islamic Banks (Year 2015-2017). *Journal of Islamic Economic Laws*, *2*(1), p.30–59. https://doi.org/10.23917/jisel.v2i1.6370.
[15]Ledhem, M. A., & Mekidiche, M. (2020a). Economic Growth And Financial Performance Of Islamic Banks: A CAMELS Approacp. *Islamic Economic Studies*, *28*(1), p.47–62. https://doi.org/10.1108/ies-05-2020-0016.

Figure 3.1.3 Figure of Capital Adequacy Ratio (CAR) Ratio of Financial Reports of Companies in the Banking Sector for the Period 2008 – 2021.



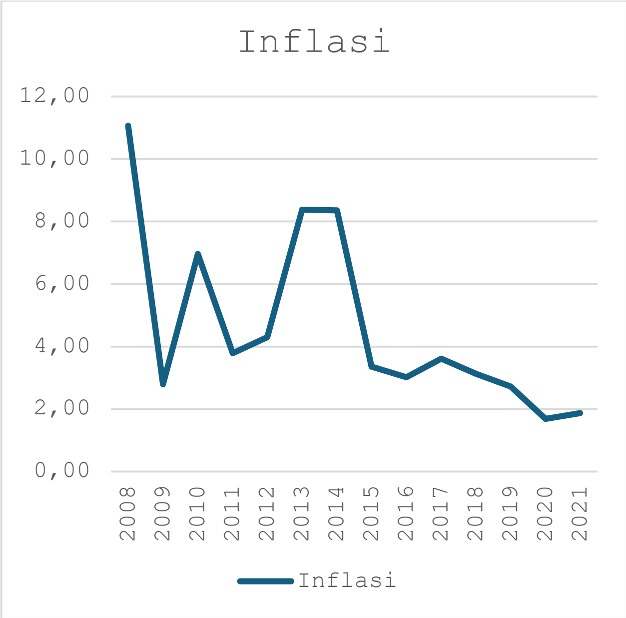
From figure 3.1.3, the phenomenon of companies registered in the banking sector as a whole has seen an increase.*CAR*which shows the bank's condition to bear the risk of each credit has increased, meaning that the bank's emergency funds have increased, as a result if the bank's funds are mostly in debtors, the bank's high default rate can be overcome.

3.1.4. Inflation

Inflation is a continuous increase in the price of goods and services over a certain period of time. In general, the government and central bank must maintain the inflation rate because high inflation rates are usually associated with an overheated economy. This means that the economy experiences a demand for products that exceeds the capacity of its product supply, so that prices tend to increase. According toWidarjonosaid that too high inflation will also cause a decrease in people's purchasing power. In addition, high inflation can also reduce real income levels and will have an impact on people's welfare. The role of government is very important so that the economy continues to run smoothly. Inflation will reflect the stability of the economy which can affect the performance of a country's financial sector. Inflation is a measure of the general price level of a country, which is negatively affected by the purchasing power of the national currency. Inflation is referred to as a price spiral of goods and services for a certain period in a particular economy.Inflation is expected to weaken the ability of debtors to pay their installments, which in turn will cause an increase in a bank's NPL.[16] In this study, the inflation phenomenon that occurred in Indonesia in the period 2008 – 2021 can be described as follows:

[16]Priyadi, U., Utami, K. D. S., Muhammad, R., & Nugraheni, P. (2021). Determinants Of Credit Risk Of Indonesian Sharīʿah Rural Banks. *ISRA International Journal of Islamic Finance*, *13*(3), p.284–301. https://doi.org/10.1108/IJIF-09-2019-0134.

Figure 3.1.4Inflation Ratio Image for the Period 2008 – 2021 in Indonesia.



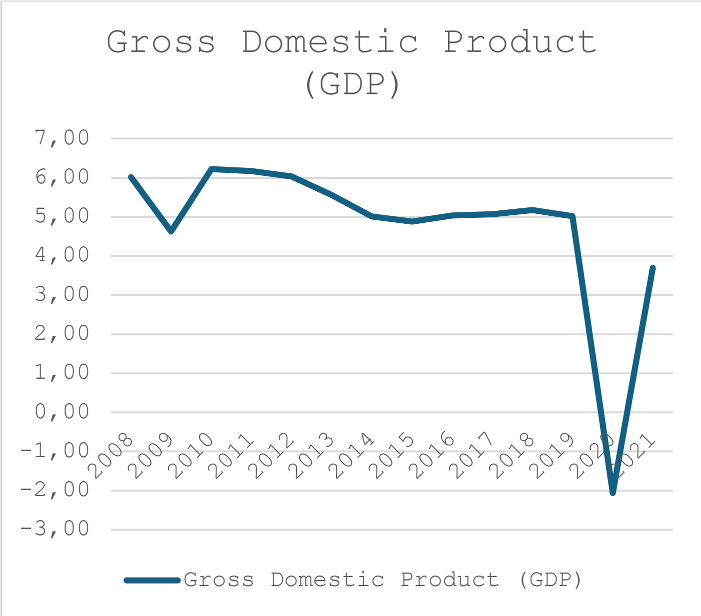
From figure 3.1.4, the overall phenomenon is that inflation fluctuations occurred in Indonesia during the period 2008-2021. This isshows that the inflation conditions in Indonesia are uncertain, which results in an increased risk of default. This is because if the price of goods and services increases, debtors will be unable to pay off the obligations promised by the bank. This will also have an impact on the high level of bankruptcy.

3.1.5. Gross Domestic Product (GDP)

*GDP*or also often called GDP (Gross Domestic Product), which is a measure of an economy's income and expenditure.*GDP*is basically the sum of the added value generated by all business units in a country. Or it is the sum of the final goods and services generated by all economic units. The higher the income level, the higher the level of prosperity is considered. Macroeconomic data related to real GDP (gross domestic product) is also obtained from the World Development Indicators database.[17]GDP is the annual growth in real gross domestic product. GDP is the value of goods or services in a country produced by factors of production owned by the citizens of that country and foreign countries. GDP shows sustainable economic growth at the country level but also at the global level.[18] *GDP*used to control the impact of economic growth. In this study the phenomenon*GDP*what happened in Indonesia in the period 2008 – 2021 can be described as follows:

[17]Sobarsyah, M., Soedarmono, W., Yudhi, W. S. A., Trinugroho, I., Warokka, A., & Pramono, S. E. (2020). Loan growth, capitalization, and credit risk in Islamic banking. *International Economics*, *163*(February), p.155–162. https://doi.org/10.1016/j.inteco.2020.02.001.
[18]Firmansyah, I. (2014). Determinant Of Non Performing Loan: The Case Of Islamic Bank In Indonesia. *Bulletin of Monetary Economics and Banking*, *17*(2). https://doi.org/10.21098/bemp.v17i2.

Figure 3.1.5 Figure of Gross Domestic Product (GDP) Ratio for the Period 2008 – 2021 in Indonesia.



From figure 3.1.5 the overall phenomenon shows fluctuations.*GDP*that occurred in Indonesia during the period 2008-2021. Thisshow condition*GDP*in Indonesia is uncertain which results in an increased risk of default. This is because the income of each country is different, especially in 2020 based on figure 3.1.5 above, it can be seen that there was a very drastic decline. This is because in Indonesia in that year there was a spread of the Covid 19 virus which resulted in very difficult economic conditions, massive layoffs which resulted in income in Indonesia decreasing sharply, as a result debtors were unable to pay off the obligations promised by the bank. This will also have an impact on the high level of bankruptcy.

3.2. Results of the Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Inflation, andGross Domestic Product (GDP)Against Credit Risk (NPL)

Table 3.2.1

Summary Results of Panel Regression Model Selection Test

Testing	Results
Chow test	*Fixed Effect Model (FEM)*
Hausman test	*Random Effect Model (REM)*
Lagrange Multiplier (LM) Test	*Random Effect Model (REM)*
Selected Models	*Random Effect Model (REM)*

Source: Eviews 10 output results, processed (2022)

From several stages of testing the model,it can be concluded that in this study the regression model uses the Random Effect Model (REM).

Table 3.2.2
Descriptive Analysis Results

	Y_NPL	X1_LDR	X2_CAR	X3_INFLATION	X4_GDP	Z_GCG
Mean	3.509838	0.667895	0.192913	4.644286	3.1.3.1449 42	75.82304
Median	2.715000	0.696951	0.179300	3.480000	5.051428	78.61000
Maximum	50.96000	1.141261	0.980700	11.06000	6.223854	99.99000
Minimum	0.210000	0.107920	-0.222900	1.680000	-2.065005	35.69000
Std. Dev.	4.416089	0.134428	0.082860	2.761757	2.006320	17.30875
Observations	308	308	308	308	308	308

From table 3.2.2 above, there are 308 samples of data, so it can be concluded that:

1) *Credit Risk*which is proxied by Non Performing Loan (NPL) is the ratio of non-performing loans compared to the total loans given to the public. In table 3.2.2 above, the results of EVIEWS version 10 processing have a mean NPL of 3,509; median NPL of 2,715; maximum NPL of 50,960; minimum NPL of 0.210 and standard deviation of NPL of 4,416 in banking companies listed on the Indonesia Stock Exchange. The results show an average of less than 5% based on Bank Indonesia Regulation Number 23/2/PBI/2021 that *NPL*in good condition and the highest NPL during the research period was the company PT. Bank Pembangunan Daerah Banten, Tbk with the company code BEKS in 2010 while the lowest Non Performing Loan (NPL) during the research period was the company PT. Bank Bumi Arta, Tbk with the company code BNBA in 2013.[19]
2) *Loan to Deposit Ratio (LDR)*is the ratio of credit volume distributed by the bank. In table 3.2.2 above, the results of EVIEWS version 10 processing have a mean LDR of 0.667; median LDR of 0.696; maximum LDR of 1.141; minimum LDR of 0.107 and standard deviation of LDR of 0.134 in banking companies listed on the Indonesia Stock Exchange. The results show an average of less than 78% based on Bank Indonesia Regulation Number 15/7/PBI/2013 that *LDR*in conditions that have not reached the target and the highest LDR during the research period is the company PT. Bank Woori Saudara Indonesia 1906, Tbk with the company code SDRA in 2020 while the lowest Loan to Deposit Ratio (LDR) during the research period is the company PT. Bank Capital Indonesia, Tbk with the company code BACA in 2021.[20]
3) *Capital Adequacy Ratio (CAR)*is a ratio that measures the bank's ability to provide minimum capital. In table 3.2.2 above, the results of EVIEWS version 10 processing have a mean CAR of 0.192; median CAR of 0.179; maximum CAR of 0.980; minimum CAR of -0.222 and standard deviation CAR of 0.082 in banking companies listed on the Indonesia

[19]Mazreku, I., Morina, F., Misiri, V., & Spiteri, J. V. (2018). Determinants Of The Level Of Non-Performing Loans In Commercial Banks Of Transition Countries. *European Research Studies Journal*, *XXI*(3), p.3–13.
[20]Nainggolan, R., Sari, D. W., & Wasiaturrahma, W. (2022). Analysis Of The Effect Of Bank Size, Credit Risk, And Capital Adequacy On Cost Efficiency Of Banks In Indonesia (SFA Method). *Jurnal Ekonomi And Bisnis*, *25*(2), p.321–336. https://doi.org/10.24914/jeb.v25i2.4825.

Stock Exchange. The results show an average of less than 2.5% based on Bank Indonesia Regulation Number 15/12/PBI/2013 that *CAR*in poor condition and the highest CAR during the research period was the company PT. Bank Of India Indonesia, Tbk with the company code BSWD in 2021 while the lowest CAR during the research period was the company PT. Bank Jtrust Indonesia, Tbk with the company code BCIC in 2008.[21]

4) *Inflation*is the increase in the price of goods and services. In table 3.2.2 above, the results of EVIEWS version 10 processing have a mean inflation in Indonesia of 4,644; median inflation in Indonesia of 3,480; maximum inflation in Indonesia of 11,060; minimum inflation in Indonesia of 1,680 and standard deviation inflation in Indonesia of 2,761. The results show an average of more than 3.0% based on Bank Indonesia regulation NumberPMK No.101/PMK.010/2021 dated July 28, 2021that *Inflation*in poor condition and the highest inflation in Indonesia during the research period was in 2008 while the lowest inflation in Indonesia during the research period was in 2020.[22]
5) *Gross Domestic Product (GDP)*is the production volume in Indonesia. In table 3.2.2 above, the results of EVIEWS version 10 processing have a mean GDP in Indonesia of 3,344; median GDP in Indonesia of 5,051; maximum GDP in Indonesia of 6,223; minimum GDP in Indonesia of -2,065 and standard deviation of GDP in Indonesia of 2,006. Based on the descriptive analysis obtained, the highest GDP in Indonesia during the study period was in 2010 while the lowest GDP in Indonesia during the study period was in 2020.[23]

3.3. Discussion

*Good Corporate Governance*which is proxied by Institutional Ownership (INSOWN) as a moderating variable that is expected to be a solution to the differences in previous research results which are intended to strengthen or weaken the relationship and prevent significant errors in corporate strategy and ensure that errors that occur can be immediately corrected. The strategy to reduce credit risk is the implementation of corporate governance. The existence of Good Corporate Governance can eliminate asymmetric information and credit risk can be reduced. Good Corporate Governance can reduce credit risk andKo et al.also said corporate governance reduces credit risk.[24]

---

[21]Saeed, A., Javed, A. Y., & Noreen, U. (2018). Microfinancing, Governance, And Performance: A South Asian Perspective. *Journal of Economics, Finance and Administrative Science*, *23*(46), p.247–265. https://doi.org/10.1108/JEFAS-01-2017-0014.
[22]Soekapdjo, S., Tribudhi, D. A., & Nugroho, L. (2019). Pengaruh Fundamental Ekonomi and Kinerja Keuangan Terhadap Kredit Bermasalah Pada Bank Syariah Di Indonesia. *Ekonika : Jurnal Ekonomi Universitas Kadiri*, *4*(2), p.126. https://doi.org/10.30737/ekonika.v4i2.327.
[23]Kumar, R. R., Stauvermann, P. J., Patel, A., & Prasad, S. S. (2015). Determinants Of Non-Performing Loans In Banking Sector In Small Developing Island States: A Study Of Fiji. *Accounting Research Journal*, *31*(2), p.192–213. https://doi.org/10.1108/ARJ-06-2015-0077.
[24]Ko, C., Lee, P., & Anandarajan, A. (2019). The Impact Of Operational Risk Incidents And Moderating Influence Of Corporate Governance On Credit Risk And Firm Performance. *International Journal of Accounting and Information Management*, *27*(1), p.96–110. https://doi.org/10.1108/IJAIM-05-2017-0070.

With the phenomenon of financial reports that occurred in the Banking Sector for the period 2008-2021 and there were discrepancies in the results of several research gaps, the object of this study was companies listed in the banking sector on the Indonesia Stock Exchange (IDX). The research period was taken from 2008-2021. There were 658 banking sector companies listed on the Indonesia Stock Exchange (IDX) for 14 years from 2008-2021. The number of samples in this study was 308 companies and with a purposive sampling model. Then, this study combines cross-section data for 14 years (2008-2021).[25]

Trade Off Theory where Trade off theory discusses the relationship between capital structure and company value. The theory is applied in this study because this study discusses how banks can reduce non-performing loans so that they are not too high if the non-performing loans owned by the bank increase then the bank will face financial difficulties which can eventually lead to bank bankruptcy so in this study requires the variable Good Corporate Governance which is proxied by Institutional Ownership (INSOWN) as a moderating variable with the hope that non-performing loans will not increase. Thus this study has several hypotheses including:

1) Loan to Deposit Ratio (LDR) has a positive effect on Credit Risk (NPL)
   *LDR*isthe ratio between the total volume of credit distributed by the bank and the amount of funds received from various sources. The higher the LDR reflects that the banking company has high credit activity, resulting in a high level of failure of debtors and/or other parties in fulfilling their obligations to the bank. Therefore, the higher the LDR, the higher the Credit Risk. LDR affects Credit Risk, which means that the LDR given by the bank to the debtor can affect Credit Risk, so the higher the LDR, the higher the Credit Risk faced by the bank, that LDR does not affect Credit Risk.[26]
2) Capital Adequacy Ratio (CAR) affects Credit Risk (NPL)
   *CAR*is the capital adequacy ratio that functions to accommodate the risk of loss that may be faced by the bank. The higher the CAR, the better the bank's ability to bear the risk of each credit/productive asset that is at risk, as a result the level of failure of debtors and/or other parties in fulfilling obligations to the bank can be resolved optimally. Therefore, the higher the CAR, the lower the Credit Risk. Based on the description of the results above, the CAR variable that CAR does not affect Credit Risk, which means that CAR cannot function to accommodate the risk of loss faced by the bank. This occurs because debtors do not pay their obligations given by the bank on time, therefore Credit Risk increases and can cause losses faced by the bank. So the higher the CAR ratio, the higher the Credit Risk faced by the bank.[27]

---

[25]Putri, M. O. D., & Wiksuana, I. G. B. (2021). The Effect of Liquidity and Profitability on Firm Value Mediated by Dividend Policy. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, *5*(1), p.204–212. https://www.ajhssr.com/wpcontent/uploads/2021/01/ZB21501204212.pdf.

[26]Puspita, P., Ndaru, S., & Jayanti, R. (2022). Effect Of Liquidity, Capital Adequacy And Net Interest Margin On Credit Risk With Its Impact On Profitability. *International Seminar on Accounting Society*, p.626–635.

[27]Ozili, P. K. (2019). Non-Performing Loans And Financial Development: New Evidence. *Journal of Risk Finance*, *20*(1), p.59–81. https://doi.org/10.1108/JRF-07-2017-0112.

3) Inflation has a positive effect on Credit Risk (NPL)
Inflation can be interpreted as a continuous increase in the price of goods resulting in a decrease in people's purchasing power. The decrease in people's purchasing power is due to the increase in the price of goods and services. Thus, the decrease in people's purchasing power causes the income of producers to also decrease so that the ability to pay their obligations to the bank is not on time and the credit risk will increase. On the other hand, real community income will also decrease due to increasing prices, causing people as debtors to have difficulty paying loans to banks so that the credit risk will increase. Therefore, the higher the inflation, the higher the credit risk. Inflation does not affect credit risk, which means that if inflation increases, the price of goods and services is expensive, then the non-performing loans faced by banks will decrease, this happens because if inflation increases, people in buying goods and services will increase, therefore people will experience financial difficulties so that people are afraid to borrow credit from banks because they are afraid that they will not be able to pay off the obligations promised by the bank. That way, loans at the bank will decrease and the credit risk faced by the bank will decrease.[28]
4) Gross Domestic Product (GDP) has a positive effect on Credit Risk (NPL)
*GDP*shows an increase in the income of a company or individual. If a recession occurs, economic growth will certainly decline, which will affect a company's income and will have difficulty paying (default). If a recession occurs, economic growth will experience sluggishness and slowness, this will indicate that prices, output and unemployment rates cannot be maintained. Economic growth as seen from*GDP*shows the growth of a company's income. The ability of debtors to pay their debts will also increase so that the credit risk indicated by NPL will decrease. Therefore, the higher*GDP*then the lower the Credit Risk. Based on the description of the results above, the GDP variable shows that Gross Domestic Product (GDP) has no effect on Credit Risk, which means that*GDP* does not affect Credit Risk. This is because during the pandemic, namely from 2019 to 2020, people's purchasing power decreased, this was due to the large number of unemployed employees caused by the strict PPKM launched by the government to inhibit the rate of increase in the number of patients affected by Covid-19, this will certainly cause a decrease in people's purchasing power which has an impact on traders and producers, even buyers hold back their appetite to buy goods outside of basic needs so that Credit Risk also increases. Therefore, the lower*GDP*then the higher*Credit Risk*.[29]

[28]Singh, S. K., Basuki, B., & Setiawan, R. (2021). The Effect Of Non-Performing Loan On Profitability: Empirical Evidence From Nepalese Commercial Banks. *Journal of Asian Finance, Economics and Business*, *8*(4), p.709–716. https://doi.org/10.13106/jafeb.2021.vol8.no4.0709.
[29]Sitompul, S., & Nasution, S. K. (2019). The Effect of Car, BOPO, NPF, and FDR on Profitability of Sharia Commercial Banks in Indonesia. *Budapest International Research and Critics Institute (BIRCI-Journal) : Humanities and Social Sciences*, *2*(3), p.234–238. https://doi.org/10.33258/birci.v2i3.412.

5) RoleGood Corporate Governance (INSOWN) in moderating the influence of the Loan to Deposit Ratio (LDR) against Credit Risk (NPL)
   *LDR*isthe ratio between the total volume of credit distributed by the bank and the amount of funds received from various sources. Bank funds generally come from third party funds collected by the bank and then distributed in the form of credit. The higher the LDR, the higher the Credit Risk. This is due to the demands of companies in the banking sector to have high profits so that many funds are distributed by the bank, of course the credit risk is also high, so supervision is needed using the Good Corporate Governance ratio which is proxied by Institutional Ownership (INSOWN) so that the level of failure of debtors and/or other parties in fulfilling obligations to the bank can be monitored properly so that it can reduce credit risk. In this study, based on testing, it can be concluded that H5 The Role of Good Corporate Governance can moderate the effect of LDR on Credit Risk in banking companies is accepted or the Role of Good Corporate Governance in moderating can strengthen the effect of LDR on Credit Risk, which means that Good Corporate Governance which is proxied by Institutional Ownership can strengthen the effect of the amount of LDR given by the bank to debtors on Credit Risk. Thus, the existence of good and correct Good Corporate Governance can control the amount of Loan to Deposit Ratio (LDR) given by the bank to the debtor so that the Credit Risk faced by the bank can be controlled. This will make the bank have increasingly better Good Corporate Governance in reducing Credit Risk so that banking companies can avoid the possibility of bankruptcy.[30]
6) The Role of Good Corporate Governance (INSOWN) in moderating the influence of the Capital Adequacy Ratio (CAR) against Credit Risk (NPL)
   *CAR*is the capital adequacy ratio that functions to accommodate the risk of losses that may be faced by the bank. The lower the CAR, the worse the ability of the banking sector company to bear the risk of each credit/productive asset that is at risk, as a result the level of failure of debtors and/or other parties in fulfilling obligations to the bank cannot be resolved so that the bank will go bankrupt, this is an undesirable condition. Therefore, in order for this condition to not occur, supervision is needed using the Good Corporate Governance ratio which is proxied by Institutional Ownership (INSOWN) which is very strict which functions to monitor banking activities so that the level of failure of debtors and/or other parties in fulfilling obligations to the bank can be resolved properly. In this study, based on testing, it can be concluded that H6 The Role of Good Corporate Governance can moderate the effect of CAR on Credit Risk in banking companies is rejected or the role of Good Corporate Governance in moderating weakens the effect of CAR on Credit Risk, which means that Good Corporate Governance weakens the effect of CAR owned by the bank on Credit Risk. Thus, the large percentage of Good Corporate Governance weakens the effect of CAR owned by the bank on Credit Risk. In this study, it

[30]Yang, L., van Wijnbergen, S., Qi, X., & Yi, Y. (2019). Chinese Shadow Banking, Financial Regulation And Effectiveness Of Monetary Policy. *Pacific Basin Finance Journal*, *57*(March 2017), 101-169. https://doi.org/10.1016/j.pacfin.2019.06.016.

is possible that this occurs due to the lack of members or the large percentage of Institutional Ownership in moderating which will weaken the influence of the bank's CAR on Credit Risk.[31]

4. Conclusion

LDR affects Credit Risk, meaning that the LDR given by the bank to the debtor can affect Credit Risk, so the higher the LDR, the higher the Credit Risk faced by the bank. CAR does not have a significant effect on Credit Risk, meaning that CAR cannot function to accommodate the risk of loss faced by the bank. This occurs because the debtor does not pay the obligations given by the bank on time, therefore Credit Risk increases and can cause losses faced by the bank. So the higher the CAR, the higher the Credit Risk faced by the bank. Inflation does not have a significant effect on Credit Risk, meaning that if inflation increases, the price of goods and services is expensive, then the Credit Risk faced by the bank decreases. This happens because if inflation increases, people in buying goods and services will increase, therefore people will experience financial difficulties so that people are afraid to get credit at the bank because they are afraid that they will not be able to pay off the obligations promised by the bank. That way, loans at the bank will decrease and the Credit Risk faced by the bank will decrease. GDP does not have a significant effect on Credit Risk, meaning that GDP does not affect Credit Risk. This happened because during the pandemic, namely from 2019 to 2020, people's purchasing power decreased. This was due to the large number of unemployed employees caused by the strict PPKM launched by the government to inhibit the rate of increase in the number of patients affected by the Covid-19 disease. This will certainly cause a decrease in people's purchasing power which has an impact on traders and producers, even buyers hold back their appetite to buy goods outside of basic needs so that Credit Risk also increases. Therefore, the lowerGDPthen the higherCredit Risk. Good Corporate Governance can moderate the influence of LDR on Credit Risk, meaning that Good Corporate Governance can strengthen the influence of the amount of LDR given by the bank to the debtor on Credit Risk. Thus, the existence of good and correct Good Corporate Governance can control the amount of LDR given by the bank to the debtor so that the Credit Risk faced by the bank can be controlled. This will make the bank have increasingly good Corporate Governance in reducing Credit Risk so that banking companies can avoid the possibility of bankruptcy. Good Corporate Governance cannot moderate the influence of CAR on Credit Risk, meaning that Good Corporate Governance weakens the influence of CAR owned by the bank on Credit Risk. Thus, the large presentation of Good Corporate Governance weakens the influence of CAR owned by the bank on Credit Risk. In this study, the possibility that occurs due to the lack of members or the large percentage of Good Corporate Governance in moderating will weaken the influence of CAR owned by the bank on Credit Risk.

[31]Wanke, P., Azad, M. A. K., & Barros, C. P. (2016). Financial Distress And The Malaysian Dual Baking System: A Dynamic Slacks Approacp. *Journal of Banking and Finance*, *66*, p.1–18. https://doi.org/10.1016/j.jbankfin.2016.01.006.

5. References

Journals:

Ayuvisda, S. A., & Made, N. I. (2019). The Mediation Effect Of Work Stress On Workload, Work Condition, And Loan Collection Performance. *Russian Journal of Agricultural and Socio-Economic Sciences*, *86*(2), p.288–296. https://doi.org/10.18551/rjoas.2019-02.36.

Bhattarai, B. P. (2020). Effects Of Non-Performing Loan On Profitability Of Commercial Banks In Nepal. *European Business & Management*, *6*(6), p.164. https://doi.org/10.11648/j.ebm.20200606.15.

Dao, B. T., & Pham, H. (2015). Corporate Governance And Bank Credit Risk: Default Probability, Distance To Default. *SSRN Electronic Journal*, *June*, p.2–22. https://doi.org/10.2139/ssrn.2708994.

Firmansyah, I. (2014). Determinant Of Non Performing Loan: The Case Of Islamic Bank In Indonesia. *Bulletin of Monetary Economics and Banking*, *17*(2). https://doi.org/10.21098/bemp.v17i2.

Gadzo, S. G., Kportorgbi, H. K., & Gatsi, J. G. (2019). Credit Risk And Operational Risk On Financial Performance Of Universal Banks In Ghana: A Partial Least Squared Structural Equation Model (PLS SEM) Approach. *Cogent Economics and Finance*, *7*(1). https://doi.org/10.1080/23322039.2019.1589406.

Gunawan, I., Purnamasari, E. D., & Setiawan, B. (2020). Pengaruh CAR, NPF, FDR, dan BOPO terhadap Profitabilitas (ROA) pada Bank Syariah Bukopin Periode 2012-2018. *Jurnal Manajemen SDM Pemasaran, Dan Keuangan*, *01*(01), p.19–36.

Ko, C., Lee, P., & Anandarajan, A. (2019). The Impact Of Operational Risk Incidents And Moderating Influence Of Corporate Governance On Credit Risk And Firm Performance. *International Journal of Accounting and Information Management*, *27*(1), p.96–110. https://doi.org/10.1108/IJAIM-05-2017-0070.

Korompis, R. R. N., Murni, S., & Untu, V. N. (2020). Pengaruh Risiko Pasar (NIM), Risiko Kredit (NPL), Dan Risiko Likuiditas (LDR) Terhadap Kinerja Keuangan Perbankan (ROA) Pada Bank Yang Terdaftar Di LQ45 Periode 2012-2018. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *8*(1), p.175–184.

Kumar, R. R., Stauvermann, P. J., Patel, A., & Prasad, S. S. (2015). Determinants Of Non-Performing Loans In Banking Sector In Small Developing Island States: A Study Of Fiji. *Accounting Research Journal*, *31*(2), p.192–213. https://doi.org/10.1108/ARJ-06-2015-0077.

Kusumastuti, W. I., & Alam, A. (2019). Analysis Of Impact Of CAR, NPF, BOPO On Profitability Of Islamic Banks (Year 2015-2017). *Journal of Islamic Economic Laws*, *2*(1), p.30–59. https://doi.org/10.23917/jisel.v2i1.6370.

Ledhem, M. A., & Mekidiche, M. (2020a). Economic Growth And Financial Performance Of Islamic Banks: A CAMELS Approach. *Islamic Economic Studies*, *28*(1), p.47–62. https://doi.org/10.1108/ies-05-2020-0016.

Mawarti, W., Negoro, D. A., & Syah, T. Y. R. (2022). The Effect Of Financial Ratio In Determining Company Value: (Empirical Study On Banking Companies Listed On The Indonesia Stock Exchange For The 2015-2019 Period). *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, *5*(1), 3001–3013. https://doi.org/10.33258/birci.v5i1.3942 3001.

Mazreku, I., Morina, F., Misiri, V., & Spiteri, J. V. (2018). Determinants Of The Level Of Non-Performing Loans In Commercial Banks Of Transition Countries. *European Research Studies Journal*, *XXI*(3), p.3–13.

Mutamimah, M., Tholib, M., & Robiyanto, R. (2021). Corporate Governance, Credit Risk, And Financial Literacy For Small Medium Enterprise In Indonesia. *Business: Theory and Practice*, *22*(2), p.406–413. https://doi.org/10.3846/btp.2021.13063.

Nainggolan, R., Sari, D. W., & Wasiaturrahma, W. (2022). Analysis Of The Effect Of Bank Size, Credit Risk, And Capital Adequacy On Cost Efficiency Of Banks In Indonesia (SFA Method). *Jurnal Ekonomi Dan Bisnis*, *25*(2), p.321–336. https://doi.org/10.24914/jeb.v25i2.4825.

Ozili, P. K. (2019). Non-Performing Loans And Financial Development: New Evidence. *Journal of Risk Finance*, *20*(1), h.59–81. https://doi.org/10.1108/JRF-07-2017-0112.

Permatasari, I. (2020). Does corporate governance affect bank risk management? Case study of Indonesian banks. *International Trade, Politics and Development*, *4*(2), p.127–139.https://doi.org/10.1108/itpd-05-2020-0063.

Priyadi, U., Utami, K. D. S., Muhammad, R., & Nugraheni, P. (2021). Determinants Of Credit Risk Of Indonesian Sharīʿah Rural Banks. *ISRA International Journal of Islamic Finance*, *13*(3), p.284–301. https://doi.org/10.1108/IJIF-09-2019-0134.

Puspita, H., Ndaru, S., & Jayanti, R. (2022). Effect Of Liquidity, Capital Adequacy And Net Interest Margin On Credit Risk With Its Impact On Profitability. *International Seminar on Accounting Society*, p.626–635.

Putri, M. O. D., & Wiksuana, I. G. B. (2021). The Effect of Liquidity and Profitability on Firm Value Mediated by Dividend Policy. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, *5*(1), p.204–212. https://www.ajhssr.com/wpcontent/uploads/2021/01/ZB21501204212.pdf.

Saeed, A., Javed, A. Y., & Noreen, U. (2018). Microfinancing, Governance, And Performance: A South Asian Perspective. *Journal of Economics, Finance and Administrative Science*, *23*(46), p.247–265. https://doi.org/10.1108/JEFAS-01-2017-0014.

Singh, S. K., Basuki, B., & Setiawan, R. (2021). The Effect Of Non-Performing Loan On Profitability: Empirical Evidence From Nepalese Commercial Banks. *Journal of Asian Finance, Economics and Business*, *8*(4), p.709–716. https://doi.org/10.13106/jafeb.2021.vol8.no4.0709.

Sitompul, S., & Nasution, S. K. (2019). The Effect of Car, BOPO, NPF, and FDR on Profitability of Sharia Commercial Banks in Indonesia. *Budapest International Research and Critics Institute (BIRCI-Journal) : Humanities and Social Sciences*, *2*(3), p.234–238. https://doi.org/10.33258/birci.v2i3.412.

Sobarsyah, M., Soedarmono, W., Yudhi, W. S. A., Trinugroho, I., Warokka, A., & Pramono, S. E. (2020). Loan growth, capitalization, and credit risk in Islamic banking. *International Economics*, *163*(February), h.155–162. https://doi.org/10.1016/j.inteco.2020.02.001.

Soekapdjo, S., Tribudhi, D. A., & Nugroho, L. (2019). Pengaruh Fundamental Ekonomi and Kinerja Keuangan Terhadap Kredit Bermasalah Pada Bank Syariah Di Indonesia. *Ekonika : Jurnal Ekonomi Universitas Kadiri*, *4*(2), p.126. https://doi.org/10.30737/ekonika.v4i2.327.

Sofyan, M. (2019). Analysis Financial Performance Of Rural Banks In Indonesia. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, *3*(03), p.255–262. https://doi.org/10.29040/ijebar.v3i03.588.

Wanke, P., Azad, M. A. K., & Barros, C. P. (2016). Financial Distress And The Malaysian Dual Baking System: A Dynamic Slacks Approach. *Journal of Banking and Finance*, *66*, p.1–18. https://doi.org/10.1016/j.jbankfin.2016.01.006.

Widarjono, A. (2020). Stability Of Islamic Banks In Indonesia: Autoregressive Distributed Lag Approach. *Jurnal Keuangan Dan Perbankan*, *24*(1), p.40–52. https://doi.org/10.26905/jkdp.v24i1.3932.

Yang, L., van Wijnbergen, S., Qi, X., & Yi, Y. (2019). Chinese Shadow Banking, Financial Regulation And Effectiveness Of Monetary Policy. *Pacific Basin Finance Journal*, *57*(March 2017), 101-169. https://doi.org/10.1016/j.pacfin.2019.06.016.

Books:

Sugiyono, P. D. (2015). *Cara Mudah Menyusun: Skripsi, Tesis, and Disertasi.*

Regulation:

Law Number 10 of 1998 concerning Banking.