The Effect of Non Performing Loan (NPL), Independent Commissioner (KMI), and Capital Adequacy Ratio (CAR) on Firm Value (PBV) Mediated by Return on Asset (ROA)

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Abstract

The purpose of this study was to analyze the effect of Non Performing Loan (NPL), Independent Commissioner (KMI) and Capital Adequacy Ratio (CAR) on Firm Value (PBV) mediated by Return on Assets (ROA). The population of this study are all banking companies listed on the Indonesia Stock Exchange for the 2016-2020 period. The sample in this study were 22 banking companies that were selected based on the purposive random sampling method. This study was conducted with a path analysis approach using panel data regression analysis on Eviews 10. The results of this study conclude the following: NPL has a negative and significant effect on ROA, KMI has a positive and significant effect on ROA, CAR has a positive and insignificant effect on ROA, NPL has a positive and insignificant effect on PBV, KMI has a positive and significant effect on PBV, CAR has a significant and positive effect on PBV and ROA has a significant positive effect on PBV. The relationship between NPL and PBV mediated by ROA shows that it is fully mediated. Meanwhile, the relationship between KMI and CAR on PBV mediated by ROA shows that there is a partial mediated.

Keywords: non-performing loan (NPL), independent commissioner (KMI), capital adequacy ratio (CAR), firm value (PBV), return on assets (ROA)

1. Introduction

Banking is a financial service company that plays an important role in economic activity and community economic growth. The strategic function of banking companies lies in the role of financial intermediary, namely the role of financial institutions that can be used by the public as a medium to collect and distribute funds effectively and efficiently. Because of this vital role, banking companies must always be in a healthy condition as evidenced by their financial performance.

Cases related to bank soundness occurred in Indonesia in 1997 and 2008. In 1997 there was a monetary crisis in which 16 private banks had their licenses revoked by the government and liquidation was carried out. Meanwhile, in 2008 the crisis triggered the disruption of banking financial intermediation activities and increased competition between banks, which included efforts to increase public interest in saving and providing loans to banks. This case proves that the banking sector is a very risky business so it needs strict supervision (Irianti & Saifi, 2017).

The soundness of a bank is the result of an assessment of the bank's condition on the risk and performance of the bank. Provisions regarding the soundness of banks are regulated by Bank Indonesia through Bank Indonesia Regulation Number 13/1/PBI/2011 concerning Assessment of the Soundness of Commercial Banks (Bank Indonesia, 2011). The indicators for assessing the soundness of banks in this study were measured using Non Performing Loans (NPL), Independent Commissioners (KMI), Capital Adequacy Ratio (CAR) and Return on Assets (ROA). The soundness of a bank is one of the important elements that can be used to determine the viability of a bank. Substantially a good bank soundness level will increase customer confidence. In addition, the bank's soundness level is also useful as a means to evaluate the conditions and problems faced by the bank, as well as determine the next steps to overcome the bank's weaknesses and problems (Kadim et al., 2018).

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The soundness of a bank reflects the performance of banking institutions which is a signal for investors in making investment decisions. The healthier a bank is, the more investors will be interested in investing, which in turn will increase the value of the company, which is reflected in rising stock prices (Anggarsini & Suprasto, 2018). In research conducted by Kadim et al., (2018) stated that the indicators of bank soundness represented by LDR, GCG, NIM, CAR and DER simultaneously had a positive and significant effect on firm value. Then the results of research conducted on private commercial banks listed on the Indonesia Stock Exchange stated that LDR and GCG had no effect on firm value, while NIM and CAR had an effect on firm value (Esomar et al., 2020). Meanwhile, according to Maheswari & Suryanawa, (2016) states that the soundness of the bank has no effect on the value of the company.

A healthy bank will have good performance so that its ability to generate profits becomes more optimal. The results showed that the soundness of banks measured using NPL, GCG, ROA and CAR simultaneously also had an effect on increasing company income (Prihatni, 2019). Profit is the excess difference between income and expenses that arise in the main or side activities of the company during a period. Earnings information is important for existing and potential investors because profit is an indicator of a company's good prospects in the future; If a company's profits increase, then existing or potential investors will be more willing to buy shares in the company (Hapsari & Saputra, 2018).

Profits that continue to grow will make the company's assets also increase. An asset is something that a company owns and has value. The assets will be used for the company's operational activities. The larger the assets used tend to be the greater the profits obtained. An increase in assets followed by an increase in the results obtained will increase the confidence of interested parties in the company. With increasing stakeholder trust, the value of the company will increase (Badruzaman et al., 2019). Other research also states that profit growth has a positive relationship with increasing firm value (Sudiyatno et al., 2021).

Previous researchers have conducted explorations regarding the effect of bank soundness on firm value, however, this study further explains the direct effect of bank soundness on firm value (Esomar et al., 2020), while other studies use the Loan to Deposit Ratio (LDR) as a mediating variable (Kadim et al., 2018). In addition, the results of research on the effect of bank soundness on firm value have mixed results (Amelia & Aprilianti, 2018). So in this study the researchers used Non Performing Loans (NPL), Independent Commissioners (KMI) and Capital Adequacy Ratio (CAR) as independent variables, firm value (PBV) as dependent variable, and Return on Assets (ROA) as mediating variables to provide different perspectives and explore the direct and indirect effects of bank soundness on firm value.

The purpose of this study was to explore the effect of Non Performing Loans (NPL), Independent Commissioners (KMI) and Capital Adequacy Ratio (CAR) on firm value (PBV) mediated using the Return on Assets (ROA) variable. It is hoped that this research can contribute to the theoretical or scientific level of financial management and also provide positive managerial implications on investment management in the banking sector.

2. Literature Review

2.1. Signaling Theory

Signaling theory emphasizes the importance of a company submitting its information to the public regarding financial statements, policies and other relevant information related to the company's activities. Signaling theory is used to reduce the occurrence of information asymmetry. Information asymmetry is a condition where managers have financial information that is not owned by outsiders. Through signaling, it is hoped that certain information can be used by recipients to make financial decisions and distinguish between high-value and healthy companies and low-value companies. Signaling theory describes the relationship between NPL, KMI and CAR with firm value mediated by ROA and its prospects in the perspective of investors. Managers will convey good information that aims to increase the value of the company to investors (Esomar et al., 2020).

2.2. Non-Performing Loan (NPL)

NPL is a ratio used to measure a bank's ability to manage its non-performing loans. The greater the NPL value indicates that the bank's credit quality is getting worse. This causes the number of non-performing loans to increase which has an impact on the poor condition of the bank (Susilawati & Nurulrahmatiah, 2021). The NPL is an indicator of credit risk disbursed by banks (Wardoyo & Agustini, 2017). High credit risk in a bank indicates a decline in the company's financial performance. Declining financial performance will cause the value of the company to decrease (Pradana, 2019).
2.3. Independent Commissioner (KMI)

Independent Board of Commissioners according to Darmawan et al. (2018) is a person who is appointed to represent the independent shareholders (minority shareholders) and the appointed party is not in the capacity to represent any party and is solely appointed based on his background of knowledge, experience, and professional expertise to fully carry out his duties in the interests of the company. The Independent Board of Commissioners has the main responsibility for implementing Good Corporate Governance (GCG) in the company. The function of the independent commissioner is as a bridge between shareholders and managers as well as supervisors and advisors to the board of directors (Ferial, 2016). If the monitoring mechanism carried out by the independent commissioner is carried out properly, the company's performance will increase (Rusmin, 2012).

2.4. Return on Assets (ROA)

Return on Assets (ROA) is a kind of profitability ratio that is used to measure the ability of banking management in obtaining net profit which is then compared with total assets (Wardoyo & Agustini, 2017). Meanwhile, according to A.R. Dewi (2019) ROA is a comparison between net income and total assets that can show how much net profit the company gets when measured by the value of its assets. The purpose of ROA is to measure the success of management in generating profits. The smaller this ratio shows that the ability of bank management in terms of managing assets to increase revenue and or reduce costs is still lacking. The higher the ROA performance will indicate that the bank is more capable of managing management (Wijaya & Amelia, 2017).

2.5. Capital Adequacy Ratio (CAR)

In this aspect, what is assessed is the level of capital adequacy and capital management owned by the bank based on the minimum capital adequacy requirement of the bank. In assessing capital adequacy, banks must link the capital adequacy ratio with the bank's risk profile, the higher the bank's risk, the more capital must be provided to anticipate these risks (B Setiadi & Ursula S, 2020). The assessment is based on the CAR (Capital Adequacy Ratio) that has been determined by BI. Capital Adequacy Ratio is a ratio that shows how far all bank assets that contain risks (credit, investments, securities, claims on other banks) are also financed from the bank's own capital funds in addition to obtaining funds from sources outside the bank, such as public funds, loans, and so on (Lisa, 2020).

2.6. Firm Value

Company value is an investor's assessment of the company based on the stock price. A high company value indicates a high level of shareholder welfare. The purpose of the company's financial management is to maximize the level of shareholder welfare. Firm value can be measured through stock prices using Price Earning Ratio, Tobin's Q and Price Book Value (PBV) (Badruzaman et al., 2019). The measure of firm value used in this study is PBV, because PBV is widely used in investment decision making and can be compared between similar companies as an indicator of whether the company's stock price is high or low (Esomar et al., 2020). PBV is a more stable measure than the market price and is one of the variables considered by investors in buying shares. The higher the PBV of a company, the higher the value of the company for investors and the greater the investor's confidence in the company's prospects (Fauzi et al., 2016).

3. Relationship between Variables

3.1. Relationship of Non Performing Loans (NPL) with Return on Assets (ROA)

Non-Performing Loan (NPL) is an assessment of credit risk inherent in a bank's business activities that have the potential to affect the bank's financial position (Uran & Wuryani, 2019). Non Performing Loan (NPL) is a ratio to measure the level of non-performing loans that occur in a bank. The large percentage of NPL must be a concern of the management because the increasing number of non-performing loans can endanger the health of the bank. Credit disbursed by banks carries the risk of default by the debtor. The higher the NPL level indicates that the bank is unprofessional in managing its credit which will have an impact on the bank's losses and affect the growth of bank profitability (Yuhenita, N. N, Indiati, 2016). If the NPL increases, the company's profit will actually decrease. NPL itself has a negative relationship with changes in earnings. If the NPL ratio increases, the profit generated will actually decrease, so that the change in profit will also decrease, and vice versa (Guicheldy & Sukartaatmadja, 2021). The results of this study are also supported by Susilawati & Nurulrahmatiah (2021), Dwihandayani (2017) and Maheswari & Suryanawa (2016). Based on this description, it can be concluded that the research hypothesis is as follows:
H1: There is a negative effect of Non Performing Loan (NPL) on Return on Assets (ROA)

3.2. Relationship of Independent Commissioner (KMI) with Return on Assets (ROA)

Independent Board of Commissioners according to Darmawan et al. (2018) is a person who is appointed to represent the independent shareholders (minority shareholders) and the appointed party is not in the capacity to represent any party and is solely appointed based on his background of knowledge, experience, and professional expertise to fully carry out his duties in the interests of the company. The Independent Board of Commissioners has the main responsibility for implementing Good Corporate Governance (GCG) in the company. The function of the independent commissioner is as a bridge between shareholders and managers as well as supervisors and advisors to the board of directors (Ferial, 2016). If the monitoring mechanism carried out by the independent commissioner is carried out properly, the company's performance will increase (Rusmin, 2012). Thus the increase in GCG management carried out by Independent Commissioners will have a positive effect on company profits, as one measure of company performance. Based on this description, it can be concluded that the research hypothesis is as follows:

H2: There is a positive influence of Independent Commissioner (KMI) on Return on Assets (ROA)

3.3. Relationship between Capital Adequacy Ratio (CAR) and Return on Assets (ROA)

CAR is a ratio that shows the proportion of total bank assets that contain risk and are financed from own capital and the proportion of funds from sources outside the bank. CAR is also an indicator of a bank's ability to cover the decline in its assets as a result of losses caused by capital adequacy risk. In other words, the smaller the risk, the higher the return, and therefore the higher the CAR achieved by the bank, which leads to improved bank performance (Ningsih & Sari, 2019). This is also supported by research conducted by Sofyan (2019) and Fathoni (2012) who found that CAR had a positive effect on profit growth. Based on this description, it can be concluded that the research hypothesis is as follows:

H3: There is a positive effect of Capital Adequacy Ratio (CAR) on Return on Assets (ROA)

3.4. Relationship of Non Performing Loan (NPL) with Firm Value (PBV)

Non-Performing Loan (NPL) is a risk profile indicator that is used to assess banking risk based on the loans it disburses. This risk profile is used as a signal for stakeholders to determine the level of risk faced by a bank. The lower the risk owned by a bank indicates that the performance of the bank in terms of risk management is very good. This will improve the good image of banks so as to increase investor interest in investing and increase the value of the company which is reflected in stock prices (Anggarsini & Suprasto, 2018). Based on research conducted by Kadim et al., (2018) states that the risk profile has a significant negative effect on firm value. The results of a similar study are also supported by (Septiani & Lestari, 2016) and (Suciaty et al., 2019). Based on this description, it can be concluded that the research hypothesis is as follows:

H4: There is a negative effect of Non Performing Loan (NPL) on Firm Value (PBV)

3.5. Relationship of Independent Commissioner (KMI) with Company Value (PBV)

Independent Board of Commissioners according to Darmawan et al. (2018) is a person who is appointed to represent the independent shareholders (minority shareholders) and the appointed party is not in the capacity to represent any party and is solely appointed based on his background of knowledge, experience, and professional expertise to fully carry out his duties in the interests of the company. The Independent Board of Commissioners has the main responsibility for implementing Good Corporate Governance (GCG) in the company. Good Corporate Governance (GCG) is defined as processes and structures in the business that are directed and managed in order to increase long-term shareholder value through improving corporate performance and accountability by taking into account the interests of other stakeholders (Khan, 2011). Good Corporate Governance (GCG) in the context of banking health is the result of an assessment of the implementation of supervision over management performance in managing the company to increase company profits and achieve shareholder prosperity. Welfare obtained by shareholders will increase the value of the company. Firm value is an investor's perception of the company, which is often associated with stock prices. Based on the results of the study, it is shown that the Independent Commissioner (KMI) has a significant positive effect on firm value (Ferial, 2016), (Darmawan et al., 2018) and (Fauzi et al., 2016). Based on this description, it can be concluded that the research hypothesis is as follows:

H5: There is a positive influence of Independent Commissioner (KMI) on Company Value (PBV)
3.6. Relationship between Capital Adequacy Ratio (CAR) and Firm Value (PBV)

Capital for banks is used as a support for the possibility of risk. CAR (Capital adequacy ratio) is a proxy for measuring capital. The results of the CAR ratio are a good signal for stakeholders in assessing banking performance. The CAR value that is in accordance with regulatory provisions, which is at least 8 percent, indicates that banks are able to have sufficient funds to cover risks that may occur due to their operational activities (Amin et al., 2019). According to research conducted by Hantono (2017) stated that bank capital assessed from the CAR was able to increase the value of the company. This is because stakeholders consider that companies that have sufficient capital will be able to cover the decline in assets and generate higher profits. When banks have sufficient capital to cover the risk of their assets, investors receive this information as good news about banking performance. The company’s assessment of stakeholder perceptions will increase which is reflected in the stock price of the bank (Ningsih & Sari, 2019). The results of the study show that CAR has a positive effect on firm value (Widyastuti, 2019) and (Pure & Sabijono, 2018). Based on this description, it can be concluded that the research hypothesis is as follows:

**H6: There is a positive effect of Capital Adequacy Ratio (CAR) on Firm Value (PBV)**

3.7. Relationship of Return on Assets (ROA) with Firm Value (PBV)

Return on Assets (ROA) is used to ensure the efficiency and quality of bank earnings correctly and accurately. Return on Assets (ROA) shows the company’s performance to earn a profit in one closing period. Return on Asset (ROA) assessment is an assessment of the condition and ability of bank profitability to support its operational activities (Anita et al., 2014). Return on Assets (ROA) shows the comparison between earnings before tax and total assets. The company’s ability to earn profits is used as a good signal for stakeholders because of additional cash inflows to the company which will be used as funds to develop its business or increase the amount of dividends on the profits earned. This increase in profit will provide welfare to stakeholders and increase the value of the company (Haryani, 2018). The results show that ROA has a positive influence on firm value (Wijaya & Amelia, 2017), (Rashid, 2012) and (AS Dewi, 2018). Based on this description, it can be concluded that the research hypothesis is as follows:

**H7: There is a positive effect of Return on Assets (ROA) on Firm Value (PBV)**

3.8. Relationship of Non Performing Loans (NPL) to Firm Value (PBV) Mediated by Return on Assets (ROA)

Non-Performing Loan (NPL) is a risk profile indicator that is used to assess banking risk based on the loans it disburses. The lower the risk owned by a bank indicates that the performance of the bank in terms of risk management is very good. Non-Performing Loan (NPL) is an indicator used to assess banking risk based on the loans it disburses (Wardoyo & Agustini, 2017). Based on research conducted by Kadim et al., (2018) stated that Non-Performing Loans (NPL) had a significant negative effect on firm value.

The large percentage of NPL must be a concern of the management because the increasing number of non-performing loans can endanger the health of the bank. Credit disbursed by banks carries the risk of default by the debtor. The higher the NPL level indicates that the bank is unprofessional in managing its credit which will have an impact on the bank’s losses and affect the growth of bank profitability (Yuhenita, N. N, Indiati, 2016). If the NPL ratio increases, the profit generated will actually decrease, so that the change in profit will also decrease, and vice versa (Guicheldy & Sukartaatmadja, 2021).

On the other hand, this profit is considered very important in influencing the value of the company. The company’s ability to earn profits is used as a good signal for stakeholders because of additional cash inflows to the company which will be used as funds to develop its business or increase the amount of dividends on the profits earned. This increase in profit will provide welfare to stakeholders and increase the value of the company (Haryani, 2018). The results show that ROA has a positive influence on firm value (Wijaya & Amelia, 2017), (Rashid, 2012) and (AS Dewi, 2018). Based on this description, it can be concluded that the research hypothesis is as follows:

**H8: Return on Assets (ROA) mediates the relationship of Non Performing Loans (NPL) to Firm Value (PBV)**

3.9. Relationship of Independent Commissioners (KMI) to Firm Value (PBV) Mediated by Return on Assets (ROA)

Independent Board of Commissioners according to Darmawan et al. (2018) is a person who is appointed to represent the independent shareholders (minority shareholders) and the appointed party is not in the capacity to represent any party and is solely appointed based on his background of knowledge, experience, and professional expertise to fully carry out his duties in the interests of the company. The Independent Board of Commissioners has the main responsibility for implementing Good Corporate Governance (GCG) in the company. Good Corporate Governance (GCG) is defined as processes and structures in the business that are directed and managed in order to increase long-
term shareholder value through improving corporate performance and accountability by taking into account the interests of other stakeholders (Khan, 2011). Welfare obtained by shareholders will increase the value of the company. This opinion is shown by the results of research conducted by Ferial (2016), Darmawan et al., (2018) and Fauzi et al., (2016).

Besides that, with the existence of an Independent Commissioner (KMI), it will create a healthy business climate and encourage the improvement of banking performance itself (Darmawan et al., 2018). According to Bruno & Claessens (2010), the existence of an Independent Commissioner (KMI) will improve the management of the company so that it affects the company's performance. Thus, improving GCG management will have a positive effect on company profits, as a measure of company performance. The next impact, the profit will increase the value of the company as the results of research conducted by (Wijaya & Amelia, 2017), (Rashid, 2012) and (AS Dewi, 2018). This is because the increase in profit will increase the welfare of the stakeholders. Based on this description, it can be concluded that the research hypothesis is as follows:

\[ H_9: \text{Return on Assets (ROA) mediates the relationship of Independent Commissioners (KMI) to Firm Value (PBV)} \]

3.10. Relationship of Capital Adequacy Ratio (CAR) to Firm Value (PBV) Mediated by Return on Assets (ROA)

Capital for banks, it is used as a support for the possibility of risk occurring which is usually proxied using the capital adequacy ratio. According to research conducted by Hantono (2017) stated that bank capital assessed from the CAR was able to increase the value of the company. This is because stakeholders consider that companies that have sufficient capital will be able to cover the decline in assets and generate higher profits.

In addition, CAR also affects the ability of banks to earn profits. The smaller the risk, the higher the return, and therefore the higher the CAR achieved by the bank, which leads to improved bank performance (Ningsih & Sari, 2019). This is also supported by research conducted by Sofyan (2019) and Fathoni (2012) who found that CAR had a positive effect on profit growth. Then, the company's ability to earn profits can be used as a good signal for stakeholders because of additional cash inflows to the company which will be used as funds to develop its business or increase the amount of dividends on the profits earned. This increase in profit will provide welfare to stakeholders and increase the value of the company (Hariyani, 2018). The results show that ROA has a positive influence on firm value (Wijaya & Amelia, 2017), (Rashid, 2012) and (AS Dewi, 2018). Based on this description, it can be concluded that the research hypothesis is as follows:

\[ H_{10}: \text{Return on Assets (ROA) mediates the relationship between Capital Adequacy Ratio (CAR) and Firm Value (PBV)} \]

Based on the previous research hypothesis, the research model can be described as follows:

![Fig. 1. Research Model](image_url)
4. Methods

4.1. Research Variable

a. Non-Performing Loan (NPL)

NPL is a ratio used to measure a bank's ability to manage its non-performing loans (Wahasusmiah & Watie, 2019). The formula for calculating NPL is as follows:

\[
\text{NPL} = \frac{\text{Non Performing Loan}}{\text{Total Loan}} \times 100\%
\]

b. Independent Commissioner (KMI)

The Independent Commissioner functions as a bridge between shareholders and managers as well as supervisors and advisors to the board of directors. The proportion of independent commissioners is formulated as follows (Mutmainah, 2015):

\[
\text{KMI} = \frac{\text{Independent Commissioners}}{\text{Total Commissioners}} \times 100\%
\]

c. Return on Assets (ROA)

ROA is a profitability ratio calculated by slaming net income with total assets (Wardoyo & Agustini, 2017). The ROA formula is as follows:

\[
\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}} \times 100\%
\]

d. Capital Adequacy Ratio (CAR)

CAR is a bank performance ratio that is used to measure the adequacy of capital owned and compare it with assets that contain risk (Hantono, 2017). The CAR formula is as follows:

\[
\text{CAR} = \frac{\text{Capital Owned}}{\text{ATMR}} \times 100\%
\]

e. Firm Value

Company value is an investor's assessment of the company based on the stock price. The indicator used to measure company value is PBV, which is the relationship between stock price and book value per share (Esomar et al., 2020). The PBV formula is as follows (Badruzaman et al., 2019):

\[
\text{PBV} = \frac{\text{Stock Price}}{\text{Book Value per Share}} \times 100\%
\]

4.2. Population and Sample

The qualitative data in this study is a list of banking companies listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period. The quantitative data in this study is the financial statements of banking companies listed on the Indonesia Stock Exchange (IDX) during the 2016-2020 period. The population of this study is 49 banking companies listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period. The number of samples in this study were 22 banking companies listed on the Indonesia Stock Exchange for the period 2016-2020 which were selected using the purposive sampling method, namely the sampling method based on the determination of certain predetermined characteristics and criteria. The use of this method is because purposive random sampling can reduce the possibility of selection bias and minimize the potential for skewed results (Green et al., 2013).

4.3. Path Analysis

Path analysis is an analytical technique used to analyze the inherent causal relationship between variables arranged in temporary order by using the path coefficient as the value in determining the magnitude of the effect of the exogenous independent variable on the endogenous dependent variable (Sarwono, 2011). The object of this research is a banking company listed on the Indonesia Stock Exchange for the period 2016-2020. The independent variables in this study are Non Performing Loan (NPL), Independent Commissioner (KMI) and Capital Adequacy Ratio (CAR). The dependent variable in this study is Firm Value (PBV), while the mediating variable in this study is Return on Assets.
(ROA). This path analysis is used to determine the direct and indirect effect of Non Performing Loans (NPL) (X1), Independent Commissioners (KMI) (X2), and Capital Adequacy Ratio (CAR) (X3) on Firm Value (PBV) (Y) through Return on Assets (ROA) (Z) in banking companies listed on the Indonesia Stock Exchange for the 2016-2020 period.

5. Result

The research sample in this journal is banking companies listed on the Indonesian stock exchange in the 2016-2020 period that meet the sampling criteria that have been determined by the researchers. Based on the sample criteria, 22 banking companies were obtained as the research sample.

The Chow test is performed by comparing the results of the common effect model (CEM) with the fixed effect model (FEM) in order to select the panel data regression model to be used. Based on the results of the Chow test, the first structural model has a probability value of 0.0000 < 0.05, so the fixed effect model is selected. Then the fixed effect model was compared again with the random effect model using the Hausman test and obtained a probability result of 0.0008 < 0.05, then the fixed effect regression model was chosen for the first structural regression. For the second structural model, the results of the Chow test were obtained with a probability value of 0.0000 < 0.05, while the Hausman test results obtained a probability value of 0.1936 > 0.05, so the random effect regression model was chosen for the second structural regression.

Based on the results of the normality test, the probability value in the first structure is 2.02 > 0.05, and 0.44 > 0.05 in the second structure. Based on these results, the data is normally distributed. The results of the multicollinearity test obtained that the value of the relationship on all independent variables was < 0.8, so there were no symptoms of multicollinearity in the data. Then, the results of the autocorrelation for the first structure of the Durbin Watson value meet the equation du < dw < 4-du, so there is no autocorrelation. The panel data regression test is robust to the heteroscedasticity test, so that the test results can be ignored.

Based on the results of the Eviews 10 panel data regression analysis, the following results are obtained: first, the path coefficient value of Non Performing Loan (NPL) to Return on Assets (ROA) is -0.3080 and probability value is 0.0000 < 0.05, then Non Performing Loan (NPL) to Return on Assets (ROA) has a negative and significant effect. Second, the path coefficient value of the Independent Commissioner (KMI) to Return on Assets (ROA) is 0.0162 and the probability value is 0.0284 < 0.05, then the Independent Commissioner (KMI) to Return on Assets (ROA) has a positive and significant effect. Third, the path coefficient value of the Capital Adequacy Ratio (CAR) to Return on Assets (ROA) is 0.0211 and the probability value is 0.0791 > 0.05, so the Capital Adequacy Ratio (CAR) to Return on Assets (ROA) has a positive and insignificant effect. Fourth, The path coefficient value of the Non Performing Loan (NPL) to the Firm Value (PBV) is 1.1764 and the probability value is 0.8476 > 0.05, then the Non Performing Loan (NPL) to the Firm Value (PBV) has a positive and insignificant effect. Fifth, the path coefficient value of the Independent Commissioner (KMI) to Company Value (PBV) is 2.0785 and the probability value is 0.0006 < 0.05, then the Independent Commissioner (KMI) to Company Value (PBV) has a positive and significant effect. Sixth, the path coefficient value of the Capital Adequacy Ratio (CAR) to Firm Value (PBV) is 3.1679 and the probability value is 0.0251 < 0.05, then the Capital Adequacy Ratio (CAR) to Firm Value (PBV) has a positive and significant effect. Seventh, the path coefficient value of Return on Assets (ROA) to Firm Value (PBV) is 18.6849 and the probability value is 0.0251 < 0.05, then Return on Asset (ROA) on Firm Value (PBV) has a positive and significant effect.

The results of the mediation analysis carried out based on the theory of Baron and Kenny (1986) showed that the relationship of Non Performing Loans (NPL) to Firm Value (PBV) mediated by Return on Assets (ROA) showed a fully mediated. Meanwhile, the relationship between Independent Commissioners (KMI) and Capital Adequacy Ratio (CAR) to Firm Value (PBV) mediated by Return on Assets (ROA) shows that there is a partial mediated.

Furthermore, to show the significance level of the mediation model, it can be done by performing the Sobel Test. The test results show that the relationship of Non Performing Loans (NPL) to Firm Value (PBV) mediated by the Return on Assets (ROA) variable has a Sobel test value of 2.0416 > 1.96 and a two-tailed probability value of 0.0411 < 0.05, then there is significant mediation. Second, the relationship of Independent Commissioner (KMI) to Firm Value (PBV) mediated by the Return on Assets (ROA) variable has a Sobel test value of 1.5917 < 1.96 and a two-tailed probability value of 0.1114 > 0.05, so the mediation that occurs is not significant. Third, the relationship between Capital Adequacy Ratio (CAR) and Firm Value (PBV) mediated by the Return on Assets (ROA) variable has a Sobel test value of 1.4000 < 1.96 and a two-tailed probability value of 0.1614 > 0.05, so the mediation that occurs is not significant.
Based on the path analysis diagram, it can be proposed to test the research model hypothesis as follows:

### Table 1. Results of Direct Effect Test

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>T-stats</th>
<th>Probability</th>
<th>Note</th>
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<tr>
<td>1</td>
<td>NPL =&gt; ROA</td>
<td>-0.308098</td>
<td>0.066194</td>
<td>-4.654481</td>
<td>0.0000</td>
<td>The data support the hypothesis</td>
</tr>
<tr>
<td>2</td>
<td>KMI =&gt; ROA</td>
<td>0.016244</td>
<td>0.007284</td>
<td>2.230129</td>
<td>0.0284</td>
<td>The data support the hypothesis</td>
</tr>
<tr>
<td>3</td>
<td>CAR =&gt; ROA</td>
<td>0.021193</td>
<td>0.011926</td>
<td>1.776991</td>
<td>0.0791</td>
<td>The data support the hypothesis</td>
</tr>
<tr>
<td>4</td>
<td>NPL =&gt; PBV</td>
<td>1.176497</td>
<td>6.108488</td>
<td>0.192600</td>
<td>0.8476</td>
<td>The data do not support the hypothesis</td>
</tr>
<tr>
<td>5</td>
<td>KMI =&gt; PBV</td>
<td>2.078569</td>
<td>0.589630</td>
<td>3.525208</td>
<td>0.0006</td>
<td>The data support the hypothesis</td>
</tr>
<tr>
<td>6</td>
<td>CAR =&gt; PBV</td>
<td>3.167979</td>
<td>0.978595</td>
<td>3.237271</td>
<td>0.0016</td>
<td>The data support the hypothesis</td>
</tr>
<tr>
<td>7</td>
<td>ROA =&gt; PBV</td>
<td>18.68491</td>
<td>8.224121</td>
<td>2.271964</td>
<td>0.0251</td>
<td>The data support the hypothesis</td>
</tr>
</tbody>
</table>

### Table 2. Mediation Analysis (Baron & Kenny, 1986)

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>X -&gt; Z</th>
<th>Z -&gt; Y</th>
<th>X -&gt; Y</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NPL =&gt; ROA =&gt; PBV</td>
<td>Significant</td>
<td>Significant</td>
<td>Not significant</td>
<td>Fully Mediated</td>
</tr>
<tr>
<td>2</td>
<td>KMI =&gt; ROA =&gt; PBV</td>
<td>Significant</td>
<td>Significant</td>
<td>Significant</td>
<td>Personal Mediated</td>
</tr>
<tr>
<td>3</td>
<td>CAR =&gt; ROA =&gt; PBV</td>
<td>Not significant</td>
<td>Significant</td>
<td>Significant</td>
<td>Partial Mediated</td>
</tr>
</tbody>
</table>
Table 3. Sobel Test

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>[Sobel Test]</th>
<th>One-Tailed Probability</th>
<th>Two-Tailed Probability</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NPL =&gt; ROA =&gt; PBV</td>
<td>2.04161015</td>
<td>0.02059511</td>
<td>0.04119022</td>
<td>Significant</td>
</tr>
<tr>
<td>2</td>
<td>KMI =&gt; ROA =&gt; PBV</td>
<td>1.59175655</td>
<td>0.05571971</td>
<td>0.11143942</td>
<td>Not significant</td>
</tr>
<tr>
<td>3</td>
<td>CAR =&gt; ROA =&gt; PBV</td>
<td>1.40004727</td>
<td>0.08074958</td>
<td>0.16149916</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

Source: Sobel Calculator data processing https://www.danielsoper.com/

6. Discussion

This study intends to explore the influence and relationship between Non Performing Loans (NPL), Independent Commissioners (KMI), capital, firm value and earnings as mediating variables. In testing the first hypothesis (H1), it shows that the risk profile has a negative and significant effect on earnings. Non-Performing Loan (NPL) is an assessment of the risks inherent in the bank's business activities, both quantifiable and non-quantifiable, which have the potential to affect the bank's financial position (Uran & Wuryani, 2019). Non-Performing Loans (NPL) indicate that the greater the value of bad loans experienced by banks, the company's profit as proxied by Return on Assets (ROA) decreases. Credit disbursed by banks has the risk of default by the debtor so that it has an impact on bank losses. The results of research examining this phenomenon have been carried out by Susilawati & Nurulrahmatiah (2021), Dwihandayani (2017) and Maheswari & Suryanawa (2016).

Then, another factor that affects the company's ability to generate profits is banking governance itself. Banking management that applies the principles of openness, accountability, responsibility, independence, and fairness will encourage the formation of clean and transparent management. The application of the principles of good corporate governance is also one of the efforts to increase public trust in banking. With the implementation of good GCG, it will create a healthy business climate and encourage the improvement of banking performance itself (Darmawan et al., 2018). To apply the principles of GCG, it is necessary to have an important role for the Independent Commissioner (KMI). According to Bruno & Claessens (2010), increasing corporate governance will have a positive effect on company performance. Thus the increase in GCG management by the Independent Commissioner (KMI) will have a positive effect on company profits, as a measure of company performance. This is in line with the results of the second hypothesis test (H2), where the role of the Independent Commissioner (KMI) has a positive and significant effect on company profits.

Furthermore, the proportion of a bank's total assets that contain risk and company capital can be an indicator of a bank's ability to cover the decline in its assets as a result of losses caused by capital adequacy risk. In other words, if banks have the ability to cope with losses resulting from the decline in asset values, the banking performance will increase (Ningsih & Sari, 2019). In this study, the capital adequacy of banking is measured using the value of the Capital Adequacy Ratio (CAR) where the results of testing the third hypothesis show that CAR has an insignificant positive effect on company profits. This is also supported by research conducted by Sofyan (2019) and Fathoni (2012) who found that CAR had a positive effect on profit growth.

In relation to the company value variable, the ability of banks to manage credit risk will improve the good image of banks so as to increase investor interest in investing and increase company value as reflected in stock prices (Anggarini & Suprasto, 2018). Non Performing Loan (NPL) is used as a signal by stakeholders to determine the level of risk faced by a bank. Based on research conducted by Kadim et al., (2018) stated that Non-Performing Loans (NPL) had a significant negative effect on firm value. The results of a similar study are also supported by (Septiani & Lestari, 2016) and (Suciaty et al., 2019). However, the results of the fourth hypothesis test (H4) are different from the previous research, so it was found that Non-Performing Loans (NPL) had a significant positive effect on Firm Value (PBV). This condition is suspected because the value of NPL is not the main reference for investors in investing in the banking sector.

Meanwhile, for the Independent Commissioner (KMI) variable, the results of hypothesis testing (H5) were obtained which stated that the variable had a significant positive effect on Firm Value (PBV). This shows that the performance of management in managing the company in order to increase company profits and achieve shareholder prosperity is seen as good by investors. The welfare obtained by the shareholders will increase the value of the company. Firm
value is an investor's perception of the company, which is often associated with stock prices. The results of the hypothesis test are supported by previous research which shows that the Independent Commissioner (KMI) has a significant positive effect on Firm Value (PBV) (Ferial, 2016), (Darmawan et al., 2018) and (Fauzi et al., 2016).

Furthermore, from the capital point of view, the results of hypothesis testing (H6) are obtained that Capital Adequacy Ratio (CAR) has a significant positive relationship to Firm Value (PBV). Capital Adequacy Ratio (CAR) for banks is used as a support for the possibility of risk. The value of the Capital Adequacy Ratio (CAR) that is in accordance with regulatory provisions, which is at least 8 percent, indicates that banks are able to have sufficient funds to cover risks that may occur due to their operational activities. According to research conducted by Hantono (2017) mentioned that banking capital assessed from the Capital Adequacy Ratio (CAR) was able to increase firm value. This is because stakeholders consider that companies that have sufficient capital will be able to cover the decline in assets and generate higher profits. When banks have sufficient capital to cover the risk of their assets, investors receive this information as good news about banking performance. The company's assessment of stakeholder perceptions will increase, which is reflected in the stock price of the bank. The results of previous studies also show that the Capital Adequacy Ratio (CAR) has a positive effect on Firm Value (PBV) (Widyastuti, 2019) and (Pure & Sabijono, 2018).

Then, Return on Assets (ROA) is used to ensure the efficiency and quality of bank earnings correctly and accurately. Return on Assets (ROA) shows the company's performance to earn a profit in one closing period. Return on Assets (ROA) assessment is an assessment of the condition and ability of a bank's profitability to support its operational activities. The company's ability to earn profits is used as a good signal for stakeholders to invest because of additional cash inflows to the company which will be used as funds to develop its business or increase the amount of dividends on the profits earned. This increase in profit will provide welfare to stakeholders and increase the value of the company. The results of hypothesis testing (H7) obtained a positive and significant relationship between Return on Assets (ROA) and Firm Value (PBV). This is also supported by previous research by Wijaya & Amelia (2017), Rashid (2012) and A.S. Dewi (2018).

Based on the relationship of the Non Performing Loan (NPL) variable to Return on Assets (ROA) and Return on Assets (ROA) to Firm Value (PBV) which has been described previously, there is an interrelated relationship in these variables. The results of hypothesis testing (H8) found that the Return on Assets (ROA) variable resulted in a fully mediated which was significant for the relationship between Non Performing Loans (NPL) and Firm Value (PBV). This finding shows that the direct relationship of Non Performing Loans (NPL) to Firm Value (PBV) has a smaller effect when compared to the indirect effect through Return on Assets (ROA) first. In addition, this study also found inconsistent mediation (Kenny, 2021), where the direct effect between NPL and PBV shows an insignificant positive relationship with a coefficient value of 1.176, while the indirect effect shows a significant negative relationship, namely -5.754, while the total effect is -4.578.

The results of testing the ninth (H9) and tenth (H10) hypotheses found that there was a partial mediation associated with the Return on Assets (ROA) variable. According to Baron & Kenny (1986) partial mediation occurs because one of the conditions for the occurrence of full mediation is not fulfilled, namely the relationship of the Independent Commissioner to Firm Value has a significant effect and the relationship of CAR to ROA is not significant and CAR to PBV is significant. Based on these results, the mediation that occurs is partial mediated. Then, the results of the significance test for the partial mediated that occurred showed that the ninth (H9) and tenth (H10) hypotheses had no significant effect. Both of these relationships have a greater direct effect on firm value when compared to the indirect effect through the Return on Assets (ROA) variable.

7. Conclusion

Based on the results of testing all hypotheses, it is proven that there is a relationship between Non Performing Loans (NPL), Independent Commissioners (KMI), Return on Assets (ROA), Capital Adequacy Ratio (CAR) and Firm Value (PBV). In the first structure, Non-Performing Loans (NPL) have a significant negative effect on company profits. Furthermore, the Independent Commissioner (KMI) has a positive and significant effect on Return on Assets (ROA), and the Capital Adequacy Ratio (CAR) has an insignificant positive relationship on Return on Assets (ROA).

While the results of the research on the second structure are known that Non-Performing Loans (NPL) have a positive influence on Firm Value (PBV). Then, for the Independent Commissioner (KMI), Return on Assets (ROA) and Capital Adequacy Ratio (CAR) variables have a positive and significant relationship to Firm Value (PBV). Furthermore, the relationship between Non-Performing Loans (NPL) and Firm Value (PBV) mediated by Return on Assets (ROA) shows that it is fully mediated. Meanwhile, the relationship between Independent Commissioners
(KMI) and Capital Adequacy Ratio (CAR) to Firm Value mediated by Return on Assets (ROA) shows that there is a partial mediated.

However, of course in this study there are still some limitations or limitations that need to be improved in the future, namely first, this research is limited to a few companies in the banking sector, so it is not necessarily able to describe conditions or represent the entire banking sector. In the future, the same research can be carried out but by involving several other banking companies that are not included in this study. Second, the business processes that occur in the banking sector are currently very complex, which is marked by the development of digital banking, therefore short-term (cross-sectional) research may be inappropriate and long-term (longitudinal) sustainable research is recommended. Third, factors that affect the value of the company besides Non Performing Loans (NPL), Independent Commissioners (KMI), Capital Adequacy Ratio (CAR) and Return on Assets (ROA) there are also other factors that can affect the value of the company. Fourth, the research was carried out in conditions that were not good enough where banking performance was affected quite eccentrically due to the Covid-19 pandemic that occurred in 2020, which year was included in the research period.

This research has several managerial implications that are important to consider in order to increase firm value, namely: first, considering the results of research on Non Performing Loans (NPL), Independent Commissioners (KMI), Capital Adequacy Ratio (CAR), Return on Assets (ROA) has relationship varies with the value of the company, it is only natural for the management to pay attention to these indicators in managing the company so that the company can obtain optimal profits and increase the value of the company. Second, for investors who want to invest in banking companies, of course, they need to pay attention to the variables of Non Performing Loan (NPL), Independent Commissioner (KMI), Return on Assets (ROA) and Capital Adequacy Ratio (CAR) and Company Value (PBV) are indicators of assessment of banking financial performance.

References


Bruno, V., & Claessens, S. (2010). Corporate governance and regulation: Can there be too much of a good thing?


Mediation (David A. (n.d.).


