The Effect of Capital Adequacy Ratio (CAR), Net Profit Margin (NPM), Return on Assets (ROA), Non-Performing Loans (NPL) and Loan to Deposit Ratio (LDR) to Stock Prices in Banking Companies on the Indonesia Stock Exchange

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Abstract: This study aims to determine the effect of Capital Adequacy Ratio (CAR), Net Profit Margin (NPM), Return on Assets (ROA), Non-Performing Loans (NPL) and Loan to Deposit Ratio (LDR), simultaneous or partial share prices in the Banking Sector listed on the Indonesia Stock Exchange. The analysis method used in this study is an associative method with multiple regression analysis techniques and classical assumption testing. The data used are secondary data sourced from the Indonesian Capital Market Directory (ICMD) as well as the Annual Report from Indonesia Stock Exchange (IDX) in the form of financial statements for the period 2010-2017 in the Banking Sector listed on the Indonesia Stock Exchange. This research is expected to be a valuable input especially for investors as a consideration in making investment decisions in the capital market, also for company management is expected to be taken into consideration in making decisions on stock prices in order to maximize the Banking Sector Company Stock Prices. The results showed that simultaneously CAR, NPM, ROA, NPL and LDR had a significant effect on the Company's stock price. Partially CAR, NPM, ROA, NPL has a positive and significant effect on company value, while the LDR does not have a significant effect on the share price of Banking Sector Companies listed on the Indonesia Stock Exchange.

Keywords: Stock Price, CAR, NPM, ROA, NPL and LDR

1. Introduction

The issue of PT Bank Negara Indonesia Tbk (BNI) predicts this segment can grow to a dozen percent this year, that the ratio of non-performing loans (NPL) of Bank Negara Indonesia (BNI) commercial credit is still at a stable limit, compared to the position in the quarter III-2018 of 2.7% at the end of this year the position has been better. This condition is an effect of Bank Negara Indonesia (BNI) asset quality management strategy with selective expansion of new loans and the settlement of problem loans through remedial and restructuring. (Kontan.co.id, 2019), PT Bank Tabungan Negara Tbk (BTN). After touching 4.96% in the middle of last year, the commercial non-performing loan (NPL) position of the Bank Tabungan Negara (BTN) has dropped to below 4.25% as of the end of 2018 thanks to the risk management carried out in the past year. To optimize the potential of commercial credit, in 2019 the Bank Tabungan Negara Tbk (BTN) will increase housing supply. The Bank Tabungan Negara Tbk (BTN) projects commercial credit growth to reach around 13-16% this year, (Kontan.co.id, 2019).

Commercial Banks are financial institutions whose task is to collect funds from the community in the form of funding and channeling back to the community in the form of credit (lending). One important element for the bank is the element of performance and health, because by knowing these elements we can assess and compare the quality of a bank against another bank. These elements are important to be known by investors, the customers of current accounts, deposits, and savings that invest their funds in certain banks. To assess the soundness of the bank, it can be done with the financial statements of the bank concerned. Bank Indonesia issued a bank health assessment policy using the CAMEL method based on PBI No. 10/10/2004. CAMEL which stands for Capital, Asset Quality, Management, Earning and Liquidity. CAMEL is also used as an indicator in ranking and predicting the prospect of a bank in the future, (Syahputra & Ahsanul Fuad Saragih, 2018).

The stock price of a company reflects the value of the company in the eyes of the public, if the stock price of a company is high, then the value of the company in the eyes of society is also good and vice versa. Therefore stock prices are very important for the company (Syahputra & Ahsanul Fuad Saragih, 2018). For companies that go public, an important element of company value is stock prices, so in financial literature known as the stock market value, (Syahputra & Ahsanul Fuad Saragih, 2018) Company value / stock price can provide maximum shareholder prosperity if stock prices increase. The higher the share price of a company, the higher the prosperity of shareholders. The average value of Capital Adequacy Ratio (CAR), banking in 2014 and 2015 amounted to 15.53% and 18.04%, Capital Adequacy Ratio (CAR), which was
obtained by banks in that year above the provisions of Bank Indonesia, which stipulated a minimum CAR ratio by 8%. While the NPL obtained in that year is below the banking provisions, this indicates that the performance of the banking sector when viewed from the Capital Adequacy Ratio (CAR) and Non-Performing Loans (NPL) is quite good. Also seen is Return on Assets (ROA) which shows that the profits achieved for the years are above 15%. LDR is a comparison between loans channelled with Third Party Funds collected by banks (Demand Deposits, Savings and Deposits). A good loan to deposit ratio (LDR) in the range of 80 - 110%, the higher Return on Assets (ROA) shows the ability of banks to generate better profits, which means that the bank's performance gets better so that it can affect bank stock prices, (Syahputra & Ahsanul Fuad Saragih, 2018). Research conducted (Syahputra & Ahsanul Fuad Saragih, 2018) concerning Analysis of Bank Soundness with the CAMEL method at Bank Rakyat Indonesia (Persero) Tbk for the period 2010-2014, said to Bank Rakyat Indonesia, indicating that the capital of CAR (Capital Adequacy Ratio) in this bank was said to be healthy because the presentation of results was above the Bank Indonesia regulation standard year 2004 which is 12%, productive asset quality factor with NPL ratio (Non Performing Loan) shows a presentation of less than 3%, which means the smaller the NPL, the lower the risk of bad credit borne by the bank and the healthier quality of productive assets, Management Factors with NPM ratios, (Net Profit Margin) obtaining a fairly healthy predicate means that the manager in managing and controlling the bank must be increased to produce maximum profit, profitability with ROA and BOPO ratio in healthy predicate and liquidity factor with loan to deposit ratio with healthy predicate. The difference between this research and the previous one lies in the object and the research period, namely at PT. Bank Artos Indonesia Tbk 2014-2017 period, (Syahputra & Ahsanul Fuad Saragih, 2018).

Banking is a financial institution engaged in financial services. From the background description above, the writer wants to know the role of CAMEL ratio analysis in an efficient way to measure the financial health performance of the bank and have an impact on the price of its shares. Based on this, the authors are interested in conducting research with the title "Effect of Capital Adequacy Ratio (CAR), Net Profit Margin (NPM), Return on Assets (ROA), Non Performing Loans (NPL) and Loan to Deposit Ratio (LDR) Against Price Shares in Banking Companies on the Indonesia Stock Exchange"

2. Theoretical Framework and Development of Hypothesis

2.1 Definition of Banks

Banking is everything related to banks, including institutions, business activities, and ways and processes in carrying out their business activities (OJK, 2017), so that it can be defined as follows:

1) Banks are business entities that collect funds from the public in the form of deposits and distribute them to the public in the form of loans and / or other forms in order to improve the standard of living of the community (OJK, 2017)
2) Commercial Banks are banks that carry out conventional business activities and / or based on sharia principles which in their activities provide services in payment traffic. (OJK, 2017)
3) Rural Bank is a bank that conducts business activities conventionally or based on sharia principles which in its activities do not provide services in payment traffic. (OJK, 2017)
4) Conventional Banks are banks that carry out their business activities conventionally and based on their types consisting of Conventional Commercial Banks and Rural Credit Banks, (OJK, 2017)
5) Sharia Banks are banks that carry out their business activities based on Sharia Principles and according to their types consist of Sharia Commercial Banks and Sharia People Financing Banks (OJK, 2017).
6) Sharia Principle is the principle of Islamic law in banking activities based on a fatwa issued by an institution that has authority in establishing fatwas in the field of sharia (OJK, 2017).

2.2 Efficient Market Theory

Fama, (1970) explains that efficient markets are a market condition where stock market prices reflect perfectly all available information. In addition, market prices also react quickly to new information reflected in changes in stock prices. The key to measuring information efficiently is by investigating the relationship between stock prices and accounting information. But which information should be used to assess an efficient market? (Fama, 1970), (F.Fama, 2013), (Brown, Lo, & Lys, 1999) states that there are three main forms of efficient markets, including: weak form, weak market, semi-strong form and strong form efficient market (strong form).

2.3 Relevance of Value of Accounting Information

Research on value relevance is a study to determine whether there is a relationship between a value in financial statements and stock prices in the capital market. Financial statements must be relevant and reliable. Financial statements are said to be relevant if they can be used to predict a business decision (predictive value) and confirm the prediction that has been made (confirmatory value). Financial statements are said to be relevant when the numbers in the financial statements have a strong relationship with the value of the company (Barth, Beaver, & Landsman, 2001), (Hodder, Hopkins, Wahlen, & Zimmerman, 2006), (Brimble & Hodgson, 2007). (Holthausen & Watts, 2001) in “The relevance of the value relevance of the literature for financial standard settings” the research on value relevance is divided into three, namely: a. Relative Association studies (Comparing the relationship between the market value of land and alternative size bottom line. For example research that investigates the relationship between earnings and stock prices), b. Incremental association studies (Investigating whether certain figures in financial statements are useful in explaining stock market values and returns), c. Marginal information content studies (This study investigates
whether certain accounting numbers add to the collection of information available to investors.

2.4 Ohlson's Valuation Model

Model James Ohlson, (1995) is the best known of the value relevance model that aims to formulate the relationship between accounting values and firm value. Ohlson's model itself is a model in accounting that includes a measurement model that is concerned with the fundamental values of financial information. Ohlson's model is a strong theoretical framework for evaluating markets based on basic accounting variables, and other types of information that may be relevant in predicting company value. However, the Ohlson model is a simple model. This Ohlson model assumes that investors are neutral to risk, accounting is not biased, has clean surplus, there is no detailed role in accounting, there is no information asymmetry, tax rates faced by shareholders are irrelevant, real choices are not explicitly calculated, abnormal profits and "v" evolved autoregressive (Rusdiyanto & Narsa, 2018), (James Ohlson, (1995), company value stated in stock price, can be seen from the following equation:

\[ NP_t = NB_t + \alpha_1 LA_t + VL_t \]

The equation above shows that the value of the company (\(NP_t\)) at time \(t\) is influenced Capital Adequacy Ratio (CAR), Net Profit Margin (NPM), Return on Asset (ROA), Non-Performing Loan (NPL) dan Loan to Deposit Ratio (LDR) and other information (VL) each of which is multiplied by a constant (\(\alpha_1\) and \(\alpha_2\)). Thus the function of company value can be derived as follows:

\[ NP_t = f(CAR, NPM, ROA, NPL, LDR, VL) \]

Model valuates James Ohlson, (1995) surprising because it was derived simply, but managed to eliminate the necessity of predicting dividends in calculating the value of the company with a valuation that is identical to the present value of all expectations dividends, (Rusdiyanto & Narsa, 2018).

2.5 Research Framework

Based on the background description, theoretical basis and previous research, the framework of this research can be described as follows:

![Picture 2-1: Research Framework]

\[ \text{Research Framework} \]

2.6 Company Value / Stock Price

Company value is the result of investor perception in observing a company as reflected in the market price of the company's stock. The company's stock price is a market reaction to the overall condition of the company that describes the wealth of shareholders / companies as a result of investment decisions, funding and asset management that are realized in the form of company stock prices (Narsa & Pratiwi, 2012), (Rusdiyanto & Narsa, 2018), (T. Y. Sari & Ridwan, 2017), (Anastassia & Firianti, 2014), (Azura, Sofia, & Nurhasanah, 2018), (Romli, Wulandari, & Pratiwi, 2017), (Hamidah, Maryadi, & Ahmad, 2018), (Ardiangsyah & Isbanah, 2017), (Astuti, 2010), (Anisma, 2012), (Asghar, Zulfiqar, Shah, Hamid, & Suleman, 2011), (Dewi, Nurmala, Adhi, & Brummer, 2018), (Satriawan, 2017), (Ilniyono, 2017), (Priana & Rm, 2017), (Jondri & Rohmawati, 2017), (Trimono, Maruddani, & Ispiyanti, 2017), (Septiawan, 2016), (Mahliindiani, Maiyatri, & Yozza, 2017), (Malau, 2018), (R. Sari, 2018), when the stock price is high, it means that the active stock is traded, so the dealer will not keep the stock for too long.

2.7 Capital Adequacy Ratio (CAR)

Capital Adequacy Ratio (CAR) is also commonly referred to as the capital adequacy ratio, which means the amount of own capital needed to cover the risk of losses arising from planting risk-bearing assets and financing all fixed assets and bank investments. The Capital Adequacy Ratio (CAR) or often called the Minimum Capital Provision Need in accordance with Bank Indonesia regulations is said to be healthy if the bank has a minimum Capital Adequacy Ratio (CAR) ratio of 8%. The greater the Capital Adequacy Ratio (CAR), the greater the bank profits. In other words, the smaller the risk of a bank, the greater the profit obtained by the bank, a ratio that shows how much the total assets of the bank contain elements of risk (credit, participation, securities, bills on other banks) which are funded by the bank's own capital, besides obtaining funds from sources outside the bank (Syahputra & Ahsanul Fuad Saragih, 2018).

Capital Adequacy Ratio (CAR), which is the ratio of bank performance to measure the capital adequacy owned in supporting assets that contain or produce risks, for example loans given and placements with other banks. Capital Adequacy Ratio (CAR), shows the role of capital that is quite important in the banking business because the operational activities of the bank run smoothly if the bank is in an adequate capital condition. Bank Indonesia (now OJK) has set a Capital Adequacy Ratio (CAR), or a bank's Minimum Capital Adequacy Ratio of at least 8%. Besides the Capital Adequacy Ratio (CAR), bank health can also be measured based on bank liquidity. Liquidity is an indicator that measures a bank's ability to fulfill or pay its obligations that must be fulfilled immediately (E. Wijaya & Amelia, 2017), (Elvira Azwan, 2016), (Sani, Amboningtyas, & Yulianeu, 2016), (Yundi & Sudarsono, 2018), (Setiani, Gagah, & Fathoni, 2018), (Suyono, Chandra, & Irawati, 2017), (Akbar, P, & Djazuli, 2018), (Sani et al., 2016), (Yundi & Sudarsono, 2018), (Setiani et al., 2018), (Elvira Azwan, 2016), (Suryansyah & Rusdiyanto, 2016), (Rusdiyanto & Narsa, 2018), (Satriawan, 2016), (Mahliindiani, Maiyatri, & Yozza, 2017), (Malau, 2018), (R. Sari, 2018), when the stock price is high, it means that the active stock is traded, so the dealer will not keep the stock for too long.

2.8 Determinant Factors of Stock Price

The determinant factors of stock price are based on the capital and liquidity of the bank. The capital adequacy of the bank is measured by capital adequacy ratio (CAR) which is the ratio of bank's own capital to total assets. The higher the CAR ratio, the better the bank's capital adequacy. Bank liquidity is measured by liquidity ratio (LDR) which is the ratio of liquidity to total assets. The higher the LDR ratio, the better the bank's liquidity.
Based on the description above, the research hypothesis can be formulated as follows:

H1: CAR has a positive influence on stock prices

2.8 Net Profit Margin (NPM)

Net Profit Margin (NPM) management of a bank will determine whether or not a bank is healthy, considering this, the management of a bank's management gets great attention in assessing the soundness of the bank, a bank is expected to create and maintain health, assess aspects of management Net Profit Margin (NPM) ratio. According to (Syahputra & Ahsanal Fuad Saragih, 2018), Net Profit Margin is a "ratio used to measure a bank's ability to generate net income from its main operating activities", (Hermanto, Rahayu, & Yudi, 2018), (Piu, Murni, & Untu, 2018), (Erdawati & Bachtiar, 2018), (Landjang & Tumiwa, 2017), (Yanti & Ibrahim, 2018), (Faruq & Agista, 2014), (Sholikati, 2018), (Jamil, Amin, & Junaidi, 2018), (Pratiwi & Kurniawan, 2017), (Ramadini, Mardani, & Wohono, 2017), (Wati, Susyanti, & Salim, 2017), (Syahputra, 2018), (Putri, Marisiwi, & Mustofa, 2018), (Hermina & Wufron, 2017), (Umar & Mauliatun, 2018), (Panorama, 2018), (Fahruosi, 2018), (Agustianata, 2018), (Bakri, 2018), (Wiyati, 2018), (Muzarlis, Efni, & Savitri, 2016) so that this assessment is based on the Non Profit Margin (NPM) set by Bank Indonesia. Based on the description above, the research hypothesis can be formulated as follows:

H2: NPM has a positive influence on stock prices.

2.9 Return on Assets (ROA)

Return on Assets (ROA) is an analysis of the bank's profitability ratio is the ratio used to measure the level of business efficiency and profitability achieved by the bank concerned, (Sani, Ambonngtyayias, & Yulianeu, 2018), (Suryansyah & Rusdiyanto, 2016), (Cahya & Mifti, 2018), (Syahputra & Ahsanal Fuad Saragih, 2018), (Hermanto et al., 2018), (Piu et al., 2018), (Erdawati & Bachtiar, 2018), (Landjang & Tumiwa, 2017), (Yanti & Ibrahim, 2018), (Faruq & Agista, 2014), (Sholikati, 2018), (Hartono & Diasyah, 2018), (Jamil et al., 2018), (Pratiwi & Kurniawan, 2017), (Ramadini et al., 2017), (Fitri, 2018), (Wati et al., 2017), (Syahputra, 2018), (Putri et al., 2018), (Umar & Mauliatun, 2018), (Panorama, 2018), (Fahruosi, 2018), (Agustianata, 2018), (Bakri, 2018), (Wiyati, 2018), (Naftali, Saerang, & Tulung, 2018), Based on the description above, the research hypothesis can be formulated as follows:

H3: ROA has a positive influence on stock prices.

Non-Performing Loan (NPL)

Non-Performing Loans (NPL) reflect the amount of credit risk faced by banks, the smaller the Non-Performing Loan (NPL), the smaller the credit risk borne by the bank. Banks in providing credit must analyze the ability of the debtor to repay its obligations. After credit is granted, banks must monitor the use of credit and the ability and compliance of the debtor in fulfilling obligations. The Bank conducts reviews, evaluations, and binding of collateral to minimize credit risk (Syahputra & Ahsanal Fuad Saragih, 2018). Credit risk (default risk) can also occur due to failure or inability of the customer to return the amount of the loan received from the bank and its interest according to a predetermined or scheduled time period. (Syahputra & Ahsanal Fuad Saragih, 2018). According to (Syahputra & Ahsanal Fuad Saragih, 2018), Non-Performing Loans (NPLs are loans that do not fulfill installment schedules so that arrears occur. Non-Performing Loans (NPLs can be interpreted as loans that experience difficulty repayment due to intentional factors and or due to external factors beyond the debtor's control ability.

Non-performing loans (NPL) is a ratio that presents the risks that are owned by a bank. The ratio of non-performing loans shows that the ability of bank management to manage problem loans provided by banks. So that the higher the ratio, the worse the quality of bank credit that causes the number of problem loans to increase, the greater the likelihood of a bank in problematic conditions and allowing the achievement of profits to be lower, (Syahputra & Ahsanal Fuad Saragih, 2018). Credit in this case is credit given to third parties excluding credit to other banks. A bank that has good performance reflected in the low Non-performing loan (NPL) is assumed to want to show its good performance to get attention from stakeholders. From the above explanation, the following hypothesis can be formed:

H2: NPL has a positive effect on stock prices.

2.10 Loan to Deposit Ratio (LDR)

According to Bank Indonesia Circular No 6 / DPNP dated May 31, 2004 Loan to Deposit Ratio (LDR) represents the ratio of loans to third party funds (Demand Deposits, Savings, Certificates of Deposits, and Deposits). According to (Syahputra & Ahsanal Fuad Saragih, 2018), Loan to Deposit Ratio (LDR) Loan to Deposit Ratio (LDR) is a comparison between the total credit provided with the total Third-Party Funds that can be collected by the bank. According to (Syahputra & Ahsanal Fuad Saragih, 2018).Loan to Deposit Ratio (LDR) is a ratio to measure the composition of the amount of credit given compared to the amount of public funds and own capital used. The standard used was based on Bank Indonesia for the Loan to Deposit Ratio (LDR) ratio is 80% to 110%. If the ratio of the loan to deposit ratio (LDR) of a bank is below 80% (for example 70%), it can be concluded that the bank can only channel 70% of all funds collected. If the ratio of the bank's Loan to Deposit Ratio (LDR) reaches more than 110%, it means that the total credit provided by the bank exceeds the funds collected. The higher the Loan to Deposit Ratio (LDR) shows the riskier conditions for bank liquidity.

Loan to Deposit Ratio (LDR) which is the ratio of credit given to funds received by the bank concerned. The amount of the Loan to Deposit Ratio (LDR) will affect profits through the creation of credit. The greater the distribution of funds in the form of credit compared to deposits or deposits of the public in a bank brings the consequences of the greater the risk that must be borne by the bank concerned. According to Bank Indonesia Regulation No.3 / 30 / DPNP /
2000 healthy LDR values range from 80-100% (Elvira Azwan, 2016), (Sani et al., 2016), (Elvira Azwan, 2016), (Verawati, Siahaan, & Susanti, 2016), (Suyono et al., 2017), (Sani et al., 2016). Based on the description above, the research hypothesis can be formulated as follows:

H0: LDR has a positive influence on stock prices.

3. Research Methods

Types of Research
The type of research used in this research is explanatory research with its quantitative approach. According to (Handayani, Susyanti, & Slamet, 2018) “explanatory research method is a research method that intends to explain the position of the variables studied and the influence of one variable with another variable.” Quantitative methods according to (Handayani et al., 2018) is “research that seeks to understand and solve problems based on positive or empirical, namely emphasizing testing on theory through measuring research variables with numbers and analyzing data with statistical analysis. In this case the research was conducted to analyze the effect of CAR, NPM, ROA, NPL and LDR on the share price of a banking sector company.

Population and Research Samples
The sample is part of the number and characteristics possessed by the population. The sampling technique used in this study is purposive sampling. Purposive sample is a sampling technique for determining samples with certain considerations (Handayani et al., 2018). The data used as samples are stock prices, CAR, NPM, ROA, NPL and LDR. The number of samples in this study were 1,280 of the 4 banking sector companies of Persero Tab which were listed on the Indonesia Stock Exchange with the period 2010 to 2017.

Data collection technique
The library technique in this study is in the form of data obtained from various literature such as books, journals, newspapers, the internet and others related to the research aspects in an effort to obtain valid data. In addition, by using the documentation technique used in this study in the form of data search in the form of stock price reports, publication financial reports in the form of CAR, NPM, ROA, NPL and LDR ratios from 2010-2017. The method used in data collection is done online, namely by accessing www.yahooofinance.com (stock price report) www.ojk.go.id and www.bi.go.id (Financial reports with ratios, CAR, NPM, ROA, NPL and LDR) and access to other sites related to the problem of this research.

Operational Definition of Variables
This study uses ten types of variables to produce a regression model in measuring the relevance of the value of corporate accounting information. The variables used in this study include:

1) Dependent Variable
In this study, the dependent variable is the value of the company proxied by the stock market price (Knot) at the end of the month. The stock market price is the price or value of shares that occur in the capital market at a specified time point based on market demand and supply (Malau, 2018), (Rusdiyanto & Narsa, 2018).

2) Independent Variable
a) Capital Adequacy Ratio (CAR) is a capital adequacy ratio that shows the ability of banks to provide funds that are used to overcome the possible risk of losses. This ratio is important because by maintaining a Capital Adequacy Ratio (CAR) at a safe limit of at least 8%, it also protects customers and maintains overall financial system stability, (Setiani et al., 2018), (Elvira Azwan, 2016), (Suyono et al., 2017), (Yusuf, 2018), (Akbar et al., 2018), (Rusdiyanto & Suryansyah, 2015), (Suryansyah & Rusdiyanto, 2016). (Sani et al., 2018), (Naftali et al., 2018), (Witjaksono, Ariyanto, & Lesmana, 2014), (Armereo, 2015), (Imnda Firmyantys Pertivi, 2017), (Murni & Ramulangi, 2018), (Cahya & Mfidil, 2018), (Syahputra & Ahsanul Fauad Saragih, 2018), (Hermanto et al., 2018), (Pui et al., 2018), (Erda wati & Bachtir, 2018), (Landjag & Tumiwa, 2017), (Yanti & Ibrahim, 2018), (Faruq & Agista, 2014), (Sholikati, 2018), (Hartono & Diasyasyah, 2018), (Pratiwi & Kurniawan, 2017), (Ramadini et al., 2017), (Fitr, 2017), (Wati et al., 2017), (Sutrisno, 2017), (Suprihati et al., 2018), (Putri et al., 2018), (L. Wijaya & MN, 2018), (Hermina & Wufron, 2017), (Umar & Mauliutun, 2018), (Panorama, 2018), (Poewranti & Kartika, 2018), (Fahurosi, 2018), (Agustianata, 2018), (Bakri, 2018), (Wiyat, 2018), (Naftali et al., 2018), so that this assessment is based on the Capital Adequacy Ratio (CAR) set by Bank Indonesia, the calculation is as follows:

\[
\text{CAR} = \frac{\text{Capital}}{\text{Risk Weighted Assets}} \times 100\%
\]

b) Net Profit Margin (NPM) is a "ratio used to measure a bank's ability to generate net income from its principal operating activities", (Hermanto et al., 2018), (Pui et al., 2018), (Erda wati & Bachtir, 2018), (Landjag & Tumiwa, 2017), (Yanti & Ibrahim, 2018), (Faruq & Agista, 2014), (Sholikati, 2018), (Jamil et al., 2018), (Pratiwi & Kurniawan, 2017), (Ramadini et al., 2017), (Wati et al., 2017), (Sutrisno, 2017), (Suprihati et al., 2018), (Putri et al., 2018), (Hermina & Wufron, 2017), (Umar & Mauliutun, 2018), (Panorama, 2018), (Poewranti & Kartika, 2018), (Fahurosi, 2018), (Agustianata, 2018), (Bakri, 2018), (Wiyat, 2018), (Muzarlis et al., 2016) so that this assessment is based on the Non Profit Margin (NPM) set by Bank Indonesia, the calculation is as follows:

\[
\text{NPM} = \frac{\text{Operating income}}{100}\%
\]

c) Return on Assets (ROA) This ratio is used to measure the effectiveness of banks in obtaining overall profits, which are obtained from net income after tax divided by total assets, (Setiani et al., 2018), (Sani et al., 2016), (Elvira Azwan, 2016), (Suyono et al., 2017), (Yusuf, 2018), (Akbar et al., 2018), (Rusdiyanto & Narsa, 2018), (Suryansyah & Rusdiyanto, 2016), (Rusdiyanto & Suryansyah, 2015), (Cahya & Mfidil, 2018), (Syahputra & Ahsanul Fauad Saragih, 2018), (Hermanto et al., 2018), (Pui et al., 2018), (Erda wati & Bachtir, 2018), (Landjag & Tumiwa, 2017), (Yanti & Ibrahim, 2018), (Faruq & Agista, 2014), (Sholikati, 2018), (Hartono & Diasyasyah, 2018), (Jamil et al., 2018), (Pratiwi & Kurniawan, 2017), (Ramadini et al., 2017), (Fitr, 2017), (Wati et al., 2017), (Sutrisno, 2017), (Suprihati et al., 2018), (Putri et al., 2018), (Hermina & Wufron, 2017), (Umar & Mauliutun, 2018), (Panorama, 2018), (Fahurosi, 2018), (Agustianata, 2018), (Bakri, 2018), (Wiyat, 2018), (Muzarlis et al., 2016) so that this assessment is based on the Non Profit Margin (NPM) set by Bank Indonesia, the calculation is as follows:
(Panorama, 2018), (Fahrurosi, 2018), (Agustianata, 2018), (Bakri, 2018), (Wiyati, 2018), (Naftali et al., 2018), Return On Assets (ROA) is measured using the following calculations

\[
\text{Net Income} \quad \text{ROA} = \frac{\text{Total Asset}}{
\]

d) Non-Performing Loan (NPL) Assessment of asset quality is an assessment of the condition of bank assets and the adequacy of credit risk management. This means that the Non-Performing Loan (NPL) is an indication of a problem in the bank which if it does not immediately get a solution it will have an impact on the bank (Elvira Azwan, 2016), (Suyono et al., 2017), (Yusuf, 2018), (Akbar et al., 2018), (Syahputra & Ahsanul Fuad Saragih, 2018), Net Profit Margin merupakan “rasio yang digunakan untuk mengukur kegiatan operasi pokoknya”, (Hermano et al., 2018), (Piu et al., 2018), (Erdawati & Bachtiar, 2018), (Landjang & Tumiwa, 2017), (Yanti & Ibrahim, 2018), (Faruq & Agista, 2014), (Sholikati, 2018), (Jamal et al., 2018), (Pratiwi & Kurniawan, 2017), (Ramadini et al., 2017), (Wati et al., 2017), (Sutrisno, 2017), (Suprihati et al., 2018), (Putri et al., 2018), (Hermina & Wufron, 2017), (Umar & Mauliatun, 2018), (Panorama, 2018), (Fahrurosi, 2018), (Agustianata, 2018), (Bakri, 2018), (Wiyati, 2018), (Muzarlis et al., 2016) (Sani et al., 2018), (Suryansyah & Rusdiyanto, 2016), (Murni & Rarulangi, 2018), (Syahputra & Ahsanul Fuad Saragih, 2018), (Hermano et al., 2018), (Piu et al., 2018), (Erdawati & Bachtiar, 2018), (Landjang & Tumiwa, 2017), (Yanti & Ibrahim, 2018), (Faruq & Agista, 2014), (Sholikati, 2018), (Hartono & Danielsyah, 2018), (Pratiwi & Kurniawan, 2017), (Ramadini et al., 2017), (Wati et al., 2017), (Sutrisno, 2017), (Suprihati et al., 2018), (Putri et al., 2018), (Hermina & Wufron, 2017), (Umar & Mauliatun, 2018), (Panorama, 2018), (Poerwanti & Kartika, 2018), (Fahrurosi, 2018), (Agustianata, 2018), (Bakri, 2018), (Wiyati, 2018), (M. A. Sari & Amboningtyas, 2018), so that this assessment is based on the Non Performing Loan (NPL) set by Bank Indonesia, the calculation is as follows: (Bank Indonesia Circular Letter No.6/23/ DPNP dated 31 May 2004):

\[
\text{LDR} = \frac{\text{total credit to third parties not banks}}{\text{total credit to third parties}} \times 100%
\]

Analysis Model

The analysis model used in this study tests the effect of independent variables on the dependent variable in this study using multiple regression analysis, which is an analysis to express linear relationships between two or more variables. The following is the empirical model of the research:

\[
NPr=\alpha+\beta_1\text{CAR}+\beta_2\text{NPM}+\beta_3\text{ROA}+\beta_4\text{NPL}+\beta_5\text{LDR}...........(1)
\]

Analysis Techniques

To answer the problem statement, the work that will be carried out in this study is as follows:

a) Calculating the ratio of banking financial statements in accordance with the operational definition of the variable.

b) Regulate according to the analysis model and test the significance of each coefficient and carry out the analysis

4. Research Results And Discussion

4.1 Research Results

Before testing the hypothesis, it is necessary to describe the characteristics of the research data by using descriptive analysis to give an overview of the variable variables under study. Data normality test is also done to detect the distribution of research data used. From the results of the sample selection, 1,280 data were obtained from 4 state-owned banking sector companies listed on the Indonesia Stock Exchange that met the predetermined criteria. The following are descriptive statistical data from the sample.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock price</td>
<td>128</td>
<td>870,00</td>
<td>1,275,00</td>
<td>5721,1484</td>
<td>3395,3965</td>
</tr>
<tr>
<td>CAR</td>
<td>128</td>
<td>12,02</td>
<td>22,96</td>
<td>17,3105</td>
<td>2,2897</td>
</tr>
<tr>
<td>NPM</td>
<td>128</td>
<td>4,32</td>
<td>9,78</td>
<td>6,2848</td>
<td>1,4634</td>
</tr>
<tr>
<td>ROA</td>
<td>128</td>
<td>1,01</td>
<td>5,15</td>
<td>2,9575</td>
<td>1,0825</td>
</tr>
<tr>
<td>NPL</td>
<td>128</td>
<td>0,31</td>
<td>3,83</td>
<td>1,3427</td>
<td>1,0967</td>
</tr>
<tr>
<td>LDR</td>
<td>128</td>
<td>61,89</td>
<td>116,29</td>
<td>90,2520</td>
<td>13,3672</td>
</tr>
</tbody>
</table>

From the table above, the LDR has a high value rather than CAR, NPM, ROA, NPL. Whereas NPL and ROA are far lower than CAR, and NPLs and LDRs contain more components of the fair value of financial assets and

Table 3-1: Deskripsi Variabel

<table>
<thead>
<tr>
<th>Information</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPr</td>
<td>Stock price</td>
</tr>
<tr>
<td>a</td>
<td>Constants</td>
</tr>
<tr>
<td>β1, β2, β3</td>
<td>Variable regression coefficient NPr, CAR, NPM, ROA, NPL, LDR</td>
</tr>
<tr>
<td>CAR</td>
<td>Capital Adequacy Ratio</td>
</tr>
<tr>
<td>NPM</td>
<td>Non Performing Loan (NPL)</td>
</tr>
<tr>
<td>ROA</td>
<td>Return On Asset</td>
</tr>
<tr>
<td>NPL</td>
<td>Non Performing Loan</td>
</tr>
<tr>
<td>LDR</td>
<td>Loan to Deposits Ratio</td>
</tr>
<tr>
<td>e</td>
<td>Standard Error</td>
</tr>
</tbody>
</table>

Table 4-1: Statistik Deskriptif

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
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<td>13,3672</td>
</tr>
</tbody>
</table>

From the table above, the LDR has a high value rather than CAR, NPM, ROA, NPL. Whereas NPL and ROA are far lower than CAR, and NPLs and LDRs contain more components of the fair value of financial assets and
liabilities than inflation, CAR and LDR. The increase in value in succession of CAR and NPM shows that it contains information about the relevance of the fair value faced by banking companies related to their financial assets and liabilities. So, in other words CAR, NPM, ROA, NPL and LDR like so far. CAR, NPM, ROA, NPL and LDR will have an effect on the economic situation which tends to fluctuate and be unstable towards the stock prices of banking sector companies listed on the Indonesia Stock Exchange.

4.2 Regression Analysis

All research variables are declared stationary at degree 0, then these variables can be directly used in the regression equation. The following are the regression results of the research variables:

<table>
<thead>
<tr>
<th>Table 4-2: Regression Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>CAR</td>
</tr>
<tr>
<td>NPM</td>
</tr>
<tr>
<td>ROA</td>
</tr>
<tr>
<td>NPL</td>
</tr>
<tr>
<td>LDR</td>
</tr>
<tr>
<td>R</td>
</tr>
<tr>
<td>R Square</td>
</tr>
<tr>
<td>F</td>
</tr>
<tr>
<td>Sig.F</td>
</tr>
</tbody>
</table>

Bound Variables: Stock prices (NB)

5. Discussion

The regression coefficient for the CAR variable is 397.587 and is positive, this explains that every change of one percent in the temporary CAR of the LDR, Non-Performing Loan (NPL), NPM and Return on Assets (ROA) is assumed to be constant, the share price will experience a change namely an increase of 397.587. For the CAR variable obtained by the number t count of 3.775> t table at α = 0.05 at 0.000 and the significance level is smaller than α = 0.05 which is equal to 0.000, thus H1 is rejected, meaning that there is a positive and significant effect of the CAR variable on stock prices. (CAR) has a positive effect on stock prices. This means that an increase in CAR will be followed by an increase in firm value / stock price, whereas a decrease in CAR will be followed by a decrease in firm value / stock price. The regression coefficient for NPM variable is 397.587 and is positive, this explains that every change of one percent in the temporary CAR of the LDR, Non-Performing Loan (NPL), NPM and Return on Assets (ROA) is assumed to be constant, the share price will experience a change namely an increase of 397.587. For the CAR variable obtained by the number t count of 3.775> t table at α = 0.05 at 0.000 and the significance level is smaller than α = 0.05 which is equal to 0.009, thus H2 is accepted, meaning there is a positive and significant effect of NPM variables on Company Value / stock price. The NPM variable has a positive effect on Company Value / stock price. This means that an increase in NPM will be followed by an increase in company value, whereas a decrease in NPM will be followed by a decrease in the value of the company. The test results show that NPM has a positive effect on firm value. The results of this study are not in accordance with previous estimates and are not in accordance with investment theory. The results of this study provide an empirical understanding for management that if the NPM goes up, then the value of the company will decrease, this condition illustrates that the acquisition of increased NPM has an impact on decreasing the value of the company. From the results of the variable description, the current level of NPM for banking companies is still low, which is below 5%. Banking companies always maintain that the amount of NPM is below 5%, this is also the reason why in this study NPM has a significant effect on company value. Poor credit quality will increase risk, especially if credit is given by not using the precautionary principle and expansion in the provision of uncontrolled loans so that the bank will bear greater risks. The risk is in the form of difficulties in repaying credit by debtors, which if the amount is large enough can affect the performance of the bank. The results of this study were supported by NYT Times Villa Dewy in (Murni & Rarulangi, 2018), But it is different from Santorini Dyad Lestari (2015) in (Murni & Rarulangi, 2018) The reason is that investors do not pay too much attention to the level of NPM or bad credit faced by a bank if the level of NPM faced by a bank is still below the limit set by Bank Indonesia.
The regression coefficient for the ROA variable is 1792.793 and is positive, this explains that each change is one percent at the temporary ROA while CAR, NPM, NPL, and LDR are assumed to be fixed, then the share price will change which is a decrease of 1792.793. For the ROA variable, the number \( t \) is equal to (3.594) < \( t \) table at \( \alpha = 0.05 \) of 1.72913 and the significance level is greater than \( \alpha = 0.05 \) which is 0.000, thus H3 is accepted, meaning there is a positive and significant effect of the ROA variable on company value / stock price. The variable ROA has a positive effect on Company Value. This means that the increase in ROA will be followed by an increase in the value of the company, whereas a decrease in ROA will be followed by a decrease in the value of the company. The test results show that ROA does not affect and significantly affect the value of the company. The results of this study are not in accordance with previous estimates and are not in accordance with investment theory. The results of this study provide empirical understanding for management that if ROA rises, the value of the company will increase, this condition illustrates that the acquisition of increased ROA has an impact on increasing the value of the company. These results indicate, the greater the Return on Assets (ROA) of a company has an influence and gives an attraction to investors to trust and want to invest their assets by buying shares, this causes the stock price to rise. The results of this study are supported by Santorini (2016) the reason investors do not pay too much attention to the level of Return on Assets (ROA) in investing their assets but rather look at market trends so that Return on Assets (ROA) affect the Firm Value / Stock Price.

The regression coefficient for the NPL variable is -1414.644 and is negative, this explains that each change of one percent in the NPL while CAR, NPM, ROA, and LDR are assumed to be fixed, then the share price will change which is a decrease of -1414.644. For the NPL variable, the \( t \)-count is -3.081 > \( t \) table at \( \alpha = 0.05 \) at -3.081 and the significance level is smaller than \( \alpha = 0.05 \) which is 0.003, thus H4 is accepted, meaning that there is a positive and significant effect of the NPL variable on Value Company. The NPL variable has a positive effect on Company Value. This means that an increase in NPL will be followed by an increase in company value, whereas a decrease in NPL will be followed by a decrease in the value of the company. The test results show that NPL has a positive effect on firm value. The results of this study are not in accordance with previous estimates and are not in accordance with investment theory. The results of this study provide an empirical understanding for management that if the NPL rises, then the value of the company will decrease, this condition illustrates that the increase in NPL increases resulting in a decrease in the value of the company. The results of the variable description show that at present the level of non-performing loans (NPLs) of banking companies is still relatively low, which is below 5%. Banking companies always maintain that the amount of Non-Performing Loans (NPL) is below 5%, this is also the reason why in this study Non-Performing Loans (NPL) have a significant effect on company value. Poor credit quality will increase risk, especially if credit is given by not using the precautionary principle and expansion in the provision of uncontrolled loans so that the bank will bear greater risks. The risk is in the form of difficulties in repaying credit by debtors, which if the amount is large enough can affect the performance of the bank. The results of this study were supported by NYTimes Villa Dewi, but different from Santorini Dyad Lestari (2015) The reason investors are not too concerned about the level of Non-Performing Loans (NPL) faced by a bank if the level of NPL faced by a bank is still below the limit determined by Bank Indonesia.

The regression coefficient for the LDR variable is 56.125 and is positive, this explains that every change of one percent in the LDR while CAR, NPM, ROA and NPL are assumed to be fixed, then the share price will change, namely an increase of 56.125. For the LDR variable, the \( t \)-count is 1.786 < \( t \) table at \( \alpha = 0.05 \) at 1.786 and the significance level is greater than \( \alpha = 0.05 \) which is equal to 0.077, thus H5 is rejected, meaning there is no positive and insignificant effect on the LDR variable on the value of the company. LDR variable has an effect on company value. This means that an increase in LDR will be followed by firm value, whereas a decrease in LDR will be followed by a decrease in firm value. The test results show that the LDR has a positive effect on firm value. The standard used by Bank Indonesia for the Loan to Deposit Ratio (LDR) ratio is 80% to 110%. If the ratio of the loan to deposit ratio (LDR) of a bank is below 80% (for example 70%), it can be concluded that the bank can only channel 70% of all funds collected. If the ratio of the Bank's Loan to Deposit Ratio (LDR) reaches more than 110%, it means that the total credit provided by the bank exceeds the funds collected. The higher the Loan to Deposit Ratio (LDR) shows the riskier condition of bank liquidity, on the contrary the lower the Loan to Deposit Ratio (LDR) indicates the lack of effectiveness of banks in lending so that the bank's opportunity to profit. The higher the Loan to Deposit Ratio (LDR), the higher the bank profit (assuming the bank is able to channel its credit effectively), with increasing bank profits, the bank's performance also increases. Thus, the size of the ratio of the loan to deposit ratio (LDR) of a bank will affect the performance of the bank. The results of the study state that LDR has a significant effect on firm value. The influence of the LDR is probably due to the large asset ownership of banks in Indonesia. And the second possibility is that the Bank's income is not only from interest income from loans given to the community but also from commission-based income. The results of this study were also supported by Rotate Indah Menteri (2013), Fernanda Billion (2015), Budi Poncho (2015). But this result is not in accordance with Positas (2009), Rest Iyana (2011), and Hardicante (2012) research which states that LDR has a positive and significant effect on stock prices.

The linear correlation coefficient (R) is 0.700. From this number it can be shown that the relationship between the independent variable (X) and the dependent variable (Y) is very strong because the linear correlation coefficient (R) is close to 1, 0.700 and the correlation number shows positive number (+) which means that changes in one of the Variable Values CAR, NPM, ROA, NPL and LDR are followed by changes in the other Variable Values regularly in the same direction, it is known that the value of R2 produced is 0.490 or 49.0%. This figure explains that the...
corporate value of the banking sector listed on the Indonesia Stock Exchange is influenced by factors such as CAR, NPM, ROA, NOP and LDR of 49.0%, while the remaining 51% is influenced by factors or other variables. All independent variables, namely CAR, NPM, ROA, NPL and LDR simultaneously have a significant effect (together) on Company Values. This is known from the results of the F test, the value of F obtained from the calculations that have been done is 23,473 and this value is greater than the F-table value of 2.49 and the significant value that is smaller than 0.05 is 0,000. These results fulfill the hypothesis that CAR, NPM, ROA, NPL and LDR have a significant effect on Company Values seen from the value of the stock price.

6. Conclusion

The test results show that CAR, NPM, ROA, NPL and statistical significance are increased by 5% on stock prices, while the LDR has no influence on stock prices. With regard to conclusions, the results of this study are expected to provide information to investors or potential investors to be more careful in paying attention to aspects of CAR, NPM, ROA, NPL as a consideration for investing in relation to stock prices. The results of this study are expected to be used as consideration for banking companies to make business decisions, especially those related to CAR, NPM, ROA, NPL and LDR to share prices. The business decision focuses on how much the stock returns will be given by the banking sector companies and how the banking sector companies maintain the level of capital and company liquidity so that investors can put interest in the company.

Future research should use a larger sample of companies not only in the banking sector. In addition, further research should use a longer period of time to identify the relationship between CAR, NPM, ROA, NPL and LDR on stock prices. Further research should also use audited annual financial report data so that the values of CAR, NPM, ROA,

NPL and LDR use a longer period not only for seven years. Even better, further research also examines the relevance of the capital measurement model and banking liquidity at each stage of the company cycle as in the research conducted by Black (1998)

7. Theoretical and Empirical Implications of Research Results

Based on the results of the analysis and discussion of this research which is expected to contribute to the theoretical development of investment are as follows:
1) The theory implication that can be stated in this study is that to increase the value of companies in the Capital Market can use the internal factor model of firm value.
2) The results of this study found that the increase in company value as a result of lowering NPL, as well as LDR of banking companies.

8. Research Limitations

Limitations in this study, the proposed model is an internal factor model of company value where the model in this study emphasizes the importance of assessing internal factors in determining the value of the company. There are still many variables that have not been accommodated in this model, it is necessary to add other variables that affect Company Values, such as good corporate governance, corporate behavior, Statutory Reserves (GWM), problematic earning assets or PPAP on Earning assets, adding more time long so that later it is expected that the results obtained will be more generalizable and others while external factors include monetary policy, economic growth, competition between banks and technological developments so that researchers interested in researching company value can add this variable. In addition, the other limitations lie in research objects, preferably not only in the banking industry.

References


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Umi Elan, Faculty of Economics, Universitas Gresik