Effect of Loan to Deposit Ratio, Capital Adequacy Ratio, Return On Equity, and Dividend Payout Ratio on stock prices with Bank Indonesia Interest Rates as Moderating Variables in Banking Companies on the Indonesia Stock Exchange

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Abstract — *This study aimed to analyze the effect of Loan Deposit Ratio, Capital Adequacy Ratio, Return On Equity, and Dividend Payout Ratio on stock prices with Bank Indonesia interest rates as moderating variables. The research data was collected using secondary data from the financial statements of banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period. The sample of issuers was selected by purposive sampling so that 18 companies were selected according to the criteria. The collected data is processed using the Partial Least Square (PLS) data analysis method with the help of SmartPLS software. The results show that there is no influence of Loan to Deposit Ratio, Capital Adequacy Ratio, and Dividend Payout Ratio on stock prices; there is an effect of Return On Equity on stock prices, then Bank Indonesia interest rates cannot moderate the influence of Loan to Deposit Ratio, Capital Adequacy Ratio, Return On Equity, and Dividend Payout Ratio to stock prices.*

Keywords — *Loan to Deposit Ratio, Capital Adequacy Ratio, Return On Equity, Dividend Payout Ratio, Stock Price, Bank Indonesia Interest Rate*

I. INTRODUCTION

Investment in the capital market today is increasingly attractive; this is indicated by the increasing growth in the number of investors in Indonesia. Public statistical data released by PT Kustodian Sentral Efek Indonesia (KSEI) in January 2021 showed an increase in the number of investors from 2018 until the end of 2019 1,619,372 to 2,484,354. This increase of 53.41% is still lower than the data from the end of 2019 to 2020. By 2020, the number of investors had reached 3,880,753 despite the Covid 19 pandemic. This was due to the increasing awareness of the public in investing, mainly due to the economic uncertainty of the impact of the Covid 19 pandemic. Investment in the capital market can provide a reasonably high return in a reasonably short time. Still, investment in the capital market is also inseparable from risks that can result in losses for investors.

According to Jogianto (2017: 167), the share price is the price of a share in the stock market, which is determined by market participants and is influenced by the demand and supply of shares in the capital market. A company's stock price is essential because it reflects its excellent performance, thus gaining investors' trust to invest by buying shares of the company so that the company gets additional capital to develop its business.

One factor determining the decision of potential investors to invest in a stock is the company's financial performance. A company's performance is reflected in its financial ratios, which are a consideration for potential investors to invest in a company. Thaharuddin (2019) said that investors in practice analyze many internal and external factors to assess the returns to be obtained. A banking company is one of the companies on the Indonesia Stock Exchange whose shares are traded on the capital market. Several banking companies are also included in the list of dividend-distributing companies with large values; this indicates that banking companies have good prospects in the future. Not only the distribution of dividends but the share price of banking companies also tend to increase, except during when Covid-19 pandemic. Even during a pandemic, banking companies generally can still generate profits from their operational activities. This is inseparable from good financial performance, reflected in its financial ratios.

The loan to Deposit Ratio is a comparison ratio between the number of funds disbursed in the form of credit and the number of funds collected from the public in savings and owned capital. This ratio shows the level of liquidity of banking companies, which shows the bank can pay its short-term obligations, especially when customers withdraw their funds from the bank. The composition between loans and deposits can also affect the profit level in banking companies, namely the difference between loan interest and deposit interest.

Capital Adequacy Ratio is a ratio of capital adequacy owned compared to assets with risk in banking companies. This ratio shows how much bank capital is available to bear the risks of operational activities. The higher the value of the CAR ratio, the stronger the bank's level of capital in bearing losses that may occur.

Return On Equity is a ratio used to measure net income after tax on Equity at a particular time. This ratio shows how much shareholders receive the company's profits for investments. The higher the ROE value, the better the company uses the funds invested by investors in generating profits.

The dividend Payout Ratio is a percentage of the total net profit after deducting taxes distributed to shareholders as a form of return on investment in a company. The dividend distribution action by the company will increase the demand for company shares because the number of dividends distributed can increase the rate of return on investment.

According to Boediono (2014: 176), the interest rate is the price of using investment funds. The interest rate is one indicator of whether someone will invest or save.

II. LITERATURE REVIEW

A. Stock price

According to Irham Fahmi (2013: 323), the notion of shares is evidence of participation in ownership of capital/funds in a company. The paper clearly states the nominal value, the name of the company, followed by the rights and obligations explained to each holder, and the inventory is ready for sale. According to Jogiyanto (2017: 167), the stock price is the price of a share in the stock market, which is determined by market participants and is determined by market participants. Influenced by the demand and supply of shares in the capital market. According to Ali Arifin (2004: 23), investors should be able to pay attention to the factors that affect stock prices: 1. The company's fundamental conditions. 2. Law of Supply and Demand, 3. Interest rates. 4. Foreign exchange, 5. Foreign funds on the stock exchange, 6. Stock price index, 7. News and rumors.

B. *Loan to Deposit Ratio*

According to Kasmir (2014: 225) Loan Deposit Ratio is a ratio used to measure the composition of the amount of financing/credit given compared to the number of public funds and the amount of own capital used. According to Rivai et al. (2013: 150), there are several that can affect the Loan to Deposit Ratio: 1. Events that rarely occur are short-term in nature, 2. Seasonal factors, 3. Business cycle factors, 4. Long-term events

$$\boxed{Loan\ to\ Depsit\ Ratio\ = \frac{Total\ Kredit}{Dana\ Pihak\ Ketiga}\ x\ 100}$$

C. *Capital Adequacy Ratio*

Kasmir (2012: 325) states that the Capital Adequacy Ratio (CAR) is a ratio to measure capital and allowance for write-offs in taking on credit, especially the risks that occur because interest fails to be collected. CAR is a ratio that calculates the amount of capital owned by a bank against Risk-Weighted Assets (RWA). The factors of the Capital Adequacy Ratio: 1. The number of profits earned in the past will affect the capital used in the future, 2. The minimum capital set by Bank Indonesia or the authorized government agency, 3. The number of funding sources owned by banking. The level of capital adequacy can be measured by calculating it using the following formula:

$$\boxed{CAR = \frac{Modal}{ATMR}\ x\ 100}$$

D. *Return On Equity*

Sukmawati Sukamulja (2019: 99) said Return On Equity measures the company's ability to generate net income from Equity. This ratio is significant for shareholders because it determines the rate of return on the company's shares they own. Hani (2015: 120) states that the factors influencing Return On Equity are sales volume, capital structure, and debt structure. Companies that use credit more in spending on company activities will get a high ROE value. The following formula can calculate the Return On Equity value:

$$\boxed{Return\ On\ Equity = \frac{Laba\ Bersih}{Total\ Equitas}}$$

E. *Dividend Payout Ratio*

Subramanyam (2017: 178) said that the certainty of receiving dividends, which is the return of profits to investors, is proportional to the value of the DPR (Dividend Payout Ratio), a comparison between dividends per share and earnings per share. According to Mulyawan (2015: 258), the factors that influence dividend policy are as follows: 1. The need for funds for the company, 2. Liquidity of the company, 3. The ability to borrow, 4. Restrictions in debt agreements, 5. The level of company expansion, 6. The rate of expansion of assets, 7. Stability of earnings. According to Sudana (2019: 26), the formula for calculating the Dividend Payout Ratio (DPR) is as follows:

$$\mathit{Dividen\ Payout\ Ratio}\ (\mathrm{DPR}) = \frac{\mathit{Dividen}}{\mathit{Earning\ after\ tax}}$$

F. Interest rate

According to Boediono (2014: 176), the interest rate is the price of using investment funds. The interest rate is one indicator of whether someone will invest or save. According to Herry (2021: 66), the main factors influencing the interest rate-setting size are 1. Fund requirements, 2. Competition, 3. Government policies, 4. Desired profit targets, 5. Period, 6. Quality assurance, 7. Debtor's reputation, 8. Competitive products, 9. A good relationship, 10. Third-party guarantee

To make it easier to explain a study, the researcher describes a conceptual framework that contains the relationship between variables as follows:

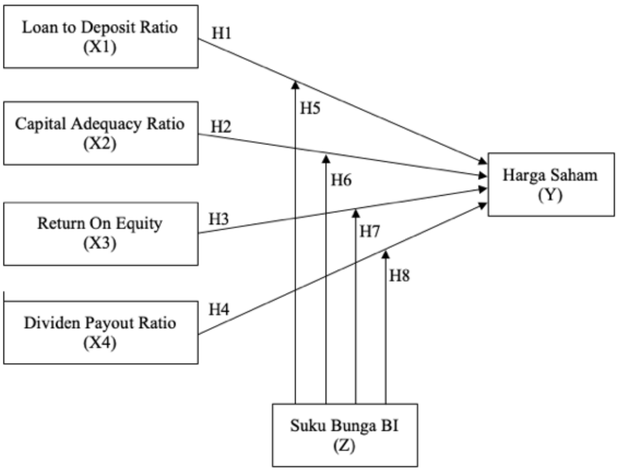


Figure 1. Conceptual Framework

III. METHOD

The research variables in this study are Loan to Deposit Ratio, Capital Adequacy Ratio, Return On Equity, Dividend Payout Ratio, and stock prices, with Bank Indonesia Interest Rates as moderating variables. The method of determining the sample in this study was using purposive sampling, with the criteria determined by the researcher, namely banking companies listed on the Indonesia Stock Exchange, publishing financial statements, and distributing dividends in the 2017-2020 period.

Table 1. Research Sample

No	Issuer Code	Company Name
1	BBRI	Bank Rakyat Indonesia (Persero) Tbk.
2	BBCA	Bank Central Asia Tbk.
3	BMRI	Bank Mandiri (Persero) Tbk.
4	BBNI	Bank BNI (Persero) Tbk.
5	BNGA	Bank CIMB Niaga Tbk.
6	BDMN	Bank Danamon Indoneisa Tbk.
7	BNII	Bank Maybank Indonesia Tbk.

8	BBTN	Bank Tabungan Negara (Persero) Tbk.
9	MEGA	Bank Mega Tbk.
10	MAYA	Bank Mayapada Internasional Tbk.
11	BJBR	Bank Pembangunan Daerah Jawa Barat
12	BJTM	Bank Pembangunan Daerah Jawa Timur
13	SDRA	Bank Woori Saudara Indonesia 1
14	BBMD	Bank Mestiba Dharma Tbk
15	AGRS	Bank IBK Indonesia Tbk.
16	BBYB	Bank Neo Commerce Tbk.
17	BNBA	Bank Bumi Arta Tbk.
18	BMAS	Bank Maspion Indonesia Tbk.

IV. RESULT AND DISCUSSION

A. Descriptive Statistics

Table 2. Descriptive Statistics

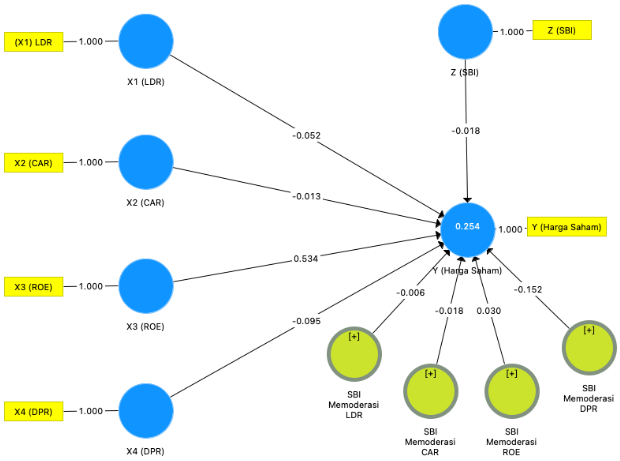
	No.	Mean	Median	Min	Max	Standard Deviation
X1 (LDR)	72	89.748	88.640	56.470	162.290	16.857
X2 (CAR)	72	22.022	21.520	14.110	46.490	5.644
X3 (ROE)	72	10.744	10.210	-22.730	21.390	7.086
X4 (DPR)	72	32.513	32.500	0.000	68.810	19.322
Z (SBI)	72	4.750	5.000	3.750	6.000	0,588
Y (Harga Saham)	72	7.307	7.346	4.905	9.200	1.280

Source: Data processed with SmartPLS, 2022

Based on table 2, it shows the minimum value, maximum value, average value (mean), and standard deviation of the variables Loan to Deposit Ratio (X1), Capital Adequacy Ratio (X2), Return On Equity (X3), and Dividend Payout Ratio. (X4), Bank Indonesia Interest Rate (Z), and share price (Y) with the following details:

1. The Loan to Deposit Ratio variable has a sample size of 72, with a minimum value of 56,470 at Bank Mega in 2017 and a maximum value of 162,290 at Bank Woori Saudara Indonesia 1 in 2020, with an average value (mean) of 89,748 with a standard deviation of 16,857.
2. The Capital Adequacy Ratio variable has a sample size of 72, with a minimum value of 14,110 at Bank Mayapada Internasional in 2017 and a maximum value of 46,490 at Bank Mestika Dharma in 2020, with an average value (mean) of 22,022 with a standard deviation of 5,644.
3. The Return On Equity variable has a sample size of 72, with a minimum value of -22,730 at Neo Commerce Bank, and a maximum value of 21,390 at Bank Mandiri, with an average value (mean) of 10,744 with a standard deviation of 7,086.
4. The Dividend Payout Ratio variable has a sample of 72, with a minimum value of 0.000 at the State Savings Bank in 2020, Bank Mayapada International in 2017, 2018, 2019, Bank Mestika Dharma in 2018, 2010, Neo Commerce Bank in 2018, 2020, Bank Maspion Indonesia 2019, 2020, and a maximum value of 68,810 at Bank Mega, with an average value (mean) of 32,513 with a standard deviation of 19,322.
5. The Bank Indonesia Interest Rate Variable has a sample of 72, with a minimum value of 3,750 in 2020 and a maximum value of 6,000 in 2018, with an average value (mean) of 4,750 with a standard deviation of 0.588.
6. The Stock Price variable has a sample of 72, with a minimum value of 4,905 at Bank IBK Indonesia in 2019 and a maximum value of 9,200 at Bank Negara Indonesia in 2017, with an average value (mean) of 7,307 with a standard deviation of 1,280.

B. Inner Model Evaluation



Source: Data processed with SmartPLS, 2022

Figure 2. Figure PLS Algorithm Calculation Model

C. Coefficient of Determination

The results of testing the inner model, which includes R Square, are:

Table 3. Coefficient of Determination

	R Square	R Square Adjusted
Y (Harga Saham)	0,254	0,146

Source: Data processed with SmartPLS, 2022

Based on the table above, it can be described that the value of R Square Adjusted on the stock price variable is 0.146; this shows that the Loan to Deposit Ratio (X1), Capital Adequacy Ratio (X2), Return On Equity (X3), and Dividend Payout Ratio (X4) can explain the stock price (Y) of 14.6% and the remaining 84.4% is explained by other variables not examined in this study.

D. Hypothesis Test Results

The next analysis after analyzing the model is hypothesis testing. This analysis compares the T-table value with the T-statistic value generated from the bootstrapping results in PLS. The hypothesis is accepted (supported) if the T-statistic value is higher than the T-table value (1.993) with a significance level of 5% or through P-value =5%, p-val=0.05 (Ghozali and Latan, 2015). The results of the smartPLS bootstrapping process can be seen in table 4

Table 4 Hypothesis Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
X1 (LDR) -> Y (Harga Saham)	-0,052	-0,022	0,122	0,429	**0,668**
X2 (CAR) -> Y (Harga Saham)	-0,013	0,015	0,133	0,102	**0,919**
X3 (ROE) -> Y (Harga Saham)	0,534	0,580	0,128	4,154	**0,000**
X4 (DPR) -> Y (Harga Saham)	-0,095	-0,108	0,158	0,600	**0,549**
Z (SBI) -> Y (Harga Saham)	-0,018	-0,029	0,115	0,158	**0,875**
SBI Memoderasi LDR -> Y (Harga Saham)	-0,006	0,009	0,125	0,046	**0,963**
SBI Memoderasi CAR -> Y (Harga Saham)	-0,018	0,001	0,138	0,128	**0,898**
SBI Memoderasi ROE -> Y (Harga Saham)	0,030	0,083	0,161	0,187	**0,851**

SBI Memoderasi DPR -> Y (Harga Saham)	-0,152	-0,169	0,148	1,025	**0,306**

Source: Data processed with SmartPLS, 2022

From table 4, it can be seen that the P-Values between the effect of ROE on stock prices is 0.000, which means that it has a significant effect with a positive direction. The P-Values values between the influence of LDR, CAR, and DPR on stock prices are 0.668, 0.919, and 0.549, respectively, which are more significant than 0.05, which means LDR, CAR, and DPR do not affect stock prices. The P-Values value of SBI moderates LDR to share price by 0.963, SBI moderates CAR to share price by 0.898, SBI moderates ROE to share price by 0.851, SBI moderates DPR to share price by 0.306, where this value is greater than 0.05 which is meaning that SBI cannot moderate the relationship between LDR, CAR, ROE, and DPR on stock prices.

Effect of Loan to Deposit Ratio on stock prices of banking companies on the Indonesia Stock Exchange.
Based on the results of table 4.9 analysis, it can be seen that the results of the hypothesis test of the effect of LDR on stock prices have a parameter coefficient of -0.052 with a T-statics significance of 0.429 < 1.96 and a P-Value value of 0.668 > 0.05. This shows that LDR has no effect on stock prices and negatively influences banking companies on the Indonesia Stock Exchange. Therefore, the hypothesis is rejected.

Effect of Capital Adequacy Ratio on stock prices of banking companies on the Indonesia Stock Exchange.
Based on the analysis results in table 4.9, it can be seen that the results of the hypothesis test of the effect of CAR on stock prices have a parameter coefficient of -0.013 with a T-statics significance of 0.102 < 1.96 and a P-Value value of 0.668 > 0.05. This shows that CAR has no effect on stock prices with a negative effect on banking companies on the Indonesia Stock Exchange. Therefore, the hypothesis is rejected.

Effect of Return on Equity on stock prices of banking companies on the Indonesia Stock Exchange.
Based on the analysis of table 4.9, it can be seen that the results of the hypothesis test of the effect of ROE on stock prices have a parameter coefficient of 0.534 with a T-statics significance of 4.154 > 1.96 and a P-Value value of 0.000 < 0.05. This shows that ROE affects stock prices with a positive influence on banking companies on the Indonesia Stock Exchange. Therefore, the hypothesis is accepted.

Effect of Dividend Payout Ratio on stock prices on stock prices of banking companies on the Indonesia Stock Exchange.
Based on the results of table 4.9 analysis, it can be seen that the results of the hypothesis test of the influence of DPR on stock prices have a parameter coefficient of -0.095 with a T-statics significance of 0.600 < 1.96 and a P-Value value of 0.549 > 0.05. This shows that the DPR has no effect on stock prices with a negative influence on banking companies on the Indonesia Stock Exchange, therefore the hypothesis is rejected.

Bank Indonesia interest rates moderate the effect of the Loan to Deposit Ratio on stock prices in banking companies on the Indonesia Stock Exchange
Based on the results of table 4.9 analysis, it can be seen that the results of the SBI hypothesis test moderating the effect of LDR on prices have a parameter coefficient of -0.006 with a T-statics significance of 0.046 < 1.96 and a P-Value value of 0.963 > 0.05. This shows that SBI cannot moderate LDR on stock prices in banking companies on the Indonesia Stock Exchange. Therefore, the hypothesis is rejected.

Bank Indonesia interest rates moderate the effect of the Capital Adequacy Ratio on stock prices in banking companies on the Indonesia Stock Exchange
Based on the results of table 4.9 analysis, it can be seen that the results of the SBI hypothesis test moderating the effect of CAR on prices have a parameter coefficient of -0.018 with a T-statics significance of 0.128 <1.96 and a P-Value value of 0.898> 0.05. This shows that SBI cannot moderate CAR on stock prices in banking companies on the Indonesia Stock Exchange, therefore, the hypothesis is rejected.

Bank Indonesia interest rates moderate the effect of Return On Equity on stock prices in banking companies on the Indonesia Stock Exchange.
Based on the results of table 4.9 analysis, it can be seen that the results of the SBI hypothesis test moderating the effect of ROE on prices have a parameter coefficient of 0.030 with a T-statics significance of 0.187 < 1.96 and a P-Value value of 0.851 > 0.05. This shows that SBI cannot moderate ROE on stock prices in banking companies on the Indonesia Stock Exchange, therefore, the hypothesis is rejected.

Bank Indonesia interest rates moderate the relationship between the Dividend Payout Ratio and stock prices in banking companies on the Indonesia Stock Exchange.

Based on the results of table 4.9 analysis, it can be seen that the results of the SBI hypothesis test moderating the influence of DPR on prices have a parameter coefficient of -0.152 with a T-statics significance of 1.025 < 1.96 and a P-Value value of 0.306 > 0.05. This shows that SBI cannot moderate the DPR on stock prices in banking companies on the Indonesia Stock Exchange, therefore, the hypothesis is rejected.

DISCUSSION

Effect of Loan to Deposit Ratio on stock prices

The results of this study indicate that the Loan to Deposit Ratio has no effect on stock prices in banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period.

The analysis results prove that the high and low LDR does not affect the stock price of banking companies, which means the number of loans disbursed by banks. The amount of funds that can be raised and the bank's own capital is not one factor that determines investors' decisions in buying banking shares in the capital market. However, LDR is one indicator that can be used to assess a bank's health.

Based on the development data for the 2017-2020 period previously presented, the average development of the LDR of banking companies fluctuates where. In 2018, it increased, and in 2019 - 2020 has decreased. While the average price of banking shares in 2017, 2018, and 2019 has increased, in 2020, it has decreased. This shows that the movement of the LDR with the stock price does not go hand in hand.

Banking companies tend to have good LDR ratios, following regulations made by Bank Indonesia, which are 75% - 105%, indicating that banking companies are generally able to manage the amount between loans disbursed and the number of funds collected from the public and their capital. This will affect profit, where one source of bank income is interest income which can be calculated by the amount of loan interest minus deposit interest. However, bank income can come from various sources, such as fee-based income, service income, foreign exchange transactions, etc. Hence, investors consider that the ability to manage the LDR ratio is not always able to generate maximum profit, considering that loans also contain risks that can be a burden. Income that reduces profits. Therefore, LDR does not affect stock prices.

As happened in the financial statements of Bank BCA with an average LDR of 76.53%, which is the value closest to the lowest ratio determined by Bank Indonesia. This reflects that Bank BCA can manage the composition between the number of loans and deposits, which is the best of all banking samples in this study. In 2018 Bank BCA's LDR increased by 4.34% from 2017 to 81.60%. However, BCA's share price increased by 18.72% to Rp 5,200.00. Meanwhile, Bank Woori Saudara, which had the highest average LDR in 2019, increased its liquidity by lowering its LDR by 3.68%, but its share price decreased by 3.48%.

The results of this study are in line with research by Ananto Dwi Antoro and Sri Hermuningsih (2018), Rido Raiza Fahlevi, Set Asmapane, Bramantika Oktavianti (2018), Dana Eka Setiawan and Ika Yustina Rahmawati (2020) which state that there is no influence between LDR on stock prices. However, the results of this study contradict the research of Iwan Setiawan, Chaerudin Manaf, Patar Simamora (2017), Wiwi Warsiati and Official Ranti Rosalina (2019), Elvira Rosa Tanjung Fatma (2020), Kumba Digdowiseiso (2021), Munira, Nafisah Nurulrahmatia (2021) which states that there is an effect of LDR on stock prices.

Effect of Capital Adequacy Ratio on stock prices

The results of this study indicate that the Capital Adequacy Ratio does not affect the stock prices of banking companies listed on the Indonesia Stock Exchange in 2017-2020.

The results of the analysis prove that the high and low CAR does not affect stock prices, indicating the ability of banks to manage their capital to finance their activities that carry risks is not an indicator for investors to buy shares of banking companies on the capital market, even though this ratio is one of the ratios used. to assess the performance of a bank.

Based on the development data for the 2017-2020 period, the average CAR of banking companies fluctuated in 2018; it decreased slightly from 2017 but increased in 2019 and 2020. While the average banking share price in 2017, 2018, and 2019 experienced an increase, in 2020, it decreased. This shows that CAR's movement with stock prices does not go hand in hand.

Based on the financial statements of banking companies in the 2017-2020 period, banking companies tend to have good CAR ratios, where the average CAR of all banks is above the minimum value set by Bank Indonesia, which is 8%, indicating that banking companies can manage their capital ownership in assuming risky assets. The risk that is most likely to occur in banking companies is credit risk, especially the risk that occurs because the principal and interest on the loan fail to be collected; this has an impact on the quality of the credit provided, resulting in an allowance for impairment losses (CKPN) which has an impact on profit decline. Every banking company will try to maintain credit quality by billing debtors. If the debtor can no longer pay its obligations, the bank will sell or auction collateral to cover debtors' obligations that cannot be paid so that the CKPN that has been formed will be written off and become income for banks. Therefore, CAR does not affect bank stock prices.

Bank Mestika Dharma experienced an increase in CAR value in 2020 by 20.44% from 2019 to 46.49%. However, the share price of Bank Mestika Dharma in 2020 decreased by 46.42% from 2019, namely from Rp. 2,800.00 to Rp. 1,500. The increase in CAR experienced by Bank Mestika was due to the strategic policy of Bank Mestika Dharma to repurchase the company's shares of 70 billion rupiah, which increased paid-in capital, while in 2020, credit distribution experienced a decline which resulted in a decrease in risk-weighted assets. Bank Maspion Indonesia in 2020 was the bank with the most significant decrease in CAR in this study. The decrease of 18.13% from 2019 was due to the increase in lending to Bank Maspion Indonesia. Still, its share price increased by 20.11%. This shows that the increase or decrease in CAR value does not affect the increase or decrease in stock prices.

This study's results follow Wiwi Warsiati and Official Ranti Rosalina (2019), Munira and Nafisah Nurulrahmatia (2021), who said that CAR could not affect stock prices. However, the results of this study contradict the research of Iwan Setiawan, Chaerudin Manaf, and Patar Simamora (2017), Rido Raiza Fahlevi, Set Asmapane, and Bramantika Oktavianti (2018), Elvira Rosa Tanjung Fatma (2020), Neli Hajar and Muhammad Tho'in Musta 'an (2020) which states that there is an effect of CAR on stock prices.

Effect of Return on Equity on stock prices

The results show that Return On Equity has a positive effect on stock prices in banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period.

The results of the study prove that the high and low ROE has a positive effect on stock prices, which means a high ROE value indicates the company's ability to increase profits, so as to increase demand for shares which in turn can increase stock prices. High profits always get a positive response from investors as indicated by the increasing demand for shares so as to increase share prices in the capital market.

To describe the general state of banking in this study, it is made using the average value per year as a whole. When viewed from the data previously presented, the average Return On Equity of banks has decreased from year to year, while the average stock price has been fluctuating, where in 2017-2019 it has increased, but in 2020 it has decreased. This shows that the average annual ROE of banking does not coincide with the average stock price in the same year, but when viewed from each issuer, ROE and stock prices tend to go hand in hand.

In 2020 the whole world experienced the Covid 19 pandemic which had an impact on all aspects of the economy, including banking. Where this results in a decrease in company performance which results in a decrease in the company's ability to generate profits, but if you look at the banking companies in this study, the average bank experienced a growth in ROE value, this happened because of the regulation of the Financial Services Authority of the Republic of Indonesia Number 11/POJK 03/2020 concerning the national economic stimulus as a countercyclical policy as a result of the spread of the 2019 Coronavirus Disease. Where the regulation regulates credit or financing restructuring, which provides concessions to debtors such as lowering interest rates and extending loan terms, this also has an impact on banks that does not have to form CKPN (Allowance for Impairment Losses) which reduces profit.

Based on the financial statements of banking companies in the 2017-2020 period, the average banking company has a good ROE performance, where the average banking company has an ROE ratio value that is in accordance with the standards of Bank Indonesia, which is 5%-12.5%, except at Neo Commerce Bank (formerly Bank Yudha Bhakti) so that on average banking companies are able to generate profits from their business activities, where this affects the demand for shares of banking companies which can increase the stock prices of banking companies.

Neo Commerce Bank (formerly Bank Yudha Bhakti) is the only bank with the lowest ROE value of -22.73% in 2018. This is due to bad loans. KAP audit correction for the shortfall in the formation of individual CKPN on behalf of Altamoda Group debtors amounting to 141.66 billion rupiah. As a result of the KAP, the ratio of non-performing loans (NPL Gross) jumped from 4.98% to 15.75%. Net NPL also rose from 2.07% to 9.92%. This condition is a negative indication for customers, as evidenced in 2018 the share price of Neo Commerce Bank decreased by 29%, from Rp. 400.00 to Rp. 284.00.

The West Java Regional Development Bank is one of the banks with the highest average ROE level in this study, which is 18.08%. ROE fluctuations with the volatility of the stock price shift in tandem. Where in 2018 and 2019 the ROE value decreased, which was followed by a decrease in stock prices in the same year. The decline in ROE was caused by a decrease in Net Interest Income (NII). Based on Bank BJB's annual report, in the first semester of 2018, the company's net profit decreased by 11.20% because the source of income from interest income decreased. Likewise, in the first quarter and second quarter of 2019, Net Interest Margin growth was at the level of 5.9% and 5.7%, respectively. which is lower than the Net Interset Margin in the first and second quarters of 2018 which was 6% and 6.3%, respectively.

The results of this study are in accordance with the theory of Sukamulja (2019: 99) which states that ROE is very important for shareholders because it determines the rate of return on the company's shares they own. If the ROE increases, it means that the rate of return on share ownership will also increase. Increasing returns from share ownership is something that is favored by investors, thereby increasing the demand for shares

which ultimately raises share prices. The decline in these fundamental factors is negative information for investors, where the stock price of BJB bank in 2018 and 2019 has decreased.
The results of this study are in line with research by Antoro and Hermuningsih (2018), Fatma (2020), Megamawarni (2021), Arwijuliscan and Ramli (2021), which stated that ROE affects stock prices . However, the research results contradict the research of Fadli et al (2021) which states that ROE has no effect on stock prices.

Effect of Dividend Payout Ratio on stock prices

The results of this study indicate that the Dividend Payout Ratio has no effect on stock prices in banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period.
The results of the analysis prove that the level of the DPR cannot affect the share price, indicating that the net profit distributed in the form of dividends to shareholders does not necessarily increase the share price, because the profit earned by banking companies must be used as well as possible by considering various aspects that prioritize banking health and expansion. future business activities.

Based on the 2017-2020 development data previously presented, the DPR average fluctuated, but the increase in 2020 did not match the 2017 average. Meanwhile, the average banking share price in 2017, 2018, and 2019 experienced a decline. increase, but in 2020 it decreased.
The bank with the highest average DPR is the West Java Regional Development Bank at 57.11%, which in 2019 distributed dividends of 60% of net profit. The dividend distribution was due to an increase in profit, namely from 1.55 trillion rupiah in 2018 to 1.56 trillion rupiah in 2019. The increase in net profit came from credit income which increased by 8.7% to 81.9 trillion rupiah, and third party funds which increased by 2.7% from 2018 to 89.3 trillion rupiah, where the composition of third party funds obtained consisted of low-cost funds (CASA) with a percentage of 49.6%. However, in 2019 the share price of the West Java Regional Development Bank decreased by 42.20%, from Rp 2,050.00 to Rp 1,185.00.

The bank with the lowest DPR average is Bank Mayapada Internasional, which is 10.11%, where during the 2017-2020 research period Bank Mayapada Internasional only distributed dividends once, namely in 2017 it was 40.46%, this is the result of GMS where the profits earned are allocated to retained earnings, with the aim of strengthening capital. However, the share price of Bank Mayapada Internasional from 2017-2019 has increased, except in 2020 it has decreased due to the impact of the Covid 19 pandemic experienced by the economic sector including banking. This shows that the movement of DPR and stock prices do not go hand in hand. Therefore, the DPR has no effect on stock prices.

The results of this study are not in accordance with the theory put forward by Mulyawan (2015: 263) which says that dividend policy has a positive effect on stock value, through creating a balance between current dividends and retained earnings so as to maximize share value.
The results of this study are in line with the research of Fadli et al (2021) which states that the DPR cannot influence stock prices. However, the results of this study contradict the research of Antoro and Hermuningsih (2018), Aten and Nurdiniah (2020) Megamawarni (2021) which state that the DPR has an effect on stock prices.

BI interest rates moderate the effect of LDR on stock prices

The results of this study indicate that the Bank Indonesia Interest Rate is not able to moderate the effect of the Loan to Deposit Ratio on stock prices in banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period.

The results of the study prove that the level of SBI is not able to moderate the LDR on stock prices, indicating that the BI Interest Rate applied to all banks in Indonesia which is one of the indicators in determining whether someone will invest or save is not a determinant of prospective investors' decisions to invest in banking stocks. This is because a person's behavior in investing is not influenced by the amount of interest rates, considering that investing in stocks also has risks. Where in investing potential investors also pay attention to the company's performance factors in generating profits. The results of hypothesis testing show that LDR has no effect on stock prices, and SBI cannot moderate the effect of LDR on stock prices.

Based on the development data for the 2017-2020 period previously presented, SBI fluctuated, and tended to decline from 2017 to 2020. On the other hand, LDR also fluctuated and tended to decline from 2017 followed by share prices which also fluctuated and tended to decline. Therefore, interest rates are not able to influence the effect of LDR on stock prices.

The interest rate that is set will affect the behavior of the public in placing their extra funds, whether they are placed on the capital market in the form of shares or saved in a bank. In 2020 the interest rate decreased to 3.75%, but BRI's third party funds increased by 9.14% from 996 trillion in 2019 to 1,087 trillion in 2020. This will affect the LDR value of BRI. BRI's ability to disburse loans and raise funds does not affect the demand for BRI shares, so it does not affect the movement of BRI's stock prices. This happens because people choose to

place funds that are not risky, considering that investing in stocks cannot be separated from risk, especially during the Covid 19 pandemic in 2020.
The results of this study are in line with research by Antoro & Hermuningsih (2018), Setiawan & Rahmawati (2020) which states that SBI cannot moderate the effect of LDR on stock prices of banking companies.

BI interest rate moderates CAR against stock prices

The results of this study indicate that Bank Indonesia interest rates are not able to moderate the effect of the Capital Adequacy Ratio on stock prices in banking companies listed on the Indonesia Stock Exchange.
The results of the analysis prove that the level of SBI that is able to influence the pattern of behavior to save or invest in the capital market is not able to moderate the effect of CAR on the stock price of banking companies, because there are other factors that are considered by investors in investing, such as financial performance that can generate profits for the company.

Based on the development data for the 2017-2020 period previously presented, the movement of the average interest rate fluctuates and tends to decline, where the interest rate in 2020 is not higher than the interest rate in 2017, on the other hand the movement of CAR does not coincide with the movement of stock prices, so that low interest rates cannot strengthen the effect of CAR on stock prices. Therefore, the size of the interest rate is not able to influence the effect of CAR on stock prices.

One of the benefits of CAR is to find out the amount of company assets financed by debt, in banking one of the sources of capital is third party funds, where third party funds collected from the public are channeled in the form of credit. Interest rates in 2020 are the lowest interest rates in this study, which is 3.75%, this does not make third party funds at Bank Mandiri experience a decline. During this research period, Bank Mandiri's third party funds increased every year, where at the end of 2020 Bank Mandiri's third party funds were recorded to have grown by 12.24% from 2019 which was Rp. 1,047.3 trillion. This happened because during the Covid 19 pandemic, unstable economic conditions resulted in sluggish capital market performance, where in March the JCI fell by 26.55% from the beginning of the year, from 6,323 to 3,937. This is bad information for investors and the public, so saving funds in a bank is considered safer even with a low interest rate, compared to investing in stocks that carry a risk of decline in value.

Until this research is completed, researchers have not found researchers who examine interest rates moderating the effect of CAR on stock prices in companies listed on the Indonesia Stock Exchange, so there is no comparison in the discussion of this variable.

BI interest rate moderates ROE on stock prices

The results of this study indicate that Bank Indonesia interest rates are not able to moderate the effect of Return On Equity on stock prices in banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period.
The results of the analysis prove that the level of SBI is not able to moderate the influence of ROE on stock prices in banking companies, indicating that the interest rate set by Bank Indonesia is not a measure for investors to choose investment in the capital market, which can increase demand for banking stock prices, as well as raise prices. banking company shares.

Based on the development data for the 2017-2020 period previously presented, the average movement of interest rates is fluctuating and tends to decline, where the interest rate in 2020 is not higher than the interest rate in 2017, on the other hand, the movement of ROE has decreased every year, where the movement of ROE has decreased every year. stock prices fluctuate and tend to decline, this shows that interest rate movements, ROE, and stock prices do not go hand in hand. Therefore, the size of the interest rate is not able to influence the effect of capital structure on firm value.

One source of banking profit is interest income, namely the difference between loan interest and deposit interest. Funds collected from the public, especially low-cost funds (CASA) and channeled in the form of credit will provide profits for the company. The rise and fall of interest rates does not affect the amount of deposits at BCA Bank, where every year BCA third party funds increase, although interest rates tend to decrease, even in 2020 interest rates touched the level of 3.75% but in 2020 TPF increased by 23.6% from 2019, which is 834 trillion rupiah, of which 78.9% of the TPF is low-cost funds (CASA) which will increase interest income.
The results of this study are in line with research by Ananto Dwi Antoro, Sri Hermuningsih (2018), Dana Eka Setiawan, Ika Yustina Rahmawati (2020) which states that SBI cannot moderate the effect of LDR on stock prices.

BI interest rate moderates DPR against stock prices

The results of this study indicate that Bank Indonesia Interest Rates are not able to moderate the effect of the Dividend Payout Ratio on stock prices of banking companies listed on the Indonesia Stock Exchange for the 2017-2020 period.

The results of the analysis prove that the level of SBI is not able to moderate the influence of the DPR on stock prices in banking companies, indicating that the interest rate does not affect investors' decisions in investing in banking companies, even though the company pays dividends, but there are other factors that are considered by investors such as performance banking finance in generating profits.

Based on the development data for the 2017-2020 period previously presented, the average movement of interest rates is fluctuating and tends to decline, where the interest rate in 2020 is not greater than the interest rate in 2017, on the other hand the average DPR is fluctuating, where in 2018 experienced a significant decline, although in 2019 and 2020 there was an increase, the value of the DPR was not greater than 2017. This shows that the average movement of SBI, DPR, and stock prices do not coincide. Therefore, the size of the interest rate is not able to influence the effect of capital structure on firm value.

Interest is the return received on deposits placed in the bank, while dividend is the return received by shareholders on the return on their investment, where the distribution of dividends will take into account the company's financial condition and the use of profits, meaning that the distribution of dividends is not mandatory. During this research period, Bank Mayapada was the bank with the lowest average DPR, this is because Bank Mayapada for the last 4 years has only distributed dividends once, namely in 2017 with a dividend distribution of 40.46% of net profit. This happened due to a decrease in profitability where Bank Mayapada's interest income decreased, especially in 2020 net interest income decreased by 94.16% from 2019 of 2.92 trillion to 170.63 billion in 2020.

The results of this study are in line with the research of Dana Eka Setiawan, Ika Yustina Rahmawati (2020) which states that SBI cannot moderate the influence of the DPR on stock prices. Meanwhile, until this research is completed, researchers have not found any research that shows SBI can moderate the influence of DPR on stock prices.

V. CONCLUSION

Based on the results of the study, some conclusions can be drawn as follows:

1. Loan to Deposit Ratio has no effect on stock prices of banking companies on the Indonesia Stock Exchange.
2. Capital Adequacy Ratio has no effect on stock prices of banking companies on the Indonesia Stock Exchange.
3. Return on Equity has an effect on the stock price of banking companies on the Indonesia Stock Exchange.
4. Dividend Payout Ratio has no effect on stock prices of banking companies on the Indonesia Stock Exchange.
5. Bank Indonesia interest rates are not able to moderate the influence of the Loan to Deposit Ratio on the stock prices of banking companies on the Indonesia Stock Exchange.
6. Interest rates of Bank Indonesia are not able to moderate the effect of the Capital Adequacy Ratio on stock prices of banking companies on the Indonesia Stock Exchange.
7. Interest rates of Bank Indonesia are not able to moderate the effect of Return On Equity on stock prices of banking companies on the Indonesia Stock Exchange.
8. Interest rates of Bank Indonesia are not able to moderate the effect of Dividend Payout Ratio on stock prices of banking companies on the Indonesia Stock Exchange

Based on the results of the research that researchers have put forward, the suggestions that researchers can give are as follows:

1. For investors who want to invest in banking companies, it is recommended that they choose banking companies that have good financial performance such as Loan to Deposit Ratio in the value range of 75%-105%, Capital Adequacy Ratio of at least 15%, high Return On Equity, and make distributions dividends to shareholders. Good financial performance of banking companies will ensure the continuity of banking business activities and increase the stock prices of banking companies.
2. For further researchers, they can examine other company sectors, such as energy, technology, mining, and trading companies listed on the Indonesia Stock Exchange, it is also advisable to examine other factors as moderating variables, such as inflation, and gold prices, and it is advisable to examine other factors others not examined in this study that have an effect on stock prices, such as the implementation of Good Corporate Governance, Corporate Social Responsibility, and so on, and can add a longer research period.
3. For banking companies to pay attention to the Return On Equity ratio through increasing interest income by paying attention to the composition between quality loan distribution and third party funds, especially low-cost funds (CASA), as well as focusing on other sources of income such as feebase income and other bank service income. through professional human resources, infrastructure, and the latest technology that is easy and safe.

REFERENCES

Ananto Dwi Antoro, Sri Hermuningsih. 2018. *"Kebijakan Dividen dan BI Rate Sebagai Pemoderasi Likuiditas, Profitabilitas, dan Leverage Terhadap Nilai Perusahaan Perbankan yang Terdaftar di BEI Tahun 2011-2017".* Upajiwa Dewantara, 2(1), 58-75.

Arief Yuswanto Nugroho, Fatichatur Rachmaniyah. 2020. "*Pengaruh LDR, NIM, NPL, dan BOPO terhadap Harga Saham pada PT Bank Rakyat Indonesia, Tbk 2017-2019".* Jurnal Komastie, 1(1), 28-43.

Arifin, Ali. *2004. Membaca Saham*. Yogyakarta: Penerbit Andi.

Arifin Zainul. 2019. Dasar Dasar Manajemen Bank Syariah. Tanggerang. Azkia Publisher.

Boediono. 2014. *Seri Sinopsis Pengantar Ilmu Ekonomi*. Yogyakarta: BPE.

Dahlan, Siamat. 2014. *Manajemen Lembaga Keuangan*. Jakarta: LPFE.s

Elvira Rosa Tanjung Fatma. 2020.*"Pengaruh ROA, ROE, LDR, CAR, dan NPL Terhadap Harga Saham (Studi Kasus pada Perusahaan Sekrotr Perbankan yang Termasuk dalam Indeks LQ 45 2015-2019)".* Jurnal Mitra Manajemen, 4(12), 1651-2663.

Fahmi, Irham. 2014. *Pengantar Manajemen Keuangan*. Bandung: Alfabeta

Fahmi, Irham. 2015. Manajemen Perbankan: KonvensionaI dan Syariah. Jakarta: Mitra Wacana Media.

Eriga Chintya Dewi, Jonnardi. 2021. *"Pengaruh Profitabilitas, Liquiditas, dan Struktur Modal Terhadap Nilai Perusahaan dengan Suku Bunga Sebagai Variabel Moderasi".* Jurnal Kontemporer Akuntansi, 1(2), 60-67.

Ghozali, I. 2018. *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25.* Semarang: Unviersitas Diponegoro.

Ghozali, I., & Latan, H. 2015. *Partial Least Square Konsep, Teknik dan Aplikasi menggunakan Program Smart PLS 3.0.* Semarang: Universitas Diponegoro.

Hanafi, M. (2007). *Analisis Laporan Keuangan*. Yogyakarta: UPP STIM YKPN.

Hasibuan, Malayu.(2008). *Dasar-dasar perbankan.* Cetakan ketujuh.Jakarta: PT. Bumi Aksara.

Haryono, S. 2016. *Metode SEM Untuk Penelitian Manajemen dengan AMOS 22,00, LISREL 8.80, dab Smart PLS 3.0* Bekasi: PT. Intermedia Personalia Utama.

Hani, S. (2015). *Teknik Analisa Laporan Keuangan*. Medan: UMSU PRESS.

Husnan, Suad., & Muhammad, Suwarsono. 2014. *Studi Kelayakan Proyek Bisnis.* Unit Penerbit UPP STIM YKPN, Yogyakarta.

Hendro, Tri dan Conny Tjandra Raharja.(2014). *Bank dan Institusi Keuangan Non Bank di Indonesia.* cetakan kesatu. Yogyakarta: UPP STIM YKPN.

Imam Fadli, Agussalim M, Sri Yuli Ayu Putri. 2021. *"Pengaruh Kebijakan Laba, Kebijakan Dividen dan Kebijakan Hutang Terhadap Hara Saham Perusahaan LQ45 yang Terdaftar Pada Bursa Efek Indonesia 2012-2018".* Pareso Jurnal, 3(3), 471-490.

Iwan Setiawan, Chaerudin Manaf, Patar Simamora. 2017. *"Pengaruh Capital Adequacy Ratio, Non Performing Loan, Loan To Deposit Ratio, Return On Aset,, dan Suku Bunga Terhadap Harga Saham Perusahaan Sun Sektor Perbankan yang Terdaftar di Bursa Efek Indonesia".* Universitas Pakuan

Husnan, Suad dan Enny Pudjiastuti. *Dasar-Dasar Manajemen Keuangan, Edisi Ketujuh*, (Yogyakarta: UPP STIM YKPN, 2015), h.23

Jogiyanto, H. M. 2017. *Teori Portopolio dan Analisis Investasi.* Edisi sebelas. Yogyakarta: BPFE Yogyakarta

Kasmir. (2012), *Analisis Laporan Keuangan*. Jakarta: PT. Raja Grafindo Persada.

Kasmir.(2014). *Analisis Laporan Keuangan.*edisi I. cetakan ketujuh. Jakarta: Rajawali Pers.

Kasmir, Dr. 2016. *Analisis Laporan Keuangan*. Jakarta: RajaGrafindo Persada.

Maria Laurentine Novenita, Choirul Anwar, JMV. Mulyadi. 2018. *"Determinan Valuasi Harga Saham dan Tingkat Suku Bunga pada Perusahaan Perdagangan Terdaftar di Bursa Efek Indonesia"*. Jurnal Ekobisman, 2(3), 262-285.

Megamawarni, Aliyah Pratiwi. 2021. *"Pengaruh Rasio Keuangan dan Pertumbuhan Perusahaan terhadap Dividen Payout Ratio (DPR) dan Implikasinya pada Harga Saham Perusahaan Perbankan yang Listing di Bursa Efek Indonesia (BEI)".* Jurnal Maksipreneur, 11(1), 47-68.

Mulyawan, S. (2015). *Manajemen Keuangan.* Bandung: CV Pustaka Setia

Munira, Nafisah Nurulrahmatia. 2021. *"Pengaruh LDR dan CAR Terhadap Harga Saham Pada Perusahaan Perbankan Yang Listing di BEI"*. Jurnal Dsirupsi Bisnis, 4(6), 487-496.

Patricia Maurin Aten, Dede Nurdiniah, 2020. *"Pengaruh Kebijakan Dividen Terhadap Volatilitas Harga Saham dengan Inflasi Sebagai Variabel Moderasi".* LPMP Imperium, 2(2), 85-94.

Patricia Maurin Aten, Dede Nurdiniah. 2020. *"The Effect Of Liquidity, Profitability, Leverage On Corporate Value with Dividend Policy and BI Rate as Moderated Variables"*. Economics & Business Solutions Journal, 4(1), 1-19.

Peraturan OJK Nomor 4/POJK/03/2016

Rahardjo, Budi. (2021). *Jeli Investasi Saham Ala Warren Buffet*. Yogyakarta: ANDI.

Rido Raiza Fahlevi, Set Asmapane, Bramantika Oktavianti. 2018. *"Pengaruh Kinerja Keuangan Terhadap Harga Saham pada Perusahaan Perbankan yang terdaftar di Bursa Efek Indonesia"*. AKUNTABEL, 15(1), 39-48.

Rivai, et al. (2013).*Commercial Bank Manajement*: Manajemen Perbankan Dari Teori Ke Praktik. Edisi 1. Cetakan 1. Jakarta : Rajawali Pers.

Sartono, Agus. 2012. *Manajemen Keuangan Teori dan Aplikasi.* Edisi Keempat. BPFE. Yogyakarta.

Soewadji, J. 2012. *Pengantar Metode Penelitian.* Jakarta: Mitra Wacana Media.

Sugiyono. 2015. *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D).* Bandung: CV Alfabeta
Sujarweni, V. W. 2014. *Metodologi Penenlitian Lengkap, Praktis, dan Mudah Dipahami.* Yogyakarta: Pustaka Baru Press.
Sukamulja, Sukmawati. 2019. Analisis Laporan Keuangan Sebagai Dasar Pengembilan Keputusan Investasi. Yogyakarta: BPFE
Subramanyam, K.R,. 2017. *Analasis laporan Keuangan Jilid II.* Jakarta : Salemba Empat
Sudana, I. M. (2015). *Manajemen keuangan perusahaan,* Jakarta: Erlangga.
Tandelilin, Eduardus. 2010. *Portofolio dan Investasi: Teori dan Aplikasi Edisi Pertama*. Yogyakarta: BPGE UGM