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Profitability, Leverage and Liquidity Analysis on Share Prices In Banking Companies on the Indonesia Stock Exchange

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Abstract

This work aims to provide consideration in investing in banking companies listed on the Indonesia Stock Exchange by examining the effect of profitability, leverage and liquidity variables on stock prices. Purposive sampling is a technique to determine the sample used in this work. In which the population is 45 banking sector companies and the sample obtained is 19 banking companies listed on the Indonesia Stock Exchange for the observation period from 2017-2021. This work uses secondary data in the form of an annual report on the banking sector from the annual report published on the official website of the Indonesia Stock Exchange or from the official website of each agency. The data analysis technique uses multiple linear regression analysis and software SPSS version 25 as a medium for testing hypotheses. The results of this study prove that Profitability (Return on Equity) has a significant effect on stock prices, while Leverage (Debt to Equity Ratio) and Liquidity (Current Ratio) have no significant effect on stock prices. Profitability (Return on Equity), Leverage (Debt to Equity Ratio) and Liquidity (Current Ratio) simultaneously have a significant effect on stock prices of banking companies listed on the Indonesia Stock Exchange.

Keywords: *Profitability, Leverage, Liquidity, Stock Price*

Introduction

The current phenomenon, namely the Covid-19 pandemic, does not only apply to Indonesia, but every corner of the world is facing this problem. So that it has an impact on all aspects of life, including the economic sector. Prior to the emergence of this phenomenon, the business world was experiencing an increase due to the development of increasingly advanced technology and also increasing the number of companies that have gone public. Banking companies are very much needed by companies to support continuity in the company's prospects, not only that banks are also very much needed by the public to be given the trust in managing their funds. The increase in income affects people's behavior in taking advantage of their financial condition. After meeting his basic needs, there is a speculative motive to guard against his life insurance in the future. Some people choose to use their money to open a business, other people choose new means to invest their money. Investment activities are carried out in a container called the capital market. The capital market is a market for various long-term financial instruments that can be traded, either in the form of bonds, stocks, or other instruments. In Indonesia, the capital market is known as the Indonesia Stock Exchange. In the banking sector, the higher the profit level, the greater the company's business prospects, and the bank's prudential policy in reducing risk is possible. Investors are expected to be interested in investing in bank shares so that the demand for shares increases so that it can affect the increase in share prices. If the value of the stock increases, so does the value of the company and increases the stock price in the market (Umar & Savitri, 2020).

The following is a list of stock prices in banking companies that fluctuated up and down during 2017-2021, namely:

Table1. Banking Sector Stock Price

Stock code	Company name	2017	2018	2019	2020	2021
BBCA	Bank Central Asia Tbk	4.380	5,200	6.685	6770	7,300
BBMD	Bank Mestika Dharma Tbk	1.375	1,380	2800	1,548	2,000
BBNI	Bank Negara Indonesia (Persero) Tbk	9900	8,800	7.850	6.175	6.750
BBRI	Bank Rakyat Indonesia (Persero) Tbk	3.640	3.660	4,400	4.170	4.110
SDRA	Bank Woori Saudara Indonesia 1906 Tbk	890	860	830	740	565

Source:www.idx.co.id

Based on table 1 above, the annual increase in stock prices is shown by BBCA (Bank Central Asia). Meanwhile, SDRA (Bank Woori Saudara Indonesia 1906 Tbk) experienced a decline in stock prices during the 2017-2021 period. Meanwhile, other banks experience fluctuations every year and it can be seen in 2020 that many companies experienced a decline in stock prices due to the global pandemic, namely Covid-19 which greatly affected the company's financial performance. The increase or decrease in stock prices can be influenced by several aspects, one of which is fundamental aspects such as profitability, leverage and liquidity. The contribution of profitability to stock prices is such that a high level of profitability will motivate management to provide more information to convince investors that the company is able to generate large profits. The higher the level of profitability, the higher the stock price, because the return or income provided by the owner of the company will be greater, causing an increase in the company's stock price. The contribution of leverage to stock prices, the greater the leverage value, indicates that the company is more dependent on short-term and long-term loans from outside sources. This can result in a decrease in the company's stock price, because investors feel a significant risk of liquidation if the percentage of loan financing exceeds the company's own capital. When a company is liquidated, the company is required to pay all its debts to creditors first, so there is a possibility that investors will not get a full return on their initial investment. Investors like to invest in companies with low leverage ratios. because the probability of default on all company commitments is lower, Thus, The contribution of liquidity to stock prices with a decrease in liquidity is estimated to indicate a liquidity mismatch, or liquidity that is too high is also not expected to be good, because it shows a large amount." idle funds resulting in a decrease in the potential profitability of the company. The main concern of investors is whether the company will be able to pay off its debts on a certain date or not. An increase in shares causes an increase in the demand for company shares. This also affects the company's stock price, which consequently rises.

Literature Review

Signal theory

According to opinion (Putra et al., 2021) signaling is done to reduce information asymmetry for both the organization and external stakeholders (investors). In addition, investors want relevant, reliable and timely information because it serves as an analytical tool when making investment choices. The company's annual financial report is one of the information that serves as a signal to outsiders from management. Signal theory is used because the company's stock price is constantly changing, which can be a signal for investors from management. According to opinion (Prima et al., 2022) the adoption of IFRS by companies around the world has the effect of increasing the comparability and transparency of financial information because it can help reduce the costs of preparing financial statements by companies globally.

Stock price

Definition of stock in the book (Fahmi, 2015:80) is evidence that exists in a company for ownership of funds/capital. A piece of paper with the company name, nominal value, and an explanation of the rights and obligations of each holder on it is a form of share. Prices on an exchange that can change quickly are called stock prices. This is because there is a possibility of dependence by buyers or sellers of shares on demand or supply. The stock price in the market is the price sold to investors with the shares listed on the stock exchange (Umar & Savitri, 2020).). There are some conditions according to opinion (Amalya, 2018) which determines that a share must experience instability, as follows:

1. The situation that occurs in microeconomics and macroeconomics.
2. Business expansion is a policy in the company.
3. There was a sudden change in the board.
4. One of the directors in the company is involved in a criminal case.

Profitability

Profitability is used for the overall effectiveness of management can be measured by showing the level of the size of the profit obtained in relation to investment and sales. The final answer to the problem of the effectiveness of the company's management will be given from this profitability ratio (E Janrosi, 2018). Profitability uses ROE as a measurement tool. According to opinion (Juwari, 2019) Return on equity shows the company's capability to create after-tax profits through the use of the company's own capital ownership. For investors, this ratio is important so that the effectiveness and efficiency can be known to the management of the company that manages its own capital. If the company's management is efficient in using its own capital, it can be seen from the higher this ratio. *Return on equity can be calculated using the formula below:*

$$ROE = \frac{\text{Net Income}}{\text{Total Equity}} \times 100\%$$

Leverage

Leverage relates to the capability for ongoing debt to be paid in the short term. When the debt is paid on time by the company or is liquid, investors will usually believe it, the company's dependence on debt will increase if the solvency number is high, which is an external source of the company. (Candra & Wardan, 2021). Leverage uses DER as a measurement tool. According to opinion (Halawa & Br.Purba, 2020) Debt to equity ratio shows the percentage of shareholders who provide funds to lenders. When the debt ratio is higher, so the shareholders who fund the company are getting lower, then there is a decrease in interest. The formula used by researchers are:

$$DER = \frac{\text{Total Liabilities}}{\text{Total Equity}} \times 100\%$$

Liquidity

Liquidity is often referred to as the ratio of working capital through the part contained in the balance sheet compared to total current assets with total current liabilities. Companies that are unable to meet their short-term obligations because the company does not own a penny of funds, while also in the maturity interval can generate money, because the money is not owned by the company, it must wait until other assets are sold (Kasmir, 2018:128). Liquidity wear *Current ratio as a measurement tool. According to opinion (Gunawan et al., 2020)*. The current ratio is a measuring tool used when assessing the company's performance in order to meet its current liabilities with assets owned. Then the formula used by researchers are:

$$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}} \times 100\%$$

Research Methods

Research design

Research design is a sequence of diagrams that describe all the procedures needed to carry out research. The type of research used is quantitative research, which is a positivism-based research technique that is useful for carrying out research on populations and samples, research instruments used from collected samples, analysis of quantitative data, and the purpose of the research is to test the hypotheses that have been formulated (Sugiyono, 2016). This work uses a causality study design to further investigate the probability of a causative relationship between previously calculated variables (Chandrarin, 2017:98).

Population and Sample

A public forum consisting of quality subjects and objects along with selected characteristics in accordance with what has been determined by the researcher, so that it can be studied and can be concluded afterwards.(Sugiyono, 2016) Thus, from the research carried out, there are 45 banking companies listed on the Indonesia Stock Exchange in the 2017-2021 period as the population. Sample is a sub-population or half of the population(Sugiyono, 2016). The technique used is the purposive sampling method. Purposive Sampling method is a method of obtaining a sample in which the data source must be based on a certain assessment.

The criteria to be sampled are:

1. The company belongs to the banking type group and publishes the 2017-2021 annual report.
2. Banking companies with complete data required in the study.
3. Banks that were not delisted in the 2017-2021 period.
4. Companies that have profits during the 2017-2021 period.

Based on the above criteria that have been determined by the researcher, there are 19 samples of companies obtained.

Data Types and Sources

This type of data is quantitative data used. Secondary data is data exposure that will be used by researchers as a data source. Secondary data is indirectly the data obtained and as a complement to primary data. In this research, the data is taken from bank financial statements that have been published on www.idx.co.id as the official website of the IDX.

Data collection technique

Documentation method is a method to be used during the research process. This documentation is a record of past events, it can be in the form of writing, pictures or someone's monumental work(Sugiyono, 2016). Collecting data with written documents that have been published can be accounted for. Documents collected in the form of financial reports aim to support research on Stock Prices, ROE, DER and CR as data.

Data analysis technique

This technique is an activity that will be operated after collecting data from respondents and from various other sources. Carry out data testing with software called SPSS and then in the form of tables / graphs the data is obtained, thus the final research can support the results.

Descriptive Statistical Analysis

Descriptive statistics in the form of presenting data in the form of graphs, tables, diagrams, calculating the average value, mean, mode, median and standard deviation that are intended when assigning a value to data (Sugiyono, 2016).

Classic assumption test

1. Normality test

This test has a purpose as described (Ghozali, 2018) in order to determine whether there is a normal distribution in the regression model, residuals or confounding variables. When the comlogorof-Smirnov test has a significance value greater than 0.05, the assumption of normality in a regression model is met.

2. Multicollinearity Test

Is a close relationship that exists between each independent variable, has the purpose of the regression model is to determine whether or not there is a relationship between the independent variables. In a good regression model, the independent variables should have no relationship. The tolerance value is greater than 0.10 and the VIF value is < 10, thus it is stated in the regression model between the independent variables that there is no multicollinearity (Riyanto & Hatmawan, 2020).

3. Heteroscedasticity Test

There is a purpose in this test, whether the variance of inequality arises through this regression model test, which is the residual from one observation to another. If the scatterplot test shows a random distribution of points above and below 0 on the Y axis, then the regression model is free from heteroscedasticity interference.(Ghozali, 2018).

4. Autocorrelation Test

According to opinion (Ghozali, 2018) In order to determine whether or not there is a correlation in a regression, the Durbin-Watson test (DW test) can be used. With the criteria if $dU < d < 4 - dU$, the regression model does not have positive and negative autocorrelation.

Results and Discussion

Descriptive Statistical Analysis

Table2. Descriptive Statistical Results

Descriptive Statistics					
	N	Minimum	Maximum	mean	Std Deviation
Return on Equity	95	.11	20.94	8.7700	5.19788
Debt to Equity Ratio	95	159.37	1607.86	545.9977	247.50783
Current Ratio	95	98	161	118.62	8,408
Stock price	95	66	9900	2737.59	2618,732
Valid N (listwise)	95				

Source: SPSS 25 (2022) data processing results

Table 2. above shows the descriptive statistical value of the variables in the study. Profitability is one of the independent variables with an average value for 2017-2021 of 8.7700. The highest profitability is 20.94 owned by PT Bank Mega Tbk in 2021 and the lowest is 0.11 owned by PT Bank Sinarmas Tbk in 2019. The standard deviation obtained by the Profitability variable is 5.19788. *Leverage* is the next independent variable. The average value of Leverage during 2017-2021 is 545.9977 with the lowest Leverage being 159.37 which is owned by PT. Bank Ina Perdana Tbk in 2017. While the highest Leverage value is 1,607.86 which is owned by PT Bank Tabungan Negara Tbk in 2020. The standard deviation of Leverage is 247,50783. Liquidity is the next independent variable. The average value of Liquidity 2017-2021 is 118.62. The lowest liquidity is 98, which is owned by PT Bank Bumi Arta Tbk in 2020, while the highestThe high value is 161 which is owned by PT Bank Ina Perdana Tbk in 2018. The standard deviation of Liquidity in 2017-2021 is 8.408. The dependent variable in this study is the stock price. The average value of stock prices during 2017-2021 is 2,737.59. The highest share price occurred in 2017 at 9,900, namely at PT Bank Negara Indonesia Tbk. Meanwhile, the lowest share price occurred at PT. Bank Ganesha Tbk in 2019 with a share value of 66. The standard deviation of the stock price in 2017-2021 is 2,618,732.

Classic assumption test

1. Normality test

Table3. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
N		Unstandardized Residual 95
Normal Parameters, b	mean	.0000000
	Std. Deviation	.44652740
Most Extreme Differences	Absolute	.085
	Positive	.078
	negative	-.085
Test Statistics		.085
asymp. Sig. (2-tailed)		.085c

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

Source: SPSS 25 (2022) data processing results

Referring to the output above, the Asymp value. Sig (2-tailed) of the normality test is $0.085 > 0.05$. This value is greater than 0.05, it can be concluded that the data obtained have normal data.

2. Multicollinearity Test

Table4. Multicollinearity Test Results

Coefficients^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Return on Equity	.818	1,223
	Debt to Equity Ratio	.582	1,717
	Current Ratio	.558	1,793

a. Dependent Variable: Stock Price

Source: SPSS 25 (2022) data processing results

Referring to the results above, ROE has a tolerance value of 0.818 and a VIF value of 1.223, for DER it has a tolerance value of 0.582 and a VIF value of 1.717 and for CR it has a tolerance value of 0.558 and a VIF value of 1.793. This explains that the above variables have met the requirements that there are no symptoms of multicollinearity because all of the variables have a tolerance value greater than 0.10 while the VIF value is less than 10.

3. Heteroscedasticity Test

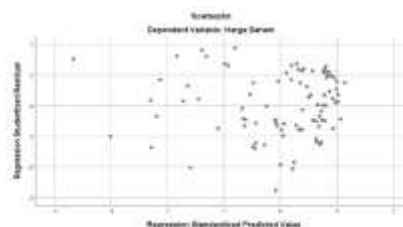


Figure1. Heteroscedasticity Scatterplot Results

Source: SPSS 25 (2022) data processing results

It can be seen in the picture above, that the points that show the research data are well spread, that is, they spread more than 0 at point Y and the resulting pattern is clearer and does not override each other, so it can be concluded that there is no heteroscedasticity in this regression model.

4. Autocorrelation Test

Table5. Autocorrelation Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.549a	.301	.278	.45383	1,841

a. Predictors: (Constant), Current Ratio, Return on Equity, Debt to Equity Ratio

b. Dependent Variable: Stock Price

Source: SPSS 25 (2022) data processing results

The Durbin Watson value shown in the table above is 1.841. The value of dU with 95 samples is 1.7316. The Durbin Watson value from the test results is known to assume that $dU < DW < 4 - dU$ is $1.7316 < 1.841 < 2,268$, which means that there is no autocorrelation symptom in the regression model.

Multiple Linear Regression Analysis

Table6. Multiple Linear Regression Test Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	-6,890	5.025		-1.371	.174
	Return on Equity	.684	.115	.576	5,942	.000
	Debt to Equity Ratio	.333	.354	.108	.942	.349
	Current Ratio	4.161	2.120	.230	1963	.053

a. Dependent Variable: Stock Price

Source: SPSS 25 (2022) data processing results

Based on the regression table above, it can be concluded the following things:

1. The constant value of -6.890 indicates that if X1 (Profitability), X2 (Leverage) and X3 (Liquidity) have a value of 0, then the value of Share Price (Y) is -6.890.
2. The value of the regression coefficient (β_1) of 0.684 indicates the effect of Profitability (X1) on the Stock Price (Y) if it is increased by 1%.
3. The value of the regression coefficient (β_2) of 0.333 indicates the effect of Leverage (X2) on the Stock Price (Y) if it is increased by 1%.
4. The value of the regression coefficient (β_3) of 4.161 indicates the effect of Liquidity (X3) on the Stock Price (Y) if it is increased by 1%.

Hypothesis testing

t test

The number of variables studied was 4 with a sample of 95 data and a significance level of 0.05 or 5%, so the table value used was 1.98638. The following are the results of the t-test carried out:

Table7. T Test Results (Partial)

		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-6,890	5.025		-1.371	.174
	Return on Equity	.684	.115	.576	5,942	.000
	Debt to Equity Ratio	.333	.354	.108	.942	.349
	Current Ratio	4.161	2.120	.230	1963	.053

a. Dependent Variable: Stock Price

Source: SPSS 25 (2022) data processing results

1. The t-count value of the Profitability variable (X1) is 5.942 > 1.98638 with a significance of 0.000 < 0.05, so it can be concluded that Profitability (X1) has a significant effect on Stock Price (Y) or in other words, hypothesis 1 (H1) is accepted.
2. The t-count value of the Leverage variable (X2) is 0.942 < 1.98638 with a significance of 0.349 > 0.05, so it can be concluded that Leverage (X2) has no significant effect on Stock Price (Y) or in other words, hypothesis 2 (H2) is rejected.
3. The tcount value of the Liquidity variable (X3) is 1.963 < ttable 1.98638 with a significance of 0.053 > 0.050, so it can be concluded that Liquidity (X3) has no significant effect on Stock Price (Y) or in other words, hypothesis 3 (H3) is rejected.

F Uji test

Table8. F Test Results (Simultaneous)

		ANOVAa				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8081	3	2,694	13.078	.000b
	Residual	18,742	91	.206		
	Total	26,823	94			

a. Dependent Variable: Stock Price

b. Predictors: (Constant), Current Ratio, Return on Equity, Debt to Equity Ratio

Source: SPSS 25 (2022) data processing results

Referring to the test above, it is known that the Fcount obtained is 13.078 and the significance is 0.000. The value of Ftable at the significance level (α) is 0.05 with the numerator degree (N1) which is $4 - 1 = 3$ and the denominator degree (N2) is $95 - 4 = 91$ is 2.70. Given the value of Fcount $13.078 > Ftable 2.70$ and a significance value of $0.000 < 0.05$, it can be concluded that the Profitability (X1), Leverage (X2) and Liquidity (X3) variables simultaneously have a significant effect on Stock Price (Y) or in other words otherwise hypothesis 4 (H4) is accepted.

Conclusions

Based on the results obtained and the discussion that has been described in carrying out the Profitability, Leverage and Liquidity tests on stock prices. The results obtained are as follows: Profitability (X1) has a significant effect on stock prices (Y) of banking companies listed on the Indonesia Stock Exchange. Leverage (X2) has no significant effect on stock prices (Y) of banking companies listed on the Indonesia Stock Exchange. Liquidity (X3) has no significant effect on stock prices (Y) of banking companies listed on the Indonesia Stock Exchange.

Profitability (X1), Leverage (X2) and Liquidity (X3) simultaneously have a significant effect on the Stock Price (Y) of banking companies listed on the Indonesia Stock Exchange.

References

- Amalya, N. T. (2018). Pengaruh Return on Asset, Return on Equity, Net Profit Margin dan Debt to Equity Ratio terhadap Harga Saham. *Jurnal Sekuritas (Saham, Ekonomi, Keuangan Dan Investasi)*, 1(3), 157–181. <https://doi.org/10.32493/skt.v1i3.1096>
- Candra, D., & Wardan, E. (2021). Pengaruh profitabilitas, likuiditas, solvabilitas, rasio aktivitas dan pertumbuhan perusahaan terhadap harga saham. *Jurnal Manajemen*, 13(2), 212–223. <https://doi.org/10.29264/jmmn.v13i2.9726>
- Chandrarin, G. (2017). *Metode Riset Akuntansi Pendekatan Kuantitatif*. Jakarta: Salemba empat.
- E Janrosi, V. S. (2018). Analisis Pengaruh Leverage, Ukuran Perusahaan Dan Profitabilitas Terhadap Ketepatan Waktu Pelaporan Keuangan Pada Perusahaan Perbankan. *Jurnal Benefita*, 3(2), 196. <https://doi.org/10.22216/jbe.v3i2.3464>
- Fahmi, I. (2015). *Manajemen Investasi* (2nd ed.). Jakarta: Salemba empat.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25* (9th ed.). Universitas Diponegoro.
- Gunawan, J., Funny, Marcella, C., Evelyn, & Sitorus, J. S. (2020). Pengaruh CR (Current Ratio), DER (Debt to Equity Ratio), EPS (Earning Per Share) dan Financial Distress (Altman Score) Terhadap Harga Saham Pada Perusahaan Sektor Industri Dasar dan Kimia Yang Terdaftar Di Bursa Efek Indonesia. *Owner*, 4(1). <https://doi.org/10.33395/owner.v4i1.176>
- Halawa, L., & Br.Purba, N. M. (2020). Pengaruh Total Aset, Liabilitas Dan Ekuitas Terhadap Harga Saham Pada Perusahaan Manufaktur Di Bursa Efek Indonesia. *Jurnal Akrab Juara*, 53(9), 1689–1699. Retrieved from <https://www.akrabjuara.com/index.php/akrabjuara/article/view/1187>
- Juwari, N. (2019). Pengaruh Return on Asset, Return on Equity, Earning Per Share dan Current Ratio Terhadap Harga Saham pada Perusahaan Sub Sektor Otomotif dan Komponen yang Terdaftar Di Bursa Efek Indonesia. *Jurnal GeoEkonomi*, 10(1), 57–73. <https://doi.org/10.36277/geoekonomi.v10i1.50>
- Kasmir. (2018). *Analisis Laporan Keuangan*. Jakarta: PT. Raja Grafindo Persada.
- Prima, A. P., Janrosi, V. S. E., & Muda, I. (2022). Impact of IFRS 7 Implementation Compliance in National Banking on Capital Market Trust in Indonesia. *The Seybold Report Journal*, 17(06), 400–408. <https://doi.org/https://doi.org/10.5281/zenodo.6655111>
- Putra, A. H. E. A., Mendra, N. P. Y., & Saitri, P. W. (2021). Analisis Pengaruh CR, ROE, ROA, Dan PER Terhadap Harga Saham Perbankan Di BEI Tahun 2017-2019. *Kumpulan Hasil Riset Mahasiswa Akuntansi (KHARISMA)*, 3(1), 84–93. Retrieved from <https://e-journal.unmas.ac.id/index.php/kharisma/article/view/1682>
- Riyanto, S., & Hatmawan, A. A. (2020). *Metode Riset Penelitian Kuantitatif Penelitian di Bidang Manajemen, Teknik, Pendidikan dan Eksperimen*. Deepublish.
- Sugiyono, P. D. (2016). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Umar, A. U. A. Al, & Savitri, A. S. N. (2020). Analisis Pengaruh ROA, ROE, EPS Terhadap Harga Saham. *Analisa Akuntansi Dan Perpajakan*, 4(1), 30–36. <https://doi.org/10.25139/jaap.v4i2.3051>