Analysis of the Effect of Loan to Deposit Ratio, Return on Asset and Debt to Equity Ratio on Stock Returns
(Case Study on Financial Technology Companies Listed on the Indonesian Stock Exchange 2018-2023)

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ABSTRACT
The purpose of this study is determine the effect of loan-to-deposit, return-on-asset, and debt-to-equity ratios on stock returns. This study uses a purposive sampling method to select observation data of seven companies' from 2018 to 2023 and then applies multiple linear regression analysis techniques to The population of interest is financial technology companies listed on the Indonesian stock exchange. This research found that return on assets had a favorable influence on stock returns, whereas loan-to-deposit and debt-to-equity ratios had a negative effect.

Keywords: *Loan To Deposit Ratio, Return On Asset, Deb To Equity Ratio, Stock Returns*

1. INTRODUCTION

Investment is a sacrifice made in the present to get future benefits. The capital market facilitates a wide variety of investment options, one of which is stock investing. Many Indonesians have put their money into the stock market with the expectation of receiving dividends or capital gains—that is, the profit made when selling an asset for more than it cost to buy it. The greater the premium above acquisition cost, the greater the profit for financiers. An investor's return is the money they make from their investments. Among the various potential stock investments, digital banking stocks, which track the progress of financial technology (fintech), are worth considering.

Financial technology is a company that innovates in the field of financial services with a modern touch according to (ojk.go.id) from 2018-2023 the number of loan recipient accounts is 120,259,912 according to OJK information technology joint funding service statistical data, there are many types of fintech in Indonesia but this research focuses on digital banks that can provide hybrid services and online loans that have made initial public offering, namely 7 companies.

Table 1. The development of stock returns in 7 companies (%)

List of Companies	2018	2019	2020	2021	2022	2023
Allo Bank	4,61	-2,36	15,18	47,75	-4,46	-0,31
Jago Bank	-0,47	49,66	27,13	15,02	-10,73	2,09
Neo Bank	-2,44	-0,09	1,02	31,71	-8,69	-0,88
Amar Bank	0	0	4,48	3,23	0,97	3,09
Ok Bank	0,28	-0,46	0,29	6,57	-4,29	-2,64
QNB Bank	-2,30	1,29	-0,28	8,22	-5,04	-1,81
Nobu Bank	0,45	-0,78	0,26	0,66	-1,49	4,12
Avg. Stock Return	0,02	6,75	6,87	16,16	-4,82	0,52

Source: finance.yahoo.com (data processed by the author)

According to the data in the table, seven fintech businesses traded on the Indonesian stock market had their stock returns fluctuate and generally fall. If investors lose faith in these seven companies, it could dampen their enthusiasm for putting their money into them. After all, a healthy company's return indicates that the business is running smoothly, which means it's making the most of its resources. According to (alfianti and Andriani: 2017), investors should thoroughly evaluate the company's financial situation before making any investments. Fundamental research may help identify the elements that impact stock prices. The financial accounts reveal the essential elements of the firm, and the analysis is based on, (Sutrisno: 2013) financial statements represent a summary of management's performance over a certain period. Financial reports with ratios that are considered good will reflect the company's good financial quality and will bring good power to investors. The ratios used in this study are Loan to Deposito Ratio, Return on Asset, and Debt to Equity Ratio.

Loan to deposit ratio (Riyadi 2015) LDR is the ratio of total credit to third party funds (DPK) collected by banks, reflects the banks capacity to distribute funds obtain from third parties or the public such as savings deposits, deposits and demand deposits from. The higher the level of banking LDR, the higher the profit will be, the indicates that bank is capable of distributing its credit efficiently (Any Rustia Dewi: 2019), this is a consideration for investors to buy these shares. (Any Rustia Dewi: 2019) stated that the results of his research LDR exerted a notable positive influence on stock returns, and according to study (Eko Giyartiningrum et al: 2023) There is a direct correlation between LDR and stock returns. However, there are studies with different results according to (I Gusti Ayu Meta Purmina Dewi et al: 2024) Stock returns are unaffected by the LDR. Retno Wulandari (2022) LDR exerted a notable negative influence on stock returns and Meliza et al. (2024) found no statistically significant relationship between the LDR and stock returns, suggesting that the two variables are unrelated.

It can determine a company's earning potential by looking at its Return On Asset. One measure of a company's efficiency in turning a profit is its return on assets (ROA). This is also consistent with studies considering on research (Any Rustia Dewi: 2019) ROA significantly and positively influences bank stock returns. However, there are differences in research according to (Daniel Kurniadi: 2013) ROA has a negative effect on bank stock returns.

DER is the ratio measures the extent to which the company's operations are financed through debt, a higher level of debt can negatively impact stock returns, as the company is obligated to repay its liabilities. According to (Esli Silalahi and Evelin Roma: 2020) The use of debt as a source of funding requires the company to bear a fixed burden in the form of interest and debt instalments, an increase in debt can influence the amount of net income that shareholders receive and is in line with research (Esli Silalahi and Evelin Roma: 2020) which indicates the proportion of DER positively influences the returns of banking stocks while according to Mulia Adnirfa et al (2021) the DER does not influence stock returns.

Considering on this explanation, there are differences in research results that have been raised by several previous researchers. Therefore, researchers are motivated to revisit the study with the title Analysis of the Effect of Loan Deposit Ratio, Return on Asset and DER on Stock Returns in fintech (financial technology) companies listed on the Indonesian stock exchange (2018-2023).

2. LITERATURE REVIEW

2.1. Effect of Loan to Deposit Ratio on Stock Return

Loan to Deposit Ratio is a ratio included in the liquidity ratio, this ratio is utilized to assess the proportion of credit distributed in relation to the total public funds collected and own capital used or third-party funds (Kasmir: 2019). The more credit funds that are channelled will add to the interest profit earned for the company and will affect stock returns. This can be a basis for consideration for investors to be able to choose banking stock issuers in investing. Bank Indonesia determines that the figure of 75% - 92% is a number that is sufficient to maintain a balance between the distribution of credit funds provided and third-party funds received. The results of research from (Any Rustia Dewi: 2019) liquidity as measured by LDR has a notable positive impact on stock returns and according to research (Eko Giyartiningrum et al: 2023) There is a positive relationship between LDR and stock returns.

H1: The LDR influences stock returns in fintech companies listed on the IDX (2018-2023).

2.2. Effect of Return on Asset on Stock Return

According to Kasmir (2019), one way to measure a company's profitability is by looking at its return on assets, which is the net income divided by the total assets of the business. If a corporation has a high ROA, it means it can make money successfully. A low ROA indicates the opposite, this can be a consideration and attraction for investors in investing in shares because it will later affect stock returns. In accordance with research according to (Any Rustia Dewi: 2019) ROA has a notable positive influence on the return of bank stock.

H2: The return on assets influences stock returns in fintech companies listed on the IDX (2018-2023).

2.3. Effect of Debt To Equity Ratio on Stock Return

The Debt Equity Ratio compares a company's debt to its equity, or the amount to which debt is utilized to finance the company's assets (Kasmir: 2020). You can evaluate how much of the company's short-term and long-term financing can be covered by its own capital by looking at this ratio. DER measures the ratio of a company's debt to its own capital. When a firm's DER is high, it indicates that a larger portion of the company's funding comes from debt rather than equity. This makes investors wary because they believe the company will have to utilize its assets to pay off its obligations. The debt-to-equity ratio (DER) has a effect on the returns of banking stocks, according to studies (Esli Silalahi and Evelin Roma: 2020). It was mentioned that DER has a impact significant positive on stock returns (Ni Wayan Lindayani and Sayu Kt. Sutrisna Dewi: 2016).

H3: The debt equity ratio influences stock returns in fintech companies listed on the IDX (2018-2023).

3. RESEARCH METHODS

Through the use of SPSS, yahoo.finance, and investing.com, as well as an analysis of financial statements made public on the Indonesian stock market, this study aims to provide an explanation utilizing quantitative approaches. Using a purposive sampling technique—a way of obtaining information from certain sample means deliberately employed by researchers—this study's population consists of fintech-based companies, namely digital banks, listed on the IDX (Zulganef: 2018). Financial report published from 2018 to 2023, listed digital bank companies in the Indonesian capital market and regularly conducting banking transactions and online lending services are the criteria covered in this research. Seven individuals meet the inclusion criteria for this research, namely ALLO, JAGO (ARTOS), NEO (BBYB), AMAR IDN, BANK OK (DNAR), QNB (BKSW) NOBU consisting of 42 observations over a span of 6 years.

According to Ghozali (2018), the data was analyzed using multiple linear regression, which is a technique for testing the influence of one dependent variable (bound) on two or more independent variables (free). Using the equation:

$$Y = a + \beta 1\ LDR + \beta 2\ ROA + \beta 3\ DER + e \qquad (1)$$

Y = Dependent variable
a = Constant
β1, β2, β3 = Regression coefficients independent variable
e = Error term

4. RESULT AND DISCUSSION

4.1. Classical Assumption Test Results (Normality, Multicollinearity, Heteroskedastic, Autocorrelation)

The normality test according to (Sugiyono: 2019) anything that is done to find out whether the dependent, independent, or both variables are normal. The Kolmogorov-Smirnov test was used for comparison. There is an asymptotic significance level of 0.200> 0.05 according to the findings of the One-Sample Kolmogorov-Smirnov test for normalcy. So, it seems that the residuals that were considered in this research follow a normal distribution, according to the data.

The multicollinearity test indicates that the LDR has a VIF value (1,308), return on assets has a VIF value (1,063) and the DER has a VIF value (1,380) the value of these three ratios is smaller than the Variance inflation factor (VIF) < 10, so of the three variables there is no multicollinearity problem contained in this research data The results of the heteroscedastic test produce an abstract image that does not form a pattern, meaning that there is a spread of data.

Considering on the data, the autocorrelation test yields a Durbin-Watson (DW) value of 1,702, dU of 1,358 and dL of 2,339; with these numbers, one can deduce that dU < dW < 4-dU, which, when entered into the calculation, reads 1,358 < 1,702 < 2,339. The absence of autocorrelation in this study's data is shown by the DW value.

4.2. Model Feasibility Test Results (F Test)

Table 2. Model Feasibility Test Results (F Test)

Model		Sum of Squares	df	Mean Squares	F	Sig.
1	Regression	52.920	3	17.640	11.404	.000[b]
	Residual	58.779	38	1.547		

	Total	111.699	41			
a. Dependent Variable: STOCK RETURN						
b. Predictors: (Constant), DER, ROA, LDR						

Considering on the F test table results above, the F value is 11,404 and the F table value is 3.,245 (11,404> 3,245), indicating the presence of simultaneous effect of the LDR (X1), ROA (X2) and DER (X3) variables on stock returns (Y) within Financial Technology firms listed on the Indonesian stock exchange (2018-2023).

4.3. Multiple Linear Regression Test Results

Table 3. Multiple Linear Regression Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.324	.765		3.037	.004
	LDR	-.893	.418	-.287	-2.136	.039
	ROA	.983	.206	.578	4.767	.000
	DER	-.168	.083	-.280	-2.027	.050
a. Dependent Variable: STOCK RETURN						

1. The constant is valued of 2,324, indicating that if the LDR (X1), ROA (X2) and DER (X3) are 0, the stock return that occurs is 2,324.

2. Considering on the table above, the regression coefficient value of the Loan to Deposit Ratio variable (X1) is -0,893. So, every 1% increase in LDR will reduce stock returns by 0,893 ceteris paribus.

3. Considering on the table above, the regression coefficient value of the ROA (X2) variable is 0,983. So, every 1% increase in ROA will increase stock returns by 0,983 ceteris paribus.

4. Considering on the table above, the regression coefficient value of the DER variable (X3) is -0,168. So, every 1% increase in DER will reduce stock returns by 0,168 ceteris paribus.

4.3.1. Effect of Loan to Deposit Ratio on Stock Return

Considering on the table above, the results of the multiple linear regression test of the LDR variable show an absolute t value of 2.136 > 2.024 t_{table} with a significance value of 0.039 < 0.05. This means that the LDR variable has major detrimental consequences for stock returns. Because debtors with a high LDR may not be able to repay their debts, banking businesses face risks that reduce their earning value. According to the study done by (Retno Wulandari: 2022), LDR has a strong negative influence on the stock returns of banking firms. As a result, the stock return value will fall.

4.3.2. Effect of Return on Asset on Stock Return

It can see that the ROA presented variable has a t-value of 4.767, which is more than the crucial t-value of 2.024, and a significant level of 0.00, which falls short of 0.05, in the table above. This indicates that return on assets (ROA) is a key determinant of stock returns. The effective utilization of assets to create profits is indicated by a high ROA which in turn affects the profits owned and ultimately the stock returns delivered to investors. This jibes with what we know from studies showing that ROA boosts bank stock returns (Any Rustia Dewi: 2019).

4.3.3. Effect of Debt to Equity Ratio on Stock Return

In reference to the data shown in the table, the results of the DER variable's multiple linear regression test reveal an absolute t-value of 2,027, surpassing the crucial t-value of 2,024 at a significance level of 0.05 ≤ 0.05. This proves that DER is a major negative factor influencing stock performance. The higher a company's DER value, the higher its debt-to-equity ratio, which leads to the perception that the company carries a significant amount of debt and must settle its liabilities, thereby impacting the company's profits and affecting the stock returns received by investors. This aligns with the research conducted by Dedi Aji Hermawan (2012), which found that the DER variable has major detrimental consequences for stock returns.

4.4. The result of the Coefficient of Determination (R2) test.

Table 4. The result of the Coefficient of Determination test (R2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.688[a]	.474	.432	1.24371
a. Predictors: (Constant), DER, ROA, LDR				
b. Dependent Variable: STOCK RETURN				

The results from the table above show a coefficient of determination value of 0.474 or 47.4%, this indicates that the stock return variable can be influenced by the LDR (X1), Return on Assets (X2), and Debt to Equity Ratio (X3). Meanwhile, 52.6% it can be influenced by various factors including inflation, interest rates, economic growth, government policies, and other elements not covered in this study.

5. CONCLUSION

According to the findings of the research mentioned above, the following insights can be inferred:

1. The LDR variable has major detrimental consequences for the stock returns of companies (Financial Technology) listed on the IDX (2018-2023).

2. The ROA variable has a significant positive effect on the stock returns of companies (Financial Technology) listed on the IDX (2018-2023).

3. The DER variable has major detrimental consequences for the stock returns of companies (Financial Technology) listed on the IDX (2018-2023).

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