

# THE INFLUENCE OF SOLVENCY AND LIQUIDITY ON STOCK RETURNS WITH PROFITABILITY AS A MODERATION VARIABLE IN BANKING COMPANIES LISTED ON THE BEI FOR THE 2017-2021 PERIOD

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## Abstract

This research aims to determine the effect of solvency and liquidity on stock returns with profitability as a moderating variable in banking companies listed on the IDX for the 2017-2021 period. This research uses quantitative methods. The population in this study were all banking companies registered on the IDX for the 2017 - 2021 period. The sample in this study used a *purposive sampling method* so that a total sample of 15 companies was obtained. The type of data used is secondary data obtained from [www.idx.com](http://www.idx.com) and [www.investing.com](http://www.investing.com). The analytical method used is multiple regression analysis using Eviews version 10. The results of this research show that solvency as proxied by the *Debt to Equity Ratio* has no effect on stock returns. Liquidity as proxied by *the Current Ratio* has a positive and significant effect on stock returns. Profitability as proxied by *Return on Assets* is unable to mediate the effect of solvency on stock returns. Profitability is able to mediate the effect of liquidity on stock returns.

**Keywords: Solvency (DER), Liquidity (CR), Stock Return and Profitability (ROA).**

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## INTRODUCTION

The capital market in Indonesia is developing very rapidly. Along with these changes, the need for appropriate information in making investment decisions in the capital market is also growing. The capital market is an indicator of a country's economic progress and supports its economy. Investors who invest their money need a lot of useful information to predict investment returns in the capital market. Banking companies play an important role in improving the community's economy by providing various services to help people do business, such as: various types of savings, business credit, money transfer services through banks, both between banks of the same type and those that are not the same. Apart from that, banks also help the government generate tax revenues by providing fast, easy and safe payment tools to the public.

Banking is one of the financial sectors that is in great demand by investors to invest their capital. This is because the banking sector is a vital sector in a country so it attracts a lot of investor interest. Another reason investors choose bank shares is because the way banks are run is supervised and regulated by the government. Therefore, the banking world will always manage companies

professionally and transparently in order to foster confidence in positive values in the eyes of the public (Parendra et al., 2020) .

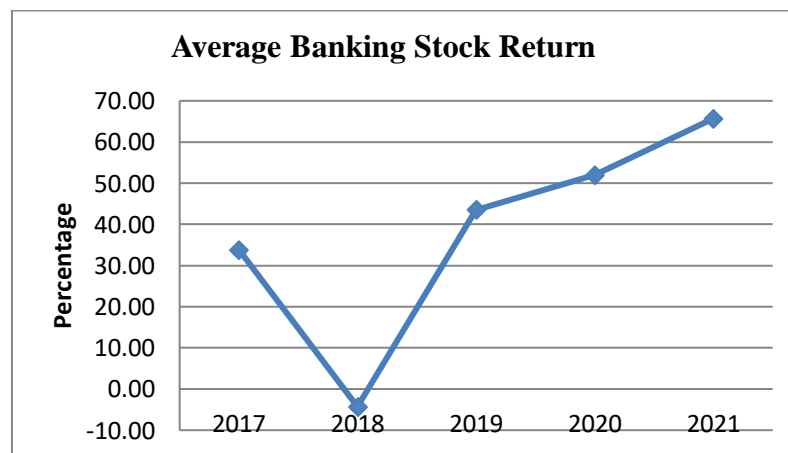
Investors in analyzing and selecting shares must use a market approach, one of which is the fundamental approach. There are various types of fundamental factors which tend to make it difficult for investors to choose which fundamental factors are appropriate to describe the company's condition and influence stock returns. The result of an investment is known as return. Returns can be returns that have occurred or expected returns that have not yet occurred but are expected to occur in the future. Realized returns are returns that have already occurred. Realized returns are calculated using historical data. Realized returns are significant because they are used to assess company performance. Realized returns or historical returns can also be used to calculate expected returns and future risks (Asikin et al., 2021) . If a company gets high profits, it means that the financial performance of a company is good, and shareholders will also get high returns. This is what shows the greater the rate of return on shares. The following is stock return data for banking companies for 2017-2021:

**Table 1.1**  
**Banking Stock Returns 2017-2021**

<b>Year</b>	<b>Stock returns</b>
2017	33.81
2018	-4.29
2019	43.51
2020	51.95
2021	65.70

Source: [www.investing.com](http://www.investing.com)

From table 1.1 you can produce the following graph:



Source: [www.investing.com](http://www.investing.com)

**Graph 1.1**  
**Banking Stock Returns 2017-2021**

Based on Figure 1.1, you can see the average stock return of banking companies from 2017 to 2021. In 2017 it was 33.81%, this was due to the performance of financial issuers, especially large banks which have the largest capitalization on the stock exchange. Then it decreased in 2018 by -4.29%, this was caused by negative performance, a number of domestic and foreign sentiments encouraged foreign investors to carry out net selling actions. Then it increased in 2019 by 43.51%, this was due to the world economic slowdown, the net profit of national banks has the potential to slow down even though Bank Indonesia has cut the benchmark interest rate. Then in 2020 it also increased by 51.95%, this was due to banking performance, especially giant banks starting to recover from their downturn at the beginning of 2020, although it started to improve, on average, the profits generated throughout 2020 experienced a decline as a result of the pandemic. . And it will increase in 2021 by 65.70%, this is due to solvency, liquidity and profitability.

Solvency is a ratio used to measure the extent to which a company's assets are financed by debt. The higher *the debt to equity ratio*, the better the profit growth. Asset depreciation will affect profit growth (Build & Burn, 2018) . The greater the solvency used in the company will encourage the company to change profits in the future. To find out whether the solvency ratio affects stock returns, researchers used a measure of the solvency ratio, namely Debt to Equity Ratio (DER). This ratio is a comparison of company debt to total equity. A high *debt to equity ratio* reflects the high debt owned by the company. Increasing debt shows that the company's funding sources depend on external parties (creditors), thereby reducing investors' interest in investing their funds in the company.

Liquidity is the company's ability to meet all obligations when they fall due. This ability can be realized when the amount of current assets is greater than current liabilities. A liquid company is a company that is able to fulfill all its obligations when they fall due and an illiquid company is a company that is unable to fulfill all its obligations when they fall due (Chasanah & Sucipto, 2019) .

Profitability are ratios that show a company's ability to generate profits in a period (Afrino & Erni, 2019) . High profitability shows the company's success in earning profits and reflects good company performance. One of the factors determining profitability ratios is *Return on Assets* (ROA). *Return on Assets* is a financial ratio used to measure a company's ability to generate profits from the total assets used. Profitability shows the company's performance in generating profits. If the company's financial performance in generating profits increases, this will show attractiveness for investors or potential investors in investing their capital in the company.

## METHOD

This type of research is quantitative using secondary data. The analysis model is multiple regression analysis using the Eviws 10 program. The population in this research is banking companies listed on the Indonesia Stock Exchange (BEI) for the 2017-2021 period. The sample used in this research was 15 banking companies listed on the IDX in 2017-2021. So the number of samples is 75 with the sampling technique in this research using the *purposive sampling method* , namely samples based on the suitability of the sample characteristics with predetermined sample criteria. The criteria determined in this research for determining the sample are as follows:

Banking companies that have been registered on the IDX during the 2017-2021 period.

Banking companies that have complete data related to research variables for the 2017-2021 period.

## Variables and Their Measurement

**Table 2**  
Operational Definition of Variables

Variable	Definition	Parameter	Measuring scale
Return (Y)	<i>returns</i> are the profits obtained by investors from the results of their investments in the company.	$Return\ saham = \frac{Pt - (Pt - 1)}{Pt - 1}$	Ratio
Solvency (X1)	Solvency is a company's ability to meet its long-term debt and financial obligations.	$DER = \frac{Total\ hutang}{Total\ ekuitas}$	Ratio

Variable	Definition	Parameter	Measuring scale
Liquidity (X2)	Liquidity ratios are ratios that measure a company's ability to pay debt obligations when they fall due.	CR = $\frac{\text{Aktiva lancar}}{\text{Kewajiban lancar}}$	Ratio
Profitability (Z)	Profitability ratios are ratios to measure a company's ability to earn profits.	ROA = $\frac{\text{Laba bersih}}{\text{Total aset}}$	Ratio

## RESULTS AND DISCUSSION

### Classic assumption test

**Table 3**

**Classic Assumption Test Results**

Test Equipment	Test results	Decision
Normality	Prob > 0.05	Data is normally distributed
Multicollinearity	Correlation < 0.70	Free from symptoms of multicollinearity
Heteroscedasticity	Prob > 0.05	Free from heteroscedasticity
Autocorrelation	-2 < DW < 2	There is no autocorrelation

Based on the table above, it shows that this research data meets the classical assumption test criteria.

### Regression Model Results

**Table 4**

**Model 1 Regression Model Results**

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	2.103602	0.418463	5.026975	0.0000
X1	0.000101	0.000333	0.305000	0.7612
X2	0.025855	0.006980	3.703921	0.0004

Based on the results of the regression test above, the regression equation is as follows:  

$$Y = 2.103602 - 0.000101 (X1) + 0.025855 (X2) + \varepsilon_1$$

From the results of the multiple regression test Model 1, it can be seen that the constant value is 2.103602, meaning that solvency (X1) and liquidity (X2) are considered constant, so the share price increases by 2.103602. The solvency variable (X1) has a regression coefficient of -0.000101. This means that if the solvency variable (X1) increases by one weight unit with the assumption that liquidity (X2) is zero or constant, then stock returns will increase by -0.000101. The liquidity variable (X2) has a regression coefficient of 0.025855. This means that if the liquidity variable (X2) increases by one weight unit with the assumption that solvency (X1) is zero or constant, stock returns will decrease by 0.025855.

**Table 5**

**Results of Multiple Regression Analysis Model 2**

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	2.443768	0.389386	6.275956	0.0000
X1	0.000164	0.000335	0.489236	0.6262

X2	0.017272	0.007000	2.467646	0.0161
Z	0.343389	0.306406	1.120699	0.2663

Based on the results of the regression test above, the regression equation is as follows:

$$Y = 2.443768 + 0.000164 (X1) + 0.017272 (X2) + 0.343389 (Z) + \epsilon_2$$

From the results of the multiple regression test Model 2, it can be seen that the constant value is 2.443768. This means that solvency (X1), liquidity (X2) and profitability (Z) are considered constant, so the stock return value increases by 2.443768. The solvency variable (X1) has a regression coefficient of 0.000164. This means that if the solvency variable (X1) increases by one weight unit with the assumption that liquidity (X2) and profitability (Z) are zero or constant, stock returns will experience a decrease of 0.000164. The liquidity variable (X2) has a regression coefficient of 0.017272. This means that if the liquidity variable (X2) increases by one weight unit with the assumption that solvency (X1) and profitability (Z) are zero or constant, stock returns will increase by 0.017272. The profitability variable (Z) has a regression coefficient of 0.343389. This means that if the profitability variable (Z) increases by one weight unit with the assumption that solvency (X1) and liquidity (X2) are zero or fixed, then profitability will increase by 0.343389.

### **The Effect of Solvency on Stock Returns**

From the table above, it is known that at a significant level ( $0.7970 > 0.05$ ) there is no significant influence between solvency and stock returns.

DER describes a company's ability to meet its obligations in the form of the percentage of equity, or capital, allocated to debt repayment. A low DER value also means the company's risk of paying off debt is lower. This reduces investors' interest in investing their funds in certain companies. This decline in investors' interest in investing their funds will have an impact on the company's share price falling which will also have an impact on share returns. Therefore, companies must be able to maintain the DER value within acceptable limits for investors.

The results of this research are in line with (R. Juwita Effendy & Razmjoo, 2022) and (Afrino & Erni, 2019). However, this research is not in line with (Kusjono & Patricia Carolin, 2020).

### **The Effect of Liquidity on Stock Returns**

From the table above, it is known that at a significant level ( $0.0000 < 0.05$ ), there is a significant influence between liquidity and stock returns.

A high CR level reflects the company's ability to fulfill its short-term obligations, thereby reducing the risk of the company becoming illiquid. This then attracts investors' interest in investing in shares because the risk borne by investors will be reduced, and the company's share price will increase. When the company's share price increases, the rate of return generated from the capital owned by the company will also be greater.

The results of this research are in line with (Lestari & Cahyono, 2020) and (Telaumbanua et al., 2021). However, this research is not in line with (Rini Tri Hastuti, 2020).

### **The Effect of Solvency on Stock Returns with Profitability as a Moderating Variable**

From the table above, it is known that the significant level ( $0.4943 > 0.05$ ) of profitability is unable to mediate the effect of solvency on stock returns.

When making investment decisions, investors look more closely at the development of the company's use of debt compared to the company's profitability. Investors in making decisions to invest do not look at one profitability ratio. A high DER level indicates that the composition of total debt will be greater when compared to the total capital itself, so something like this will have an impact on the company's greater burden on creditors in fulfilling its debt obligations.

The results of this research are in line with (Aditya & Badjra, 2018). However, this research is not in line with (Sutanto, 2021).

### **The Effect of Liquidity on Stock Returns with Profitability as a Moderating Variable**

From the table above, it is known that the significant level ( $0.0074 > 0.05$ ) of profitability is able to mediate the influence of solvency on stock returns.

The results of this research indicate that a high CR value for a company reflects the company's ability to fulfill its short-term obligations. When a company is deemed capable of meeting its short-term obligations, interest from investors will increase in investing in the company, then the company's stock returns will increase, followed by an increase in ROA and ultimately increasing stock returns. The research results are in line with (Cindy Ardina Antariksa & Sudiarta, 2019) . However, this is not in line with (Ofori et al., 2020) .

## CONCLUSION

The results of this research show that solvency has no effect on stock returns, while liquidity has a positive and significant effect on stock returns. Solvency with profitability as a moderating variable has no effect on stock returns, while liquidity with profitability as a moderating variable has a positive and significant effect on stock returns.

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