



The Effect of Leverage on Stock Prices is Moderated by Liquidity in Food and Beverage Subsector Companies on the Indonesia Stock Exchange

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ABSTRACT

This study aims to examine and analyze the effect of leverage on stock prices moderated by liquidity in food and beverage sub-sector companies listed on the Indonesia Stock Exchange. Data collection uses secondary data, namely the company's financial statements for the 2018-2021 period using purposive sampling technique with 10 companies so that 40 samples are obtained. The results of these financial statements have been tested for classical assumptions, linear regression tests and Moderated Regression Analysis (MRA). The results showed that the first, second, and third hypotheses were rejected because leverage and liquidity had no partial effect on stock prices and liquidity was unable to moderate the effect of leverage on stock prices. Meanwhile, the fourth hypothesis is accepted because leverage and liquidity have no simultaneous effect on stock prices.

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INTRODUCTION

Nowadays financial contests are getting tougher so organizations try to compete with endurance by joining the Capital Market. With the capital market as a viable vehicle for business improvement and continuing work. The specificity of the exploration used is the buyer's product organization which is listed on the Indonesian stock trading. Organization of customer merchandise in carrying out its business exercises, especially offering to earn revenue. Customer product organizations that join the capital market generally offer their portion to investors (Nurismalatri & Artika, 2022).

The stock price is the value that occurs in a trade at any given time. The cost of stocks can switch or drop in no time so quickly. It can change in a matter of minutes and can actually change very soon. This can be imagined depending on the interest and supply between the bid buyer and the offer seller (Tjiptono & Fakhrudin, 2012). Before investors invest in a particular company, investors will certainly see how the condition of a company is, namely by looking at the movement of the company's stock price and financial reports as a reflection of the company's performance (Firmansyah & Maharani, 2021).

Phenomenon of stock prices seen by organizations in the food and beverage sub-area which is one of the areas where stocks are not recommended in 2020. The Corona virus pandemic is said to be hampering individual purchasing power. Mirae Asset Sekuritas analysts at the Stock on Fire online event found that weakening purchasing power was reflected in the 2020 financial development report contracting 2.07% year on year (yoy). Stocks in the Food Beverage area have actually been estimated from now on, taking into account that the population in Indonesia has now reached 270 million people. Where 70% of individuals are at a useful age which has a high utilization rate (Investasi.kontan.co.id, 2021). Based on this explanation, it can be explained that the Changes in the Average Share Price of Food and Beverage Issuers in the image below are as follows.

Shows that food and beverage companies listed on the Indonesia Stock Exchange from 2019 to 2021 which present complete financial report data are 10 issuers whose share prices for the Q1 to Q4 reporting periods 2019-2021 only have 2, namely: ICBP and MLBI which shows a positive average change in stock price, while 8 of them show a negative average change in stock price, namely: CEKA, DLTA, INDF, MYOR, ROTI, SKLT, STTP, dan ULTJ.

The decline in changes in share prices was identified as being influenced by the effects of the Covid-19 pandemic. The interesting thing from the change data is what happened to issuers MYOR (Mayora) and ULTJ (Ultra Jaya Milk). However, in fact, when referring to changes in share prices for 2019-2021, the products produced by Mayora (MYOR) show that the share price has decreased. A similar condition is also found in issuers with the code ULTJ (Ultra Jaya Milk) whose products are in great demand by the public, such as boxed tea and ultra milk, which also experience an average decline in share prices.

This field fact is the reason for the researchers to analyze the stock prices of food and beverage companies because it should have been during a pandemic outbreak where the government issued a work from home policy that required people to work from home, the tendency of people to consume instant food and drinks should have been high so as to enable people to consume more products. instant food and drinks, but in fact the food and beverage issuers did not experience an increase in share prices and even experienced a decrease (an increase in the average change in share prices only occurred in; ICBP and MLBI).

Signal theory explains why organizations have motivators to provide Monetary Disclosure Data to outsiders. Referring to this theory, it can be stated that Liquidity and Leverage are significant variables that have an impact on financial supporters to go with the choice of buying stocks. Leverage is used to reward obligations by value. By comparing all liabilities including current liabilities and all values. The higher this proportion, the lower the organizational financing provided by investors and conversely, the lower this proportion, the better the organization's capacity to pay for long-term commitments. This will increase the cost of the organization's portion (Jumady et al., 2022). on leverage where the high ratio of debt to equity in the company makes financial supporters hesitant to put resources into the organization on the grounds that the organization cannot fulfill its commitments. Because if the company's debt increases, it will reduce the value of the company's return. In this way, the ratio will decrease (Azzahra & Ramadhan, 2021). Debt to Equity Ratio (DER) is a proxy for estimating the leverage level of a company. Companies with high DER can provide higher returns to their shareholders, in line with the risks faced by these companies compared to other companies with lower DER (Acheampong et al., 2014).

H₁: Leverage has a positive effect on stock prices

Liquidity is used to measure the level of organizational liquidity to show the organization's capacity to take care of short-term liabilities. If the organization can manage by paying off its obligations then this is what makes investors interested in effective money management and causes interest in the demand for company shares to increase. High liquidity can keep organizations from liquidation so that organizations are considered ready to distribute benefits to

investors compared to organizations that have low liquidity (Kasmir, 2013). Liquidity is a ratio that describes a company's ability to meet short-term obligations (Jihadi et al., 2021). In this study it is proxied by the current ratio. The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those that mature within one year. It tells investors and analysts how a company can maximize the current assets on its balance sheet to meet current and other debts. This is a comparison between the total current assets and liabilities of the company. Liquidity as a moderating variable is able to provide an increase or decrease in stock price developments that are influenced by leverage according to (Nugraha & Mertha, 2016) where a low Current ratio will reduce the market cost of the cost of the shares concerned.

H₂: Liquidity has a positive effect on stock prices

Variables such as leverage and liquidity risk are considered the most important in financial markets. The leverage ratio describes the financing of a company's activities by creditor funds versus owner funds (Jain & Singla, 2022). Based on previous research according to (Firmansyah & Maharani, 2021) proves that partially, liquidity does not affect stock prices, and partially that leverage affects stock prices. Simultaneously that Liquidity and Leverage affect stock prices. Whereas (Nugraha & Mertha, 2016) proves that liquidity is not able to moderate the effect of capital structure on stock returns. Based on this explanation, several different research results are obtained so that it is necessary to carry out in-depth research regarding this explanation, several different research results are obtained so that it is necessary to carry out in-depth research regarding Leverage on Stock Prices with Liquidity as a moderating variable.

H₃: Leverage has a positive effect on stock prices moderated by liquidity

This research model relates liquidity as an independent variable, leverage as a moderating variable, and stock prices as the dependent variable in food and beverage subsector companies on the Indonesia Stock Exchange.

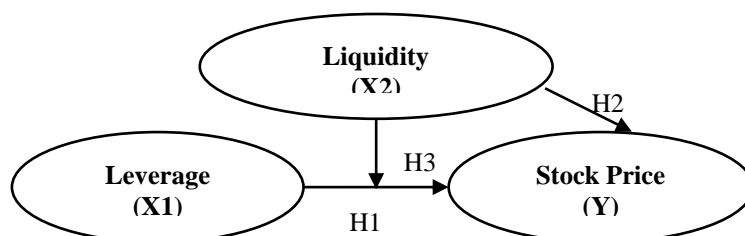


Figure 2. conceptual framework

RESEARCH METHOD

This research uses the non-probability sampling observation method in data collection which is done by downloading the necessary data through the official website of the Indonesia Stock Exchange (www.idx.co.id), the official website of the sample companies, books or e-books, articles published nationally and internationally as well as publication reports obtained from various reliable sources. The population of this research is the food and beverage sub-sector manufacturing companies totaling 14 companies listed on the Indonesia Stock Exchange in 2018-2021. The sampling technique uses purposive sampling, namely the selection of non-random samples whose information is obtained with certain considerations or criteria (Gozali & Latan, 2015).

Based on these criteria, there are 10 company data studied for the 2018-2021 period, namely 4 years, so the number of samples in this study is $10 \times 4 = 40$ samples. The analytical method uses multiple linear regression and Moderated Regression Analysis (MRA), in this review it is used to test pure arbiters which are resolved by making recurring collaborations, but the mediator variable does not function as an independent factor (Gozali & Latan, 2015).

To test the influence of moderating variables, the interaction test is used, namely Moderated Regression Analysis (MRA). The regression equation model to be examined is as followst:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + e \dots\dots\dots (1)$$

$$Y = \alpha + \beta_1X_1 + \beta_2X_1*X_2 + e \dots\dots\dots (2)$$

Keterangan:

- Y = Stock Price
- X1 = Leverage
- X2 = Liquidity
- e = Error

RESULTS AND DISCUSSIONS

The sample in this study was obtained through a purposive sampling method, namely selecting data from samples that met predetermined test criteria. The results of determining the sample are presented in Table 1 below:

Table 1. Sample Criteria Results

No	Criteria	Number of Observations
1	Food and beverage sub-sector companies listed on the Indonesia Stock Exchange during the 2018-2021 research period	14
2	The company publishes financial reports as of December 31 and annual reports or sustainability reports during the observation period	(2)
3	The company suffered no losses and its balance sheet did not show negative assets during the observation period	(2)
	Number of Selected Companies	10
	Observation Year	4
	Number of Samples	40

Source: Research Data, 2022

This study uses descriptive statistics to be able to define the research data used. The results of the descriptive statistical test are presented in Table 2 below:

Table 2. Descriptive Results

	N	Minimum	Maximum	Mean	Std. Deviation
Leverage	40	,1518	1,6600	,661710	,4213588
Liquidity	40	,7300	8,0505	2,974565	1,8715691
Stock Price	40	1050	16200	4877,88	4041,806
Valid N (listwise)	40				

Source: SPSS Processed Data, 2022

From these results, it can be explained from the Leverage, Liquidity, and Stock Price variables in Descriptive Statistics as follows:

Liquidity, based on table 1, that liquidity produces the highest value of 805.05% which means that the value occurs in the DLTA organization in the 2019 period and the base value is 73.00% which means that the value occurs in the MLBI organization in the 2019 period. Normal/average value average 2.974565 with a standard deviation of 1.8715691. Based on what is known, the mean is more prominent than the standard deviation value which states that the value of the information distribution is not too contrasting

Leverage, Based on the table it can be seen that the Leverage Result yields the highest value of 166.00% which means that the value occurs in the MLBI organization in the 2021 period and the base value is 15.18% which means that the value occurs in the DLTA organization in the 2019 period. Normal value/ the average is 0.661710 with a standard deviation of 0.4213588. Based on what is known, the mean is more prominent than the standard deviation value which states that the value of the distribution of information does not differ much.

Share Prices, Based on the table it can be seen that the Share Price Results with the highest value of IDR 16,200 means that this value occurred in the MLBI organization in the 2018 period and the basic value is IDR 1. 050 which means that this value occurred in the CEKA organization in the

2018 period. The normal/average value is 4877.88 with a standard deviation of 4041.806. Based on what is known, the mean is more prominent than the standard deviation value which states that the value of the distribution of information does not differ much.

Table 3. Linear Regression Analysis Results

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
1 (Constant)	8,686	,226	
Leverage	-,249	,342	-,219
Liquidity	-,773	,387	-,599

a. Dependent Variable: Stock price

Source: SPSS Processed Data, 2022

Based on the calculation results of the SPSS 23.0 program above, it is known that the multiple regression equation is as follows:

$$Y = 8,686 - 0,249 X_1 - 0,773 X_2$$

The regression equation above can be explained by a constant value of 8.686 which means that if the level of the independent variable leverage and liquidity is constant or equal to zero (0), then the stock price as measured by the leverage and liquidity independent variables or changes in the stock price is 8.686.

The Leverage coefficient value (X_1) of -0.249 is negative, which means that any increase in leverage will reduce the value of the stock price by 0.249. This non-unidirectional relationship occurs because one manufacturing company, namely the ROTI company, where the company has reduced the leverage value from 2019 to 2020 by 13.46%, but this only increased the ROTI company's share price from 2019 to 2020 by Rp. 150.

The liquidity coefficient value (X_1) of 0.773 is negative, which means that any increase in liquidity will reduce the value of the stock price by 0.773. This non-unidirectional relationship occurs because one of the manufacturing companies, namely the SKLT company, has increased its liquidity value from 2018 to 2019 by 20.99%, but this has lowered the SKLT company's share price in 2018 to 2019 by Rp. 45.

The decision-making data in this model test is $F\text{-count} > F\text{-table} = 3.252$, then the model is accepted. The model test results can be seen in table 4, below:

Table 4. F Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	4,914	2	2,457	4,038	,026 ^b
Residual	22,514	37	,608		
Total	27,428	39			

a. Dependent Variable: Stock price

b. Predictors: (Constant), Liquidity, Leverage

Source: SPSS Processed Data, 2022

Simultaneous test results (F-test) prove that the results of model testing obtained F-count values (4.038) > F-table (3.252) and (0.026) < $\alpha = 0.05$, so these results show that Leverage and Liquidity have a significant effect simultaneously on stock prices. Then it can be interpreted that the hypothesis is accepted. Based on this explanation, in research conducted by (N.S & Sunartiyo, 2020) prove that Leverage and Liquidity simultaneously have a significant effect on the variable Stock Price, then according to (Nurismalatri & Artika, 2022) also proves that Leverage and Liquidity simultaneously have a significant effect on the Stock Price variable. Meanwhile according to (Syahzuni & Sari, 2022) proves that Leverage and Liquidity simultaneously have no significant effect on the Stock Price variable. This means that if the company is able to jointly anticipate problems in Leverage and Liquidity, theoretically, the stock price of the company can increase periodically.

The t test was carried out by looking at the significance level of each independent variable and comparing it with the significance level ($\alpha = 0.05$) as measured with the help of SPSS (Statistical Package for the Social Sciences) software 23. If the significance value of $t \leq 0.05$ then the hypothesis accepted and the independent variable is declared to have a significant effect on the dependent variable. The results of the hypothesis test or t test in this study are presented in Table 5 as follows:

Table 5. t Test Results

Model	t	Sig.
1 (Constant)	38,472	,000
Leverage	-,729	,471
Likuiditas	-1,996	,053

Source: SPSS Processed Data, 2022

Based on the table it can be seen in Leverage that the t is -0.729 smaller than the t_{tab} is 2.026 with $\text{sig } 0.471 > \alpha = 0.05$ then H_0 is accepted and H_a is rejected. This means that leverage has a negative and insignificant effect on stock prices. Based on these results, the hypothesis is rejected. The results of this study are inconsistent (Kohansal et al., 2013) with the opinion that investors are more interested in putting resources into organizations with low DER values considering the fact that the risk of inability to take care of all organizational commitments in financial management. The results of the same research were also obtained (Nurismalatri & Artika, 2022) proves that Leverage has no effect on stock prices and complies (Arumuninggar & Mildawati, 2022) also proves that leverage has no effect on stock prices. Meanwhile according to (Firmansyah & Maharani, 2021) proves that Leverage has an influence on stock prices. This means that if the leverage is too high because it rarely has productive debt, it can make a company's stock price decrease because it is considered that the company is in difficulty developing.

Based on the table it can be seen in Liquidity that the t is -1.996 smaller than the t_{tab} is 2.026 with $\text{sig } t (0.053) > \alpha = 0.05$ then H_0 is accepted and H_a is rejected. This means that Liquidity has a negative and insignificant effect on stock prices. Based on these results, the hypothesis is rejected. The results of the same research were also obtained (Firmansyah & Maharani, 2021) proves that liquidity has no effect on stock prices. Meanwhile according to (Nurismalatri & Artika, 2022) prove that liquidity has an influence on stock prices and according to (N.S & Sunartiyo, 2020) also proves the same thing, namely liquidity has an influence on stock prices. This means that if liquidity is too high due to insufficient investment of profits, it can make a company's stock price decrease because it is assessed by investors that the company has not been able to optimize its own potential in reinvesting from the profits earned.

Table 6. Moderated Regression Analysis Test Results

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
1 (Constant)	8,375	,168	
Leverage*Liquidity	-,464	,295	-,659

Source: SPSS Processed Data, 2022

The coefficient value $X_1 \times X_2$ (Leverage*Liquidity) of 0.464 is negative, which means that any increase that occurs in Variable $X_1 \times X_2$ (Leverage*Liquidity) will reduce the value of the stock price by 0.464. This non-unidirectional (negative) relationship occurs because one of the manufacturing companies, namely the INDF company, has increased the Leverage value from 2019 to 2020 by 28.66% and has increased Liquidity from 2019 to 2020 by 10%, but this lowered the INDF company's share price in 2019 to 2020 by IDR 1,775.

The results of this study are in line with the theory according to (Kasmir, 2013) stated that the sustainable proportion is the proportion most often used to measure liquidity. The current proportion (current proportion), is the proportion to measure the organization's capacity to pay

temporary commitments or obligations that are expected to occur immediately when collected in general. Meanwhile, accordingly (Nugraha & Mertha, 2016) where a low proportion of currents will reduce the market cost of the cost of the shares concerned. On the other hand, the proportion of ongoing too high is also not great, given the fact that under certain circumstances denotes a ton of inactive organizational reserves (small actions) which can eventually reduce an organization's profit-making capacity. The high current proportion can be due to uncollectible accounts receivable and unsold inventories, which obviously cannot be used quickly to pay liabilities.

Based on this explanation, in research conducted by (Nugraha & Mertha, 2016) proves that liquidity is not able to moderate the effect of leverage on stock price variables. This means that investors have several considerations, namely companies need debt to meet funding for companies that are growing. Companies need funds that are large enough to be able to fulfill their operational activities which are impossible to fulfill by the amount of capital owned by the company.

CONCLUSION

Leverage has a negative and insignificant effect on stock prices, this indicates that the high ratio of debt to equity in the company makes investors hesitate to put financial resources into the company on the grounds that the company cannot fulfill its commitments because if the company's debt increases, it will decrease company's return value. Liquidity has a negative and insignificant effect on stock prices, this indicates that the accumulation of large assets does not provide a good signal for investors to be interested in investing. Liquidity is not able to moderate the effect of leverage on the stock price variable, this indicates that the company's liquidity capability does not contribute to an increase in the company's stock price. The results of this study can be used as a consideration for companies to strengthen company liquidity in utilizing more productive assets and utilizing debt so that they can provide a positive signal for investors in making investments that have an impact on increasing the value of stock prices in food and beverage sub-sector companies on the Indonesia Stock Exchange.

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