

## Research Article

# The Effect of Profitability, Liquidity, Dividend Policy, and Capital Structure on Firm Value in Food And Beverage Companies Listed on the Indonesia Stock Exchange in 2017--2021

Allyana Rifda Nafisah, Supriyono\*, Mira Meilia Marka

Economics and Business Faculty, Universitas Muria Kudus, Indonesia

**ORCID**

Supriyono: <http://orcid.org/0000-0003-2258-1187>

**Abstract.**

In the business world, competition between companies is growing rapidly along with the times. When new companies merge, the companies compete with each other to increase sales and market of each other's products. In Indonesia, the industrial sector is growing rapidly, such as the food and beverage industry, which will continue to be needed by humans. As a result, new companies are emerging, and competition is getting tougher, impacting performance improvement. Based on the value of food and beverage companies in 2017–2021, there were fluctuations in several companies. In 2020, food and beverage companies experienced a decline due to COVID-19, so in 2020, several companies experienced a decline in their firm value. This research aims to analyze the influence of profitability, liquidity, dividend policy, and capital structure on firm value in food and beverage listed on the Indonesia Stock Exchange in 2017–2021. The type of this research is quantitative, secondary data. Data that had been collected were then processed using the SPSS 26 version analysis tool. The sample selection in this research was purposive sampling. Results show that profitability positively and significantly influences firm value. Liquidity has a negative and insignificant effect on firm value. Dividend policy has a positive and insignificant effect on firm value. Capital structure has a positive and insignificant effect on firm value. Profitability, liquidity, dividend policy and capital structure simultaneously influence firm value.

**Keywords:** profitability, liquidity, dividend policy, capital structure, firm value

Corresponding Author:

Supriyono; email:

supriyono@umk.ac.id

**Published:** 4 June 2024

Publishing services provided by  
Knowledge E

© Allyana Rifda Nafisah et

al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICEMA Conference Committee.

## 1. Introduction

Every company must have a way to increase its business to achieve company goals. A business has a purpose. The establishment of a company must have a clear purpose. The first goal is to achieve maximum profits. The second goal is to make the owner a prosperous company or shareholders.

Meanwhile, the third company goal is to maximize the company's value, as reflected in its share price. These three company objectives are not substantially different. It's just the emphasis you want to achieve. Each company is different from one another.

 OPEN ACCESS

High firm value reflects high share prices. A high share price means high prosperity for the company's shareholders. Firm value can be an indicator for investors to assess a company. The higher the ratio, the more the Companies are increasingly successful in creating value for shareholders' shares.

Several factors influence firm value. This research uses four variables that can influence firm value: profitability, liquidity, dividend policy and capital structure. Profitability is ratio to assess the company's ability to seek profits or profit in a certain period. Kasmir (2019). The higher the level of profit obtained, the company's ability to pay dividends will also be higher, and the company's share price will increase. The company's high level of liquidity indicates growth opportunities companies tend to be high, meaning that the more liquid the company is, the higher investors' confidence in investing in the company so that it can increase the value of the company, Tumanan & Dyah Ratnawati (2021). For investors, dividends are a reason to invest their capital because dividends are the return they will receive on the investment invested in the company. The dividends expected by investors mainly aim to improve their welfare, while the company expects continuous growth to maintain survival and provide welfare to the holders' shares (Septariani, 2017). Capital structure is a factor that influences a company's financial performance. Company financial management must properly compose the funding required for operational and investment activities (Aeni & Fun, 2019).

Research on profitability has had mixed results. First, previous research conducted by Siregar & Dalimunthe (2019) found that profitability significantly influences firm value. The results of this research contradict research by Farizki (2021), which found that profitability has no significant effect on firm value. Second, The results of previous research align with research conducted by Salim and Susilowati (2020), which states that liquidity has a negative and significant effect on firm value. Research conducted by Irawati and Gendro (2022) states that liquidity has a positive and insignificant effect on firm value. Third, The results of this research are in line with the research conducted by Septariani (2017), which states that policy dividends do not have a significant effect on firm value.

Research conducted by Nandita & Kusumawati (2018) is not in line with research carried out because dividend policy significantly influences firm value. Fourth, the results of this research align with research conducted by Ukhriyawati (2019), which states that it has a positive and insignificant effect on firm value. However, research by Zuraida (2019) states that capital structure has a significant positive effect on firm value. Many companies use the food and beverage sector as research objects. Researchers also suggest using variable measuring instruments other than ROE in calculating profitability.

Therefore, other research was conducted using ROA as a measure of profitability. Current Ratio to measure liquidity. Dividend policy is proxied by the Dividend Payout Ratio. Then, the capital structure is proxied by the Debt to Equity Ratio and company value are proxied by price to book value.

This research analyses the influence of profitability, liquidity, dividend policy and capital structure on company value. This research can add new literature regarding the influence of liquidity profitability, dividend policy and capital structure on company value. Apart from that, it is hoped that it can become a reference for the development of science. The benefit of this research is that it can be used as a consideration for a company in creating company value.

## 2. Methods

In this study, the type of data used is quantitative secondary data. The required data was obtained from the Indonesia Stock Exchange (IDX) website in 2017 – 2021. This study used one dependent variable, namely company value, and four independent variables, namely profitability, liquidity, dividend policy and capital structure. The population studied was the food and beverage companies listed on the Indonesia Stock Exchange (IDX) for 2017 - 2021. The purposive sampling method was used to obtain the sample. The purposive sampling method is a technique for determining samples with certain considerations. The criteria used in selecting research population criteria are as follows: 1. Food and beverage companies listed on the Indonesia Stock Exchange have complete financial report data for 2017 – 2021, which are needed to measure variables. 2. The companies used in this research are Food and Beverage companies that publish or publish consecutive annual reports during the observation period 2017 - 2021. 3. Companies that distribute dividends during the research period. The sample selection process according to the applied criteria is presented in Table 1.

TABLE 1:

Description	Total
Food and beverage companies listed on the Indonesian Stock Exchange	82
Food and beverage companies that did not publish consecutive annual reports during the research period	(28)
Food and beverage companies that do not distribute dividends	(44)
Number of samples used (10 companies x4 years of observation)	10 50

The dependent variable used in this study was firm value. Firm value is proxied in Price to Book Value. Price to Book Value (PBV) describes how much the market appreciates the book value of a company’s shares. The higher the PBV ratio, the more

confidence the market has in the company's prospects. The dependent variable used in this research is company value. Company value is proxied by Price to Book Value. Price to Book Value (PBV) describes how much the market appreciates the book value of a company's shares. The higher the PBV ratio, the more confidence the market has in the company's prospects. Mark a high value is the desire of company owners because a high value shows that the prosperity of the shareholders is also high. Zuraida (2019). The calculation of firm value, according to Harmono (2017), is formulated as follows:

$$\text{Price Book Value} = \frac{\text{Market Price per Stock}}{\text{Book Value per Share}}$$

The independent variables used in this research are profitability, liquidity, dividend policy and capital structure. Profitability is proxied by Return on Assets (ROA). According to Kasmir, (2019:201), Return on Assets is a ratio that shows the return on the number of assets used in the company. The calculation of profitability is formulated as follows:

$$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total assets}} \times 100\%$$

The second independent variable is liquidity. Liquidity is proxied by the Current Ratio (CR). According to Kasmir (2019:134), the Current Ratio is a ratio used to measure a company's ability to pay short-term obligations or debts immediately due when billed in full. The liquidity calculation is formulated as follows:

$$\text{Current Ratio} = \frac{\text{Current asset}}{\text{Current liabilities}} \times 100\%$$

The third independent variable is dividend policy. Dividend policy is proxied by the Dividend Payout Ratio (DPR). According to Musthafa (2017:143), the dividend payout ratio compares dividends paid and net profit. The higher the Dividend Payout Ratio, the more profitable it will be for investors as shareholders. On the contrary, it will weaken the company's internal finances. The dividend policy calculation is formulated as follows:

$$\text{Deviden Payout Ratio} = \frac{\text{Deviden Per Share (DPS)}}{\text{Earning Per Share (EPS)}}$$

The fourth independent variable is capital structure. Capital structure is proxied by the Dept Equity Ratio (DER). According to Kasmir (2018:157), the debt-to-equity ratio is a ratio used to assess debt versus equity. This ratio is found by comparing all debt,

including current debt, with all equity. The capital structure calculation is formulated as follows:

$$\text{Total Liabilities} \\ \text{Dept Equity Ratio} = \\ \text{Total Equity}$$

This research used multiple linear regression analysis techniques to determine the direction of influence and impact of the independent variable on the dependent variable. Before carrying out a multiple linear regression test, it is necessary to test the classical assumptions. The steps taken to test the classical assumptions are the normality test, multicollinearity test, heteroscedasticity test, and autocorrection test. The regression model formulated in this research is as follows:

$$Y = a + \beta^1 X^1 + \beta^2 X^2 + \beta^3 X^3 + \beta^4 X^4 + \beta^5 X^5 + e$$

Notes :

Y = Firm Value

a = Constanta Number

$\beta$  = Regression Coefficient

X<sub>1</sub> = Profitability

X<sub>2</sub> = Liquidity

X<sub>3</sub> = Dividend Policy

X<sub>4</sub> = Capital Structure

e = Standard Error

After the classical assumption test is met, the hypothesis is tested using the t-test and F-test. The t-test tests the truth or falsity of the null hypothesis. Payadnya and Jayantika (2018). The F test is used to find out whether the independent variables jointly influence the dependent variable. Next, the Coefficient of Determination test is carried out. The Coefficient of Determination (R-square) measures how far the model can explain variations in the dependent variable.

### 3. Results and Discussions

#### 3.1. Results

The results of the analysis show that 82 food and beverage companies were listed on the Indonesia Stock Exchange (IDX) in 2017 - 2021, and 10 companies meet the criteria. These companies are shown in table 2.

TABLE 2: List of Companies.

No	Company Code	Company Name
1.	CEKA	Wilmar Cahaya Indonesia Tbk
2.	DLTA	Delta Jakarta Tbk
3.	DSNG	Dharma Satya Nusantara Tbk
4.	ICBP	Indofood CBP Sukses Makmur Tbk
5.	INDF	Indofood Sukses Makmur Tbk
6.	JFPA	Japfa Comfeed Indonesia Tbk
7.	MYOR	Mayora Indah Tbk
8.	ROTI	Nippon Indosari Corpindo Tbk
9.	SKLT	Sekar Laut Tbk
10.	TBLA	Tunas Baru Lampung Tbk

### 3.2. The Classical Assumption Test

#### 3.2.1. Normality Test Results

The normality test is used to determine whether the data that has been collected is normally distributed or taken from a normal population. If the Kolmogorov-Smirnov test results show a p-value greater than 0.05, then the data has a normal distribution, and vice versa. The data has an abnormal distribution if the p-value is smaller than 0.05.

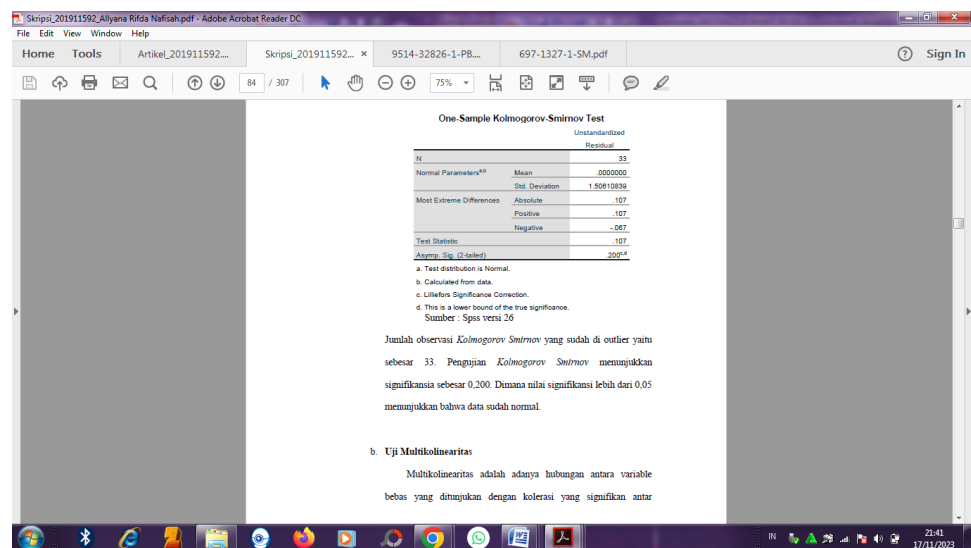


Figure 1: Normality Test Results.

The Kolmogorov-Smirnov test shows a significance of 0.200. A significance value of more than 0.05 indicates that the data is normal.

### 3.2.2. Multicollinearity Test Results

Multicollinearity test is the existence of a relationship between independent variables, which is shown by a significant correlation between independent variables. To determine whether there is multicollinearity or not, this research uses tolerance and variance inflation factor (VIF). If the tolerance value is  $\leq 0.10$  or the VIF value is  $\geq 10$ , then the independent variable has a multicollinearity problem with other independent variables. On the other hand, if the tolerance value is  $> 0.10$  and  $VIF < 10$ , then there is no multicollinearity between the independent variables.

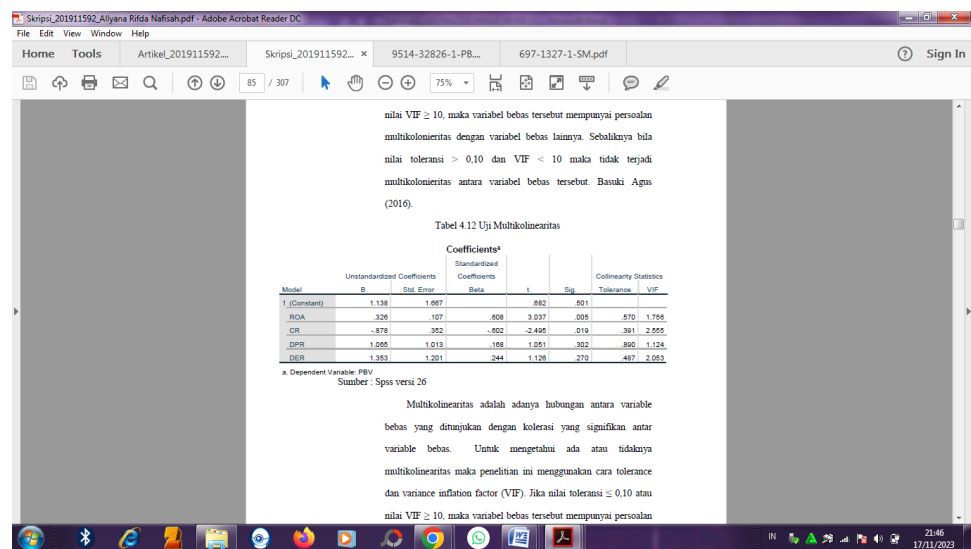


Figure 2: Multicollinearity Test Results.

Based on the tolerance and VIF values from the conlinearity statistics table, the regression model on the profitability variable (ROA), liquidity variable (CR), dividend policy variable (DPR), and capital structure variable (DER) does not show symptoms of multicollinearity.

### 3.2.3. Heteroscedasticity Test Results

Heteroscedasticity is the unequal variance of the residuals for all observations in the regression model. Heteroscedasticity testing can be done by looking at the scatterplot graph between SRESID and ZPRED, namely, whether there is a certain pattern.

The results of the analysis show that there are no symptoms of heteroscedasticity in the data. In these data points, the distribution is above and below or around the number 0 because, in the table above, the points do not form a pattern. This research does not have heteroscedasticity.

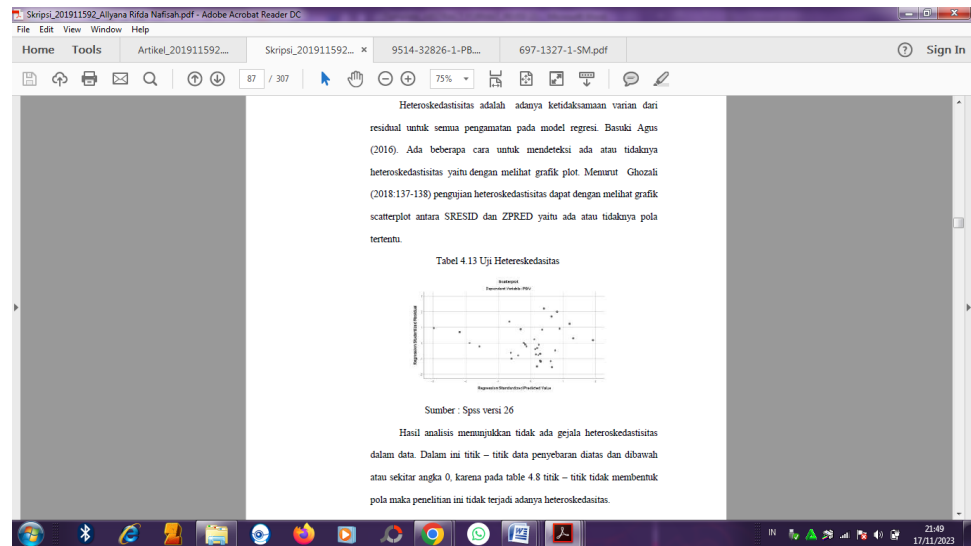


Figure 3: Heteroscedasticity Test Results.

### 3.2.4. Autocorrelation Test Results

The autocorrelation test is used to determine whether or not there are deviations from the classic assumption of autocorrelation, namely the correlation between the residuals in one observation and other observations in the regression model.

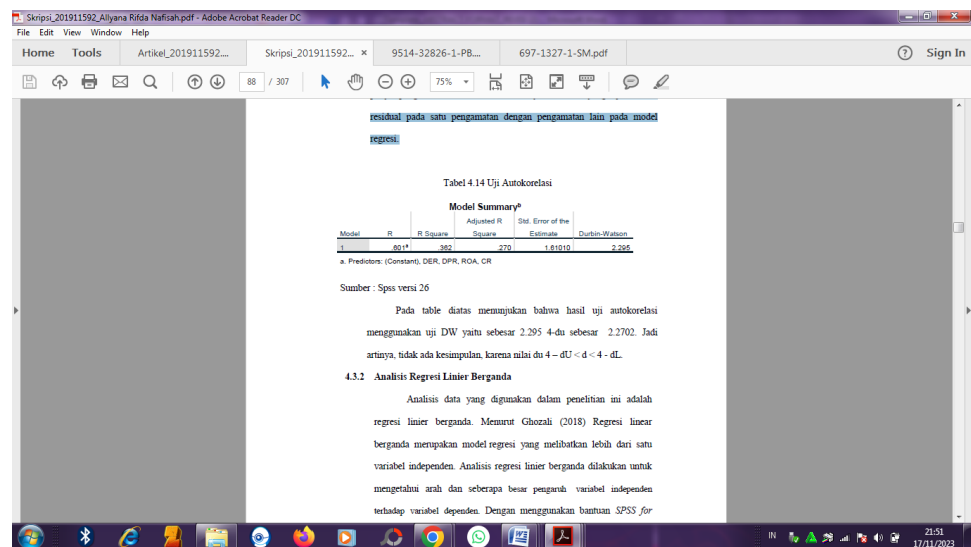


Figure 4: Autocorrelation Test Results.

The table above shows that the results of the autocorrelation test using the DW test are 2.295 4-du, equal to 2.2702.



### 3.2.5. Multiple Linear Regression Test Results

Multiple linear regression with four independent variables and one dependent variable was used in this research. This test aims to see the influence of the independent variable on the dependent variable.

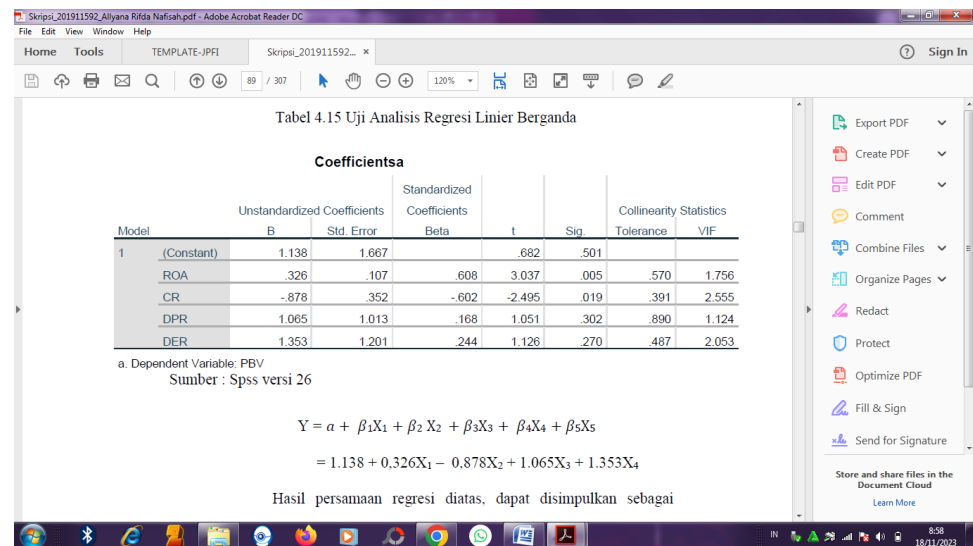


Figure 5: Multiple Linear Regression Test Results.

$$Y = a + \beta^1 X^1 + \beta^2 X^2 + \beta^3 X^3 + \beta^4 X^4 + \beta^5 X^5 + e$$

$$= 1.138 + 0,326X_1 - 0,878X_2 + 1.065X_3 + 1.353X_4 + e$$

Notes :

Y = Firm Value

a = Constanta Number

β = Regression Coefficient

X<sub>1</sub>= Profitability

X<sub>2</sub>= Liquidity

X<sub>3</sub>= Dividend Policy

X<sub>4</sub> = Capital Structure

e = Standard Error

### 3.3. Hypothesis Test Results

### 3.3.1. The T-Test

The t-test aims to test the effect of each independent variable on the dependent variable. P-value is used to see possible errors that occur in the hypothesis testing. If the p-value is less than 0.05, then the hypothesis is accepted.

Tabel 4.16

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1							
	(Constant)	7.148	120.731		.059	.953	
	ROA	-19.659	12.148	-.400	-1.618	.113	.304
	CR	51.383	34.249	.411	1.500	.141	.4032
	DPR	-67.955	61.535	-.183	-1.104	.275	.681
	DER	139.944	72.716	.328	1.925	.061	1.561

a. Dependent Variable: PBV

Sumber : Spss versi 26

Figure 6: T Test Results.

### 3.4. The F-Test

The F test is used to test hypotheses. The F test is used to see the influence of all independent variables on the dependent variable. Based on the F test results in Table 9, the F count obtained is 3,965, and the significance value is 0.011, smaller than the predetermined significance level. In this research, it can be interpreted that profitability, liquidity, dividend policy and capital structure simultaneously influence firm value, so it can be concluded that hypothesis H5 is accepted, meaning that there is an influence between profitability, liquidity, dividend policy, and capital structure simultaneously on firm value.

#### 3.4.1. R-Squared Test

Based on the results of the table, the R2 value is 0.270. This shows that in this study, profitability, liquidity, dividend policy and capital structure can explain the value of the company's influence by 27%, while the remaining 73% can be explained or influenced by other variables. not included in this research model.

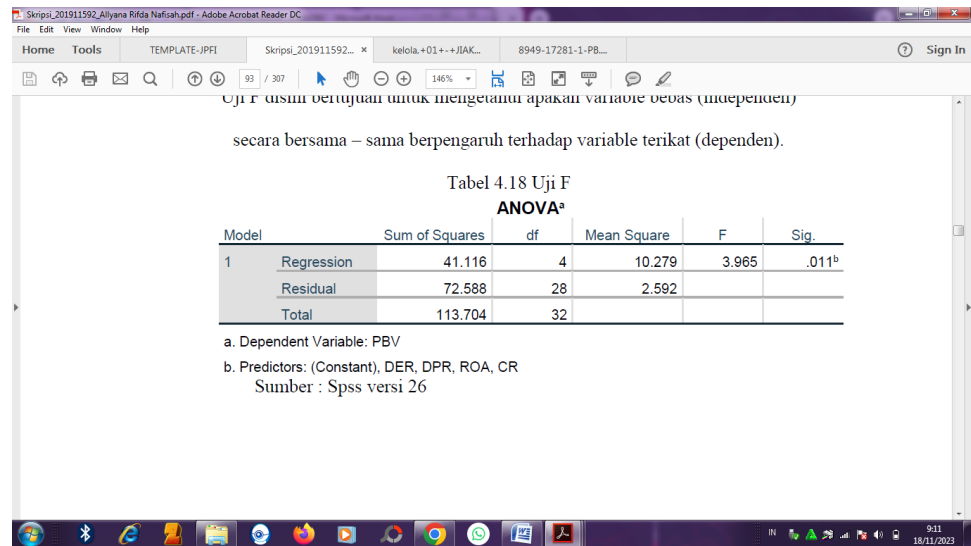


Figure 7: F-Test.

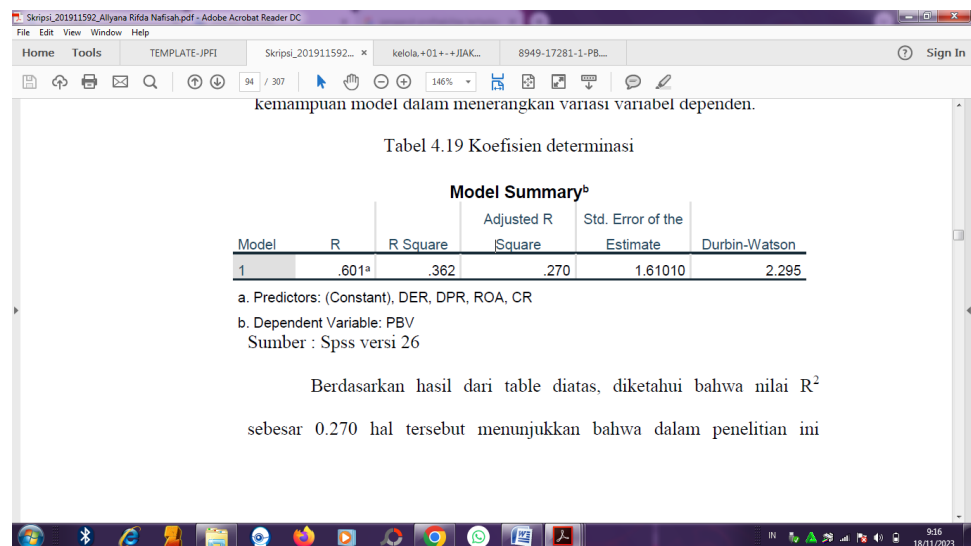


Figure 8: R-Squared Test.

## 4. Discussion

### 4.1. Profitability on Firm Value

The research results show that the Profitability variable positively and significantly affects the firm value of food and beverage companies listed on the Indonesia Stock Exchange in 2017 - 2021. This means that if profitability increases, the firm value will increase. This shows that profitability can influence the value of food and beverage companies, where the greater the profitability, the greater the value of the company being acquired. Companies with higher profitability receive greater funding, which improves company performance and thereby increases company value. The results

of this research are in line with the research conducted by Butar (2019), who states that profitability has a positive and significant effect on firm value.

## 4.2. Liquidity on Firm Value

The research results show that the liquidity variable negatively and significantly affects the company value of food and beverage companies listed on the Indonesia Stock Exchange in 2017 - 2021. In this research, liquidity increases, and firm value decreases. If the liquidity value is too low, it means there is a liquidation problem in the company. Conversely, suppose the current ratio is too high. In that case, it is not good because the company has too many idle funds and is increasing profitability to produce decreased company profits. Shareholder returns and lower share prices influenced this. This way, investors will consider investing their money, affecting the company's value. The results of this research are in line with research conducted by Salim and Susilowati (2020), which states that liquidity has a negative and significant effect on firm value.

## 4.3. Dividend Policy on Firm Value

The research results show that the dividend policy variable (Dividend payout ratio) does not significantly affect firm value. The research results are insignificant because not all samples have the same average dividend payout ratio. High dominates the sample, which also has a high price book value. A high or low dividend policy does not affect firm value. The results of this research align with research conducted by Septariani (2017), who stated that policy dividends do not significantly affect firm value.

## 4.4. Capital Structure on Firm Value

The research results show that the capital structure (Debt Equity Ratio) does not significantly affect the company value of food and beverage companies listed on the Indonesia Stock Exchange in 2017 - 2021. The research results are insignificant because the rise and fall of the capital structure does not affect the firm value. The results of this research are in line with research conducted by Ukhriyawati (2019), which states that it has a positive and insignificant effect on firm value.

## 5. Conclusion

This research aims to determine the effect of profitability, liquidity, dividend policy and capital structure on firm value in food and beverage companies listed on the Indonesia Stock Exchange in 2017 - 2021. Based on research results and the basis of results of hypothesis testing, the following conclusions can be drawn: (1) Profitability has a positive and significant effect on firm value. (2) Liquidity has a negative and significant effect on firm value. (3) Dividend policy has a positive and insignificant effect on firm value. (4) Capital structure has an insignificant positive effect on firm value. (5) Profitability, liquidity, dividend policy and capital structure simultaneously influence firm value.

## Acknowledgement

The authors would like to sincerely thank the Food and Beverage companies who have provided data and information for this research.

## References

- [1] Aeni NA, Asyik NF. Pengaruh Profitabilitas, Pertumbuhan Perusahaan, Struktur Modal, Ukuran Perusahaan Terhadap Pertumbuhan Perusahaan. *Jurnal Ilmu Dan Riset Akuntansi*. 2019;8(7):1–17.
- [2] Butar BB. Pengaruh Profitabilitas, Struktur Modal, Likuiditas, dan Ukuran Perusahaan terhadap Nilai Perusahaan (Studi Pada Perusahaan BUMN Bidang Konstruksi yang Terdaftar di BEI). *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*; 2019.
- [3] Farizki, F. I., Suhendro, S., & Masitoh, E. (2021). Pengaruh Profitabilitas, Likuiditas Dan Kebijakan Dividen Terhadap Nilai Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (Bei)
- [4] Harmono. (2017). *Manajemen Keuangan Berbasis Balanced*. PT. Bumi Angkasa Raya..
- [5] Irawati, K. R., Wiyono, Gendro & Sari, Pristin. P. (2022) “*Pengaruh Likuiditas, Struktur Modal, Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Manufaktur Sector Industry Barang Dan Konsumsi Yang Terdaftar Di Bursa Efek Indonesia (BEI) Tahun 2015 – 2019*”
- [6] Musthafa. (2017). *Manajemen Keuangan*. Cv Andi Offset.
- [7] Nandita A, Kusumawati R. Pengaruh Profitabilitas, Leverage, Size Dan Kebijakan Deviden Terhadap Nilai Perusahaan. *CAM JOURNAL : Change Agent For*

- Management Journal. 2018;2(2):188–99.
- [8] Kasmir. (2019). *Pengantar Manajemen Keuangan* (Edisi kedua). Prenadamedia Group.
- [9] Salim, M. Noor, and Rina Susilowati. (2020). “The effect of internal of factors on capital structure and its impact on firm value: listed on Indonesian stock exchange 2013 – 2017”. *International journal of engineering technologies and management research* 6 (7): 173 – 91.
- [10] Septariani D. Pengaruh Kebijakan Dividen dan Kebijakan Hutang terhadap Nilai Perusahaan (Studi Empiris pada Perusahaan LQ45 di BEI Periode 2012- 2015) [Journal of Applied Business and Economic]. *JABE*. 2017;3(3):183.
- [11] Siregar ME, Dalimunthe S. Pengaruh profitabilitas, ukuran perusahaan, kebijakan dividen dan struktur modal terhadap nilai perusahaan pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2015-2017 [JRMSI]. *Jurnal Riset Manajemen Sains Indonesia*. 2019;10(2):356–85.
- [12] Tumanan N, Dyah Ratnawati. Pengaruh Likuiditas, Profitabilitas, Leverage Terhadap Nilai Perusahaan, CSR Sebagai Pemoderasi. *E-Bisnis : Jurnal Ilmiah Ekonomi Dan Bisnis*. 2021;14(1):123–36.
- [13] Ukhriyawati, C, F., dan Dewi, R., (2019)“ Pengaruh Struktur Modal, Pertumbuhan Perusahaan dan Ukuran Perusahaan terhadap Nilai Perusahaan pada Perusahaan LQ-45 yang Terdaftar di Bursa Efek Indonesia”. *Jurnal Equilibiria*.
- [14] Zuraida (2019) “ Pengaruh Struktur modal, ukuran perusahaan, profitabilitas dan kebijakan deviden terhadap nilai perusahaan