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The Effect of Liquidity, Profitability, Capital Structure, Asset Growth, And Firm Size on the Firm Value with Dividend Policy as a Moderating Variable in Food and Beverage Sub-Sector of Manufacturing Companies Listed on the Indonesia Stock Exchange

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ABSTRACT

This study aims to determine the effect of Liquidity, Profitability, Capital Structure, Asset growth, and Firm size on the Firm value of Food and Beverage Sub-Sector Companies listed on the Indonesia Stock Exchange (IDX). The sampling method used is purposive sampling. The sample selected was 12 food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) from 2011-2020. The data used in the financial statements of each sample company was published through www.IDX.co.id and www.financeyahoo.com. The analytical method used in this study is a quantitative method, with classical assumption testing and statistical analysis, namely multiple linear regression analysis using a random-effects model with the help of Eviews10.

The results of this study indicate that Liquidity and Capital structure have a positive and insignificant effect on firm value partially. Profitability, Asset growth, and Firm size have a positive and significant impact on firm value partially. Dividend policy cannot moderate the influence of the relationship between Liquidity, Profitability, Capital Structure, Asset growth, and Firm size on Firm Value.

Keywords: liquidity, profitability, capital structure, firm growth, firm size, dividend policy, firm value.

INTRODUCTION

The development of the business world in Indonesia is growing rapidly, so it significantly influences the development of other sectors. The tight competition requires companies to improve performance and innovate with the products produced to obtain high sales. Companies in improving performance need more funds to create the best product innovations. It is one of the factors for companies to enter the stock exchange (go public) to obtain new funding sources in the form of stocks or bonds to strengthen and improve their performance in getting high profits to increase the firm value. In this case, the company uses the capital market to achieve the company survival goals.

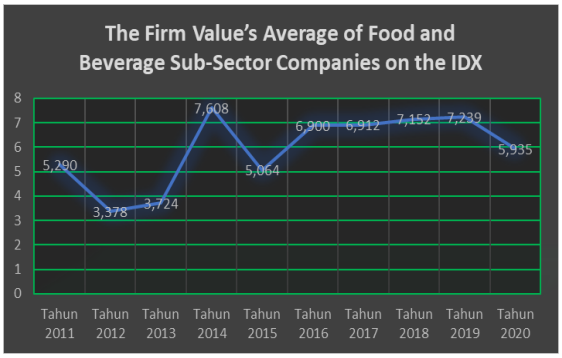
The manufacturing industry listed on the IDX (Indonesian Stock Exchange) is one of the industrial companies growing rapidly and has quite tight competition. Among these sub-sectors is the Food and Beverage industry sub-sector, one of the consumer goods industry sectors that can survive amid Indonesia's economic conditions. Manufacturing companies in the consumer goods industry, especially the Food and Beverage Sub-Sector, are still the mainstay

sector supporting Indonesia's manufacturing and economic growth. The important role of the food and beverage industry can be seen in its immense contribution to Gross Domestic Product (GDP).

The growth of the food and beverage industry is likely to be hampered during the Corona (Covid-19) Pandemic (https://kontan.co.id). The impact of the Covid-19 pandemic has made the growth of the food and beverage industry not reach the growth target. The sales target was missed in the first quarter of 2020 due to the pandemic. The emergence of the Corona Virus pandemic impacted the growth of the food and beverage business in the first quarter of 2020. The Indonesian Food and Beverage Entrepreneurs Association (GAPMMI) said that food and beverage sales in the first three months of this year only grew 2% compared to the previous period. This figure missed the target set at the beginning of the year, which was 2.5%. The decline occurred in bottled drinking water and soft drinks in line with the crowd restriction policy. At the beginning of the year, growth was still good but fell from March when the epidemic began to spread.

However, several types of food and drink are still victorious during the pandemic. The varieties consist of kitchen spices, sauces, butter, instant noodles, food products to increase the body's immunity, and large packaged milk and canned foods. Business prospects in the third quarter of 2020 are still affected by the effects of the Covid-19 outbreak, so business has not been able to recover as usual. In semester I 2020, for the company PT. Mayora Indah, Tbk (MYOR) experienced a decline in sales compared to the previous year's period. The company PT Garudafood Putra Putri Jaya, Tbk (GOOD), until the first quarter of 2020, experienced a decline in the company's net income, down 1.75%. According to Katadata.co.id survey results from the Central Statistics Agency (BPS) recorded, 82.85% of companies in Indonesia experienced a decline in revenue during the Covid-19 pandemic.

The phenomenon regarding firm value in the Food and Beverage Sub-Sector Manufacturing companies on the Indonesia Stock Exchange related to the fluctuations in firm value is as follows:



Source: www.IDX.co.id, data processed in 2022

Figure 1.
The Firm Value's Average of Food and Beverage Sub-Sector Companies Period 2011-2020

Based on Figure 1, the Firm value calculated using Price to Book Value (PBV) can be explained that the Food and Beverage Sub-Sector Company for 10 (ten) years experienced fluctuations in the firm value. The average value of the company fluctuates or is unstable every year.

A company that has gone public aims to increase its value. Every company is required to increase firm value because the firm value is a factor considered by investors to invest their capital. Firm value is a crucial financial performance indicator because firm value reflects the state or condition and performance of a company. According to Mudjijah et al. (2019), an increase in financial performance will be followed by an increase in firm value. The results of financial performance increase, and firm value will increase. The increase in firm value is an achievement and the owners' desire because, with the increase in it, the share price and the shareholders' welfare will increase.

According to Husnan & Suad (2006), firm value is the potential price

investors are willing to pay if a company is sold. The maximizing firm value will be identical to maximizing profit. Increasing firm value as the company's goal illustrates increasing welfare for shareholders or shareholders through dividends and rising share prices. Assessment of a company's performance can be seen from the company's ability to generate profits. The company's profit is not only an indicator of its ability to fulfill obligations to its funders, but it is also an element in the creation of firm value that shows the company's prospects in the future (Mery et al., 2017). Optimizing firm value can be achieved by implementing the financial management function, where a decision will affect the financial decisions, affect other financial decisions, and impact the company's value.

For a company, firm value is very important because firm value reflects the state or condition and performance of a company. Firm value can affect investors' perceptions of the company's prospects. The results of a company's performance can be seen by investors from the company's financial performance. One of the benchmarks for investors in investing in a company is to look at the company's financial performance results. Factors that influence the high and low value of the company are the company's financial performance. According to Mudjijah et al. (2019), If the firm value is high, it will indicate an increase in shareholder prosperity. Investors deciding to invest in a company depend on the development of the firm's value. The higher the value of the company, the smaller the risk that investors will bear.

In this study, firm value can be measured using Price Book Value (PBV). PBV is a ratio that shows whether the price of the shares traded is overvalued or undervalued in the book value of the shares. The greater the PBV ratio, the higher the company is assessed by investors relative to the funds invested. High PBV is the desire of company owners because it shows increased shareholder prosperity, which can be seen through the equity firm's market value or book value (Mudjijah et al., 2019).

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

The liquidity ratio is a ratio that describes the company's ability to meet short-term obligations (Kasmir, 2008). This liquidity ratio is to show or measure the company's ability to meet its maturing obligations, both obligations to parties outside the company and within the company. This liquidity ratio shows the company's ability to pay its short-term debts or obligations to determine its ability to fulfill its obligations.

The higher the level of company liquidity, the higher the firm value. It can increase investor demand for company shares, and increased share demand will result in increased firm value (Putra and Lestari, 2016). Companies must continue to pay attention to the level of liquidity to increase investor confidence in the company. It also indicates that in making investment decisions, investors must pay attention to the level of company liquidity. So, investors should prioritize investing in companies with a greater level of liquidity over companies with a smaller level of liquidity (Taslim, 2016). A company with a high current ratio will increasingly be able to pay off its short-term obligations, which can attract investors to buy shares or invest in the company.

In this study, liquidity can be measured using the current ratio. The current ratio is a ratio to measure the company's ability to pay short-term obligations or those that are due immediately when they are billed as a whole. The current Ratio can be regarded as a form to measure a company's level of security (margin of safety). Calculating the current ratio is done by comparing the total current assets with the total current debt and

then the current ratio formula (current ratio).

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$$

The research results by Hidayat et al. (2019) stated that liquidity positively influences firm value. When the company has a high level of liquidity, the firm value will be increased. These results are in line with the research results of Sondakh (2019), Mery et al. (2017), Du et al. (2016), and Putra & Lestari (2016). Aisyah et al. (2019) found different results, which showed that liquidity had no significant effect on firm value. The same results were stated in the research of Fajaria & Isnalita (2018), Tahu & Susilo (2017), Adelina et al., (2014) and Wulandari (2013).

Profitability is a ratio that measures the company's ability to generate profits using the company's sources (Sudana, 2015). This ratio measures the overall management effectiveness, indicated by the profit size obtained by the relationship with the seller and investment. The better the profitability ratio, the better it describes the company's high profitability.

The higher the company's profitability will also increase the company's earnings per share (Prasetyorini, 2017). An increase in the company's earnings per share will make investors interested in investing by purchasing company shares. With many investors buying company shares, the company's share price will increase its value. This profitability ratio measures the level of management effectiveness of a company. It is addressed by the profit generated from sales or investment income. Companies with high profitability show the company prospects in the future, and this is very important to maintain the company's survival in the long term.

This study's profitability can be measured using Return on Equity (ROE). ROE shows the company's ability to generate after-tax profits using capital. This ratio is essential for the shareholders to determine the effectiveness and efficiency of their capital management carried out by the company's management. The higher this ratio means, the more efficient the use of own money by the company's management. The formula used for this ratio is:

$$ROE = \frac{\text{Earning After Tax}}{\text{Total Equity}}$$

Based on the research results of Rutin et al., (2019), Puspitaningtyas, (2017), Hung et al., (2018), Mahfudnurnajamuddin et al., (2018), Handayani et al., (2018), Fajaria and Isnalita (2018), Tahu and Susilo (2017), Sabrin et al., (2016) and Chen Li-Ju & Chen Shun-Yu (2011) stated that profitability has a positive effect on firm value. In contrast to the results of research conducted by Sondakh (2019), Setiawanta (2016), and Sambora et al. (2014), which state that profitability has no effect and is not significant to firm value.

The capital structure illustrates the company's financial proportions, namely between owned capital, which comes from long-term debt, and own money, which is a company's financing source (Fahmi, 2014). The need for funds to strengthen a company's capital structure can be sourced from internal and external sources, provided that the sources of funds needed are from places that are considered safe. It means that when funds are used to strengthen the company's capital structure, it can control it effectively and efficiently. The capital structure is related to a company's long-term spending as measured by comparing long-term debt with its capital (Sudana, 2015).

Capital structure is the proportion of company funding consisting of own capital, debt, common stock, and preferred stock to finance the company's long-term operations. Capital structure management aims to create a permanent mix of sources of funds in such a way as to be able to maximize share prices

which are a reflection of firm value. In meeting funding needs, a company must look for alternative funding that is efficient and effective. Efficient and effective funding will occur if the company has a good and optimal capital structure. The task of financial management is to determine the optimal capital structure to support the company's investment activities. The capital structure aims to combine permanent sources of funds which the company then uses in a way expected to maximize the firm value. According to Ukhriyawati & Dewi (2019), the capital structure is above the optimal capital structure target, so any increase in debt will reduce the firm value.

Capital structure can be measured in this study using the Debt equity ratio (DER). DER is the ratio used to assess debt to equity. This ratio is sought by comparing the ratio between debt and equity. The formula used in this study is proxied to this ratio as follows:

$$DER = \frac{Total\ Debt}{Total\ Equity}$$

Based on the research results by Indasari & Yadnyana (2018), it is stated that capital structure positively affects firm value. The same result was also stated by Prastuti & Sudiartha (2016) and Yanti & Darmayanti (2019). In contrast to the results of Tumangkeng & Mildawati's (2018) research, it shows that capital structure does not affect firm value. This result is in line with Mandalika (2016) and Chasanah (2018).

According to Brigham & Houston (2009), asset growth is a change (increase or decrease) in the total assets owned by the company. The greater the need for external funding for companies with high growth rates. External funding needs are interrelated with asset growth. Investment and financing decisions interact with the company's future opportunities. Therefore, these decisions cannot be considered separately from one another.

According to Setiyowati et al. (2020), the growth opportunity is a company's growth that can be seen from increased assets or sales. It is perfect for companies that will become investment opportunities for investors. Asset growth is another factor that can affect the value of a company. Companies with suitable growth will demand a good quality of company management, which will affect the company's overall performance. Increasing assets from one period to the next shows that the company's performance is improving. Asset growth is what internal and external parties want to signal to investors in investing positively.

A company that can maintain its position amid economic development is considered successful in carrying out its corporate strategy. The company's strategy that goes well and achieves the target can reflect good performance so that the company can further develop and expand its business. Asset growth is measured by using changes in total assets. The company's growth in this study was measured using changes in total assets. Changes in total assets are calculated by the total assets of the current period minus the total assets of the previous period and divided by the total assets of the last period.

$$Asset\ Growth = \frac{Total\ Asset^{t} - total\ Asset^{(t-1)}}{Total\ Asset^{(t-1)}}$$

Information:
TA t = Total Assets for the current year
TA (t-1) = Total Assets of the previous year

Kurniawan and Suhermin's (2020) research shows that asset growth positively and significantly affects firm value. These results are in line with research by Nurwahyuni et al. (2020), Setiyowati et al. (2020), and Sumarsono & Hartediansyah (2012). Different results stated that Hergianti & Retnani's (2020) asset growth did not affect firm value. These results are in line with the research of Asmanto & Andayani (2020), Ibrahim & Jonnardi (2020), and Nathanael & Panggabean (2021).

According to Riyanto (2011), firm size (firm size) describes the size of a company shown in total assets, total sales, and average sales. Average total net sales for the current year over several years. Small companies with small total assets tend to use their capital costs and short-term liabilities compared to long-term liabilities because the costs are lower. Large companies with large total assets are the company's financial condition is more robust, operations are more stable, and relatively more able to generate profits so that the company's prospects in the future are better.

Large companies have easier access to the capital market, so large companies are more flexible in obtaining funds because of the ease of accessibility to the capital market. Companies with large total assets indicate that they have reached the maturity stage and have more strong funding sources. Company management can control and utilize existing assets in large companies to achieve company goals and improve company operational activities, so investors will respond positively to investing so that firm value will increase. Firm size is a measure used to reflect the size of the company based on the company's total assets. The firm size in this study is proxied as follows:

Firm Size = Ln Total Assets

Prasetyorini (2017), Pratama & Wiksuana (2016), and also Khasanah & Aryati (2019) stated that firm size has a positive effect on firm value. The results of this study are not in line with the research of Firmansyah (2019), Aisyah et al. (2019), and Mudjijah et al. (2017), which reveal that firm size does not have a significant effect on firm value.

In this study, dividend policy is used as a moderating variable because the firm value can be seen from the company's ability to pay dividends. Dividend policy decisions are decisions about how many current earnings will be paid out as dividends rather than retained for reinvestment in the company (Brigham, E. F., and Houston, 2001). Dividend policy is related to determining the size of the dividend payout ratio, namely the percentage of net profit after tax which is distributed as dividends to shareholders. Dividend decisions are part of the company's spending decisions, especially those related to internal spending. The size of the dividends distributed will affect the size of retained earnings. Retained earnings are one of the company's internal sources of funds.

Determining the amount of the company's net profit to be distributed as dividends is a company management policy and will affect the firm value and share price (Sudana, 2011). The dividend policy provides information about the company's performance. The dividend policy has a substantial impact on many parties, especially those who have an interest in the company. The dividend policy determines how much profit should be paid to shareholders and reinvested in the company. In this study, dividend policy is measured using a dummy. Namely, one means that it is divided by dividends, and 0 is not divided by dividends.

Based on the phenomena that occur above, the researchers are interested in conducting research under the title "The Influence of Liquidity, Profitability, Capital Structure, Asset growth and Firm size on Firm Value with Dividend Policy as a Moderating Variable in Food and Beverage Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2011-2020 period".

Framework

Following the description of the background of the problem, literature review, and previous research, a conceptual research framework is prepared as follows:

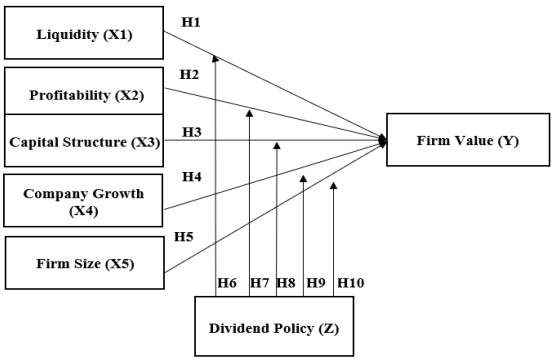


Figure 2.
Conceptual Framework

H1: Liquidity has a positive and significant effect on firm value.
H2: Profitability has a positive and significant effect on firm value.
H3: Capital structure has a positive and significant effect on firm value.
H4: Asset growth has a positive and significant effect on firm value.
H5: Firm size has a positive and significant effect on firm value.
H6: Dividend policy can moderate the effect of liquidity on firm value.
H7: Dividend Policy can moderate the effect of Profitability on Firm Value.
H8: Dividend policy can moderate the effect of capital structure on firm value.
H9: Dividend policy can moderate the effect of asset growth on firm value.
H10: Dividend policy can moderate the effect of firm size on firm value.

RESEARCH METHODS

This research was designed by researchers using causal research. Causal research is research with identified causal relationships between various variables (Sugiyono, 2011). This study uses causal research to see the effect of liquidity, profitability, capital structure, firm growth, and firm size as the dependent variable on firm value as an independent variable, with dividend policy as a moderating variable.

This study uses secondary data. Secondary data is data obtained indirectly through intermediary media. Secondary data in this study was obtained by downloading the form of the company's financial statements from the website www.IDX.co.id and data obtained from https://finance.yahoo.com/.

The population in this study is the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange from 2011 – 2020. The sample is part of the population to be studied or part of the number of characteristics possessed by the population (Sugiyono, 2016). This study uses a purposive sampling technique which is a sampling technique based on certain considerations. The criteria for sampling are as follows:

1. Manufacturing companies in the food and beverage sub-sector are listed on the Indonesia Stock Exchange from 2011 – 2020.
2. Entirely published and audited company financial statements for the period 2011 – 2020.

Based on these criteria, a research sample of 12 companies was obtained from the total population of manufacturing companies listed on the IDX in 2016-2020, so the total observations for ten years were 120 (12 companies x 10 years).

The data analysis technique used in this research is the panel data regression method, using Eviews 8 software for data processing and Microsoft Office Excel. According to (Gunjarati, 2003), panel data means the combination of data between time (time series) and data between individuals or spaces (cross-sections). Statistical methods with regression using panel data (pooled data) combine time series data and cross-sections.

RESULT AND DISCUSSION

1. Descriptive Statistical

Descriptive statistical analysis in this study is used to provide an overview or description of the research variables. The tools used to describe the variables in this study are the average (mean), minimum, maximum, and standard deviation values. The table below presents a descriptive analysis of the research variables:

Table 1.
Descriptive statistics Result

	PBV (Y)	CR (X1)	ROE (X2)	DER (X3)	AG (X4)	LN TA (X5)	DIV DUMMY (Z)
Mean	6.040490	2.332461	0.229346	0.906315	0.146517	22.01251	0.575000
Median	2.542267	1.758130	0.165688	0.905119	0.121509	20.91522	1.000000
Maximum	50.91229	8.637842	1.435333	3.028644	1.676057	30.61557	1.000000
Minimum	0.062276	0.513906	0.005952	0.163544	-0.160617	12.66365	0.000000
Std. Dev.	9.806287	1.664145	0.274590	0.524442	0.205939	6.296261	0.496416
Skewness	2.474972	1.844218	3.048653	0.800031	3.819188	-0.048752	-0.303433
Kurtosis	8.707285	6.244679	11.70220	4.283203	27.18374	1.286792	1.092072
Jarque-Bera	285.3753	120.6625	564.5271	21.03406	3215.991	14.72294	20.04239
Probability	0.000000	0.000000	0.000000	0.000027	0.000000	0.000635	0.000044
Sum	724.8588	279.8953	27.52152	108.7578	17.58200	2641.501	69.00000
Sum Sq. Dev.	11443.43	329.5561	8.972552	32.72967	5.046874	4717.506	29.32500
Observations	120	120	120	120	120	120	120

Source: Research Results, Eviews 10 (2022)

From the test results of the descriptive statistics table above, it can be seen that:

1. The highest firm value was at Budi Starch & Sweetener Tbk in 2011. The lowest firm value was at PT. Delta Djakarta Tbk in 2011.
2. The highest CR value was at PT. Delta Djakarta Tbk 2017. The lowest CR value was at PT. Multi Bintang Indonesia Tbk in 2014.
3. The highest ROE value was at PT. Multi Bintang Indonesia Tbk in 2014. Budi Starch & Sweetener Tbk had the lowest ROE value in 2012.
4. The largest DER value was at PT. Multi Bintang Indonesia Tbk in 2009. The lowest DER value was at by PT. Ultra Jaya Milk Industry & Trading Company Tbk in 2018.
5. The highest Asset Growth value was at PT. Wilmar Cahaya Indonesia Tbk in 2018. The lowest score was at Indofood CBP Sukses Makmur Tbk in 2020.
6. The highest firm size value was at PT. Mayora Indah Tbk in 2020. The lowest firm size value was at Akasha Wira International Tbk in 2011.
7. Budi Starch & Sweetener Tbk owned the highest dividend policy value in 2011. The lowest dividend policy value was at PT. Delta Djakarta Tbk in 2011.

8. Analysis Model Selection

a. Chow Test

The Chow test (Chow test) was conducted to determine the most appropriate Common Effect Model or Fixed Effect Model used in estimating panel data. The hypothesis for the chow test is as follows:

1. H0 = if the cross-section probability value is F (0.05), H0 is accepted, meaning that the Common Effect is accepted.
2. H1 = if the cross-section probability value is F < (0.05), then H0 is rejected, meaning that the Fixed Effect is accepted.

Table 2.
Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	10.615615	(11,103)	0.0000
Cross-section Chi-square	90.943273	11	0.0000

Source: Research Results, Eviews 10 (2022)

The table above shows the probability value of cross-section F and chi-square of 0.00, so H0 is rejected, and H1 is accepted. The Fixed Effect Model is accepted, so the Random Effect Model test is carried out.

b. Hausman test

The Hausman test was conducted to choose whether the Fixed Effect or Random Effect model was the most appropriate. The hypothesis of the Hausman test is as follows:

1. H0 = Chi-Square probability value (0.05), then the RE model
2. H1 = if the probability value of Chi-Square < (0.05), then the FE model.

Table 3.
Hausman's Test Analysis Results

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8.486447	5	0.1314

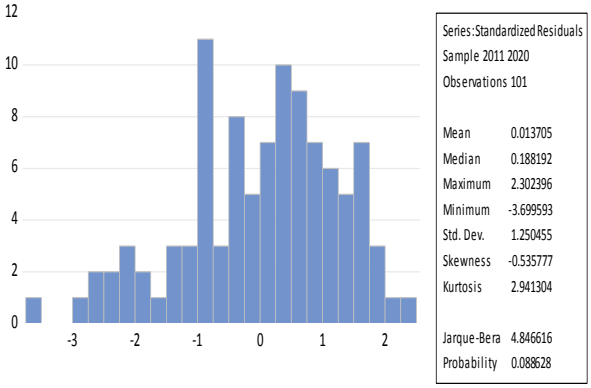
Source: Research Results, Eviews 10 (2022)

The table above shows that the Chi-Square probability value is 0.131, so that > 0.05 then what is accepted is the Random Effect Model, so that the research model used is the Random Effect Model.

3. Classic Assumption Test

a) Normality Test

The normality test is to test whether the regression model, the independent variable, and the dependent variable have a normal data distribution or not. Normality testing using Eviews10 obtained the following results:



Source: Research Results, Eviews 10 (2022)

Figure 3.
Normality Test Results with Data Transformation

The research results after the transformation using logarithms on the dependent and independent variables, namely data that are normally distributed, Jarque-Bera Probability is greater than 0.05, namely 0.0886.

b) Multicollinearity Test

Multicollinearity means that the independent variables contained in the regression model have a perfect relationship. One way to detect collinearity is by collaborating between variables. By using eviews10, a multicollinearity test was obtained, and the following results were obtained:

Table 4.
Multicollinearity Test Result

	LN_PBV	LN_X1	LN_X2	LN_X3	LN_X4	LN_X5
LN_PBV	1.894233	-0.239744	-0.066137	0.218894	-0.387650	-2.979421
LN_X1	-0.239744	0.318052	0.043943	-0.304635	0.030195	0.701694
LN_X2	-0.066137	0.043943	0.676994	-0.079723	0.026975	-0.389816
LN_X3	0.218894	-0.304635	-0.079723	0.440488	-0.017470	-0.159478
LN_X4	-0.387650	0.030195	0.026975	-0.017470	1.066947	0.783206
LN_X5	-2.979421	0.701694	-0.389816	-0.159478	0.783206	39.46963

Source: Research Results, Eviews 10 (2022)

The table above shows no multicollinearity in the research data because the correlation value of all research variables is less than 0.8.

c) Heteroscedasticity Test

The table below shows that the probability values of the six independent variables of liquidity, profitability, capital structure, asset growth, and firm size are greater than 0.05, namely 0.821; 0.065; 0.056; 0.149; and 0.773, so it can be concluded that there is no heteroscedasticity in the research data.

Table 5.
Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.716391	0.397881	4.313829	0.0000
LN_X1	0.051535	0.228323	0.225712	0.8219
LN_X2	0.182869	0.098136	1.863423	0.0655
LN_X3	0.447749	0.183070	2.445783	0.0563
LN_X4	0.077325	0.053190	1.453734	0.1493
LN_X5	-0.004293	0.014896	-0.288211	0.7738

Source: Research Results, Eviews 10 (2022)

d) Autocorrelation Test

According to Ghozali (2013), "the autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding error in the t-1 period (previous)".

Table 6.
Autocorrelation Test Results

Weighted Statistics

R-squared	0.101558	Mean dependent var	0.365724
Adjusted R-squared	0.054272	S.D. dependent var	1.105267
S.E. of regression	1.074415	Sum squared resid	109.6649
F-statistic	2.147720	Durbin-Watson stat	0.649183
Prob(F-statistic)	0.066354		

Source: Research Results, Eviews 10 (2022)

The table above shows the Durbin Watson value of 0.649183. In the Durbin-Watson table with = 5%, k = 5 and n = 12, the values for dL = 0.379 and dU = 2.506 so that the DW value is between dL and dU, it can be concluded that there is no autocorrelation in the research data.

4. Hypothesis Test

Hypothesis Results Before Moderation

a) Multiple Regression Analysis

The results of the analysis of the random effect model test with data transformation in the form of pooled regression are as follows:

Table 7.
Multiple Regression Analysis Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.113604	0.860751	2.455536	0.0159
LN X1	0.170653	0.480750	0.354973	0.7234
LN X2	0.067342	0.209567	0.321342	0.7487
LN X3	0.311594	0.382789	0.814010	0.4177
LN X4	-0.236560	0.109664	-2.157132	0.0335
LN X5	-0.075643	0.032324	-2.340156	0.0214

Weighted Statistics

R-squared	0.101558	Mean dependent var	0.365724
Adjusted R-squared	0.054272	S.D. dependent var	1.105267
S.E. of regression	1.074415	Sum squared resid	109.6649
F-statistic	2.147720	Durbin-Watson stat	0.649183
Prob(F-statistic)	0.066354		

Source: Research Results, Eviews 10 (2022)

The table above shows the results of the analysis of the random effects model test with the data transformation in the form of pooled regression as follows:

$$\mathbf{PBV_1 = 2{,}113 + 0{,}170X1 + 0{,}067X2 + 0{,}311X3 - 0{,}234X4 - 0{,}075X5 + e}$$

b) T test (Partial Test)

The t-test aims to partially determine the effects of financial ratios of liquidity, profitability, capital structure, asset growth, and firm size on firm value in food and beverage sub-sector companies listed on the Indonesia Stock Exchange. The hypothesis testing procedure is as follows:

1. Determine the Level of Significance = 0.05. If the significance <0.05, then Ha is accepted and vice versa.
2. If t-count < t-table, accept Ha, which means that the independent variable can significantly influence the dependent variable. If t-count > ttable, then Ha cannot be accepted, which means that the independent variable does not affect the dependent variable.

Table 7 shows the results of the random effect model test analysis with data transformation, so the sig t-test is obtained as follows:

1. The probability of liquidity with a value of 0.7234 > 5% indicates that the effect of liquidity on firm value is not significant. Then H1 is rejected.
2. Probability profitability with a value of 0.7487 > 5% indicates that profitability (ROE) has no significant effect on firm value. Then H2 is rejected.
3. The probability of capital structure (DER) with a value of 0.4177 > 5% indicates that the capital structure has no significant effect on firm value. Then H3 is rejected.
4. The probability of asset growth is 0.0335 < 5%, indicating that the company's growth significantly affects the firm value. Then H4 is accepted.
5. The probability value of firm size (Ln total assets) is 0.0241 <0.05, so the company size significantly affects firm value. Then H5 is accepted.

c) Coefficient of Determination

Table 7 shows R2 data of 0,101558, meaning that firm value is influenced by liquidity, profitability, capital structure, asset growth, and firm size by 10.15% in food and beverage sub-sector companies

listed on the IDX. Other factors influence the remaining 89.85%.

Hypothesis Results After Moderation

The following table shows the results of the multiple regression analysis moderating the form of pooled regression as follows:

a) Moderating Multiple Regression Analysis

Table 8.
Moderating Multiple Regression Analysis Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.978982	0.761336	2.599354	0.0109
LN X1	-0.038912	0.650187	-0.059847	0.9524
LN X2	-0.068131	0.226945	-0.300210	0.7647
LN X3	0.024906	0.534574	0.046590	0.9629
LN X4	-0.248021	0.134523	-1.843707	0.0685
LN X5	-0.081865	0.030466	-2.687061	0.0086
LNX1 Z	-0.104940	0.780225	-0.134500	0.8933
LNX2 Z	0.004288	0.282643	0.015171	0.9879
LNX3 Z	0.376293	0.634993	0.592594	0.5549
LNX4 Z	-0.041183	0.198266	-0.207718	0.8359
LNX5 Z	0.009503	0.032068	0.296346	0.7676
Weighted Statistics				
R-squared	0.155251	Mean dependent var		0.523756
Adjusted R-squared	0.061390	S.D. dependent var		1.187015
S.E. of regression	1.149272	Sum squared resid		118.8744
F-statistic	1.654055	Durbin-Watson stat		0.603783
Prob(F-statistic)	0.104227			

Source: Research Results, Eviews 10 (2022)

PBV_2 = 1,978 -0,038X1 - 0,068X2 + 0,024X3 - 0,248X4 - 0,081X5 - 0,104X6Z6 + 0.004X7Z7 + 0,376X8Z8 - 0,041X9Z9 + 0,009X10Z10 + e

b) T-test (Partial Test)

Based on the results of the table attached to the table 8, the results of the moderated multiple regression analysis obtained the sig t-test as follows:

1. Probability X1Z, worth 0.893 > 5%, indicates that the effect of liquidity on firm value moderated by dividend policy is insignificant. Then H6 is rejected.
2. Probability X2Z with a value of 0.987 > 5% indicates that the effect of profitability on firm value moderated by dividend policy is insignificant. Then H7 is rejected.
3. Probability X3Z with a value of 0.554 > 5% indicates that the effect of capital structure on firm value moderated by dividend policy is insignificant. Then H8 is rejected.
4. Probability X4Z with a value of 0.835 > 5% indicates that the effect of firm growth on firm value moderated by dividend policy is insignificant. Then H19 is rejected.
5. Probability X5Z with a value of 0.7676 > 0.05 indicates that the effect of firm size on firm value moderated by dividend policy is insignificant. Then H10 is rejected.

c) Coefficient of Determination

The table of moderated multiple regression analysis results obtained an R2 of 15.52%. It means that firm value is influenced by liquidity (CR), profitability (ROE), capital structure (DER), asset growth (Asset Growth), and firm size (Ln total assets), which are moderated by a dividend policy of 15.52% in sub-sector companies food and beverages listed on the IDX. At the same time, the remaining 84.48% is influenced by other factors.

CONCLUSION

Based on the results of research and discussion, the following conclusions can be drawn:

1. Liquidity has a positive and insignificant effect on firm value in the food and beverage sub-sector companies listed on the IDX for 2011-2020.
2. Profitability has a positive and insignificant effect on firm value in food and beverage sub-sector companies listed on the IDX for 2011-2020.
3. Capital structure has a positive and insignificant effect on firm value in food and beverage sub-sector companies listed on the IDX for 2011-2020.
4. Asset growth positively and significantly effect the firm value in food and beverage sub-sector companies listed on the IDX for 2011-2020.

5. Firm size has a positive and significant effect on the firm value in food and beverage sub-sector companies listed on the IDX for 2011-2020.
6. Dividend policy cannot moderate the effect of liquidity on firm value in food and beverage sub-sector companies listed on the IDX for the period 2011-2020.
7. Dividend policy cannot moderate the effect of profitability on firm value in food and beverage sub-sector companies listed on the IDX for the period 2011-2020.
8. Dividend policy cannot moderate the effect of capital structure on firm value in food and beverage sub-sector companies listed on the IDX for 2011-2020.
9. Dividend policy cannot moderate the effect of asset growth on firm value in food and beverage sub-sector companies listed on the IDX for 2011-2020.
10. The dividend policy cannot moderate the effect of firm size on firm value in food and beverage sub-sector companies listed on the IDX for the period 2011-2020.

RESEARCH LIMITATIONS

Weaknesses or deficiencies that were found after analyzing and interpreting the data were as follows:

1. The object of this research is the food and beverage sub-sector companies listed on the Indonesia Stock Exchange, with a population of 15 companies. The companies used as samples are limited to 12 companies that comply with predetermined criteria. The research sample does not yet describe the complete condition of the food and beverage sub-sector listed on the Indonesia Stock Exchange.
2. The observed research period is too short, only ten years, from 2011 - 2020, so it is still not enough to describe the actual situation.
3. Limitations in using factors that affect firm value. Many more factors affect firm value and other variables that can be used as a moderating variable apart from dividend policy.

SUGGESTION

Based on the results of the research, discussion and conclusions obtained, the following suggestions can be given:

Future research is expected to further develop the firm value proxy with other methods. For further investigation, it is recommended not to use the current ratio because it only measures current assets with current liabilities and does not take into account the company's overall assets and total liabilities. And further researchers to develop a firm value proxy.

For further expansion of the sample, the research period used is longer to provide more complete results and use different observation variables on the object and period of research observation. Issuer companies should increase firm value by increasing the distribution of dividends from year to year to attract investors to invest in the company, and issuer companies should be able to maintain the level of profitability of the company so that financial performance is good in the eyes of investors.

REFERENCES

1. Adelina, S., Agusti, R., & Basri, Y. M. (2014). Pengaruh Rasio Likuiditas, Leverage Dan Profitabilitas Terhadap Nilai Perusahaan Pada Industri Barang Konsumsi Yang Terdaftar Di Bursa Efek Indonesia Tahun 2010-2012. *Jurnal Online Mahasiswa Fakultas Ekonomi Universitas Riau*, *1*(2), 1–15.
2. Aisyah, S., Wijayanti, R., & Ermawati, E. (2019). Pengaruh Profitabilitas, Likuiditas, Leverage, Growth, dan Firm Size Terhadap Kebijakan Dividen. *Jurnal Manajemen Dan Kewirausahaan*, *11*(2), 53–69.
3. Asmanto, M. R., & Andayani. (2020).

Pengaruh Profitabilitas, Struktur Modal, Growth Opportunity, dan Keputusan Investasi Terhadap Nilai Perusahaan. *Jurnal Ilmu dan Riset Akuntansi*, *9*(3), 1–25.

4. Brigham & Houston. 2009. *Fundamentals of Financial Management*. Jakarta: SalembaEmpat.
5. Brigham, E. F., &, J. F. Houston. (2011). *Dasar- dasar Manajemen Keuangan.* Jakarta: Salemba Empat.
6. Chasanah, A. N. (2018). Perusahaan Manufaktur Yang Terdaftar di BEI. *Jurnal Penelitian Ekonomi dan Bisnis*, *I*(1998), 1.
7. Chen Li Ju, & Chen Shun Yu. (2011). The influence of profitability on firm value with capital structure as the mediator and firm size and industry as moderators. *Investment Management and Financial Innovations*, *8*(3), 121–129.
8. Du, J., Wu, F., & Liang, X. (2016). Corporate liquidity and firm value: evidence from China's listed firms. *SHS Web of Conferences*, *24*, 01013. https:// doi.org/10.1051/shsconf/20162401013
9. Fahmi, I. (2014). *Manajemen Keuangan Perusahaan*. Mitra Wacana Media. Gujarati, Damodar N (trans). (2003). *Ekonometrika Dasar* (6th ed., pp. 637) Jakarta: Erlangga.
10. Fajaria, A. Z. (2018). The Effect of Profitability, Liquidity, Leverage and Firm Growth of Firm Value with its Dividend Policy as a Moderating Variable. *International Journal of Managerial Studies and Research*, *6*(10), 55–69. https://doi.org/ 10.20431/2349-0349.0610005
11. Firmansyah. (2019). Pengaruh Leverage, Likuiditas, komisaris Independen dan Ukuran Perusahaan Terhadap Nilai Perusahaan Dengan Kebijakan Dividen Sebagai Variabel Moderating. *Jurnal Studia Akuntansi Dan Bisnis*, *7*(3), hlm. 202.
12. Ghozali. (2013). Correlation Matrix. 105.
13. Handayani, I. A. R. P., Ariyanto, D., Rasmini, N. K., & Widanaputra, A. A. G. P. (2018). The Effect of Profitability and Institutional Ownership on firm value with Dividend Policy as a Meditation. *International Journal Sciences : Basic and Applied Research (IJSBAR)*, *41*(1), 234–242.
14. Hergianti, A. N. (2020). Pengaruh Pertumbuhan Perusahaan, Profitabilitas Dan Leverage Terhadap Kebijakan Dividen. *Jurnal Ilmu dan Riset Akuntansi*, *9*, 1–20.
15. Hidayat, R., Wahyudi, S., Muharam, H., Shaferi, I., & Puspitasari, I. (2019). The improved level of firm value with liquidity, debt policy, and investment in the emerging Indonesian market. *Espacios*, *40*(40).
16. Hung, D. N., Cuong, P. D., & Bich Ha, V. T. (2018). Effects of financial statements information on firms' value: Evidence from Vietnamese listed firms. *Investment Management and Financial Innovations*, *15*(4), 210–218. https://doi.org/10.21511/imfi.15(4).2018.17
17. Husnan, Suad. 2006. *Teori dan Penerapan (Keputusan Jangka Panjang)*. Edisi Keempat. Yogyakarta: BPFE.
18. Ibrahim, M., & Jonnardi. (2020). Pengaruh Leverage, Profitabilitas dan Likuiditas terhadap Nilai Perusahaan. Jurnal Multiparadigma Akuntansi Tarumanagara, 8(2), 1763–1771.
19. Indasari, A. P., & Yadnyana, I. K. (2018). *Pengaruh Profitabilitas, Growth Opportunity, Likuiditas, Dan Struktur Modal Pada Nilai Perusahaan Fakultas Ekonomi dan Bisnis Universitas Udayana (Unud), Bali , Indonesia Fakultas Ekonomi dan Bisnis Universitas Udayana (Unud), Bali , Indonesia ABST*. *22*, 714–746.
20. Khasanah, S. K., & Aryati, T. (2019). Pengaruh Ukuran Perusahaan, Likuiditas, Kebijakan Hutangdan Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Kebijakan Deviden Sebagai Variabel Moderating Pada Perusahaan Manufaktur Di Bursa Efek. *Magister Akuntansi FEB, Universitas Trisakti*, *1*(April), 15–31.
21. Kasmir. (2008). *Analisa Laporan Keuangan*. PT Raja Grafindo Persada.
22. Kurniawan, F. E., & Suhermin. (2020). Pengaruh Likuiditas, Ukuran Perusahaan, Dan Pertumbuhan Perusahaan Terhadap Nilai Perusahaan Pada Industri Perkebunan Yang Terdaftar Di Bei. Jurnal Ilmu dan Riset Manajemen, 9(2), 1–15. http://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/download/2978/2992
23. Mahendra, A., Sri artini, L. gede, & Suarjaya, A. G. (2012). Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Manufaktur di Bursa Efek Indonesia. *Jurnal Manajemen, Stategi Bisnis, Dan Kewirausahaan*, *6*(2), 130–138.
24. Mahfudnurnajamuddin, Mas'ud, M., Nur, A. N., & Rasyid, I. (2018). The Influence of

Ownership Structure, Firm size, and Profitability on the Dividend Policy and the Value of Manufacturing Companies Registered With The Indonesian Stock Exchange. *IOSR Journal of Business and Management (IOSR-JBM)*, *20*(11), 28–32. https://doi.org/10.9790/487X-2011012832

25. Mandalika, A. (2016). Pengaruh Struktur Aktiva, Struktur Modal, Dan Pertumbuhan Penjualan Terhadap Nilai Perusahaan Pada Perusahaan Publik Yang Terdaftar Di Bursa Efek Indonesia (Studi Pada Sektor Otomotif) . Jurnal Berkala Ilmiah Efisiensi, 16(01), 207–218.
26. Mery, K. N. (2017). The Effect of Liquidity, Leverage and Profitability of the Corporate's Value with Dividend Policy as Moderation on Mining Companies at The Indonesia Stock Exchange Year 2011-2014. *Faculty of Economics, Riau University, Pekanbaru, Indonesia.*, *4*(1), 2000–2014.
27. Mudjijah, S., Khalid, Z., & Astuti, D. A. S. (2019). Pengaruh Kinerja Keuangan dan Struktur Modal Terhadap Nilai Perusahaan yang Dimoderasi Variabel Ukuran Perusahaan. *Jurnal Akuntansi Dan Keuangan*, *8*(1), 41–56.
28. Nathanael, R. F., & Panggabean, R. R. (2021). Pengaruh Struktur Modal, Profitabilitas, Leverage Dan Growth Opportunity Terhadap Nilai Perusahaan. BALANCE: Jurnal Akuntansi, Auditing dan Keuangan, 17(2), 175–200. https://doi.org/10.25170/balance.v17i2.2262
29. Nurwahyuni, Mas'ud, M., Alam, S., & Djamareng, A. (2020). Pengaruh Profitability, Growth Opportunities Dan Leverage Terhadap Nilai Perusahaan Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia. Journal of Management Science (JMS), 1(1), 14–35. https://doi.org/10.52103/jms.v1i1.49
30. Prasetyorini, Fitri. B. (2013). Pengaruh Ukuran Perusahaan, Leverage, Price Earning Ratio Dan Profitabilitas Terhadap Nilai Perusahaan. *Jurnal Imu Manajemen*, *1*(1), 183–196.
31. Prastuti, N.K.R & Sudiartha, I .G.M. (2016). Pengaruh Struktur Modal, Kebijakan Dividen, Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur. E-Jurnal Manajemen Unud, 5(3), 1572–1598.
32. Pratama, I. G. B. A., & Wiksuana, I. G. B. (2016). Pengaruh Leverage Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagai Variabel Mediasi. E-Jurnal Manajemen Universitas Udayana, 5(2), 1338–167. https://doi.org/10.24843/ejmunud.2019.v08.i05.p16
33. Puspitaningtyas, Z. (2017). Efek Moderasi Kebijakan Dividen Dalam Pengaruh Profitabilitas Terhadap Nilai Perusahaan. *Jurnal Akuntansi, Ekonomi Dan Manajemen Bisnis*, *5*(2), 173. https://doi.org/10.30871/jaemb.v5i2.538
34. Putra, A. N. D. A., & Lestari, P. V. (2016). Pengaruh Kebijakan Dividen, Likuiditas, Profitabilitas Dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *E-Jurnal Manajemen Unud*, *5*(7), 4044–4070.
35. Rianto, Bambang. 2011. Dasar-dasar Pemebelajaran.Yogyakarta: BPFE
36. Rutin, R., Triyonowati, T., & Djawoto, D. (2019). Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Kebijakan Dividen Sebagai Variabel Moderating. *Jurnal Riset Akuntansi & Perpajakan (JRAP)*, *6*(01), 126–143. https://doi.org/10.35838/jrap.v6i01.400
37. Sabrin, Sarita Buyung, Dedy Takdir, S. (2016). Actomyosin relationships with surface features in fibroblast adhesion. *The Effect of Profitability on Firm Value in Manufacturing Company at Indonesia Stock Exchange*, *5*(10), 81–89. https://doi.org/10.1016/0014-4827(80)90264-5
38. Sambora, M. N., Handayani, S. R., & Rahayu, S. M. (2014). Terhadap Return Saham Syariah Dalam Kelompok Jakarta Islamic Index (Jii) Tahun 2003 – 2005. *Jurnal Administrasi Bisnis*, *8*(1), 1–10.
39. Setiawanta, Y. (2016). Profitabilitas, Likuiditas Dan Nilai Perusahaan (Industri Properti Dan Real Estate Yang Listed Di PT. BEI pada tahun 2011-2014). 1(2), 151–163. https://doi.org/http://www.jpeb.dinus.ac.id
40. Setiyowati, S. W., Naser, J. A., & Astuti, R. (2020). Leverage dan growth opportunity mempengaruhi nilai perusahaan melalui profitabilitas. *Jurnal Ekonomi Modernisasi*, *16*(1), 31–40. https://doi.org/10.21067/jem.v16i1.4513
41. Sondakh, R. (2019). the Effect of Dividend Policy, Liquidity, Profitability and Firm Size on Firm Value in Financial Service

Sector Industries Listed in Indonesia Stock Exchange 2015-2018 Period. *Accountability*, *8*(2), 91. https://doi.org/10.32400/ja.24760.8.2.2019. 91-101

42. Sudana, I. M. (2011). *Manajemen Keuangan Perusahaan Teori dan Praktik*. Erlangga.
43. Sugiyono. (2011). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta.
44. Sumarsono, H., & Hartediansyah, E. (2016). Pengaruh Keputusan Pendanaan, Kebijakan Deviden Dan Pertumbuhan Perusahaan Terhadap Nilai Perusahaan. Ekuilibrium : Jurnal Ilmiah Bidang Ilmu Ekonomi, 7(1), 36. https://doi.org/10.24269/ekuilibrium.v7i1.30
45. Tahu, G. P., & Susilo, D. (2017). Effect of Liquidity, Leverage, and Profitability on The Firm Value (Dividend Policy as Moderating Variable) in Indonesia Stock Exchange Manufacturing Company. *Research Journal of Finance and Accounting*, *8*(18), 89–98.
46. Taslim, F. A. (2016). Pengaruh Rasio Likuiditas, Aktivitas, Dan Profitabilitas Terhadap Nilai Perusahaan Dengan Kebijakan Dividen Sebagai Variabel Intervening (Pada Perusahaan Manufaktur yang Terdaftar di BII Periode 2010-2014). *Equilibrium Journal*, *10*(1), 1–29. http://repository.unkhair.ac.id/51/
47. Tumangkeng, M. F., & Mildawati, T. (2018). Jurnal Ilmu dan Riset Akuntansi e-ISSN : 2460-0585 Pengaruh Struktur Modal, Pertumbuhan Perusahaan, Profitabilitas Dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *Jurnal Ilmu dan Riset Akuntansi*, *7*(6), 1–16.
48. Ukhriyawati, C. F. & 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, 6(1), 1–14. ISSN 25031546
49. Wulandari Dwi Retno. (2013). Pengaruh Profitabilitas, Operating Leverage, Likuiditas Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Intervening. *Accounting Analysis Journal*, *2*(4),455–463. https://doi.org/10.15294/aaj.v2i4.4172
50. Yanti, I. G. A. D & Darmayanti, N. P. A. I. G. (2019). *Pengaruh Profitabilitas , Ukuran Perusahaan, Struktur Perusahaan Makanan Dan Minuman Di Bursa Efek Indonesia*, *8*(4),2297–2324. https://doi.org/ DOI: https://doi.org/10.24843/EJMUNUD.2019.v8.i4.p15

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