

The effect of Leverage, Profitability, and Firm Size on Firm Value

(Empirical Study on Garment and Textile Companies listed on the Indonesia Stock Exchange in 2017-2021)

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Abstract : This study was conducted to determine the effect of leverage, profitability and firm size on firm value at Garment & Textile Companies in 2017-2021. This study uses secondary data obtained through IDX and the website of each company. Sampling was done by using purposive sampling method. The population in this study were 18 companies and there were 12 Garment & Textile companies that met the criteria, so that the research sample data amounted to 60. The data analysis technique in this study used multiple linear regression analysis, classical assumption test, and hypothesis testing. The results of this study provide information that the leverage variable has an effect on firm value, the profitability variable has no effect on firm value, and the firm size variable affects firm value.

Keywords : leverage, profitability, firm size, firm value

I. INTRODUCTION

The survival of the company is important for people who have a profitable relationship with the company. The company will not be able to stand alone without the existence of people or entities that help fund the company. Funding is done, of course, must provide compensation in accordance with expectations. Investors and creditors will not be willing to invest if the company cannot provide appropriate compensation in the future. Before investing or providing credit to the company, investors and creditors will conduct various analyzes to be able to assess whether the company is able to compensate for the investment they have invested in the company. One of the tools that can provide information so that investors and creditors can decide to invest or provide credit is a financial report.

For companies that are still private or have not gone public, the value of the company is determined by an appraisal agency or an appropriate company (Kalbuana & Mulyati, 2016). For companies that will go public, the value of the company can be indicated or implied from the number of variables attached to the company. For example, the assets owned by the company, management expertise in managing the company.

Firm value is the selling value of a company as an operating business (Kolamban, et al, 2020). The value of the company is very important because it shows how much the company can provide profits for investors. The value of the company is basically measured from several aspects, one of which is the market price of the company's shares, because the market price of the company's shares reflects the investor's assessment of the overall equity owned (Dewi & Wirawati, 2018). Firm value is very important because it reflects the company's performance which can affect investors' perceptions of the company (Wulandari, 2016).

There are many factors that can determine the value of the company. Leverage ratio is a ratio used to describe how a company's ability to pay off debts owned by the company (Kalbuana & Mulyati, 2016). Corporate leverage describes a company's ability to meet its long-term obligations. Debt to Equity Ratio (DER) is a leverage ratio used to measure the company's own capital ability to be used as collateral for all company debts (Wardani, et al, 2020). Research conducted by Rahayu and Sari (2018) states that leverage has no effect on firm value (Rahayu & Sari 2018).

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Profitability is the company's ability to generate profits at a certain level of sales, assets and capital (Kalbuana & Mulyati, 2016). Profitability is thought to be able to affect firm value. Profitability will show the balance of income and the company's ability to generate profits at various levels of operations, so this ratio will reflect the effectiveness and success of overall management. If the company is not able to generate sufficient profitability, then the company will not be able to maintain its business continuity. Therefore, companies must look for sources of funds from outside the company to maintain their business continuity (Sutama & Lisa, 2018). The high value of profitability shows that the company's performance is increasing and it is estimated that the company has good future prospects so that the demand for company shares also increases which in turn will increase the value of the company (Dewi & Candradewi, 2018). Research conducted by Novan and Lestari (2016), Lumoly et al. (2018), Siahaan et al. (2016) stated that profitability has an effect on firm value (Soge & Brata, 2020). However, research conducted by Rahayu and Sari (2018) concludes that profitability has no effect on firm value (Rahayu & Sari 2018).

The size of the company is considered capable of influencing the value of the company. Because the larger the size or scale of the company, the easier it will be for companies to obtain sources of funding, both internal and external. Firm size is stated to be positively and significantly related to firm value (Khumairoh, et al, 2016). The size of the company is the size of the company seen from the amount of equity value, sales value and company shares that are spread outside, where each expansion of share capital will only have a small effect on the loss or shift of control from the dominant party to the company concerned (Soge & Brata). , 2020). Company size describes the size of a company. Suryana and Rahayu (2018), Rahayu and Sari (2018), Novari and Lestari (2016) have research results that firm size affects firm value (Soge & Brata, 2020). However, research conducted by Widiyasari and Nursiam (2020) states that company size has no effect and is not significant on company value (Widiyasari & Nursiam 2020).

This study is a development of research conducted by Kalbuana & Mulyati (2016) the effect on firm value by using leverage, profitability, and firm size as independent variables. Several previous studies have been conducted by Rahayu & Sari (2018), Sutama & Lisa (2018), and Ardiansyah (2020) which show that Leverage has an effect on Firm Value. This is different from the research conducted by Soge & Brata (2020) which shows that Leverage has no effect on Firm Value. Research conducted by Suryana & Rahayu (2018) which shows that profitability has an effect on firm value. Meanwhile, the research conducted by Poolban et al (2020) which shows that profitability has no effect on firm value. The research conducted by Putra &gantino (2021) shows that firm size has an effect on firm value. Meanwhile, research conducted by Widiyasari & Nursiam (2020) shows that company size has no effect on firm value.

Based on the background and inconsistency of the research above, the researchers reviewed the Effect of Profitability, Leverage and Firm Size on Firm Value (Empirical Study on Garment & Textile Companies Listed on the Indonesia Stock Exchange in 2017-2021). This study aims 1). To find out whether leverage has an effect on firm value in Garment & Textile Companies Listed on the Indonesia Stock Exchange in 2017-2021. 2). To find out whether profitability has an effect on firm value in Garment & Textile Companies Listed on the Indonesia Stock Exchange in 2017-2021. 3). To find out whether the size of the company has an effect on the value of the company in Garment & Textile Companies Listed on the Indonesia Stock Exchange in 2017-2021.

II. HEADINGS

Signaling Theory

A signal is an action taken by the company's management that aims to provide clues to investors about what the company's prospects will be in the future. Signaling theory states that companies with good quality will intentionally give signals to the market, thus the market can distinguish companies that have good quality and companies that have poor quality.(Widiyasari & Nursiam 2020).

Firm Value

Firm value is the price that potential investors will pay if a company is to be sold (Markonah, et al, 2020). For investors, the value of the company is an important concept because the value of the company is an indicator of how the market views the company as a whole. High company value makes investors have high confidence to invest their capital in the company.

Leverage

Leverage is a ratio that describes the relationship between the company's debt to capital, this ratio can see how far the company is financed by debt or external parties with the company's ability described by capital. Leverage is a measure

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used in analyzing financial statements to show the amount of collateral available to creditors. Leverage ratio is a ratio that measures how much the company is financed with debt. (Kolamban, et al, 2020).

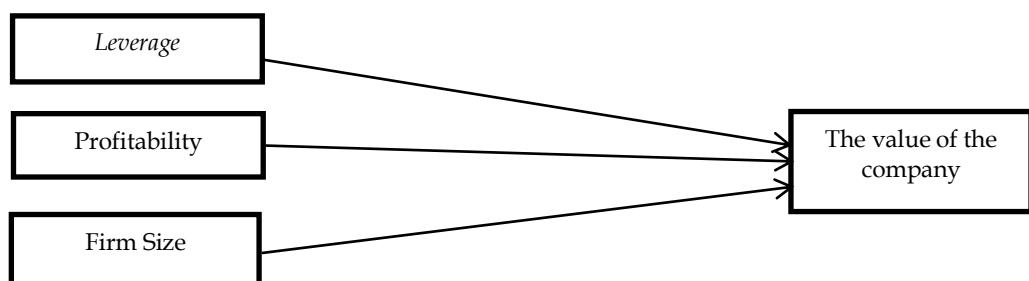
Profitability

Profitability is the company's ability to earn profits in relation to sales, total assets and own capital. Companies with high returns on investment use relatively small debt because high returns allow the company to finance most of its internal funding. In other words, companies with large retained earnings will use retained earnings first before deciding to use debt (Kolamban, et al, 2020).

Firm Size

Company size is a scale where the size of a company can be classified according to various ways, including total assets, log size, stock market value, and others. Company size is often used as an indicator of company performance. A large company can reflect if the company has a high commitment to continuously improve its performance, so the market will be willing to pay dearly to get its shares because it believes it will get a profitable return from the company. This will increase the share price in the capital market. The increase in stock prices in the capital market resulted in an increase in the value of the company (Widiyasari & Nursiam, 2020).

Research Framework



The framework for thinking and developing hypotheses in this study are as follows:

H1: Leverage affects firm value

H2: Profitability affects Firm Value

H3: Firm Size Affects Firm Value

III. INDENTATIONS AND EQUATIONS

Types of research

The type of research used in this research is quantitative research. Quantitative research methods are used to examine certain populations or samples, data collection using research instruments, data analysis is quantitative/statistical, with the aim of testing research related to the variables studied.

Data source

The source of data in this study is secondary data obtained from Indonesia Stock Exchange (IDX) website www.idx.co.id.

Population and Sample

The population in this study are garment and textile companies listed on the Indonesia Stock Exchange (IDX). Based on data from the Indonesia Stock Exchange (IDX), there are 18 garment and textile manufacturing companies listed on the IDX. However, from 18 companies there were 6 companies that did not meet the criteria so that only 12 companies were continued for the data analysis process. The observation period in this study was for 5 consecutive years. So the total research sample is 60 research samples.

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Data collection technique

The sample collection technique used purposive sampling, namely the sample was selected according to certain criteria. The criteria for the sample set are as follows: Garment and textile companies that earn profits in the 2017-2021 period. Garment and textile companies that publish annual financial reports in a row in the 2017-2021 period.

Data analysis method

The data analysis method in this research is using multiple linear regression analysis method. To test the effect of leverage, profitability, and firm size on firm value partially and simultaneously the F-test is used. Before testing the hypothesis on multiple linear regression, the classical assumption test was first tested. This classical assumption test is intended to ensure that the model obtained really meets the basic assumptions in the regression analysis which was carried out by data normality test, multicollinearity test, autocorrelation test and heteroscedasticity test with the help of SPSS version 21 program. The following equations are used in linear regression analysis research multiple :

$$NP = + 1LEV + 2PROF + 3UK + e$$

Information :

| | |
|-------|--------------------------------|
| NP | = Company Value |
| □ | = Constant |
| 1 - 3 | = Coefficient of each variable |
| LEV | =Leverage |
| PROF | = Profitability |
| UK | = Company Size |
| e | = Error |

IV. FIGURES AND TABLES

IV.1 Research Results and Discussion

IV.1.1 Descriptive statistical analysis

Table 1. Descriptive Statistics

| Variables | N | Minimum | Maximum | mean | Std. Deviation |
|--------------------|----|---------|---------|---------|----------------|
| Company_ValueY | 60 | .01 | 4.49 | .9367 | .84867 |
| LeverageX1 | 60 | .00 | 5.17 | .8972 | 1.28918 |
| ProfitabilityX2 | 60 | -.88 | .12 | -.0008 | .12183 |
| Size_CompanyX3 | 60 | 26.79 | 30.89 | 28.3153 | 1.28239 |
| Valid N (listwise) | 60 | | | | |

Source: Processed secondary data, 2022

Based on table 1, it shows that the variable value of the company has a minimum of 0.01, namely Asia Pacific Fibers Tbk in 2017-2021 and a maximum of 4.49, namely at PT Trisula Textile Industries Tbk in 2020. The average value of the company is 0.9367. and the standard deviation value is 0,84867.

Leverage has a minimum of 0.00, namely at Star Petrochem Tbk in 2020-2021 and a maximum of 5.17, namely at Asia Pacific Fibers Tbk in 2020. The average leverage value is 0.8972 and the standard deviation value is 1.28918.

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Profitability has a minimum of -0.88, namely at PT Sri Rejeki Isman Tbk in 2021 and a maximum of 0.12, namely at Sunson Textile Manufacturer Tbk in 2021. The average leverage value is -0.0008 and the standard deviation value is 0.12183.

Company size has a minimum of 26.79, namely Eratex Djaya Tbk in 2018 and a maximum of 30.89, namely at PT Sri Rejeki Isman Tbk in 2020. The average value of the company size is -0.0008 and the standard deviation value is 1.28239..

IV.1.2 Classic Assumption Test Results

IV.1.2.1 Normality test

The results of the normality test using the Central Limit Theorem (CLT) method. The results of the normality test in this study indicate that the number of observations (N) is 60 samples, so it can be interpreted that the number of samples 60 is greater than 30 samples. This shows that the data can be said to be normally distributed.

IV.1.2.2 Multicollinearity Test

Table 2.Multicollinearity Test

| Model | Collinearity Statistics | | Information |
|-----------------|-------------------------|-------|-------------------------------|
| | Tolerance | VIF | |
| Leverage | 0.974 | 1.027 | There is no multicollinearity |
| ProfitabilityX2 | 0.974 | 1.027 | There is no multicollinearity |
| Size_CompanyX3 | 0.977 | 1.024 | There is no multicollinearity |

Source: Processed secondary data, 2022

Based on table 2 above, it can be said that there is no multicollinearity, because VIF <10, Leverage (X1) is 1.027, Profitability (X2) is 1.027 and Company Size (X3) of 1.024. So it can be concluded that the data in this study does not occur multicollinearity because the VIF is less than 10 so it can be stated that the model does not experience multicollinearity.

IV.1.2.3 Heteroscedasticity Test

The results of the heteroscedasticity test using the test *spearman's rho* can be seen in table 3.

Table 3. Heteroscedasticity Test *Spearman's rho*

| Variables | Sig | Information |
|---------------|-------|-----------------------------------|
| Leverage | 0.336 | Heteroscedasticity does not occur |
| Profitability | 0.074 | Heteroscedasticity does not occur |
| Company Size | 0.413 | Heteroscedasticity does not occur |

Source: Processed secondary data, 2022

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Based on the table3above, it can be seen that the significance value of all variables is greater than 0.05, so it can be concluded that all variables do not occur heteroscedasticity.

IV.1.2.4 Autocorrelation Test

The results of heteroscedasticity testing using the Run Test can be seen in table 4.

Table 4. Test Run Test

| Run Test | |
|-----------------------|-------------------------|
| | Unstandardized Residual |
| Test Value | -0.108836 |
| asymp. Sig (2-tailed) | 0.298 |

Source: Processed secondary data, 2022

Based on table 4, the test value is -0.108836 with a significance value greater than 0.05, which is 0.298, it can be concluded that there is no autocorrelation in the regression model.

IV. 2 Hypothesis Test

IV.2.1Multiple Linear Regression

Table 5. Multiple Linear Regression

| Model | Unstandardized Coefficients | | Standardized Coefficients | | Collinearity Statistics | |
|---------------|-----------------------------|-------|---------------------------|--------|-------------------------|------|
| | Std. Error | Beta | T | Sig. | Tolerance | VIF |
| (Constant) | 8,557 | 2,155 | 3.970 | .000 | | |
| Leverage | -.203 | .076 | -.309 | -2.675 | .010 | .974 |
| Profitability | -.493 | .804 | -.071 | -.614 | .542 | .974 |
| Company Size | -.263 | .076 | -.397 | -3.445 | .001 | .977 |

Source: Processed secondary data, 2022

Based on the tableIV.5above, the regression equation can be arranged as follows:

$$NP = 8.557 - 0.203LEV - 0.493PROF - 0.023UK +$$

Based on the results of the multiple regression test in the above equation, it can be interpreted as follows:

1. The positive constant value of 8.557 indicates that leverage, profitability and firm size are assumed to be constant or equal to zero, so the firm value increases by 8.557.
2. The regression coefficient value of the leverage variable has a negative relationship with the firm value of -0.203, which means that if there is an increase of 1 unit of leverage, the firm value will decrease.
3. The regression coefficient value of the profitability variable has a negative relationship with the firm value of -0.493, which means that if there is an increase of 1 unit of profitability, it will decrease the firm

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value.

4. The regression coefficient value of the firm size variable has a negative relationship with the firm value of -0.023, which means that if there is an increase of 1 unit of firm size, the firm value will decrease.

IV.2.2 Test Coefficient determinant (R^2)

Table 6. Test R^2

| Model | R | R Square | Adjusted Square | R | Std. Error of the Estimate |
|-------|-------|----------|-----------------|---|----------------------------|
| 1 | .523a | .274 | .235 | | .74222 |

Source: Processed secondary data, 2022

Based on table 6 above, it shows the value of the coefficient of determination with adjusted R2 of 0.235. This means that 23.5% is influenced by the variables of leverage, profitability and firm size. While the remaining 76.5% is influenced by other variables.

IV.2.3 F . Test

Table 7. F Uji test

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|-------|-------|
| Regression | 11,644 | 3 | 3,881 | 7.046 | .000b |
| Residual | 30850 | 56 | .551 | | |
| Total | 42,494 | 59 | | | |

Source: Processed secondary data, 2022

Based on table 7 above, the results of the F test have a significance level of 0.000, which is less than 0.05, this indicates that leverage, profitability and firm size simultaneously have a significant effect on firm value.

IV.2.4 t test

Table 8. t test

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---------------|-----------------------------|-------|---------------------------|--------|------|
| | Std. Error | Beta | | | |
| (Constant) | 8,557 | 2,155 | | 3.970 | .000 |
| Leverage | -.203 | .076 | -.309 | -2.675 | .010 |
| Profitability | -.493 | .804 | -.071 | -.614 | .542 |
| Company Size | -.263 | .076 | -.397 | -3.445 | .001 |

Source: Processed secondary data, 2022

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Leverage

Based on the results of the t-test in table IV.9, it is obtained that the tcount value is -2,675 with a significance value of 0.010 so that the tcount is greater than ttable (-2,675 > 2,000) with a significance value less than 0.05 (0.010 < 0.05), then H1 is accepted. So it can be concluded that the leverage variable has an effect on firm value. This research is in line with research conducted by Rahayu & Sari (2018), Sutama & Lisa (2018), and Ardiansyah (2020) which show that Leverage has an effect on Firm Value.

Profitability

Based on the results of the T test in table IV.9, it is obtained that the tcount value is -0.614 with a significance value of 0.542 so that the tcount value is smaller than ttable (-0.614 < 2,000) with a significance value greater than 0.05 (0.542 > 0.05), then H2 is rejected. So it can be concluded that the profitability variable has no effect on firm value. This research is in line with research conducted by Poolban et al (2020) which shows that profitability has no effect on firm value.

Company Size

Based on the results of the t-test in table IV.9, the tcount value is -3.445 with a significance value of 0.001 so that the tcount is greater than ttable (-3.445 > 2,000) with a significance value less than 0.05 (0.001 < 0.05), then H3 is accepted. So it can be concluded that the firm size variable has an effect on firm value. This research is in line with the research conducted by Putra &gantino (2021) which shows that firm size has an effect on firm value.

IV.3 Discussion of Analysis Results

1. The Effect of Leverage on Firm Value

The calculation of the results of the research on the leverage variable shows the magnitude of tcount -2,675 with a significance value of 0.010 so that tcount > ttable (-2,675 > 2,000) with sig < 0.05 (0.010 < 0.05) it can be concluded that the leverage variable has an effect on firm value. These results indicate that the first hypothesis (H1) which states that leverage has an effect on firm value is accepted.

2. The Effect of Profitability on Firm Value

Calculation of variable research results profitability show bigtcount value -0.614 with a significance value of 0.542 so that tcount < ttable (-0.614 < 2,000) with sig > 0.05 (0.542 > 0.05) it can be concluded that the profitability variable has no effect on firm value. These results indicate that the second hypothesis (H2) which states that profitability has an effect on firm value is rejected.

3. The Effect of Firm Size on Firm Value

The calculation of the results of the research on the variable size of the company shows the magnitude of tcount -3.445 with a significance value of 0.001 so that tcount > ttable (-3.445 > 2,000) with sig < 0.05 (0.001 < 0.05) it can be concluded that the variable company size affect the value of the company. These results indicate that the third hypothesis (H3) which states that firm size affects firm value is accepted

V. CONCLUSION

Based on the results of the analysis and discussion described in the previous chapter, the following conclusions can be drawn:

1. Leverage has an effect on Firm Value, this shows that Leverage is a determining factor for Firm Value.
2. Profitability has no effect on firm value, this proves that profitability is not a determining factor for firm value.
3. Firm size has an effect on firm value, this shows that firm size is a determining factor for firm value.

Limitations

This research still has limitations, so it needs to be considered for future researchers. The limitations of the study are as follows:

1. The sampling in this study was limited to Garment & Textile companies listed on the Indonesia Stock Exchange (IDX) in the 2017-2021 period, so this research cannot be generalized to companies outside of Garment & Textile.

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2. The coefficient of determination in this study of 23.5% indicates that there are many other variables that can affect firm value apart from the variables used in this study.
3. This study only uses a few variables, so overall it has not been able to explain what factors affect firm value.

Suggestion

Based on the conclusions and limitations contained in this study, it can be put forward some suggestions that can be used for consideration in further research, namely:

1. Further research is expected to increase the number of samples of companies listed on the IDX by expanding the sector of the companies that will be sampled.
2. Future research is expected to find variables that have a higher influence on firm value.
3. Further research is expected to add other variables that can affect firm value, such as {debt policy, liquidity, dividend policy, etc.}.

REFERENCES

- [1] Ardiansyah, G. G. K. (2020). Pengaruh Profitabilitas, Ukuran Perusahaan, Leverage Dan Likuiditas Terhadap Nilai Perusahaan. *Jurnal Paradigma Akuntansi*, 2(1), 367-375.
- [2] Dwi Respati, R., & Hadiprajitno, P. T. B. (2015). ANALISIS PENGARUH PROFITABILITAS, LEVERAGE, UKURAN PERUSAHAAN, TIPE INDUSTRI, DAN PENGUNGKAPAN MEDIA TERHADAP PENGUNGKAPAN CORPORATE SOCIAL RESPONSIBILITY (*StudiEmpiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2014*) (Doctoral dissertation, UNDIP: Fakultas Ekonomika dan Bisnis).
- [3] Kalbuana, N., & Mulyati, H. (2016). Pengaruh Leverage, Profitabilitas, dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Studi Empiris pada Perusahaan Garment dan Textile yang terdaftar di Bursa Efek Indonesia Tahun 2011-2015).
- [4] Kolamban, D. V., Murni, S., & Baramuli, D. N. (2020). Analisis Pengaruh Leverage, Profitabilitas dan Ukuran Perusahaan terhadap Nilai Perusahaan pada Industri Perbankan yang Terdaftar di BEI. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 8(3).
- [5] Markonah, M., Salim, A., & Franciska, J. (2020). Effect of profitability, leverage, and liquidity to the firm value. *Dinasti International Journal of Economics, Finance & Accounting*, 1(1), 83-94.
- [6] Putra. R. D & Gantino, Rilla. (2021). Pengaruh Profitabilitas, Leverage, dan Ukuran Perusahaan Terhadap Nilai Perusahaan. Esensi: *Jurnal Bisnis dan Manajemen* Volume 11 (1), Halaman 81 – 96.
- [7] Rahayu, M., & Sari, B. (2018). Faktor-faktor yang mempengaruhi nilai perusahaan. *Ikraith-Humaniora*, 2(1), 69-76.
- [8] Soge, M. S. N., & Brata, I. O. D. (2020). PENGARUH PROFITABILITAS, LEVERAGE, DAN UKURAN PERUSAHAAN TERHADAP NILAI PERUSAHAAN PADA PERUSAHAAN MANUFAKTUR YANG TERDAFTAR DI BEI. *Jurnal Akuntansi Bisnis dan Ekonomi*, 6(2), 1767-1788.
- [9] Suryana, F. N., & Rahayu, S. (2018). Pengaruh Leverage, Profitabilitas, dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Studi Empiris pada Perusahaan Industri Barang Konsumsi Sub Sektor Farmasi yang Terdaftar di Bursa Efek Indonesia Tahun 2012-2016). *eProceedings of Management*, 5(2).
- [10] Sutama, D., & Lisa, E. (2018). Pengaruh leverage dan profitabilitas terhadap nilai perusahaan. *JSMA (Jurnal Sains Manajemen Dan Akuntansi)*, 10(1), 21-39.
- [11] Widiyasari, C., & Nursiam, N. (2020). ANALISIS PENGARUH KEBIJAKAN DIVIDEN, KEBIJAKAN HUTANG, PROFITABILITAS, DAN UKURAN PERUSAHAAN TERHADAP NILAI PERUSAHAAN (Studi Empiris pada Perusahaan Properti dan Real Estate yang terdaftar di Bursa Efek Indonesia Tahun 2015-2018).