

## THE EFFECT OF PROFITABILITY, SOLVENCY, AND COMPANY SIZE ON COMPANY VALUE IN VARIOUS INDUSTRIAL SECTORS IN MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE IN 2018-2021

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***Abstract** – This study aims to test and analyze whether Profitability, Solvency, and Company Size have an effect on Firm Value in various industrial sector Manufacturing Companies listed on the Indonesia Stock Exchange in 2018-2021. In this study, a different perspective and year period was used regarding the Company Value. This research takes the perspective of development and management. In this study secondary data were used. The sample of this study is manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2018-2021 using purposive sampling method. There are 10 companies that meet the criteria as research samples. This research uses quantitative methods. The research variables used are Profitability, Solvency, and Company Size. The tests used are statistical test analysis, classical assumption test, hypothesis testing (T test and F test) using the Eviews 12 program application. The results of this study indicate that the Profitability variable has a positive significant effect on Firm Value, Solvency has a negative significant effect on Firm Value, and Company Size has no effect and is not significant to Firm Value. Simultaneously, the results of this study indicate that the variables of Profitability, Solvency, and Company Size have an effect on Firm Value.*

***Keywords:** Firm Value, Profitability, Solvency, Company Size*

### I. INTRODUCTION

Indonesia's current economic condition opens up a competition between companies in the industrial world. So that every company competes to increase its performance so that the planned goals can be achieved. There are many impacts caused by economic progress which will greatly affect the level of welfare of a company. In improving the welfare of a company, innovation and strategies are needed to be able to compete in order to maintain company value.

Various manufacturing industry companies are currently growing rapidly, where the manufacturing industry has contributed greatly to increasing economic growth in Indonesia. In addition to expanding employment opportunities, this industry is a trigger for increasing good investment. In Indonesia, the various industrial sectors are one of the main sources and priorities that promise to be developed.

A company must have the main goal of increasing the value of the company. According to (Suranto & Walandouw, 2017 and Dewi & Abundanti, 2019) in (Paul Eduard Sudjiman, 2022) if the stock price rises, this is followed by an increase in company value.

The element that influences the company's value is profitability. If the company gets a high profit, then this shows that the company has

the ability to earn high enough profits (Yanuar Dwi Syahbani, 2021).

Solvability is able to have an impact on company value. Solvability is defined as measuring the company's ability to pay off all long-term debt with all assets and/or equity collateral if the company is liquidated. (Dr. Agus S. Irfani, 2020).

Company size is also able to have an impact on company value along with its growth. Large companies will attract investors to buy shares or invest their capital so that the company can obtain more financial resources. (Yanuar Dwi Syahbani, 2021).

## II. METHODS

This research uses quantitative methods. Quantitative method is research that can be assigned a numerical/measurable value starting from the process data collection to interpretation. Information to be used in this study in the form of data from financial reports. The financial reports that will be used are secondary data from manufacturing companies in various industrial sectors listed on the Exchange Indonesian Securities.

## III. RESULTS AND DISCUSSION

### 1. Descriptive Statistical Analysis

By calculating the statistical value of the research variables, the following results are obtained:

#### a. Firm Value (Y)

The results of the sample data studied were 40, the mean value was 2.178250, and the median value was 1.265000. The maximum value of 8.060000 is occupied by CCSI or Communication Cable Systems Indonesia Tbk in 2021, while the minimum value of 0.100000 is occupied by LPIN or Multi Prima Sejahtera

Tbk in 2018-2019. And the standard deviation value is 2.287926.

#### b. Profitability ( $X_1$ )

The sample data studied was 40, the mean value was 0.076750 and the median value was 0.060000. The maximum value of 0.240000 is occupied by AUTO or Astra Otoparts Tbk in 2020, whereas the minimum value of 0.010000 is occupied by STAR or Buana Artha Anugerah Tbk in 2020. And the standard deviation value is 0.057082.

#### c. Solvability ( $X_2$ )

The sample data studied was 40, the mean value was 0.535250, and the median value was 0.390000. The maximum value of 3.340000 is occupied by SLIS or Gaya Abadi Sempurna Tbk in 2018, while the minimum value of 0.070000 is occupied by LPIN or Multi Prima Sejahtera Tbk in 2019 and SCCO or Supreme Cable Manufacturing & Commerce Tbk in 2021. And the standard deviation value is 0.577421.

#### d. Company Size ( $X_3$ )

The sample data studied was 40, the mean value was 28.00875 and the median value was 28.71500. The maximum value of 33.54000 is held by ASII or Astra International Tbk in 2021, while the minimum value of 19.67000 is occupied by CCSI or Communication Cable Systems Indonesia Tbk in 2018. And the standard deviation is 3.383717.

**Table 1** Descriptive statistics

	PBV	ROA	DER	LN
Mean	2.178250	0.076750	0.535250	28.00875
Median	1.265000	0.060000	0.390000	28.71500
Maximum	8.060000	0.240000	3.340000	33.54000
Minimum	0.100000	0.010000	0.070000	19.67000
Std. Dev.	2.287926	0.057082	0.577421	3.383717
Obs.	40	40	40	40

### 2. Panel Data Regression Analysis

- FEM

it can be concluded that the CEM model in this study is as follows:

$$Y = 11.76790 + 1.121679*ROA + (1.320053)*DER + (0.316961)*LN$$

**Table 2** Fixed Effect Model Estimation Results

Dependent Variable: PBV				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.76790	34.94473	0.336758	0.7389
ROA	1.121679	0.342840	3.271727	0.0024
DER	-1.320053	0.383204	-3.444783	0.0019
LN	-0.316961	1.240424	-0.255527	0.8003

Effects Specification

Cross-section fixed (dummy variables)			
Root MSE	0.514020	R-squared	0.948231
Mean dependent var	2.178250	Adjusted R-squared	0.925222
S.D. dependent var	2.287926	S.E. of regression	0.625646
Akaike info criterion	2.156892	Sum squared resid	10.56867
Schwarz criterion	2.705778	Log likelihood	-30.13784
Hannan-Quinn criter.	2.355352	F-statistic	41.21208
Durbin-Watson stat	1.753752	Prob(F-statistic)	0.000000

Table 2 shows the results of the assessment of factors that affect Profitability (ROA), Solvability (DER), and Company Size (LN) using the Fixed Effect Model (FEM), which is translated into the following equation:

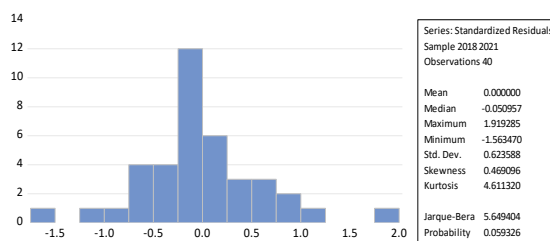
$$Y = 13.38283 + 10.36889*ROA + 1.160977*DER + (0.450638)*LN$$

- i. The constant value of the Firm Value (PBV) is 11.76790
- ii. The regression coefficient on Profitability (ROA) is 1.121679
- iii. The regression coefficient on Solvency (DER) is - 1.320053
- iv. The regression coefficient on Firm Size (LN) is - 0.316961

3. Test the Klasik Assumptions

a. Normality test

The Jarque-Bera value of 5.649404 is greater than the X2 table of 55.7585 and the Probability of 0.059326 > 0.05. This means that the residuals are normally distributed.



b. Multicollinearity test

showing the value of the correlation coefficient between variables <0.8, it can be concluded that there is no multicollinearity.

**Table 3** Correlation between Variables

ROA	DER	LN
1.000000	-0.018917	-0.065295
-0.018917	1.000000	0.038345
-0.065295	0.038345	1.000000

c. Heteroscedasticity test

shows that the heteroscedasticity test has a probability value for each independent variable and an absolute residual > 0.05, so there is no heteroscedasticity problem.

**Table 4** Heteroscedasticity test

Dependent Variable: RESABS				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.106785	0.102287	1.043972	0.3058
ROA	0.002312	0.009432	0.245132	0.8082
DER	-0.000804	0.001122	-0.716403	0.4799
LN	-0.003727	0.003631	-1.026457	0.3138

4. Hypothesis Test

a. Persian Test (T Test)

1. First Hypothesis ( $H_1$ )

Based on table 2, the results of the profitability T test show that the statistics are greater than ttable  $3.271727 > 1.68830$  and a significant value of  $0.0024 < 0.05$ . Then the results are drawn that profitability has a positive and significant effect on company value.

2. Second Hypothesis ( $H_2$ )

Based on table 2, the solvency T test results show a statistic greater than ttable  $(-3.444783 > 1.68830)$  and a significant value of  $0.0019 < 0.05$ . This explains that solvency has a negative and significant effect on company value.

3. Third Hypothesis ( $H_3$ )

Based on table 2, the results of the T-test for firm size show statistics  $<$  ttable  $(-0.255527 < 1.68830)$  with a significance of  $0.8003 > 0.05$ . Thus, it is stated that company size has no significant effect on company value.

b. Simultaneous Test (F Test)

Based on table 2, it is explained that the statistical value  $>$  Ftable  $(41.21208 > 2.87)$  has a significant value of  $0.000000 < 0.05$ , meaning that the variables Profitability, Solvability and Company Size simultaneously have a significant influence on Company Value.

c. Coefficient of Determination ( $R^2$ )

The coefficient of determination is applied to explain the maximum ability of the independent variable to interpret the dependent variable. Adjusted R-squared has a value of 0.925222 which makes the dependent variable able to interpret the dependent variable at 92.52% and the deficiency of 7.48% is interpreted by different variables outside the study.

## IV. CONCLUSION

Based on the elaboration of the research results above, it is concluded that Profitability found a positive and significant influence on Company Value of various industrial sectors of manufacturing companies listed on the IDX for the 2018-2021 period. This result means that the company is able to get big profits for the company.

Meanwhile, the Solvency variable has a negative and significant influence on the Company Value of various industrial sectors of manufacturing companies listed on the IDX for the 2018-2021 period. So that means the company's lack of ability to minimize losses resulting in decreased company value. And make investors to be more vigilant in choosing a company to invest in.

Unlike the case with Company Size which has no influence and is not significant on Company Value of various industrial sectors of manufacturing companies listed on the IDX for the 2018-2021 period. Where investors do not use company size as a benchmark and choose companies to invest in because the size of the company has no effect on company value.

Simultaneously it is stated that profitability, solvency and company size have a significant effect on the Company Value of various industrial sectors of manufacturing companies listed on the IDX for the 2018-2021 period.

The test results for the coefficient of determination ( $R^2$ ) reveal that the value of  $R^2$  is 0.925222, so that the independent variables in this study can be responsible for 92.52% of the dependent variable, and other variables outside the study can be responsible for the remaining 7.48%.

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