

**EFFECT OF BUSINESS RISK, COMPANY SIZE, SALES GROWTH, AND TOTAL  
ASET TURNOVER AGAINST DEBT TO EQUITY RATIO  
(Study of Pharmaceutical Sub-Sector Companies Listed on the Indonesia Stock  
Exchange 2014-2021 Period)**

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**ABSTRACT**

*The purpose of this study is to determine the effect of business risk, company size, and sales growth Total Asset Turnover Against Debt to Equity Ratio. The method used in this research is a quantitative method with a descriptive and verification approach. The data analysis technique used in this study is the classical assumption, multiple linear regression test, person correlation coefficient test (product moment), test the coefficient of determination ( $R^2$ ), and hypothesis testing both partially ( $t$  test) and simultaneously ( $f$  test) using the help of the SPSS version 25 program. Based on the research results show that in testing the hypothesis ( $t$  test) the results are: (1) Business Risk (DOL) has a significant effect on Debt to Equity Ratio. (2) Company size has no significant effect on Debt to Equity Ratio. (3) Company growth has a significant effect on Debt to Equity Ratio. (4) Total Asset Turn Over has a significant effect on Debt to Equity Ratio. (5) Business Risk, Company Size, Sales Growth, and Total Asset Turn Over provide a simultaneous (together) effect on Debt to Equity Ratio.(6)*

**Keywords :** *Business Risk, Company Size, Sales Growth, Total Asset Turnover, Debt to Equity Ratio*

**INTRODUCTION**

The Minister of Finance Sri Mulyani Indrawati again revealed a surprising fact about State-Owned Enterprises (BUMN). Sri Mulyani said that as much as 68% of SOEs, especially recipients of capital injections, faced the potential for bankruptcy. The SOEs, explained Sri, usually receive capital injections from the government through State Capital Participation (PMN). This possibility of bankruptcy was explained when dissecting the performance of SOEs receiving PMN in 2020 during a working

meeting with Commission XI of the DPR RI. Then, when viewed from the debt-to-equity ratio (DER), it was also found that most SOEs receiving PMN had relatively high debt compared to the industry average. In fact, said Sri Mulyani, the debt is above the industry average. Meanwhile, only 2% is comparable to the industry. Then, debt that is below the industry average is recorded at 34%.

As a rule of thumb, a company's DER is usually said to be healthy if it is below 1 or 100%. However, of course these figures vary from one sector to another. As a benchmark, in general, the reasonable

limit for DER itself is 3 times (300%) to 4 times (400%). According to Sri Mulyani's data, the allocation of funds for SOEs through PMN during 2005-2021 was divided into three clusters, namely the establishment of Rp 3 trillion for BUMN, the restructuring of Rp 12.7 trillion for BUMN and the improvement of BUMN performance of Rp 345.6 trillion. When examining the debt ratio through DER, there are 12 issuers that have very high DER positions, namely all issuers from the BUMN Karya and banking sectors. It's just that high DERs for the construction and banking sectors are often considered reasonable. Meanwhile, out of 12 issuers other than issuers of banks and BUMN Karya, it was recorded that there were at least 2 issuers with DER above the rule of thumb 1 time, although it is still far from below the safe limit 3 times, namely PGAS (1.7 times) and pharmaceutical issuer KAEF (1.6 times).

## **LITERATURE REVIEW**

According to Sugiyono (2020: 86) Literature review is a flow of logic or reasoning which is a set of concepts, definitions, and proportions arranged systematically.

### **Debt To Equity Ratio**

According to Kasmir (2019:112), Debt to Equity Ratio is the ratio used to value debt to equity. This ratio is useful for knowing the amount of funds provided by the borrower (creditor) with the owner of the company. In other words, this ratio is to find out every rupiah of own capital that is used as collateral for debt.

### **Business Risk**

According to Gitman (2015: 527), Business Risk is a risk for the company because it cannot cover its operational costs. In general the bigger leverage company operations, the use of fixed operating costs the higher the business risk.

### **Company Size**

According to Jogiyanto (2017: 685), company size is the size of the company which can be measured by the total asset value or net sales or equity value.

### **Sales Growth**

According to expectations (2016: 309), Sales Growth is the difference between the number of sales of the current period and the previous period compared to the previous period. High sales growth will reflect high revenue gains and on the profit of a company. The higher the sales growth rate of a company, the more

successful the company is in carrying out its strategy. Company management can be assessed for its performance by looking at the sales generated.

### **Total Asset Turn Over**

According to Kasmir (2019:187), Total Asset Turnover (Total Asset Turn Over) is the ratio used to measure the turnover of all assets owned by the company and to measure how many sales are obtained from each rupiah of assets.

### **METHOD**

The method used in this research is a quantitative method with a descriptive and verification approach. Quantitative research methods according to Sugiyono (2020: 16), namely: "Research methods based on the philosophy of positivism, are used to research certain populations or samples, collect data using research instruments, data analysis is quantitative/statistical, with the aim of testing hypotheses that have been applied."

### **RESULT AND DISCUSSION**

#### **Descriptive Statistical Analysis Descriptive Statistical Analysis Debt To Equity Ratio**

The minimum value occurs at PT Industri Jamu and Pharmacy Sido Muncul Tbk amounted to 0.08 in 2015, the maximum value of 2.26 occurred at PT Pyridam Farma Tbk in 2016, the average was 0.83 and the standard deviation was 0.63.

#### **Business Risk Descriptive Statistical Analysis**

The minimum value occurs at PT Pyridam Farma Tbk of -0.84 in 2014, the maximum value of 3.67 occurs at PT Kimia Farma Tbk in 2020, the average is 1.256 and the standard deviation is 0.958

#### **Company Size Descriptive Statistical Analysis**

The minimum value occurs at PT Pyridam Farma Tbk of 25.85 in 2016, the maximum value of 30.88 occurs at PT Kalbe Farma Tbk in 2021, the average is 28.92 and the standard deviation is 1.351.

#### **Sales Growth Descriptive Statistical Analysis**

The minimum value occurs at PT Industri Jamu and Sido Muncul Tbk Pharmacy of -0.07 in 2014, the maximum value of Sales Growth of 0.45 will occur at PT Pyridam Farma Tbk in 2021, an average of 0.135 and a standard deviation of 0.114

Statistic analysis Total Asset Turn Over

1.120 is smaller than 10 and Tolerance 0,893.

The minimum value occurred at PT Kalbe Farma Tbk of 0.56 in 2014, the maximum value of 2.30 occurred at PT Pyridam Farma Tbk in 2016, the average was 1.09 and the standard deviation was 0.384.

4. on variables Total Asset Turn Over (X4), nilai Variance Influence Factor (VIF) of 1.256 smaller than 10 and Tolerance 0796.

Verification Statistical Analysis of Classical Assumption Test Results

### **Heteroscedasticity Test**

#### **Normality test**

Based on the test results that the normality test kolmogorov smirnovin this study was  $0.051 > 0.050$ . A significance value greater than 0.05 indicates that the data in this study are normally distributed

The results of the heteroscedasticity test show that the points spread randomly, not forming a pattern. As well as the points spread both above and below zero on the Y axis. It can be concluded that there is no heteroscedasticity in the regression model, so this regression model is suitable for further analysis.

#### **Multicollinearity Test**

Based on the test results that there is no Multicollinearity problem where:

#### **Autocorrelation Test**

1. In the Business Risk variable (X1), the mark Variance Influence Factor (VIF) of 1.010 is smaller than 10, and Tolerance is 0,991.
2. On the variable Company Size (X2), mark Variance Influence Factor (VIF) of 1.161 is smaller than 10 and Tolerance 0,861.
3. In the Sales Growth variable (X3), the mark Variance Influence Factor (VIF) of

Based on the results of data processing using SPSS version 25, a Durbin-Watson value of 1.983 can be obtained. Based on the criteria below, the value is between DU -2 and +2, which is 1.983. So it can be said that research data is not available positive and negative autocorrelation. Based on all the results of the tests that have been carried out, it can be concluded that the data in this test did not violate the regression assumptions.

Multiple Linear Regression Analysis Test Results

### **Konstanta (a)**

Constant (a): 2.255 constant value is positive which means if the value of the DOL, UP, PP variables is 0 (zero), then there is a change in the DER variable with a constant value of 2.255

### **Regression Coefficient Business Risk**

$b_1$  is the regression coefficient of the Business Risk variable the magnitude of the value is 0.216. The positive sign indicates the direction of a positive (unidirectional) relationship between and DER. If the partially increases by one unit assuming the other independent variables remain constant, it will be followed by an increase in DER equal to the DOL direction coefficient, namely  $\beta_1 = 0.216$ .

### **Firm Size Regression Coefficient**

$b_2$  is the regression coefficient of the variable Firm Size the value is -0.084. The negative sign indicates the direction of the negative relationship (not unidirectional) between UP and DER. If the Firm size partially increases by one unit assuming the other independent variables are constant, then it will not be followed by an increase in the DER of the firm size direction coefficient which is equal to  $\beta_2 = -0.084$ .

### **Sales Growth Regression Coefficient**

$b_3$  is the regression coefficient.

Sales Growth variable (PP) the magnitude of the value is 1.534. The positive sign indicates the direction of a positive (unidirectional) relationship between PP and DER. If PP partially increases by one unit assuming the other independent variables remain constant, it will be followed by an increase in DER equal to the PP direction coefficient, namely  $\beta_3 = 1.534$ .

$b_4$  is the variable regression coefficient Total Assets Turn Over the magnitude of the value is 0.474. The positive sign indicates the direction of a positive (unidirectional) relationship between TATO and DER. If TATO partially increases by one unit assuming the other independent variables remain constant, it will be followed by an increase in DER equal to the coefficient of the TATO direction, namely  $\beta_3 = 0.474$ .

### **Product Moment Coefficient Test (Person Correlation)**

The results of the correlation calculation show:

1. The magnitude of the correlation between Business Risk and Debt To Equity Ratio is equal to 0.374. This

shows that there is a low positive correlation between Business Risk and Debt To Equity Ratio. 2) The magnitude of the correlation between Firm Size Debt to Equity Ratio is - 0.339. This shows that there is a low negative correlation between firm size Debt To Equity Ratio.

2. The magnitude of the correlation between Sales Growth Debt To Equity Ratio is equal to 0.423. This shows that there is a moderate positive correlation between sales growth and Debt to Equity Ratio.
3. The magnitude of the correlation between Total Aset Turn Over to Debt To Equity Ratio is equal to 0.463. This shows that there is a moderate positive correlation between Total Aset Turn Over with Debt To Equity Ratio.

Analysis of the Coefficient of Determination

$$\begin{aligned} Kd &= R^2 \times 100\% \\ &= (0,656)^2 \times 100\% \\ &= 43,0\% \end{aligned}$$

The value of the coefficient of determination (R square) of 0.430 which means that change Debt to Equity Ratio can be affected by changes in the variables

Business Risk, Company Size, and Growth of 43.0%. Based on the correlation criteria table, the correlation value between 41% - 60% has a moderate relationship. This shows that there are still other factors that can improve Debt to Equity Ratio besides the variables of Business Risk, Company Size, and Sales Growth Total Asset Turn Over namely 57.0%.

### **Hypothesis test**

#### **Partial Hypothesis Testing Results (t-test)**

1. Business Risk (X1) positive and significant effect on Debt To Equity Ratio (AND)
2. Company Size ( X2) There is no insignificant influence to Debt To Equity Ratio (AND).
3. Sales Growth ( X3) positive and significant effect on Debt To Equity Ratio (AND).
4. Total asset Turn Over (X1) effect and not significant to Debt To Equity Ratio (AND).
5. Results of Simultaneous Hypothesis Testing (Test F) simultaneously there is a significant influence of Business Risk (X1), Size Company (X2), Sales Growth (X3), Total Assets Turn Over (X4), against Debt to Equity Ratio (AND).

## CONCLUSION

### **Descriptive Statistical Analysis Debt to Equity Ratio**

Based on the results of descriptive statistical analysis for variables Debt to Equity Ratio the table above shows that the minimum value Debt to Equity Ratio happened to PT. Sido Muncul Tbk Herbal and Pharmaceutical Industry of 0.08 in 2015 and value maximum Debt to Equity Ratio of 2.26 occurred at PT. Pyridam Farma Tbk in 2016. As for the average Debt to Equity Ratio from Pharmaceutical Subsector Companies in the 2014-2020 period of 0.83 and a standard deviation Debt to Equity Ratio in Pharmaceutical Subsector Companies in the 2014-2021 period of 0.63. The industry standard for grades Debt to Equity Ratio according to Kasmir (2019: 161) it is 80%. Based on the results of the analysis above shows that the average value of Pharmaceutical Subsector Companies is greater than the industry average ( $0.83 > 0.80$ ) this shows that each research sample shows unfavorable financial conditions because the company has greater debt compared to its own capital.

### **Business Risk Descriptive Statistical Analysis**

Based on the results of descriptive statistical analysis for the Business Risk variable on the table above shows that the minimum value of Business Risk occurs in PT. Pyridam Farma Tbk amounted to -0.84 in 2014 and value maximum Business Risk of 3.67 occurred at PT. Kimia Farma Tbk in 2020. As for the average business risk from Pharmaceutical Subsector Companies in the 2014-2020 period of 1.256 and the standard deviation of Business Risk in Pharmaceutical Subsector Companies in the 2014-2021 period of 0.95. Business Risk is a company that can be seen in the fluctuation of the company's profit. Companies that have a lot of debt will increase the risk of bankruptcy because more and more obligation which must be met. Business Risk in Pharmaceutical Sub Sector Companies in 2014-2021 experienced fairly good conditions, sample companies were able to accurately measure the sensitivity of operating income which will be used as sales

### **Company Size Descriptive Statistical Analysis**

Based on the results of descriptive statistical analysis for the variable company size in the table above, it shows that the minimum value is company size happened to PT. Pyridam Farma Tbk of

25.85 in 2016 and the maximum value of Company Size of 30.88 occurs at PT. Kalbe Farma Tbk in 2021. The average company size of pharmaceutical sub-sector companies in the 2014-2020 period was 28.92 and the standard deviation of company size in pharmaceutical sub-sector companies in the 2014-2021 period was 0.63. Based on the results of the statistical analysis above, the 5 sample companies are studied has an average company size of 28.92 or if based on an average total company asset of RP. 6,564,893,645,225,-. According to Law No. 20 of 2008 states that if the total assets are above 10 billion then it is included in the category of large companies. This means that the average assets of the sample companies under study have a value of > 10 billion, so the sample companies under study fall into the category of large companies.

### **Sales Growth Descriptive Statistical Analysis**

Based on the results of descriptive statistical analysis for the Sales Growth variable in the table above shows that the minimum value of Sales Growth occurs at PT. Herbal Medicine and Pharmaceutical Industry Sido Muncul Tbk amounted to -0.07 in 2014 and the maximum Sales Growth value of 0.45 occurred at PT.

Pyridam Farma Tbk in 2021. The average sales growth for pharmaceutical sub-sector companies in the 2014-2020 period was 0.135 and the standard deviation of sales growth for pharmaceutical sub-sector companies in the 2014-2021 period was 0.114.

According to Weston and Brigham in Farhana, et al (2016: 5) by knowing how much a company's sales growth can predict how much profit will be obtained. To measure sales growth, it is calculated by current sales minus previous sales divided by previous sales multiplied by one hundred percent. If the comparison percentage is getting bigger, it can be concluded that sales growth is getting better or better than the previous period. Sales growth of 5-10% is usually considered good for large companies, and the expected figure for companies that are not too large is more than 10%. Based on the results of the analysis above, the sample companies under study have an average of above 10%, meaning that a company that is highly skilled is a good company.

### **Descriptive Statistical Analysis Total Asset Turn Over**

Based on the results of descriptive statistical analysis for variables Total



Assets Turn Over in the table above shows that the minimum value is Total Assets Turn Over happened to PT. Kalbe Farma Tbk of 0.56 in 2014 and the maximum value Total Assets Turn Over of 2.30 occurred at PT. Pyridam Farma Tbk in 2016. As for the average Total Assets Turn Over from Pharmaceutical Subsector Companies in the 2014-2020 period of 1.09 and a standard deviation Total Assets Turn Over in Pharmaceutical Subsector Companies in the 2014-2021 period of 0.384.

The industry standard for grades Total Assets Turn Over according to Kasmir (2019: 186) is 2 times. Based on the above analysis results show that the average value of Subsector Companies Pharmacy smaller than the industry average (1.09 < 2.00) this shows that each research sample is less than optimal in managing all assets to earn profits.

#### **Effect of Business Risk on Debt To Equity Ratio**

The results of the study stated that the Business Risk (DOL) variable had an influence on Debt to Equity Ratio (DER). This statement is proven by the t test of Business Risk (DOL) obtained by  $t_{table}$  of (2.536 > 1.683), so that it can be interpreted that H<sub>0</sub> is rejected, which

means that there is an influence of Business Risk (DOL) on Debt to Equity Ratio (DER). and a significance value of 0.016 < 0.050 so that H<sub>1</sub> is accepted, meaning that there is an influence of Business Risk (DOL) on Debt to Equity Ratio (DER) for pharmaceutical subsector companies listed on the IDX for the 2014-2021 period. Results this research is in line with research conducted by Sari et al (2019) showing that Business Risk (DOL) has a significant effect on Debt to Equity Ratio (DER) and research conducted by Meilyani et al (2019) shows that Business Risk (DOL) has no significant effect on capital structure.

#### **Effect of Company Size on Debt To Equity Ratio**

The results of the study stated that the variable Firm Size (UP) had no effect on Debt to Equity Ratio (DER). This statement is proven by the t test of Firm Size (UP) obtained by  $t_{table}$  of (-1.286 < 1.683), so that it can be interpreted that H<sub>0</sub> is accepted, which means that there is no effect of Firm Size (UP) on Debt to Equity Ratio (DER). and a significance value of 0.207 > 0.05 so that H<sub>2</sub> is accepted, meaning there is an influence of Company Size (UP) on Debt to Equity Ratio (DER) for pharmaceutical sub-

sector companies listed on the IDX for the 2014-2021 period. The results of this study are in line with research conducted by Sari et al (2019) showing that firm size (UP) has no significant effect on Debt to Equity Ratio (THE).

### **Effect of Sales Growth on Debt To Equity Ratio**

The results of the study stated that the variable Sales Growth (PP) had an influence on Debt to Equity Ratio (DER). This statement is proven by the t test Sales Growth (PP) obtained  $t_{table}$  of  $(2.043 > 1.683)$ , so that it can be interpreted that  $H_0$  is rejected, which means that there is an influence of Sales Growth (PP) on Debt to Equity Ratio (DER). and a significance value of  $0.049 > 0.050$  so that  $H_3$  is accepted, meaning that there is an effect of Sales Growth (PP) on Debt to Equity Ratio (DER) for pharmaceutical sub-sector companies listed on the IDX for the 2014-2021 period. The results of this study are in line with research conducted by Meilyani et al (2019) showing that Sales Growth (PP) has no significant effect on Debt to Equity Ratio (THE).

### **Debt To Equity Ratio**

The results of the study stated that variable total Assets Turn Over (TATO) has an

influence on Debt to AND equity Ratio (DER). This statement is proven by the Total t test Assets Turn Over (TATO) obtained  $t_{table}$  equal to  $(1.997 > 1.683)$ , so it can be interpreted that  $H_0$  is rejected which means there is influence total Assets Turn Over (Tattoo) against debt to Equity Ratio (DER). and a significance value of  $0.054 > 0.050$  so that  $H_4$  is accepted, meaning that there is influence total Assets Turn Over (Tattoo) against debt to Equity Ratio (DER). in pharmaceutical sub-sector companies listed on the IDX for the 2014-2021 period. The results of this study are in line with research conducted by Sari (2019) showing that Total Assets Turn Over (TATO) has a significant effect on Debt to Equity Ratio (THE).

### **Simultaneous Effect of Business Risk, Company Size, Sales Growth, Total Asset Turn Over, to Debt To Equity Ratio**

The results of the study show that simultaneously there is a significant influence from Business Risk (DOL), Firm Size (UP), Sales Growth (PP) Total Assets Turn Over (Tattoo) against Debt to Equity Ratio (DER). This statement is proven by the Coefficient of Determination (KD) value of 43.0%,

which shows the meaning of DOL, UP, PP, and TATO on DER gives a simultaneous effect (together) of 43.0%. While the remaining 57% is influenced by other factors outside the research. Correlation coefficients DOL, UP, PP, TATO to DER are moderately correlated, Business Risk f test (DOL), Firm Size (UP), Sales Growth (PP) Total Assets Turn Over (Tattoo) against Debt to Equity Ratio (DER). obtained for 6.613 where  $F_{count}$  bigger than  $F_{table}$  ( $6.613 > 2.606$ ), so that it can be interpreted that  $H_0$  is rejected and there is an influence on Business Risk (DOL), Company Size (UP), Sales Growth (PP) Total Assets Turn Over (Tattoo) against debt to Equity Ratio (DER). and a significance value of  $0.004 < 0.05$  so that  $H_6$  is accepted, meaning that there is influence from Business Risk (DOL), Company Size (UP), Sales Growth (PP) Total Assets Turn Over (Tattoo) against debt to Equity Ratio (THE)

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