The Effect Of Debt Structure And Family Ownership On Firm Performance

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ABSTRACT

The purpose of this quantitative research is to find out how debt structure and family ownership affect the performance of manufacturing companies listed on the Indonesia Stock Exchange from 2019 to 2021. With a population of 120 out of 40 samples of manufacturing companies listed on the Indonesia Stock Exchange were selected through a purposive technique sampling. This study uses secondary data and is analyzed using multiple linear regression. The results of this study indicate that the debt structure has a significant negative effect on company performance as measured using the Debt to Asset Ratio (DAR). This is because the higher the use of debt, the greater the risk that will be borne by the company, so that it can reduce the company's financial performance. Meanwhile, ownership structure has no significant effect on firm performance as measured by the dummy variable. This is due to the lack of family control over the company. According to this study, family firms tend to have positive control over their business and limit their use of debt. This is because the family tends to have positive control over the company and lower debt, which can improve company performance.

Keywords: Debt Structure, Family Ownership, Company Performance.

Introduction

In the business world, company performance is the main criterion for determining the success or failure of the company in achieving its goals. In general, company performance is the result of company management activities. The results of these management activities can be used as benchmarks or parameters to assess how well management manages the company at any time. Muhamad et al., (2022) revealed that a company can be said to be healthy if the company is able to survive in difficult economic conditions, is able to fulfill its obligations in financial matters and is able to carry out its operational activities stably and is able to maintain its business continuity continuously. The company is said to be good if it can achieve its goals, such as an increase in company value and prosperity for company owners.

To find out the development of the company, it is necessary to evaluate the company's performance. Evaluation of company performance includes the duties and responsibilities of company managers as company managers. The good and bad performance of the company can be seen from the company's financial condition, namely by using financial analysis tools. For example, the company has good performance because the company gets greater profitability. To obtain good performance, the company needs control over the role of management and the role of ownership.

In general, the characteristics of companies in Indonesia are companies concentrated in family ownership and managed by family members of the founders or non-founding families of the company. This is in line with a survey conducted by PWC in 2014 that 87% of the family's role in business is as owners and management with 47% as CEO, 23% as directors and 7% as owners. In addition, 33% are managed by more than 3 generations of the family.
Due to the concentrated ownership structure, shareholders may be heavily involved in the management of the company. When the family is in management, there will be alignment of incentives, so that the conflict between the owner and management will be reduced, thus agency costs will also be reduced (Khamis et al., 2015). In addition, families who are included in management can directly control and supervise the company's operations, so that the company's performance will run optimally.

In the business world, it is possible that agency problems will occur, as with concentrated ownership companies such as family companies, there must be problems, for example, second-level agency conflicts between majority and minority owners. When the majority owner takes part in management decisions, the minority owner will tend to be disadvantaged, especially in countries with weak legal protection. In addition, another problem is that when the family is involved in management, there is likely to be a bias when choosing management for family relations issues with efficiency issues that will affect the company's performance to be less good.

Previous research that tested family ownership on company performance had mixed results. According to Indarwati (2015) family ownership has a positive effect on company performance. This is because families tend to have a high sense of ownership to pass on their company to the next generation so that they maintain the company's good performance. This is in line with Reyna and Encalada (2015) that family ownership can improve company performance, this is due to the participation of families who participate in supervising management and have a low debt structure. In addition, based on other research (Astuti et al., 2015) that there is a positive influence of family ownership on company performance calculated by Return on Asset (ROA).

In contrast to the findings of Tanzil and Juniarti, (2017) companies with family ownership are more likely to take personal benefits. In addition, if there is a big risk to the company, the family tends to save their own money rather than saving the company's performance. This is in line with previous research by Tanzil and Juniarti, (2017) family ownership has a negative effect on company performance, this is because the family tends to prioritize personal interests over investor interests. In contrast to research by Ivan and Raharja, 2021) family ownership has no effect on company performance.

The next factor that can affect company performance is the company's debt structure. According to Peillouw, (2017) family-owned companies tend to use debt in their capital structure, so that outsiders do not have control over the company by minimizing the issuance of shares to outsiders. In addition, if the company uses its own capital for its operations, it is likely that the company's performance will not run effectively. The company can develop if it has sufficient capital and has the ability to manage its capital and resources efficiently (Cahyana, et al., 2022). Therefore, companies tend to need additional capital from outside parties to meet their operational needs.

If the company has debt from outside parties that is too large, the company will also get greater financial risk, so that it can create new problems such as leverage problems. Because the company uses assets, the company will face a leverage problem which causes the company to use debt and pay fixed costs, so the company bears the burden (Akbar et al., 2021). In Trade Off Theory Myers, (1976) states that increasing debt will reduce company performance after the optimal point is exceeded. The optimal point is exceeded when there is a trade-off between the benefits of tax advantages and the costs incurred due to debt.

This is in line with previous research by Herdiyanto, (2015) that there is a negative effect of debt structure on company performance calculated using the total debt ratio (TDA), short-term debt ratio (STD), and long-term debt ratio (LTD). So that the higher the company's debt can reduce company performance. This is also in line with Andarsari, (2021) who found a negative effect of capital structure on company performance. In contrast to the research results of Noviastuti et al., (2022) capital structure (debt) has no effect on company performance.

Debt structure and family ownership structure have a role in influencing company performance because company performance is the result of financial decisions taken (Andarsari, 2021). Due to the phenomenon that the majority of companies in Indonesia have a family ownership structure and the various inconsistent results of previous research, this research is interesting to be reexamined. For this study, the company used as the object of research is a manufacturing company listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period. To measure company performance, certain indicators must be used to determine its accuracy.
In addition, to assess the debt structure, this study uses the Debt to Asset Ratio (DAR) measurement tool to measure the ratio between total debt and total assets in order to find out how much influence the debt structure has on company performance. In addition, family ownership can be measured by calculating the total percentage of family ownership of issued shares. Due to the large number of family companies in the manufacturing industry, this study uses manufacturing companies as the population. This is done because it is easier for researchers to select the right sample. In addition, manufacturing companies can oversee profit or loss every year. Therefore, the authors tested the Debt Structure and Family Ownership on Company Performance with a sample of Manufacturing sector companies listed on the Indonesian Securities Exchange for the period 2019 - 2021.

Research Method
This quantitative research uses secondary data sources. Researchers used 120 population data from 40 samples of manufacturing companies listed on the Indonesian Stock Exchange. These companies publish their audited financial reports regularly, have complete data on family ownership, and did not experience losses during the 2019-2021 observation period. Tests were conducted with the help of Eviews 12 and Microsoft Office Excel to process statistical data to determine the effect of debt structure and family ownership on company performance. This study uses purposive sampling method, and the sampling criteria are listed in Table 1.

<table>
<thead>
<tr>
<th>No.</th>
<th>Sample Criteria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturing companies listed on the Indonesian Stock Exchange (IDX) continuously during the observation period 2019-2021.</td>
<td>183</td>
</tr>
<tr>
<td>2</td>
<td>Manufacturing companies that publish audited financial reports during the observation period 2019-2021 in full.</td>
<td>174</td>
</tr>
<tr>
<td>3</td>
<td>Manufacturing companies that do not have complete data related to family ownership.</td>
<td>(94)</td>
</tr>
<tr>
<td>4</td>
<td>The company was not selected as a research sample, because it experienced losses during the observation period. Companies used as Research Samples</td>
<td>(40)</td>
</tr>
<tr>
<td></td>
<td>Total observations in annual reports during the 2019-2021 period.</td>
<td>120</td>
</tr>
</tbody>
</table>

Source: Secondary data obtained from the Indonesia Stock Exchange

Variable Measurement
The dependent variable in this study is company performance. Financial statements are the basis for assessing the performance of a company. In this study, company performance is proxied by Return on Assets (ROA). Return on Assets is used to measure the company's operational performance or to determine the company's ability to generate profits. The greater the Return on Assets value, the better the company's performance because the rate of return is getting bigger.

The independent variables in this study are debt structure and family ownership. Debt structure is proxied by Debt to Assets Ratio (DAR). According to Cahyana, et al. (2022) DAR is the ratio of debt to assets used to compare the value of assets and corporate debt. Meanwhile, family ownership is measured by a dummy variable: (0) companies that are not owned by the family and (1) companies that are owned by the family with at least 20% of the shares or family members holding positions in company management.
Result

I. Descriptive Statistics

Descriptive analysis is a data analysis technique that uses a description of the data that has been prepared without making general conclusions. Figure 1 shows the descriptive statistical analysis of the variables under study, including Return on Assets (ROA), Debt to Assets Ratio (DAR), and Dummystrat1, i.e. family ownership, based on the research data sample.

<table>
<thead>
<tr>
<th>ROA</th>
<th>DAR</th>
<th>DUMMYSTRAT1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.052528</td>
<td>0.424257</td>
</tr>
<tr>
<td>Median</td>
<td>0.040300</td>
<td>0.426550</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.212200</td>
<td>0.911400</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.000400</td>
<td>0.065000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.041859</td>
<td>0.199181</td>
</tr>
</tbody>
</table>

Based on the table above, the highest Return on Asset (ROA) value is 0.2122, while the lowest Return on Asset (ROA) value is 0.0004, for the average Return on Asset (ROA) value is 0.0525.

Based on the table above, the highest Debt to Asset Ratio (DAR) value is 0.9114, while the lowest Debt to Asset Ratio (DAR) value is 0.0650, for the average Debt to Asset Ratio (DAR) value is 0.4242.

Based on the table above, the highest Dummystrat1 value is 1.000, while the lowest Dummystrat1 is 0.000, for the average Dummystrat1 value is 0.7750.

II. Inferential Statistics

Inferential analysis is carried out to make certain predictions related to the object of research. In this research inferential analysis uses multiple linear regression analysis models.

A. Multiple Linear Regression Model Selection

Three tests can be used to determine the multiple estimation model: Chow test, Hausman test, and Lagrange Multiplier test. The Chow test can choose between the Common Effect Model (CEM) and the Fixed Effect Model (FEM), and the Hausman test can choose between the Random Effect Model (REM) and the Fixed Effect Model (FEM).

1. Chow Test

Fixed Effect Model (FEM) testing has errors or Near Singular Matrix, so this model is not chosen as the best model for this study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.070701</td>
<td>0.012069</td>
<td>5.858160</td>
<td>0.0000</td>
</tr>
<tr>
<td>DAR</td>
<td>-0.077768</td>
<td>0.018057</td>
<td>-4.30685</td>
<td>0.0000</td>
</tr>
<tr>
<td>DUMMYSTRAT1</td>
<td>0.019122</td>
<td>0.008577</td>
<td>2.229418</td>
<td>0.0277</td>
</tr>
</tbody>
</table>

R-squared 0.216995  Mean dependent var 0.052528
Adjusted R-squared 0.203610  S.D. dependent var 0.041859
S.E. of regression 0.037355  Akaike info criterion  3.712011
Sum squared resid 0.163262  Schwarz criterion  -3.642324
Log likelihood 225.7207  Hannan-Quinn criter. -3.683711
F-statistic 16.21216  Durbin-Watson stat 0.403110
Prob(F-statistic) 0.000001

Figure 2. Chow Test Results (General Effect Model)
Source: Eviews 12 Processed Data
Prob value. DAR 0.0000 <0.05 and Prob value. Dummystrat1 0.0277 <0.05, meaning that the probability value of both is smaller than 0.05, so the Common Effect Model is not chosen as the best model.

Due to the Fixed Effect Model (FEM) test, there are errors or Near Singular Matrix and the probability value of the Common Effect Model (CEM) is smaller than the significance level <0.05, so both are not chosen as the best model of this study.

2. **Hausman Test**
   
The following are the results of the Hausman test:

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>3.032687</td>
<td>1</td>
<td>0.0816</td>
</tr>
</tbody>
</table>

   Figure 3. Hausman Test Results (Random Effect Model)
   Source: Eviews 12 Processed Data

   Prob. value 0.0816 > 0.05, meaning that the probability value is greater than 0.05, so the selected model is the Random Effect Model (REM).

3. **Lagrange Multiplier Test**
   
The following are the results of the Lagrange Multiplier test:

<table>
<thead>
<tr>
<th>Test Hypothesis</th>
<th>Cross-section</th>
<th>Time</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>61.66969</td>
<td>0.414624</td>
<td>62.08431</td>
</tr>
<tr>
<td>Honda</td>
<td>7.853005</td>
<td>-0.643913</td>
<td>5.097598</td>
</tr>
<tr>
<td>King-Wu</td>
<td>7.853005</td>
<td>-0.643913</td>
<td>1.106427</td>
</tr>
<tr>
<td>Standardized Honda</td>
<td>8.210119</td>
<td>-0.301461</td>
<td>0.939662</td>
</tr>
<tr>
<td>Standardized King-Wu</td>
<td>8.210119</td>
<td>-0.301461</td>
<td>-1.056388</td>
</tr>
<tr>
<td>Gourieroux, et al.</td>
<td>--</td>
<td>--</td>
<td>61.66969</td>
</tr>
</tbody>
</table>

   Figure 4. LM Test Results (Random Effect Model)
   Source: Eviews 12 Processed Data

   Prob. value 0.000 <0.05, meaning that the probability value is smaller than 0.05, so the selected model is the Random Effect Model (REM).

   From the test results above, the best model for this case is to use the Random Effect Model (REM).
B. Lagrange Multiplier Test

1. Normality Test

In the normality test, if the significance probability value is > 0.05, then H0 is accepted or it can be concluded that the data is normally distributed. If on the contrary it is more <0.05, then the data is not normally distributed.

![Figure 5. Normality Test Results](Image)

Based on Figure 5, it shows that the probability value is 0.000040 or smaller than the set significance level of 0.05 (0.00004 < 0.05), which indicates that the data is not normally distributed. However, since the amount of data in the study is more than 100, the normality assumption is not important; therefore, the data can still be used to test the hypothesis because the data can be assumed to be normal. (Gujarati and Dawn, 2004).

2. Autokorelasi Test

![Table 1](Table)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.081859</td>
<td>0.018066</td>
<td>4.531111</td>
<td>0.0000</td>
</tr>
<tr>
<td>DAR</td>
<td>-0.098552</td>
<td>0.025934</td>
<td>-3.800075</td>
<td>0.0002</td>
</tr>
<tr>
<td>DUMMYSTRATA1</td>
<td>0.016103</td>
<td>0.013609</td>
<td>1.183200</td>
<td>0.2391</td>
</tr>
</tbody>
</table>

![Figure 6. Autocorrelation Test Results](Image)

Based on Figure 6, it is known that the results of the autocorrelation test for all variables, the Durbin-Watson (DW) value is 1.474120. This value has met the assumption that there is no autocorrelation problem or shows positive autocorrelation, because the Durbin-Watson (DW) value is in the range of 0 to 2.
3. Heteroskedastisitas Test

The heteroscedasticity test used in this study is the Glejser test. If the output has a p value = 0.0000 or a significant Chi-Square probability value, it means heteroscedasticity occurs. If on the other hand the p value > 0.0000, then heteroscedasticity does not occur.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.020935</td>
<td>0.010417</td>
<td>2.009642</td>
<td>0.0468</td>
</tr>
<tr>
<td>ROA</td>
<td>0.342690</td>
<td>0.057275</td>
<td>5.983211</td>
<td>0.0000</td>
</tr>
<tr>
<td>DAR</td>
<td>-0.016219</td>
<td>0.014779</td>
<td>-1.097407</td>
<td>0.2747</td>
</tr>
<tr>
<td>DUMMYSTRAT1</td>
<td>-0.004444</td>
<td>0.006984</td>
<td>-0.636334</td>
<td>0.5258</td>
</tr>
</tbody>
</table>

Figure 7. Heteroscedasticity Test Results
Source: Eviews 12 Processed Data

Based on Figure 7, it is known that the results of the heteroscedasticity test using the Glejser test, the DAR value is 0.2747 and the DUMMYSTRAT1 value is 0.5258. From these results it can be concluded that the value of the independent variable has a significance > 0.05, meaning that it is not exposed to heteroscedasticity problems.

4. Multikolinieritas Test

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>DAR</th>
<th>DUMMYSTRAT1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.000000</td>
<td>-0.428640</td>
<td>0.304743</td>
</tr>
<tr>
<td>DAR</td>
<td>-0.428640</td>
<td>1.000000</td>
<td>-0.305855</td>
</tr>
<tr>
<td>DUMMYSTRAT1</td>
<td>0.304743</td>
<td>-0.305855</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Figure 8. Multicollinearity Test Results
Source: Eviews 12 Processed Data

Based on Figure 8, it can be seen that the correlation value between ROA and DAR is -0.428640. The correlation value between ROA and DUMMYSTRAT1 is 0.304743. The correlation value between DAR and DUMMYSTRAT1 is -0.305855. It is known that all values are less than 0.80 (<0.80), meaning it can be concluded that there is no multicollinearity problem.

C. Multiple Linear Regression Analysis

Based on the results of the Chow test, Hausman test, and Lagrange Multiplier Test, the selected model is the Random Effect Model (REM).
From Figure 9, the multiple linear regression equation can be arranged as follows:

\[ y = 0.081859 - 0.098552X_1 + 0.016103X_2 \]

Based on this equation, it can be described as follows:

a. The constant value is positive, which has a value of 0.081859, meaning that if the value of the variable (X1) and the variable (X2) is equal to zero, then the company's performance has a value of 0.081859.

b. The variable regression coefficient (X1) is negative, with a value of -0.098552, which indicates that if the value of (X1) increases, the company's performance (Y) will decrease by 0.098552, assuming that the other independent variables do not change.

The variable regression coefficient (X2) has no effect, which has a value of 0.016103. This shows that even if the value (X2) increases, the company's performance (Y) will not be affected.

### 1. Test Coefficient of Determination (R2)

Based on the results obtained from the test in Figure 9, it can be seen that the R Square value is 0.142, meaning that the contribution of the influence of variables (X1) and (X2) on variable (Y) is 14.2% and the remaining 85.8% is influenced by other variables not examined.

### 2. Partial Test (t Test)

Based on the results obtained from the test in Figure 9, it can be seen that the effect of the independent variable on the dependent variable is as follows:

a. Debt Structure Variable (X1)

The result of t test on the debt structure variable shows the t value of 3.800075, which indicates that the t value is greater than t table, because the t value is greater than 1.657982, and the probability value obtained is 0.0002, which indicates that the probability value is lower than the significance level (0.0002 <0.05). Therefore, it can be concluded that the debt structure factor has a significant negative impact on company performance in the manufacturing industry.
b. Family Ownership Variable (X2)

In the family ownership variable, the t test found a calculated t value of 1.183200, which indicates that the calculated t value is smaller than the t table value (1.183200 < 1.657982). In addition, the probability value obtained is 0.2391, which indicates that the significance level (0.2391 > 0.05). Therefore, it can be concluded that the family ownership factor does not have a positive or significant impact on company performance in the manufacturing industry.

D. Discussion of Research Result

1. The Effect of Debt Structure on Company Performance

Based on the results obtained from the research, it can be seen that the debt structure has a significant negative effect on company performance. These results are in line with the hypothesis of this study, that the debt structure has a significant negative effect on company performance. Thus the first hypothesis (H1) in this study is accepted.

The use of debt structure by companies is usually aimed at funding its capital which is functioned to run the company’s operations or increase the company’s assets. In other words, the debt structure is used by management as a tool for making corporate decisions in considering and determining the company's short-term or long-term funding needs.

Short-term debt is used to fund the company’s operating capital whose results can be felt directly in a short period of time, with a maximum payment of 1 year and the company can pay with current assets. Examples of the use of short-term debt include trade payables, tax payables, cost payables and so on. Meanwhile, long-term debt is used to fund long-term operating capital, purchase assets or long-term investment activities whose total value is usually quite large, the repayment time is up to 10 years or more according to the agreement. Long-term debt used for long-term investment is likely to generate profits for longer, but the company's obligations such as interest expenses must always be paid by the company to creditors.

Based on this fact, the company’s high debt burden can cause a decrease in profitability value and can have an impact on the decline in company performance. So that the debt structure has a significant negative effect on company performance. The greater the company’s debt, the greater the burden the company will bear. According to Umdiana and Claudia, (2020) the use of debt will increase firm value only at a certain point. According to Myers’ Trade Off Theory, (1976) the addition of debt will reduce company performance after the optimal point is exceeded.

The above opinion is also supported by the results of research conducted by previous researchers such as Herdiyanto, (2015), Andarsari, (2021).

2. The Effect of Family Ownership on Company Performance

Based on the results obtained from the research, it can be seen that family ownership has no significant effect on company performance. These results are different from the hypothesis of this study, that family ownership has a significant negative effect on company performance. Thus the second hypothesis (H2) in this study is rejected.

Family Owned Companies are companies whose dominant share ownership is owned by the family and top management positions are usually occupied by the family of the company founder. Throughout the world, family companies include the economic support of a country, especially in developing countries. As is the case in Indonesia, which is a developing country, the characteristics of companies in Indonesia are companies with concentrated family ownership, both founding family owners and non-founding family owners (Arifin, 2003).
In family-owned companies, family members usually tend to take part in the management of the company so that many management decisions are taken by the family. This can usually affect company performance. The performance of a company managed by the family can be good or bad according to the family's control. If the family tends to be more concerned with the interests of the company and the development of the company, then the company's performance will tend to be positive. However, if the family (majority shareholder) tends to be more concerned with personal interests such as hiring incompetent family members, as well as the distribution of certain dividends that can harm minority shareholders as the controlling party, then the company's performance tends to be negative. However, the results of the research above show that family ownership has no significant effect on company performance. This can be due to the lack of family control in the company. So that family ownership has no effect on company performance. The above opinion is also supported by the results of research conducted by previous researchers such as Ivan and Raharja, (2021), Yopie and Desiani, (2021).

Conclusion

Based on the research results, the debt structure has a significant negative effect on company performance. These results occur because the higher the use of debt which causes the greater the risk borne by the company, thereby reducing the company's financial performance. While family ownership has no significant effect on company performance. These results can be due to the lack of family control over the company, so that it does not affect company performance.

This study has implications that the family must have positive control over the company, because companies that have positive control of family ownership of the company can improve their performance. This study also shows that company management must pay attention to their debt ratio so that their financial performance is stable. Management should also pay attention to the company's debt ratio because higher debt can increase the risk of financial costs.

This study has limitations in terms of the use of samples that are only in the Manufacturing company sector. In addition, other limitations of this study only use the profitability ratio measurement tool (ROA) to assess the company's financial performance, and only use debt structure variables and family ownership to assess company performance. Suggestions for future researchers are expected to expand the research sample to all industries listed on the Indonesia Stock Exchange which are owned by the family, so that existing deficiencies can be corrected. In addition, future researchers are expected to consider using other measurement tools such as Tobin's Q to assess market performance and additional variables that can affect company performance, such as company size, company age, and corporate governance.

Reference:


