Firm Size and Business Risk on Debt Policy with Profitability as Moderating Variables

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Abstract:
This study aims to examine the effect of firm size and business risk on debt policy with profitability as a moderating variable. The proxy for company size uses Natural Logarithms (Total Assets), business risk uses net income to total equity, and profitability uses Return On Assets (ROA). The population used in this study is property and real estate companies listed on the Indonesia Stock Exchange for the 2018-2020 period. This research uses quantitative research with multiple linear regression model. By using purposive sampling, 55 companies were found that met the criteria as research samples. This study uses secondary data obtained from the Indonesia Stock Exchange and sample company websites. The analytical method used in this study is Moderated Regression Analysis (MRA) using the Eviews 9 application. The results of this study indicate that company size and business risk have a positive and significant effect on debt policy. Profitability as a moderating variable is proven that profitability weakens the relationship between firm size and debt policy, while profitability strengthens the relationship between business risk and debt policy.
Introduction

Debt policy has both positive and negative effects on companies to increase funding and provide managerial discipline in managing company funds. Companies in improving performance will be careful in determining debt policies as they face the risk of financial problems due to high debt utilization (Zurriah & Sembiring, 2018). Thus, high debt consumption will be at risk of bankruptcy (Sari and Setiawan, 2021). The risk of bankruptcy as a result of a debt policy can be minimized through relatively stable sales and income, so that the risk is lower and can use a large amount of debt (Karina & Khafid, 2015).

Relatively stable income with company size will tend to use funds from outside parties (Saputri, et al. 2020). The firm size of the company makes it easier to obtain financing from outside parties and is a positive signal to creditors to provide debt loans to the company (Bahri, 2017). Financing from external parties is used by the company if the internal funding sources are insufficient to finance the operating activities of the company (Paryanti & Mahardhika, 2020). Due to the larger size of the company, not a single fund is needed to finance the operating activities of the company.

To finance the company's operating activities, the manager in implementing the policy on the use of funds derived from external parties has a responsibility to consider the interests of the parties involved and act in accordance with the interests of shareholders. However, in debt policy decision making, agency conflicts often occur between managers and shareholders because they have conflicting interests. Shareholders only care about the systematic risks of the stocks invested by the company, while managers think about the risks that cause their reputations to fall.

Jensen & Meckling (1976) separate agency theory between decision making functions (agents) from risk-taking functions (principals) that are prone to agency conflict. Agency conflict occurs because companies have many parties with different interests (Sheisarvian, et al. 2020). Agency problems can identify and understand the distribution of power between management and shareholders (Jensen & Warmer, 1998). The use of debt can minimize agency conflicts between principals as shareholders and agents as managers through supervision by shareholders to prevent managers from acting as they wish and supervising managers who bear agency costs to oversee manager actions. Agency costs can be reduced if the agent has an investment in the company and the agent can feel directly the consequences of debt policy decisions, so that the agent does not act opportunistically (Aryanto, et al. 2021).

The Covid-19 pandemic entered Indonesia in March 2020 affecting various sectors of the economy (Sumarni, 2020). In Vietnam, banks reported that debt consumption increased from 11% to 29% (Nguyen et al 2020). Meanwhile, in Indonesia, the magnitude of the impact of Covid-19 on the real estate industry varies in each city, depending on the size of the existing real estate market and the level of transmission of Covid-19 in each city.

Based on data from Coldwell Banker Commercial Indonesia, apartment sales in Jabodetabek fell by -46.3%, making the sales rate move only 0.5% with an average price increase of 0.2%. There were no new supply additions, while net demand was lower than the previous quarter. Because investors are holding back on their decisions. Most projects have low achievement which is far from the sales target. The absorption of demand during the quarter was largely contributed by projects in Tangerang.
The implementation of the social incarceration policy made transactions limited to activities from potential buyers and constrained by building materials that must be imported from countries affected by Covid-19. Because, the new living norms or Movement Control Order (MCO) caused limitations in the real estate business to meet directly with their customers, causing the real estate sector to falter and based on real estate financial studies, it has decreased by 72% (Sulaiman, et al 2020).

**Agency Theory**

This theory explains that the agency relationship occurs when the principal gives authority to the agent in making decisions (Jansen and Meckling, 1976). Agents can make decisions regarding debt policies for the welfare of the company and optimize funding to the maximum (Paryanti and Mahardhika, 2020). If the company does not get encouraging results, the principal can replace agents who cannot improve the company’s welfare (Hardiningsih and Oktaviani, 2012).

If managers cannot fulfill their responsibilities, managers must be willing to take risks as long as they adhere to ethical values in being responsible for the risks that will be faced. This conflict arises because of the opportunistic behavior of the management who wants to maximize the welfare of the manager which is against the interests of the principal who wants to increase the company’s wealth (Zurriah and Sembiring, 2018). Conflicts of interest can be minimized through supervision that can balance the number of existing interests (Aminah and Wuryani, 2021). Agency costs arise to control managers to act in their own interests. Jensen and Meckling (1976) agency costs, namely monitoring costs, bonding costs, and residual loss costs.

**Hypotheses Development**

**The Effect of Firm Size on Debt Policy**

If the company has insufficient funding to fund the company's operational activities, the alternative chosen by the manager is one of them, namely by using debt. Companies need a lot of funds if the size of the company gets bigger to run the company's operations (Afiezan, et al 2020). In accordance with agency theory, company size can affect the occurrence of business risk, so management must be careful in determining debt policy. Yang dkk (2020), Sunardi et al (2020), Lestari (2014), and Astuti (2014) in this study provide evidence that firm size has a positive and significant effect on debt policy. So in this case, the research hypothesizes that:

H1: Company size has a positive and significant effect on policy Debt

**The Effect of Business Risk on Debt Policy**

Business risk affects decisions in debt policy making (Mardiyati, et al 2014). The use of high debt causes an increase in the interest expense that must be paid by the company (Sari and Setiawan, 2021). Because there is a one-way relationship between risk and return, so the higher the risk, the higher the return (Wahyuningsih, 2017). Managers will consider the business risks that will occur, if the risk is greater then the company's management will reduce the use of debt (Murtiningtyas, 2012). Thus, managers must analyze whether the company is able to pay off its debts (Abubakar, 2020). This is in line with research conducted by Sari and Setiawan (2021), Abubakar, et al (2020), and Putri and Andayani (2021) proving that business risk has a positive and significant effect on debt policy. So in this case, the research hypothesizes that:
H2: Business Risk has a positive and significant effect on Debt Policy

**Profitability as Modérating Effect of Firm Size on Debt Policy**

The company's profitability ratio can show that companies that have a large profitability value have more value than other companies (Putri and Andayani, 2021). The higher the value of the company’s profitability in the debt policy, the assets that are used as collateral in the debt policy (Nurfitriana and Fachrurrozie, 2018). Stable profitability value indicates that the company is able to pay off debt. Sulistiani and Agustina (2019) stated that profitability can moderate the relationship between firm size and debt policy. So in this case, the research hypothesizes that:

H3: Profitability can strengthen the relationship of firm size to debt policy.

**Profitability as Modérating Effect of Business Risk on Debt Policy**

Business risk will occur in the company if operational costs are high during the production period, the risk borne by the company will increase, thus making managers more careful in using debt (Putri and Andayani, 2021). According to agency theory, companies with high growth rates and high profitability values require large funds to fund company activities. Because the company is expanding, there is a need for supervision to minimize agency costs (Nurfitriana and Fachrurrozie, 2018). Putri and Andayani (2021) state that profitability can moderate the relationship between business risk and debt policy because companies with good profitability will use funding from external parties because the company believes it is capable of paying debts with its reserve funds. So in this case, the research hypothesizes that:

H4: Profitability can strengthen the relationship of business risk to debt policy.

**Research Method**

This study uses secondary data. The source of the data used comes from internal property and real estate companies, namely the official website of the Indonesia Stock Exchange (www.idx.co.id) to obtain financial reports for the 2018-2020 period and the website of research sample companies if the financial statements are not listed on the Indonesia Stock Exchange. The total population of property and real estate companies is 81 sample.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Skala</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Policy (Y)</td>
<td>DER = ( \frac{\text{Total Debt}}{\text{Total Equity}} \times 100% )</td>
<td>Ratio</td>
</tr>
<tr>
<td>Firm Size (X₁)</td>
<td>SIZE = ( \ln(\text{Total Asset}) )</td>
<td>Ratio</td>
</tr>
<tr>
<td>Business Risk (X₂)</td>
<td>STD. DEV = ( \frac{\text{Net Income}}{\text{Total Equity}} \times 100% )</td>
<td>Ratio</td>
</tr>
<tr>
<td>Profitability (Z)</td>
<td>ROA = ( \frac{\text{Profit after tax}}{\text{Total Asset}} \times 100% )</td>
<td>Ratio</td>
</tr>
</tbody>
</table>
This research uses EViews v.9 software. To determine the direction of the relationship between the independent variable and the dependent variable, each variable has a positive or negative relationship and to predict the value of the dependent variable if the independent variable increases or decreases. This research will be tested using several stages in data analysis. This study tested the regression with the moderating variable using the interaction test or moderated regression analysis (MRA).

This study uses property and real estate companies listed on the Indonesia Stock Exchange 79 companies. A total of 24 were incomplete in issuing financial statements, so the population was excluded in this study. As well as property and real estate companies that publish financial statements consecutively amounted to 55. A total of 28 companies have financial statements of losses, so that population must be excluded in this study. As well as companies that have successive financial statements of 27 profits in accordance with the research criteria then multiplied by the total years of research for 3 years. So that the total sample data obtained amounted to 81 data samples.

The regression equation model to be studied is as follows:

Model 1 Regression Equation (Multiple Linear Regression Analysis):

\[ Y = \alpha + \beta_1 \text{SIZE} + \beta_2 \text{RISK} + \epsilon \]  

Model 2 Regression Equation (MRA):

\[ Y = \alpha + \beta_1 \text{SIZE} + \beta_2 \text{RISK} + \beta_3 \text{ROA} + \beta_4 (\text{SIZE} \times \text{ROA}) + \beta_5 (\text{RISK} \times \text{ROA}) \epsilon \]

Information:
- \( Y \) = Debt Policy
- \( \alpha \) = constant value
- \( X_1 \) = Firm Size
- \( X_2 \) = Business Risk
- \( Z \) = Profitability
- \( \beta_1, \beta_2 \) = Regression Coefficient Value
- \( \epsilon \) = Prediction Error (Error)

![Figure 1. Conceptual Framework](https://equatorscience.com/index.php/jabter)
Result and Discussion

This study uses Eviews v.9 software using panel data which will be tested with several stages in data analysis to test regression with moderating variables using the moderated regression analysis (MRA) test. Before performing linear regression analysis, you must perform the estimation method of panel data regression analysis to determine the best model to be used in the classical assumption test and the model goodness test.

a) Chow Test Results

The Chow test has provisions if the probability value is > 0.05 then the regression model chosen is common effect. If the probability value is < 0.05, the regression model chosen is fixed affect.

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>22.68307</td>
<td>(26,52)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>203.550692</td>
<td>26</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Table 1. Chow Test Results

Data processed by EViews v.9

Based on table 1 it can be seen that the prob value. Cross-section Chi-square is 0.0000 < 0.05. Then the selected model is the fixed effect model.

b) Hausman Test Results

The Hausman test is used because the previous test used the selected Chow test, namely the fixed effect model. Furthermore, in the Hausman test with the provisions of probability > 0.05 then the chosen random effect. If the probability value is < 0.05 then the fixed effect is selected.

<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>4.884565</td>
<td>2</td>
<td>0.0870</td>
</tr>
</tbody>
</table>

Table 2. Hausman Test Results

Based on table 2 it can be seen that the prob value. Cross-section random is 0.0870 > 0.05. Then the selected model is the random effect model.

c) Lagrange Multiplier Test Result

The Lagrange multiplier test is used because in the previous test, the Hausman test was chosen, namely the random effect model. Furthermore, in the Lagrange multiplier test with the provision that if the value of both <0.05, the regression model chosen is random effect. If the value of both > 0.05 the selected regression model is the common effect.

<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>57.62727</td>
<td>1.209321</td>
<td>58.83659</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.2715)</td>
<td>(0.0000)</td>
</tr>
</tbody>
</table>

Table 3. Lagrange Multiplier Test Results

https://equatorscience.com/index.php/jabter
Based on table 3 it can be seen that the P value. Cross Section Breusch-Pagan is 0.0000 < 0.05. Then the selected model is the random effect model.

d) Normality Test Results

The normality test aims to determine whether the data obtained are normally distributed or not by using the Jarque Bera test (Winarno, 2015). with a sig value allocation. > 0.05 then the data is normally distributed.

Based on Figure 2, it can be seen that the prob value is 0.913027 > 0.05. it can be said that the data is normally distributed and has passed the normality test.

e) Multicollinearity Test Results

Multicollinearity test aims to determine whether or not there is a deviation from the classical assumption of multicollinearity. If there is a correlation between independent variables that exceeds 0.80 (> 0.80), then multicollinearity occurs (Ghozali, 2017:73).

Based on Table 4, it can be seen that based on the multicollinearity test, the correlation value between the independent variables is not more than 0.80. It can be concluded that there are no symptoms of multicollinearity.

f) Heteroscedasticity Test Results

Heteroscedasticity is an indication that the variance between the residuals of the regression model obtained is not homogeneous. Residual variance that is not homogeneous and results in the estimated value obtained is no longer efficient. In this study, heteroscedasticity was tested using the Glejser test.
Table 5. Heteroscedasticity Test

<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>5.757038</td>
<td>7.394640</td>
<td>0.778542</td>
<td>0.4389</td>
</tr>
<tr>
<td>X1</td>
<td>-1.457836</td>
<td>2.184722</td>
<td>-0.667424</td>
<td>0.5067</td>
</tr>
<tr>
<td>X2</td>
<td>0.064855</td>
<td>0.047435</td>
<td>1.367250</td>
<td>0.1759</td>
</tr>
</tbody>
</table>

Based on Table 5, based on the tests that have been carried out using the Glejser test, it is known that all the prob > 0.05 which means there is no heteroscedasticity symptom.

**g) Autocorrelation Test Results**

The autocorrelation test is to test whether in the linear regression model there is a relationship or correlation between the confounding error in period t and the confounding error in period t-1 (previous) (Ghozali, 2016:107).

Table 6. Heteroscedasticity Test

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Mean dependent var</th>
<th>-0.120519</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.491944</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.478917</td>
<td>S.D. dependent var</td>
<td>0.414680</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.299341</td>
<td>Sum squared resid</td>
<td>6.989186</td>
</tr>
<tr>
<td>F-statistic</td>
<td>37.76324</td>
<td>Durbin-Watson stat</td>
<td>1.776640</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 6, the weighted value of Durbin-Watson (DW-test) is 1.776640. Durbin Upper (dU) 1.6898 and (4-dU) 1.5888. The obtained value belongs to the criteria dU<d<(4-dU) namely 1.6898<1.776640<2.3102 so it can be concluded that the equation model is free from autocorrelation problems.

**h) F Test (Simultaneous)**

The F test is used to determine whether the independent variables together have an effect on the dependent variable. If the value of $F_{count} > F_{table}$, then $H_0$ is rejected and it can be concluded that the independent variables simultaneously (overall) affect the dependent variable. If $F_{count} < F_{table}$, then $H_0$ is accepted and it can be concluded that the independent variable simultaneously (overall) affects the dependent variable.

Table 7. F Test On Equation I of model

<table>
<thead>
<tr>
<th></th>
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</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
</tr>
</tbody>
</table>

Based on table 7 in equation I shows the $F_{count}$ value of 37.76324. Meanwhile, $F_{table}$ with a level of $\alpha = 5\%$ is 3.11. Thus $F_{count}>F_{table}$ (37.76324>3.11). Then the probability value is 0.000000 <0.05, this shows that simultaneously company size and business risk have a significant effect on debt policy in property and real estate companies on the Indonesia Stock
Exchange for the 2018-2020 period. These results indicate that model I is in the good category and passes the goodness of fit test.

Table 8. F Test On Equation of model II

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.272276</td>
<td>Mean dependent var</td>
<td>-0.150880</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.253616</td>
<td>S.D. dependent var</td>
<td>0.435377</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.376138</td>
<td>Sum squared resid</td>
<td>11.03540</td>
</tr>
<tr>
<td>F-statistic</td>
<td>14.59175</td>
<td>Durbin-Watson stat</td>
<td>1.503362</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000004</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 8 in equation II shows the F_{count} value of 14.59175. Meanwhile, F_{table} with a level of = 5% is 2.72. Thus F_{count}>F_{table} (14.59175>2.72). Then the probability value is 0.000004 <0.05, this shows that simultaneously company size and business risk have a significant effect on debt policy with profitability as a moderating variable in property and real estate companies on the Indonesia Stock Exchange for the 2018-2020 period. These results indicate that model II is in the good category and passes the goodness of fit test.

**i) R² Test**

The coefficient of determination (Adj R²) basically measures the model’s ability to explain variations in the dependent variable. The value of the coefficient of determination is between zero and one. The smaller the value of Adj R², the more limited the ability of the independent variable to explain the dependent variable in explaining changes in the dependent variable (Ghozali, 2016).

Table 9. R² Test On Equation of model I

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>37.76324</td>
<td>Durbin-Watson stat</td>
<td>1.776640</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 9 in the equation model I, it can be seen that the Adjusted R-Square (R²) is 37.76324 or 38%. While the remaining 62% is explained by other independent variables not assumed in the study.

Table 10. R² Test On Equation of model II

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.272276</td>
<td>Mean dependent var</td>
<td>-0.150880</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.253616</td>
<td>S.D. dependent var</td>
<td>0.435377</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.376138</td>
<td>Sum squared resid</td>
<td>11.03540</td>
</tr>
<tr>
<td>F-statistic</td>
<td>14.59175</td>
<td>Durbin-Watson stat</td>
<td>1.503362</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000004</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 10 in the model equation II, it can be seen that the Adjusted R-Square (R²) is 14.59175 or 15%. While the remaining 85% is explained by other independent variables not assumed in the study.
j) **T Test (Parcial)**

The t-statistical value shows the partial effect of the independent variable (X1) firm size and (X2) business risk on the dependent variable (Y) debt policy in the panel data regression model.

**Table 11. T Test On Equation of model I**

<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>X1</td>
<td>0.336599</td>
<td>0.120329</td>
<td>2.797328</td>
<td>0.0065</td>
</tr>
<tr>
<td>X2</td>
<td>3.269249</td>
<td>0.378698</td>
<td>8.632868</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Base on table 11 in equation I, it can be seen that the value of tcount shows a number of:

a. **Firm Size (X1)**

   Shows that in the variable (X1) has a \( t_{count} \) of 2.797328 > \( t_{table} \) of 1.99085 and a probability value of 0.0065 < 0.05, it can be concluded that \( H_1 \) is accepted, \( H_0 \) is rejected, so it can be said that the variable (X1) has a positive effect and sign to debt policy.

b. **Business Risk (X2)**

   Shows that in the variable (X2) has a \( t_{count} \) of 8.632868 > \( t_{table} \) of 1.99125 and a probability value of 0.0000 < 0.05, it can be concluded that \( H_2 \) is accepted, \( H_0 \) is rejected, so it can be said that the variable (X2) has a positive effect and sign to debt policy.

**Table 12. T Test On Equation of model II**

<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>X1*Z</td>
<td>-0.001254</td>
<td>0.000601</td>
<td>-2.085567</td>
<td>0.0403</td>
</tr>
<tr>
<td>X2*Z</td>
<td>0.371724</td>
<td>0.066024</td>
<td>5.630157</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Base on table 12 in equation I, it can be seen that the value of tcount shows a number of:

a. **The effect of firm size on debt policy with profitability as a moderating variable**

   Shows that in the variable (X1*Z) has a \( t_{count} \) of -2.085567 < \( t_{table} \) of 1.99125 and a probability value of 0.0403 < 0.05, it can be concluded that \( H_0 \) is accepted \( H_3 \) is rejected, so it can be said that the variable (X1*Z) profitability weakens the relationship between firm size with debt policies.

b. **The effect of business risk on debt policy with profitability as a moderating variable**

   Shows that in the variable (X2*Z) has a \( t_{count} \) of 5.630157 > \( t_{table} \) of 1.99125 and a probability value of 0.0000 < 0.05, it can be concluded that \( H_0 \) is rejected \( H_4 \) is accepted, so it can be said that the variable (X2*Z) profitability strengthens the relationship between business risk and debt policy.

**The Effect of Firm Size on Debt Policy**

Based on the regression results, it can be seen that the company size has a regression coefficient of 0.336599. The result of t statistical test obtained a value of 2.797328 with a probability value of 0.0065 < 0.05, then it can be concluded that the size of the company has a positive and significant effect on debt policy or in other words hypothesis (H1) is accepted.
The existence of a positive relationship between company size and debt policy in this study indicates the existence of a large-scale supervisory mechanism. Thus, the use of debt can reduce manager-controlled funding because it forces companies to pay principal and interest on loans and comply with debt covenant provisions, which makes managers tend to be careful in using funding sources. The use of funds from external parties in the form of debt can be profitable when compared to using internal funds.

Consistent with the agency theory that large firms incur higher agency costs than small firms (Jansen and Meckling, 1976). Large companies disclose more information as companies face greater costs and are more exposed to the market and the public. That large companies have more investors who have easier access to capital markets and banks (Yang et al. 2021). This indicates that the size of a company that has a large level of company size tends to be easier to obtain sources of financing from outside parties because it can increase creditors' confidence that the company is able to pay its debts.

**The Effect of Business Risk on Debt Policy**

Based on the regression results, business risk has a regression coefficient of 3.269249. The result of t statistical test obtained a value of 8.632868 with a probability value of 0.0000 <0.05, then it can be concluded that business risk has a positive and significant effect on debt policy or in other words hypothesis (H2) is accepted.

The existence of a positive relationship between business risk and debt policy makes the company high risk, so managers should set optimal debt targets so that the balance between debt benefits will be obtained, so that the company avoids the risk of harming the company to bankruptcy risk. Because, a company’s debt shows how much money from another party is used to make a profit. When a company borrows, risk arises when the company cannot enter into a debt repayment contract and can cause the company to go bankrupt because the rights of creditors have to be exercised before distributing profits to the company’s shareholders.

Consistent with agency theory explains that companies will incur high agency costs as a result of the use of external funds that can increase bond costs that burden the company. Bonding costs are incurred by agents to provide financial reports to principals, as increased debt forces companies to spend money to pay interest and installments (Jansen and Meckling, 1976). Bonding costs are used by companies to reduce managers acting opportunistically which can be detrimental to the company.

**The effect of profitability as a moderator of the relationship between firm size and debt policy**

Based on the regression results, it can be seen that company size with profitability as a moderating variable has a regression coefficient of -0.001254. The results of the t statistical test obtained a value of -2.085567 with a probability value of 0.0403 <0.05, so it can be concluded that company size on debt policy with profitability as a moderating variable has a
negative and significant effect, so that profitability weakens the relationship between company size and debt policy or in other words the hypothesis (H₃) rejected.

Profitability is most often influenced by funding from external parties channeled, while profitability cannot affect company size. This shows that any increase in profitability is not guaranteed to be followed by an increase in company size because under certain conditions company size can reduce the level of profitability. Because, the size of the company is only seen from total assets, unless the total assets are for activities that affect profitability. The company's activities can reduce profitability and are not one of the main variables that can affect the size of the company and do not provide a guarantee that the company has good performance as reflected in profits. Thus, management actions that make profits appear larger are reasons for investors not to see profitability ratios as the basis for investment decisions.

The effect of profitability as a moderator of the relationship between business risk and debt policy

Based on the results of the regression, it can be seen that the size of the company with profitability as a moderating variable has a regression coefficient of 0.371724. The results of the t statistical test obtained a value of 5.630157 with a probability value of 0.00000 <0.05, so it can be concluded that profitability can moderate the relationship between business risk and debt policy has a positive and significant effect or in other words the hypothesis (H₄) is accepted.

Because, the higher the profitability of the company, the assets as collateral in the policy of using debt (Nurfitriana and Fachrurrozie, 2018). In accordance with agency theory, companies that have high profitability can take advantage of debt to reduce misuse of funds by managers (Prathiwi and Yadnya, 2017). Because, profitability contributes to the influence of business risk on debt policy. Profitability explains the company's risk in the future related to the company's ability to provide internal funds for the company, so that profitable companies use large amounts of debt because they consider debt to be used to continue to capture growth opportunities (Nurfitriana and Fachrurrozie, 2018). Therefore, as a result of the use of high debt balanced with company income, the company will experience smaller bankruptcy.

Conclusion

This study aims to examine the effect of firm size and business risk on debt policy with profitability as a moderating variable. The population in this study are property and real estate companies listed on the Indonesia Stock Exchange for the 2018-2020 period. Obtained as many as 27 companies that publish complete financial statements for 3 consecutive years and companies that have consecutive earnings financial statements for 3 years, so that there are 81 data reports analyzed in this study. Based on the discussion there are the results of this study, the following conclusions are obtained: 1). Firm size has a positive and significant effect on debt policy. 2). Business risk a positive and significant effect on debt policy. 3). Profitability
weakens the relationship of firm size with debt policy. 4) Profitability strengthens the relationship of business risk with debt policy.

References


