Determinants of Corporate Value in Indonesia: Testing the Interaction Effect of Firm Age

Stevani¹, Wendy²
¹ Universitas Widya Dharma Pontianak, Indonesia
² Universitas Tanjungpura, Indonesia
Correspondent: stevani@widyadharma.ac.id¹

ABSTRACT: This study aims to examine the effect of capital structure, profitability, institutional ownership, and company size on corporate value in Indonesia, by considering firm age as a moderation variable. This research focuses on primary consumer sector companies on the Indonesia Stock Exchange (IDX) and obtained 295 panel data observations. Moderated regression analysis is used to estimate the interaction model of firm age on the relationship between independent variables and corporate value. The results showed that capital structure and company size had a positive influence on company value, while profitability and institutional ownership did not have a significant influence. Furthermore, firm age moderates the capital structure, as well as changes the direction of influence of institutional ownership and firm size on firm value. However, firm age does not moderate the influence of profitability on firm value. The implication of this study is the importance of considering other firm value proxies, as well as the need for grouping and testing in different economic conditions to increase the external validity.

Keywords: Firm Value, Firm Age, Capital Structure, Institutional Ownership, Firm Size

INTRODUCTION

Increasing company value is one of the main goals for company management in various sectors. Increasing company value is not only about achieving financial benefits but also about creating a positive impact for all stakeholders. In this context, measuring company value is a crucial aspect in evaluating the performance and investment potential of a company in the current era of globalization. Tobin's Q, price-to-book value (PBV) and Price to Earning Ratio (PER) have been commonly used approaches in measuring a company's value based on market capitalization, these approaches have not fully reflected all aspects of a company's value holistically.

According to (Lifland, 2011), the Enterprise Value (EV) metric not only includes market capitalization like Tobin's Q but also includes net debt and everything related to preferred stock as well as non-controlling minority interests. EV allows investors to value companies on the same
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basis as acquirers in merger and acquisition transactions. (An et al., 2017) suggest that EV is used instead of equity prices that represent the total market capitalization of a company. EV considers the price paid for a company's equity and debt financing used to help generate operating income. This is different from using PBV and P/E, which are based on equity market capitalization to identify value and growth stocks. (Ross et al., 2022) suggests that in practice, using Tobin's Q is difficult to calculate accurately because estimating the cost of replacing company assets is not easy. In addition, the market value of a company's debt is often unobservable. Although book value can be used in this study, its accuracy may decrease.

To overcome the limitations of using Tobin's Q, PBV, and PER in measuring company value, this study adopts EV. Research (Lifland, 2011) and (An et al., 2017) show that the EV variable is better able to explain a company's value by covering not only market capitalization but also all liabilities to be paid. Thus, using EV as a measure of enterprise value offers a more holistic and comprehensive approach, which considers not only aspects of market capitalization but also other financial obligations.

According to (Ross et al., 2022), EV provide a more comprehensive view of a company's value than just the market value of equity. This is because EV include the value available to shareholders and the company's obligations to creditors. This concept is important in investment analysis and corporate financial decision-making because it allows stakeholders to understand the extent to which the company's value consists of capital, equity, and debt. Furthermore, (Damodaran, 2012) and (Brealey et al., 2020) also emphasized that factors such as capital structure, financial performance, and market conditions affect the company's value. Therefore, a careful and detailed valuation analysis is necessary to understand the true value of a company.

According to (Higgins, 2015), the determination of factors that affect the value of the company becomes important, because high company value can reflect good performance and be attractive to investors. Therefore, this study aims to examine the factors that affect company value, by focusing on independent variables such as Debt to Assets Ratio (DAR), Return on Equity Ratio (ROE), Institutional Ownership (IO), and Company Size (SZE), and by adding Company Age (AGE) as a moderation variable.

This research is expected to make a new contribution to measuring company value by introducing a more comprehensive and accurate approach, as well as a new understanding of the factors that influence company valuation. By integrating proven financial theories and strong empirical evidence, it is hoped that the results of this study can provide insight for better decision-making in managing company value amid increasingly complex market dynamics.

This research highlights the limitations of traditional approaches such as Tobin's Q, PBV, and PER in measuring firm value. Key issues include the challenge of accurately estimating asset replacement costs for Tobin's Q, and the tendency of PBV and PER to overlook liabilities such as net debt and other financial obligations. By adopting EV as an alternative metric, this research aims to address these limitations by offering a more holistic and inclusive approach. EV not only incorporates market equity value but also transparently accounts for all net debts and other financial obligations, reflecting the perspective of acquirers in merger and acquisition transactions.
Therefore, this study not only introduces a new, more accurate framework for measuring firm value but also significantly contributes to expanding the understanding of performance evaluation and investment potential in companies amidst today’s increasingly complex market dynamics.

**Corporate Value**

(Brigham & Ehrhardt, 2008) stated that the value of a company depends on the size of the company's free cash flow, turnover time, and risk. According to (Berger & Ofek, 1995), the company's valuation deserves serious attention because it is the basis of various important financial activities. In addition to being used in merger and leveraged buyout arrangements, corporate valuation principles also guide security analysts in searching for undervalued stocks, determining public stock offering prices, and evaluating new investment opportunities. (Damodaran, 2012) stated valuation plays an important role in many areas of finance, especially in corporate finance, mergers and acquisitions, and portfolio management. In addition, (Hartono, 2017) also explains that knowing market value and intrinsic value can be used to find out which stocks are cheap, right in value, or which are expensive. Intrinsic value is the true value of a company. A market value smaller than its intrinsic value indicates that the stock was sold at an undervalued price because the investor paid the stock less than he would have paid. Conversely, a market value greater than its intrinsic value indicates that the stock was overvalued.

Company valuation is not only an analytical tool, but also a key foundation for crucial financial decisions. (Sukirni, 2012) states that company value is a certain condition that has been achieved by a company as an illustration of public trust in the company after going through a process of activity for several years, namely since the company was established until now. (MacDiarmid et al., 2018) argues that measuring value using EV can provide a clearer picture of real value compared to market capitalization value. This valuation is used for the appraisal of the takeover of entire public companies. This is important because it provides information to shareholders, creditors, and company management about the true value the company has, including all sources of financing. According to (Ross et al., 2022), EV is a measure of company value that measures the market value of outstanding shares plus the market value of interest-bearing debt minus existing cash, rather than focusing solely on the market value of outstanding shares.

Corporate value reflects public trust in the company after going through a process of long-term activities, while the use of EV as a value measurement method provides a more accurate picture of the company's real value, especially in the context of takeover valuation. This provides important information to stakeholders about the company's true value, including the source of financing. (Adagye & Ibrahim, 2019) explains EV is used to determine the value of a company. This value is seen from the perspective of market or accounting variables that include items reported in the company's balance sheet, namely assets and liabilities. Because the value of a company is viewed from different points of view, there is no specific measurement parameter because many definitions are associated with the concept of value. Thus, the parameter in this study uses EV which is defined as the total market value of shares plus total liabilities minus cash and cash equivalents (Ross et al., 2022).
Capital Structure and Corporate Value

Capital structure is a way for a company to finance its operational activities using various types of sources of funds, such as equity (own capital) and debt (loans). The trade-off theory put forward by (Myers, 1984) states that companies seek to optimize capital structure to achieve a balance between the financial costs of debt (interest costs) and the financial benefits of debt (tax advantages). The company will increase its debt until the tax advantages derived from the debt interest deduction exceed the additional costs borne due to higher financial risks. In addition, (Miller & Modigliani, 1958) it found that in the real world, there are risks and benefits that companies must consider in determining their capital structure. For example, debt can provide tax benefits, but it also increases the risk of bankruptcy. Therefore, companies must seek the right balance between the risks and benefits of using debt and equity in determining their optimal capital structure. Determining the optimal capital structure must consider several factors including taxes, agency fees, and financial hardship costs while maintaining market efficiency assumptions and avoiding information asymmetry as a balance and benefit of debt use.

Information asymmetry theory highlights how information inequality between company management and shareholders or investors can influence perceptions of a company's use of debt. (Hartono, 2017) states that information asymmetry is a condition in which some investors have information, while others do not have the same information. Information asymmetry results in one party having an information advantage in business transactions and allows moral hazard at the management level. On the other hand, information asymmetries influence management decisions, company policies, and interactions with shareholders or investors. To avoid information asymmetry, companies must provide information as a positive and trustworthy signal to investors that can help reduce uncertainty and increase the company's credibility in the eyes of investors.

According to (Brigham & Houston, 2021), the use of debt by the company can be considered a negative signal for investors that can reduce the value of the company. Companies with very bright prospects choose not to fund their companies through the issuance of new shares, while companies with bad prospects prefer to fund their companies through debt. This means that companies, under normal conditions, have to use more equity and less debt by comparing tax benefits with bankruptcy costs. Furthermore, agency theory highlights the imbalance of interests between management (agents) and shareholders (principals) that can arise from the use of debt. Research (Jensen & Meckling, 1976) states that the percentage of institutional ownership and management will determine the use of debt by companies to be able to finance company operations. In the context of agency theory, the use of debt can help reduce conflicts of interest between shareholders (principals) and management (agents). By using debt, companies can reduce the tendency of management to act in their interests, because debt has payment obligations that must be met. Therefore, choosing the right capital structure can help reduce agency costs and increase the value of the company.

Research (Sukirni, 2012) shows that debt has a significant positive effect on the value of a company. This indicates that the higher the capital structure, the higher the value of the company as long as the company can balance the benefits and costs incurred by debt. In contrast to the findings (Saputra & Fachrurrozie, 2015) which state that the use of debt has a significant negative
effect on the value of the company because the use of debt is high risk and can reduce the value of the company. While the findings (Ummah & Yuliana, 2023) and (Rizki et al., 2018) state that debt does not affect the value of the company. Based on the description above, the researcher formulates the following hypothesis:

H1: Capital structure has a positive effect on corporate value

Profitability and Corporate Value

The ability of a company to generate profits from its operational activities reflects the growth of company profits which is an important indicator to assess the company's prospects. (Palepu & Healy, 2013) said the growth and profitability of a company influenced by product market strategy and financial market strategy can determine the value of the company. Meanwhile, according to (Brigham & Ehrhardt, 2008), profitability is the net result of several policies and decisions. So it can be concluded that profitability refers to the ability of a company to generate profits or profits relative to the amount of capital or assets used. Profitability is an important measure in analyzing the financial performance of a company that is used to increase the value of the company.

Measurement of the company's operational performance in generating profits can use profitability ratios. According to (Brigham & Houston, 2021) profitability ratios are ratios that show the combined influence of liquidity, asset management, and debt on operating results. (Higgins, 2015) suggests that profit margin measures any sales that flow through the income statement into profits. The profitability ratio is very important for operations managers because it reflects the company's pricing strategy and its ability to control operating costs. A high level of profitability indicates that the company is efficient in generating profits from its capital or assets, while a low level of profitability can indicate problems in the company's operational management or business strategy.

Based on the test results (Susanti & Restiana, 2018) and (Lubis et al., 2017), financial performance (ROE) has a significant positive effect on the value of the company. This shows that ROE is one of the factors that quite influence changes in stock and financial performance that shows the company's ability to generate profits with its capital, so investors will be interested to know the amount of return the company will receive on its equity. This is not in line with the research (Ummah & Yuliana, 2023) which states that ROE does not affect company value. Based on the description above, the researcher formulates the following hypothesis:

H2: Profitability has a positive effect on corporate value.

Institutional Ownership and Corporate Value

Institutional ownership refers to shares of a company owned by large financial institutions such as pension funds, investment funds, insurance companies, and investment companies. (Jensen & Meckling, 1976) states that institutional ownership has a very important role in minimizing agency conflicts that occur between managers and shareholders. The existence of institutional investors is considered capable of being one of the company's internal supervision processes that is effective in every decision taken by managers.
The mix of institutional and individual investors allows companies to raise capital at lower costs due to the company's ability to reach a broader market (Ross et al., 2022). According to (Brealey et al., 2020), the positive reason for investor supervision is to maximize value by monitoring management and ensuring that the company implements the best operating and investment strategies. High levels of institutional ownership encourage greater scrutiny efforts that can deter managers' opportunistic behavior.

Research (Jhang et al., 2020) shows a positive relationship between institutional ownership and a company's market power. In line with the research (Lestari, 2017) which shows institutional ownership relationships have a significant effect on company value. The same is also reflected in research (Sukirni, 2012) which suggests that there is a significant positive influence between institutional ownership and company value. The three studies show that the control function of the owner is decisive in improving company performance in increasing company value. Based on the description above, the researcher formulates the following hypothesis:

H3: Institutional ownership has a positive effect on corporate value.

Size and Corporate Value

Firm size is an important variable in business economics and management that reflects the dimensions and size of a business entity that affects investor perception. Numerous studies have shown that the size of a company has significant implications for aspects of financial performance. Based on research (Siregar, 2012), company size has a positive effect on company value. The size of the company determines the capacity of the business run by the company. The greater the business capacity, the greater the company's ability to create corporate value.

Research results (Susanti & Restiana, 2018) state that the company size hurts the value of the company. This shows that the smaller company size will have an impact on the decision-making taken by investors on investment decisions in the company so it will hurt the development of the company in increasing company value. There are differences in the results of research (Saputra & Fachrurrozie, 2015) which suggest that company size has a positive and insignificant effect on company value. Investors see the size of the company valued by total assets is not a positive signal for them, because the greater the total assets owned by a company, the greater the depreciation of these assets. With large total assets, a company does not necessarily promise maximum profit or a high level of profitability if the company's management cannot manage its assets to increase productivity. Based on the description above, the researcher formulates the following hypothesis:

H4: Firm size has a positive effect on corporate value.

Firm Age as a Moderator

A company's lifespan is often considered an important indicator in analyzing a company's stability, success, and track record. A company's lifespan can affect investors, creditors, and consumers' perceptions of a company's reliability and ability to survive over the long term. (Susanti & Restiana, 2018) explains that the longer the age of the company, the more information the public will get...
about the company, and this will cause trust in the company, so the higher the age of the company, the higher the value of the company. According to (Rujin & Sukirman, 2020), the age of the company explains the small size of a company. The age of the company determines the level of risk faced, younger companies may have a high risk due to uncertainty and challenges in facing the market and competitors.

Research (Gupta, 2018) and (Susanti & Restiana, 2018) suggest that the age of the company has a significant positive influence on the value of the company. This is because older companies have a more established reputation and brand image. In contrast to (Coad et al., 2018) and (Lambey, 2021) research suggests that the age of the company does not affect the value of the company. This research shows that in evaluating a company's value, investors no longer view a company's age as an important fundamental factor.

Based on the description above, the authors formulates the following hypothesis:

H5a: Firm age strengthens the effect of capital structure on corporate value
H5b: Firm age strengthens the effect of profitability on corporate value
H5c: Firm age strengthens the effect of institutional ownership on corporate value
H5d: Firm age strengthens the effect of firm size on corporate value

METHOD

The research method used in this study is the quantitative method. According to (Dajan, 2008), a quantitative method is a series of observations or measurements expressed in numbers. This study uses secondary data collected from the annual financial statements of primary consumer companies accessed through the official www.idx.co.id and old pages of related companies. The sample collection technique is carried out using the purposive sampling method. The samples used in this study are companies listed on the IDX with predetermined criteria. The criteria used in this study are as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Criterion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Primary Consumer Sector Companies.</td>
<td>125</td>
</tr>
<tr>
<td>2</td>
<td>The Company conducted an Initial Public Offering (IPO) on the Indonesia Stock Exchange after 2017.</td>
<td>(59)</td>
</tr>
<tr>
<td>3</td>
<td>The company was suspended after 2018.</td>
<td>(2)</td>
</tr>
<tr>
<td>4</td>
<td>The company has no data to support this study.</td>
<td>(5)</td>
</tr>
<tr>
<td></td>
<td><strong>Total Sample</strong></td>
<td><strong>59</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Observation Period (2018 – 2022)</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Observations (n samples x n years)</strong></td>
<td><strong>295</strong></td>
</tr>
</tbody>
</table>

Source: Processed Data (2024)

The data analysis technique used is panel data regression analysis using the EViews version 13 application. Panel data regression analysis is an analytical tool in inferential (inductive) statistics.
used to analyze the influence relationship (causal relationship) between variables in panel data (Algifari, 2021). According to (Widarjono, 2018), panel data is a combination of cross-section data and time series data.

Independent variables in this study included DAR, ROE, IO, and SZE. Meanwhile, the dependent variable tested is EV. The study also tested the moderation effect by involving AGE. In detail, operational variables related to the research model in Figure 1 can be explained as follows.

**Table 2. Operational Definition**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxy</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corporate Value</strong></td>
<td><strong>Enterprise Value (EV)</strong></td>
<td>The value of the company is calculated from total equity plus total debt minus cash and cash equivalents.</td>
</tr>
<tr>
<td><strong>Capital Structure</strong></td>
<td><strong>Debt to Asset Ratio (DAR)</strong></td>
<td>Total debt divided by total assets.</td>
</tr>
<tr>
<td><strong>Profitability</strong></td>
<td><strong>Return on Equity (ROE)</strong></td>
<td>Total net income divided by total equity.</td>
</tr>
<tr>
<td><strong>Institutional Ownership</strong></td>
<td><strong>Institutional Ownership (IO)</strong></td>
<td>The percentage of shares owned by large financial institutions such as pension funds, investment funds, insurance companies, and investment companies.</td>
</tr>
<tr>
<td><strong>Firm Size</strong></td>
<td><strong>Firm Size (SZE)</strong></td>
<td>The natural logarithm of total assets.</td>
</tr>
<tr>
<td><strong>Firm Age</strong></td>
<td><strong>Firm Age (AGE)</strong></td>
<td>The age of the company is listed on the Indonesia Stock Exchange, which is expressed in units of years.</td>
</tr>
</tbody>
</table>

This study developed three regression models as follows:

\[
EV_{it} = \alpha + \beta_1.DAR_{it} + \beta_2.ROE_{it} + \beta_3.IO_{it} + \beta_4.SZE_{it} + \epsilon \hspace{1cm} \text{Model (1)}
\]

\[
EV_{it} = \alpha + \beta_5.DAR_{it} + \beta_6.ROE_{it} + \beta_7.IO_{it} + \beta_8.SZE_{it} + \beta_9.AGE_{it} + \epsilon \hspace{1cm} \text{Model (2)}
\]

\[
EV_{it} = \alpha + \beta_{10}.DAR_{it} + \beta_{11}.ROE_{it} + \beta_{12}.IO_{it} + \beta_{13}.SZE_{it} + \beta_{14}.AGE_{it} + \beta_{15}.AGE_{it}*DER_{it} + \beta_{16}.AGE_{it}*ROE_{it} + \beta_{17}.AGE_{it}*IO_{it} + \beta_{18}.AGE_{it}*SZE_{it} + \epsilon \hspace{1cm} \text{Model (3)}
\]

**Information:**

- \(EV_{it}\) = Enterprise Value
- \(DAR_{it}\) = Debt to Asset Ratio
- \(ROE_{it}\) = Return on Equity Ratio
- \(IO_{it}\) = Institutional Ownership
- \(SZE_{it}\) = Company size
- \(AGE_{it}\) = Age of the company
- \(\beta_1 - \beta_{18}\) = Regression coefficient
- \(\alpha\) = Constants or intercepts
- \(\epsilon_{it}\) = Residual
RESULT AND DISCUSSION

Panel data regression can produce three estimated regression models: Common Effect Model, Fixed Effect Model, and Random Effect Model. The determination of the best model to interpret the results of the study was carried out by the Chow Test, Hausman Test, and Lagrange Multiplier Test.

The Chow test is performed to determine the most appropriate model between the Common Effect Model and the Fixed Effect Model. Using EViews 13 the following results were obtained:

Table 3. Chow Test Results

<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>11,704</td>
<td>(61,244)</td>
<td>0,000</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>423,960</td>
<td>63</td>
<td>0,000</td>
</tr>
</tbody>
</table>

Source: Data processed with EViews 13 (2024)

Table 3 shows the probability value of cross-section chi-square of 0.000 less than 0.050, hence the most appropriate model is the Fixed Effect Model.

The Hausman test is performed to determine the most appropriate model between the Fixed Effect Model and the Random Effect Model. Using EViews 13 the following results were obtained:

Table 4. Hausman Test Results

<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>12,918</td>
<td>4</td>
<td>0,012</td>
</tr>
</tbody>
</table>

Source: Data processed with EViews 13 (2024)

Table 4 shows a random cross-section probability value of 0.012 less than 0.050, so the most appropriate model is the Fixed Effect Model.

The classical assumption test is used to check whether the data used in linear regression analysis meets the basic assumptions of the linear regression model. This classical assumption test consists of a residual normality test and a heteroscedasticity test.

The residual normality test is used to check whether the residuals of the regression model used in the research analysis are normally distributed or not. The normality test using Jarque-Bera shows a probability value of 0.000 less than 0.050. This explains that the residual regression models used in the analysis of the study were not normally distributed. According to (Gujarati & Porter, 2009), if the size of the observations is large enough (assuming the number of observations > 100), then normality is negligible.

The heteroscedasticity test is used to check whether the variance of residuals in the regression model is inequality. According to (Algifari, 2021) The fixed Effect Model is inefficient which means there is a possibility of heteroscedasticity problems in this model. One way to detect heteroscedasticity problems in Fixed Effect Models is to compare statistical values between the Unweighted Fixed Effect Model and the Fixed Effect Model with weighting.
Table 5. Heteroscedasticity Test Results

<table>
<thead>
<tr>
<th>Statistical Value</th>
<th>No Weighting</th>
<th>With Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical t value (Prob value.) DAR</td>
<td>4,708 (0,000)</td>
<td>6,275 (0,000)</td>
</tr>
<tr>
<td>Statistical t value (Prob value.) ROE</td>
<td>1,099 (0,273)</td>
<td>0,413 (0,680)</td>
</tr>
<tr>
<td>Statistical t value (Prob value.) IO</td>
<td>0,535 (0,593)</td>
<td>-0,381 (0,703)</td>
</tr>
<tr>
<td>Statistical t value (Prob Value.) SIZE</td>
<td>6,760 (0,000)</td>
<td>19,636 (0,000)</td>
</tr>
<tr>
<td>Statistical F value (Prob. F stat)</td>
<td>186,402 (0,000)</td>
<td>1551,360 (0,000)</td>
</tr>
<tr>
<td>Coefficient of determination (R2)</td>
<td>0,980</td>
<td>0,998</td>
</tr>
</tbody>
</table>

Source: Data processed with EViews 13 (2024)

Table 5 shows the statistical values of the Fixed Effect Model with weighting is better than the Fixed Effect Model no weighting. Thus, it can be concluded that the Fixed Effect Model without weighting has heteroscedasticity problems.

Table 6 examines the three main models in this study. Model one tests DAR, ROE, IO, and SZE variables. Regression results show that DAR and SZE positively affect EV with a significance level of one percent. ROE is positive and IO is negative, but neither variable is significant (significance level above ten percent) to EV.

Model-2 tested the effect of AGE on EV. Because it is positioned as a moderator in model two, AGE is also analyzed in the estimation model. The test results in model two showed that the AGE variable had a predictor role in explaining EV (significant at the one percent level).

The next test in Model-3 examines the effect of interaction between AGE moderating variables with all independent variables. When interacting with DAR, it appears that the interaction coefficient (DAR*AGE) is positive with a significance level of one percent, which means that AGE moderates the influence of capital structure on company value. These results do not change the effect of DAR on EV in model one testing. Thus the interaction (DAR*AGE) shows consistency of results when tested against EV.

The next test in model three tested the effect of interaction between ROE variables and AGE. The results of statistical tests found that the effect of interaction did not appear on the variable profitability (ROE*AGE). Testing the ROE variable separately, in both model one and model three also showed that the ROE variable did not affect EV, although the direction sign of influence (positive) was consistent with theoretical concepts.
Table 6. Estimation Results

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>Model (1)</th>
<th>Model (2)</th>
<th>Model (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Coefficient</td>
<td>10,863</td>
<td>7,987</td>
<td>1,855</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td>(0,950)</td>
<td>(1,146)</td>
<td>(2,409)</td>
</tr>
<tr>
<td></td>
<td>Probability</td>
<td>0,000*</td>
<td>0,000*</td>
<td>0,442</td>
</tr>
<tr>
<td>2</td>
<td>To give</td>
<td>0,397</td>
<td>0,449</td>
<td>-0,123</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td>(0,063)</td>
<td>(0,062)</td>
<td>(0,210)</td>
</tr>
<tr>
<td></td>
<td>Probability</td>
<td>0,000*</td>
<td>0,000*</td>
<td>0,561</td>
</tr>
<tr>
<td>3</td>
<td>ROE</td>
<td>0,007</td>
<td>-0,001</td>
<td>-0,009</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td>(0,017)</td>
<td>(0,018)</td>
<td>(0,062)</td>
</tr>
<tr>
<td></td>
<td>Probability</td>
<td>0,680</td>
<td>0,957</td>
<td>0,884</td>
</tr>
<tr>
<td>4</td>
<td>IO</td>
<td>-0,062</td>
<td>-0,067</td>
<td>-3,138</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td>(0,162)</td>
<td>(0,148)</td>
<td>(0,422)</td>
</tr>
<tr>
<td></td>
<td>Probability</td>
<td>0,703</td>
<td>0,650</td>
<td>0,000*</td>
</tr>
<tr>
<td>5</td>
<td>SZE</td>
<td>0,630</td>
<td>0,740</td>
<td>1,036</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td>(0,032)</td>
<td>(0,040)</td>
<td>(0,082)</td>
</tr>
<tr>
<td></td>
<td>Probability</td>
<td>0,000*</td>
<td>0,000*</td>
<td>0,000*</td>
</tr>
<tr>
<td>6</td>
<td>AGE</td>
<td>-0,018</td>
<td>0,355</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td>(0,004)</td>
<td>(0,076)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Probability</td>
<td>0,000*</td>
<td>0,000*</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>DAR*AGE</td>
<td></td>
<td></td>
<td>0,023</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td></td>
<td></td>
<td>(0,009)</td>
</tr>
<tr>
<td></td>
<td>Probability</td>
<td></td>
<td></td>
<td>0,013*</td>
</tr>
<tr>
<td>8</td>
<td>ROE*AGE</td>
<td></td>
<td></td>
<td>0,001</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td></td>
<td></td>
<td>(0,002)</td>
</tr>
<tr>
<td></td>
<td>Probability</td>
<td></td>
<td></td>
<td>0,578</td>
</tr>
<tr>
<td>9</td>
<td>IO*AGE</td>
<td></td>
<td></td>
<td>0,139</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td></td>
<td></td>
<td>(0,018)</td>
</tr>
<tr>
<td></td>
<td>Probability</td>
<td></td>
<td></td>
<td>0,000*</td>
</tr>
<tr>
<td>10</td>
<td>SZE*AGE</td>
<td></td>
<td></td>
<td>-0,017</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td></td>
<td></td>
<td>(0,002)</td>
</tr>
<tr>
<td></td>
<td>Probability</td>
<td></td>
<td></td>
<td>0,000*</td>
</tr>
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</table>

F 155,36  1816,863  1178,702
(Sig.) (0,000)*  (0,000)*  (0,000)*

Adjusted R² 0,998 0,997 0,996

Description: dependent variable = EV ; *Sig. 1% ; **Sig. 5% ; Sig. 10%
Source: Data processed with EViews 13 (2024)

The interaction effect of IO variable and AGE tested in Model-3. When interacting with IO, it appears that the interaction coefficient (IO*AGE) is positive with a significance level of one percent which means that AGE moderates the effect of IO on EV. The results in model three also showed that when before interacting, the IO variable was marked negative with a significance level of one percent, but after interaction the direction of influence of IO became positively significant (one percent) so that it was consistent with theoretical concepts. This shows that the IO market
monitoring function is only visible after interacting with AGE. High IO conceptually indicates a high level of institutional monitoring of management so that there is a positive influence between IO and management performance which will be reflected through company value. This result is in line with the research (Jhang et al., 2020), (Lestari, 2017), and (Sukenri, 2012) which suggests that there is a significant positive influence between institutional ownership and company value.

The last test in model three tested the effect of interaction between SZE variables and AGE. When interacting with SZE, it appears that the interaction coefficient (SZE*AGE) is negative with a significance level of one percent which means that AGE moderates the effect of company size on company value. The results in model three also showed that when before being interacted, the SZE variable was positively marked with a significance level of one percent, but after the interaction, the direction of SZE influence became negative with a significance of one percent. This shows that the larger size of the company is considered to be able to cause a lack of efficient supervision by management to reduce the value of the company. In addition, companies with large sizes may not necessarily be able to guarantee whether resource management can be optimal in achieving the expected goals. This test is in line with research (Susanti & Restiana, 2018) and (Ristivana et al., 2024) suggests that there is a significant negative influence between company size and company value.

Testing of models one, two, and three showed strong support for the hypotheses developed in this study. The results of the Goodness of Fit Model Test also high. This is confirmed by the significant F test at the one percent level for the three models. These results confirm that the regression model built is appropriate and able in explaining the research phenomenon. Meanwhile, the value of the coefficient of determination also shows a high value, meaning that the variation of the independent variable can explain the variation in company value (EV) very well.

CONCLUSION

This research tests three regression models. The first model tested the effect of DAR, ROE, IO, and SZE on EV. The test results showed that only DAR and SZE were consistent with the research hypothesis. Tests on the second model showed AGE had a predictor function. This variable is further interacted with all independent variables in model three. The results of the interaction show that AGE has a quasi-moderating role. In general, AGE can moderate the influence of DAR, IO, and SZE on EV. The interaction of AGE with IO and SZE can change the direction of influence from initially positive to negative and vice versa. AGE is unable to reduce the influence of DAR on EV. This can be seen in the test results that remain significantly positive, both before and after interaction with AGE (significant at the level of one percent).

The research conducted provides insight into how a company's age can affect the relationship between capital structure, profitability, institutional ownership, and company size and company value. However, there are some limitations to be aware of. First, this research is limited to the context of primary consumer sector companies in Indonesia, which may not reflect the overall situation. This recent work only focuses on the use of EV as a proxy of firm value. Further researches need to consider other firm value proxies as a comparison to this recent work. Third, this research is tied to the period from 2018 to 2022 where in 2020-2022 there was a Covid-19
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pandemic which resulted in a decline in general company performance. Further study needs to consider different economic conditions in their robustness test to increase the external validity.

REFERENCE


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