Factors Affecting Firm Value in Indonesia’s Manufacturing Firms

Henryanto Wijaya¹, Andy Andy¹, Levina Febriyanti¹, Hadi Cahyadi¹, Aditya Nugraha¹

¹Faculty of Economic and Business, Universitas Tarumanagara, Jakarta, Indonesia
*Corresponding author. Email: henryantow@fe.untar.ac.id

ABSTRACT
The purpose of this study was to determine whether the capital structure, independent board of commissioners, liquidity, dividend policy, and profitability can affect firm value. This is expected to be useful and used for interested parties, such as investors, to assist in providing information and making decisions to invest in a company. In this study, the firm value was measured using the Price to Book Value ratio (PBV). The subjects used in this study were manufacturing companies listed on the Indonesia Stock Exchange (IDX) in the 2017-2019 period. The research design used in this study is a descriptive research design. The descriptive research was conducted to understand the existence of one or more variables, by not comparing the variables themselves and looking for a relationship with other variables.

Keywords: Firm Value, Capital Structure, Independent Commissioner Board, Liquidity, Dividend Policy, Profitability

1. INTRODUCTION
The general objective of a business is to maximize profits to increase the firm’s value. Firm value is the result of management's efforts in several areas, including net cash flow from investment decisions, growth, and the cost of capital of the business. Firm value is critical for investors to understand because it is a barometer of how the market views the firm. Firms with strong values perform well. Creditors take a close look at the company's value. For creditors, the value of a business is determined by its liquidity, its ability, or inability to repay creditors' loans. If the implied value of the business is poor, investors will perceive the business as having a low value. Additionally, the share price provides insight into the firm's value. If the stock price increases, the firm's value increases as well. This will have a beneficial effect on the shareholders' welfare and prosperity. Investors will become more interested in investing in the company as a result of this increase.

Several factors will affect the firm’s value. These variables have a non-linear relationship and influence firm value. Capital structure is one of these factors. According to capital structure theory, a firm's financial policy in determining its capital structure is a mix of debt and equity aimed at optimizing the company's value. Managers should select a capital structure that they believe will maximize firm value and will be the most profitable for the company's shareholders[1]. One disadvantage is that when a business is going through a difficult period and its operating profit is insufficient to cover its interests, the shareholders are forced to make up the difference. If the firm is unable to cover the shortfall, it will go bankrupt [2]. The capital structure of a business is a comparison of its equity and debt financing. Debt is a component of a business's capital structure. This capital structure is critical for increasing the productivity and performance of the business.

The Debt to Equity Ratio provides insight into a company's capital structure (DER). If the Debt to Equity Ratio (DER) is higher, the company's value will increase, as long as the Debt to Equity Ratio (DER) has not reached its optimum level as defined by the Trade-off theory. The independent board of commissioners, which will be discussed in this study, can also serve as a benchmark for increasing the value of the company. The independent board of commissioners is responsible for supervising the board's policies, ensuring the board's smooth operation, and providing advice to the board of directors[3]. Independent commissioners are believed to be capable of effectively monitoring activities by resolving the conflict of interest between internal managers regarding the misuse of firm assets or transaction manipulation. Additionally, the independent board of commissioners is considered capable of indefinitely preserving the majority shareholder's independence while still representing all shareholders[4]. The findings of this study contradict those of Amaliyah and Herwiyanti[5], who concluded that a large number of independent commissioners cannot guarantee an increase in firm value. This is because the existence of an independent board of commissioners is merely a formality necessary to comply with Financial Services Authority (OJK) regulations. Without an
independent board of commissioners, the independent board of commissioners cannot perform its supervisory function properly.
Liquidity is another factor that can affect a firm's value. Liquidity refers to a business's ability to meet financial obligations that can be disbursed immediately or are due. Liquidity, in this context, refers to the company's ability to repay debts that are about to mature.
Dividend policy is determined by the amount of profit the company currently earns and the number of dividends that will be paid to investors. According to Lumarapow and Tumiwa [6], a company's dividend policy can have a negative and significant effect on the company's value. A dividend policy is essentially a statement of how much profit will be distributed to investors or shareholders. Dividend policy is important to consider because it affects the cash flow that will be paid to shareholders or retained by the company for reinvestment.
The amount of dividends distributed by a company is determined by the company's dividend policy. The dividend payout ratio (DPR) is typically used to express the percentage of net income after taxes distributed as dividends. The paid dividends affect the stock price because investors generally prefer capital gains to dividend distribution profits [7].
Profitability refers to a business's ability to generate profit or profit from the relationship between sales, capital, and total assets [8]. Profitability is a ratio that indicates how well a business is performing financially. If the company's financial performance improves, the returns to investors will also improve. Profitability and effectiveness of management can be determined by the profits generated by the firm's investment and sales, as shown in the financial statements.

2. BACKGROUND OF STUDY

Signaling Theory
The Signal Theory explains why a business should or is required to provide external parties with financial statement information. Due to a lack of information about the company, external parties may seek to protect themselves by charging the company low prices. Businesses can increase their value by sending signals to external parties [9].

Trade-Off Theory
According to the Trade-Off Theory, a firm's value will increase in tandem with its increased use of leverage. Until the cost of financial pressure or bankruptcy exceeds the interest tax shields, it will reduce the firm's value [10].

Capital Structure's Effect on Firm Value
The capital structure reflects the state of the company's financing; if the company finances effectively, the company's value will increase. Sulindawati, Yuniarta, and Purnamawati [11] stated that the capital structure's purpose is to consolidate the sources of funds used by the company to finance cooperatives. This objective can be viewed as a search for a combination of funds that will lower the cost of capital while increasing the share price; with a higher share price, the company's value will increase.

The trade-off theory of capital structure suggests that the Debt Equity Ratio (DER) be used to balance the benefits and costs of debt. The greater the debt-to-equity ratio (DER), the greater the risk. This will affect investor confidence and will continue to affect the company's value. Eventually, it reduce investor willingness to invest in such company.

Independent Commissioner's Influence on Firm Value
Harlati's [4] research demonstrated that her findings were consistent with agency theory. This is because the supervisory function performed by independent commissioners is believed to be capable of resolving conflicts of interest created by managers, such as asset abuse and financial statement manipulation. Additionally, independent commissioners are thought to be more objective and able to maintain their independence not only when representing majority shareholders, but also a minority and foreign shareholders.
According to Astuti et al.'s [12] research, independent commissioners do not affect firm value. This is because the independent board of commissioners is incapable of properly supervising management or the management of the company. If supervision is inadequate, management's manipulation of financial statements will likely have a negative effect on the company's value.

Liquidity's Effect on Firm Value
The Liquidity Ratio is used to determine a business's ability to meet short-term obligations [13]. Increased liquidity can increase firm value; therefore, financial decision-makers are urged to maintain a high level of liquidity to ensure that higher firm values can take advantage of investment opportunities to the fullest extent possible. Numerous research findings demonstrate the breadth of liquidity's influence on firm value. According to the findings of Siringoringo and Hutabarat [14], liquidity has a significant impact on firm value. This is in contrast to Markonah, Salim, and Frunciska's [15] research, which indicates that liquidity has no discernible effect on firm value.

Dividend Policy's Effect on Firm Value
Lumarapow and Tumiwa [6] assert that dividend policies have a detrimental and significant effect on firm value. Dividend policy, in general, refers to the allocation of profits to shareholders or investors. The amount of dividends distributed by the company is determined by the company's dividend policy. If dividends are paid in large amounts, the company's value will increase.
However, Martha et al. [16] discovered that dividend policy has a negative and statistically insignificant effect on firm value. The dividend policy does not affect the market price or value of the company but on the amount of profit that the company can generate. And investors
generally prefer to profit from capital gains rather than dividends.

**Profitability's Effect on Firm Value**
Profitability refers to a business's ability to generate a profit for its shareholders. Profitability increases the firm's ability to pay dividends, which increases the firm's value. If a company's profitability ratio is high, investors will be interested in investing in it. Profitability can be determined using the return on equity formula (ROE). ROE is a measure of a firm's return on equity. Investors' increased interest in high-ROE firms will increase stock prices, which will affect the firm value. This is consistent with Dewi and Wirajaya's [17] research, as well as Anggara, Mukhzarudfa, and Aurora's [18] research, which demonstrate that profitability has a significant effect on firm value. Meanwhile, according to Hirdinis' [19] research, profitability has no discernible effect on firm value.

### 2.1. FRAMEWORK

**HYPOTHESIS:**

- **H1:** Capital structure has a significant negative effect on firm value.
- **H2:** Independent Commissioners have a significant positive effect on a firm's value.
- **H3:** Liquidity has a significant positive effect on firm value.
- **H4:** Dividend Policy has a significant positive effect on Firm Value
- **H5:** Profitability has a significant positive effect on firm value.

### 3. RESEARCH METHODOLOGY

**Population and Sampling**
The population for this research is manufacturing firms that were publicly traded on the Indonesian Stock Exchange (IDX) between 2017 and 2019. This study's data collection over the last three years is expected to provide the most recent data. This study employed a technique known as purposive sampling to select random samples. The random sampling technique was chosen because it is simpler and can be tailored to the researchers' criteria. The sampling criteria are as follows: (1) Manufacturing firms that have been consecutively listed on the IDX for the period 2017-2019; (2) Manufacturing firms that have used Rupiah in their financial statements for the 2017-2019 period; (3) Manufacturing firms that have not had consecutive losses during the 2017-2019 period; and (4) Manufacturing firms whose data are presented in full as necessary for resampling.

**Variables and Measuring Techniques**
The variables in this study were classified as independent and dependent. In this study, the researchers examined four independent variables: capital structure, firm size, liquidity, dividend policy, and profitability. Meanwhile, firm value is used as the dependent variable.
4. RESULTS AND DISCUSSION

Table 2 Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measuring Tool</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Value</td>
<td>PBV = stock market value/book value per share</td>
<td>Ratio</td>
</tr>
<tr>
<td>Capital Structure</td>
<td>DER = Total Debt/Total Equity</td>
<td>Ratio</td>
</tr>
<tr>
<td>Independent Commissioner</td>
<td>IC = Total Independent Commissioner/Total Commissioner</td>
<td>Ratio</td>
</tr>
<tr>
<td>Liquidity</td>
<td>CR = Current Asset/Current Liabilities</td>
<td>Ratio</td>
</tr>
<tr>
<td>Dividend Policy</td>
<td>DPRE = Dividend Per Share (DPS)/Earnings Per Share (EPS)</td>
<td>Ratio</td>
</tr>
<tr>
<td>Profitability</td>
<td>ROE = Net Profit After Tax/Equity</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

According to the table above, the average (mean) Firm Value (PBV) for the observation period is 2.555925, while the median PBV is 1.643210, with a maximum PBV of 16.48889 for Unilever. The maximum PBV value is 0.209108, which is Ricky Putra Globallindo TBK's PBV in 2019, with a deviation rate or standard deviation of 2.720539.

Capital Structure (DER) has an average value (mean) of 0.775847 in the studied sample, while the median value is 0.529338. The maximum DER value is 3.520538, which corresponds to the DER of the Sido Muncul Tbk in 2017, while the minimum DER value is 0.074766, which corresponds to the DER of Unilever Indonesia Tbk in 2017. The standard deviation, or variance, of the DER is 0.447137.

The mean (mean) of the sample's Board of Independent Commissioners (IC) is 0.413814, while the median (median) is 0.400000. The highest IC value is 0.800000, which belongs to Semen Baturaja Tbk in 2017, 2018, and 2019, while the lowest IC value is 0.200000, which belongs to Semen Baturaja Tbk in 2017. The standard deviation, or variance, of the IC is 0.105824.

The mean (average) liquidity (CR) of the samples examined was 29.19903, while the mean (median) CR was 28.8218. The maximum CR value is 33.49453, which corresponds to Astra Internation Tbk's CR in 2019, while the minimum CR value is 26.45496 for Dutta Pertiwi Nusantara Tbk's CR in 2017. 1.561946 is the standard deviation or the deviation that occurs in the CR.

Dividend Policy (DPR) has an average (mean) value of 0.489662 in the studied sample, while the median value is 0.403554. The maximum DPR value is 3.520538, which corresponds to the DPR of Trisula Internasional Tbk in 2017, while the minimum DPR value is 0.074766, which corresponds to the DPR of Champion Pacific Indonesia Tbk in 2017. The DPR's standard deviation, or the amount of variation that occurs, is 0.447137.

Profitability (ROE) has an average (mean) value of 0.151436 in the sample studied, while the median value is 0.114131. The maximum ROE value in 2019 is 1.399665, which corresponds to Unilever Indonesia Tbk, while the minimum ROE value is 0.008636, which corresponds to Semen Baturaja Tbk. The ROE has a standard deviation of 0.187818.

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>4.748430</td>
<td>(47,91)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>176.429603</td>
<td>47</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Data processing using Eviews version 11

According to the Chow or likelihood test results, the probability has a cross-section F value of 0.0000. This value has a less-than-0.05 level of significance (H0 is rejected). That is, the estimation model selected from the Chow test or likelihood for this regression is also a Fixed Effect Model (FEM). Thus, the Hausman test is the next test that researchers must conduct.

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>3.404418</td>
<td>5</td>
<td>0.6379</td>
</tr>
</tbody>
</table>

Source: Data processing using Eviews version 11

The Hausman MRA regression test results above indicate that a random cross-section value with a probability of 0.6379 exists. This value has a greater than 0.05 level of significance (H0 is accepted). That is, the estimation model chosen for this regression based on the Hausman test results also receives the Random Effect Model (REM). Thus, the Lagrange test is the next test that researchers must conduct.

Table 5. Lagrange Test Results

Lagrange Multiplier Tests for Random Effects

Null hypotheses: No effects
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

<table>
<thead>
<tr>
<th>Test Hypothesis</th>
<th>Time</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>43.2113</td>
<td>0.006187</td>
</tr>
<tr>
<td>(0.0000)</td>
<td>(0.9373)</td>
<td>(0.0000)</td>
</tr>
</tbody>
</table>

Source: Data processing using Eviews version 11

According to the Lagrange test results above, both have a Breusch-Pagan value of 0.0000. This value has a less-than-0.05 level of significance (H0 is accepted). That is, the estimation model chosen from the Lagrange test results also receives the Random Effect Model for this regression (REM). As a result, the optimal panel data estimation
model that will be used in this study is also a Random Effects Model (REM).

**Table 6. Multiple Regression Analysis Results (random effect model)**

<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>Y_PBV</td>
<td>-5.660027</td>
<td>4.316112</td>
<td>-1.311372</td>
<td>0.1919</td>
</tr>
<tr>
<td>X1_DER</td>
<td>-0.540512</td>
<td>0.294365</td>
<td>-1.836196</td>
<td>0.0685</td>
</tr>
<tr>
<td>X2_IC</td>
<td>-4.183765</td>
<td>1.747375</td>
<td>-2.394314</td>
<td>0.0180</td>
</tr>
<tr>
<td>X3_CR</td>
<td>0.287341</td>
<td>0.145776</td>
<td>1.971646</td>
<td>0.0506</td>
</tr>
<tr>
<td>X4_DPR</td>
<td>0.469519</td>
<td>0.350594</td>
<td>1.339210</td>
<td>0.1827</td>
</tr>
<tr>
<td>X5_ROE</td>
<td>11.54288</td>
<td>3.22833</td>
<td>3.725876</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

**Effects Specification**

<table>
<thead>
<tr>
<th>S.D. Rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5845</td>
</tr>
<tr>
<td>0.4155</td>
</tr>
</tbody>
</table>

**Weighted Statistics**

| R-squared | 0.417145 |
| Adjusted R-squared | 0.396027 |
| S.E. of regression | 1.156944 |
| F-statistic | 19.75312 |
| Prob(F-statistic) | 0.000000 |

**Unweighted Statistics**

| R-squared | 0.597007 |
| Sum squared resid | 426.5244 |

Source: Data processing using Eviews version 11

From the test results above, the regression equation can be formulated as follows:

**Y_PBV = -5.660027 – 0.540512 X1_DER – 4.183765 X2_IC + 0.287341 X3_CR + 0.469519 X4_DPR + 11.54288 X5_ROE + e**

Notes:

- **Y_PBV** = Price to Book Value
- **X1_DER** = Debt to Equity Ratio
- **X2_IC** = Independent Commissioner
- **X3_CR** = Liquidity(Current Ratio)
- **X4_DPR** = Dividend Payout Ratio
- **X5_ROE** = Profitability(Return on Equity)
- **e** = Error

**5. CONCLUSION AND SUGGESTIONS**

After analyzing the results of the previous chapter's tests, the following conclusions can be drawn:

1. The research findings indicate that Ho is accepted and Ha is rejected, indicating that the Debt to Equity Ratio has a negative direction but has no significant effect on firm value in manufacturing companies between 2017 and 2019. The findings of this study validate those of Anggara, Mukhzarudfa, and Aurora[18], who concluded that the Debt to Equity Ratio had no significant effect on firm value. However, Hirdinis [19], Dewi and Wirajaya [17], Pratiwi, Yudiaatmaja, and Suwendra [20] found that capital structure has a significant effect on firm value.

2. In the second hypothesis, the independent board of commissioners has a significant positive effect on firm value, Ho is accepted and Ha is rejected. This means that the Independent Commissioner has a detrimental effect on the value of manufacturing firms between 2017 and 2019. The findings of this hypothesis are consistent with Hariati’s [4] research, which indicates that the Independent Commissioner has a significant effect on firm value. In contrast to the findings of Astuti et al. [12], the independent board of commissioners does not have any effect on firm value.

3. In the third hypothesis, liquidity has a significant positive effect on firm value, Ha is rejected and Ho is accepted, with the results of liquidity research being positive but not significant for firm value in manufacturing companies between 2017 and 2019. The findings of this study corroborate those of Markonah, Salim, and Franciska [15], who concluded that liquidity has no discernible effect on firm value. Additionally, according to Siringoringo and Hutabarat [14], liquidity has a significant effect on firm value.

4. In the fourth hypothesis, which states that dividend policy has a significant positive effect on firm value, Ha is rejected and Ho is accepted, with the Dividend Payout Ratio research indicating a positive direction but no significant effect on firm value in manufacturing companies between 2017 and 2019. The findings of this study corroborate those of Martha et al. [16], who concluded that the Dividend Payout Ratio has no significant effect on firm value. However, contrary to Lumapow and Tumiwa’s[6] previous research, this study finds that dividend policy has a negative and significant effect on firm value.

5. The fifth hypothesis states that Profitability has a significant positive effect on firm value, with Ho being rejected and Ha being accepted, with Profitability results projected to have a positive direction and a significant effect on stock firm value in manufacturing companies projected in the 2017-2019 period. The findings of this study corroborate the findings of Dewi and Wirajaya [17]and Anggara, Mukhzarudfa, and Aurora [18], who concluded that Return on Equity has a significant impact on firm value. Hirdinis [19] demonstrates that profitability has little effect on a firm’s value.
6. RESTRICTIONS AND RECOMMENDATIONS

This study has several limitations, including the following:
1. The research period covered is only three years, from 2017 to 2019.
2. This study's sample includes only 48 manufacturing firms, implying that the study's objective does not encompass all existing firms.
3. This study employs a total of five independent variables.

In light of the limitations discussed previously, there are several suggestions for additional research, including the following:
1. It is recommended that additional research be conducted to increase the number of longer research periods.
2. It is recommended that the sample size be increased, particularly in other industrial sectors listed on the IDX.
3. Additional researchers are encouraged to experiment with additional variables that affect firm value, such as investment opportunities, taxation, the size of the board of commissioners, and business risk.

REFERENCES


