Determinants of the Financial Performance: Evidence from Indonesian Manufacturing Companies

Permatasari Cahyaningdyah\(^{a,1}\), Mukti Prasaja\(^b2\), Abdurrahman Maulana Yusuf\(^{c,3}\)

\(^{a}\) Politeknik Negeri Madiun, Madiun, Indonesia
\(^{b}\) Universitas Mulawarman, Samarinda, Indonesia
\(^{c}\) Universitas Mulawarman, Samarinda, Indonesia

1 permatasari.c@pnm.ac.id*, 2 mukti_prasaja@pnm.ac.id, 3 abdurrahmanmaulana@feb.unmul.ac.id

Abstract

This study aims to investigate the determinants of the financial performance of manufacturing companies in Indonesia. Financial performance is proxied by return on assets, while the determining factors in this study include capital structure (leverage), institutional ownership, audit quality, and firm size. This study uses a quantitative method. The samples were determined through the purposive sampling method, which resulted in a sample of 112 manufacturing companies in Indonesia during the 2018-2020 period—hypothesis testing by performing multiple linear regression using STATA. The results show that leverage and audit quality significantly influence the company's financial performance. Meanwhile, institutional ownership and company size do not affect the financial performance of manufacturing companies in Indonesia.

Keywords: Audit Quality, Financial Performance, Firm Size, Institutional Ownership, Leverage.

I. INTRODUCTION

Investors in the capital market need financial information as material for making economic decisions. Financial reports are one of the things that can be used by management to convey company performance. Stakeholders, as well as potential investors, see the condition of the company through financial reports. One of the things that must be considered in looking at the condition of the company is the financial performance of that company, whether the company has the potential to generate profits or not.

The company's prospects, growth, and good development potential can be interpreted based on the company's financial performance. Financial performance information measures potential changes in the company's economic resources. The company's financial performance reflected the company's prospects and risks. The great of companies prospects can be observed by the profit level (profitability); otherwise, risk can be observed from the possibility of a company experiencing financial difficulties or going bankrupt.

Investors are more interested in companies that have good performance. According to the initial plan, the company with good performance will have good sales and profit income. The ratio that can be used to measure and evaluate the financial performance of the companies is the profitability ratio. The Profitability ratios can measure the profit level of a company as a whole; the profitability ratio, for example, is the return on assets (ROA) [1].

The big company has a stronger motivation to present a high level of profitability than smaller companies because the investor is more critical to observe the big companies [2]. One of the indicators of company size is all of the company's assets. The company's greater assets indicate the company's size is getting bigger. Companies with a larger size will certainly be more attractive to investors because these companies have many components that can support the company's operations. The big size of the company enables the company to give high returns on assets and sales. It leads to better company financial performance through the ability to obtain higher production values [3].

Investors are interested in investing their capital to gain as much profit as possible—investors, in this case as the principal, delegate their authority to management to manage the funds invested. The existence of differences in the ownership function and the management function causes agency conflict. According to Jensen and Meckling [4], agency conflict appears when managers make decisions that profit for themselves rather than concern for shareholders. Agency conflict can lead the agency costs by providing proper incentives to managers and monitoring costs to prevent the moral hazard. Agency conflicts also come between controlling and minority shareholders, shareholders and creditors, and controlling shareholders and other stakeholders.

In carrying out its operations, the company can be funded by debt from creditors and equity from shareholders. The combination of the use of debt and equity is represented by capital structure. The use of debt to fund the company's operational activities is called financial leverage. In the financial literature, Jensen and Meckling [4] were the first to link agency costs with debt in the capital structure. Using the debt in the capital structure staves off unnecessary company expenses and boosts managers to operate the company more efficiently. It can decrease agency costs; furthermore, the company's performance can increase [5].

Brigham and Houston state that financial leverage is an indicator that can be used to increase profits [6]. Leverage is the ratio used in measuring the company’s financial performance in the debt and capital obtained from
the assets. The debt is the additional funding of the company's assets for operational activity, which is expected to increase the company's profit. It caused the company's assets to be used to get the company’s profits. Thus the profit available to equity holders becomes greater.

Institutional ownership is the claim of the company’s share by institutions. Institutional shareholders usually have relatively large shareholdings. It causes the institutional shareholder to have a greater resource of funds and claims than the individual shareholders. Institutional ownership is one of the control systems that companies can use to control agency conflicts between shareholders and management. Bathala, Moon, and Rao explained that institutional investors are motivated to control the quality of financial reports and can punish the managers for the poor quality of accounting information that managers report [7]. Institutional ownership is an effective monitoring mechanism for producing better operating performance [8]. Institutional investors often have substantial holdings in several companies. Institutional investors can encourage companies to improve disclosure and monitoring procedures and company performance [9].

The financial performance of the company appears from the financial statements. The role of the auditor is needed to produce reliable financial reports. An auditor has the qualifications for conducting an audit of the financial statements and all activities of the company. The financial statements of companies audited by qualified auditors will produce higher quality information than those produced by unqualified auditors. Audit quality is determined by the Public Accounting Company's (KAP) reputation. It is assumed that the KAP's reputation will influence the audit report's results by the auditor.

An audit is an alternative monitoring company used to decrease agency costs of companies with bondholders and shareholders[4]. The quality of the audit will be able to reduce the number of accounting errors made by clients. The auditing report is represented in the financial statements by the company.

Previous research on financial performance explained more about the factors that influence financial performance from an internal company perspective [10] [11] [12], for example, leverage, company size, the role of the board of directors, and the role of the board of commissioners. Unlike previous research, this is important because it explores internal and external factors that may influence a company’s financial performance. The internal factors are the capital structure and company size, and the external factors are institutional ownership and audit quality, both of which are support systems and entities outside the company.

We investigate whether firm size, leverage, institutional ownership, and audit quality affect financial performance. The company expected great financial performance to get the desired profit. We use the STATA application to investigate the determinants of financial performance. We use multiple linear regression. One hundred twelve manufacturing businesses listed on the IDX in 2018–2020 served as the samples for this study.

II. LITERATUR REVIEW AND HYPOTHESIS DEVELOPMENT

A. Theoretical Background

Agency Theory is a theory that discusses agency relationships that occur when one or more shareholders (principal) hire another person (agent) to run the company and delegate decision-making authority to the agent[4]. Managers as agents are responsible for optimizing the profits of the indicators and, in return, will receive compensation according to the contract. Companies that separate management and ownership functions are prone to agency conflicts, such as agents taking actions inconsistent with the principal's interests and tend to be selfish (moral hazard).

Type I agency conflict, which usually arises in businesses with dispersed ownership structures, is the conflict that arises between shareholders and managers. The moral hazard in type II agency conflict is the action of the majority shareholder, which the minority shareholder cannot observe. Then the conflict between stockholders and creditors is explained by type III agency conflict. This theory explains that conflicts between shareholders and creditors can arise if the funds obtained from creditors are not used properly, leading to high risks for the company and creditors [13].

B. Hypothesis Development

Investors are drawn to making investments in businesses with strong financial performance. Investors tend to focus on the return on investment invested. Investors will see a company more favourably the larger it is since larger businesses tend to have higher profitability and more reliable financial results. Larger company size allows companies to generate higher returns on assets and sales, leading to the better financial performance of companies through the ability to obtain higher production values [3].

H1: Company size affects the company's financial performance.

The agency conflict type III explains the conflict between shareholders and creditors. This theory explains that conflicts between shareholders and creditors can arise if the funds obtained from creditors are not properly used [13]. Jensen and Meckling were the first to link agency costs to debt in the capital structure. Using debt in the capital
structure can reduce unnecessary business costs and help managers run the business more successfully. It lowers agency costs, improving the company's performance [5].

H2: Leverage affects the company’s financial performance.

Conflict of interest between managers (agents) and shareholders (principals) leads to agency problems. Sometimes agents act not under the objectives expected by the principal and are more likely to carry out policies that benefit themselves (moral hazard). If there is an agency problem, it is necessary to minimize it. One of them is the existence of institutional ownership. Institutional investors are owners of shares in the form of institutions. Institutional investors generally have a high proportion of shareholding because they have large sources of funds. A high proportion of institutional ownership can tighten supervision to prevent the opportunistic behaviour of managers. Research by Bhattacharya and Graham [14]; Lin and Fu [15] stated that institutional investor ownership can positively affect company performance.

H3: Institutional ownership affects the company's financial performance.

The financial statements of a company show its financial performance. The auditor has a role in producing reliable financial reports. To decrease agency expenses for businesses with bondholders and shareholders, firms sometimes utilize audits as a monitoring method. When a company's financial statements have been audited, investors are more likely to accept the data as accurate. The company's actual performance is depicted in the monitoring method as the Return on Asset (ROA), which shows the company's financial performance.

H4: Audit quality affects the company’s financial performance.

III. RESEARCH METHODS

A. Sample Data

This study uses a quantitative method to test whether company size, leverage, institutional ownership, and audit quality affect the financial performance of manufacturing companies in Indonesia during the 2018-2020 period. Manufacturing companies listed on the Indonesia Stock Exchange (IDX) make up the population of this study. Purposive sampling was applied in this study, with a total sample size of 112 businesses. The sample used to investigate our hypothesis was selected based on the following criteria: 1) companies listed on the IDX consecutively from 2018 to 2020; 2) reporting currency stated in rupiah. It is to avoid bias when measuring variables caused by differences in currency exchange rates; 3) the company’s annual report is available and can be accessed on the website of the Indonesia Stock Exchange; 4) during the study period, the samples used fulfilled the completeness of the data needed in the study. The website www.idx.co.id of the Indonesia Stock Exchange was where the secondary data for this study was discovered.

B. Hypothesis Testing

This study aims to see whether there is influence from the determinants of financial performance variables. Financial performance was the research’s dependent variable, while the independent variables used were Firm Size, Leverage, Audit Quality, and Institutional Ownership.

The Return on Assets (ROA) ratio, the result of dividing total net income by total assets, is used to measure the dependent variable, which determines the company's financial performance. Company size is the total number of assets owned by the company. Company size is calculated using the Ln of total assets. Leverage is the amount of debt used in the business’s capital structure. Leverage is determined by dividing total debt by total assets [17], [18]. The proportion of common stock institutions owned at the end of each fiscal year is known as institutional ownership [19]. Institutional ownership is measured using the percentage formula for the number of institutional shares of the total outstanding shares. The audit quality variable refers to research by Bae et al. [20] using Big 4 Public Accountant Company; due to their extensive knowledge and experience, auditors are the primary indicator of audit quality. A dummy variable was used to determine audit quality, with 1 for companies using the Big 4 Public Accountant Company and 0 for companies using non-Big 4.

The research model proposed in this study is:

\[ \text{ROA}_{it} = \alpha_0 + \alpha_1 \text{SIZE}_{it} + \alpha_2 \text{LEV}_{it} + \alpha_3 \text{Inst}_{it} + \alpha_4 \text{AUD}_{it} + \epsilon_{it} \]  

(1)

Where:

- \( \text{ROA}_{it} \) = the return on asset \( i \) for period \( t \)
- \( \text{SIZE}_{it} \) = firm size \( i \) for period \( t \)
- \( \text{LEV}_{it} \) = leverage of company \( i \) for period \( t \)
- \( \text{Inst}_{it} \) = institutional ownership period \( t \)
- \( \text{AUD}_{it} \) = audit quality for period \( t \)
TABLE I. RESEARCH VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Performance (ROA)</td>
<td>( ROA_{it} = \frac{Net Income_{it}}{Total Asset_{it}} )</td>
</tr>
<tr>
<td>Firm Size (SIZE)</td>
<td>( SIZE_{it} = \text{Ln}(\text{Total Asset}_{it}) )</td>
</tr>
<tr>
<td>Capital Structure (LEV)</td>
<td>( LEV_{it} = \frac{\text{Total Debt}<em>{it}}{\text{Total Asset}</em>{it}} )</td>
</tr>
<tr>
<td>Institutional Ownership (INST)</td>
<td>( INST_{it} = \frac{\text{Institutional Share}<em>{it}}{\text{Outstanding Shares}</em>{it}} )</td>
</tr>
<tr>
<td>Audit Quality (AUD)</td>
<td>Dummy variable, the value is 1 in companies that use Big-4 Public Accountant Firms and 0 in companies that use non-Big 4.</td>
</tr>
</tbody>
</table>

TABLE II. DESCRIPTIVE STATISTICS FOR RESEARCH VARIABLE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Observation</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>336</td>
<td>0.075541</td>
<td>0.1156769</td>
<td>2.70e-06</td>
<td>1.049839</td>
</tr>
<tr>
<td>SIZE</td>
<td>336</td>
<td>28.84585</td>
<td>2.094555</td>
<td>20.16996</td>
<td>40.64186</td>
</tr>
<tr>
<td>LEV</td>
<td>336</td>
<td>0.5689479</td>
<td>0.5964179</td>
<td>0.0034534</td>
<td>5.167738</td>
</tr>
<tr>
<td>INST</td>
<td>336</td>
<td>0.9107143</td>
<td>0.285581</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>AUD</td>
<td>336</td>
<td>0.4642857</td>
<td>0.4994667</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

TABLE III. HYPOTHESIS TEST RESULT

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sample Period 2018-2020</th>
<th>Coef. (t-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(constant)</td>
<td>0.0567564</td>
<td>(0.531)</td>
</tr>
<tr>
<td>Firm Size (SIZE)</td>
<td>0.0003634</td>
<td>(0.907)</td>
</tr>
<tr>
<td>Capital Structure (LEV)</td>
<td>0.0273473**</td>
<td>(0.011)</td>
</tr>
<tr>
<td>Institutional Ownership (INST)</td>
<td>-0.0244222</td>
<td>(0.273)</td>
</tr>
<tr>
<td>Audit Quality (AUD)</td>
<td>0.0322742**</td>
<td>(0.017)</td>
</tr>
<tr>
<td>N</td>
<td>336</td>
<td></td>
</tr>
<tr>
<td>F-value</td>
<td>0.0252</td>
<td></td>
</tr>
<tr>
<td>Adj R²</td>
<td>0.0213</td>
<td></td>
</tr>
</tbody>
</table>

The t-statistics are based on robust standard errors. ***; **; * denote significance at the 1%, 5% and 10% level, respectively. The definition and measurement of variables refer to Table 1.

IV. RESULTS AND DISCUSSION

A. Descriptive Statistics

The descriptive statistical analysis aims to get an overview of the data characteristics described as the distribution's characteristics [21]. The details are shown in Table II.

B. Main Result

Our study examines whether the determinants of financial performance influence the financial performance of manufacturing companies in Indonesia during the 2018-2020 period. The results of hypothesis testing are presented in Table 3. Hypothesis 1 shows that 0.907 is greater than 0.1, so hypothesis 1 is unsupported. For testing hypothesis 2, the number 0.011 is smaller than 0.05, so hypothesis 2 is supported. Testing hypothesis 3 shows the number 0.273 is greater than 0.1, so hypothesis 3 is not supported. Testing hypothesis 4 shows that 0.017 is smaller than 0.05, so hypothesis 4 is supported.

C. Discussion

Hypothesis One examines the relationship between firm size and financial performance. The results show that the value of 0.907 is greater than 0.1 (10%), so hypothesis 1 is not supported. Company size does not influence the company’s financial performance. It is because company size is a value that shows the company's size. Company size can usually also represent total assets, number of sales, and market capitalization. The bigger the company and the size of its business, the result is that the owner cannot directly manage the company himself so that the company’s size does not affect the company’s financial performance.
Furthermore, companies with small total assets do not necessarily have lower performance. Further internal aspects, such as the managerial abilities and the function of the board of commissioners, impact the company's financial performance [22]. This hypothesis supports previous research from Indarti and Extaliyus [23] and Goldwin and Christiawan [24], showing that company size does not affect financial performance.

The second hypothesis shows that 0.011 is smaller than 0.05 (5%), so hypothesis 2 is supported. It shows that capital structure (leverage) influences the company's financial performance. The coefficient value of 0.0273473 indicates that the higher the level of leverage, the better the company's financial performance. It is because companies with high debt levels tend to be supervised by outsiders, namely creditors. Companies will tend to be careful in managing their finances.

Moreover, using debt from creditors, the company can utilize funds for operational activities and expansion, which will impact company performance. This hypothesis supports Cao[5] and Fachrudin [25]. Using debt in the capital structure helps cut down on needless company expenses and motivates management to run the business more effectively. Because of this, agency costs are reduced, which should improve business performance.

The third hypothesis shows that institutional ownership does not affect financial performance. The significance value of 0.273 is proven to be greater than 0.1, so the hypothesis is not supported. Institutional ownership does not affect financial performance because institutional ownership tends to be reluctant to be actively involved in corporate portfolio governance [26]. This study supports the research by Bhattacharya and Graham [14] that a simple institutional ownership concentration index does not influence firm performance. In addition, the research of Schmidt and Fahlenbrach [27] states that institutional investors are divided into three categories, namely quasi-indexers, transient, and dedicated institutional investors. So institutional ownership is not always dedicated to actively control the company's performance.

The fourth hypothesis shows that 0.011 is smaller than 0.05 (5%), so hypothesis 2 is supported. Shows that audit quality affects the company's financial performance. The coefficient value of 0.0322742 shows that enterprises whose financial performance is audited by experts perform better. It is because the auditor has the function of guaranteeing the reliability of the company's financial statements. The more reliable the company's financial statements, the more investors will trust and be interested in investing their funds in the company.

Furthermore, the auditor's role can also reduce the company's agency costs so that the company's financial performance can be effective. According to Elaoud and Jarboui [28], auditor specialization is very helpful in increasing investment efficiency, which will also impact financial performance—following research by Sattar, Javeed, and Latief [16] that financial performance can be improved through audit quality.

V. CONCLUSIONS, IMPLICATIONS, AND LIMITATIONS

This study examines the factors that influence the financial performance of manufacturing companies in Indonesia using a sample of 112 companies during the years 2018 and 2020. These factors include company size, capital structure, institutional ownership, and audit quality. The study's findings offer empirical evidence that capital structure and audit quality positively affect the financial performance of Indonesian manufacturing enterprises. At the same time, company size and institutional ownership do not influence financial performance.

This study has theoretical implications that a company's financial performance can be influenced by several things, namely capital structure and audit quality. When the company's leverage level is high, it will tend to be careful in operating its finances. In addition, audit quality also influences financial performance through a reliable control mechanism for financial reports.

This research also has practical implications, showing no effect of institutional ownership on financial performance. In Indonesia, institutional ownership is relatively high, institutions, especially state-owned companies, own most companies. It needs to be considered a company policy on institutional ownership because not all institutions can become external controls in good company policies and management, especially financial performance. There is a government policy regarding reporting capital ownership on OJK Regulation No. 11/POJK.04/2017 [29]. However, these regulations are still general and do not specify whether individuals or institutions are in the ownership.

This research has limitations; that only discusses four independent variables (firm size, leverage, institutional ownership, and firm size). This study only uses a sample of manufacturing companies and three periods. It is hoped that future research will explore more and more deeply the factors that influence a company's financial performance. In addition, it can add research samples based on the type of industry and year of observation. Future research can further explore the characteristics of institutional ownership, that is, concentrated and non-concentrated institutional ownership [14], on its impact on financial performance.

REFERENCES


