Managerial Ability, Earnings Management and Fair Value Accounting: Does Debt Policy Matter?

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1. Introduction

The concept of fair value was first introduced by Australia, England, and their former colonies (Sukendar, 2012) and was followed by America, subsequently (Immanuela, 2014). The first implementation of this concept in plantation and livestock companies is to calculate biological assets. It does not represent the real economic value if it is valued at book value or historical cost (Sukendar, 2012). With the more dynamic transaction and developing global capital and money markets, the
historical cost concept is no longer suitable for business operations because it does not reflect market value (Sukendar, 2012). Fair value reflects the true market value as a substitute for historical cost. It is considered the most reliable and relevant for preparing a company's or business entity's financial statements (Sukendar, 2012). The International Accounting Standard Board (IASB) establishes fair value to measure assets and liabilities (Sukendar, 2012). In Germany, in the case of consolidated financial statements, assets and liabilities acquired at the time of a business combination must be revalued to fair value, and the remaining excess is allocated to goodwill (Hidayanti & Sunyoto, 2012). Goodwill is amortized over 20 years and is tested for impairment annually (Hidayanti & Sunyoto, 2012). Fair value is the price received when selling an asset or the price paid to transfer a liability in a transaction between market participants at the measurement date (Kieso et al., 2018).

As a member of the G20, Indonesia should follow all the consequences for adopting International Financial Reporting Standards (IFRS) (Immanuela, 2014). Indonesia adopted IFRS fully since early 2012, including changes in financial reporting from measurement to disclosure using historical cost to fair value (Immanuela, 2014). It should be measured using the price in the primary market for a particular asset or liability (Immanuela, 2014). If it is unavailable in the main market, the price or value must "favorable" to the company is used to measure fair value. It also applies to standardizing the rating hierarchy for Levels 1, 2, and 3 in Statement of Financial Reporting Standard or Pernyataan Standar Akuntansi Keuangan (PSAK) No. 68 concerning fair value measurement (Immanuela, 2014). Level 1 is the quoted price (unadjusted) in an active market for identical assets or liabilities the entity can access at the measurement date (Wahyuni, 2016). For example, quoted prices for equity securities traded on the Indonesia Stock Exchange (IDX) (Wahyuni, 2016). Level 2 is input other than the quoted price included in level 1, which can be observed directly or indirectly for assets or liabilities (Wahyuni, 2016). Fair value will make a difference in assessing the company's management if subjective research is carried out.

As has occurred in the last two years, COVID-19 has become a pandemic that has occurred in many
countries around the world, causing prices in the active market of assets and liabilities to experience significant price fluctuations so that companies find it difficult to apply fair value price of assets and liabilities (Ainiyah et al., 2021). For example, hospitals have received equipment assistance to handle the COVID-19 pandemic, such as personal protective equipment and clothes. Accountants from hospitals or management will find it difficult to apply the fair value prices of these tools because, at the time of receipt, the prices fluctuate due to the COVID-19 pandemic. An asset or liability price variation will make it difficult for the company management or appraisal to determine the price (Ainiyah et al., 2021). The management tends to make subjective rather than objective assessments, ultimately resulting in the wrong price determination (Ainiyah et al., 2021).

Fair value concept implementation leads the manager's subjectivity to influence the accounting numbers in the financial statements. On the one hand, applying fair value makes accounting numbers more relevant. On the other hand, managers can use discretionary accruals, which can result in biased information in the financial statements. Although fair value indicates a high level of relevance to financial statements, the subjectivity of the fair value determination is also high, causing the information in the financial statements to be not necessarily appropriate for use in decision-making by the investor as the shareholders. Thus, testing of fair value still needs to be investigated.

Fair value accounting testing is still rarely conducted. Several tests were carried out with managerial ability (Bradley & Sun, 2021) and accounting restatement (Lin et al., 2017). In previous studies, fair value testing was employed as an independent variable in testing earnings management (Šodan, 2015; Tutino & Pompili, 2018; Xu, 2019), debt conversion privilege (Wang & Zhang, 2017), debt maturity (Wang & Zhang, 2017), cash holding (Bick et al., 2018), audit fee (Alharasis et al., 2022), and value relevance (Adwan et al., 2020).

Based on the literature mapping in the previous studies, fair value testing is important as the main factor in a study. This study is an expansion of the research of Bradley & Sun (2021) by re-examining using data from Indonesia, a developing country that has adopted IFRS since 2012 (Ahalik, 2019; A. Firmansyah & Irawan, 2018). The role of managers lies not only in managerial ability, which can affect the company's operating performance but also in influencing the numbers in financial statements with certain policy choices by applicable financial accounting standards. Thus, this study also examines earnings management which is the effect of managers' accrual policies on fair value accounting, which is still rarely used in previous research both at the international level and by using company data in Indonesia. The managerial ability has an important role in an organization. According to Demerjian et al. (2011), competent managerial skills will better understand the company, competitors, markets, and industry trends. A capable manager is a manager who, in making decisions, can provide added value to the company and successfully designs its efficient business processes (Yulianda & Sebrina, 2017).

The proficient manager can estimate the specific accruals policies. The company's real economic performance can be reflected in earnings on financial statements without manager engineering (Yulianda & Sebrina, 2017). It is an efficient business process when the input is less than the output. As cost is smaller than sales, profit is the difference (Yulianda & Sebrina, 2017). Baik et al. (2011) found that managers with good abilities can produce more accurate management revenue estimations. Bradley & Sun (2021) found a positive association between managerial ability and fair value accounting. It indicates that firms with higher managerial abilities use more fair-value inputs. That study employs the US company data, while this association has not been examined yet using Indonesian data, whereas the implementation of fair value accounting has been carried out since 2012 (Firmansyah & Irawan, 2018). Thus, this association should be examined in the Indonesian context.
Related to managerial ability, decisions in the company made by managers play an important role in determining strategic and operational decisions within the company (Augier & Teece, 2009; Bertrand & Schoar, 2003). A manager is equipped with various domains of expertise and resource expertise, so these two dimensions can shape a manager's skills (Holcomb et al., 2009). The ability of managers to use company resources can be related to earnings management actions because managers have discretion in influencing the numbers presented in the financial statements (Scott, 2015; Vito et al., 2022). Earnings management is the action managers take to generate accounting profits that do not show the real situation through managerial policies related to accounting methods and procedures (Febryanti et al., 2017). The motivations that cause earnings management included in the testing on fair value accounting is a manager's motivation to obtain a higher bonus so that managers take advantage of accounting methods and procedures to increase the current year's profit.

Also, managerial compensation and debt covenants are caused by the risk of a company's debt or equity, thereby increasing the opportunity for managers to increase company profits. Managers will use accounting methods and procedures to reduce reported earnings to get around government regulations. Previous research rarely examines the effect of earnings management on fair value but mostly examines the effect of fair value on earnings management (Šodan, 2015; Tutino & Pompili, 2018; Xu, 2019). These studies test whether managers' decisions in applying fair value accounting are related to earnings management activities. Meanwhile, this study examines the ability of managers to perform earnings management related to fair value accounting policies. Regarding the manager's role in the company to employ all resources, managers make the decisions in company in determining the strategic and operational decisions (Vito et al., 2022), directing operations and allocating the company's resources (Vito et al., 2022). Thus, earnings management testing on fair value deserves to be investigated.

This study includes debt policy as moderating variable in testing managerial ability and earnings management on fair value accounting, which is still rarely used in previous research. Managers have a policy in determining the debt in the funding structure. Debt funding is considered easier than stocks, but companies must bear greater risks (Firmansyah et al., 2020). Managers prefer accounting methods that impact increasing profits to violate debt covenants. It is conducted to maintain its reputation among external parties (Arthawan & Wirasedana, 2018). Companies with high-level debt to equity will encourage managers to use accounting methods to increase earnings. Zuhair & Nurdiniah (2018) found that debt policy is positively associated with earnings management. Also, the manager's policy in choosing debt in the company's funding structure can increase the company's internal risk (Geno et al., 2022).

However, Demerjian et al. (2016) fair value accounting is not necessarily unfavorable for debt contracts. Based on agency theory, companies with high profitability should take advantage of debt to reduce the misuse of funds by managers who do not pay attention to the interests of shareholders (Hardiningsih & Oktaviani, 2012). Shareholders expect the use of debt to realize the desire of managers to improve the company, and shareholders can also enjoy the distribution of dividends. Obtaining assets requires funds, and one of the company's funding sources derives from debt. When the company has greater debt, managers, with their abilities, can carry out earnings management by setting a higher fair value.

This study also employs control variables, namely firm size and profitability. The firm size can be classified in various ways, including total assets, log size, stock market value, and others (Febryanti et al., 2017). Prastya & Jalil (2020) concluded that firm size positively affects the possibility of choosing the fair value method. The larger the company's size, the higher the political costs due to increased regulation.
from the government or increased tax regulations from the tax authorities (Prastya & Jalil, 2020). Also, Nugroho (2017) found that firm size positively affects the firm's fair value. Large companies tend to provide greater operating results and are more able to provide returns than small companies. Second, profitability is the level of performance ability to generate returns on company assets (Brigham & Houston, 2019). Ilhamsyah & Soekotjo (2017) found that profitability positively affects the company's fair value. High profits reflect good company prospects to attract investors to join (Ilhamsyah & Soekotjo, 2017).

This research is expected to expand the literature on financial accounting, especially fair value accounting, which is rarely used in previous research. Therefore, it is hoped that this research can be used as a reference in future studies exploring fair value accounting in Indonesia and countries that have adopted IFRS. In addition, the OJK (Indonesia Financial Services Authority) is expected to use this research in the regulation and supervision of financial services and capital markets, which are the object of its supervision. Moreover, for the Indonesian Accounting Association to improve accounting standards related to the concept of fair value.

2. Theoretical framework and hypotheses development

According to agency theory, two problems arise from the relationship between managers and principals: moral hazard and adverse selection (Scott, 2015). A moral hazard is a problem due to the manager's negligence. At the same time, adverse selection is a problem due to the manager not being open with the principal, so the principal does not know the business decisions taken by the manager (Scott, 2015). Such as the manager's policy in choosing fair value accounting because it increases the market response's sensitivity to financial information (Febryanti et al., 2017). Thus, inputting the fair value of an asset requires a manager with the ability to estimate a fair value that reflects the actual conditions.

Managers with higher abilities know more about the company's business to master the industry, product, and environmental trends, leading to better judgments and decisions in accounting practice (Bradley & Sun, 2021). This information asymmetry allows managers to make policies by prioritizing personal interests. In using fair value accounting, managers must make estimates and judgments about the quality of the accounting numbers for these assets or liabilities (Bradley & Sun, 2021).

Fair value accounting levels 2 and 3 are considered easy to manipulate by opportunistic managers who are too optimistic, making it difficult for auditors to verify them (Ramadhani & Sebrina, 2020). Bradley & Sun (2021) found a positive association between managerial ability and fair value accounting. Managers with high abilities are more likely to manipulate the price of an asset and a liability. In addition, managers who can estimate fair value tend to be more accurate and reflect the real situation.

H1: Managerial ability is positively associated with fair value accounting

Agency theory explains asymmetric information between principals and managers as the cause of agency problems (Jensen & Meckling, 1976). It results in managers having complete access to company activities compared to principals, leading to earnings management practices (Bradley & Sun, 2021). Earnings management is related to a manager's decision to choose a fair value accounting that does not reflect the real situation (Febryanti et al., 2017). The motivation of managers to do earnings management is to maximize personal benefits to obtain bonuses so that they take advantage of accounting methods and procedures to increase company profits for the current year (Febryanti et al., 2017).

Šodan (2015), Tutino & Pompili (2018) and Xu (2019) found that applying fair value positively affects earnings management. Measuring the fair
value of financial assets can use the manager's assessment as an appraisal. Level 2 and 3 inputs use subjective appraisal estimates based on the fair value input hierarchy. This condition is a gap for managers to take earnings management actions because it may beautify company earnings or company information for managers' gain. A high level of subjectivity makes financial statements unreliable and will impact the results of financial statement users' decisions.

H₂: Earnings management is positively associated with fair value accounting

Based on agency theory, agency conflicts arise due to differences in interests between managers and principals (Harianto, 2020). Agency theory increases the ability of managers and principals to evaluate the business environment to make decisions (Harianto, 2020). One of them is related to decisions in the company's debt policy. The company's funding derives from external sources such as bank loans, leasing, and others. Debt policy measures the company's ability to manage its funds effectively and efficiently to maximize company profits (Harianto, 2020).

Managers have the authority to manage the company, so managers should make decisions related to the company's funding structure, either through debt or by utilizing company equity (Cahyani & Suryono, 2020). The manager chooses to use debt because it takes advantage of tax-saving benefits. However, this decision can be detrimental to shareholders because the distribution of dividends is reduced.

Debt policy is related to fair value when companies buy assets from funds sourced from debt (Harianto, 2020). Managerial ability influences decision-making in determining the company's funding structure and estimating fair value if that value is not available in the market (Ng & Daromes, 2016). The principle of IFRS is that fair value is related to the valuation. If there is no active market value, it must be self-assessed or using the services of an appraiser. If the company has a capital structure that uses more debt, the company has the potential for bankruptcy in the future. Managers will work more optimally in conditions of such pressure.

H₃: Debt policy strengthens the positive effect of managerial ability on fair value accounting.

In the agency theory, the principal gives responsibility and authority to management to manage the company and make business decisions (Cahyani & Suryono, 2020). Managers determine the amount of company funding from debt to finance company operations (Cahyani & Suryono, 2020). Based on the IFRS rules, financial liabilities are measured using fair value through profit or loss, payables and loans. In determining the fair value of debt, if the fair value is not available in the market, it is based on a relevant and accurate appraisal or assessment by a manager. In determining fair value, managers can take earnings management actions by taking advantage of gaps in the use of the basic input of fair value to increase company profits. However, earnings management is not always related to efforts to manipulate data or information. Managers may choose accounting methods to manage their benefits (Cahyani & Suryono, 2020).

Zuhair & Nurdiniah (2018) found that debt policy is positively associated with earnings management. Managers tend to commit violations by earnings management actions and tend to be unmotivated to reduce debt, and even contract violations are eliminated (Arthawan & Wirasedana, 2018). Also, Pamungkas et al. (2022) found that managers will decide on a fair value policy for companies with debts with faster maturities. Lenders or creditors also expect the credibility and reliability of financial reports to determine the worthiness of borrowing. Thus, managers will make financial reports according to the actual situation without manipulating existing information or data. However, the manager's policy in choosing debt in the company's funding structure can increase the company's internal risk (Geno et al., 2022).

H₄: Debt policy strengthens the positive effect of earnings management on fair value accounting.
3. Research method

This study employs a quantitative method approach. The data used in this study is secondary data in the form of annual financial reports of companies in the infrastructure, utilities, and transportation sectors listed on the Indonesia Stock Exchange (IDX) from 2016 to 2020. The stocks of the infrastructure, utilities, and transportation sectors companies always have high market performance (Prima, 2019; Rahayu, 2019). In addition, in the declining economic conditions due to the COVID-19 pandemic, stocks in this sector are still performing well (Maulana, 2020). The transportation sector reflects economic growth directly because transportation has an important and strategic role, both macro and micro (Kementerian Perhubungan RI, 2014). Thus, managers in this sector are required to have the ability to use their resources optimally, including their decisions to decide fair value on their financial assets. The summary of the sample used in this study based on purposive sampling is as follows:

Table 1. Research sample

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure, utility and transportation sector companies listed on the IDX as of February 2022</td>
<td>88</td>
</tr>
<tr>
<td>Companies listed on the IDX after January 1, 2016</td>
<td>(38)</td>
</tr>
<tr>
<td>Incomplete data during the observation period</td>
<td>(12)</td>
</tr>
<tr>
<td>Companies that use reporting currencies other than IDR</td>
<td>(18)</td>
</tr>
<tr>
<td>Number of companies that can be used for this research</td>
<td>20</td>
</tr>
<tr>
<td>Number of years of research (2016-2020)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total observations</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: data processed

This study employs the dependent variable, namely fair value accounting; the independent variable is managerial ability and earnings management, and the moderating variable is debt policy. The control variable is firm size and profitability. The fair value accounting proxy follows Pamungkas et al. (2022) as follows:

\[
FV = \frac{\text{Total Financial Assets Measured at Fair Value}}{\text{Total Assets}}
\]

Based on Bradley & Sun (2021), Nurfauzi & Firmansyah (2018), and Vito et al. (2022), the managerial ability is measured using Data Envelopment Analysis (DEA). DEA is generally used in operations management and decision science as a decision-making technique that adjusts output measures with inputs to establish efficiency limits (Bradley & Sun, 2021). A company map at the frontier is considered the most efficient when the score is from 1 to 0. In contrast, a company map is considered inefficient or suboptimal when the score is between 1 and 0 (Bradley & Sun, 2021). The outputs and inputs used are as follows:

Output: sales  
Input: COGS = Cost of goods sold  
SGNA = Selling, general and administrative expenses  
PPE = Fixed assets  
INTAN = Intangible asset
The DEA equation is as follows:

$$\max \theta = \frac{\text{SALES}}{v_1 \text{COGS} + v_2 \text{SGNA} + v_3 \text{PPE} + v_4 \text{INTAN}}$$

After the DEA score is obtained, which shows the efficiency of the company, the next step is to find the residual value from the Tobit regression using the DEA score and the company's distinguishing factors with the following equation model:

$$\text{FE} = \beta_0 + \beta_1 \text{SIZEit} + \beta_2 \text{MSit} + \beta_3 \text{FCFit} + \beta_4 \text{AGEit} + \beta_5 \text{BUSEGit} + \beta_6 \text{FCIt} + \sum_{t=1}^{T} \varphi \text{YEARt} + \epsilon$$

Where:

- $\text{FE}$: DEA efficiency score
- $\text{SIZE}$: Natural logarithm of total assets
- $\text{MS}$: Revenue company i divided industry revenue per year
- $\text{FCF}$: Dummy variable, score 1 if free cash flow is more than 0, and score 0 if free cash flow is 0 or less.
- $\text{AGE}$: Natural logarithm of the sum of year listing in BEI at the end of year t
- $\text{BUSEG}$: Business segment in the company
- $\varphi$ and $\epsilon$: Managerial ability scores

Earnings management is measured by calculating discretionary accruals using Kothari et al. (2005) model, which also is employed by Falbo & Firmansyah (2021), Pamungkas et al. (2021), and Wijoyo & Firmansyah (2021) with the following equation:

$$\left(\frac{TACC_t}{TA_{t-1}}\right) = \beta_1 \left(\frac{1}{TA_{t-1}}\right) + \beta_2 \left(\frac{\Delta REV_t}{TA_{t-1}}\right) + \beta_3 \left(\frac{PPE_t}{TA_{t-1}}\right) + \beta_3 (\text{ROA}_t) + \epsilon_t$$

Where:

- $\text{TACC}_t$: Net income – operating cash flow of company i in year t
- $\text{TA}_{t-1}$: Total assets of the company i in the previous year
- $\Delta \text{REV}_t$: Change in earnings of the company i in years t and t-1
- $\text{PPE}_t$: Net value of plant, property, and equipment of company i in year t
- $\text{ROA}_t$: Return on assets of the company i in year t.

Discretionary accruals are the residuals of the above equation obtained using annual data. This study does not distinguish the pattern of earnings management that decreases earnings (residual is negative) and increases profits (residual is positive). Thus, the residual value from the above equation is absolute to produce the earnings management value of each company (Pamungkas et al., 2021; Ramadhan & Firmansyah, 2022).

This study employs debt equity ratio (DER) as a debt policy proxy following Febryanti et al. (2017), Kimsen et al. (2019) and Winda & Nariman (2021).

$$\text{DER} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Firm size in this study employs the natural logarithm of total assets as Imhof & Seavey (2014), Kusnadi (2015), and Wijoyo & Firmansyah (2021).

$$\text{Firm Size} (\text{SIZE}) = \ln (\text{Total Assets})$$

Profitability in this study employs return on assets as Imhof & Seavey (2014), Kusnadi (2015), and Loureiro & Silva (2021).

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$
Hypothesis testing in this study used multiple linear regression analysis with panel data for choosing the best model, using the Chow test, Hausman test, and the Lagrange-Multiplier test. Model 1 is used to test hypotheses 1 and 2, while model 2 is used to test hypotheses 3 and 4.

\[ FV_{it} = \beta_0 + \beta_1 MA_{it} + \beta_2 DAC_{it} + \beta_3 ROA_{it} + \varepsilon_{it} \] .......................... (1)

\[ FV_{it} = \beta_0 + \beta_1 MA_{it} + \beta_2 DAC_{it} + \beta_3 DER_{it} + \beta_4 (MA_{it} \times DER_{it}) + \beta_5 (DAC_{it} \times DER_{it}) + \beta_6 SIZE_{it} + \beta_7 ROA_{it} + \varepsilon_{it} \] .......................... (2)

Where:
- \( FV_{it} \): Fair value of company \( i \) in year \( t \)
- \( MA_{it} \): The managerial ability of company \( i \) in year \( t \)
- \( DAC_{it} \): Earnings management of company \( i \) in year \( t \)
- \( DER_{it} \): Debt per equity owned by company \( i \) in year \( t \)
- \( SIZE_{it} \): Size of the company \( i \) in year \( t \)
- \( ROA_{it} \): Profitability of company \( i \) in year \( t \)

4. Results and discussion

Table 2 shows a summary of descriptive statistics of the variables used in this study.

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FV</td>
<td>0.1773</td>
<td>0.1448</td>
<td>0.0015</td>
<td>0.5563</td>
<td>0.1381</td>
<td>100</td>
</tr>
<tr>
<td>MA</td>
<td>0.2969</td>
<td>0.2424</td>
<td>0.0044</td>
<td>1.1617</td>
<td>0.2318</td>
<td>100</td>
</tr>
<tr>
<td>DAC</td>
<td>0.0556</td>
<td>0.0448</td>
<td>0.0012</td>
<td>0.2142</td>
<td>0.0472</td>
<td>100</td>
</tr>
<tr>
<td>DER</td>
<td>1.3163</td>
<td>0.9887</td>
<td>0.0593</td>
<td>7.7315</td>
<td>1.2361</td>
<td>100</td>
</tr>
<tr>
<td>SIZE</td>
<td>29.2209</td>
<td>29.2918</td>
<td>25.7155</td>
<td>33.1402</td>
<td>2.0701</td>
<td>100</td>
</tr>
<tr>
<td>ROA</td>
<td>0.0222</td>
<td>0.0237</td>
<td>-0.3460</td>
<td>0.1799</td>
<td>0.0781</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: processed

Based on the results of the descriptive analysis in Table 2, the FV variable has a mean of 0.1773 with a mean value of 0.1448. The minimum value for the FV variable is 0.0015 from ISAT in 2016. The highest value is 0.5563 from CASS in 2019. The standard deviation value is 0.1381 (smaller than the mean), meaning that the fair value has a low level of data variation. The mean owned by the MA variable is 0.2969, with a median of 0.2424. However, the standard deviation of 0.2318 (smaller than the average) means that managerial abilities are not too varied.

This research data's minimum and maximum values are 0.004 from BIRD in 2017 and 1.1618 from TOWR in 2016. DAC has a mean of 0.0556 with a median value of 0.0448. The standard deviation of the DAC variable is 0.0472, and the maximum DAC value is at CENT in 2017 with a value of 0.2142; the minimum value is at ISAT in 2018 with a value of 0.0012. The minimum value of the DER variable is 0.0594 from NELY in 2016, and the maximum value is 7.7316 from EXCL in 2016. The mean of the DER variable is 1.3163, and the standard deviation is 1.2362; this means that there is a deviation in the value of debt policy toward the average value is 1.2362. SIZE has an average of 29.2209 with a median value of 29.2918. The maximum value of the company size owned by TLKM in 2020 was 33,1402, while the minimum value for KOPI in 2018 was 25,7155. The distribution of the variable size data is 2.0701 (smaller than the mean), meaning that the level of variation of the firm size data is low. ROA has a mean of 0.0222, which is smaller than the median of 0.0237, so the data is left-skewed. Overall, the performance of companies in the infrastructure,
utilities, and transportation sectors is low because they have a negative average value. CASS owned the maximum ROA value of 0.1799 in 2016, KOPI owned the minimum ROA variable of -0.3460 in 2018, and the standard deviation value was 0.0781. From the Chow test, Hausman test and Lagrange multiplier test results, the best modal used for both model 1 and model 2 is fixed effect model. The summary of the results of hypothesis testing is in Table 3.

Table 3. Summary of hypothesis test results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.2615</td>
<td>1.1578</td>
<td>0.1253</td>
<td>0.0939</td>
<td>0.1983</td>
</tr>
<tr>
<td>MA</td>
<td>0.0138</td>
<td>1.3096</td>
<td>0.0972 *</td>
<td>-0.0425</td>
<td>-1.2252</td>
</tr>
<tr>
<td>DAC</td>
<td>0.0165</td>
<td>0.4593</td>
<td>0.3237</td>
<td>0.0543</td>
<td>0.4796</td>
</tr>
<tr>
<td>DER</td>
<td></td>
<td>-0.0317</td>
<td>-2.0812</td>
<td>0.0205 **</td>
<td></td>
</tr>
<tr>
<td>MA*DER</td>
<td></td>
<td>0.0407</td>
<td>2.0061</td>
<td>0.0243 **</td>
<td></td>
</tr>
<tr>
<td>DAC*DER</td>
<td></td>
<td>0.0220</td>
<td>0.2802</td>
<td>0.3901</td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.0029</td>
<td>-0.3705</td>
<td>0.3560</td>
<td>0.0041</td>
<td>0.2467</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.2233</td>
<td>-4.7792</td>
<td>0.0000 ***</td>
<td>-0.1616</td>
<td>-1.8331</td>
</tr>
<tr>
<td>R2</td>
<td>0.9692</td>
<td></td>
<td></td>
<td>0.9557</td>
<td></td>
</tr>
<tr>
<td>Adj. R2</td>
<td>0.9599</td>
<td></td>
<td></td>
<td>0.9399</td>
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<tr>
<td>F-stat.</td>
<td>104.0283</td>
<td></td>
<td></td>
<td>60.5836</td>
<td></td>
</tr>
<tr>
<td>Prob. (F-stat.)</td>
<td>0.0000</td>
<td></td>
<td></td>
<td>0.0000</td>
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</table>

Information:

***) affects the significance level of 1% or 0.01
**) affects the significance level of 5% or 0.05
*) affects the significance level of 10% or 0.1

The association between managerial ability and fair value accounting

The result of the first hypothesis test suggests that managerial ability is positively associated with fair value accounting. This study's results align with Bradley & Sun (2021). Managerial ability converts company resources into revenue (Demerjian et al., 2012). Managerial ability is also useful for making predictions or assumptions about fair value inputs, especially level 3 inputs, because they are not observable and have low measurement certainty. In contrast to the level 1 and level 2 fair value inputs, they are observable and have certainty in their measurement. Fair value accounting measures assets and liabilities, including financial assets. Fair value is considered more relevant and reflects current value than historical value. Thus, good managerial ability is related to the relevance of fair value accounting information at a high level of uncertainty. Even with a higher level of subjectivity, the application of fair value by managers shows the manager's ability in uncertain situations facing the company, and managers attempt to present relevant financial information to users of financial statements (Kumar & Zbib, 2022).

The descriptive statistical analysis results suggest that the average managerial ability (MA) variable is 0.2969. On average, companies in the infrastructure, utility and transportation sectors in Indonesia have good management skills. Increased managerial ability can improve the performance of corporate social responsibility (Bradley & Sun, 2021). According to agency theory, managers have the authority to manage the company because managers master more concerning company information, including in making company financial statements. Managers with higher abilities will use more relevant and reliable fair-value inputs in making financial statements. In addition, managers better understand the process of estimating level 3
fair value and are better able to estimate these inputs (Bradley & Sun, 2021). Higher-ability managers better understand fair value accounting measurement procedures based on applicable guidelines. Companies in the infrastructure, utilities and transportation sectors can improve their fair value measurements to make their financial statements more relevant which is more beneficial for users of financial statements in making decisions.

The association between earnings management and fair value accounting

The result of the second hypothesis test of this study indicates that earnings management is not associated with fair value accounting. Earnings management is the intervention of managers in determining the company's profits for their interests (Sari & Utomo, 2019). The manager's flexibility in determining the fair value measurement method is a gap in taking earnings management actions. The manager can assess a fair value if there is no fair value in the market or hierarchy 1. According to agency theory, there is a conflict of interest between the manager and the principal regarding the motivation for their welfare. The principal intends the company's profitability always to increase while the management is motivated to fulfill their economic and psychological needs (Ng & Daromes, 2016). The result of this test indicates that the managerial ability to perform earnings management does not mean that they can determine fair value accounting in financial reporting. It is different from previous tests, which found that managers' fair value accounting decisions are related to earnings management activities (Šodan, 2015; Tutino & Pompili, 2018; Xu, 2019).

The descriptive statistical analysis results in Table 2 show that the average earnings management variable (DAC) is 0.0556. On average, infrastructure, utility, and transportation companies in Indonesia have a low level of management in the range of 5%. Then, based on the results of hypothesis testing, management does not affect fair value accounting. It indicates that fair value is not the main alternative that motivates managers to take earnings management actions. The fair value policy has risks associated with the risk of the relevance of accounting information.

Meanwhile, earnings management is not a choice made by managers in making these decisions. This study suspects that earnings management is not related to fair value accounting decisions because of the efforts of the standards-setting body in protecting users of financial statements through IFRS-based financial accounting standards, which regulate the principle of fair value accounting measurement. IFRS-based financial accounting standards explain that the most reliable evidence of fair value is quoted prices in an active market. If quoted prices are available, it is not appropriate to measure the fair value of accounting level 3 based on the manager's judgment. Thus, fair value accounting in infrastructure, utility, and transportation sector companies is not the main cause of earnings management.

The moderating role of debt policy in the association between managerial ability and fair value accounting

The result of testing the third hypothesis of this study suggests that debt policy strengthens the positive effect of managerial ability on fair value accounting. Companies' debt policies can strengthen the credibility and reliability of financial statements whose measurement is dominated by fair value. Financial statements are used to gain confidence in obtaining external funding sources to make decisions. The decision is to determine whether the company is eligible for a loan. Research related to testing the effect of debt policy on moderating the relationship between ability and fair value has never existed before.

The descriptive statistical analysis results show that the average debt policy variable (DER) is 1.3163 or 131.63%. Indonesia's infrastructure, utility, and transportation companies are included in the warning category because the average DER value is above 100%. However, it is necessary first to
confirm where the debt comes from through the financial statements. If it comes from bank debt or bonds, the company is included in the warning category, but if the debt comes from trade payables, the company is in good condition. Corporate debt can come from external sources such as bank loans, leasing, bond sales and the like (Harianto, 2020).

This study confirms the agency theory, which explains the separation of functions between managers and principals in a company. Agency relationships arise when the principal employs others to provide services and authorizes employees to manage and make company business decisions (Wongso, 2012). One of these decisions is related to the company's operational funding source debt policy and the fair value accounting method selection. With a debt policy, managers will continue improving their decision-making abilities because capable managers maintain their reputations (Vito et al., 2022).

Managers in the infrastructure, utilities and transportation sectors will be more optimal in making decisions based on more relevant information in financial statements when the company's capital structure is larger by using debt. Managers attempt to make the best decisions when the company has potential financial difficulties or future bankruptcy—using debt in the company's capital structure results in creditors having the right to monitor managers' performance. The application of fair value in financial reporting, which is supported by good managerial ability, makes the financial statement figures more relevant. Therefore, creditors increasingly believe in the performance of managers in financial reporting.

The moderating role of debt policy in the association between earnings management and fair value accounting

The hypothesis testing result indicates that debt policy does not have a moderating role in weakening the positive association between earnings management and fair value accounting. In general, debt policies are prone to creating conflicts of interest. Managers are motivated to manage earnings and minimize debt covenant violations to achieve performance targets and bonus compensation so that earnings management actions will be avoided (Cahyani & Suryono, 2020). However, managers should also consider the nature and costs of the firm's financing decisions. Suppose the company uses debt as a source of funding for its operations and cannot pay it off. In that case, the company's liquidity will be threatened, so that managers will be threatened. Usually, managers use accounting methods to increase company revenues or profits (Cahyani & Suryono, 2020).

When companies use debt in the company's capital structure, managers try to present better financial statement information to increase creditor confidence. On the other hand, using debt can increase the company's risk (Geno et al., 2022). These conditions do not result in managers who can perform earnings management making decisions using fair value accounting. Managers still consider that using fair value accounting in financial reporting is a strategic decision that can affect users' confidence in financial statements, namely investors and creditors. Managers realize that earnings management actions can increase company risk (Chang et al., 2015; Firmansyah & Suhanda, 2021; Zhou et al., 2016) so that when companies use debt in the company's funding structure, managers do not necessarily choose policies in implementing fair value accounting.

5. Conclusions

This study concludes that higher-ability managers can estimate accurately and reliably in fair value accounting. Meanwhile, earnings management carried out by managers is not related to policies in applying fair value accounting. Furthermore, debt policy has a role in increasing the ability of managers to make policies for applying fair value accounting. However, the debt policy does not change the manager's policy in conducting earnings management which is not related to the policy of applying fair value accounting. This study has
several limitations; some companies do not present data on financial assets measured of financial sector. Future research can use a sample of financial sector companies suspected of carrying out a lot of fair value measurements. Future research can take longer to obtain more comprehensive results and explanations. The results of this study indicate that the Indonesian Financial Services Authority (OJK) should supervise managers' policies that result in asymmetric information even though it is permitted in accounting standards. OJK carries out this policy to protect the interests of investors.

References


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transportasi paling unggul, ini rekomendasi selanjutnya.


