The Effect of Income and Earnings Management on Firm Value: Empirical Evidence from Indonesia

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Abstract

This study aims to find empirical evidence of the effect of increasing income on the potential transfer of wealth from manufacturing companies that go public to stakeholders. Earnings management with an accrual approach with the Modified Jones model is an identifier of the availability of earnings management practices, without paying attention to both positive and negative symbols. The interpretation of the results of the discretionary accrual measurement between positive and negative symbols has different meanings. Positive discretionary accruals indicate that management uses income-increasing techniques. Meanwhile, negative discretionary accruals indicate that management uses income-reducing techniques. Income-increasing techniques tend to be viewed as opportunistic behavior of managers. This study used 111 data from manufacturing companies listed on the IDX (Indonesia Stock Exchange) from 2015–2018. Path analysis is used to test the hypothesis. The results of this study are in line with the point of view of management strategy, increasing income is used as a way to transfer potential welfare from the company to stakeholders. Social welfare (tax) and managerial remuneration are proven to be mediators in increasing the effect of increasing income on future company value. Further research can complete the potential welfare transfer against the shareholders related to income-increasing strategy.

Keywords: Earnings Management, Managerial Remuneration, Tax, Firm Value

JEL Classification Code: G32, M12, M40, M41

1. Introduction

The company’s performance is measured through the capability of resulting earnings. Hence, a firm will put an effort to increase performance by obtaining a high amount of earnings. A high amount of earnings obtained by the firm is more attractive for investors than a firm with low earnings.

Earnings, presented in a financial statement, can influence the firm’s decision-making (Al-Absy et al., 2020; Mohammadi & Nezhad, 2015). On the other side, investors and analysts use these numbers to determine a company’s profitability and to evaluate a company’s investment potential (Ernayani & Robiyanto, 2016; Purwanti & Natser, 2016). Therefore, the management will try to report a high amount of earnings since they want to show that the firm is in a good state.

Dealing with fierce competition, a firm takes several efforts to earn a high amount of earnings for increasing the firm value. Based on the facts, the use of a financial statement only focuses on earnings information regardless of how the earnings are obtained. The high amount of earnings illustrates the company’s effort in increasing the firm value. To increase or show a high amount of earnings companies perform earnings management. Earnings management is a practice followed by the management of a company to influence the earnings reported in financial statements. Companies use earnings management to smooth out fluctuations in earnings and present more consistent profits each month, quarter, or year. Large fluctuations in income and expenses may be a normal part of a company’s operations, but the changes...
may alarm investors who prefer to see stability and growth (Suryani & Putri, 2019).

The accounting literature defines two perceptions of earnings management, namely opportunistic perspective and information perspective (Holthausen, 1990). According to the opportunistic perspective, the manager manages earnings for their own private benefits rather than for the benefit of the stockholders. There is a public perception that earnings management is utilized opportunistically by firm managers for their own private gain rather than for the benefit of the stockholders. This misalignment of managers’ and shareholders’ incentives could induce managers to use the flexibility provided by the accounting standards to manage income opportunistically, thereby creating distortions in the reported earnings. The motivation of opportunistic management tends to perform aggressive accounting policy by reporting higher numbers from the actual amount of earnings. Meanwhile, the information perspective is a means for managers to reveal to investors their private expectations about the firm’s future cash flows. The information perspective relates to the discretionary manipulation of earnings by managers with the intention of signaling expectations of future company performance to shareholders (Mulyasari et al., 2016; Suryani & Putri, 2019).

Earnings management can occur when a company feels pressured to manipulate earnings to match a pre-determined target (Hermiyetti & Manik, 2010). According to Tong and Junarsin (2013) and Handriani and Robiyanto (2019), the concept of earnings management that has been formulated using the Agency Theory as an approach explains that earnings management practice is influenced by the conflict of interest between the management (agent) and the shareholders (principal) since each of them wants to achieve a certain level of welfare. An earnings management strategy uses accounting methods to present an excessively positive view of a company’s financial positions, inflating earnings. Earnings management is used by companies to flatten out earnings variations and present profits that are consistent each quarter or year.

According to Al-Najjar and Riahi-Belkaoui (2001), there are two purposes of the company’s management in earnings management practice. The first is to engage in earnings management is to make the stream of earnings seem more predictable and less volatile. The share price of a company usually increases or decreases once the announcement is made and is determined by whether the company meets or fails to meet earnings forecasts. The management tries to influence accounting practices to meet the earnings estimates and hold share prices up. External expectations come into play when the company has already made projections as to what their profits will be and investors now expect that exact amount of profits or more. Management may feel the need to shift revenue from one accounting period to another to meet the projected goal. Earnings management, quite simply, takes advantage of the different ways that accounting policies and procedures can be applied to financial reporting.

The study on earnings management using the accrual approach generally uses the measurement with the Modified Jones model. Those studies used the result of discretionary accrual as an identifier for the availability of earnings management without paying attention to both positive and negative symbols. In reality, in the interpretation of discretionary accrual measurement, the positive and negative symbols have different meanings. Positive discretionary accrual indicates that the management uses an income-increasing technique, while negative discretionary accruals show that the management uses an income-decreasing technique. Positive and negative symbols in discretionary accrual have a different impact on stakeholders, as shown in the hypotheses of Positive Accounting Theory (1) bonus plan hypothesis, (2) debt covenant hypothesis, and (3) political cost hypothesis (Watts & Zimmerman, 1986). These were not considered in previous studies. Earnings management was considered management opportunistic behavior, with only positive discretionary accrual; however, it was not supported by the company’s data.

In this study, testing the influence of positive discretionary accrual on stakeholders was done. A positive discretionary accrual shows that the manager performs income-increasing. It is about whether this action is a form of the management opportunistic behavior or a form of the management strategy to distribute welfare to all stakeholders. When the manager performs income-increasing, the manager will receive remuneration, also, shareholders have a possibility to get dividends, and the government will receive a higher tax. From this premise, it can be defined that it is not only the manager who will enjoy the result of income-increasing but also the direct impact of income-increasing will be seen in the tax expense in the current period since it is calculated based on the total earnings and remuneration of the management. Hence, this study aimed at finding out the empirical evidence for the influence of income-increasing on the potential transfer of wealth from manufacturing companies that are listed on the IDX from 2015–2018 that go public to stakeholders.

2. Literature Review

2.1. The Influence of Income-Increasing on Firm Value

The financial statement contains important information to predict future earnings. Financial statements are important to investors because they can provide enormous information about a company’s revenue, expenses, profitability, debt load, and the ability to meet its short-term and long-term financial
obligations. There are three major financial statements. This information will cause a change in the current stock price and as a result, there is a change in the investors’ expectation against the firm value (Salehi & Manesh, 2011). The strategic impact of earnings that have been reported will influence the investors’ assessment of the value of the stock market (Chaney et al., 2011). The assumption is that management performs earnings management to influence the output of the accounting system to provide better signal and performance in the future. Investors, and potential investors, like to see continual upward income growth. It looks really positive and looks as if the company is doing well in the charts found in annual reports. Hence, income smoothing is the second external factor potentially contributing to earnings management. The manager uses earnings management as an instrument to convey a positive signal to investors about future performance through current earnings reporting (Tucker & Zarowin, 2006). The positive earnings quality eventually influences the companies’ performance (Saleh et al., 2020).

According to Stolowy and Breton (2004), there are a lot of players (shareholders (dividend), people (tax), and the manager (remuneration)) in the account’s manipulation game. They identified, on the one side, the potential gains of each group in manipulating accounts and the potential loss for different stakeholder groups because of accounts manipulation, on the other side. Earnings management is the use of accounting techniques to produce financial statements that present an overly positive view of a company’s business activities and financial position. Many accounting rules and principles require that a company’s management make judgments in following these principles. Earnings management takes advantage of how accounting rules are applied and creates financial statements that inflate or smooth earnings (Stulz 2015, 2013). A good-governance company will stimulate earnings management in an efficient direction and positively influence firm value (Gill et al., 2013; Lin, 2011). The accrual approach uses management discretion, with increasing income. This discretion is expected to lead to managerial efficiency. Managerial efficiency has a positive effect on company performance (Phornlapratrachakorn & Na-Kalasindhu, 2020). Earnings management is efficiency, where it is done to increase the value of the company and one of them is by increasing persistence earnings, the profitability of the company in the future, or the quality of profit (Gunny, 2010), the increase in stock price (Siregar & Utama, 2008). Siregar and Utama (2008) showed that accrual-based earnings management in Indonesia had a positive impact on future performance. Earnings management in Indonesia tends to be more efficient than the opportunistic type. This finding is supported by a study by Suprianto and Setiawan (2018) and Susanto and Christiawan (2016), who stated that earnings management positively influences the company’s performance in the future in Indonesia. Wardani and Hermuningsih (2013) found empirical evidence from their study conducted at Malaysia’s Stock Exchange, showing that accrual-based earnings management positively influences firm value.

H1: Increasing earnings increases firm value in the future.

2.2. Potential Wealth Transfer on the Increase in Firm Value

2.2.1. The Mediation of Social Welfare in the Impact of Income-increasing on Firm Value

Tax is the biggest funding source for Indonesia. The higher the amount of tax received, the bigger the funding source for state development. The self-assessment system followed by Indonesia provides authority to the taxpayer to calculate the amount of payable tax according to the established regulation (Resmi, 2012). In the context of agency, the taxpayer as an agent is given authority to calculate and report his/her tax liability by the government (principal). The amount of tax that should be paid is strongly determined by the total Earnings before Interest and Tax (EBIT). In the income-increasing case, the higher the reported total earnings, the higher the amount of tax should be paid; it indicates that the amount of tax received by the government is getting higher (Adiyansih et al., 2016; Kurniawan, 2019; Puspita et al., 2020). The higher the amount of tax received by the government, the higher the availability of the development fund and the bigger the opportunity to increase people’s welfare.

The compliance of a taxpayer with his/her tax payment obligation shows the compliance of an agency in fulfilling its obligation towards the principal. As a reward for the compliance of an agency, the principal provides a reward to the issuer who pays the highest amount of tax. This principal’s recognition will create a conducive situation to stimulate the positive response of the market influencing the increase in firm value in the future.

H2a: Increasing earnings increases social welfare.
H2b: social welfare increases firm value in the future.
H2: social welfare mediates the impact of income-increasing on firm value.

2.2.2. The Mediation of Managerial Remuneration in the Influence of Income-increasing on Firm Value

Employee remuneration refers to the reward or compensation given to the employees for their work performances. Remuneration provides basic attraction to
an employee to perform the job efficiently and effectively. Remuneration leads to employee motivation. The reward can be in the form of salary, bonus, stock option, restricted share, pension fund, and other benefits (Neokleous, 2015). Remuneration can be a link connecting between the agent and the principal as well as increasing the conflict between those two parties (Haron & Akhtaruddin, 2013; Siti et al., 2020). Therefore, a well-structured remuneration system is needed to create the suitability of purposes between the agent and principal (Scott et al., 2006). Remuneration as a part of the mechanism of the company’s governance is considered to solve the agent’s poor performance. The given remuneration is expected to motivate and increase the agent’s performance that will increase the company’s performance (Mildred, 2012). A high remuneration motivates the agent’s performance to be better and it makes the company’s performance better (Ruparelia & Njuguna, 2016). The better company’s performance motivates the increase in firm value. High remuneration can motivate the directors in performing their duties and job on behalf of shareholders. (Mohd Razali et al., 2018).

H3a: Income-increasing increases the management remuneration.

H3b: The management remuneration increases the firm value in the future.

H3: The management remuneration mediates the impact of income-increasing on the firm value.

3. Methodology

3.1. Population and Sample

The population of the study is manufacturing companies listed in Indonesia’s Stock Exchange within 2015–2018. Sampling was done using the Purposive Sampling technique with the following criteria: (1) The company is listed consecutively within the period of the observation, and (2) The company is indicated to perform earnings management through income-increasing. Based on the criteria, it obtained 111 samples.

3.2. Operational Definition

3.2.1. Earnings Management

Earnings management was measured through the Modified Jones model (Dechow et al., 1995). The application of accrual-based accounting systems will affect the allocation of income and expenditure, thus providing opportunities for the management to manage earnings through its accounting policies (Healy & Wahlen, 1999). In this study, the earnings management used a positive discretionary accrual (PDA).

It means that the manager performs earnings management through income-increasing. The formula applied for calculating the Modified Jones Model is as follows:

\[
PDA_{it} = DAC_{it} > 0
\]

\[
DAC_{it} = TAC_{it} - NDA_{it}
\]

\[
TAC_{it} = NI_{it} - CFO_{it}
\]

\[
NDA_{it} = \beta_1(1/TA_{it-1}) + \beta_2((\Delta REV_{it} - \Delta REC_{it})/TA_{it-1}) + \beta_3(PPE_{it}/TA_{it-1}) + \epsilon
\]

PDA: positive discretionary accrual \( t \)
CFO: cash flow operating \( t \)
DAC: discretionary accrual \( t \)
TA: total assets \( t \)
TAC: total accrual \( t \)
REV: revenue \( t \)
NDA: non-discretionary accrual \( t \)
REC: accounts receivable \( t \)
NI: net income \( t \)
PPE: property, plant, equipment \( t \)

3.2.2. Management Remuneration

The Financial Services Authority Regulation No. 34/POJK.04/2014 explained that the management remuneration is a reward determined and given to the members of the Board of Directors and the members of the Board of Commissioners because their positions and roles given are based on the duties, responsibilities, and the authority of the members of Board Directors and the members of the Board of Commissioners. The remuneration structure can be in the form of salaries, honorarium, incentives, and/or allowances that are fixed and/or variable. The management remuneration (MR) was measured by the amount of remuneration paid in the current year.

3.2.3. Social Welfare

Social Welfare (SW) was measured through tax payment in the current year by dividing Earnings before Interest and Tax (EBIT). A higher EBIT will increase the potential of the government to receive taxes from the company, indicating that it will result in a greater potential social wealth transfer.

3.2.4. Firm Value

Firm value (FV) was measured through Tobin’s \( Q \) (TQ). Tobin’s \( Q \) value describes a company’s investment opportunity (Lang et al., 1989) or company’s growth potential (Tobin, 1969; Tobin & Brainard, 2016) and it can
be used as a measure for the company’s performance in terms of the potential market value of a company. Tobin’s $Q$ ratio has succeeded in creating value if the return of investment is greater than the cost of investment. On the contrary, the company is considered to fail in achieving the value-maximizing goal if the value of Tobin’s $Q$ ratio is less than 1. Consequently, the greater Tobin’s $Q$-value indicates that the company has good growth prospects.

4. Result and Discussion

Descriptive tests (i.e. Minimum and Maximum value, Mean and Standard Deviation) were used to describe data during the period.

Table 1 presents the descriptive statistics, where the value of positive discretionary accrual range between 0.0028–9.7580, which is due to the large difference in income-increasing to earnings management. The firm value indicates a mean of $Q > 1$, which indicates that the company has good growth prospects. The mean of the tax rate paid (26%) is greater than the corporate tax rate (25%), indicating a better potential wealth transfer to the public. The mean of management remuneration is greater than the standard deviation, which indicates remuneration are very volatile from one company to another.

To assess the role of Social Welfare (SW) and Management Remuneration (MR) as the mediators, first, we must do direct testing between Positive Discretionary Accrual (PDA) and Firm Value (FV). Based on Table 2, the hypothesis is accepted ($P = 0.000$), indicating that positive discretionary accrual (income-increasing) positively influences the firm value in the future. One of the manager’s motivations in performing income-increasing is to provide good news to the company’s stakeholders by showing the company’s maximum performance within a certain period. This is a potential endogenous problem since the manager is reluctant to announce the earnings below the analyst’s estimation (Cohen et al., 2011; Gill et al., 2013) because it

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<tr>
<th>Hypothesis</th>
<th>Path Coefficient ($\beta$)</th>
<th>Standard Error</th>
<th>$t$ statistics</th>
<th>$P$-Value</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDA $\rightarrow$ FV</td>
<td>0.237</td>
<td>0.065</td>
<td>3.673</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>PDA $\rightarrow$ SW</td>
<td>0.023</td>
<td>0.009</td>
<td>2.445</td>
<td>0.016</td>
<td>Accepted</td>
</tr>
<tr>
<td>SW $\rightarrow$ FV</td>
<td>3.472</td>
<td>0.606</td>
<td>5.727</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>PDA $\rightarrow$ MR</td>
<td>2.193</td>
<td>0.150</td>
<td>14.583</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>MR $\rightarrow$ FV</td>
<td>0.076</td>
<td>0.024</td>
<td>3.125</td>
<td>0.002</td>
<td>Accepted</td>
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<th>Hypothesis</th>
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<tr>
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<td>0.009</td>
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will negatively influence the stock price in the market. Since the stock price in the market can influence firm value, the manager tends to manage the component of profit-loss and balance sheet through accrual to maintain and/or to maximize the stock price in the current year and the next year.

Another impact of the income-increasing is the increase in Earnings before Interest and Taxes (EBIT). The increase in EBIT leads to a consequence of paying an increased amount of tax since the amount of tax that should be paid is calculated based on EBIT. Based on Table 2, hypothesis 2a is accepted, indicating that positive discretionary accrual positively influences social welfare (P-value of 0.016). The result of this study is in line with a study conducted by Adiyaningsih et al. (2016), Kurniawan (2019), and Puspita et al. (2020). When the amount of tax paid by the company increases, the state revenue will be more to improve the development and people’s welfare.

The improvement in the development and people’s welfare will increase people’s potential purchasing power. To create these goals, the government realizes them by giving an appreciation to companies who provide the highest amount of tax for the country. This government legitimacy will increase people’s trust in the company. This people’s trust is reflected in the increase in the stock price in the market that will eventually increase the firm value. It becomes the evidence for hypothesis 2b stating that social welfare positively influences firm value (P-value of 0.000).

The income-increasing strategy is often defined as the manager’s opportunistic behavior. It seems like the impact of the income-increasing strategy is only enjoyed by the manager. As stated in the hypothesis 2a and 2b, it was explained that the income-increasing strategy brought benefits for a country through increasing the tax revenue as the funding source for improving people’s welfare through better development. A study on earnings management and tax mostly focused on avoiding tax. This study provided different perspectives on earnings management when the applied strategy was income-increasing. Earnings management through income-increasing increases the potential social welfare transfer that eventually increases the firm value in the future. Table 3 shows that the result of the Sobel Test for Social Welfare is (2.334 > 1.98), indicating that social welfare can play the mediation role between positive discretionary accrual and firm value. It means that hypothesis 2 was accepted.

Several previous studies stated that earnings management is the manager’s opportunistic action to get bonuses. This result is not fully wrong, but it should be understood that the managers do not always receive bonuses as the result of their opportunistic actions. In this case, bonuses were measured by the remuneration received by the management. Giving remuneration could be defined as the reward for the performance achieved by the managers when their performance was measured by the earnings they received. This action can also be defined as a positive reinforcement for the managers’ performance by expecting better performance in the next year. Table 2 shows that income-increasing positively influences the remuneration received by the manager (P-value of 0.000). It means that hypothesis 3a is accepted. To ensure the appropriateness of giving remuneration, it can be done by forming the committee of remuneration as instructed by Financial Services Authority Regulation (POJK) No. 34/POJK.04/2014. The result of this study is in line with a study by Mildred (2012) and Ruparelia and Njuguna (2016).

Remuneration received by the managers was expected to act as a stimulant and the reinforcement for positive actions leading to better performance in the future. The result of testing hypothesis 3b (Table 2) proved that the managers’ remuneration positively influenced the firm value in the future (P-value of 0.002). The result of this study is in line with a study by Pangestu et al. (2019), Sheikh et al. (2019), and Gan et al. (2020). Giving remuneration for directors becomes an important thing to harmonize the executives’ interest and that of shareholders (Kostyuk et al., 2016; Pearce & Robinson, 2007). Remuneration received by the board of directors should match with the company’s expectation or performance to make the directors’ interest in line with the shareholders’ interest; therefore, it can provide the shareholders with welfare (Pearce & Robinson, 2007).

Income-increasing is defined as the management strategy in issuing the financial statement, whereby the financial statement is the result of a compromise from several necessities that have been considered by the management. It will influence the firm value in the future. Remuneration plays a role as a mediator in actualizing the management strategy in improving the firm value in the future. Based on Table 3, hypothesis 3 stating that remuneration plays a role in the relationship between income-increasing and firm value (Sobel test of 3.095 > 1.98) is accepted. Well-structured remuneration systems can be a link connecting the agent and the principal and it can decrease the conflict between both parties (Haron & Akhtaruddin, 2013; Siti et al., 2020). Good remuneration systems will stimulate the agent’s performance to be better and increase the company’s performance (Ruparelia & Njuguna, 2016).

5. Conclusion

The result of the study shows that an income-increasing strategy can increase the firm value in the future through the mediation of potential welfare transfer to the people and the management remuneration. The implementation of the income-increasing strategy is defined as an effort to compromise every stakeholders’ interest to create a better firm value in the future.
Positive accounting theory explains that there are three stakeholders related to positive discretionary accrual, namely shareholder (dividend), the government (tax), and the manager (remuneration). This study only analyzes two relevant parties by using income-increasing. Consequently, further research can complete the potential welfare transfer against the shareholders related to income-increasing strategy.

References


