Simultaneous Effect between Financial Reporting Aggressiveness and Tax Reporting Aggressiveness: The Impact on The Earnings Informativeness

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Abstract: This study aims to analyze the simultaneous effect between Financial Reporting Aggressiveness and Tax Reporting Aggressiveness. Moreover, this study seeks to examine the impact of financial reporting aggressiveness (the level of tax reporting aggressiveness had influenced that) on the earnings informativeness. Also, this study also aims to investigate the impact of tax reporting aggressiveness (the level of financial reporting aggressiveness had influenced that) on the earnings informativeness. Using the TSLS method and sample consists of Indonesian listed manufacture companies for the period 2013 – 2016, this study found that the financial reporting aggressiveness and tax reporting aggressiveness have a simultaneous effect. However, this study failed to demonstrate that the simultaneous effect between financial reporting aggressiveness and tax reporting aggressiveness have a significant impact on earnings informativeness. There are two contributions expected from this study. First, it provides empirical evidence that financial reporting aggressiveness and tax reporting aggressiveness have simultaneously effect since this study is the first that investigates this area. Second, this research also the first that focused on analyzing the earnings informativeness impact of managers' activity in financial reporting and tax reporting aggressiveness.

Keywords: Financial reporting aggressiveness, tax reporting aggressiveness, earnings informativeness.

Intisari: Penelitian ini bertujuan untuk menganalisis pengaruh simultan antara Financial Reporting Aggressiveness dan Tax Reporting Aggressiveness. Lebih lanjut, penelitian ini bertujuan untuk menguji dampak agresivitas pelaporan keuangan (yang telah dipengaruhi oleh tingkat agresivitas pelaporan pajak) pada daya informasi laba. Selain itu, penelitian ini juga bertujuan untuk menyelidiki dampak agresivitas pelaporan pajak (yang telah dipengaruhi oleh tingkat agresivitas pelaporan...

**Kata Kunci:** Agresivitas pelaporan keuangan, agresivitas pelaporan pajak, daya informasi laba.

1. **Introduction**

Management has a responsibility to take various policies and activities to organize the company, to doing so, managers focus on maximizing the accounting income as well as to minimize the taxable income through earnings management and tax planning activities. Frank et al. (2009) explained that tax reporting aggressiveness is an attempt to decrease profits with tax planning either by legal means (not violating the law) or by illegal means (tax evasion). In general, companies assume that taxes are a burden that can reduce the company's wealth; this makes the managers attempt to minimize the income tax through tax management activities. However, the tax management activities will lead to the minimum reported income which is unfavorable to the shareholders, investors, and creditors. Therefore, managers commonly trade off with earning management activities. Frank et al. (2009) had found that there is a tradeoff on the aggressiveness of managers in financial reporting for tax purposes with earnings management activities to report earnings to shareholders, investors, and creditors.

Tax planning activities by choosing accounting policies that have an impact on minimizing taxable income (fiscal profit), as well as earnings management activities that aim to maximize net income (accounting profit), both reflected in earnings
reports. The reported earnings as a result of the earnings and tax planning activities will eventually cause the information content to be less relevant so that it can allegedly lead to a decrease in the earnings informativeness. Therefore, this can mislead the investors or shareholders if they use the less relevant earnings report for the basis of decision making. On this basis, it is necessary to research that the aggressiveness of financial statements and the aggressiveness of tax reports can affect earnings information. In Indonesia, the problem with the earnings informativeness remain occurs because of the lack of credibility of information reported by the company. This is important to gain the investors' trust related to support their decision making.

Previous studies have examined the impact of the conformity of accounting reports with tax rules (book-tax conformity) on the earnings informativeness. According to Hanlon et al. (2008), the earnings informativeness can be reflected in the Book Tax Different (BTD) value because if accounting standards and tax regulations are more conform (higher book-tax conformity) will lead to fewer earnings informativeness. Moreover, Hanlon et al. (2008) documented that companies with large BTD (LBTD) are associated with low earnings informativeness levels as the components of LBTD are indicators of the intensity of earnings management. From that empirical evidence, it can be concluded that financial statements, taxable income, and earnings information are interconnected. However, no study focuses on the aggressiveness of managers in reporting, both accounting and tax reports, associated with information earnings.

Previous studies on the effect of the aggressiveness of financial statements on the aggressiveness of tax reports show inconsistent results, namely Frank et al. (2009) and Kamila and Martani (2014) found that financial reporting aggressiveness has a positive effect on tax reporting aggressiveness. However, Hanna and Haryanto (2016) show that financial reporting aggressiveness does not affect tax reporting aggressiveness. The inconsistency of the empirical evidence (especially in the context of Indonesia), this study will reexamine the effect of financial reporting aggressiveness on tax reporting aggressiveness. In contrast to the research of Frank et al. (2009); Kamila and Martani (2014); and Hanna and Haryanto (2016), this study
will examine the simultaneous (reciprocal) influence between financial reporting aggressiveness and tax reporting, and furthermore, this study will investigate the impact on the earnings informativeness.

In 2012 a total of 4000 foreign investment companies reported losses in their financial statements for seven consecutive years and the majority were manufacturing companies (Directorate General of Taxes, 2013). The consequence of the loss reported in the financial statements is companies do not necessary to pay income tax. This study focuses on manufacturing companies, because this sector mostly implements an aggressive tax reporting by reporting losses in their financial statements, yet these losses are unrecognized for fiscal purposes (Directorate General of Taxes, 2013).

This study aims to, first, to examine the simultaneous (reciprocal) influence between financial reporting aggressiveness on tax reporting aggressiveness. Second, to analyze the impact of financial reporting aggressiveness (which has been influenced by the level of tax reporting aggressiveness) on the earnings informativeness. Third, to analyze the impact of tax reporting aggressiveness (which has been affected by the level of financial reporting aggressiveness) on the earnings informativeness.

This study has several notable contributions, firstly, this study is the first that investigates the simultaneous effect between financial reporting aggressiveness and tax reporting aggressiveness, and analyze its impact on the earnings informativeness in Indonesia context. Secondly, the findings of this study are also expected to enrich the development of science, specifically by providing empirical evidence that there is a simultaneous influence between financial reporting aggressiveness and tax reporting aggressiveness, as well as its impact on the earnings informativeness. Thirdly, this study is expected to provide information to regulators, both accounting standard and tax rules setter that the selection of various accounting policies can have an impact on the intensity of tax reporting aggressiveness, and vice versa. Fourthly, for public companies, especially manufacturing, the results of this study can provide impact information if managers conduct aggressiveness of financial statements on tax reports as well as information on earnings. Finally, investors, the results of this study can be
used as an illustration of how companies conduct financial and tax reporting and are more careful in capturing information contained in earnings as decision making.

2. Theoretical Framework and Hypothesis Development

2.1. Agency Theory

Agency theory is an agreement between the two parties between the agent and principal where the agent is in charge of decision making in the company's operations (Amanda and Febrianti, 2015). Agency theory has two relationships, namely, between the agent and principal, where each party wants to achieve profits in different ways, then there will be a separation of interests in which the principal surrenders all responsibilities and policies to the agent. However, due to differences in information or agents can obtain more information (asymmetry information), the agent acts according to his desire to maximize his own profits without being reported to the principal. Following what was stated by Kamila and Martani (2014) that in practice managers actually do not report financial reports that are following the conditions of the company and do data manipulation aimed at attracting investors by doing earnings management and tax planning.

Jensen and Meckling (1976) suggested that in agency theory there is a contract between the agent and the principal. The separation of interests arises agency conflicts ranging from the low to the complex and caused by the principal's limitations which include: 1. Moral hazard is an agreement that has been agreed by both parties between the agent and the principal, but not by the agent. 2. Adverse selection is a situation where all information obtained from the agent is addressed to the principal purely from negligence or intentional error, which aims to maintain the company's reputation and investor confidence.

2.2. Signaling Theory

The signal theory emphasizes the importance of information conveyed by companies that aim at investment decisions by external parties. The type of information conveyed by the company can be a good signal that is received by
external parties, especially investors in the form of earnings announcements from listed companies (Anggraeni, 2015). The signal theory states incredible and responsible information disclosure carried out by the entity as a sign of the success of the efforts made (Rahman et al., 2014).

According to Brigham and Hauston (2001, 36), the signal is the company's efforts to give a signal or instructions to investors about how management sees the company's prospects. The signal that is made by management is in the form of information about the actions that have been taken to realize or realize the wishes of the owner. Information conveyed by management on the basis of specific objectives is to influence investors in making investment decisions. For investors and business people, information is useful for presenting information, notes and descriptions of the condition of the company both in the past, present, or future to benefit the company's survival and its impact on the company.

Signal theory helps reduce the existence of asymmetrical information between management, investors and outside parties with the disclosure of quality and integrated financial reporting — efforts made by companies to convey information where outsiders cannot observe directly. The reduced information gap can improve performance and image for the company (Connely et al., 2011).

Signal theory can be in the form of information about profitability (ROA or the level of profit earned on assets that have been used), the higher ROA, the better signal shown to investors because ROA reflects the company's performance. A good signal can attract investors to invest their funds in stocks or securities. The increase in stock demand is followed by stock prices which also increase (Feri, 2014). Increased debt can also reflect that the company is considered capable of paying off its obligations and is confident about the company's prospects in the future, so an increase in profitability and debt can provide a positive signal response for investors and increase the value of the company (Mai, 2013).

2.3 Financial Reporting Aggressiveness

Financial statements are obligations that must be issued by the company as a public entity regularly which aims to inform stakeholders about the components of
financial statements, one of which is profit, from profit can assess the performance of the company either now or in the future (Ujiyantho and Pramuka, 2007). The importance of profit for stakeholders encourages management to conduct earnings management to attract users of financial statements. Scott (2009) states that the reason companies report high profits is due to bonus rewards, political motivation, long-term debt agreements, company reputation, attracting investors, initial public offering (IPO), and CEO turnover. These reasons motivate companies to manipulate profits by reducing or increasing profits following company goals.

Activities to increase profits according to or not in accordance with accounting principles utilizing earnings management are called financial reporting aggressiveness (Frank et. Al., 2009). Healy and Wahlen (1999) say if financial statements are no longer objective or there is a manager's intervention by using their opinion to change the numbers in the actual financial statements to influence the users of financial statements it is called earnings management. Fischer and Rosenzweig, (1995) say that the existence of earnings management when managers report current profits but do not report profitability in the long term.

2.4 Tax Reporting Aggressiveness

The primary objective of aggressive tax is to reduce the tax burden paid. Tax expense is obtained from the results of multiplying taxable income with the tax rate set. Whereas taxable income is profit from the company reduced by tax correction or referred to as book-tax difference. Techniques carried out in aggressive taxes by regulating book-tax difference. According to Chen et al. (2010), there are three advantages of tax aggressiveness, namely the first, the tax burden of the company becomes smaller, the second is the bonus obtained by managers from shareholders, and the third is the opportunity to do rent extraction. But behind the benefits, some losses must be received such as sanctions from the tax authority if it is proven to do tax evasion, the decline in the value of the company that has an impact on reputation and investor confidence. This also affects the fall in stock prices if investors know the
company is conducting tax aggressiveness to trick investors (Hanlon and Slemrod, 2009).

2.5 The Earnings Informativeness (ERC)

Earnings Response Coefficient (ERC) is the extent to which market capabilities (sensitivity of stock returns) respond to reported earnings. Earnings informativeness can also be interpreted as how much investors capture information contained in profits. Whereas according to Cho and Jung (1991), ERC is the impact of unexpected returns on stock returns. ERC is the earnings response coefficient to determine the extent of abnormal returns in securities to respond to unexpected earnings. In other words, ERC aims to predict the effect of changes in stock prices with changes in accounting earnings (Scott, 2015).

The difference in market response is influenced by several things which include the earnings informativeness, beta, the company's capital structure, earnings quality, growth opportunities and informativeness of price. Scott also said that the level of informativeness of stock prices affects the content of accounting earnings information. The higher the informativeness of stock prices, the earnings informativeness will increase. So that the ERC is decreasing, the stock price information is decreasing.

ERC is used by investors as fundamental analysis to predict the strength of market reactions reflected in corporate earnings information. So, the higher the ERC, the market reaction in responding to earnings information is higher and vice versa. ERC is considered to have value relevance in measuring earnings information, and the information is said to be relevant if it can reflect information needed by investors in assessing the company.

2.6. Development of Hypotheses

Simultaneous Effect between Financial Reporting Aggressiveness on Tax Reporting Aggressiveness

Following agency theory (Jensen and Meckling, 1976), managers are required to maximize shareholder wealth, and one way is for managers to select various
accounting policies whose purpose is to produce a high-profit report, that is to do tax reporting aggressiveness. The selection of income increasing accounting policies is not liked by managers, because it will result in increasing corporate income tax. This makes managers offset financial reporting aggressiveness activities with tax planning activities.

Frank et al. (2009) found that tax reporting aggressiveness affected the financial reporting aggressiveness. On the reverse side, Kamila (2014) found that financial reporting aggressiveness can affect corporate tax reporting. From these theoretical studies and empirical evidence, the hypotheses 1a and 1b of this study aimed to examine the simultaneous influence (reciprocal influence) between financial reporting aggressiveness and tax reporting aggressiveness.

**H1a: Financial reporting aggressiveness has a positive effect on tax reporting aggressiveness.**

**H1b: Tax reporting aggressiveness has a positive effect on financial reporting aggressiveness.**

*The Impact of Financial Reporting Aggressiveness and Reporting Aggressiveness (Which Has Affected Each Other) on the Earnings Informativeness*

Shareholders assess the investment prospects that have been done before; one of them is through the statement of financial position and company performance report contained in the statement of comprehensive income. When a manager performs a discretion in the form of financial reporting aggressiveness, the information content of the earnings cannot reflect the actual condition of the company. Empirical evidence states that the aggressiveness of financial statements can reduce earnings informational power (Hanlon and Slemrod, 2009). Furthermore, Hanlon and Slemrod (2009) found that LBTD (accounting profit is higher than fiscal profit) proved to reduce investor expectations of the quality of corporate earnings. One proxy for earnings quality is earnings informational power (Dechow et al., 2010). Through the company's reported
profits, stakeholders can evaluate and predict events in the past, present and future (Hanlon and Slemrod, 2009).

Other empirical evidence by Hanlon et al. (2008) is financial statements prepared with accounting standards that are more following tax rules (book-tax conformity) proven to reduce earnings informativeness reported to shareholders. For shareholders, financial statements that better reflect tax rules are not relevant for investment decision making. In line with Hanlon, Atwood (2010) found that increasing higher book-tax conformity had an impact on the decline in the relationship between accounting earnings reported with future cash flows. Besides that, the evidence obtained by Alim (2009), that is if the company carries out earnings management by reducing accounting earnings (income-decreasing earnings management) makes the earnings informativeness decrease.

Some of the empirical evidence indicates that earnings reports according to accounting and according to tax can affect earnings information power, so the hypotheses 2a and 2b of this study are as follows:

**H2a**: *Financial reporting aggressiveness that has been influenced by the level of tax reporting aggressiveness hurts earnings informativeness.*

**H2b**: *Tax reporting aggressiveness that has been influenced by the level of financial reporting aggressiveness hurts earnings informativeness.*

3 **Research Method**

3.1. *Data and Samples*

This study uses a quantitative approach with non-probability purposive sampling method. Sample selection criteria are (1) manufacturing companies that publish financial statements continuously in 2013-2016, (2) manufacturing companies that use the Rupiah in their financial statements, (3) Available stock price information from 2013-2016. This study uses secondary data with documentation of data collection methods. Secondary data used are financial statements, annual reports and other data related to manufacturing companies in 2013-2016.
3.2. Operational Definition and Variable Measurement Financial reporting aggressiveness (DFIN)

Financial reporting aggressiveness is the act of managers to conduct earnings management in the preparation of financial statements whether permitted or not permitted by applicable accounting principles (Frank et al., 2009). In this study using corporate discretionary accruals (DFIN) as a proxy measure for financial reporting aggressiveness (Kothari et al., 2005). In financial reporting aggressiveness reflected in earnings management. Earnings management is done by discretion aimed at choosing the accounting method to be used. The accounting method that will be used in this research is the accrual method. First, we use equations (1) from modified Jones (Jones, 1991) as follows:

\[
\text{TACC}_{it} = \alpha_0 + \alpha_1 (\Delta \text{REV}_{it} - \Delta \text{AR}_{it}) + \alpha_2 \text{PPE}_{it} + \epsilon_{it} \ldots (1)
\]

Where:
\[
\text{TACC}_{it} = \text{Company accrual total i in year t, namely the difference in profits before extraordinary items and operations that are terminated with cash flows from operations divided by total assets}
\]
\[
\text{REV}_{it} = \text{Changes in income are divided by the total assets of the company i year t with t-1}
\]
\[
\text{AR}_{it} = \text{Changes in accounts receivable are divided by the total assets of the company i year t with t-1}
\]
\[
\text{PPE}_{it} = \text{The gross value of fixed assets is divided by the total assets of the company i in year t}
\]
\[
\epsilon_{it} = \text{discretionary accruals (DFIN) company i in year t}
\]

Tax reporting aggressiveness (DTAX)

Tax reporting aggressiveness is a tax management action to manipulate taxable income both following tax regulations or classified as tax evasion. This study uses the company's discretionary permanent difference (DTAX) to measure tax reporting aggressiveness. This study uses the residue (\(\epsilon\)) of equation (2) as an estimate
of the difference in permanent discretion that adopts the Desai and Dharmapala (2006) models:

\[
\text{PERMDIFF}_{it} = \alpha_0 + \alpha_1 \text{INTANG}_{it} + \alpha_2 \text{UNCON}_{it} + \alpha_3 \text{MI}_{it} + \alpha_5 \Delta\text{NOL}_{it}
\]

\[+ \alpha_6 \text{LAGPERM}_{it} + \varepsilon_{it} \]

Where:

\( \text{PERMDIFF}_{it} \) = The total difference in commercial profit and fiscal profit minus temporary differences divided by the total assets of the company i in year t

\( \text{INTANG}_{it} \) = Goodwill and other intangible assets are divided by the total assets of the company i in year t

\( \text{UNCON}_{it} \) = Profit (loss) reported by the equity method divided by the total assets of the company i in year t

\( \text{MI}_{it} \) = The profit (loss) borne by the minority is divided by the total assets of the company i in year t

\( \Delta\text{NOL}_{it} \) = Changes to net operating losses that can be compensated are divided by the total assets of the company i year t with t-1

\( \text{LAGPERM}_{it} \) = Lagged value of permanent different divided by total assets of company i in year t

\( \varepsilon_{it} \) = discretionary permanent difference (DTAX) company i in year t

DTAX has several advantages compared to other models, which exclude temporary differences that can reflect earnings management activities and controls for non-discretionary sources of permanent BTD.

Earnings Response Coefficient

Earnings Response Coefficient is the ability to what extent the market response to the reported earnings of the company (Bushman et al., 2004). To find out the change in earnings informativeness can be measured by the slope of the earnings coefficient in the annual return regression and annual profit changes from equation 3 (Arieftiara and Yanthi, 2017). The ERC model that adopts the Hanlon et al. model. (2008) as a proxy for earnings informativeness are as follows:
\[ R_{it} = \alpha + \beta \Delta E_{it} + \varepsilon \] .............(3)

Where:

The ERC model consists of:

**Stock returns**

Stock return is the difference in the ratio of stock prices over the year including the stock price at the end of the previous year \((t-1)\) to the stock price at the end of the current tax year \((t)\). So, the market response to earnings reports is after the company reports its financial statements. The stock return formula is as follows:

\[ R_{it} = \frac{P_t - P_{(t-1)}}{P_{(t-1)}} \] .............(4)

Where:

- \( R_{it} \) = Stock return
- \( P_t \) = Share price at the end of the tax year \(t\)
- \( P_{(t-1)} \) = Share price at the end of tax year \(t-1\)

**Earnings Response Coefficient**

The coefficient \((\beta)\) of regression changes in previous and current year's earnings on stock returns. The coefficients of this regression show earnings response coefficient.

**Empirical Model**

In this study, there are four hypotheses and use the two-stage least square (TSLS) regression, model. The TSLS method aims to test two independent variables simultaneously (Arieftiara et al., 2017). The independent variables in this study also have an influence on the dependent variable (endogenous) according to the estimation of the TSLS method (Gujarati and Porter, 2009).

**Empirical Model of the Effect of Simultaneous Financial Reporting Aggressiveness and Tax reporting aggressiveness.**

Simultaneous influences (hypotheses 1a and 1b) will be tested using Models 5 and 6. These models 5 and 6 are the first stage of the TSLS Method, from the first stage the fitted value will be fitted for each dependent variable.
Hypothesis 1a of this study aims to determine the effect of financial reporting aggressiveness on tax reporting aggressiveness based on research by Frank et al. (2009) will be tested using the empirical model of the study as follows:

\[
DTAX_{it} = \alpha_0 + \alpha_1 DFIN_{it} + \alpha_2 PTROA_{it} + \alpha_3 LEV_{it} + \alpha_4 LCF_D_{it} + \alpha_5 SIZE_{it} + \epsilon_{it} \ldots.
\]

(5)

Where:

- \(DTAX_{it}\) = discretionary permanent differences of the company \(i\) in year \(t\)
- \(DFIN_{it}\) = discretionary accruals of the company \(i\) in year \(t\)
- \(PTROA_{it}\) = The ratio of income before tax to total assets of company \(i\) in year \(t\)
- \(LEV_{it}\) = Total debt ratio to total assets of company \(i\) in year \(t\)
- \(LCF_D_{it}\) = The dummy variable is the existence of loss carry forward of company \(i\) in year \(t\)
- \(SIZE_{it}\) = Natural logarithms of total assets of company \(i\) in year \(t\)
- \(\epsilon_{it}\) = Error

To test the opposite effect (simultaneous influence), i.e., hypothesis 1b which aims to determine the effect of tax reporting aggressiveness on financial reporting aggressiveness, then using the Frank et al. (2009) research model as follows:

\[
DFIN_{it} = \gamma_0 + \gamma_1 DTAX_{it} + \gamma_2 PTROA_{it} + \gamma_3 LEV_{it} + \gamma_4 LCF_D_{it} + \gamma_5 SIZE_{it} + \epsilon_{it} \ldots.
\]

(6)

Description of variables such as variable description in Model 5 above.

Hypotheses 1a and 1b are accepted if the coefficient values are positive and significant. If so, then it is evident that financial reporting aggressiveness and tax reporting aggressiveness influence each other, or have simultaneous influence.

**Empirical Model of the Effect of Financial Reporting Aggressiveness (which has been influenced by the Tax Reporting Aggressiveness) on the Earnings Informativeness.**

Hypotheses 2a and 2b aim to test the simultaneous influence between financial reporting aggressiveness and tax reporting aggressiveness on the information power of earnings. Models 7 and 8 are used to test Hypotheses 2a and 2b, which is the second stage of TSLS.
Hypothesis 2a aims to prove the impact of financial reporting aggressiveness that has been influenced by the level of tax reporting aggressiveness on earnings information power, tested using Model 7. The dependent variable predictive value (DFIN) in Model 6 (TSLS first stage) will be used as an independent variable in Model 7 of the following:

\[ R_{it} = \sigma_0 + \sigma_1 \Delta E_{it} + \sigma_2 \Delta E_{it} \ast \text{fvDFIN} + \sigma_3 \text{CtrlVar} + \epsilon_{it} \ldots \ldots (7) \]

Where:
- \( R_{it} \) = Stock return
- \( \Delta E_{it} \) = Change in previous year's earnings with the current year divided by total assets
- \( \text{fvDFIN} \) = Predicted the value of DFIN (fitted value of DFIN as a result of regression models (6)
- \( \epsilon_{it} \) = Error

In Model (7) above \( \sigma_1 \) is the earnings response coefficient (ERC) without any influence from financial reporting aggressiveness, while \( \sigma_2 \) earnings response coefficient has been influenced by the predictive value of financial reporting aggressiveness (fitted value DFIN). It is expected that the value \( \sigma_2 \) is negative and significant, which means Hypothesis 2a is accepted.

Empirical Model of the Effect of Financial Reporting Aggressiveness (which has been influenced by the Tax Reporting Aggressiveness) on the Earnings Informativeness

The final hypothesis, Hypothesis 2b, aims to examine the impact of tax reporting aggressiveness that has been influenced by the level of financial reporting aggressiveness, on the earnings informativeness using Model 8. Like Model 7, Model 8 is the second stage of the TSLS estimation method, using predictive value DTAX dependent variable from Model 5 as an independent variable fvDTAX in Model 8 as follows:

\[ R_{it} = \beta_0 + \beta_1 \Delta E_{it} + \beta_2 \Delta E_{it} \ast \text{fvDTAX} + \beta_3 \text{CtrlVar} + \epsilon_{it} \ldots \ldots (8) \]

Where:
- \( \text{fvDTAX} \) = Predicted value of DTAX (fitted value of DTAX as a result of regression model (5)
Other variable information sees the variable description in Model 7.

In the Model (8) above $\beta_1$ is earnings response coefficient (ERC) without being influenced by tax reporting aggressiveness (DTAX), while $\beta_2$ is earnings response coefficient has been influenced by the predictive value of tax reporting aggressiveness (fitted value DTAX). It is expected that the value $\beta_2$ is negative and significant, which means Hypothesis 2b is accepted.

4 RESULTS AND DISCUSSIONS
4.1 Descriptive Statistics of Sample Data

The number of samples available, namely manufacturing companies listed on the IDX in 2013-2016 is 560 firm-years, but as many as 64 firm-years does not have complete financial reports, 108 firm-years use currencies other than Rupiah in financial statements, and as many as 31 firm-years does not have stock return data. The number of final samples used is 357 firm-years. This research data is classified as an unbalanced panel because not all companies have the same observation year. Some variables have outlier data but have been treated using the winsorizing technique, which is 3 times the standard deviation of the average of each variable (Arieftiara and Yanthi, 2017).

All variables have been tested for classical assumptions, namely multicollinearity and heteroscedasticity, autocorrelation tests are not carried out considering the type of research data is not classified as time series but rather a data panel. The classic assumption test results show that all variables do not have multicollinearity because all variables have VIF $<10$. For heteroscedasticity, the results show heteroscedasticity in the main model of the study (Models 5, 6, 7, and 8). Therefore, TSLS regression testing uses an estimation method that has a robust error variant (Adkins and Hill, 2008, 194).

Table 1 is a descriptive statistic for all research data. From Table 1 it can be seen that the average manufacturing company has a stock return of 9%. Financial reporting aggressiveness and tax reporting show negative averages consistent with their respective predictive values.
Table 1.
Descriptive statistics

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Mean</th>
<th>Max</th>
<th>Min</th>
<th>St.Deviasi</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFIN</td>
<td>-1.19e-09</td>
<td>2.6739</td>
<td>-3.2133</td>
<td>.04634</td>
<td>-0.5009</td>
</tr>
<tr>
<td>DTAX</td>
<td>-5.20e-12</td>
<td>3.6101</td>
<td>-3.0873</td>
<td>0.3454</td>
<td>1.5749</td>
</tr>
<tr>
<td>Return</td>
<td>0.0911</td>
<td>2.1325</td>
<td>-0.9342</td>
<td>0.5377</td>
<td>1.7734</td>
</tr>
<tr>
<td>ΔEarnings</td>
<td>0.0087</td>
<td>1.9669</td>
<td>-1.8861</td>
<td>0.3209</td>
<td>2.3179</td>
</tr>
<tr>
<td>fvDFIN</td>
<td>-0.0013</td>
<td>1.3025</td>
<td>-1.3773</td>
<td>0.2577</td>
<td>-0.6204</td>
</tr>
<tr>
<td>fvDTAX</td>
<td>-0.0005</td>
<td>0.8631</td>
<td>-0.8929</td>
<td>0.1562</td>
<td>0.1526</td>
</tr>
<tr>
<td>PTROA</td>
<td>0.0765</td>
<td>1.134</td>
<td>-0.5505</td>
<td>-0.1457</td>
<td>1.9645</td>
</tr>
<tr>
<td>LEV</td>
<td>0.1036</td>
<td>0.468</td>
<td>-0.0828</td>
<td>0.0889</td>
<td>1.6917</td>
</tr>
<tr>
<td>LCF_D</td>
<td>0.2017</td>
<td>1</td>
<td>0</td>
<td>0.4018</td>
<td>1.4869</td>
</tr>
<tr>
<td>SIZE</td>
<td>6.1508</td>
<td>7.9629</td>
<td>0.1149</td>
<td>-2.9743</td>
<td>1.4869</td>
</tr>
</tbody>
</table>

Where:

\[DTAX_{it} = \text{discretionary permanent differences of the company i in year t; } DFIN_{it} = \text{discretionary accruals of the company i in year t; } R_{it} = \text{Stock return; } \Delta E_{it} = \text{Change in previous year's earnings with the current year divided by total assets; } f vDFIN_{it} = \text{Predicted value of DFIN (fitted value of DFIN as a result of regression models (6); } f vDTAX_{it} = \text{Predicted value of DTAX (fitted value of DTAX as a result of regression model (5); } PTROA_{it} = \text{The ratio of income before tax to total assets of company i in year t; } LEV_{it} = \text{Total debt ratio to total assets of company i in year t; } LCF.D_{it} = \text{The dummy variable is the existence of loss carry forward of company i in year t; } SIZE_{it} = \text{Natural logarithms of total assets of company i in year t.}

Univariate Test Results

Univariate testing is done to predict the relationship between dependent and independent variables as an initial prediction of the results of the hypothesis. Univariate test results (complete Spearman correlation test can be seen in Appendix 1. From the univariate test results all the first stage TSLS model variables (Models 5 and 6) show that between DFIN and DTAX have a positive and significant correlation, while the univariate test results for all the second stage TSLS Model variables (Models 7 and 8) show that the relationship between ΔE and return is positive but not significant, the relationship between ΔE_{it} * f vDTAX is negative but not significant, and the relationship between ΔE_{it} * f vDFIN is positive but not significant as well. Large shows that the relationship between the dependent and independent variables of this study is suitable and not following the hypothesis. The results of this Spearman
correlation test in broad outline show that the relationship between the dependent and independent variables of this study is suitable and not in accordance with the hypothesis.

4.2. Hypothesis Test Results

Hypothesis Test Results 1a and 1b (Testing of Simultaneous Influence)

Summary of the results of testing the simultaneous influence between financial reporting aggressiveness and tax reporting aggressiveness or testing Hypotheses 1a and 1b can be seen in Table 2 (TSLS test results of Models 5 and 6).

Testing of Model 5 and 6 of this study uses a common effect. This selection is following the results of the Chow Test and Hausman Test, and the test is done considering the research data is a panel data structure (unbalanced). From Table 2 it is known that both models have a significant F probability; this means that the arrangement of the independent variables in both Models 5 and 6 can explain well the dependent variable. The determination coefficient of R Square in Model 5 is 0.2024 and Model 6 is 0.3062. This means that Models 5 and 6 meet the goodness of fit requirements.

Table 2 it is known that in Model 5, the DFIN coefficient results show a positive and significant value (at level 1%); this means that Hypothesis 1a is accepted. In Model 6, the results of the DTAX coefficient also show positive and significant values (at the level of 1%); this means that Hypothesis 1b of this study is accepted. These results indicate that financial reporting aggressiveness is proven to affect tax reporting aggressiveness and vice versa. Thus, it is proven that there is a simultaneous influence between financial reporting aggressiveness and tax reporting aggressiveness.

The results of the control variables are consistent in both models, which are positive and significant for the PTR_OA and SIZE control variables. Both control variables are significant at the level of 1% and 10%. The results of other control variables, namely LEV and LCF_D showed insignificant results.
Table 2.
TSLS test results of Models 5 and 6

\[
\begin{align*}
\text{DTAX}_{it} &= \alpha_0 + \alpha_1 \text{DFIN}_{it} + \alpha_2 \text{PTROA}_{it} + \alpha_3 \text{LEV}_{it} + \alpha_4 \text{LCF}_D + \alpha_5 \text{SIZE}_{it} + \epsilon_{it} \ldots \\
\text{DFIN}_{it} &= \gamma_0 + \gamma_1 \text{DTAX}_{it} + \gamma_2 \text{PTROA}_{it} + \gamma_3 \text{LEV}_{it} + \gamma_4 \text{LCF}_D + \gamma_5 \text{SIZE}_{it} + \epsilon_{it} \ldots
\end{align*}
\]

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<th>Coefficient</th>
<th>Prob-statistic</th>
<th>Conclusion</th>
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Hettest Model Common Effect | Hettest Model Common Effect
Prob>F 0.0000 | Robust Prob>F 0.0000
R-Square 0.2024 | R-Square 0.3062
N 357 | N 357

Where:

DTAX= discretionary permanent differences of the company i in year t; DFIN= discretionary accruals of the company i in year t; PTROA= The ratio of income before tax to total assets of company i in year t; LEV= Total debt ratio to total assets of company i in year t; LCF_D= The dummy variable is the existence of loss carry forward of company i in year t; SIZE= Natural logarithms of total assets of company i in year t.

***Significant at 1%; **Significant at 5%; *Significant at 10%

Summary of TSLS regression test results for models 5 and 6
Hypothesis 2a and 2b Test Results (Simultaneous Recursive Impact on Earnings Response Coefficient)

Testing of Hypotheses 2a and 2b uses the TSLS regression model 7 and 8. As with Models 5 and 6, Model 7 and 8, the Chow Test and Hausman Test are conducted first to determine the best estimate of panel data (unbalanced). The results of Models 7 and 8 better use the estimation of common effects.

From Table 3 it is known that the arrangement of independent variables in both Models 7 and 8 can explain well the dependent variable, this is because both models have an F probability that is significant at the level of 1%. Furthermore, both of these models have R Square determination coefficients in Models 7, and 8 are 0.0506. Thus, Models, 7 and 8 meet the goodness of fit requirements.

Table 3 shows that in Model 7, the results of the coefficient $\Delta E*fvDTAX$ are negative but not significant; this means that Hypothesis 2a was rejected. It can also be seen in Table 3, that the results of the coefficient $\Delta E*fvDFIN$ also show negative values but not significant; this means that Hypothesis 2b of this study was rejected. These results indicate that tax reporting aggressiveness that has been influenced by financial reporting aggressiveness is not proven to reduce the information power of earnings. Besides that, the results of this study cannot prove that financial reporting aggressiveness that has been influenced by tax reporting aggressiveness can reduce the information power of earnings. Thus it is not proven that the simultaneous influence between financial reporting aggressiveness and tax reporting aggressiveness can affect (decrease) the information power of earnings.

For the results of the control variables, both LEV and PTROA models show consistent results. The LEV coefficient is negative and significant at the 5% level. The PTROA coefficient shows a positive value and is significant at the level of 1%. SIZE variable shows insignificant results.
Table 3.
Summary of TSLS regression test results for models 7 and 8

\[
R_{it} = \sigma_0 + \sigma_1 \Delta E_{it} + \sigma_2 \Delta E_{it} \ast fvDFIN + \sigma_3 \text{CtrlVar} + \epsilon_{it} \quad \ldots (7)
\]

\[
R_{it} = \beta_0 + \beta_1 \Delta E_{it} + \beta_2 \Delta E_{it} \ast fvDTAX + \beta_3 \text{CtrlVar} + \epsilon_{it} \quad \ldots (8)
\]

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Where:
- R= Stock return; \(\Delta E\)= Change in previous year's earnings with current year divided by total assets;
- fvDTAX= Predicted value of DTAX (fitted value of DTAX as a result of regression model (5);
- fvDFIN= Predicted value of DFIN (fitted value of DFIN as a result of regression models (6);
- PTROA= The ratio of income before tax to total assets of company i in year t; LEV= Total debt ratio to total assets of company i in year t; LCF_D= The dummy variable is the existence of loss carry forward of company i in year t; SIZE= Natural logarithms of total assets of company i in year t

***Significant at 1%; **Significant at 5%; *Significant at 10%
4.3. Discussion

The results of this study prove that there is a simultaneous influence between financial reporting aggressiveness and tax reporting aggressiveness. The results that financial reporting aggressiveness affects tax reporting aggressiveness are consistent with the research of Kamila and Martani (2014). While the results that tax reporting aggressiveness affects financial reporting aggressiveness are consistent with the research of Frank et al. (2009). The results of this study confirm that earnings management activities by managers will always be balanced with tax avoidance activities. This is to maintain that increased accounting profit (due to earnings management activities) does not cause the company's tax burden to be higher as explained by Erickson et al. (2004). On the other hand managers as representatives of corporate taxpayers have basic human characteristics that will not be willing to invest in the state through the payment of high-income taxes. Therefore managers carry out tax avoidance activities by conducting tax reporting aggressiveness (Arieftiara, 2017). But this tax avoidance activity is not liked by shareholders because it causes earnings reports to be small, this causes managers to balance them with earnings management activities.

The results of this study cannot prove that the simultaneous influence between financial reporting aggressiveness and tax reporting aggressiveness have an impact on the earnings response coefficient. There are several explanations related to this. First, shareholders do not see that the activities of managers in conducting financial reporting aggressiveness and tax reporting aggressiveness as activities that can damage the earnings information content. Second, the earnings response coefficient (ERC) without being interacted with reporting aggressiveness (both for financial and tax purposes) also does not show a significant value, and this means that in the company data set in the study sample there is no relationship between stock returns and earnings reports. The market is not affected by earnings reports issued by manufacturing companies in the period 2013-2016. Third, aggressive financial reporting and tax reporting activities for shareholders/investors are not considered as information signals that can change investment decisions. Information on the
aggressiveness of the report is considered by shareholders/investors as a reasonable activity, such as the selection of accounting methods for reporting purposes only, does not change the company's financial condition in real terms. This is different from if managers are doing other corporate actions as a signal of information that the company is making real efforts that can increase the growth of the company.

5 Conclusion, Implication, and Limitation

5.1. Conclusion

The results of the study found three things. First, there is a simultaneous (reciprocal) influence between financial reporting aggressiveness on tax reporting aggressiveness. Second, the results of the study cannot prove that financial reporting aggressiveness (which has been influenced by the level of tax reporting aggressiveness) has an impact on the information power of earnings. Third, this study also cannot prove that tax reporting aggressiveness (which has been influenced by the level of financial reporting aggressiveness) has an impact on the earnings response coefficient.

5.2. Implication and Limitation

The results of this study have several implications, namely: for the development of science, the evidence obtained from this study confirms that aggressive financial reporting activities by companies will always be balanced with aggressive tax reporting activities. The results of this study provide empirical evidence that there is a simultaneous influence between financial reporting aggressiveness and tax reporting aggressiveness. Implications for regulators, namely accounting standards-making bodies should pay attention to regulate in more detail the disclosures related to the motivation of managers to choose an accounting policy. For the Director General of Taxes, the results of this study imply that as long as the tax rules and accounting rules are different, then managers as representatives of taxpayers will always use their discretion to do tax planning. For public companies, especially manufacturing, the implications of the results of this study can provide information that managers will
always take their discretion to regulate profits and the amount of corporate tax burden. Although this discretion is not proven to affect the information power of earnings, companies still need to keep an eye on the aggressiveness of managers, to prevent manager's opportunistic behavior. For shareholders/investors, the results of this study imply that shareholders/investors must begin to pay attention to the quality of reported earnings so that they avoid mistakes in decision making. Shareholders/investors must begin to invest attention to tax awareness or tax compliance as a basis for making investment decisions. Such attention will help companies (issuers) to comply with tax rules in conducting earnings management and tax avoidance activities, as good citizens, investors must still pay attention to information and can be used as an illustration of how companies conduct financial and tax reporting and be more careful in capturing information contained in profit as decision making.

This study has limitations, namely assuming that in that period there were no changes in accounting policies carried out by the company. This study did not consider any changes to the PSAK and the existence of a new policy/policy change by the Director General of Taxes in the 2013-2016 period which might have an impact on the results of the study. For better results, further research can consider changes in accounting policies carried out by companies as control variables. Also, further research also needs to add new policies or policy changes issued by the Director General of Taxes as a control variable. The addition of this control variable can make the research model better at estimating.

Reference


APPENDIX

Univariate Test Results

a. Korelasi Spearman (Model 5 dan 6)
   . spearman DTAX DFIN ptroa lev lcf size, stats (rho p)
   (obs=357)

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b. Korelasi Spearman (Model 7 dan 8)
   . spearman return eta ETA_fvDTAX size lev ptroa, stats (rho p)
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