Book Tax Differences, Operating Cash Flow, Leverage and Earning Persistence in Indonesia Manufacturing Companies

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DOI: http://dx.doi.org/10.15294/jda.v11i2.20481

Received: May 5, 2017 Revised: September 15, 2018 Accepted: September 20, 2018 Published: September 30, 2019

Abstract
Current earnings can be used by investors to predict future earnings if the earnings are of high quality (persistent). This study examines the effect of book tax differences, operating cash flow and debt level on earnings persistence. This study uses manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2014-2016 as populations. Based on data analysis with ordinary least square regression, the results show that two hypotheses are accepted, namely temporary book tax differences and cash flow from operating. As hypothesized, book tax differences negatively affect earnings persistence and operating cash flow has a positive effect on earnings persistence. Meanwhile, permanent book tax differences have not been proven to influence earnings persistence.

Keywords: temporary book tax differences; permanent book tax differences; operating cash flow; leverage; earnings persistence

INTRODUCTION
Earnings are important information for investors, because earnings show the financial performance of a firm (Bandi, 2012). Earnings generally become guidelines for internal and external users in making various decisions, for example granting compensation and distributing bonuses to managers, measuring management performance, and determining the amount of tax imposed (De Simone, 2016). Quality information will only be obtained from companies with high quality earnings. High quality earnings will provide more information about the firm’s financial performance that is relevant for decision making (Dechow, Ge, & Schrand, 2010).

Earnings are classified into two categories, namely earnings persistence and transitory earnings (Penman and Zhang, 2002). Earnings persistence is earnings that occur repeatedly in the long run. Instead, transitory earnings are earnings that are temporary and not repetitive. Therefore, if earnings are persistent, they can be indicators of future earnings. However, if earnings are transitory, they cannot be indicators of future earnings (Tang & Firth, 2012). Related to future earnings, the information content of earnings is strongly influenced by the earnings component.
If current accounting earnings consist of elements of permanent income, then the information content about future earnings and stock prices will be high. Conversely, if the transitory earnings component is more dominant, then the information content will be weak (Boubakri, 2012).

There are two proxies for measuring earnings quality, namely the concept of permanent earnings (Anctil & Chamberlain, 2005; Black, 1980; Ohlson & Zhang, 1998) and the concept of persistent earnings (Nichols & Wahlen, 2004; Penman & Zhang, 2002; Schipper & Vincent, 2003). Earnings persistence refers to the sustainability of current earnings for the coming period (Nichols & Wahlen, 2004; Schipper & Vincent, 2003) in Bandi (2012). Earnings can be a reference for investors in predicting the future earnings of a firm. Quality earnings will provide an overview of the firm's financial performance in the future. This condition supports investors to make better investment decisions. It can be concluded that, the more persistent earnings of a firm, the higher the relevance value for the accuracy of decision making (Bandi, 2012). Earnings information becomes a key element and becomes the basis for investors in making investment decisions. Therefore, earnings information must be relevant, reliable, and free from manipulation.

Related to earnings, there is the phenomenon of book tax differences which is the difference between accounting earnings and fiscal income (Chi, Pincus, & Teoh, 2014). Book tax differences represent the difference between pre-tax earnings and taxable income reported to the tax office (Tang & Firth, 2012). Previous research shows that tax information in a firm's financial statements provides information about earnings quality (Blaylock, Shevlin, & Wilson, 2012; Hanlon, 2005; Lev & Nissim, 2004). Some studies have been conducted to examine the effect of book tax differences on earnings persistence. Hanlon (2005) found that investors use book tax differences as a means to assess earnings quality and book tax differences are powerful tools to assess earnings persistence.

Until now, research on book tax differences and their impact on earnings persistence had not been done much in developing countries. Research in this area is mostly carried out by researchers in developed countries (Fadilah & Wijayanti, 2017; Ismail, Kamarudin, Zijl, & Dunstan, 2013; Waluyo, 2016). It is undeniable that developing countries have differences with developed countries, both in terms of the economy and society (Hofstede and Hofstede, 2004) in Waluyo (2016). Some characteristics of developing countries are capital markets that are still weak, law enforcement is still low and concentrated corporate ownership. In addition, there are fundamental differences in accounting standards and regulations between developing and developed countries. This condition can lead to information asymmetry, making it difficult for investors to assess firm performance and make rational investment decisions (Ismail et al., 2013). In addition, different laws and regulations in each country allow different research results (Fadilah & Wijayanti, 2017).

Understanding the relationship between book tax differences and future earnings changes is very important. This understanding will help users of financial statements accurately predict the effects of various book tax differences. For researchers, this understanding will also help them in interpreting the literature and the results of previous studies (Jackson, 2015). Graham, Raedy, and Shackelford (2012) and Hanlon and Heitzman (2010)suggested to researchers to examine two components of book tax differences. These components are permanent and temporary book tax differences.

The difference of time period in recognition of revenue and expenses based on accounting standards and tax regulations will cause temporary book tax differences. However, this difference can be identified in the next accounting period, so it is called a temporary difference. When the difference between income based on accounting standards and income according to taxation is greater, there is an increased risk of worsening earnings quality (Noga & Schnader, 2013).

The time difference between the recognition of accounting standards and tax regulations for the same transaction will lead to temporary tax book differences. A transaction can be recognized based on accounting standards, but it is not recognized based on tax regulations (Sonnier, Hennig, Everett, & Raabe, 2012). This difference will be identified in the next period, so...
it is only temporary. Actually all transactions will be recognized by accounting standards and tax regulations. However, the time of recognition between accounting standards and tax regulations is different. The difference between accounting standards and taxation regulations in accruals and realization, depreciation, amortization, inventory valuation and calculation of loss compensation causes temporary book tax differences (Nor’ Azam & Bardai, 2009).

Research by Hanlon (2005) proves that companies with large temporary book tax differences will have less persistent accruals and revenues. The same results are shown by Persada and Martani (2010). Some researchers also prove that temporary differences have a negative effect on earnings quality as measured by various proxies, including revenue growth. Some researchers also prove that temporary differences have a negative effect on earnings quality as measured by various proxies, including revenue growth (Jackson, 2009; Waluyo, 2016) and changes in future net income (Jackson, 2015). Referring to the theoretical framework and empirical support described above, the following hypothesis is formulated:

H1: The higher the book tax differences, the lower the earnings persistence

Permanent differences occur because of income and expense transactions that were recognized under commercial accounting but are not recognized according to taxation rules. Permanent income is not recoverable in the future, so it has a high level of earnings persistence. The time difference between the recognition of accounting standards and taxation regulations on transactions related to certain expenses and income will cause permanent tax book differences. Certain types of income and expenses are recognized according to accounting standards, but not according to taxation regulations. Permanent differences will result in a difference between accounting income and taxable income that is fixed. This difference occurs because some transactions are not included in the calculation of taxable income based on tax regulations (Martinez, Souza, & Monte-Mor, 2016).

Research by Pratiwi and Zulaikha (2014) and Sari and Lyana (2015) prove that the higher the permanent difference, the higher the persistence of earnings. Research conducted by Waluyo (2016) found that permanent differences positively affect the firm’s profit growth. Research by Jackson (2015) also shows a positive relationship between permanent differences and changes in tax burden over periods 1, 3 and 5 years. Companies that have large permanent book tax differences will increase their tax burden in the future. In fact, this condition will occur when at the same time there is a decrease in income before tax. This condition shows that the average return on tax rates is effective. Companies with large permanent differences experience a large net profit recovery. Based on the description above, the second hypothesis is formulated as follows:

H2: The higher the book tax differences, the higher the persistence of earnings

Operating cash flow is the difference between earnings and accruals. Current earnings contain cash flow components and accrual earnings that determine the level of earnings persistence (Penman, 2013; Sloan, 1996). Cash flow is a better financial indicator than accounting, because cash flows are relatively more difficult to manipulate. Accounting manipulation is usually done through the use of different accounting methods for the same transaction with the aim of displaying the desired income (Fanani, 2010). When the firm’s operational activities are good, the earnings generated by the firm will also be good. Therefore, the higher the component of operating cash flow contained in current earnings will be the higher the persistence of earnings.

Operating cash flows include cash generated and issued which is included in the determination of net income. Operating cash flow can be a positive signal given by managers to reduce information asymmetry. Information on operating income and cash flow can be used as the main tool to help investors and creditors reduce risk due to decision-making. Therefore, operating cash flow is positively correlated to earnings persistence. Companies with greater cash flow from operating activities will have higher earnings persistence. Conversely, if the cash flow from operating activities is lower, then the quality of earnings will be lower.

Many studies have shown that there is a positive influence of cash flow from operating
activities on earnings persistence (Fajri & Mayangsari, 2012; Kasiono & Fachrurrozie, 2016; Salsabiila, Pratomo, & Nuraiti, 2016). Study by Bandi (2012) found that cash flow can predict future earnings. This finding shows that the higher the cash flow, the higher the quality or persistence of earnings. Based on the logic of thought and empirical support described above, the following hypothesis is proposed.

H3: The higher the cash flow from operating activities, the higher the persistence of earnings

In addition to book tax differences and operating cash flow, earnings persistence is also influenced by the level of debt owned by the firm. Debt has consequences for a firm, namely the obligation to pay interest and principal at maturity. The large level of corporate debt will cause the firm to increase earnings persistence with the aim of maintaining good performance in the investors and auditors view point, so that creditors will continue to have trust in the firm and easily disburse funds (Fanani, 2010).

The firm can obtain funds through debt to finance its investment. The level of debt or leverage is used because it has a lower effect and risk. The large level of debt will cause companies to increase earnings persistence with the aim of maintaining good performance in the eyes of investors and auditors (Kasiono and Fachrurrozi, 2016). Based on the firm’s good performance, it is expected that creditors will continue to have trust in the firm, remain easy to disburse funds, and the firm will get ease in the payment process (Fanani, 2010). The higher leverage indicates that the firm will use accounting methods to increase current period earnings so that the firm can still get the trust of investors and creditors. Therefore, violations of debt contracts can be prevented. The firm seeks to increase earnings in certain periods with selected accounting policies (Magfiroh and Kusmuriyanto, 2018). Study by Fanani (2010) shows that the higher the level of leverage, the higher the persistence of earning. Based on the description above, the fourth hypothesis is formulated as follows:

H4: The higher the leverage, the higher the persistence of earnings

This research examined the influence of book tax differences divided into temporary and permanent differences, operating cash flows, and leverage on earnings persistence. The results of this study are expected to contribute, both theoretically and practically on financial accounting and capital markets. Earnings persistence is an indicator of a firm’s earnings quality. Therefore, investors are expected to be more careful in considering the determinants of profit persistence, so that they can make investment decisions appropriately.

METHODS

The populations in this study were all manufacturing companies listed on IDX in 2014-2016. Sampling technique uses purposive sampling, namely the selection of samples using certain criteria. These criteria include manufacturing companies which are publish annual financial statements consistently, have no losses, have complete information about fiscal corrections, and have positive operating cash flows. Based on these criteria the number of observations was 129 data.

The data analysis technique used in this study is ordinary least square regression (OLS) with the following equation.

\[ EP_{it} = \alpha + \beta_1 TBTD_{it} + \beta_2 PBTD_{it} + \beta_3 CFO_{it} + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \epsilon \]

Where:
- \( EP_{it} \): Earning persistence of firms \( i \) in year \( t \)
- \( TBTD_{it} \): Temporary book-tax difference of firms \( i \) in year \( t \)
- \( PBTD_{it} \): Permanent book-tax difference of firms \( i \) in year \( t \)
- \( CFO_{it} \): Cash flow from operating of firms \( i \) in year \( t \)
- \( LEV_{it} \): Leverage of firms \( i \) in year \( t \)
- \( SIZE_{it} \): Size of firms \( i \) in year \( t \)
- \( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 \): coefficient beta
- \( \epsilon \): error term
A summary of operational definitions and measurement of independent and dependent variables is presented in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operational Definition</th>
<th>Measurement</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings Persistence</td>
<td>Earnings persistence is the expected revision of earnings in the future which is reflected in current year's earnings, and is one of the measuring instruments of earnings quality. Earnings persistence is measured by the slope coefficient of current earnings regression in lagged earnings.</td>
<td>(Penman &amp; Zhang, 2002), (Francis, LaFond, Olsson, &amp; Schipper, 2004), (Fanani, 2010)</td>
<td></td>
</tr>
<tr>
<td>Temporary book tax differences</td>
<td>Difference between taxable income and net income (temporary &amp; permanent written in notes to the financial statements)</td>
<td>(Pratiwi &amp; Zulaikha, 2014)</td>
<td></td>
</tr>
<tr>
<td>Permanent book tax differences</td>
<td>Cash flows from current year activities are cash inflows and cash outflows</td>
<td>CFO = Ln (Cash Flow From Operating Activities)</td>
<td>(Kasiono &amp; Fachrurozie, 2016)</td>
</tr>
<tr>
<td>Cash flow from operating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>Comparison between total debt values to total asset value, which is the percentage of funds provided by creditors for the company.</td>
<td>(Fanani, 2010; Widiatmoko &amp; Indarti, 2018a, 2018b)</td>
<td></td>
</tr>
<tr>
<td>Size of firms (as control variable)</td>
<td>Firm's size is measured using natural log of assets of each company</td>
<td></td>
<td>(Fadilah &amp; Wijayanti, 2017)</td>
</tr>
</tbody>
</table>

Prior to regression testing, normality and classical assumptions are tested as a condition of using ordinary least square regression (OLS).

RESULTS AND DISCUSSIONS

Before testing multiple linear regressions, normality and classical assumptions are tested. The initial test results with 129 data shows a Zskewness value of -28.65, smaller than -1.96. These results prove that the residuals in the regression model are not normally distributed, so that data transformation is carried out by issuing extreme data (outliers). The results of normality testing after removing outlier data obtained Zskewness figures of -0.59, smaller than 1.96. It can be concluded that the normality requirements are met. Table 2 shows that the significance values for all independent variables are above 0.05. Based on these results, there was no heteroscedasticity in the regression model.

The information in Table 3 shows that all independent variables have tolerance values above 0.10 and the value of the variance inflation factor (VIF) is below 10. It can be concluded that in the regression model multicollinearity does not occur. The Durbin-Watson values in Table 3 show a figure of 1,820. This value is between $d_u$ (1.7809) and $4-d_u$ (2.2191). These results indicate that the regression model does not have an autocorrelation problem.

The regression test results presented in Table 3 show the adjusted R Square value of 0.235. These results indicate that temporary differences, permanent differences, operating cash flow, debt levels, and firm size as control variable are able to explain variations in earnings persistence of 23.50%. The remaining 76.50% is explained by other variables not included in this research model. The calculated F value is 7.152, with a significance level of 0.000, indicating that the model is feasible to use.
Table 2. Heteroscedasticity Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>TBTD</td>
<td>-8.788</td>
<td>5.016</td>
<td>-0.183</td>
<td>-1.752</td>
</tr>
<tr>
<td>PBTD</td>
<td>-1.953</td>
<td>2.559</td>
<td>-0.076</td>
<td>-0.763</td>
</tr>
<tr>
<td>CFO</td>
<td>-0.026</td>
<td>0.061</td>
<td>-0.067</td>
<td>-0.423</td>
</tr>
<tr>
<td>LEV</td>
<td>0.428</td>
<td>0.250</td>
<td>0.175</td>
<td>1.710</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.035</td>
<td>0.070</td>
<td>-0.080</td>
<td>-0.501</td>
</tr>
</tbody>
</table>

Dependent Variable: ABSRESID

Table 3. Regression Testing Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.937</td>
<td>2.054</td>
<td>0.456</td>
<td>0.649</td>
<td></td>
</tr>
<tr>
<td>TBTD</td>
<td>-15.918</td>
<td>7.956</td>
<td>-0.187</td>
<td>-2.001</td>
<td>0.048</td>
</tr>
<tr>
<td>PBTD</td>
<td>2.949</td>
<td>4.058</td>
<td>0.065</td>
<td>0.727</td>
<td>0.469</td>
</tr>
<tr>
<td>CFO</td>
<td>0.233</td>
<td>0.097</td>
<td>0.344</td>
<td>2.418</td>
<td>0.018</td>
</tr>
<tr>
<td>LEV</td>
<td>-1.993</td>
<td>0.397</td>
<td>-0.463</td>
<td>-5.021</td>
<td>0.000</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.204</td>
<td>0.112</td>
<td>-0.261</td>
<td>-1.829</td>
<td>0.071</td>
</tr>
</tbody>
</table>

The results of testing the first hypothesis as shown in Table 3 show that the beta coefficient value of the temporary difference variable is -15.918 with a significance value of 0.048, smaller than 0.050. These results indicate that the first hypothesis which states the higher the book tax difference, the lower the income persistence was received. This shows that the greater the temporary difference produced the lower the profit persistence, and vice versa. The amount of positive correction due to temporary differences will have an impact on the amount of deferred taxes. If the deferred tax is large, it will cause a decrease in net income. Companies that have high book tax differences will have less persistent accruals and income (Hanlon, 2005). This finding supports previous research by Jackson (2009), Persada and Martani (2010), Jackson (2015) and Waluyo (2016) which concluded that temporary differences negatively influence the earnings quality.

Agency perspective highlight that agency conflicts occur because managers have the authority to choose the accounting recognition method that they want to maximize their own profits, without thinking about their responsibilities to shareholders, thus causing agency costs. With the agency cost, temporary differences can provide information to shareholders about management authority in accrual processes, because there is little freedom of accounting recognition methods that are allowed in measuring fiscal earnings that have an impact on decreasing net income.
Permanent differences have a beta value of 2.949 with a significance value of 0.469. These results indicate that permanent differences do not affect earnings persistence. The second hypothesis which states the higher the book tax difference, the higher the income persistence was rejected.

That is, the size of the permanent difference does not affect the future profit growth. This condition is caused by there are items of permanent difference such as income that are subject to final tax and are not taxable objects that can reduce fiscal earnings, and are accompanied by non-taxable costs that can add to fiscal earnings. The current tax burden does not show a significant change in net income after tax.

In accordance with the agency theory, permanent differences are a result of the use of managerial authority in managing accounting earnings with the intention of avoiding taxable earnings, thereby increasing net income to meet the interests of investors in making decisions. However, investors are more focused on the growth of earnings that guarantee the continuity of dividends without regard to permanent differences. This can explain that permanent differences do not affect the persistence of earnings. These results support the findings of research done by (Salsabiila et al., 2016) which proves that permanent differences have no relationship with earnings persistence.

The value of beta in the operating cash flow variable is 0.233, significant at the 5% level. It means that operating cash flow has a positive effect on earnings persistence. Thus, the third hypothesis which states that the higher the cash flow from operating activities, the higher the persistence of earnings was accepted. The higher the value of operating cash flow in the firm, the quality of earnings or earnings persistence will increase, and vice versa if the value of operating cash flow decreases, the quality of earnings will also decrease. This can be interpreted if the firm’s operations are good, it will generate good and persistent earnings, in other words the firm has cash to carry out its operations again without having to borrow or seek capital from other parties.

Operating cash flow is able to provide a positive signal to investors and creditors in making decisions and reducing risk, because basically operating cash flow can be used as a benchmark in acting other than earnings. This result was in line with previous studies done by Fajri and Mayangsari (2012), Salsabiila et al. (2016), and Kasimo and Fachurrrozie (2016), which states that the higher the cash flow from operating activities, the more persistent earnings will be. Research by Bandi (2012) also found that cash flow can predict future earnings.

The results prove that the level of debt has negative influence on earnings persistence. Debt contains the consequence that the firm must pay interest and principal at maturity, so that earnings derived by the firm will be prioritized to pay debts and interest, rather than to maintain the firm’s income in financing the firm’s operations. Therefore, the level of debt will have an impact on the firm’s earning decline in the future. This is in accordance with agency theory, which states that creditors pay more attention to the firm’s ability to repay debts, while investors are more towards the firm’s ability to recover funds to make investments. Thus, the use of debt that is too large will lead to agency conflict between creditors and investors that can cause the existence of debt agency costs. The results are consistent with the research done by Kasimo and Fachurrrozie (2016) who provided evidence that the level of debt has negative influence on earnings persistence.

CONCLUSION

This research investigated the effect of temporary differences, permanent differences, operating cash flow, and debt levels on earnings persistence. The results showed that the temporary book tax differences negatively affected the persistence of earnings. The higher the value of book tax differences, the greater the accrual level and worsening earnings quality risk. Operating cash flow has a positive effect on earnings persistence. The higher value of operating cash flow indicates that earnings quality is getting better. Different results occur in the permanent book tax differences variable, which does not affect the persistence of earnings. Meanwhile, contrary to what was hypothesized, the level of debt has a negative influence on persistence of earnings. This
condition explains that the higher the level of debt, the higher the firm’s obligation to repay loans and interest so that earnings will decrease.

The weaknesses of this study include the relatively low adjusted R2 value of 23.50%. This value means that the ability of temporary book tax differences, permanent differences, operating cash flow, debt levels, and firm size as control variables in explaining the variation in earnings persistence variable is only 23.50%. The remaining 76.50% indicates that variations in earnings persistence are influenced by other variables. Future research is expected to be able to use other variables in predicting earnings persistence, for example accrual levels, cash dividends, and audit quality (Mousa & Desoky, 2019).

REFERENCES


