The Influence of Book Tax Differences on Correlation of Current Earnings, Accruals, and Cash Flows to Future Earnings (Empirical Study on Manufacturing Companies Registered on the Indonesia Stock Exchange in Years 2007-2011)

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ABSTRACT

This study aims to analyzing the effect of book-tax differences on the correlation of current earnings, accruals, and cash flows to future earnings, of companies registered on the Indonesia Stock Exchange in Years 2007-2011. This study consisted of a dependent variable, three independent variables, and a moderating variable. The dependent variable was the future earnings before tax of one-year period ahead (PTBIt $_{+1}$). The independent variables consisted of current year earnings before tax and the accrual and cash flow components. The moderating variable of this research was book-tax difference representing sub-samples of companies with large positive book-tax differences (LPBTD), companies with large negative book-tax differences (LNBTD), and companies with small book-tax differences. The third subsample was a variable indicator. The statistical analysis method in this study used multiple regression analysis. The results of this study indicate that the large negative book tax differences do not affect the accounting earnings of the one-year period ahead. This indicates that companies with large negative book tax differences may not be able to realize revenues in the future so that it cannot affect the future earnings. The large positive book tax differences which statistically significant have an effect on the future earnings. This indicates that companies with large positive book-tax differences cannot perform subjectivity in financial reporting if compared to the tax reporting so that the accrual and cash flow the components could affect the future earnings.

Keywords: Book-tax differences, earnings, accruals, cash flows

1. INTRODUCTION

The preparation of financial statements by companies can be used as one of the bases for the assessment of their performance and financial conditions. The financial statements of the companies are intended both for the benefits of shareholders and for the purpose of taxation. Therefore, for the corporate tax calculation, the companies must make fiscal financial statements. The standard that governs the preparation of financial statements is a fiscal tax law, whereas the standard governing the preparation of commercial financial statements is Basic Financial Accounting Standard which has a

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different basis in the preparation of such financial statements and which may lead to differences in their profit and loss account. Such differences coin the term of book tax differences in the analysis of taxation (Resmi, 2011: 369).

Companies do not need to do a double bookkeeping to meet the objective of accounting financial statements and fiscal financial statements. However, when the companies prepare the fiscal financial statements, they must first make fiscal reconciliation to the commercial financial statements. Fiscal reconciliation is the fiscal adjustment made to the commercial financial statements under the terms of taxation in order to obtain fiscal earnings. Therefore, the presence of basic differences in the preparation of commercial earning calculation and in that of taxable earning calculation result in the difference between the amount of pre-tax income (accounting earnings) and taxable earnings (fiscal earnings). The differences between the accounting earnings and the fiscal earnings are called the book tax differences (Lestari, 2011).

Book tax differences are created due to temporary differences and permanent differences. The former occur because there is a timing difference of the recognition of income and expenses between the fiscal financial statements and the commercial financial statements whereas the latter occur due to the presence of different setting between the financial accounting standards and the taxation laws and regulations (Martani and Persada, 2010).

The persistence of earnings is the accounting earnings to be expected in the future (expected future earnings), which is reflected in the current earnings. The information contained in the book tax differences can affect the companies' future earnings, and can lead to profit management practices which indicate that the companies have poor and less persistent quality of earnings. The earnings are said to be persistent when the companies are able to maintain the amount of the current earnings and the future earnings and when the cash flows and the accrual earnings affect the companies' following year earnings (Penman, 2001).Therefore, the persistence of earnings is often used as a consideration of quality of earnings because the persistence of earnings is a component of the qualitative characteristics of relevance, namely: predictive value (Jonas and Blanchet, 2000). The earning forecast value is determined by the accrual and cash flow components of the current earnings which currently represent a transitory (temporary) characteristic and a permanent earnings (Sloan, 1996).

2. THEORY AND DEVELOPMENT OF HYPOTHESES

2.1. Differences between Accounting Financial Statements and Fiscal Financial Statements

The differences between the accounting (commercial) financial statements and the fiscal financial statements are as follows: 1) The former are intended to assess the economic performance and the financial condition of the business sector whereas the latter is intended to calculate the tax. 2) The commercial financial statements are prepared based on the common principles, namely: the Financial Accounting Standards (GAAP) whereas the fiscal financial statements are prepared based on the tax laws and regulations (Resmi ;2009).

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2.2. Profit Accounting

One of the tools to measure the success and achievement of the companies is profit. The measurement of profit is important not only for the assessment of performance of the companies but also as information for investors in the provision of dividends, bonuses for managers, and tax payments as well as for determining the investment policy of the companies in the future. Meanwhile, the accounting earnings which is referred to in this study is in accordance with IAS Number: 46. Accounting earnings according to IAS Number: 46 is the net profit for one period before being deducted with tax expenses.

2.3. Book Tax Differences

The difference between accounting earnings and taxable earnings is the difference in reporting the earnings due to differences in the concepts and rules in their respective reporting system (Plesko, 2004). Meanwhile, Philips, Pincus and Rego (2003) claimed that the difference between accounting earnings and taxable earnings is the total component of the tax burden which is borne by the companies and which reflects the tax effect generated by the temporary differences between accounting and taxation. According to Permanent differences are differences in the recognition of tax arising due to transactions recognized income and expense for accounting purpose are not recognition by commercial and fiscal.Temporary difference in the difference that occurs because of differences in the recognition of fiscal time and expense in calculating profit.

2.4. Accrual

In accordance with IAS Number: 1, Belkaoui (2000) argued that accrual accounting is the process of the recognition of non-cash events and circumstances that occurred, specifically, the accrual for recognition of revenue and an increase in assets, as well as the expenses and an increase in debts in the amount expected to be received or paid, usually in the form of cash in the future.

2.5. Cash Flow

According to IAI in Paragraph 5 of IAS Number: 2 of 2009, cash flow is the cash inflow and cash flow or cash equivalents. The cash flow statement explains changes in cash or in cash equivalents in a given period. Cash equivalents are short-term investments which are highly liquid and which can be immediately redeemed for cash.

2.6. Development of Hypotheses

2.6.1. Effect of Book Tax Differences on Accounting Earnings

SFAC Number: 2 concerning the qualitative characteristics of accounting information states that the primary quality of accounting information is the relevance and reliability. The persistence of earnings is not a component of the definition of the primary quality of earnings, but the persistence of earnings is often used as a

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consideration of the quality of earnings because it is a component of the qualitative characteristics of relevance which is predictive value (Wijayanti, 2006).

Ohlson (1995) in Barth and Hutton (2004) also uses the persistence of earnings as characteristics of relevant value in the value model. Therefore, the persistence of earnings is an element of relevance. Thus, some of the information in the book tax differences that may affect the persistence of earnings may assist investors in determining the quality of earnings and corporate value.

The assumption underlying the research on the book tax differences to assess the quality of earnings is the managers' ability to manipulate accounting earnings reporting in one period of time, but (not) their ability to manipulate taxable earning reporting (Phillips *et al,* 2003).Therefore, managers prefer to increase the accounting earnings without causing an increase in taxable earnings to utilize the flexibility rules of generally accepted accounting principles (GAAP) or in Indonesia known as generally acceptable accounting principles (GAAP) (Hanlon, 2005).

Large positive book tax differences will give rise to tax deferred expenses in the statement of profit and loss and deferred tax liabilities in the balance sheet. Large negative book tax differences will cause a deferred tax benefit in the income statement and deferred tax assets in the balance sheet. Therefore, the large positive book tax differences and the large negative book tax differences are claimed to have a lower and less persistent quality of earnings because the advent of the balance of assets (liabilities) should be pursued further, and changes in conjunction with the account balance may be used as a way of to manipulate (increase or decrease) income artificially in management policy (management discretion) so that the large positive and negative book tax differences together indicate that they are unable to maintain the amount of the current earnings and to the future earnings (Revsine *et al,* 1999 in Hanlon 2005). Thus, the first hypothesis is formulated as follows:

H1: Book tax differences have an effect on the correlation between the current earnings and the future accounting earnings in the one-year period ahead

2.6.2. Effect of Book Tax Differences with Accrual and Cash Flow Components on Accounting earnings

Revsine *et al,* (1999) in Hanlon (2005) argued that the increase in tax deferred expenses which reflect the tax book differences indicates the quality of earnings is getting worse. Therefore, the reduction in the balance of assets (liabilities) should be explored further. Thus the changes in relation to the balance sheet accounts are probably used as a way to increase profits artificially because the amount of income during one period must be in accordance with the amount of flow of cash. Therefore, the managers have to reverse some of the advantages resulting from the increase or decrease in the accrual of profits made in the past.

There are two components which form the accounting earnings, namely: cash flow and accrual components. The persistence of earnings is one component of the predictive values of profits in determining the quality of earnings. It is determined by the accrual and cash flow components of the current earnings, which represents the

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transitory (temporary or transitional) and permanent natures of earnings (Wijayanti, 2006).

Tax laws and regulations do not provide much freedom for management to select accounting procedures in tax reporting. If the book tax differences indicate subjectivity in the process of accrual financial reporting, companies with large negative or positive book tax differences will indicate the persistence of low returns due to their accrual components if compared with those with small book tax differences (Wijayanti, 2006). The second hypothesis is formulated as follows:

H2: Book tax differences have an effect on the correlation of the accrual and cash flow to the future accounting earnings in the one-year period ahead

3. RESEARCH METHOD

3.1. Methods of Analysis

Regression analysis was employed in this research to investigate how the independent variables and the dependent variable are correlated in term of functional correlation or causal correlation.

3.2. Hypothesis Testing

To test the proposed hypotheses, this research used the regression analysis to measure the strength of the correlation between two or more variables and also to show the direction of the correlation between independent variables and the dependent variable. The regression equation for the first hypothesis in this study is as follows:

$$PTBIt_{+1} = \beta_0 + \beta_1 LNBTD + \beta_2 LPBTD + \beta_3 PTBIt + \beta_4 PTBIt{*}LNBTD + \beta_5 PTBIt{*}LPBTD + \varepsilon_{+t} \quad (1)$$

Remarks:

PTBIt +1	:	Accounting earnings before tax of one-year period ahead (Pre-tax book income)
LNBTD	:	Negative difference between accounting earnings and taxable earnings (Large Negative Book Tax Differences)
LPBTD	:	Positive difference between accounting earnings and taxable earnings (Large Positive Book Tax Differences)
PTBIt	:	Earnings before tax of the current period

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The second hypothesis testing uses the equation model by attributing earnings into the accrual and cash flow components.

$$PTBIt_{+1} = \beta_0 + \beta_1 LNBTD + \beta_2 LPBTD + \beta_3 PTCF + \beta_4 PTCF*LNBTD + \beta_5 PTCF*LPBTD + \beta_6 PTACC + \beta_7 PTACC*LNBTD + \beta_8 PTACC*LPBTD \quad (2)$$

Remarks:

PTBIt	:	Accounting earnings before tax of one-year period ahead (Pretax book income)
LNBTD	:	Negative difference between accounting earnings and taxable earnings (Large Negative Book Tax Differences)
LPBTD	:	Positive difference between accounting earnings and taxable earnings (Large Positive Book Tax Differences)
PTCF	:	Pre Tax Cash Flow
PTACC	:	Pre Tax Accrual

4. RESULT

4.1. Result of Sample Selection

In this study, the population included all manufacturing companies listed on Indonesia Stock Exchange from 2007 to 2011. According to data on the Indonesian Capital Market Directory (ICMD) 2011, there were 149 manufacturing companies listed on the Indonesia Stock Exchange (IDX). By using the purposive sampling method for a year, 26 sample companies were obtained, and within a five-year observation period, the total samples were 130 companies.

Table 1
Sampling Procedure

Total number of manufacturing companies listed on IDX from 2007-2011	149
Companies with unaudited financial statements	(1)
Companies with incomplete data	(69)
Companies delisting (2007-2011)	(15)
Companies that have financial statements other than IDR	(10)

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Companies that have negative revenue	(17)
Companies that do not report deferred tax expenses	(11)
	123
Number of sample companies	26
Five-year observation period sample companies	130

Source : ICMD

4.2. Descriptive Statistic

Descriptive statistic in this study is presented to provide information on the characteristics of research variables including minimum, maximum, average (mean), and standard deviation values.

Table 2
Descriptive Statistic

Variables	N	Minimum	Maximum	Mean	Std. Deviation
$PTBIt_{+1}$	103	-1.50916	2.40563	0.0000021	0.99508597
PTBIt	103	-1.25763	2.23209	0.0000043	0.99014754
PTACC	103	-2.07305	1.60413	-2.2377086	0.98518437
PTCF	103	-3.65895	4.03251	0.0001220	1.00000000

Source: Data Processing Results

Table 2 presents the descriptive statistic of the sample data in this study. The mean of the accrual variable (PTACC) of -2.23% of the asset value indicates that average accruals tend to decrease earnings, and this result is an assumption of the research model so that the results obtained are not biased.

Notes:

PTBIt + 1 : Pretax Book Income (Accounting earnings before tax) period t + 1

PTBIt : Pretax Book Income (Accounting earnings before tax) period t

PTCF : Pre-tax Cash Flow, measured by the sum of operating cash flow minus extraordinary items plus cash for taxes.

PTACC : Pre-tax Accrual, measured by the earnings of pre-tax book income minus pre-tax cash flow

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Table 3

The results of regression analysis of profit persistence testing by including the profit coefficient which distinguishes the levels of accounting earnings and fiscal earnings

$$\mathbf{PTBIt_{+1} = \beta_0 + \beta_1 LNBTD + \beta_2 LPBTD + \beta_3\, PTBIt + \beta 4 PTBIt{*}LNBTD + \beta_5 PTBIt{*}LPBTD + \varepsilon}$$

Variables	*Unstandardized Coefficients* B	*Std. Error*	t-calculation	Significance
(*Constant*)	6.761	.920	7.352	.108
LNBTD	-2.831	2.214	-1.279	.204
LPBTD	1.369	1.359	1.007	.031*
PTBIt	4.920	10.232	.481	.003*
LNBTD*PTBIt	43.060	23.999	1.794	.076
LPBTD*PTBIt	-.026	.021	-1.200	.013*

R^2 = 0.068

Adj R^2 = 0.020

F Calculation = 41.410

Significance = 0.000*

Source: Result of processed data

Note: * = at the significance level of α = 0.05%

Table 3 shows the results of the first hypothesis testing by using the first model equation. It shows the coefficient of determination (R2) of 0.020, meaning that 2% of the variation of accounting earnings before tax for one-year period ahead can be explained through the variation of the five independent variables in the second equation model. The significance value of F calculation of 41.410 with the p-value = 0.000 indicates that the five independent variables in the second equation regression model can be used to predict accounting earnings before tax for one-year period ahead. Of the five independent variables in the regression model, the four variables, namely: LNBTD, PTBIt, LPBTD, and PTBIt * LPBTD, are statistically significant, meaning that each of these four variables affects the accounting earnings for the one-year period ahead.

The results of the first hypothesis are in line with Jackson's study (2009) who also conducted his research by analyzing permanent differences. He found evidence that permanent differences have a positive correlation with profit growth simply

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because they have a negative correlation with changes in tax burden. The statement means that the higher the permanent differences are, the lower the future tax burden will be, and that the future net earnings will be higher.

The results of multiple regression calculation show that the variable LNBTD * PTBIt at the significance level of α = 5% does not affect the accounting earnings for the one-year period ahead, which is proved by the value of regression coefficient of -1.279 and the significance value of 0.204> 0.05. This indicates that companies with large negative book tax differences may not be able to realize future earnings that such differences cannot affect future earnings. The tax laws and regulations and the research samples which are different from those in Hanlon's research (2005) cause different results in this study. The results of this study are in line with that of Wijayanti's research (2006).

Table 4
The results of persistence test on accrual and cash flow components
$$PTBIt_{+1} = \beta_0 + \beta_1 LNBTD + \beta_2 LPBTD + \beta_3 PTCF + \beta_4 PTCF*LNBTD + \beta_5 PTCF*LPBTD + \beta_6 PTACC + \beta_7 PTACC*LNBTD + \beta_8 PTACC*LPBTD\ \varepsilon$$

Variables	*Unstandardized Coefficients*			
	B	*Std. Error*	t-calculation	Significance
(*Constant*)	7.004	1.284	.226	.822
LNBTD	.286	1.665	.172	.003*
LPBTD	.969	1.805	.537	.000*
PTCF	.752	.019	8.427	.000*
LNBTD*PTCF	-.007	.010	.709	.000*
LPBTD*PTCF	.023	.027	.875	.002*
PTACC	.301	.080	.132	.000*
LNBTD*PTACC	-.009	.014	-.687	.000*
LPBTD*PTACC	-.034	.042	-.806	.040*

R^2 = 0.432

Adj R^2 = 0.422

F Calculation = 36.244

Significance = 0.001*

Source: Result of processed data

Note: * = at the significance level of α = 0.05%

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Table 4 describes the results of statistical tests which show that independent variables have a positive effect on the dependent variable. This indicates that the companies with large positive book tax-differences do not subjectively report their financial statement rather than their tax reporting that their accrual and cash flow components can affect their future earnings. The results of this study are in line with those of Wijayanti's research(2006) and Hanlon's research(2005).

5. Conclusion, Recommendation, Implication, and Limitation

5.1. Conclusion

Based on the testing results and analysis of this study, conclusions are drawn as follows:

1. Large negative book tax differences do not affect the accounting earnings for the one-year period ahead. This indicates that companies with large negative book tax differences may not be able to realize future earnings that they cannot affect future earnings.
2. Large positive book tax differences, which are statistically significant, affect the future earnings, indicating that companies with large positive book tax-differences do not subjectively report their financial statement rather than their tax reporting that the accrual and cash flow components can affect their future earnings.

5.2. Recommendation

Some considerations that need to be taken into account in developing and extending future research include the following:

1. Further research may consider using sample companies having profit and loss in order to provide a more realistic condition.
2. The duration of the research should be extended and it should use a large number of sample companies to be able to generalize the research, such as using all companies listed on the Indonesia Stock Exchange. Extended period and the addition of samples may yield better results in the study.
3. Further research may compare book tax differences to other accrual models as discretionary accrual proxies in determining profit persistence.

5.3. Practical Implication

The results of this study are expected to be useful for:

1. Academia

   The results of this study can add references to the development of the academic world, especially related to differences in accounting earnings and fiscal earnings that can be used to assess the quality of accounting earnings.
2. Practitioners

   The results of this study may be used as a consideration for adequate disclosure and explanation of the difference between accounting earnings and fiscal earnings reported in financial statements, in accordance with PSAK Number 46 regarding Accounting for Income Tax.

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3. Company Management
   This study can provide guidance for company management in managing temporary differences in the recognition of income and expenses that the accounting earnings would be perceived in quality or responded positively by investors because the differences between accounting earnings and fiscal earnings affect the quality of earnings.

5.4. Limitation of Study

This study has several limitations that must be considered in interpreting the results of the above analysis, namely:

1. The number of samples used in this study was relatively small, i.e. 26 manufacturing companies, and they were not randomly selected. As a consequence, the results of this study cannot be used as a basis of generalization. This is due to incomplete financial statement data of some companies and the focus of this research, which is emphasized on the companies having similar characteristics.
2. A relatively short observation period was considered inadequate for estimating the parameters of the research models, namely: to obtain the financial statements of companies on fees and tax debt which are consistently reported, i.e. after the implementation of PSAK Number: 46.
3. This study only used Book tax-differences as discretionary accrual proxy which is the temporary differences between the accounting earnings and the fiscal earnings, and which is shown by cost accounting (utility), deferred tax expense / benefit in explaining profit persistence.

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