VALUE RELEVANCE ANALYSIS OF DEFERRED TAX: ASEAN PERSPECTIVE

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ABSTRACT

The debate on value relevance of deferred taxes has gone so long. The older research found the positive result, whereas the younger research found the opposite because the changes of investor valuation. This paper provide value relevance analysis of deferred taxes on five of ASEAN country. The comprehensive analysis, taking into account the differentdeferred tax components, shows that investors in ASEAN generally only consider deferredtaxassets to convey relevant information for assessing firm value. Investors view deferred tax assets as a real asset. In addition to examine the effect of book tax conformity, the value relevance analysis is complement by an analysis of book tax conformity as moderating variable. This supplemental analysis find that book tax conformity can strengthen the relevance of deferred taxes. The sensitivity analysis about per country regression is done to know further about the value relevance of each country. This analysisfound that in the country that has more sophisticated investors, such as Malaysia and Singapore, the deferred taxes information would not be relevance.

Keywords: *deferred taxes, value relevance, deferred tax components, book tax conformity.*

1. INTRODUCTION

Company make financial reports with two main goals each year, the first goal for the reporting of financial information based on financial accounting and the second goal is financial reporting based on tax regulations. Financial accounting reporting is intended to inform stakeholders about the company's corporate performance, while the tax reporting aimed at determining corporate tax liability to the state. There are some differences in income which in the accounting reporting (book income) with tax reporting (taxable income). Such differences may be permanent or temporary. Temporary differences arising will be reflected in the financial statements as deferred tax.

Since the 1980s, the rules regarding the disclosure of deferred tax has experienced a rapid increase in both the U.S. GAAP, IFRS / IAS, and also in national accounting standards. However, the usefulness of deferred tax accounting is constantly debated. Critics argue that the informative value of deferred tax is very low. This is because the deferred tax implications on cash flow are highly uncertain, so make most of the users of financial statements ignore deferred tax information because they do not provide relevant information for decision making.

Empirical evidence about whether the financial statements users considering deferred tax information carried by Amir et al. (1997) and Ayers (1998), which provide evidence that the deferred tax relevant information, while the study Chang et al. (2009) using Australian data, find only deferred tax

assets to be value relevant. Chandra and Ro (1997) provide evidence that the deferred tax and stock risk are related negatively. Instead, there are several other studies that produce contradictory findings. Lev and Nissim (2004) found no significant relationship between deferred tax expense and annual returns, indicating that investors do not consider deferred tax as the relevant information. Recent research conducted by Chludek (2011) which examines the value relevance and reversal of deferred tax on companies in Germany that has apply IFRS produced findings that deferred tax has no significant relationship with firm value. Regarding other users of financial statements, Amir and Sougiannis (1999) and Chen and Schoderbek (2000) reported empirical evidence that financial analysts do not include deferred tax information in their earnings forecasts. Likewise, several empirical studies report that deferred taxes are not reflected in bond ratings (Huss and Zhao, 1991; Chattopadhyay et al., 1997).

This study tried to investigate the value relevance of deferred tax. This study uses a similar model with a research model conducted by Chludek (2011) with some additional models. This study adds international aspects in it by taking a sample of companies in five different countries, namely Indonesia, Malaysia, Singapore, Philippines, and Thailand. This study is different from Chludek because it test further the value relevance of deferred tax data among ASEAN countries. This study uses additional models and incorporate a moderating variable, book-tax conformity. Tests on the book tax conformity provides evidence that the book tax conformity will reduce the quality of earnings (Atwood et al., 2010; Hanlon et al., 2008) and therefore will reduce the value relevance of financial statements information.

The proceeding of this study is organized as follows. Second part of this study review the literature related to the value relevance of deferred tax and the research hypothesis. The third section describes the sample selection, regression models, and research methods. Analysis of the major results of the regression models and sensitivity are described in section four. Finally, the fifth part in this study provides conclusions and suggestions.

2. Literature Review and Research Hypotheses

2.1 Deferred Tax

The differences between accounting standards and tax laws cause permanent differences and temporary differences. Temporary differences arising will be reflected in the financial statements as deferred tax. Deferred tax can be deferred tax assets or deferred taxliabilities. Taxable temporary differences will rise deferred tax liabilities while the deductible temporary differences will give rise to deferred tax assets. Deferred tax arising will be allocated to account for tax effects and these effects should be presented in the financial statements.

Companies are required to calculate and recognize deferred tax using the asset and liability method. In this case, the company classifies deferred tax liabilities as a liabilities and deferred tax assets as an assets. In other words, deferred tax are reported as an assets or liabilities and deferred tax expense shows the changes in deferred tax assets or liabilities during the year. FASB states that the asset and liability approach in accounting reporting of the income tax is most consistent with the conceptual framework.

2.2 Research Hypothesis

Deferred tax can be deferred tax assets or deferred tax liabilities. According Chludek (2011), deferred tax assets will provide tax benefits in the future with a lower amount of tax than the previous period. Deferred tax

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assets will take into account the amount of income taxes recoverable in future. Therefore, the deferred tax assets will have implications for the company's cash flow in the future. Deferred tax assets will provide a better cash flow in the future so it will give a positive value to the company (Legoria & Sellers, 2005). Meanwhile, the deferred tax liability shows that the tax liability must be paid by the company in the future (Chludek, 2011). Therefore, the deferred tax liability would have implications for future cash flows. Deferred tax liabilities will reduce the company's cash flow in the future, so it will give a negative value for the company (Legoria & Sellers, 2005). Investors can use the information contained in the deferred tax assets or deferred tax liabilities to estimate the company's cash flow in the future in assessing the value of a company. Based on the previous description, the first hypothesis proposed is:

H1a: Deferred tax assets havea positive value relevance.

H1b: Deferred tax liabilitieshave a negative value relevance.

The use of the information in deferred tax assets and liabilities as independent variables in the value relevance of deferred tax as a whole is not appropriate because there is a difference between a company that has a branch. In preparing the financial statements, the value of deferred tax assets and deferred tax liabilities should be offset and produce a net deferred tax. Companies only provide net of deferred tax information on its balance sheet. Therefore, this study using other forms of deferred tax assets and deferred tax liabilities which is net deferred tax. Previous studies that using net deferred tax to test the value relevance of deferred tax information have different conclusions. Amir et al. (1997), Chandra and Ro (1997), and Ayers (1998) concluded that the net deferred tax has a relevance value, while Lev and Nissim (2004) and Chludek (2011) concluded that the net deferred tax has no relevance value. Value of positive net deferred tax would reduce the tax burden in the future and increase its net income. Based on the previous description, the second hypothesis proposed is:

H2: Net deferred tax has a positive value relevance.

Net deferred tax can be a net deferred tax asset or net deferred liabilities. If deferred tax assets is greater than deferred tax liability, would give rise to net deferred tax assets. Vice versa, if deferred tax liability is greater than deferred tax assets, will give rise to net deferred tax liabilities. The third hypothesis proposed in this study to see the superiority of the value relevance of deferred tax information can be. Superiority means when the value of assets (liabilities) greater than the deferred tax liability (asset). This hypothesis clarify first hypothesis that can answer whether deferred tax assets will be seen as a real asset if it has a value greater than the deferred tax liability. If deferred tax is the net deferred tax assets it will give a positive value to the value of the company, but if it is a deferred tax liability, that would give a negative value to the company. Based on the previous description, the third hypothesis proposedis:

H3a: Net deferred tax assets have a positive value relevance.

H3b: Net deferred tax liabilities have a negative value relevance.

Chludek (2011) found that the deferred tax information will have value relevance if the company has very large value of net deferred tax. Tremendous value of net deferred tax guarantee that the company will have a lower tax burden in the future. To examine the effect of the greater value of the deferred tax, the fourth hypothesis in this study using the value of the net deferred

tax distributions that are divided into quintiles. The greater the value of net deferred tax will be positively related to the dependent variable. Based on the previous description, the fourth hypothesis proposedis:

H4: The amount of deferred tax has a positive value relevance levels.

Every country has its taxation rules and regulations that are different. There are some countries that have tax provisions that are tailored to commercial accounting, but many states also have tax provisions that are very different from commercial accounting. This gives rise to the difference in investors' view of looking at the value relevance of tax information between one country to another. Therefore, the value relevance of deferred tax information would have a different level of relevance in each country. To examine the effect of differences in tax regulations in a country with other countries, the fifth hypothesis in this study using the book tax conformity variables as moderating variables. Tests on the book tax conformity provides evidence that the book tax conformity will reduce the quality of earnings (Atwood et al., 2010; Hanlon et al., 2008) and therefore will reduce the value relevance of financial statements information. Based on the previous description, the fifth hypothesis is:

H5: Book tax conformity will reduce the value relevance of deferred tax.

3. Research Methods

3.1 Sample Selection

Object of this study are companies in the manufacturing industry are that listed on the Indonesia, Malaysia, Singapore, Philippines, and Thailand Stock Exchange who publish audited financial statements as of December 31 in a consistent and complete from the year 2009-2011. The data used in this study is a secondary data obtained from the database Thomson Reuter's Worldscope as research conducted by Chludek (2011) and also the company's financial statements that are published, obtained either from the company website or from websites Indonesian Stock Exchange, Stock Exchange Malaysia, Singapore Stock Exchange, Philippine Stock Exchange, and the Stock Exchange of Thailand. There are some exceptions in the selection of the sample as outliers and incompleteness of data needed information.

3.2 Regression Model

Models used in this study is an extension of the Feltham and Ohlson's Price Model (F&O). This study used five research models that are consistent with F&O. The first research model aims to see whether the deferred tax assets and deferred tax liabilities have value relevance.

First Research Model

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 DTA_{it} + \beta_5 DTL_{it} + e_{it}$$

The use of independent variables net deferred tax illustrate more value relevance of deferred tax information as a whole because not all companies have subsidiaries. So the second research model as a whole can see value relevance of deferred tax.

Second Research Model

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 netDT_{it} + e_{it}$$

The third research model used to answer the third hypothesis about whether the sample that has a value of DTA (DTL) more superior than the DTL (DTA) will have morevalue relevance than otherwise. The third research model divides the two variables netDT be an net asset (liability) deferred tax.

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Third Research Model

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 netDTA_{it} + \beta_5 netDTL_{it} + e_{it}$$

The fourth research model aims to see whether the relevance of different information based on the amount of deferred tax. The fourth research model dividing the net deferred tax into five sections or quintile distribution.

TABLE 1
Variable Definitions

P	closing share price at Stock Exchange of firm i three months after fiscal year-end t
NOA	net operating assets before deferred taxes per share of firm i at fiscal year-end t = book value of equity per share " NFA " DTA + DTL
NFA	net financial assets per share of firm i at fiscal year-end t = cash, cash equivalents,and short-term investments - total debt including preferred stock
AOE	abnormal operating earnings per share of firm i at fiscal year-end t = abnormal operating earnings = [EBIT* (1 - income tax expense / EBT)] - [0.12* (book value of equity - net financial assets)]
DTA	deferred tax assets per share of firm i at fiscal year-end t
DTL	deferred tax liabilities per share of firm i at fiscal year-end t
netDT	net deferred taxes per share of firm i at fiscal year-end t = DTA " DTL
netDTA	net deferred tax assets per share of firm i at fiscal year-end t = netDT if netDT > 0 (DTA > DTL) , and 0 otherwise
netDTL	net deferred tax liabilities per share of firm i at fiscal year-end t = netDT if netDT < 0 (DTA < DTL) , and 0 otherwise
netDT1	tonetDT5 = netDT if netDT is in the first quintile (0 to 20 percent) to fifth quintile (80 to 100 percent) of the netDT-distribution, and 0 otherwise
BTC	book tax conformity
All variables are per share, i.e., deflated by common shares outstanding	

Fourth Research Model

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 netDT1_{it} + \beta_5 netDT2_{it} + \beta_6 netDT3_{it} + \beta_7 netDT4_{it} + \beta_8 netDT5_{it} + e_{it}$$

The fifth research model test further the value relevance of deferred tax information in ASEAN countries using book tax conformity variables as moderating variables. Models used in this study continue to use the Feltham and Ohlson models and is an extension of the first to the fourth model with the addition of book tax conformity variables as moderating variables.

Fifth Research Model

Model 5a:

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 DTA_{it} \times BTC + \beta_5 DTL_{it} \times BTC + e_{it}$$

Model 5b:

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 netDT_{it} \times BTC + e_{it}$$

Model 5c:

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 netDTA_{it} \times BTC \beta_5 netDTL_{it} \times BTC + e_{it}$$

Model 5d:

$$\begin{aligned} P_{it} = \quad & \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 netDT1_{it} \times BTC \\ & + \beta_5 netDT2_{it} \times BTC + \beta_6 netDT3_{it} \times BTC + \beta_7 netDT4_{it} \times BTC \\ & + \beta_8 netDT5_{it} \times BTC + e_{it} \end{aligned}$$

3.3 Data Analysis Methods

The data in this study are denominated in U.S. Dollar, it is because this is a research study that uses 5 state. In order for the entire data of each country can be compared, then the data is converted into the same currency that the U.S. Dollar is generally used for comparisons between countries. Prior to hypothesis testing, regression performed to choose the form of panel data models and tested for classical assumption. Results from the test of form the panel data, the best model used to study the first, third, fourth, and fifth (a) model is a fixed effects model, while the second, the fifth (b), fifth (c), and fifth (d) model more either using a random effects model.

Results of the testing the classical assumptions showed that heteroskedasticity and autocorrelation problems appear in all the research model that using fixed effects. Problems of autocorrelation and heteroskedasticity on fixed effects model will be given special treatment, namely the method of Generalized Least Square (GLS). GLS treatment method can eliminate the problems of autocorrelation and heteroskedasticityin the fixed effects model.

4. Empirical Results

4.1 Main Hypothesis Testing

Descriptive statistics of data are summarized in Table 2. Viewed from the minimum and maximum values, the variation of the value of the stock price (P) are very large, where the minimum value of 2.78E-12 and the maximum value of 0.000935, this is also seen in the standard deviation values are quite large as well. The median of stock price (P) is closer to the minimum value and the value is much lower when compared to its average value, indicating investor confidence in the companies in this study is still in certain companies. This led to the company's stock price is much higher than other companies.

The NOA and NFA describes company'snet assets or book value indifferent terms. NOA describing the terms of the company's operations, while the NFA describe the sources of their funding. Compared with NOA, the median of NFA much lower even have negative value which illustrates that in the range of research many companies that have losses in terms of funding, but in terms of its operations they have an advantage. Same as the stock price (P),

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NOA and NFA also has quite large difference between the minimum and maximum values. This suggests that these variables are very heterogeneous. The average of NOA is positive and the average of NFA is negative, as well as both the median value, which indicates that the average sample in this study suffered losses in terms of funding and the establishment of the book value of the company is derived from an operational perspective.

AOE has positive value in the average, this means that on average, the company has a book value higher than its expected value. This shows thatmostly investor gives a better assessment to the samplecompany. However, the median value of AOE is negative, indicates that more companies are rated poorly by investors. Most companies have a book value of less than the market value. This shows that investor still have interest only in certain companies, but these descriptive statistics can not describe more about the relationship of the company's scale and AOE.

DTA's median value is 0.000789 while the median value of DTL is 0.005191. DTL's median value is greater than the median value of the DTA, show that companies have DTL more than its DTA in its balance sheet. DTL's average value is greater than the average value of DTA, this suggests that the overall value of the company's DTL is greater than the value of DTA. The median value of netDT is negative, indicates that more companies have netDTL, in other words, more companies that have a DTL value greater than DTA.

TABLE 2
Descriptive Statistics

	Mean	Std. Dev.	Median	Max.	Min.	Obs.
P	4.79E-06	3.38E-05	6.55E-09	0.000935	2.78E-12	1908
NOA	7.89E+08	1.33E+10	0.289481	3.57E+11	-2.3559	1908
NFA	-0.20553	1.402148	-0.02042	3.845152	-28.4319	1908
AOE	39953986	1.15E+09	-0.00829	2.37E+10	-1.5E+10	1908
DTA	0.008391	0.032645	0.000789	0.802557	0	1908
DTL	0.034807	0.324156	0.005191	12.97012	0	1908
NetDT	-0.02641	0.305199	-0.00209	0.145362	-12.4318	1908
NetDTA	0.00327	0.011939	0	0.145362	0	1908
NetDTL	0.029684	0.304647	0.002088	12.43178	0	1908
NetDT1	-0.0269	0.304853	0	0	-12.4318	1908
NetDT2	-0.00229	0.005006	0	0	-0.02193	1908
NetDT3	-0.00048	0.001156	0	0	-0.00556	1908
NetDT4	3.85E-05	0.000232	0	0.001718	-0.00062	1908
NetDT5	0.003215	0.011951	0	0.145362	0	1908
BTC	0.010354	0.001618	0.01	0.013	0.008	1908

P	stock price
NOA	net operating asssets
NFA	net financial assets
AOE	abnormal operating earnings
DTA	deferred tax assets
DTL	deferred tax liabilities
netDT	net deferred tax
netDTA	net deferred tax assets per share of firm i at fiscal year-end t = netDT if netDT > 0 (DTA > DTL) , and 0 otherwise
netDTL	net deferred tax liabilities per share of firm i at fiscal year-end t = netDT if netDT < 0 (DTA < DTL) , and 0 otherwise
netDT1 to netDT5	netDT if netDT is in the first quintile (0 to 20 percent) to fifth quintile (80 to 100 percent) of the netDT-distribution, and 0 otherwise
BTC	*book tax conformity*

Other independent variables such as netDT, netDTA, netDTL, and netDT perquintil and independent variables with moderating book tax conformity is the change in shape of the DTA and DTL so that these variables have a descriptive statistic that is not much different from the variable DTA and DTL. Therefore, the interpretation of descriptive statistics on these variables are not needed.

The results of data processing in the first model suggests that only information of deferred tax assets are significantly affect the value of the company (which is proxied by stock prices / P). Deferred tax assets information had a positive and significant relationship at á = 5% of the value of the company. Deferred tax liability information has no significant effect on firm value. This shows that the only information that has value relevance is DTA, while DTL information has no value relevance. Investors useonly deferred tax asset information in making their investment decisions. In this case, investors will pay more attention to the deferred tax information if the information will give benefit in the future. Investors assume the deferred tax asset as a real asset. This conclusion contrasts with the results of Chudlek (2011) which states that deferred tax information either DTA or DTL has no value relevance. Conclusions on the results of the first model is similar to the results of research conducted by Chang et al. (2009) where they found only deferred tax asset that has a value relevant.

In the second model, where the variables DTA and DTL converted into other forms to the net deferred tax (netDT). Results of processing the models lead to the conclusion that the information in the form of net deferred tax has no value relevance. This conclusion has a different result from the conclusion of the first model. The data processing in this model provide other conclusions regarding the value relevance analysis of deferred tax information. This suggests that changes in the form of a variable can have a different significance. Therefore, this study using other forms of deferred tax which is net deferred tax assets (netDTA), net deferred tax liabilities (netDTL), and net deferred tax in the quintile distribution that can give an idea that the amount of deferred tax companies have different value relevance.

The third model uses other forms of deferred tax in the form of net deferred tax assets (netDTA) and net deferred tax liabilities (netDTL). It is intended to see the superiority of the DTA against DTL and vice versa. The results of data processing in a third model shows only the net deferred tax asset information that has value relevance, while the net deferred tax liability information has no value relevance. Net deferred tax asset information has a positive and significant relationship at á = 1% of the value of the company. This conclusion gives results in accordance with the first model, where only the DTA information that has value relevance. This suggests that investors are more concerned deferred tax information if the information will benefit them in the future. Investors only assess net deferred tax asset as a real asset, while deferred tax liabilities not as a real liabilities. Investors' assessment of the value relevance of deferred tax will depend on the possibility of the reversal and the duration of the reversal of the deferred tax (Amir et al., 1997). According Chludek (2011), deferred tax assets has a reversal faster than the deferred tax liability. This indicates that the deferred tax assets have value relevance better than the deferred tax liability due to greater certainty of its realization.

The fourth model provides an analysis of deferred tax that is based on the distribution amount divided into quintiles. Based on the results of data processing in fourth model, only the net deferred tax information in the distribution of the fifth quintile (netDT5) who has a value relevance. Net

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deferred tax information in the first quintile distribution (netDT1), the second quintile (netDT2), the third quintile (netDT3), and the fourth quintile (netDT4) has no value relevance. NetDT5 information has a positive and significant relationship at á = 1% of the value of the firm (P). This suggests that the magnitude of the value of deferred tax affects value relevance, where the greater the value of deferred tax, investors will increasingly incorporate this information in decision making.

This conclusion is consistent with the results of research conducted by Chludek (2011) which states that deferred tax information will have relevance value if the amount of the net deferred tax is very large. NetDT5 value formed from DTA that greater than the value of DTL which means that netDT5 is a net deferred tax asset. Therefore, the results of the fourth model is also consistent with the conclusion of the first and third models in which only the information of deferred tax assets and deferred net tax assets who has a value relevance.

Based on the data processing has been carried out, the overall model of 1-4 indicates that a only deferred tax asset information that has value relevance, while the deferred tax liability information has no value relevance. This is because the deferred tax assets have a level of certainty greater than the recovery of deferred tax liabilities. Results 1-4 processing models can be seen in Table 4. In general,investors in South East Asia pay more attention to the deferred tax information only if the information will benefit them in the future.

Further tests were conducted to test the fifth hypothesis (H5) in this study which is this study wanted to look beyond the role of book tax conformity as a moderating variable. Based on the data processing has been performed, the results of data processing in the fifth model (a-d) gives a conclusion that is consistent with the results of the processing of the first models to the fourth, where only information of deferred tax assets and net deferred tax assets which has relevance with a greater level of significance. The results of this processing model prove that the variable book tax conformity can affect the value relevance of deferred tax, where the book tax confromity variables will further strengthen the relationship between deferred tax information on stock prices (the value of the company / P) or reinforcing the value relevance of deferred tax information. This is shown from the increasing significance or p-value of 1-4 models to the fifth model. This conclusion contradicts the fifth hypothesis in which book tax conformity variable actually reinforce the value relevance of deferred tax.

Book tax conformity variable stating how flexible a company can make its taxable income different from the pre-tax book income (Atwood et al., 2010). This suggests that the presence of the book tax conformity will make the difference between taxabel income and pre-tax income will be smaller. This can decreasing the amount of deferred tax. With a small value of deferred tax, the greater the likelihood that the deferred tax to be recovered, so it will increase the value relevance of deferred tax. Investors seemed to also consider that if there are similarities between the book and tax,it will reduce the opportunities of the management to commit fraudin financial information so that investors will assess deferred tax information as relevant.

This research provides a new picture of the value relevance of deferred tax information, where the presence of similarity between the book and tax (book tax conformity) will improve the value relevance of deferred tax information. This is because the deferred tax will have a level of certainty greater and also reduce fraud in the accounting reporting.

4.2 Sensitivity Analysis

Sensitivity analysis is done to see whether the value relevance of deferred tax analysis will give a different conclusion from the main testing if more specific tests performed per country. The analysis still using the same sample with the main test, but its separated the testing samples that are from different countries.

The data processing of Indonesia in the first model suggests that deferred tax assets information and deferred tax liabilities significantly affect firm value (stock price / P). Deferred tax assets information are positively associated with firm value while deferred tax liability information negatively related to firm value. This shows that the DTA and DTL information has value relevance. Investors in this case using the information of deferred tax assets and deferred tax liabilities in investment decisionsmaking. In the second model where the DTA and DTL variable is converted into net deferred tax, the processing of second models lead to the conclusion that the information in the form of net deferred tax has relevance value. The net deferred tax information was positively related to firm value. The third model uses other forms of deferred tax in the form of net deferred tax assets and net deferred tax liabilities. The data processing of Indonesia on this model shows only the net deferred tax asset information that has value relevance, while the net deferred tax liability information has no value relevance. Net deferred tax asset information was positively related to firm value. This conclusion gives a different results than the first model, where both the DTA and DTL has a value relevance, but when seen from the superiority,only net deferred tax assets information which have a value relevance. The fourth model provides an analysis of deferred tax based on the distribution amount divided into quintiles. In the Indonesian state data, net deferred tax information in the first quintile distribution (netDT1) and the second quintile (netDT2) has no value relevance. Net deferred tax information in the third quintile distribution (netDT3), fourth (netDT4), and fifth (netDT5) have the value relevance. NetDT3 information, netDT4, and netDT5 positively related to firm value. This suggests that the magnitude of the amount of deferred tax affects the value relevance where the greater the amount of deferred tax, investors will increasingly incorporate this information in decisionsmaking. NetDT3, netDT4, and netDT5 is a net deferred tax asset. While the value of netDT1 and netDT2 are net deferred tax liability. Therefore, the results of the fourth model is also consistent with the conclusion of the third model in which only the net deferred tax asset information that has value relevance.

Conclusions from the other countries provide mixed results. Malaysian data processing results contrast with the data of Indonesia. The results of the first model showed no significant relationship between deferred tax assets and deferred tax liabilities with the stock price. This means, in the Malaysiandata DTA and DTL information has no valuerelevance. Investors do not use deferred tax information in its decision making. Net deferred tax information in the second model also does not have a significant relationship with firm value, or in other words have no value relevance. The third model of data processing in the country of Malaysia still provide the same conclusions as previous models in which both net deferred tax assets and net deferred tax liability information has no value relevance. This conclusion is similar to the research conducted by Chludek (2011). Results of processing the fourth model showed only netDT2, netDT3, and netDT4 which has value relevance. NetDT2, netDT3, and netDT4 negatively related to firm value.

As for the state of Singapore, conclusion of the first model shows both the DTA

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and DTL has no value relevance. This suggests that the Singapore investor does not use deferred tax information in investment decisionsmaking. This is consistent with the research conducted by Chludek (2011). Conclusion on the second model shows that the net deferred tax information has value relevance. Net deferred tax has positive effect on firm value. When variables DTA and DTL converted into positive form of net deferred tax then either netDTA and netDTL also has value relevance. NetDTA has positive effect on firm value while netDTL has negative effect on firm value. In the fourth model, net deferred tax information in the first quintile distribution (netDT1), second (netDT2), fourth (netDT4), and fifth (netDT5) all have value relevance. NetDT1 and netDT5 information has a positive and significant relationship to firm value, while netDT4 and netDT2 negatively related to firm value.

In the Philippine state data, the data processing provides the same general conclusions with Indonesian data. The first model gives a similar conclusion with Indonesia, where both the DTA and DTL information has value relevance. Deferred tax assets had a positive relationship information while deferred tax liabilities have a negative relationship. Data processing on the second model shows that the net deferred tax information has value relevance. Net deferred tax information was positively related to firm value. In the third model, only the net deferred tax asset information that has value relevance. Net deferred tax asset information was positively related to firm value. The results of data processing in the fourth model shows only net deferred tax information in the fourth quintile distribution (netDT4) that have value relevance. Information netDT4 positively related to firm value.

Conclusions from the data processing in Thailand in the first model shows only deferred tax asset information that has value relevance. Deferred tax assets was positively related to firm value. Investors assume the deferred tax asset as a real asset. Net deferred tax information in the data of Thailand does not have a significant relationship with firm value, or in other words have no value relevance. In the third model, only the net deferred tax asset information that has value relevance. The conclusion of the models similar to the first to third model in the main research results in this study where only the deferred tax assets and net deferred tax assets who has a value relevant. In the fourth model, net deferred tax information in the first quintile distribution (netDT1), second (netDT2), third (netDT3), and fourth (netDT4) has a value relevance. NetDT1 information has a negative and significant relationship to firm value. NetDT2 information, netDT3, and netDT4 has a positive and significant relationship to firm value.

The data processing results for each country gives the conclusion that different from one another and also varies from the main model results. This indicates that the value relevance of deferred tax is highly dependent on many things that come from within the country such as tax provisions, the view of investors, business climate, government regulations and many other things. Investors who already have a visualization of the information will not be considered deferred tax deferred tax as the relevant information. Therefore, countries that already have a strong market with investors who already have a visualization of the information generally indicates that the deferred tax information has no value relevance. Results of data processing in the country of Indonesia, Malaysia, Singapore, Philippines, and Thailand is illustrated in Table 6.

5. Conclusions and Suggestions

5.1 Conclusion

Overall, investors in ASEAN countries only use the information of deferred tax assets in its investment decisions. Investors

will only use the deferred tax information if such information has the potential to provide benefits in the future. Deferred tax assets are seen to have greater relevance than the value of deferred tax liabilities. Deferred tax assets also will be more relevant if the value is greater.

Research on the influence of book tax conformity gives results that contrast with previous studies in which the book tax conformity will strengthen the value relevance of deferred tax. This is because the deferred tax will have agreater level of certainty and also reduce fraud in the accounting reporting. The value relevance of deferred tax is highly dependent on many things that come from within the country such as tax provisions, the view of investors, business climate, government regulations and many other things. Investors who already have a visualization of the information will not be considered deferred tax deferred tax as the relevant information. Therefore, countries that already have a strong market with investors who already have a visualization of the information generally indicates that the deferred tax information has no value relevance.

5.2 Limitations and Suggestions

This study only focused on one industry alone, further research is expected to use more industrial in it, so it can be seen whether the value relevance of deferred tax can have different characteristics when viewed by the industry. Future studies could also use more country to look beyond the influence of the book tax conformity to the relevance of deferred tax. Conclusions regarding the value relevance of deferred tax assets and liabilities will be more varied if divided according to corporate activity such as depreciation, pension funds, compensation for losses, and others. It can provide a better conclusion because every activity has different level of realization and recovery periods.

Future studies should modify the NFA (Net Financial Assets) and AOE (Abnormal Operating Earnings) be different in each industry in order to control the systematic differences in the cost of capital and the abnormal earnings that are highly dependent on the preferences and the nature of each investor. To measure the value relevance should be using a different model than using the F&Omodel, so it can compare whether the value relevance of deferred tax depends on the model used in the study. The measurement of book tax conformity could use a different measurement techniques from this study to compare whether if using other measurements it will still give the same conclusions.

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TABLE 3
Sample Selection

Manufacture Companies	
– Indonesia	132
– Malaysia	383
– Singapura	203
– Filipina	183
– Thailand	151
Total Manufacture Companies :	1052
Pengecualian :	
– No deferred tax information	(156)
– Missing variable data for the basic regression	(212)
–Outliers	(48)
Total Sample	**636**

TABLE 4
Regression Model 1 – 4

	Intercept	NOA	NFA	AOE	DTA	DTL		R^2 Within	Obs.
1	-1.12E-07	5.08E-18	-1.39E-06	1.13E-17	**0.0001114****	2.04E-06		0.3345	1908
	-0.01	0.02	-1.03	0.01	1.96	0.93			
					netDT			R^2 Overall	
2	4.93E-06***	-1.72E-17	4.88E-07	4.92E-17	9.87E-07			0.1813	1908
	4.00	-0.18	0.65	0.07	0.51				
					netDTA	netDTL		R^2 Within	
3	6.68E-08	1.93E-17	-1.92E-06	1.44E-16	**0.0007013*****	5.77E-07		0.2713	1908
	0.01	0.07	-1.47	0.1	7.11	0.29			
					netDT1	netDT2	netDT3		Obs.
4	1.01E-07	1.92E-17	-1.88E-06	1.43E-16	-5.38E-07	0.0001939	0.0000422		
	0.01	0.07	-1.43	0.1	-0.27	1.56	0.08		
					netDT4	netDT5			
					0.0008096	**0.0006983*****		0.2859	1908
					0.38	7.07			

*, **, *** Signifikan pada α = 0.10; 0.5; 0.01

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 DTA_{it} + \beta_5 DTL_{it} + \varepsilon \quad (1)$$

$$P_{it} = \beta_0 + \beta_1 NOAit + \beta_2 NFAit + \beta_3 AOEit + \beta_4 NetDT_{it} + \varepsilon \quad (2)$$

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 NetDTA_{it} + \beta_5 NetDTL_{it} + \varepsilon \quad (3)$$

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 NetDT1_{it} + \beta_5 NetDT2_{it} + \beta_6 NetDT3_{it} + \beta_7 NetDT4_{it} + \beta_8 NetDT5_{it} + \varepsilon \quad (4)$$

TABLE 5
Regression Model 5a – 5d

	Intercept	NOA	NFA	AOE	DTAxBTC	DTLxBTC		R^2 Within	Obs.
5a	-2.22E-07	1.24E-17	-1.27E-06	1.39E-17	**0.016515*****	0.0002723		0.5258	1908
	-0.03	0.04	-0.95	0.01	2.73	1.02			
					netDTxBTC			R^2 Overall	
5b	4.94E-06***	-1.73E-17	4.93E-07	4.97E-17	0.000152			0.4758	1908
	4.00	-0.18	0.66	0.07	0.63				
					netDTAxBTC	netDTLxBTC			
5c	2.39E-06**	-2.55E-17	9.67E-07	3.85E-16	**0.0788401*****	-0.0000454		0.6394	1908
	1.97	-0.27	1.33	0.58	9.94	-0.19			
					netDT1xBTC	netDT2xBTC	netDT3xBTC		Obs.
5d	3.26E-6**	-2.63E-17	1.29E-06*	3.43E-16	0.0000566	0.018658	0.0210398		
	2.47	-0.28	1.75	0.52	0.24	1.4	0.37		
					netDT4xBTC	netDT5xBTC			
					0.0276457	0.0675971***		0.5756	1908
					0.13	9.1			

*, **, *** Signifikan pada α = 0.10; 0.5; 0.01

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 DTA_{it}*BTC + \beta_5 DTL_{it}*BTC + \varepsilon \quad (5a)$$

$$P_{it} = \beta_0 + \beta_1 NOAit + \beta_2 NFAit + \beta_3 AOEit + \beta_4 NetDT_{it}*BTC + \varepsilon \quad (5b)$$

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 NetDTA_{it}*BTC + \beta_5 NetDTL_{it}*BTC + \varepsilon \quad (5c)$$

$$P_{it} = \beta_0 + \beta_1 NOA_{it} + \beta_2 NFA_{it} + \beta_3 AOE_{it} + \beta_4 NetDT1_{it}*BTC + \beta_5 NetDT2_{it}*BTC + \beta_6 NetDT3it*BTC + \beta_7 NetDT4it*BTC + \beta_8 NetDT5it*BTC + \varepsilon \quad (5d)$$

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TABLE 6
Sensitivity Analysis

Independen Variable	Hypothesis	Prediction	INDONESIA		MALAYSIA		SINGAPURA		FILIPINA		THAILAND	
			Result	Significance	Result	Significance	Result	Significance	Result	Significance	Result	Significance
DTA	H1a	+	+	**Significant**	-	Not Significant	+	Not Significant	+	**Significant**	+	**Significant**
DTL	H1b	-	-	**Significant**	-	Not Significant	-	Not Significant	-	**Significant**	+	Not Significant
netDT	H2	+	+	**Significant**	+	Not Significant	+	**Significant**	+	**Significant**	-	Not Significant
netDTA	H3a	+	+	**Significant**	-	Not Significant	+	**Significant**	+	**Significant**	+	**Significant**
netDTL	H3b	-	-	Not Significant	-	Not Significant	-	**Significant**	+	Not Significant	+	Not Significant
netDT1	H4	-	-	Not Significant	+	Not Significant	+	**Significant**	+	Not Significant	-	**Significant**
netDT2	H4	-	-	Not Significant	-	**Significant**	-	**Significant**	-	Not Significant	+	**Significant**
netDT3	H4	+	+	**Significant**	-	**Significant**	+	Not Significant	+	Not Significant	+	**Significant**
netDT4	H4	+	+	**Significant**	-	**Significant**	-	**Significant**	+	**Significant**	+	**Significant**
netDT5	H4	+	+	**Significant**	-	Not Significant	+	**Significant**	+	Not Significant	+	Not Significant

TABLE 7
Research Conclusions

Independen Variable	Hypothesis	Prediction	Result	Significance
Deferred Tax Assets (DTA)	H1a	+	(+)	**Significant**
Deferred tax liabilities (DTL)	H1b	-	+	Not Significant
Net deferred tax (netDT)	H2	+	+	Not Significant
Net deferred tax assets (netDTA)	H3a	+	(+)	**Significant**
Net deferred tax liabilities (netDTL)	H3b	-	+	Not Significant
netDT in first quintile (netDT1)	H4	-	-	Not Significant
netDT in second quintile (netDT2)	H4	-	+	Not Significant
netDT in third quintile (netDT3)	H4	+	+	Not Significant
netDT in fourth quintile (netDT4)	H4	+	+	Not Significant
netDT in fifth quintile (netDT5)	H4	+	(+)	**Significant**
Deferred tax assets x BTC (DTA*BTC)	H5	+	(+)	**Significant**
Deferred tax liabilities x BTC (DTL*BTC)	H5	-	+	Not Significant
Net deferred tax x BTC (netDT*BTC)	H5	+	+	Not Significant
Net deferred tax assets x BTC (netDTA*BTC)	H5	+	(+)	**Significant**
Net deferred tax liabilities x BTC (netDTL*BTC)	H5	-	-	Not Significant
netDT in first quintile x BTC (netDT1*BTC)	H5	-	+	Not Significant
netDT in second quintile x BTC (netDT2*BTC)	H5	-	+	Not Significant
netDT in third quintile x BTC (netDT3*BTC)	H5	+	+	Not Significant
netDT in fourth quintile x BTC (netDT4*BTC)	H5	+	+	Not Significant
netDT in fifth quintile x BTC (netDT5*BTC)	H5	+	(+)	**Significant**