# Analysis of Net Deferred Tax Liability's Components and Discretionary Accrual to Detect Earnings Management

(an Empirical Study in Service and Trading Companies Listed in Indonesia Stock Exchange

From Period 2009-2013)

### TRI TINITAH KUSUMASTUTI

### MUQODIM

Universitas Islam Indonesia

### ABSTRACT

The objective of this study was to investigate the influence of net deferred tax liability and discretionary accrual in detecting earnings management to avoid an earnings decline. This research build model based on Phillips et. al. (2004) found that deferred tax liability, deferred tax asset, and three accrual models can be used to detect earnings management. In particular, this research investigates the relation among earnings management activities and two variables, there are changes in net deferred tax liability's components and discretionary accrual calculated by Modified Jones Model using data from firm's income tax disclosure. This research also added cash flow from operation as a control variable.

The sample of this study was service and trading companies listed in Indonesia Stock Exchange (IDX) within the period 2009-2013. The data was collected using purposive sampling method and analysis data method using binary logistics regression. The sample consisted of 33 companies.

The findings showed that total changes in net deferred tax liability, the changes of net deferred tax liability's components related to accrual and reserves, the changes of net deferred tax liability's components related to depreciation, and also discretionary accrual calculated by Modified Jones Model can be used for detecting earnings management to avoid an earnings decline.

*Keywords:* earnings management, discretionary accrual, cash flow from operation, deferred tax assets, deferred tax liability

### 1. INTRODUCTION

Detecting earnings management is important in assessing the quality of earnings, and should be useful to researchers studying earnings management behavior and to financial analysts in their examination of financial reports (Phillip et.al., 2003). Healy and Wahlen (1999) used the opportunistic perspective mentioned that managers conduct earnings management for the purpose of misleading stakeholders on the performance of the company or to influence a particular purpose company based on financial statement figures. It implies that if a company is considering earnings management, the company will give a negative signal about the performance of the company. It is very important for managers to avoid earnings loss and earnings decline use some indicators.

Some prior research about earnings management showed that the use of discretionary accrual causes the wrong prediction in earnings management (Guay et.al., 1996, Bernard and Skinner, 1996 in Yulianti, 2005). The wrongness was caused by the wrong classification of the total accrual in the terms of discretionary accrual and non-discretionary accrual. The research about five accrual models to detect earnings management conducted by Dechow et.al. (1995) found that there are no models that are really accurate to detect earnings management. The wrong prediction of earnings management will give the bad impact in measuring the quality of earnings management so that this causes bias in the valuation of firm's operational.

Some researchers tried to find alternative factors to handle the disadvantages of accrual model. The research is done by Mills and Newberry (2001), and Phillips et.al. (2003) investigated the difference between accounting earnings and fiscal earnings that will generate book-tax differences. Those researches based on financial accounting literature explained that book-tax differences provide information about current earnings. Phillips et.al. (2003) stated that managers have more discretion in the financial reporting than tax reporting and use their discretion to increase accounting earnings by using a specific method without increasing fiscal earnings.

Earnings management can be detected via book-tax differences by increasing Net Deferred Tax Liability (NDTL) generated from deferred tax liabilities minus net deferred tax assets, and this will increase Deferred Tax Expense (DTE) (Djamaluddin et.al., 2007). That statement is consistent with Phillips et.al. (2003)thathave proved that DTE, as a proxy of book-tax differences, is useful for detecting earnings management to avoid earnings loss and an earnings decline. The statement is consistent with the prior research conducted by Burgstahler and Dichev (1997) and Mills and Newberry (2001), Deferred Tax Expense (DTE) can be useful in detecting earnings management to meet three earnings targets: 1. to avoid earnings decline. 2. to avoid earnings loss, 3. to avoid failing to meet analyst forecast.

Phillips et.al. (2004) already divided NDTL's components into three categories. The first category consists of five components, which are 1) accruals and reserves, 2) compensation, 3) depreciation, 4) other assets valuation (e.g., expenses related to intangible assets, inventory, and leases), 5) miscellaneous items. Phillips et.al. (2004) already divided NDTL's components into three categories. The first category consists of five components, which are 1) accruals and reserves, 2) compensation, 3) depreciation, 4) other assets valuation (e.g., expenses related to intangible assets, 2) compensation, 3) depreciation, 4) other assets valuation (e.g., expenses related to intangible assets, 2) compensation, 3) depreciation, 4) other assets valuation (e.g., expenses related to intangible assets, inventory, and leases), 5) miscellaneous items.

Therefore, this research will explain the components of net deferred tax liability and discretionary accrual, also its usefulness in detecting earnings management to avoid an earnings decline for the period of 2009 to 2013.

### 2. LITERATURE REVIEW

### 2.1 Agency Theory

According to Anthony and Govindarajan (2007), an agency theory exists whenever the principal (in this case the shareholders) hires the agent (in this case the management) to perform some services and becomes delegators to perform decision making authority. The shareholders hire the management for example chief executive officer (CEO) and expect that the CEO can do the shareholder's interests.

In reality, the above concept does not work properly because between CEO and shareholders have divergent objectives. The CEO gets the satisfaction from their working life not only from the financial compensation but also from the generous amount of leisure time, etc. The CEO likes to make wealthy life in the economic and psychological aspects. While, the shareholdersare motivated to get a large amount of profit that increases every year. According to Eisenhard in Lukman (2013), the factors that influence the rise of conflict between the principal and agent are as follows:(1) the conflict of agency theory arises when the principal and agent have different objectives and interests and the principal

hard to verification what is really done by the agent, and (2) risk-sharing problem arises when the principal and agent have different attitudes towards risks. According to Suranggane (2007), the different objectives between shareholders and management give the idea to management on how the result of accounting number can maximize their interests by doing manipulation of earnings management in the financial statement.

### 2.2 Accruals Basis in Accounting

The objective of financial report is to provide the information related to financial position, operations, and the change of firm's financial position that will give benefits to the users in order to decision making. The formulated financial report is based on accrual basis or cash basis. Accrual basis gives better indication in the financial report because transactions are recognized when they happen (not recognized when the cash accepted) and must be reported in financial report at the current year (Suranggane, 2007).

There are two types of accrual as the basis to measure the accounting transactions: 1) discretionary accrual, and 2) non-discretionary accrual. In line withSuranggane (2007), discretionary accrual is free accrual in terms of a step to decrease or increase earnings reporting that is difficult to detect because of its characteristics (contextual and subjective). Whereas, non discretionary accrual is not free accrual to give measurement indication based on matching cost with revenue in the financial report because transaction and financial events are recognized when they happen.

Dechow et.al. (1995)assesed the ability of five accrual models to detect earnings management. They are Healy model, DeAngelo model, Jones model, modified Jones model, and Industry model. They found that the Modified Jones Model is the most powerful in detecting earnings management.

### 2.3 Deferred Tax Expense and Net Deferred Tax Liability

According to Phillips et.al. (2003), deferred tax expense is a component of a firm's total income tax expense and reflects the tax effects of temporary differences between book income (i.e., income reported to shareholders and other external users) and taxable income (i.e., income reported to the tax authorities) that arise primarily from accruals for revenue and expense items that effect on both book

and taxable income, but in different periods. The deferred tax expense happens because managers have more authority in the preparation of financial reporting than tax reporting so that managers are more freely to upward the income but not increase the taxable income.

Phillips et.al. (2004) used net deferred tax liability (i.e., deferred tax liabilities minus net deferred tax assets) as a proxy of book tax difference, and consequently, increase its deferred income tax expense. To give more understanding, deferred tax liabilities is the amount of income tax payable for the coming period as a result of taxable temporary difference (IAI, 2013).Deferred tax liabilities (assets) will be increased when the company accelerates the income recognition or defers the expenses recognition (accelerates the expenses recognition or defers the income recognition) to accounting purposes rather than taxation purposes (Irezza and Yulianti, 2012).It means that the company will report accounting income higher than income in taxation so that this will increase net deferred tax liability, and vice versa.

#### 3. HYPOTHESIS FORMULATION

### 3.1 Net Deferred Tax Liability to Detect Earnings Management

Mills and Newberry (2001) and Phillips et.al. (2003) stated that book-tax differences can be used to detect earnings management because separate management activities between discretionary and non-discretionary and firms are happy to increase accounting earnings without the tax increase. Phillips et.al. (2004) used the change of NDTL as a proxy of book-tax differences to detect earnings management to avoid an earnings decline. The components of financial report are based on the accounting standard and tax reporting in the United States. SFAS No. 109 is the same as the statement of PSAK No. 46 stated that the increase (decrease) in NDTL can be equal to a firm's deferred tax expense (benefit) for the period, but differences are common. Differences typically occur when a firm engages in mergers, acquisitions, and divestitures, or report other comprehensive income items.

As a first step, the researcher will investigate whether the total change of net deferred tax liability is useful for detecting earnings management to avoid an earnings decline. The researcher hypothesizes:

# H1 : The total change in net deferred tax liability is useful for detecting earnings management to avoid an earnings decline.

The next step focuses on the components of NDTL. PSAK No. 46 has obligated all firms to disclose the components of NDTL. There is an assumption that the manager is more likely to manage earnings before tax with specific methods without increasing taxable income in the current period. Some earnings managements show that the differences between accounting earnings and fiscal earnings and show the increase of one or more components of NDTL that reflects earnings management. This research uses the first category from the research by Phillips et.al. (2004), which are 1) accruals and reserves, 2) compensation, 3) depreciation, 4) other asset valuation, and 5) miscellaneous items. From the assumption above, the hypothesis that will be tested are:

- H2a :The change in net deferred tax liability's components related to accrual and reserves is useful for detecting earnings management to avoid an earnings decline.
- H2b : The change in net deferred tax liability's components related to compensation is useful for detecting earnings management to avoid an earnings decline.
- H2c :The change in net deferred tax liability's components related to depreciation is useful for detecting earnings management to avoid an earnings decline.
- H2d : The change in net deferred tax liability's components related to other asset valuation is useful for detecting earnings management to avoid an earnings decline.
- H2e : The change in net deferred tax liability's components related to miscellaneous itemsis useful for detecting earnings management to avoid an earnings decline.

### **3.2 Discretionary Accrual to Detect Earnings Management**

Earnings management cannot be calculated directly so that some literatures of earnings managements explain about the methods that can be used for earnings management identification. Xiong Yan (2006) in Lukman (2013) explained four models that can be used as the instrument of earnings management which commonly use accrual concepts.

Each accrual model has advantages and disadvantages so that researches about earnings management are always developed to get good and accurate models. Dechow et.al (1995) evaluated some discretionary accrual models to detect earnings management, which are: Healy Model, DeAngelo Model, Jones Model, Modified Jones Model, and Industry Model. From those models, Modified Jones Model is the best model to detect earnings management. Related to this, the researcher hypothesizes:

# H3 : Discretionary accrual calculated by Modified Jones Model has influenceson detecting earnings management to avoid an earnings decline.

The research model is described in the following figure:

### FIGURE 1 HERE

### FIGURE 2 HERE

### 4. RESEARCH METHOD

### 4.1 Research Design

This research used secondary data from each company. Thus, this research is only captured financial information from each selected company. The data will be generated from Indonesia Stock Exchange and Capital Market Directory Indonesia.

### 4.2 Population and Sample

The population of this research is all companies listed in Indonesian Stock Exchange years of 2009-2013 and the samples are service companies and trading companies. The researchers set to take sample from the years of 2009-2013 because a lot of taxation regulationshave changed and implemented in 2009. The sample was taken by using purposive sampling method which is the methodology to take samples accurately to be relevant with the research structure. The specific characteristics take samples are:

- Service and Trading Companies listed in Indonesia Stock Exchange and issued their financial reports consistently from 2009 – 2013.
- 2. Financial report ended at 31<sup>st</sup> December every year.
- 3. Service and Trading Companies which are not doing merger, acquisition, and divestitures.

4. Service and Trading Companies have complete data to support this research.

Based on the above criteria, the sample of this research are 33 service and trading companies. The list of sample used in this research as follows:

### TABLE 1 HERE

### 4.3 Research Variable Definition and Measurement

### 4.3.1 Earnings Management

According to Burgastahler and Dichev (1997) managers have strong incentives to avoid an earnings decline and to avoid earnings a loss by performing earnings management. Earnings management is 1 (one) if it includes small profit firms and will be zero if it includes small loss firm. Company categorized as small profit firm if the calculation result of earnings management is more than 0 (zero) and the company categorized as small loss firm if the calculation result of earnings management less than 0 (zero).

A formulation of earnings management to avoid an earnings decline:

Earnings  $Management_{it} = Net Income_{it} - Net Income_{i(t-1)}$ 

Market Value of Equity<sub>i(t-2)</sub>

### 4.3.2 Net Deferred Tax Liability (NDTL)

Net deferred tax liability (NDTL) calculated by deferred tax liabilities minus net deferred tax assets. NDTL also can be calculated by Deferred Tax Expense (DTE) in a certain period on the firms that do not engage in mergers, acquisition, and divestitures, or report other comprehensive income items.

#### 4.3.3 Discretionary Accrual

In this research, discretionary accrual calculated by Modified Jones Model because the prior research conducted by Dechow et,al. (1995) proved that Modified Jones Model is the best accrual model to detect earnings management. The formulation of Modified Jones Model:

 $TAcc_{it} = \alpha + \beta_1 (\Delta SALES_{it} - \Delta AR_{it}) + \beta_2 GPPE_{it} + e_{it}$ 

Where,

TAcc <sub>it</sub>	: Total accruals of firm i in year t					
α	: Constant coefficient					
$\beta_{1,2}$	: Regression variable					
∆SALES <sub>it</sub>	: Firm i's revenue in year t minus in year t-1					
$\Delta AR_{it}$	: Receivable of firm i in the year t less revenue in year t-1					
GPPE <sub>it</sub>	: Gross property, plant, and equipment of firm i in year t					
*All variables measured in the scale of firm i's total assets in year t-1						

### 4.3.4 Components of Net Deferred Tax Liability

The number of five components of net deferred tax liability can be found in the note of financial statement each company.

### 5. Research Equation

For testing hypothesis 1 and 3, this research used a statistical method of binary logistics regression, with the following model:

$$Ln \underbrace{EM_{it}}_{1-EM_{it}} = \alpha + \beta_1 \Delta NDTL_{it} + \beta_2 AC_{it} + \beta_3 \Delta CFO_{it} + e_{it}$$

Where:

 $EM_{it}$  : 1 (one) if the company in the range of a small profit firm.

0 (zero) if the company in the range of a small loss firm.

 $\alpha$  : Constant coefficient

 $\beta_{1-3}$  : Regression variable

 $\Delta NDTL_{it}$ : The annual change in firm i's net deferred tax liability, calculated by using deferred tax liabilities and assets between years t-1 and t, scaled by total assets at t-1.

 $AC_{it}$  : A measure of firm i's accruals in year t.

 $\Delta CFO_{it}$  : The change in firm i's cash flows from continuing operations from year t-1 to t, scaled by total assets of the end of year t-1.

 $e_{it}$  : Standard error

\*All independent variables and control variable measured in the scale of firm i's total asset in year t-1.

Then, for testing hypothesis 2a - 2e, this research used a statistical method of binary logistics regression, with the following model:

$$Ln \underline{EM_{it}} = \lambda + \lambda_1 \Delta NDTL \underline{ACC_{it}} + \lambda_2 \Delta NDTL \underline{COMP_{it}} + \lambda_3 \Delta NDTL \underline{DEP_{it}} + 1 - EMit$$
  
$$\lambda_4 \Delta NDTL \underline{OAV_{it}} + \lambda_5 \Delta NDTL \underline{MISC_{it}} + \lambda_6 \Delta CFO_{it} + e_{it}$$

Where,

$\mathbf{E}\mathbf{M}_{\mathrm{it}}$	: 1 (one) if the company in the range of a small profit firm.
	0 (zero) if the company in the range of a small loss firm.
λ	: Constant coefficient
$\lambda_{1-6}$	: Regression variable
$\Delta NDTL_ACC_{it}$	: The change in NDTL relating to revenue and expense accruals and
	reserves.
$\Delta NDTL_COMP_{it}$	: The change in NDTL relating to compensation.
$\Delta NDTL_DEP_{it}$	: The change in NDTL relating to depreciation of tangible assets.
$\Delta NDTL_OAV_{it}$	: The change in NDTL relating to other assets' valuation.
$\Delta NDTL_MISC_{it}$	: The change in NDTL except for those changes captured in other
	components which are not related to tax carry-forward, unrealized gains
	and losses.
$\Delta CFO_{it}$	: The change in firm i's cash flows from continuing operations from year
	t-1 to t, scaled by total assets as of the end of year t-1.
$e_{it}$	: Standard error

\*All independent variables and control variable measured in the scale of firm i's total asset in year t-1.

#### 6. RESEARCH FINDINGS

### **6.1 Descriptive Statistics**

Based on the table 2 and table 3, all variables in the first research model and second research model have standard deviation value more than mean. It means that the dispersion of set of data is relatively high. Besides that, it can be concluded that the data is heterogeneous.

### TABLE 2 HERE

### TABLE 3 HERE

### 6.2 Normality Test

Normality test in this research used One-Sample Kolmogorov-Smirnov Test. Based on table 4 and table 5, all variables have asymptotic significance which is less than 0.05. It means that the data are not normally distributed. For that reason, this research used a binary logistic regression to perform hypothesis testing (Ghozali, 2001 in Djamaluddin et.al., 2007).

### TABLE 4 HERE

#### **TABLE 5 HERE**

### 6.3 Wald Statistics Test (Hypothesis Testing)

The first model tested the influence of net deferred tax liability (NDTL) and discretionary accrual (AC) to earnings management (EM). This first model used cash flow from operation (CFO) as a control variable. The second model tested the influence of the component of NDTL relating to accrual and reserves, compensation, depreciation, other asset valuation, and miscellaneous items to earnings management (EM). This second model also used CFO as a control variable. The result of Wald Statistics Test of the first research model and second research model can be seen in the table 6 and table 7 as follows:

### TABLE 6 HERE

#### TABLE 7 HERE

The table above will be compared with the degree of significance of 0.05 and there are four variables that have positive significant influence to earnings management: the change of net deferred

tax liability (NDTL) with the significance value 0.028 < 0.05, discretionary accrual (AC) with the significance value 0.046 < 0.05, the change of net deferred tax liability related to accrual and reserves with the significance value 0.038 < 0.05, and the change of net deferred tax liability related to depreciation with the significance value 0.048 < 0.05. It means that the higher values of those four variables are increasingly able to detect earnings management to avoid an earnings decline.

### 7. DISCUSSION

# 7.1 The Influence of the Total Change of Net Deferred Tax Liability (NDTL) to Earnings Management (EM).

From the hypothesis testing of  $H_{1}$ , it is found that the total change of NDTL has a positive significance influence to EM. This matter still occurred although PSAK No. 46 about the income tax has been issued. However, this cannot guarantee that the companies do not do earnings management. Net deferred tax liability arises because of the temporary differences between accounting earnings and fiscal earnings. The calculation of fiscal earnings was regulated in the taxation laws that have more stringent regulation than the accounting standard. Therefore, the higher differences between accounting earnings and fiscal earnings show the higher management discretion. The increase of net deferred tax liability provided the evidence that the companies accelerate the revenue recognition than expense recognition for the accounting purpose resulting in the greater amount of tax in the future. In other words, Djamaluddin et.al. (2007) said that if the company's financial report shows the accounting earnings which is larger than the fiscal earnings, it means that the company tends to increase net deferred tax liability, and vice versa. The results are consistent with the prior research conducted by Irezza & Yulianti (2012) and Djamaluddin et.al. (2007). However, the results are in contrast to the research's result conducted by Phillips et.al. (2004).

### 7.2 The Influence of Discretionary Accrual (AC) to Earnings Management (EM)

From the hypothesis testing of  $H_{3}$ , it was found that AC has a positive significance influence to EM. This result can be connected with the agency theory that the agent (management) has more information and influence in decision making than the principal (investor, creditor or government). Therefore, the management can use the information and their influence to meet their interests by using and taking the opportunity of accounting policies. By using and taking the opportunity of accounting policies, the management can manipulate the amount of accrual. The higher the amount of accrual, it means that the more smoothly the operating activities of the company. This matter gives benefits for the management that they can get more bonuses from the company because they can make the operating activities reach or even exceed the target. From the company's perspective, it can give a lot of benefits, for example a lot of investors want to invest their money in the company or the creditors want to lend their money for the purpose of the company's activities. As a result, the company will get a lot of money to expand their business activities. This result is consistent with the prior research conducted by Yulianti (2005), Suranggane (2007), and Djamaluddin et.al. (2007), but the research's result is in contrast with the research conducted by Phillips et.al. (2004)

# 7.3 The Influence of the Change of NDTL's Components related to Accrual and Reserves (NDTL\_ACC) to Earnings Management (EM).

From the hypothesis testing of  $H_{2a}$ , it was found that NDTL\_ACC has a positive significance influence to EM. Almost most companies have NDTL\_ACC came from allowance of doubtful account. Companies in many times recorded allowance for doubtful account as an expense in the income statement commercially. Whereas, in the taxation laws No. 36 year 2008 about the income tax, to decide taxable income the company cannot deduct the gross income with allowance for doubtful account. The allowance for doubtful account must be recorded in the statement of financial position, recorded below account receivable. In the fiscal side, the company should make a positive fiscal correction. The positive fiscal correction makes the amount of deferred tax liability of the company increase. These results are consistent with the prior research conducted by Phillips et.al (2004), but the research's result is in contrast with the research conducted by Irezza and Yulianti (2012) and Djamaluddin et.al. (2007).

# 7.4 The Influence of the Change of NDTL's Components Related to Compensation (NDTL\_COMP) to Earnings Management (EM)

All companies have liability reserves related to employees, such as post-employment benefit, pension, etc. Companies entrust the management of employee liability reserves on the third party, often referred as a pension fund. The pension fund will manage how much companies should back up its money for the benefit of employees in the future. Therefore, the company cannot do much to manipulate the calculation of reserve liability. If companies are going to change the amount of employee reserves liability, the company must provide disclosure in recording the income tax. The variable of NDTL\_COMP is not getting a positive significance, but a negative insignificance. It proved that the variable of NDTL\_COMP is not used in earnings management to avoid an earnings decline. The reason is because of the difference between the pre-tax income and taxable income, while the other reasons are because the reversal of a payment execution of pension fund which must be paid by the company in normal activities is exceeding the estimated compensation liabilities in the current period. As a result, the pre-tax income becomes greater than the taxable income. This result is consistent with the prior research conducted by Phillips et.al (2004), Djamaluddin et.al. (2007), and Irezza and Yulianti (2012).

# 7.5 The Influence of the Change of NDTL's Components Related to Depreciation (NDTL\_DEP) to Earnings Management (EM).

In this research, the variable of NDTL\_DEP shows a positive significant result. NDTL\_DEP can be used to detect earnings management to avoid an earnings decline because determining the depreciation method and useful life can be determined freely by the management. The management can use a straight line, declining balance, sum of years digit, or etc.. Furthermore, if the management wants to change the depreciation method which is different from the previous method, they can do it prospectively without restatement on the previous financial report. However, they must disclose of the changes clearly in the notes of financial statement of the current period. With the freedom, the management can play on the depreciation method and useful life of assets to reduce depreciation cost so that this can increase the profit for the current period. This result is consistent with the prior research conducted by Irezza and Yulianti (2012), but it is contrary to the research's result conducted by Phillips et.al. (2004), and Djamaluddin et.al. (2007).

# 7.6 The Influence of the Change of NDTL's Components Related to Other Asset Valuation (NDTL OAV) to Earnings Management (EM).

NDTL\_OAV shows a negative insignificant result in this research. As a result, NDTL\_AOV cannot be used to detect earnings management to avoid an earnings decline. The reasons are the company already has the other asset valuation method which is the same as the taxation method, for example the company can use FIFO so that there is no temporary different between accounting method and taxation method. This result is consistent with the prior research conducted by Phillips et.al. (2004), Djamaluddin et.al. (2007), and Irezza and Yulianti (2012).

# 7.7 The Influence of the Change of NDTL's Components Related to Miscellaneous Items (NDTL\_MISC) to Earnings Management (EM).

NDTL\_MISC shows a negative insignificant result. It means that this variable does not use to detect earnings management anymore. The reason is that each company has different items of miscellaneous so that the items that will be used to detect earnings management are not fixed. The total of miscellaneous items in every company will give high differences to each other and it will affect the process of calculation. This result is consistent with the prior research conducted by Phillips et.al. (2004), Djamaluddin et.al. (2007), and Irezza and Yulianti (2012).

# 7.8 The Influence of Cash Flow from Operation (CFO) as a Control Variable to Earnings Management.

Both two research models in this research, CFO shows negative insignificant results. It means that CFO does not influence earnings management anymore because the high fluctuation amount of CFO in every year of each company. For example in year 2009 has a positive CFO, but in the year 2010 the company has a negative CFO. This result is consistent with the prior research conducted by Phillips

et.al (2004) and Suranggane (2007), but it is in contrast to the research's result conducted by Djamaluddin et.al. (2007), and Irezza and Yulianti (2012).

### 8. CONCLUSIONS, IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

### 8.1 Conclusions

Based on the data analysis, it can be concluded as follows:

- 1. The total change in net deferred tax liability is useful for detecting earnings management to avoid an earnings decline because the significance value is less than 0.05 (0.028 < 0.05).
- 2. The change in net deferred tax liability's components related to accrual and reserves is useful for detecting earnings management to avoid an earnings decline because the significance value is less than 0.05 (0.038 < 0.05).
- The change in net deferred tax liability's components related to compensation is not useful for detecting earnings management to avoid an earnings decline because the significance value is greater than 0,05 (0,374 > 0,05).
- The change in net deferred tax liability's components related to depreciation is useful for detecting earnings management to avoid an earnings decline because the significance value is less than 0,05 (0,048 < 0,05).</li>
- 5. The change in net deferred tax liability's components related to other asset valuations is not useful for detecting earnings management to avoid an earnings decline because the significance value is greater than 0,05 (0,772 > 0,05).
- 6. The change in net deferred tax liability's components related to miscellaneous items is not useful for detecting earnings management to avoid an earnings decline because the significance value is greater than 0,05 (0,59 > 0,05).
- Discretionary accrual calculated by Modified Jones Model has influenceson detecting earnings management to avoid an earnings decline because the significance value is less than 0,05 (0,046 < 0,05).</li>
- In addition, a control variable was added in the regression equation. Cash flow from operations has no influence on detecting earnings management to avoid an earnings decline in both two research models.

### 8.2 Implications

The findings about analysis of net deferred tax liability's components in detecting earnings management to avoid an earnings decline were measured by net deferred tax liability, discretionary accrual, net deferred tax liability's components, and put cash flow from operations as a control variable to provide certain contributions and implications. Essentially, investors and creditors can predict the companies are doing earnings management or not by viewing the amount of net deferred tax liability and accrual. The higher amount of net deferred tax liability and accrual give a signal to the investors and creditors that the companies did earnings management. Of course, the management has reasons why they did earnings management, usually they did earnings management in order to get some bonuses from the company because they can make the company's earnings higher. The company's earnings which is higher will make investors interested to invest their money in that company with certain personal purposes which is to get a lot of dividends. In the reality, investors should not invest their money to the companies that have indicated to do earnings management because the earning's quality will be low. The lower of the earning's quality happens because the earnings showed in the financial report is not true earnings.

### 8.3 Limitations

This research has some limitations, such as:

- This research used net deferred tax liability that comes from deferred tax liability minus net deferred tax asset with all of data observation without separating the positive and negative values of that reduction results.
- 2. The samples of this research are only service and trading companies so that the findings of the study are limited only to service and trading companies, and cannot be used for the other sectors. The length of time for observation period was relatively short since it only examined the data for five years (2009-2013) and only two components of net deferred tax liability that had significant influences on detecting earnings management to avoid an earnings decline, which are NDTL related to accrual & reserves, and NDTL related to depreciation. Therefore, the research results were not really reflected the real phenomenon.

- 3. The weakness of discretionary accrual calculated by Modified Jones Model in detecting earnings management to avoid an earnings decline was the change in cash sales which did not have a predicted relationship with the total accrual, the total accrual will have a certain relationship with current accruals.
- 4. The researcher predicted that there are a lot of factors that motivate the manager to do earnings management which were not included in this research.

### **8.4 Recommendations**

Based on the conclusions, the recommendations for future research are as follows:

- Separate variable net deferred tax liabilities are positive and negative values because the higher value of NDTL means that the higher probability of the company to do earnings management. The higher value of NDTL will be indicated by the positive value of reduction result, and vice versa.
- 2. The sample of the companies must be added for other sectors, the observation period should be extended, and the future researcher should add other variableshaving probability in detecting earnings management in the forthcoming research so that the results of the research will really reflect the real phenomenon and the result will be better.
- 3. The calculation methods of discretionary accruals by Modified Jones Model can be compared with other calculation methods, such as Jones Model, Forward-Looking Model, Haley Model, etc. to know the best method in detecting earnings management to avoid an earnings decline.
- 4. Future research should include factors that canmotivate the manager to do earnings management so that the research will reflect the real phenomenon.

### REFERENCES

- Anthony, Robert N. and Vijay Govindarajan. (2007). *Management control system*. 12<sup>nd</sup> Edition. Irwin: Homewood, Illinois.
- Belkaoui, A.R. (2004). Accounting theory. Singapore: Seng Lee Press.
- Bernard, V. and D. Skinner. (1996). What motivate manager's choice of discretionary accruals? Journal of Accounting and Economics 24 (1): 99-126.
- Burgstahler, D. and I. Dichev.(1997). Earnings management to avoid earnings decrease and losses. *Journal Accounting and Economics* 24 (1): 99-126.
- Dechow, P., R. Sloan., and A. Sweeney. (1995). Detecting earnings management. *The Accounting Review 70(2): 193-225.*
- Djamaludin, S., Rahmawati, and Wijayanti, H. (2007). Analisis perubahan aktiva pajak tangguhan dan kewajiban pajak tangguhan untuk mendeteksi manajemen laba.Unpublished, Surakarta: Universitas Sebelas Maret.
- Financial Accounting Standard Board. (1992). Statement of financial accounting standards no. 109 about accounting for income tax. Connecticut: FASB of the Financial Accounting Foundations.
- Ghozali, I. (2011). *Aplikasi analisis multivariate dengan program SPSS*. Edisi 5. Semarang: Badan Penerbit Universitas Diponegoro.
- Healy, P., and J.M. Wahlen.(1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizon 13 (1): 365-383*.
- Hribar, P., and D. Collins. (2002). Estimating accruals: Implications for empirical research. *Journal of Accounting Research 40(1): 105-134*.
- Ikatan Akuntan Indonesia. (2013). PSAK no. 46: Pajak penghasilan. Jakarta:Dewan Standar Akuntansi Keuangan, IAI.
- Irezza and Yulianti.(2012). Penggunaan komponen pembentuk pajak tangguhan dalam mendeteksi manajemen laba. Jurnal Akuntansi dan Keuangan Indonesia 9 (1): 68-82.
- Kevin Holland, R. H. (2004). Earnings management and deferred tax. Accounting and Business Research 34(1): 101-123.
- Lukman, P. (2013). Kemampuan beban pajak tangguhan dalam memprediksi ukuran manajemen laba. Skripsi S1 UNDIP.
- Mills, L., and K. Newberry. (2001). The influence of tax and non- tax costs on book-tax reporting differences: Public and private firms. *The Journal of American Taxation Association 23 (1):* 1-19.
- Naovalitha, T. (2013). Analisis regresi probit untuk mengukur kinerja keuangan industry asuransi jiwa di Indonesia. Skripsi S1 IPB.
- Noor, Rohaya MD., Mastuki, N., and Azis, Z. (2007). Earnings management and deferred tax. *Malaysian Accounting Review* 6 (1): 1-17.
- Phillips, J., M. Pincus, and S. Rego. (2003). Earnings management: New evidence based on deferred tax expense. *The Accounting Review* 78 (2): 491-521.

- Phillips, J., M. Pincus, S.O.Rego, and Huishan Wan. (2004). Decomposing changes in DTA and DTL to isolate earning management activities. *Journal of the American Taxation Association 26* (1): 34-54.
- Pindiharti, Dewi. (2011). Pengaruh aktiva pajak tangguhan, beban pajak tangguhan, dan akrual terhadap earnings management. Skripsi S1 UIN Syarif Hidayatullah.
- Suranggane, Z. (2007). Analisis aktiva pajak tangguhan dan akrual sebagai prediktor manajemen laba. Jurnal Akuntansi dan Keuangan Indonesia 4(1): 77-94
- Suwardjono. (2011). *Teori akuntansi: Perekayasaan dan pelaporan keuangan*. Yogyakarta: BPFE Yogyakarta.
- Uyanto, Stanislaus. (2006). Pedoman analisis data dengan SPSS. Yogykarta: Graha Ilmu.
- Widarjono, A. (2010). Analisis statistika multivariat terapan. Yogyakarta: UPP STIM YKPN.
- Yulianti. (2005). Kemampuan beban pajak tangguhan dalam mendeteksi manajemen laba. Jurnal Akuntansi dan Keuangan Indonesia 2(1): 107-129.

### APPENDICES

## Figure 1

### The First Research Model





### The Second Research Model



# The List of Sample

NO	CODE	COMPANY
1	ADMF	PT. Adira Dinamika Multifinance, Tbk.
2	AKRA	PT. AKR Corporindo, Tbk.
3	ASDM	PT. Asuransi Dayin Mitra, Tbk.
4	BFIN	PT. BFI Finance Indonesia, Tbk.
5	BMTR	PT. Global Mediacom, Tbk.
6	BNBR	PT. Bakrie and Brothers, Tbk.
7	CMNP	PT. Cipta Marga Nusaphala Persada, Tbk.
8	CNKO	PT. Eksploitasi Energi Indonesia, Tbk.
9	ECXL	PT. XL Axiata, Tbk.
10	EPMT	PT. Enseval Putra Megatrading, Tbk.
11	FAST	PT. Fast Food Indonesia, Tbk.
12	GEMA	PT. Gema Grahasarana, Tbk.
13	INTA	PT. Intraco Penta, Tbk.
14	ISAT	PT. Indosat, Tbk.
15	JIHD	PT. Jakarta Int' Hotel and Development, Tbk.
16	LPKR	PT. Lippo Karawaci, Tbk.
17	LTLS	PT. Lautan Luas, Tbk.
18	MAMI	PT. Mas Murni Indonesia, Tbk.
19	MFIN	PT. Mandala Multifinance, Tbk.
20	MREI	PT. Maskapai Reasuransi Indonesia, Tbk.
21	OKAS	PT. Ancora Indo Ressources, Tbk.
22	PANR	PT. Panorama Setrawisata, Tbk.
23	PLIN	PT. Plaza Indonesia Realty, Tbk.
24	PNIN	PT. Panin Insurance, Tbk.
25	PWON	PT. Pakuwon Jati, Tbk.
26	RELI	PT. Reliance Securities, Tbk.
27	SMDR	PT. Samudera Indonesia, Tbk.
28	TRIM	PT. Trimegah Securities, Tbk.
29	TRUB	PT. Truba Alam Manunggal, Tbk.
30	TRUS	PT. Trust Finance Indonesia, Tbk.
31	UNTR	PT. United Tractor, Tbk.
32	WOMF	PT. Wahana Ottomitra, Tbk.
33	YULE	PT. Yulie Sekurindo, Tbk.

# **Descriptive Statistics of First Research Model**

	N	Minimum	Maximum	Mean	Std.
					Deviation
NDTL	165	-0.06850	0.13667	0.0013110	0.01532288
AC	165	-1.47752	1.19677	0.1243828	0.32742528
CFO	165	-1.87716	0.69470	-0.0130288	0.26560802
EM	165	0	1	0.70	0.458
Valid N	165				
(listwise)					

Source: Secondary data processed, 2015

## Table 3

# Descriptive Statistics of Second Research Model

	N	Minimum	Maximum	Mean	Std.
					Deviation
NDTL_ACC	165	-0,07459	0,01790	-0,0006894	0,01069776
NDTL_COMP	165	-0,02885	0,03012	0,0004143	0,00360249
NDTL_DEP	165	-0,06372	0,07142	-0,0009427	0,01299747
NDTL_OAV	165	-0,08494	0,04083	-0,0007652	0,00836773
NDTL_MISC	165	-0,14777	0,06949	-0,0008868	0,01480354
CFO	165	-1,8772	0,6947	-0,013024	0,2656076
EM	165	0	1	0,70	0,458
Valid N	165				
(listwise)					

Source: Secondary data processed, 2015

## Normality Test of First Research Model

	NDTL	AC	CFO	EM
	165	165	165	165
Mean	0.0013110	0.1243828	-0.0130288	0.70
Std.	0.01532288	0.32742528	0.26560802	0.458
Deviation	1			
Absolute	0.253	0.126	0.218	0.445
Positive	0.247	0.126	0.157	0.259
Negative	-0.253	-0.110	-0.218	-0.445
Kolmogorov-Smirnov Z			2.797	5.710
	0.000	0.011	0.000	0.000
	Mean Std. Deviation Absolute Positive Negative Z	NDTL   165   Mean 0.0013110   Std. 0.01532288   Deviation 0.01532288   Positive 0.253   Positive 0.247   Negative -0.253   Z 3.253   0.000	NDTL AC   165 165   Mean 0.0013110 0.1243828   Std. 0.01532288 0.32742528   Deviation 0.253 0.126   Positive 0.247 0.126   Negative -0.253 -0.110   Z 3.253 1.618   0.000 0.011	NDTL AC CFO   165 165 165   Mean 0.0013110 0.1243828 -0.0130288   Std. 0.01532288 0.32742528 0.26560802   Deviation      Absolute 0.253 0.126 0.218   Positive 0.247 0.126 0.157   Negative -0.253 -0.110 -0.218   Z 3.253 1.618 2.797   0.000 0.011 0.000

Source: Secondary data processed, 2015

# Table 5

# Normality Test of Second Research Model

		NDTL_ACC	NDTL_COMP	NDTL_DEP	NDTL_OAV	NDTL_MISC	CFO	EM
Ν		165	165	165	165	165	165	165
Normal Parameters <sup>a,b</sup>	Mean	-0,0006894	0,0004143	-0,0009427	-0,0007652	-0,0008868	-0,013024	0,70
	Std. Deviation	0,01069776	0,00360249	0,01299747	0,00836773	0,01480354	0,265607 6	0,458
Most Extreme Differences	Absolute	0,320	0,325	0,296	0,390	0,314	0,218	0,445
	Positive Negative	0,203 -0,320	0,300 -0,325	0,222 -0,296	0,353 -0,390	0,314 -0,286	0,157 -0,218	0,259 -0,445
Kolmogorov-Smirnov Z		4,112	4,176	3,801	5,007	4,035	2,797	5,710
Asymp. Sig. (2-tailed)		0,000	0,000	0,000	0,000	0,000	0,000	0,000

Source: Secondary data processed, 2015

## Wald Statistics Test of First Research Model

		В	S.E.	Wald	df	Sig.	Exp(B)	95% EX	C.I.for P(B)
								Lower	Upper
		46.609	21.172	4.846	1	0.028	17467926350	166.129	1.837E+
~	NDTL						0149330000.0		038
							00		1
Step 1 <sup>a</sup>	AC	1.192	0.598	3.980	1	0.046	3.294	1.021	10.627
	CFO	-0.068	0.715	0.009	1	0.925	0.935	0.230	3.793
	Constant	0.738	0.185	15.820	1	0.000	2.091		

Source: Secondary data processed, 2015

### Table 7

## Wald Statistics Test of Second Research Model

		В	S.E.	Wald	Df	Sig.	Exp(B)	95%	C.I.for EXP(B)
								Lower	Upper
		82,82	39,933	4,302	1	0,038	93488504828898	95,437	9,158E+069
	NDTL_ACC	6					15000000000000		
							0000000,000		
		-	54,905	0,790	1	0,374	,000	0,000	3500258958903
	NDTL_COMP	48,79							513700000000,
		4							000
		32,91	16,652	3,907	1	0,048	19736972499188	1,322	2947490576024
	NDTL_DEP	6					9,280		816800000000
Step 1 <sup>a</sup>									000,000
	ΝΟΤΙ ΟΔΥ	-	25,509	0,084	1	0,772	0,001	0,000	3171694316237
	NDIL_OAV	7,397							594600,000
		-	16,658	1,071	1	0,301	0,000	0,000	4930064,663
	NDTL_MISC	17,23							
		8							
	CEO	-	0,781	0,291	1	0,590	0,656	0,142	3,034
	cro	0,422							
	Constant	0,961	0,187	26,457	1	0,000	2,615		

Source: Secondary data processed, 2015