

## **CHAPTER 6**

### **CONCLUSIONS AND IMPLICATIONS**

#### **6.1 Summary of Results**

This research's objective is to investigate the effects of year 1999 changes in Thai Accounting Standards (TAS) on value relevance of accounting information. The year 1999 changes are the great changes of Thai Accounting Standards because there are changes in the accounting conceptual framework including the adoption of many new accounting standards which affect the accounting items in income statement and balance sheet. The effects of changes in TAS on value relevance of earnings, earnings' components, and balance sheet components will be examined.

##### **6.1.1. The Effects of Changes in Thai Accounting Standards on Value Relevance of Earnings and Accounting Items in Income Statement**

The study examines the effects of changes in TAS on value relevance of earnings and accounting items in income statement using the return-earnings model (e.g. Collins and Kothari, 1989; Easton and Harris, 1991). Quarterly return is used as the dependent variable, while earnings and earnings' components are independent variables. Quarterly return is calculated from cumulative daily returns after a day of prior quarterly earnings' announcement to the day of current quarterly period of earnings' announcement.

The result indicates that there is the positive relationship between stock's return and earnings (as presented in TABLE 5.4). Investors use earnings in setting their stock's prices. That is, earnings are value relevant information.

For the effects of changes in TAS on value relevance of earnings, the result of model (1) indicates that coefficient of dummy variable (partition firm-quarters into before and after the changes in accounting standards) on earnings has a positive sign, but insignificant. That is, value relevance of earnings does not change due to the effects of year 1999 changes in accounting standards. The plausible explanation of this result is that the effects of the inclusion of many new accounting items in income statement due to the adoption of new accounting standards. The new accounting items have the different effects on value relevance of earnings. The new accounting items are gain and loss on troubled debt restructurings, impairment loss of

property, plant and equipment, impairment loss of investment in securities, and unrealized gain/loss on trading securities.

TABLE 5.5 and 5.6 present the results of value relevance of new accounting items (model 2) and the effects of the inclusion of these new accounting items in income statement on value relevance of earnings (model 3), respectively. Impairment loss (reversal of impairment loss) of PPE, impairment loss (reversal of impairment loss) of investment in securities, and unrealized gain/loss on trading securities are found to be value relevant information, while gain on TDR and loss on TDR are not value relevant information. Gain on TDR and loss on TDR are not value relevant information because investors perceive them occur in the unusual events. The impairment loss of PPE and impairment loss of investment in securities are value relevant information because they provide information on the reduction in values of PPE and investment in securities. Unrealized gain/loss on trading securities item is also value relevant because it convey information in which there are the changes in values of investment in securities. These results can imply that investors also consider the component of earnings besides earnings in setting their securities' prices.

Although gain and loss on TDR are not value relevant, the effects of inclusion of gain and loss on TDR on value relevance of earnings are different. The inclusion of gain on TDR reduces value relevance of earnings, while loss on TDR does not affect value relevance of earnings. Gain on TDR is presented as an extraordinary item, so the investors perceive it as the one-time item which reduces value relevance of earnings. Loss on TDR is presented as an ordinary item and the numbers of transactions and values of loss on TDR in income statement is much less than gain on TDR (see TABLE 5.3). So loss on TDR does not affect value relevance of earnings.

Although the impairment loss of PPE, impairment loss of investment in securities, and unrealized gain/loss of trading securities are value relevant information, the effects of these accounting items on value relevance of earnings are different. The inclusion of impairment loss of investment in securities in income statement increases value relevance of earnings, while the inclusion of impairment loss of PPE and unrealized gain/loss on trading securities does not affect the value relevance of earnings. This plausible explanation is that impairment loss of PPE is positively related with the stock's return only at 0.05 level, while impairment loss of investment in securities and unrealized gain/loss on trading securities are

related with security returns at 0.01 level (see TABLE 5.5). Thus, adjusted earnings including the impairment loss of PPE ( $EADJ_{it} + IMPPE_{it}$ ) are less related with the security returns than those of adjusted earnings including the impairment loss of investment in securities ( $EADJ_{it} + IMINV_{it}$ ) or adjusted earnings including unrealized gain/loss on trading securities ( $EADJ_{it} + TRADE_{it}$ ). Thus, the inclusion of impairment of PPE does not affect value relevance of earnings.

Both impairment loss of investment in securities and unrealized gain/loss on trading securities are positively related with security's return at 0.01 level, but only impairment loss of investment has the effect on value relevance of earnings, while unrealized gain/loss on trading does not affect on value relevance of earnings. The types of impaired investments are not the trading securities. Values of impaired investments are much higher than unrealized gain/loss on trading securities. In addition, trading securities are rapid turnover for buying and selling so that unrealized gain/loss on trading securities induces earnings volatility more than impairment loss of investments. The impact of earnings volatility on unrealized gain/loss on trading securities dominates its value relevance properties. It makes the effects of unrealized gain/loss on trading securities on value relevance of earnings be insignificant.

In sum, value relevance of earnings is not affected by the changes in accounting standards. The reasons are that the new accounting items have the different effects on value relevance of earnings. That is, the inclusion of impairment loss of investment in securities increases value relevance of earnings, while the inclusion of gain on TDR decreases value relevance of earnings. Loss on TDR, impairment loss of PPE, and unrealized gain/loss on trading securities do not affect value relevance of earnings.

Moreover, the study will attempt to explain the decrease in value relevance of earnings. The plausible explanation is the presence of transitory components of earnings. The test of transitory properties of each of new accounting items is presented in TABLE 5.7. It indicates that the difference of future and current quarterly earnings ( $E_{it+1} - E_{it}$ ) is related with the difference of current and previous quarterly earnings ( $E_{it} - E_{it-1}$ ) of firm-quarters with each of new accounting items. The results show that all of new accounting items are not transitory components of earnings. However, firm-quarters with gain on TDR have less correlation between ( $E_{it+1} - E_{it}$ ) and ( $E_{it} - E_{it-1}$ ) than that of firm-quarters with loss on TDR, impairment loss of PPE, impairment loss of investment in securities and unrealized gain/loss on trading securities. Gain on TDR is not

transitory component of earnings because there are the possibilities that gain on TDR occurs for consecutive quarters and consecutive years in the same firm (TABLE 5.8 and TABLE 5.9).

### **6.1.2 The Effects of Changes in Thai Accounting Standards on Value Relevance of Accounting Items in Balance Sheet**

This study investigates the effects of year 1999 changes in TAS on value relevance of accounting information in balance sheet using price model (Easton and Harris, 1991; Francis and Schipper, 1999). Stock's price is used as the dependent variable in model, while the balance sheet components (e.g. total assets, property, plant, and equipment) are the independent variables in the model. The stock's prices are the prices at the dates which the listed companies send their financial statements to the Stock Exchange of Thailand. The results indicate the positive relation between the stock prices and total assets and the negative relation between the stock prices and total liabilities as presented in TABLE 5.10. That is, investors also use total assets and total liabilities in setting the securities' prices.

Moreover, the results in TABLE 5.10 show that value relevance of total assets increases due to the adoption of TAS No. 32-40, but the adoption of TAS interpretation No. 4. does not affect value relevance of total assets. Because the new accounting standards affect the recognition and measurement criteria of property, plant and equipment (PPE), investment in securities, and other assets, the study investigates whether these components are value relevant information. This study will also examine whether the changes in accounting standards affect the value relevance of PPE, investment in securities, and other assets.

PPE is found to be value relevant information. Value relevance of PPE increases after the adoption of TAS No. 32 and TAS No. 36 as presented in TABLE 5.11. For value relevance of PPE's components, the cost values and revaluation surplus amount are value relevant information in the period of before and after the changes in accounting standards (TABLE 5.12 PANEL A and B). The allowance for impairment of PPE is also value relevant information after the adoption of TAS No. 36. So it can conclude that value relevance of PPE increases because of an allowance for impairment of PPE.

Investments in securities are also found to be value relevant information. Value relevance of investment in securities does not change after the adoption of TAS No. 40 as presented in TABLE 5.13. Although value relevance of total investment in securities does not

change, there are the changes in the value relevance of some types of investment. The results are presented in TABLE 5.14 (PANEL A and B). Marketable securities stated at lower cost or market value (LCM) before the changes in accounting standards is not value relevant, while available-for-sales securities (AFS) stated at fair value after the changes in accounting standards is value relevant information. Although trading securities are stated at fair values the same as AFS securities, it is not value relevant information. Value relevance of general or other investment is diminished after the adoption of new accounting standards. In addition, the investment in subsidiary and associated company under the equity method is value relevant information both before and after the changes in accounting standards periods.

Other assets is value relevant information (TABLE 5.15) the same as PPE and investment in securities. The adoption of TAS interpretation No. 4 does not affect value relevance of other assets. The plausible reason is that other assets is the least portion among the components of assets. Thus, the effect of the adoption of this interpretation on value relevance of other assets is insignificant for investors in setting their securities prices. This result corresponds with the prior finding that value relevance of total assets is not affected by the adoption of this interpretation.

In sum, value relevance of total asset increases because of an increase in value relevance of PPE. Value relevance of investment in securities does not change after the adoption of new accounting standards. The effect of PPE dominates the effect of investment in securities because PPE is the highest portion among the components of total assets. Value relevance of total assets and other assets are not affected by the adoption of TAS interpretation No. 4.

## **6.2 Limitations**

There are a number of limitations of this research. One of the limitation is the missing data of the stock's prices at the date which companies send the financial statements to The Stock Exchange of Thailand. The main reason is that there is no trading volume of stocks at that date. However, the samples are large enough for the data analyses (number of samples in price model equals to 2,291 firm-quarters).

Another limitation is the calculation of quarterly return. Because this study uses the quarterly financial statements, the return is measured as the quarterly interval period. The beginning date and ending date of cumulating the daily returns is subject to researchers. There are

no theories or researches that conclude the most appropriate dates and length which fully reflects the information available for investors. Justification for the length of accumulation is not only this research, but also most of capital market researches also depend on the justification for the length of accumulation.

In addition, numbers of occurrence of loss on TDR are very few. There are only 26 firm-quarters of loss on TDR in the period of after the changes in accounting standards. It is necessary to separate the gain and loss on TDR in model because the nature of gain on TDR is an extraordinary item while loss on TDR is an ordinary item in income statement.

Furthermore, another limitation is the marketable investment in securities used in model (10), which is stated at lower of cost or market (LCM) before the changes in standards. In fact, it is desired to partition the marketable securities (both short term and long term) into the cost value or market value (when the market is below than cost). But most firms do not separate the portions of cost value and market value of marketable securities. So this study need to use the marketable securities stated at LCM by not separating the cost value and market value in model (10).

Finally, the limitation is that the details of notes to financial statements provided by the listed companies are not equal. This study requires the data of the allowance for impairment of investment in securities in model (11), however some firms do not provide the details of the allowance for impairment of investment in securities in the notes to financial statements. Thus, it is necessary to adjust the model (11) in measuring value relevance of investment in securities to be suitable for data provided by listed companies. Model (11) is adjusted by not including the allowance for the impairment of investment and partitions the types of investment in securities according to the new accounting standards' requirements.

### **6.3 Suggestions for Future Research**

The suggestion for further research is to study the effects of changes in accounting standards on information content of earnings. The objectives of information content studies are different from the value relevance studies. That is, information content of earnings studies indicate whether earnings conveys information to investors at the time of the announcement of earnings, while value relevance of earnings studies indicate whether earnings provides the summary of information that investors have used in setting prices over the fiscal

period. The changes in accounting standards introduce new accounting items in income statement, hence the information content of earnings may change. Thus, we can also compare the effects of changes in accounting standards on value relevance and information content of accounting information. This will make the better understanding about the perception of investors in use accounting data in the valuation studies.

Furthermore, the effects of changes in accounting standards on information content and value relevance of cash flows and accruals should be further examined. The adoption of TAS No. 32-40 introduces the new non-cash items such as impairment loss and unrealized gain/ loss on trading securities. The accrual components in cash flow statement are different from the old accounting standards. It will also change the perception of investors about the importance of cash flows.

In addition, the results in this research (TABLE 5.6 and 5.7) are found that gain on TDR reduces value relevance of earnings, but it is not the transitory components of earnings. There should be further investigation of the other reasons in which gain on TDR reduces value relevance of earnings. The possible reason may be the firm characteristic factor affects value relevance of earnings. Firms which have gain on TDR in income statement are the debtors with financial status problem. Debt to equity (D/E) ratios of these firms may be higher than others. The firms with high D/E ratio have the less earnings coefficient than those of firms with less D/E ratio (Dhaliwal et al., 1991; Dhaliwal and Reynolds, 1994). The possibility of discussed factor (D/E ratio) or other factors affecting the decrease in value relevance of earnings with the inclusion of gain on TDR should be further examined.

Finally, it should study the effects of changes in accounting standards on the usefulness of financial statements of other users besides the investors such as creditors, analysts, and managers. This will help the accounting regulators in issuing the accounting standards which affect the usefulness for common groups of users.

## 6.4 Conclusions

This research studies the effects of year 1999 changes in accounting standards on value relevance of accounting information. The results indicate the changes in value relevance of accounting items both in income statement and balance sheet. Value relevance of earnings does not change due to the changes in accounting standards because there are the different effects of new accounting items on value relevance of earnings. Three new accounting items in income statement (impairment loss of PPE, impairment loss of investment in securities, and unrealized gain/loss on trading securities) are value relevant information, while gain and loss on TDR are not. The inclusion of impairment loss in investment in securities in income statement increases value relevance of earnings, while gain on TDR decreases value relevance of earnings. Loss on TDR, impairment loss of PPE, and unrealized gain/loss on trading securities do not affect value relevance of earnings.

In addition to value relevance of earnings, investors also consider the components of balance sheet in setting their securities' prices. Total assets, PPE, investment in securities, and other assets are found to be value relevant information. Value relevance of total assets increases because of an increase in value relevance of PPE. The introduction of allowance for impairment of PPE in balance sheet makes the value relevance of PPE increase. For the investment in securities, the value relevance does not change after the changes in accounting standards. Fair value of available-for-sales securities (under new accounting standard) is value relevant information, while the marketable securities (under lower of cost or market) are not value relevant information.

The results support that the investors in the Stock Exchange of Thailand are interested in the fair value of assets and new accounting items in both income statement (impairment loss of PPE, impairment loss of investment in securities, and unrealized gain/loss on trading securities) and balance sheet (allowance for impairment of PPE) and. An understanding of the effects of changes in accounting standards will help the accounting regulators and accounting standard setters in determining the appropriate standards. However, this study examines the effects of changes in accounting standards on the perception of investors.



There should be the investigation of the effects of changes in accounting standards on the perception of other users of financial statements such as creditors and analysts as discussed in section 6.3.