BOOK-TAX DIFFERENCE AND VALUE RELEVANCE OF TAXABLE INCOME AFTER THE ADOPTION OF FINANCIAL REPORTING STANDARDS (FRSs)

Rashinah Binti Hossen[1], and Associate Prof. Dr. Rohaya Md Noor[2]

ABSTRACT

Malaysia started to adopt FRSs in the year 2006 to replace the Generally Accepted Accounting Principles (GAAP) and International Accounting Standards (IASs). The Financial Reporting Standards claimed to be better than GAAP and IASs because it could improve the quality of financial reporting, more comprehensive, effective and transparent. Rohaya, Nor'azam and Barjoyai (2009) conducted this study before the adoption of Financial Reporting Standards, therefore this paper attempts to extent the study by examining the impact of Book-Tax Difference and whether the taxable income can be used as another alternative to measure the earnings quality after the adoption of Financial Reporting Standards. The result finds the gap between the reported earnings and taxable income is getting smaller after the adoption of Financial Reporting Standards (FRSs). The result also discovers that after-tax taxable income is significant and positively related to market value of common equity. Thus, this paper provides the evidence that the taxable income can be used as another measurement to indicate the earnings quality and firm's performance after the adoption of FRSs.

Keywords: Book-tax difference, value relevance, taxable income, financial reporting standards (FRSs)

[1] Faculty of Accountancy, Universiti Teknologi MARA (UiTM), rashinah@sarawak.uitm.edu.my
[2] Faculty of Accountancy, Universiti Teknologi MARA (UiTM), rohay725@salam.uitm.edu.my

INTRODUCTION

The firms reported different income to different users according to their preferences and interests (Hanlon, 2003; Heltzer, 2006). The firms opportunistically report higher financial income to the shareholders while lower taxable income to the tax authorities (Mills & Plesko, 2003; Deslandes & Landry, 2007; Frank, Lynch & Rego, 2004). The difference amount between the financial income and taxable income is known as Book-Tax Difference (BTD). Rohaya, Nor'Azam and Barjoyai (2009) determined the gap between the financial income and taxable income by the divergence of firm's effective tax rates (ETRs) from the statutory tax rates (STRs). It was expected to have different figure in the financial income and taxable income and the gap of BTD is getting wider as time goes by (Heflin & Kross, 2005; Robinson, Sikes & Weaver, 2007).

There are many reasons that differentiate the financial income and taxable income. Previous studies found the reasons of BTD are due to aggressive tax planning (Frank et al., 2004), earnings management (Blaylock, Shevlin & Wilson, 2010; Heltzer, 2006) and exploitation of accounting and tax rules (Yoon, 2008; Deslandes & Landry, 2007; Miils & Plesko, 2003). When the gap of BTD is getting wider, the reported earnings became inferior and low quality (Deslandes & Landry, 2007; Hanlon, 2005). Due to this matter, International Accounting Standard Board (IASB) established International Financial Reporting Standards (IFRSs) to encounter the quality problem. Latridis (2010) claimed that the International Financial Reporting Standards (IFRSs) as information-oriented and could improve the quality of financial reporting.

Before the adoption of FRSs, different countries have their own way to prepare the financial report. Hellman, Perera and Patel (2010) spelled the differences in term of legal systems, taxation, sources of finance, inflation, political ties and culture. These kinds of differences hinder the adoption of a single set of accounting standard for the worldwide. Many countries adopted the use of IFRS for domestic listed companies in August 2005 (Peng, Laan Smith & Harless, 2008) and Malaysia started to adopt FRSs in the preparation of the financial statements in 2006. However, there are speculations that doubt the effectiveness of FRSs in improving the quality of financial reporting.

Measuring the firm's performance is essential to a wide range of users such as investors, creditors, employees, bankers and other parties. Heflin and Kross (2005) measure the firm's performance by referring to the income reported to the shareholders (financial income) and income reported to the tax authorities (taxable income). Financial income is subject to manipulation and earnings management, therefore the investors are trying to seek another alternative to measure the earnings quality and firm's performance. The recent studies found that the taxable income can be considered as another alternative to measure the quality of earnings and firm's performance (Heflin & Kross, 2005; Onuma, Suzuki & Yamashita, 2007).

Weber (2006) and Lev and Nissim (2002) mentioned that the taxable income provide a useful benchmark for evaluating the quality of book earnings. Onuma at al. (2007) also found that the taxable income demonstrate significantly greater relative explanatory power after the Tax Reform Act of 1998 compared to financial income. This is because the measurement of taxable income is not as flexible as reported income (Deslandes & Landry, 2007) and taxable income contains "less managerial bias error" than book income (Heflin & Kross, 2005).

This study employs previous study conducted by Rohaya et al. (2009). The sample of this study includes the public listed companies in Malaysia from the year 2006 until 2009. This study aims to examine the impact of BTD after the implementation of FRSs and to investigate whether the taxable income can be used as another indicator of earnings quality and firm's performance after the adoption of FRSs..

LITERATURE REVIEW

Financial and Tax Reporting

The financial and tax reporting is varied in the aspect of the objective and legal requirement. The main objective of financial reporting is to provide useful information to the users. According to Financial Accounting Standards Board (FASB) No.1, the financial reporting is to provide information that is useful to existing and potential investors and creditors and other users in making rational investment, credit and similar decision. Deloitte (2008) stated the objective of financial reporting as to provide financial information about the reporting entity that is useful to present and potential equity investors, lenders and other creditors in making decisions in their capacity as capital providers.

Roshayani, Laily and Siti Maznah (2007) identified three sources of accounting regulations in Malaysia which is Companies Act 1965, two independent bodies set up by Financial Reporting Act 1997 i.e. Financial Reporting Foundation (FRF) and the Malaysian Accounting Standards Board (MASB), and other regulatory bodies such as Bank Negara, Securities Commission, Inland Revenues Board (IRB), Bursa Malaysia and Companies Commission of Malaysia. All companies incorporated under Companies Act 1965 Section 166A are required to prepare their financial statements in accordance to the accounting standards issued by MASB. However, there are many comments and criticisms related to the existing accounting standards such as easy to manipulate, earnings management and too flexible. Therefore, IASB established IFRS to encounter these matters.

IASB, International Organization of Securities Commissions, and the International Federation of Accountants are the accounting institutions that uniform the set of international accounting standards (Hellman, Perera & Patel, 2010). IASB committed to

achieve full convergence to a single set of high quality, understandable and enforceable global accounting standards by promoting the use of the standards to the worldwide (Moussa, 2010). Alp and Ustundag (2007) believed that IFRS is an effective standard as the language of reporting will be more comprehensive, comparability and restrict actions of misleading. Tan, Jane and Radiah (2007) stated that IFRS provides high quality, transparent and comparable information to the investors and analysts.

As for tax reporting, Yoon (2008) spelled the primary objective of tax rules is not to satisfy the information need of capital market participants. According to Ayers, Jiang and Laplante (2006), the goal of tax accounting is to facilitate the equitable collection of revenue *(Thor Power Tool Co. v Commissioner, 439 U.S. 522)*. Hanlon (2003) mentioned clearly the two objectives of Internal Revenue Code which are 1) to provide a framework for efficient and equitable determination of tax liabilities and the subsequent collection of revenue and 2) to provide incentives for firms to engage in particular activities. In Malaysia, companies and other enterprises as subjected to income tax are required to comply the requirements under Income Tax Act 1967 for the income or loss incurred (Jane, Roshayani and Huang, 2004).

Book-Tax Difference (BTD)

BTD exists when there is disparity of the amount between the financial income and taxable income. The gap of BTD getting wider as time goes by worried the researchers. The wide gap could represent the potential danger that the quality of reporting is getting poor (Deslandes & Landry, 2007). If the quality of earnings declined, then the information provided in the financial statements may be less relevant and useful to the users. The growing gap of BTD might be due to the strategies used in the aggressive financial and tax reporting among the financially sound corporations (Robinson et al., 2007).

The growing gap of BTD is also contributed by the managers as they earned different incentives in reporting the income. Managers earned incentives (bond covenants, compensation contracts, regulatory capital requirement and etc) to report higher income for financial reporting purposes and lower income for tax purposes (Ayers et al., 2006). Hanlon (2003) took Enron as an example where the firm reported high earnings to the shareholders while paying little taxable income. This shows that the managers prioritize their own incentives for self benefits instead of working in an ethical way.

The first objective of this study is to examine the impact of BTD after the adoption of FRSs. Most of the studies conducted in the past found that there is a gap between the financial income and taxable income. Rohaya et al. (2009) investigated the gap between the financial income and taxable income from the year 2000 until 2004. The result showed that the gap of BTD is positive and large. They also found the firms with lower ETR have a large gap of BTD, and this can be assumed that the firms with low ETR are prone to exercise aggressive financial and tax reporting.

Heltzer (2006) investigated the relation between conservatism and book-tax differences (BTD) with the period sample from 1994 to 2003. The book income is, on average, higher and shows greater left-skewness than taxable income. This shows that the book income provide greater conditional conservatism than taxable income.

Apart from that, Deslandes and Landry (2007) examined the differences between the earnings before taxes (EBT) and taxable income. The descriptive statistic shows that tax-book differences variable (TBD) is positive for more than 75% of firm-years in the first quartile. This proved that firm's received incentive to report high earnings in order to boost market value and lower taxable income to lower the cash outflows.

Value Relevance

Hung (2001) defined value relevance as the ability of an accounting measure to capture or summarize information that affect firm's value and performance. Value relevance is viewed as a synonym for high correlation with market data i.e. the more accounting data correlate to market prices or return, the more "value relevant" they are considered to be (Filip & Raffaournier, 2010).

Dechow, Ge and Schrand (2010) borrowed the definition of earnings quality from SFAC No. 1 as:

"higher quality earnings provide more information about the features of a firm's financial performance that is relevant to a specific decision made by a specific decision-maker."

However, Thingaard and Damkier (2008) claimed that the financial information contents becomes less relevant and thus affecting the value relevance of the financial information. Financial income is the most famous measurement of value relevance in indicating the quality of earnings and firm's performance (Onuma et al., 2007). However, the practice of earnings management impaired the value relevance of book income. Due to that, book income is no longer considered as relevance to measure the earnings quality and firm's performance.

Another matter that impaired the value relevance of information is the interpretation of users. Different users of financial information may have different views on what relevant information is. Thingaard and Damkier (2008) stated that the value relevance of financial information must be correlated with the information used by the investors, regardless of whether they received the information from the financial statements themselves or from other sources.

The financial income is becoming less relevant due to the practice of earnings management, managers' discretion, manipulation and many more. Therefore, the researchers tried to find another alternative to measure the earnings quality and firm's performance by using the taxable income in their studies. When the financial income is of lower quality, the investors are more likely to utilize alternative performance measure such as taxable income (Ayer et al., 2006). However, the amount of taxable income is not disclosed in the financial statements, thus most of the studies used estimation to measure taxable income. Hanlon (2003) worried that the estimation of taxable income may be incorrect due to overstating or understating the current tax expenses and the difference in consolidation rules of both systems.

Heflin and Kross (2005) investigated how well U.S. taxable income measures the firm's performance as compared to book income. They found that low book-to-tax income ratios revealed low book income quality. Low book-to-tax income ratios show that the book income has less than half of the explanatory power at high levels. Interestingly, the taxable income shows more explanatory power at low levels of the ratio than at high levels. They concluded that the taxable income is reliable by the investors as source of information when the book income is at low quality.

Deslandes and Landry (2007) investigated whether the taxable income is informative about the future earnings. The coefficient on taxable income is positive and significant. This shows that taxable income could be considered as a good predictor of the earnings quality as it provides information for firm's future performance.

Ayers et al. (2006) anticipated the information content of taxable income relative to book income could be impaired or enhanced if the firms exercise aggressive tax planning or low quality earnings. The results show that the firm-years with large abnormal accruals taxable income explain 66.2% of the annual return variation explained by book income versus 49.8% for all other firms. The additional explanatory power of adding the change in taxable income to a regression of returns on a change in pre-tax income is significantly larger for the firm-years with low earnings quality. These results demonstrate that the information content of taxable income relative to book income is higher for firms with low quality of earnings.

Onuma et al. (2007) found the information content of taxable income after the Tax Reform Act of 1998 is much higher compared to book income. The information content of taxable income could be enhanced through the Tax Reform Act of 1998, thus could be considered as value relevance indicator to measure the earnings quality and firms' performance.

Development of Hypotheses

This study aims to examine the impact of BTD after the adoption of FRSs and to investigate the value relevance of taxable income during the FRSs regime. There are four studies that can be extracted to develop the hypotheses related to the first objective. Rohaya et al. (2009) found the firms in Malaysia before the implementation of FRSs period (2000 to 2004) reported higher financial income to shareholders and lower taxable income to the tax authorities. The mean for taxable income (TI) is 0.0541 and pretax income (PTI) is 0.0750. The ANOVA reading found significant result with the f-value for taxable income (TI) at 686.273 and pretax income (PTI) at 54.257. The firms reported high financial income with the intention to impress the shareholders and lower taxable income so that the firms could pay less tax to tax authorities.

Lev and Nissim (2002) examined the gap between the reported income and taxable income. The mean for reported earnings is 0.067, while after-tax taxable income is 0.042.The gap between the reported earnings and taxable income is considerably large and positive.

As for Heflin and Kross (2005), their finding indirectly explained the difference between book and taxable income. The mean for taxable income is 0.081 and book income is 0.063. There is an obvious gap between the book and taxable income, however this study found that the taxable income is reported higher compared to book income.

Onuma et al. (2007) investigated the relative and incremental information content of taxable income after the Tax Reform Act of 1998. They found the average change in TI (ΔTI) is slightly higher than average change in PTBI ($\Delta PTBI$) with the means of 0.004 and 0.002 respectively.

Based on the four studies mentioned above, there is mixed signs of the gap between the financial income and taxable income. Therefore, the hypothesis for the first objective of this study is:

H_1: There is gap between the financial income and taxable income after the implementation of FRSs.

The second objective of this study employs the "Price Earnings Model" adopted from Rohaya et al. (2009) which is developed by Lev and Nissim (2002). This model is used to measure the value relevance of the variables such as book value of common equity (BV), reported earnings (EARNS) and after-tax taxable income (ATTI) to market value of common equity (MV).

Rohaya et al. (2009) found that all explanatory variables are significant and positively related to market value of common equity. The result shows that the coefficient of book value of common equity (BV) at 0.43, reported earnings (EARNS) at 6.904 and after-tax taxable income (ATTI) at 2.64. The reported earnings (EARNS) as expected to be a strong indicator of earnings quality. However, the positive coefficient of after-tax taxable income

(ATTI) suggests that taxable income can be used as another alternative to measure the earnings quality and firms' performance. The adjusted R^2 is 44% at 1%-level and the Durbin Watson is at 1.876.

Lev and Nissim (2002) examined the persistence of reported earnings. The result in the Pearson and Spearman Correlation Coefficients for book value at 0.41, reported earnings at 0.49 and after-tax taxable income at 0.41. All the variables are positively related to the price. As expected, reported earnings have the highest correlation to the price, while for book value and after-tax taxable income share the same correlation. In the annual cross-sectional regressions result, after-tax taxable income (ATTI) coefficient is positive and highly significant in both levels (Panel A and B). The positive ATTI shows the persistence of earnings to the stock prices. The quality of earnings deteriorated in current years, making the information in taxable income is value relevance indicator to measure the earnings quality and firms' performance.

Heflin and Kross (2005) investigated how well U.S. taxable income in measuring the firm's economic performance relative to book income. The sample is divided into high ratio of book to taxable income (Panel A) and low ratio of book to taxable income (Panel B). Explanatory power of book income for Panel A clearly dominated the taxable income. The book accruals model's R^2 is 10.8% which is twice of tax accruals model at 5.4% and the difference is statistically significant. Panel B shows the explanatory power of taxable income dominated the book income. The tax accruals model's R^2 is 8% while the book accruals model's R^2 is 5.2%. The taxable income amusingly has more explanatory power at low levels of ratio. This suggests that the investors could employ the taxable income when the book income is at low quality.

Onuma et al. (2007) examined the incremental information content of taxable income after the Tax Reform Act of 1998 in Japan. The OSL regression result reported the information content of taxable income for the total sample is much higher when the adjusted $R^2_{\text{taxable income}}$ at 0.102 and adjusted $R^2_{\text{book income}}$ at 0.073. The information content of taxable income after the Tax Reform Act of 1998 (adjusted $R^2_{\text{taxable income}}$ at 0.115) is higher than before the Tax Reform Act of 1998 (adjusted $R^2_{\text{taxable income}}$ at 0.042). After the Tax Reform Act of 1998, the information content of taxable income is increasing. This suggests that the act increased the usefulness of taxable income as a complementary performance measure for book income.

Based on the discussion on findings of the above studies, the second hypothesis for the second objective of this study is developed as follows:

H2: The taxable income is value relevance to indicate the earnings quality and firm's performance during the FRSs regime.

RESEARCH METHODOLOGY

Data Collection

The sample used in this study is obtained from Thomson ONE Banker database. The list of companies' names of Malaysia's Public Listed Companies is collected from Bursa Malaysia website as of 2nd February 2011. As of this date, there are 721 listed firms on the main and second board of Bursa Malaysia in which the firms from sectors such as Banks and other financial institutions, trust and insurance have been excluded. Firms from the sectors of banks, financial institutions, trust and insurance are excluded because according to the Income Tax Act 1967, the act affirms that persons and companies are liable to tax for income derived in Malaysia, except for banking, insurance, air and sea transport companies which are taxed based on worldwide income (Derashid & Zhang, 2003).

The data filtering of this study employs a cross-section data where the data may exclude some current firms and incomplete data (Smith, 2003). First and foremost, the data consists of the firms with non-missing financial information for the four-year of the investigation period are collected from Thomson ONE Banker database. Firms with negative pre-tax income are deleted and the remaining firms of this study are 394 firms for four years period

To obtain the clean data, the sample of 1576 firm-years (394 firms for four years period) is then sorted to eliminate the non-available data. First, the missing data for market value of common equity (MV) is excluded from the sample. The missing data for reported earnings (EARNS) and after-tax taxable income (ATTI) are also deleted. The final sample comprises of 1,168 firms-years.

Note		Firms
1	Firms available in Thomson ONE Banker as of 2 Feb 2011 (excluding financial institutions, insurance and trust)	721
2	Less: Firms with missing data for one or more of the panel years	42
3	Less: Firms with net operating losses for one or more of the panel years	285
4	Balanced Panel Sample	394
5	Sample of Firm-Years	1,576
6	Less: Firms-Years with missing data of market value	76
7	Less: Firms-Years with missing data of reported earnings	329
8	Less: Firms-Years with missing data of ATTI	3

9	**TOTAL OF CLEAN FIRM-YEARS**	**1,168**

Figure 1: Sample Selection Process

Conceptual Framework

The conceptual framework below shows the independent variables and dependent variable used in this study.

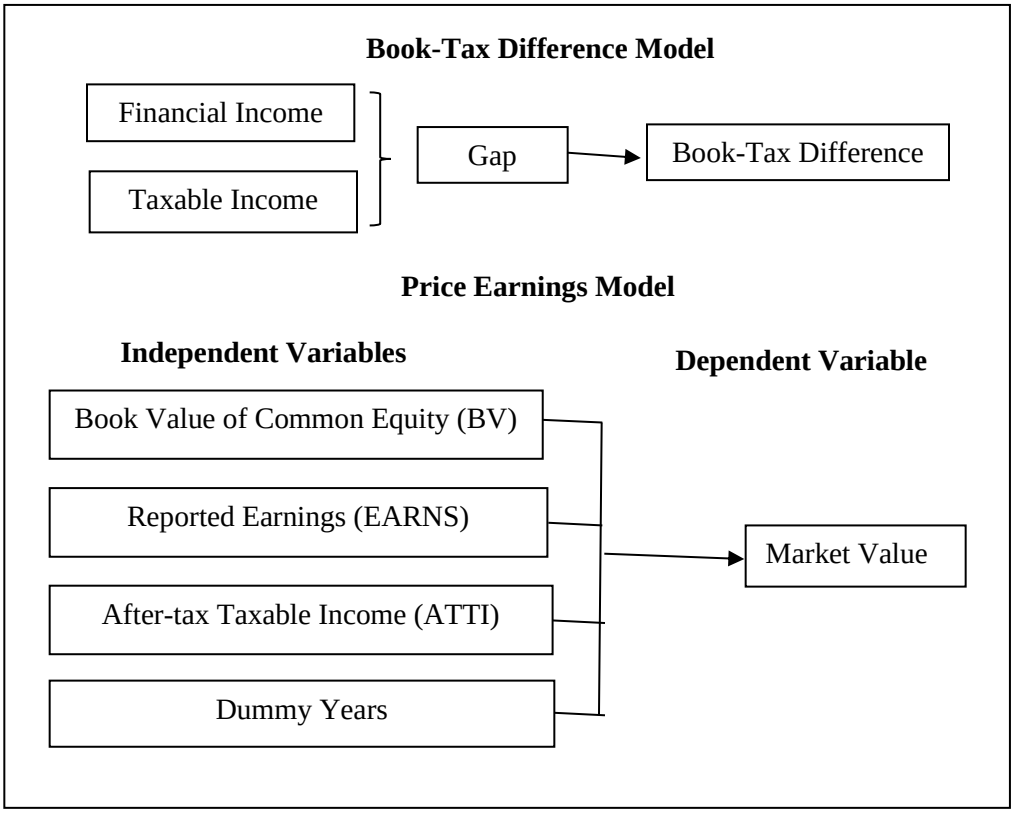

Figure 2: Conceptual Framework

Measurement of variables

Book-Tax Difference Model

The Book-Tax Difference is measured using the following model;

Book-Tax Difference (BTD) = Pretax Income – Taxable Income (1)

Pretax Income data is obtained from Thomson ONE Banker database. In Thomson ONE Banker database, the pretax income is known as Income before Tax which is after the deduction of depreciation and amortization, plus/minus non-operating income/expenses, and interest expense. Taxable Income is calculated based on the estimation only because the actual amount of taxable income only known by the taxpayers. Therefore, the estimation of taxable income is calculated using the following formula:

$$\textbf{Taxable Income = Current Tax Expense / Statutory Tax Rates} \quad (2)$$

Current Tax Expense is obtained by deducting the Tax Expense with Deferred Tax Expense.

$$\textbf{Current Tax Expense = Tax Expense – Deferred Tax} \quad (3)$$

Tax Expense and Deferred Tax Expense data can be collected from Thomson ONE Banker database. In Thomson ONE Banker database, Tax Expense is recognized as Income Taxes. As for Deferred Tax Expense, it is not given directly in the database. Therefore, the Deferred Tax Balance Sheet in the database is used to calculate Deferred Tax Expense by comparing the Deferred Tax Balance Sheet (DTBS) of current year and previous year. For instance:

$$\textbf{Deferred Tax Expense for 2009 = DTBS2009 – DTBS2008} \quad (4)$$

Price Earnings Model

The study then investigates the association between the quality of reported earnings and book-tax differences, and to examine the value relevance of taxable income as an indicator of firms' performance and earnings quality. This study again adapts the price earnings model from Rohaya et al (2009) as follows:

$$\mathbf{MV_t = \beta 0 + \beta 1 BV_t + \beta 2 EARNS_t + \beta 3 ATTI_t + \beta 4 DYEARS + \varepsilon_t} \quad (5)$$

Where **MV** is the market value of common equity at the financial year-end scaled by total assets; β0 is the intercept; β**1BV** is book value of common equity at the financial year-end scaled by total assets; β**2EARNS** is reported earnings (net income before extraordinary items) scaled by total assets; β**3ATTI** is estimated after-tax taxable income (the differences between the taxable income and current tax expenses) scaled by total assets, β**4DYEARS** is dummy years for the period of 3 years i.e. 2007, 2008 and 2009; and lastly **ε** is an error term. Independent variable of EARNS were used to avoid any non-recurring items in the earnings component which may mislead the valuation of share prices (Adibah, Nor'Azam and Asyaari, 2011). All variables except for dummy years are scaled by total assets to mitigate the effect of heteroscedasticity (Rohaya et al, 2009 and Lev and Nissim, 2002).

Market value of common equity (MV) is used in this study to reflect the value relevance of the financial statements' information. The financial information is value relevance if the accounting information and market value or returns is statistically related (Thinggaard & Damkier, 2008). Anandarajan and Hasan (2010) supported that earnings have information content to the investors if they are related to stock prices. Therefore, market value of common equity (MV) is the best measurement to indicate the value relevance in this study.

FINDINGS AND ANALYSIS

Descriptive Statistics

Table 1: Descriptive Statistics for the Year 2006 to 2009

STATISTIC	PTI	TI	BTD	MV	BV	EARNS	ATTI
MEAN	0.0862	0.0646	0.0215	0.7432	0.6027	0.0860	0.0477
STD DEV	0.0743	0.0797	0.0586	0.8639	0.1972	0.0691	0.0589
MINIMUM	0.0003	-0.4219	-0.2491	0.0409	0.1105	-0.0142	-0.3080
MAXIMUM	0.7294	0.7573	0.6316	8.5890	0.9935	0.6530	0.5680

Variable definitions:
Pretax Income (PTI) is obtained from Thomson ONE Banker database which the database used the term of Income before Tax scaled by total assets, Taxable Income (TI) is calculated using the estimation of current tax expense grossed up by Statutory Tax Rates (STR) scaled by total assets, Book-Tax Difference (BTD) is the difference between Pretax Income (PTI) and Taxable Income (TI). MV is market value of common equity at financial year-end scaled by total assets, BV is book value of common equity at financial year-end scaled by total assets, EARNS is [3]net income before extraordinary items scaled by total assets, and ATTI is estimated after-tax taxable income computed as taxable income (current tax expense grossed up by the statutory tax rate according to each year) less current tax expense scaled by total assets.

The descriptive results show the mean for pretax income (PTI) at 0.0862, taxable income (TI) at 0.0646, market value of common equity (MV) at 0.7432, book value of common equity (BV) at 0.6027, reported earnings (EARNS) at 0.0860 and after-tax taxable income (ATTI) at 0.0477. The mean for pretax income (PTI) is obviously higher than the taxable income (TI) and the mean of book-tax difference (BTD) supports the gap at 0.0215. The mean for market value of common equity (MV) is higher than the book value of common equity (BV). The mean for the reported earnings (EARNS) is almost twice higher than after-tax taxable income (ATTI). This finding is consistent with Rohaya et al. (2009).

[3] Beginning on or 1 Jan 2006, the "extraordinary items" was deleted from FRS107. However, Thomson ONE Banker database still used the term of Net Income before Extraordinary Items, but it is actually referring to Earnings before Tax. Since this study adopted approach from Rohaya et al. (2009), therefore the terms of "net income before extraordinary items" is remained in this study.

Book-Tax Difference

The impact of Book-Tax Difference (BTD) after the implementation of FRSs is illustrated in the figure 2 and Figure 3 below:

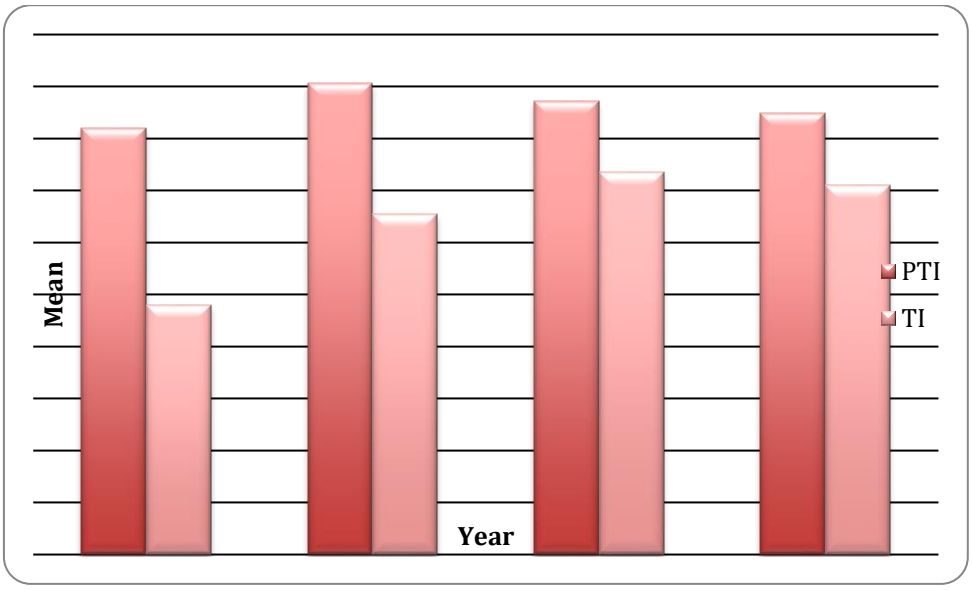

Figure 3: Mean of Pretax Income and Taxable Income

In Figure 3, the mean for pretax income (PTI) and taxable income (TI) shows that the pretax income is higher than the taxable income. Therefore, there is gap between both incomes even after the implementation of FRSs. This finding is consistent with results of Rohaya et al. (2009); Heltzer (2006); and Deslandes and Landry (2007). However, the gap of BTD is getting narrow from 2006 to 2008. In the year 2009, the gap of BTD is slightly increased from the year 2008.

According to Figure 4, there is improvement in the gap between the pretax income and taxable income starting from 2006, right after the adoption of FRSs. The adoption of FRSs in 2006 might enhance the awareness of Malaysia's firms to be more responsible to pay higher taxable income and thus contribute to the increases in the collection of tax revenues of IRB. It suggests that Malaysia's firms are getting more transparent, honest and more compliance to the new standards. This may also suggests that the adoption of FRSs could actually curb the exercise of earnings management. When the gap is getting larger, it could lead to the deterioration in the quality of earnings (Lev & Nissim, 2002; Deslandes & Landry, 2007). However, the improvement in gap of BTD after the adoption of FRSs could be an indicator that the quality of earnings in Malaysia is getting better.

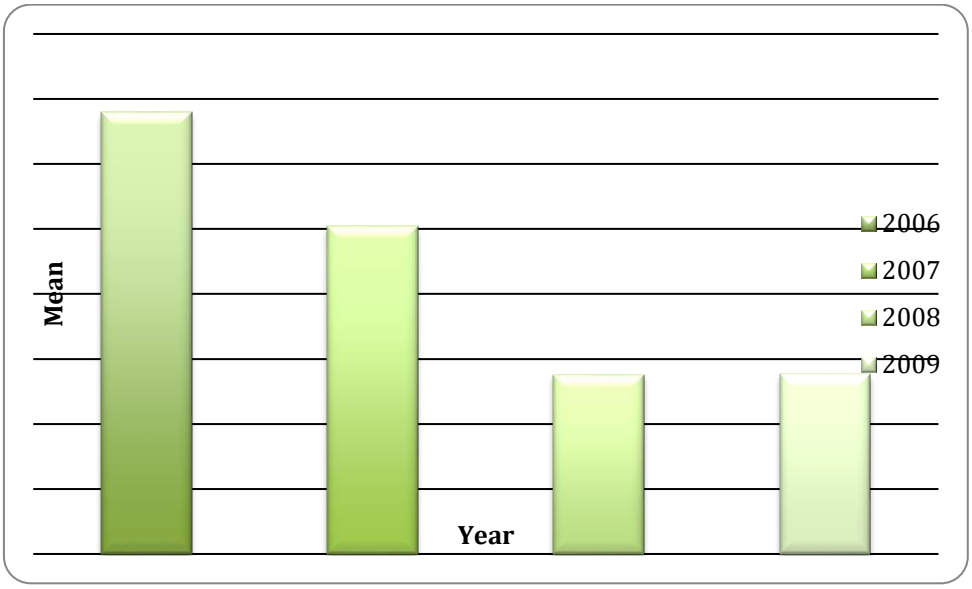

Figure 4: The mean of Book-Tax Difference

Univariate Analysis

Table 2: One-way ANOVA of Market Value of Common Equity

Independent Variables	F-value	Significant level
Book Value of Common Equity	1.490	0.007***
Reported Earnings	4.515	0.000***
After-Tax Taxable Income	2.746	0.000***

Note:
*** Significant at 1%-level (2-tailed),
** Significant at 5%-level (2-tailed)
* Significant at 10%-level (2-tailed)

Table 2 shows the relationship of market value of common equity (MV) with other independent variables. The finding shows significant result between the market value of common equity (MV) and book value of common equity (BV) with the f-value of 1.490. There is also significant result between the market value of common equity (MV) and reported earnings (EARNS) with the f-value of 4.515. Besides, the result also shows the significant result between the market value of common equity (MV) and after-tax taxable income (ATTI) with the f-value of 2.746.

As expected, the reported earnings (EARNS) shows the highest f-value with the market value of common equity (MV), followed by after-tax taxable income (ATTI) and lastly by book value of common equity (BV). It is evidenced that the reported earnings (EARNS) is the most relevant information used by the investors to measure the earnings quality and

firm's performance (Rohaya et al., 2009; Lev & Nissim, 2002). However, after-tax taxable income (ATTI) at the position of second highest may also provide high explanatory power of information to the investors to measure the earnings quality and firms' performance.

Multiple Regression Analysis

Table 3: Pearson (Lower Triangle) and Spearman (Upper Triangle) Correlations

	MV	BV	EARNS	ATTI
MV	1	0.386***	0.615***	0.380***
BV	0.123***	1	0.265***	0.241***
EARNS	0.703***	0.185***	1	0.587***
ATTI	0.566***	0.149***	0.673***	1

Table 3 provides Pearson and Spearman correlations between all the variables. Overall, The Pearson and Spearman correlations demonstrate positive and significant correlation at 1%-level (2-tailed). For Pearson correlation, the highest correlation is expressed between the market value of common equity (MV) and reported earnings (EARNS) at 0.701. The second highest correlation to market value of common equity (MV) is after-tax taxable income (ATTI) at 0.566, and then followed by book value of common equity (BV) at 0.123.This is consistent with Rohaya et al. (2009). It couldn't agree more that the reported earnings is the most common and relevant information to indicate the earnings quality and firm's performance. As compared to Rohaya et al. (2009), the Pearson correlation between market value of common equity (MV) and after-tax taxable income (ATTI) is getting improved after the adoption of FRSs.

The Spearman correlations also reveal significant and positive results for all the variables. The highest correlation is between the market value of common equity (MV) and reported earnings (EARNS) at 0.615, followed by the book value of common equity (BV) at 0.386 and lastly by after-tax taxable income (ATTI) at 0.380. This result is similar with Rohaya et al. (2009). However, this result shows after-tax taxable income as the least measurement in indicating the earnings quality and firm's performance.

Price Earnings Model Regression Analysis

The regression analysis is utilized to examine the association of the independent variables to the market value of common equity (MV). Table 4 presents significant results with the adjusted R-squared of 53.6% and Durbin Watson at 2.004. All the independent variables show significant and positive results except for book value of common equity (BV). The highest coefficient is demonstrated by the reported earnings (EARNS) at 7.215, followed by after-tax taxable income (ATTI) at 2.824. This proven that the reported earnings (EARNS) is the most relevant measurement to indicate earnings quality. The book value

of common equity (BV) however shows insignificant and negative result with the coefficient estimates of -0.052. This result is consistent with Rohaya et al. (2009) and Lev and Nissim (2002).
The significant and positive coefficient of after-tax taxable income (ATTI) at the second highest position is sufficient to suggest the after-tax taxable income (ATTI) as another indicator of earnings quality and firm's performance after the adoption of FRSs (Deslandes & Landry, 2002; Ayers et al., 2006; Onuma et al., 2007; and Heflin and Kross (2005).

Table 4: Price Earnings Regression Results from the year 2006 to 2009

Variables	**Coefficient**	**T-stats**
CONSTANT	0.107	1.680*
Book Value of Common Equity (BV)	-0.052	-0.586
Reported Earnings (EARNS)	7.215	21.120***
After-tax Taxable Income (ATTI)	2.824	7.041***
Dummy Year 2007	0.048	0.976
Dummy Year 2008	-0.327	-6.621***
Dummy Year 2009	-0.069	-1.392
R^2	0.538	
Adjusted R^2	0.536	
F-Statistic	225.629	
P-Value	0.000***	
Durbin-Watson	2.004	
Firm-years	1168	

Note:
*** Significant at 1%-level (2-tailed),
** Significant at 5%-level (2-tailed)
* Significant at 10%-level (2-tailed)

CONCLUSIONS

The data of this study is collected from different sources. First, the list of Public Listed Companies (PLCs) is obtained from the website of Bursa Malaysia. As of 2nd February 2011, there are 721 firms listed in the main and second board. This total of 721 firms excluded the firms from banks, financial institutions, trust and insurance sectors. The data then collected from Thomson ONE Banker database and the data is filtered by eliminating the non-available information. This filtering process provides the final sample of this study total up to 1,168 firm-years.

The data was analysed using appropriate analysis to examine the objectives of this study. Analysis of data is started with the descriptive analysis where it describes the mean, standard deviation, minimum and maximum information. The first objective of this study can be explained by referring to the means of pretax income (PTI) and taxable income (TI) where the result obviously shows that there is difference between these incomes. This

difference between pretax income (PTI) and taxable income (TI) is called as Book-Tax Difference (BTD). The means for the pretax income (PTI) and taxable income (TI) show the gap is getting smaller. This small gap of Book-Tax Difference (BTD) is a surprise improvement as it might be resulted from the adoption FRSs. This result is consistent with Rohaya et al. (2009); Heltzer (2006); and Deslandes and Landry (2007).

The second objective of this study is to examine the value relevance of taxable income after the adoption of FRSs. This objective can be examined by conducting the coefficient and regression analysis. In the coefficient analysis, Pearson and Spearman analysis are used to examine the correlation of independent variables to the market value of common equity (MV). In the Pearson coefficient analysis, the result demonstrates significant and positive correlation for all the variables. Reported earnings (EARNS) expressed the highest correlation with market value of common equity (MV), then followed by after-tax taxable income (ATTI), while book value of common equity (BV) with the lowest correlation. As expected, reported earnings (EARNS) excelled in indicating the quality of earnings and firm's performance. However, this study tries to seek another alternative to measure the earnings quality instead of reported earnings. Therefore, the evidence reflected in the Pearson coefficient analysis proven that after-tax taxable income (ATTI) at the second highest correlation to market value of common equity (MV) is sufficient enough to support that after-tax taxable income (ATTI) can be used as another measurement to indicate the earnings quality and firm's performance.

The Spearman coefficient analysis also provides the significant and positive correlations with all variables. The reported earnings (EARNS) again shows highest correlation with market value of common equity (MV), followed by book value of common equity (BV) and after-tax taxable income (ATTI). Based on the Spearman coefficient analysis, after-tax taxable income (ATTI) is the least variable to correlate to the market value of common equity (MV), but it is still significant and value relevance to measure the earnings quality and firm's performance.

Based on the results reflected in the coefficient and regression analysis above, it is confirmed that the after-tax taxable income (ATTI) is significant and positive to the market value of common equity (MV). Though the reported earnings (EARNS) show the highest correlation to the market value of common equity (MV), nevertheless the result still provides sufficient evidence to confirm that taxable income is value relevant in measuring the quality of earnings and firm's performance. Hence, the current study contributes to the literature and provides another option for investors in making their investment decisions.

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