The Effect of Financial Secrecy and IFRS Adoption on Earnings Quality: A Comparative Study between Indonesia, Malaysia and Singapore

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This study examines the effect of financial secrecy and IFRS adoption on earnings quality among three countries namely, Indonesia, Malaysia, and Singapore. This study utilizes the financial statements of 71 companies listed on the Indonesian Stock Exchange (IDX), Bursa Malaysia and the Singapore Stock Exchange (SGX) over a 6 year period, consisting of 426 observations. A regression analysis was used to analyse the data with discretionary accruals as the earnings quality and using a secrecy index produced by the Tax Justice Network as the secrecy proxy. This study uses control variables such as investor protection, total sales, leverage, sales growth ratio, plant assets growth rate, operating cash flow, and loss for the period and industry types as dummy variables in order to provide more robust findings. The results of this study show that although companies in Indonesia, Malaysia, and Singapore have adopted IFRS, they produce different earnings quality. This study shows that the earnings quality among the countries is not the same. This study provides evidence that secrecy is an important factor influencing earnings quality. In other words, a higher secrecy level would lead to lower earnings quality. The findings of this study provide a new contribution to the financial reporting literature and a further understanding to academics and practitioners about the impact of financial secrecy and IFRS adoption on earnings quality.

Introduction

It is generally known that different countries would have different accounting standards due to their unique conditions such as economics view, culture, politics, and social conditions. However, voluminous business transactions coupled with globalisation have led to the need to implement one standardised international financial accounting standard in order to achieve standardisation and harmonisation that represent two important qualitative characteristics of financial reporting. In 2001, the International Accounting Standard Board (IASB) which consists of four international organisations namely, the European Commissions (EC), International Organisation of Securities Commission (IOSOC) and International Federation of Accountants (IFAC), issued the International Financial Reporting Standard (IFRS). IASB aims to develop one global accounting financial reporting standard in order to increase the quality of financial reporting. The international accounting standards are expected to fulfil public need of information in order to increase the trust, improvement and stabilisation of long term global finance (Pacter, 2015). To date, there are more than 120 countries that have adopted and implemented IFRS (Deloitte, 2014).

The IFRSs are developed on principle based standards instead of rule based standards with the expectation of an increase in the quality of the financial reporting. However, studies that have examined the impact of principle based standards have often provided mixed findings. For example: Daske and Gunther (2006) found that principle based standards elevate earnings quality. Barth, Landsman and Lang (2008) conducted a study on earnings quality before and after IFRS adoption using 327 companies as the sample from 21 different countries. They found that earnings management level decreases after IFRS adoption. They also found that the value relevance of accounting information has elevated and the loss was recognised earlier after IFRS adoption. Similarly, Morais and Curto (2008) showed that income smoothing practices in Portuguese companies have decreased IFRS adoption. Other studies however, showed contrasting findings. For example: Jeanjean and Stolowly (2008) found that earnings management activities in Australia, France, and UK for the period 2005-2006 did not decrease after IFRS adoption. In other words, earnings management is still excessive.

Other studies showed that the adoption of high accounting standards does not directly increase quality of accounting information (Ball, Robin and Wu, 2003; Prochazka, 2017).

Their study concluded that the incentive and motivation of the financial information preparer (management) along with auditor also influence the quality of financial information. In other words, there are other factors influencing financial information quality. The inconsistent findings are presumed to be caused by the non-existence of direct measurement over the financial statement quality (Barth e.al, 2008; Schipper and Vincent, 2003; Cohen, Krishnamoorthy and Wright, 2004; Nicholas and Wahlen, 2004; Nilwala, Gunawardana & Fernando 2017). According to Houqe, Monem, Tareq and van Zijl (2015), it is probable that the implication of the IFRS implementation to the earnings quality varied in every region, depending on the culture and financial secrecy.

This study aims to examine earnings quality in the relation to financial secrecy. Specifically, it aims to examine factors influencing IFRS implementation in creating qualified information in different regions, especially Indonesia, Malaysia, and Singapore. The findings of this study provide a new contribution to the financial reporting literature and further understanding to the academics and practitioners on the importance of secrecy to earnings quality. The next section presents the literature review in Section 2. This is followed by the research design in Section 3. Section 4 presents the results and discussion. The last section, Section 5 presents the summary and conclusion.

Literature Review
Earnings Quality

Research on earnings quality over the past decades has increased dramatically which led researchers to providing various definitions of earnings quality. These definitions vary according to the context used in their studies. Dechow, Ge and Schrand (2010) argued that earnings quality is contextual as it provides different things to different users of financial reporting. The context can range from equity valuation, debt contracts, managerial compensation and/ or to internal use. However, they defined earnings quality as a measurement of firm performance where it reflects current operating performance, an indicator of future operating performance and accurately annuitizes the company's intrinsic value. As stated in Dechow et al. (2010, p.344):

> "Higher quality earnings provide more information about the features of a
> company's financial performance that are relevant to a specific decision made
> by a specific decision-maker"

Dechow et al (2010) further defined high earnings quality as demonstrating more honesty in representing features of the company's fundamental profit processes that are relevant for

certain decisions and helps predict future earnings, taking into account the stability and persistence of earnings. Lev (1989) on the other hand, defined earnings quality as decision usefulness that is used in the context of making decisions on equity evaluation. Dichev, Graham and Rajgopal (2012) stated that management would often view earnings are of high quality if they are sustainable with backup from actual cash flows. That is, current earnings would be considered high quality if they serve asa good guidance to the company's long term profit (Santi, Puspitasari & Ghani, 2017; Gideon, Puspitasari, Ghani & Gunardi, 2018; Nguyen, 2018). Earnings quality has often been underlined by the stakeholders, including the internal and the external users of financial statement and according to Dechow et al (2010), represents the features of the fundamental process of earnings and relevance in supporting the decision making and also the ability to predict future earnings.

An analysis of earnings quality is important to assist investors to judge the congruence between the company's earnings and the integrity of the financial statements. It helps the investors to rely on more reliable numbers. There are several ways of measuring earnings quality namely, persistence, predictability, value relevance, timeliness, and conservatism (Francis and Wang, 2008; Dechow et. al, 2010). Another form of measurement is the accrual which is consistent with what Dechow and Dichev (2002) defined earnings quality, the magnitude of estimation errors in accruals. In addition, Jones (1991) proposed a way of measuring earnings quality by using discretionary accrual. According to Wysocki (2004) and Meuwissen, Moers, Peek and Vanstraelen (2005), the new Jones measurement of earnings quality is more appropriate to evaluate the international data. Jones (1991) explained that accrual is the difference between cash flow and net profit (loss). It is described as a very operational transaction that influences the operational cash flow within on period of accounting.

This study assesses earnings quality by using accrual quality as a proxy. The reason being that profits arranged on an accrual basis can actually better show the economic implications of existing transactions and events. However, in its preparation, profits on accrual-based accounting cannot be separated from estimates, assumptions, choices of accounting policies determined by management considerations that contain subjectivity. Management's flexibility is also feared to be deliberately utilized by management to manipulate earnings (earnings management) because of certain motives and incentives from the management. Easley and O'hara (2004) noted that the company's accounting treatment of earnings and disclosure can affect the company's information environment which then impacts on information risk and cost of capital.

Accrual could be classified as non-discretionary and discretionary. Non-discretionary accrual

is the normal accrual which is caused by the normal condition of a company, and exists in the company management policy. Meanwhile, the discretionary accrual is the abnormal accrual which is caused by the 'management choices' in electing the accounting method and estimation in order to achieve certain numbers. Discretionary accrual can distort the quality of the financial statements. That is, the higher the discretionary accrual, the lower the quality of financial statements (Dechow et al, 2010). Dechow et al (2010) presented the mechanism to separate accruals into normal accrual and abnormal accrual. Normal accrual relates to the fundamental profit whilst abnormal accrual does not relate to the company's fundamental profit. Abnormal accruals are generally used as approaches to detect the possibility of earnings management in the company which will ultimately affect the quality of earnings. The smaller the abnormal accrual value, the better the quality of earnings. Abnormal accruals themselves are defined as actual accruals minus expected accruals. Abnormal accruals themselves are generally influenced by the manipulation of sales, depreciation and estimation of bad debt expenses.

According to Jones (1991), earnings quality can be measured using discretionary accruals and this method can detect indications that managers increase profits illegally, with large discretionary accruals indicating a greater likelihood of opportunistic activities carried out by managers and higher earnings quality. While Jones measurement model is considered less practical for the calculation of abnormal accruals with international data, the reasoning being that a small sample of industries in each country makes this model less reliable and with this method the company can identify its own abnormal accruals (Wysocki 2004; Meuwisse et al, 2005).

Financial Secrecy

Secrecy is one of the accounting values that most influences the information presented in corporate financial reporting, especially information disclosure. Besides having a negative effect on earnings quality, secrecy also has a negative effect on the comparability of financial statement. Gray (1988) states that secrecy is an accounting value that chooses to maintain information and does not provide disclosures about a business activity, secrecy has a tendency to prevent disclosure to external parties. Radebaugh and Gray (1990) also stated that the preference for secrecy is an activity that is consistent with strong uncertainty avoidance that prevents disclosure to external parties, thereby reducing competition and conflicts that can reduce company security. Secrecy or financial secrecy produces some positive effect, however there are other problems arising from financial confidentiality resulting in an increasing number of financial crimes such as fraud, tax fraud, money

laundering, and the release of a jurisdiction from international financial regulations, which involve accruing wealth at the expense of the general public.

The Tax Justice Network in 2015 issued a Financial Secrecy Index (FSI), which contained a secrecy index for 92 countries, where if the secrecy score is above 50 then it is said to be high, whereas if it is equal to 50 or below it is categorized as low. Countries that have high secrecy values tend to try and hide or not fully disclose relevant financial information (Geiger & Smith, 2010). The criteria for selecting these countries are based on the possibility of them being the centre of the offshore economy and the centre of the world economy. A high degree of secrecy is deemed less transparent in reporting or disclosing financial information to local government authorities, and less compliant in adhering to international standards, particularly in combating financial crime, so high secrecy jurisdiction tends to be the key to placing funds of illegal origin. In conducting research related to this secrecy index, the Tax Justice Network uses several methodologies used in calculating this secrecy index namely, banking secrecy, recorded company ownership, public company accounts, country by country reporting, efficiency of tax administration, anti-money laundering, automatic information exchange and international transparency commitments.

According to the Tax Justice Network (2015), the high secrecy jurisdictions tends to hide information less transparent when reporting and disclosing financial information. Further, they have less enforcement in preventing the money laundering and corruption causing higher illegal funds placement. Further, high secrecy also produces high asymmetry information to the investors which trigger the irrelevant/incorrect decisions. Meanwhile, IASB has been developing IFRS comprising of accounting methods and approaches to improve financial information accountability, transparency, and comparability. IFRS has been developed using the principle-based over the rule-based standard (Gideon et al., 2018). Hence, the use of the fair value measurement has been massively escalated. There are arguments that the use of the fair value measurement can increase the accounting information quality since it can reflect a company's real economic condition.

International Financial Reporting Standard (IFRS)

IFRS is an international standard issued by the International Accounting Standard Board (IASB). The International Accounting Standard Board (IASB), formerly called the International Accounting Standard Committee (IASC), is an independent institution formed to develop accounting standards. This organisation has the aim of developing and compiling accounting standards, encouraging the use of high-quality, understandable and comparable global accounting standards (Choi, Frost, Carol and Meek, 1999; Sadique and Sheikh, 2013;

Hussain et al., 2018). These accounting standards are prepared by four major world organizations, namely the International Accounting Standard Board (IASB), the European Commission (EC), the International Organisation of Securities Commissions (IOSOC), the International Federation of Accountants (IFAC). Most of the contents of this standard are part of the International Accounting Standard (IAS), which later IASB continued to develop into a new standard known as IFRS. In addition, the fair value used in the IFRS rules has the advantage that the assets and liability posts held reflect more the actual value at the time of financial reporting.

One effort to reduce earnings management is to make corrections to accounting standards. The improvement in accounting standards currently being carried out is with the adoption of IFRS. The purpose of the IASB establishes international accounting standards is to simplify various alternative accounting policies that are permissible and can limit management policy considerations (management's discretion) to earnings manipulation so as to improve earnings quality and present comparable financial reports in the eyes of the international community. So far, IFRS has been used in many countries to become international accounting standards, including Europe, Japan, Hong Kong, Australia, Malaysia and Singapore, Pakistan, Russia, Turkey, South Africa and GCC countries (Cooperation Council for the Arab States of The Gulf). To date, IFRS has been used by more than 150 countries and 57% or 85% of them have required the use of IFRS as a financial reporting standard for domestic companies or listed companies. Most countries that are members of the G-20 have also adopted IFRS, one of which is Indonesia.

Before adopting IFRS, accounting used the historical cost basis to measure transactions (Siala Bouaziz & Jarboui, 2019). Using the historical cost basis, the items in the financial statements are measured at the cost of the transaction. The costs recorded in the financial statements in accordance with the transaction will be the basis for reporting the size of a post for the next period. The use of historical cost has the advantage that it can be easily proven because the amount is in accordance with the costs recorded during the transaction. However the disadvantage is that this value does not reflect changes in value, for example when there is a decline or increase in value in the market due to inflation or deflation and so on. So the historical cost cannot reflect the value of a post at the time of reporting

Research Methodology
Sample

The public listed companies on the Indonesian Stock Exchange (IDX) under the LQ-45 index are chosen as the sample study. This study also relies on the public listed companies in the Bursa Malaysia under the KLCI, and the Singapore Stock Exchange (SSE) under the Straits

Times Index. The LQ-45, KLCI, and the Straits Times Index consists of companies that are listed in the capital market with highest market capitalization. This study only utilised companies with the consideration that these companies could work as representative samples for the implementation of IFRS adoption in Indonesia, Malaysia and Singapore. The financial reporting quality before the IFRS adoption was based on financial statements over a two year period from 2009-2010. The financial reporting quality after IFRS implementation was represented by the financial statements over a two year period from 2012 to 2014. This study excludes financial statements of 2011 with the consideration that the period is the starting point of IFRS adoption in the countries. Therefore, using the Slovine sample, the total companies used for this study are 71 companies over a period of six years, resulting in 426 observations.

Variable Measurement
Independent Variables

Secrecy is the first independent variable. Secrecy is proxied by the financial secrecy index issued in 2015. The financial secrecy index is measured by the methodologies issued by the Tax Justice Network, the results of which range from 0-100. If the index is above 50 then it is said to be high, whereas if it is equal to 50 or smaller then it is categorized as low. However, in its research, the Tax Justice Network did not include scores for Indonesia, so another proxy was needed to get the secrecy score. Gray (1988) stated that countries with high levels of uncertainty avoidance and power distance have high secrecy rates. Countries with a high level of uncertainty avoidance have a tendency to hold or not disclose accounting information as a whole (full disclosure), this is done to reduce conflicts and competition that will be faced by companies, while countries with high power distance levels allow accounting information to be known only by top management, thereby increasing the likelihood of secrecy occurring within the company. According to Desender, Castro, Leon and Escamilla (2011) individualism has a significant and negative relationship to earnings management such that the secrecy score can be obtained by summing the uncertainty avoidance (UA) and power distance (PD) scores reduced by the score of individualism. Furthermore, from the Hofstede index, a country with a Hofstede index similar to Indonesia that had similar comparison criteria was Mexico.

Adoption of IFRS

Adoption of IFRS is proxied by a dummy variable. Dummy variables are variables used to quantify qualitative variables. The following is the proxy for IFRS Adoption:

0 = companies that do not implement IFRS. It was said that it did not implement IFRS, namely in the year when the company had not carried out IFRS adoption at all in stages or in full.

1 = a company that implements IFRS, is said to implement IFRS in the year when the company has carried out IFRS adoption in stages or in full.

Dependent Variable

The dependent variable in this study is earnings quality. The measurements using Discretionary Accruals by Jones (1995) with large Discretionary Accruals indicate a greater likelihood of opportunistic activities carried out by managers and smaller earnings quality. The Jones 1991 measurement model is considered less practical for the calculation of abnormal accruals with international data because a small sample of industries in each country makes this model less reliable and with this method the company can identify its own abnormal accruals (Wysocki 2004; Meuwisse et al, 2005).

Control Variables
Investor Protection

This study uses a tool developed by Houqe et al (2011) comprising five measuring instruments that can be used to measure protection for investors. The five instruments included independence of the supervisory board, protection of minority shareholders, capital market law, irregular payment and bribery scores, and financing activities originating from the local equity market score (Zandi and Haseeb, 2019). For investor protection, the index issued by the World Bank is proxied, with scale 1-10.

Total Sales

The size of the company can also be marked by the total sales made by the company. Previous research has found that large scale companies have a tendency to have lower accruals than companies with smaller scales and the value of total sales variables is obtained in the following ways:

Total Sales = Total Sales

Leverage

Leverage is the ability of a company to use assets or funds that have a fixed burden to increase the level of income for the owner of the company. The leverage variable is used as a control variable because leverage is one mechanism that can be used to reduce opportunistic management. Leverage is calculated by comparing the total debt that the company has with total assets in carrying the risk.

$$Debt\ Ratio = \frac{Total\ Debt}{Total\ Asset}$$

Sales Growth

Accrual development is also followed by developments in the company's operating activities, one of which is sales growth. The sales growth ratio is used as a proxy for measuring annual sales growth variables. Sales growth has a positive relationship to accruals, the higher the sales growth of the company, the higher the company's accruals. Earnings quality is also said to be low if sales growth is lower than growth on net operating assets (Ohlson, 2015). Sales growth can also predict the possibility of corporate profits in the future. Earnings management is dominated by accrual manipulation functions. The greater the total accrual as a percentage of assets, the greater the likelihood that the quality of earnings is low, although there is also the possibility that accruals are estimates of the business that will occur in the future. It is difficult to determine which are manipulating accruals or not, especially for companies that do have high accruals. Sales growth was calculated using the following formula:

$$Sales\ Growth = \frac{(Total\ sales\ year\ t - total\ sales\ year\ t - 1)}{total\ sales\ year\ t - 1}$$

Property, Plant and Equipment (PPE)

Gross increase in Plant, Property and Equipment (PPE) is considered to have an effect on the increase in the number of accruals for companies that also affect the increase in abnormal accruals of companies. While growth from gross PPE was obtained by the following formula:

$$Gross\ PPE\ Growth\ Rate = \frac{(Gross\ PPE\ t - Gross\ PPE\ t-1)}{Gross\ PPE\ t-1}$$

Operating Cash Flow

The amount of cash flows arising from operating activities is an indicator that determines whether from the company's operations it can generate sufficient cash flow to repay loans, maintain the company's operating capability, and make new investments without relying on external funding sources. Cash flows from operating activities were mainly derived from the company's main income activities. The value of operating cash flow was obtained from net income less than the total accrual of the year.

Loss

This variable is a dummy variable that is worth 1 for companies that have a loss in the x period and are worth 0 for the opposite. The loss variable (LOSS) can be indicated through negative net income. In previous literature referenced, this loss variable becomes a control variable in testing earnings quality because it indicates there is a potential difference between a company that experiences a loss (negative net income) and a company that experiences profit (profit) in determining the amount of accruals (Choi et al., 2010) This variable is expected to be negatively related to earnings quality.

Fixed Effect

Fixed effect model using fixed parameters for each individual as individual heterogeneity. Industrial type is used as a control variable because the type of industry is thought to be able to strengthen the relationship between profitability, leverage and inventory. Industrial type and year are used as control variables and are proxied by dummy variables (Hussain et al., 2018).

The Earnings Quality Model

This study utilises the modified Jones model to determine the discretionary accrual. This study calculated the total accruals using the cash flow approach:

$$TACC_{it} = NI_{it} - CFO_{it} \qquad (1)$$

Where:

$TACC_{it}$ = Total accrual of company i for period t
NI_{it} = Net income of company i for period t
CFO_{it} = Operating cash flow of company i for period t

To determine the coefficient of the accrual regression model, this study used discretionary accrual as the difference between the total accrual (TACC) with the non-discretionary accrual (NDACC). In order to find the non-discretionary accrual, this study performed the following regression model:

$$\frac{TACC_{it}}{TA_{it-1}} = \beta 1 \left(\frac{1}{TA_{it-1}} \right) + \beta 2 \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TA_{it-1}} \right) + \beta 3 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + e_{it} \quad (2)$$

Where:
$TACC_{it}$ = Total accrual of company i for period t
TA_{it-1} = Total assets of company i for period t
ΔREV_{it} = The revenue changing of company i from period t-1 to period t
PPE_{it} = Property, plant, equipment of company i for period t
ΔREC_{it} = The net receivable changing of company i from period t-1 to period t
e = Error

The regression model from equation (2) produced the coefficients β1, β2, and β3. These coefficients were then utilised to predict the nondiscretionary accrual through the following equation:

$$NDACC_{it} = \beta 1 \left(\frac{1}{TA_{it-1}} \right) + \beta 2 \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TA_{it-1}} \right) + \beta 3 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + e_{it} \quad (3)$$

Where:
$NDACC_{it}$ = Nondiscretionary accrual of company i for period t

Data Analysis

The objective of this study to find empirical findings on the earnings quality in relation to financial secrecy. To accomplish this objective, this study performed a data panel regression analysis. The model used in this study is as follows:

Ab_Accrualsit = α₀ + α₁SEC + α₂IFRS + α₃SEC*IFRS + α₄INV + α₅LN_SALESit + α₆F_LEVit + α₇S_GWTHit + α₈ΔPPEit + α₉CFOit + α₁₀LAGLOSSit + fixed effects

Where:

Ab_Accruals	= Signed abnormal accruals company x in year t
SEC	= Financial secrecy Index produced by Tax Justice Network
IFRS	= is a dummy variable that gives a value of 1 when adopting IFRS in that year and 0 if the opposite
INV	= Investor protection being measured based on five components:

(i) JUD - Judicial Independence score from World Economic Forum (2012)

(ii) MIN - Protection to the minority shareholders interest score form World Economic Forum (2012)

(iii) RSE   - Regulation of securities laws score from World Economic Forum (2012)

(iv) IIPB   - Irregular payment and bribery scores from World Economic Forum (2012)

(v)   FTEM - Financing of local equity market scores from World Economic Forum (2012)

LN_Sales	= Company size measured by natural logarithm of the total sales of company x in year t
F_LEV	= Leverage measured by total debt divided by shareholders equity of company x in year t
S_GWTH	= Sales growth rate measured by total sales year t less sales in year t-1 divided by sales year t-1
ΔPPE	= Growth rate of gross PPE in t-1 compared to the gross PPE in year t
CFO	= Operating cash flows of company x in t with total asset.
LOSS	= dummy variable 1 if the company in year t reporting negative income before extraordinary item and 0 if otherwise.

While the fixed effects are:

Industry dummy	= industry sector membership dummy variable
Year dummy	= year dummy variable
Country dummy	= Country dummy variable.

Results and Discussion
Descriptive Analysis

This section presents the results of the descriptive statistics before and after IFRS adoption in Indonesia. Table 1 below shows the mean score of financial secrecy and the earnings quality before and after IFRS adoption in Indonesia. The results show that an average quality of earnings before IFRS adoption in Indonesia is -0.027 with a standard deviation of 0.084 which shows the majority of companies have good earnings quality with the lowest discretionary accrual ratio reaching -0.225 owned by Astra International in 2010, while the highest reaches 0.187 owned by Antam in 2010. Furthermore, the average quality of earnings after IFRS adoption was -0.005 with a standard deviation of 0.086 which showed that the majority of companies had better earnings quality with discretionary accrual ratio lowest reaching -0.257 owned by Astra International in 2012, while the highest value reached 0.266 owned by Antam in 2013.

Table 1: Descriptive Analysis for Indonesia

	Before IFRS adoption		After IFRS adoption	
	DACC (Earnings Quality)	SEC (Secrecy)	DACC (Earnings Quality)	SEC (Secrecy)
Observations	38	38	76	76
Cross Sections	19	19	19	19
Mean	-0,027	47,000	-0,005	46,340
STDV	0,084	0,000	0,086	0,582
Maximum	0,187	47,000	0,266	47,000
Minimum	-0,225	47,000	-0,257	45,000

The average secrecy index before IFRS adoption in Indonesia is 47,000 with a standard deviation of 0,000. Furthermore, the average secrecy index after IFRS adoption is 46.340 with a standard deviation of 0.582 and there is a decrease in the value at the secrecy level.

Table 2 below shows the mean score of the financial secrecy and the earnings quality before and after IFRS adoption in Malaysia. The results show that the average earnings quality before IFRS adoption in Malaysia was 0.046 with a standard deviation of 0.063 which showed that the majority of companies had poor earnings quality with the lowest discretionary accrual ratio reaching -0.202 owned by DIGI in 2010, while the highest reached 0.159 owned by Maxis in 2009. Furthermore, the average quality of earnings after IFRS adoption is -0.003 with a standard deviation of 0.057 which shows the majority of companies

have better earnings quality with discretionary accrual ratio lowest reaching -0.183 owned by DIGI in 2012, while the most value the high reached 0.180 was owned by Hong Leong Bank in 2012. Table 2 also shows the average secrecy index before IFRS adoption in Malaysia is 67,000 with a standard deviation of 0,000. Furthermore, the average secrecy index after IFRS adoption is 64.750 with a standard deviation of 0.435 and there was a decrease in the value at the secrecy level.

Table 2: Descriptive Analysis for Malaysia

	Before IFRS adoption		After IFRS adoption	
	DACC (Earnings Quality)	SEC (Secrecy)	DACC (Earnings Quality)	SEC (Secrecy)
Observations	54	54	108	108
Cross Sections	27	27	27	27
Mean	0,046	67,000	-0,003	64,750
STDV	0,063	0,000	0,057	0,435
Maximum	0,159	67,000	0,180	65,000
Minimum	-0,202	67,000	-0,183	64,000

Table 3 below shows the mean score of financial secrecy and the earnings quality before and after IFRS adoption in Singapore. The results show that on the average, quality of earnings before IFRS adoption in Singapore is 0.020 with a standard deviation of 0.093 which shows the majority of companies have poor earnings quality with the lowest discretionary accrual ratio reaching -0.206 owned by Starhub in 2010, while the highest reaches 0.260, owned by Hong Kong Land in 2010. Furthermore, the average quality of earnings after IFRS adoption was 0.012 with a standard deviation of 0.061 shows the majority of companies have better earnings quality with discretionary accrual ratio lowest reaching -0.156 owned by Starhub in 2012, while the highest reached 0.211 owned by Yangziang in 2013. The average secrecy index before IFRS adoption in Singapore was 79,000 with a standard deviation of 0,000. Furthermore, the average secrecy index after IFRS adoption is 69.750 with a standard deviation of 0.4354 and there is a significant decrease in value at the secrecy level.

Table 3: Descriptive Analysis for Singapore

	Before IFRS adoption		After IFRS adoption	
	DACC	SEC	DACC	SEC (Secrecy)

	(Earnings Quality)	(Secrecy)	(Earnings Quality)	
Observations	46	46	92	92
Cross Sections	23	23	23	23
Mean	0,020	79,000	0,012	69,750
STDV	0,093	0,000	0,061	0,4354
Maximum	0,260	79,000	0,211	70,000
Minimum	-0,206	79,000	-0,156	69,000

Data Analyses and Hypotheses Testing

The statistical method used to test the conceptual hypothesis proposed is panel data regression analysis. In conducting panel data regression analysis, there are three types of models that can be used, namely the common effect (PLS), fixed effect (FEM) and random effect (REM) models. To determine the regression model used, first a chow test and a Hausman test were performed. The chow test was used to compare whether panel data is better estimated using fixed effects or a common effect. The hypotheses tested in the chow test are as follows:

> Ho: Common Effect Model
> Ha: Fixed Effect Model

If the probability of cross-section F produced is less than 0.05 (α) then the test decision is to reject Ho and accept Ha or in other words, panel data is better estimated using fixed effects. The summary of the test results is presented in Table 4 below.

Table 4: Chow Test

	Cross Section F	**Prob. F**	**Result**
Chow Test	4,285	0,000	*Fixed Effect*

Based on the results of the chow test above, it can be decided that panel data is better estimated using fixed effects because the probability value generated by the two regression models is 0,000 and is much smaller than 0.05. Since the chosen model is a fixed effect, then a Hausman test is performed to determine the fixed effect with random effects and reveal whether the fixed effect model is better to use than the random effect model. The hypothesis formed in the Hausman test is as follows:

Ho: Random Effect Model

Ha: Fixed Effect Model

If the resulting chi-square is smaller than 0.05, this indicates that the decision from the results of the Hausman test is to reject Ho and accept Ha or in other words, panel data is better estimated using fixed effects. The summary of the test results is presented in Table 5 below.

Table 5: Hausman Test

	Chi-Sq (χ^2)	**Prob. Chi-Sq**	**Result**
Hausman Test	38,738	0,000	*Fixed Effect*

Based on the results presented, it can be concluded that in this study both panel data models are better estimated using fixed effects, because the test results show prob. χ^2 which is smaller than 0.05. The calculation results from panel data regression using the EViews 8 program are presented in Table 6 below.

Table 6: Results of Multiple Regression Analysis

Dependent Variable: DACC?			
Method: Pooled Least Squares			
Sample: 2009 2014			
Included observations: 6			
Cross-sections included: 88			
Total pool (balanced) observations: 426			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.191975	0.311534	-3.826149	0.0001
IFRS?	-0.017369	0.007120	-2.439334	0.0076
SEC?	0.001442	0.000836	1.723985	0.0427
IFRS*SEC?	-0.006523	0.003044	-2.142755	0.0164
INV?	0.029283	0.021749	1.346417	0.0895
SALES?	0.039424	0.011118	3.546118	0.0002
LEV?	-0.019996	0.007922	-2.524127	0.0060
CFO?	-3.26E-15	9.00E-16	-3.625275	0.0002
LOSS?	-0.086448	0.021601	-4.001999	0.0001
	Effects Specification		
Cross-section fixed (dummy variables)			
R-squared	0.621429	Mean dependent var	-0.005018

Adjusted R-squared	0.536031	S.D. dependent var	0.076853
S.E. of regression	0.052348	Akaike info criterion	-2.895887
Sum squared resid	1.178355	Schwarz criterion	-2.103517
Log likelihood	862.5143	Hannan-Quinn criter.	-2.585691
F-statistic	7.276813	Durbin-Watson stat	2.076799
Prob(F-statistic)	0.000000		

Based on the results of regression calculations, it is believed that the panel data regression model that is formed is the fixed effect model or in other words the difference in the characteristics of each company is considered to have an effect on the quality of earnings. The regression equation formed is as follows:

DACC = -1,191 – 0,017 IFRS + 0,001 SEC – 0,006 IFRS*SEC + 0,029 INV + 0,039 SALES – 0,019 LEV + 0,003 GROWTH + 0,0001 PPE – 3,26E^{-15} CFO – 0,086 LOSS

Table 7: Comparative Results

	Indonesia		Singapore		Malaysia	
	β	Sig	β	Sig	β	Sig
(Constant)	-0,904	0,0000	-1,377	0,000	-0,239	0,000
IFRS	-0,067	0,0297	-0,025	0,008	-0,011	0,010
Secrecy	0,003	0,0068	0,004	0,003	0,005	0,045
IFRS_Secrecy	-0,026	0,022	-0,013	0,002	-0,013	0,029
Investor	-0,011	0,0383	0,227	0,037	0,034	0,045
Sales	0,029	0,0000	0,004	0,022	-0,012	0,004
Leverage	-0,028	0,0281	0,002	0,019	-0,022	0,002
CFO	-4E-15	0,0000	-8E-12	0,000	-6E-12	0,000
Loss	-0,061	0,0438	-0,087	0,028	-0,023	0,047

The simultaneous hypothesis formulations to be tested are as follows:
Ho: βi = 0 Simultaneously IFRS, secrecy implementation, interaction between IFRS and secrecy and investors, total sales, sales growth, property, plant & equipment, operating cash flow and losses as control variables did not significantly influence earnings quality.

Ha: βi ≠ 0 Simultaneously IFRS, secrecy, interaction between IFRS and secrecy and investors, total sales, sales growth, property, plant & equipment, operating cash flows and losses as control variables have a significant effect on earnings quality.
The significance level (α) used is 5%.

The summary of the test results is presented in Table 8 below. The results show that with a probability value F that is smaller than 0.05 and with a confidence level of 95%, it was decided to reject Ho and accept Ha. These results indicate that the implementation of IFRS, secrecy, interaction between IFRS and secrecy and investors, total sales, growth in sales, property, plant & equipment, operating cash flows and losses as control variables simultaneously have a significant effect on earnings quality.

Table 8: Effect of IFRS, Secrecy and Investor Implementation, Total Sales, Growth in Sales, Property, Plant & Equipment, Operating Cash Flow and Losses as Control Variables on Profit Quality

F_{hitung}	F_{tabel}	Prob.F	A	Result	Summary
7,276	1,849	0,000	0,05	Ho rejected	Significant

The T-Test (Partial) was used to show how far the influence of one independent variable can influence the dependent variable. Decision making in this t test by comparing the probability value (Prob.T) with the level of significance was used to test H1, testing the effect of IFRS implementation on profit quality. The results are shown in Table 9 below. Table 9 shows that with a probability value F that is smaller than 0.05 and with a confidence level of 95%, it can be decided to reject Ho and accept Ha, which means that the implementation of IFRS has a significant negative effect on earnings quality.

Table 9: Effect of IFRS Implementation on Profit Quality

Model	t_{hitung}	t_{tabel}	Prob. T	A	Result	Summary
$X_1 \rightarrow Y$	-2,439	-1,648	0,007	0,05	Ho rejected	Significant

Table 10 below shows that with a probability value F that is smaller than 0.05 and with a confidence level of 95%, it can be decided to reject Ho and accept Ha, which means that secrecy has a significant positive effect on earnings quality.

Table 10: Effect of Secrecy on Earnings Quality

Model	t_{hitung}	t_{tabel}	Prob. t	A	Result	Summary
$X_2 \rightarrow Y$	1,723	1,648	0,042	0,05	Ho rejected	Significant

This study also examines whether there is an effect of interaction between IFRS implementation and secrecy on earnings quality. Table 11 below shows the results. From the table above, with F probability values smaller than 0.05 and with a confidence level of 95%,

it can be decided to reject Ho and accept Ha, which means that the interaction between IFRS implementation and secrecy has a significant negative effect on earnings quality. These results indicate that the implementation of IFRS is able to weaken the influence of secrecy on earnings quality which later results in better quality of earnings or in other words IFRS is a moderating variable that weakens the effect of secrecy on earnings quality.

Table 11: Effect of Interaction between IFRS Implementation and Secrecy on Earnings Quality

Model	t_{hitung}	t_{tabel}	**Prob. T**	**A**	**Result**	**Summary**
$X_1 * X_2 \rightarrow Y$	-2,142	1,648	0,016	0,05	Ho rejected	Significant

Overall Determination Coefficient

The coefficient of determination was used to determine the contribution of the influence given by the independent variable on the dependent variable. In Tables 4-7 above, it is shown that the Adjusted R-squared value obtained is 0.536. These results indicate that the implementation of IFRS, secrecy, interactions between IFRS and secrecy and investors, total sales, growth in sales, property, plant & equipment, operating cash flows and losses as a simultaneous control contributed 53.6% to earnings quality, while the remaining 46.4% is a large contribution to the influence given by other factors not examined.

From Table 12 below, it can be seen that the coefficient of determination for Indonesia obtained is 37.79%. This shows that IFRS, Secrecy, IFRS & Secrecy Interaction and all control variables contributed to the quality of earnings by 37.79%, while the remaining 63.21% was contributed by other variables not examined. The coefficient of determination for Singapore obtained is 60.37%. This shows that IFRS, Secrecy, IFRS and Secrecy Interaction and all control variables contribute to the quality of earnings by 60.37% whilst the remaining 39.63% is a contribution from other variables not examined. The coefficient of determination for Malaysia obtained is 62.75%. This shows that IFRS, Secrecy, IFRS & Secrecy Interaction and all control variables contribute to the quality of earnings of 62.75% whilst the remaining 37.25% is a contribution from other variables not examined.

According to Leonidas (2011), a decrease in discretionary accrual occurs because initially the quality of financial reporting before adopting IFRS is weak so that when using IFRS which is considered a good quality standard, earnings management becomes lower and earnings

quality improves.

Table 12: Coefficient of Determination per Country

Country	*Adjusted R Square*	%
Indonesia	0,3779	37,79%
Singapore	0,6037	60,37%
Malaysia	0,6275	62,75%

Summary and Conclusion

This study aimed to determine the effect of IFRS adoption and financial secrecy on earnings quality. The control variables used are investor protection, total sales, leverage, sales growth, operating cash flow, gross PPE, loss. Research samples are companies listed on the Indonesia, Singapore and Malaysia Stock Exchanges with 2009-2014 as the target observation years. The sample used involved 71 companies so that the sample total was 426 observations. Sampling was based on Slovine sampling techniques. Data processing was completed using multiple linear regression equations, the main model being Eviews 8.0. The data analyses performed using multiple linear regression show that simultaneous adoption of IFRS and secrecy have a significant effect on earnings quality. While in part the adoption of IFRS and secrecy have a significant effect on earnings quality and control variables such as investor protection, the total sales, leverage, operating cash flow and loss simultaneously have a significant effect, sales growth and gross PPE do not significantly influence earnings quality.

This study provides evidence that even though each country has implemented IFRS, it does not indicate that the level of earnings quality being reported would be the same. The earnings quality would be induced by investigation of the respective cultural factors, especially the concept of secrecy. Further, stakeholders need to be cautioned when making financial statements comparisons between companies in different countries, since fundamental dissimilarity could still occur.

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REFERENCES

Ball, R., Robin, A. & Wu, J. S. (2003). Incentives versus standards: properties of accounting income in four East Asian countries. Journal of accounting and economics, 36(1), 235-270.

Barth, M., Landsman, W & Lang, M. (2008). International Accounting Standards and accounting quality. Journal of Accounting Research, 46(3), 467-498.

Cohen, J. R., Krishnamoorthy, G., & Wright, A. (2004). The corporate governance mosaic and financial reporting quality. Journal of accounting literature, 87-152.

Choi, F, Frost, D.S; Carol, A. & Meek, G.K (1999) "International Accounting", Prentice Hall, Upper Saddle River, NY.

Daske, H & Gunther, G. (2006). International Financial Reporting Standards and Experts Perceptions of Disclosure Quality. Journal of Accounting Finance and Business Studies. New York: Willey Online Library.

Dechow P & Dichev, I (2002), The quality of accruals and earnings: The role of accrual estimation errors, The Accounting Review, 77(Supplement), 35-59

Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. Journal of Accounting and Economics, 50(2), 344-401.

Deloitte. (2014). *Use of IFRS by jurisdiction*. Retrieved from http://www.iasplus.com/Plone/en/resources/use-of-ifrs.

Desender, K.A., Castro, C. E., Leon, D & Escamilla, S.A. (2011). Earnings management and cultural values. American Journal of Economics and Sociology, 70(3), 639-670.

Dichev, I; Graham, J & Rajgopal, S (2012), Earnings quality: Evidence from the field, Working Paper,

https://faculty.fuqua.duke.edu/~charvey/Research/Working_Papers/W108_Earnings_quality_evidence.pdf

Easley, D & O'Hara, M (2004), Information and the cost of capital, The Journal of Finance, IIX (4), 1153-1583

Francis, J. R., & Wang, D. (2008). The joint effect of investor protection and Big 4 audits on earnings quality around the world. Contemporary accounting research, 25(1), 157-191.

Gideon, B.D; Puspitasari, E; Ghani, E.K & Gunardi, A (2018), Earnings quality: Does principles standards versus rules standards matter? Journal of Applied Economic Sciences, XIII (2), 586-594

Gray, S. J. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. Abacus, 24(1), pp.1-15.

Houqe, N., Monem, R., Tareq, M. & van Zijl, T. (2015). Secrecy and mandatory IFRS adoption on earnings quality. Working paper, Victoria University of Wellington,

Hussain, H.I., Shamsudin, M.F., Anwar, N.A.M., Salem. M.A. & Jabarullah, N.H. (2018). The Impact of Shari'ah Compliance on the Adjustment to Target Debt Maturity of Malaysian Firms, European Research Studies Journal, 21 (2), 48 – 61.

Jeanjean,T.,Stolowy,H. ,2008.Do accounting standards matter?An exploratory analysis of earnings management before and after IFRS adoption. Journal of Accounting and Public Policy, 27(1), 480-494.

Jones, J. (1991), Earnings management during import relief investigations. Journal of Accounting Research 29, 193–228.

Lev, B. (1989), On the usefulness of earnings and earnings: Lessons and directions from two decades of empirical research, Journal of Accounting Research, 27, 153-192.

Meuwissen, R., Moers, F., Peek, E. & Vanstraelen, A. (2005). An evaluation of abnormal accruals measurement models in an international context. Working Paper, University of Maastricht and University of Antwerp.

Morais, A.I & Curto, D. (2008). Accounting Quality and the Adoption of IASB Standards: Portuguese Evidence. Revisa Contabilidade & Financas. Sao Paolo: Scielo.

Nicholas, C.D & Wahlen, J,M (2004), How do earnings numbers relate to stock returns? A review of classic accounting research with updated evidence. Accounting Horizons, 18(4), 263-286

Nguyen, A. T. (2018). The Relationship among Economic Growth, Trade, Unemployment, and Inflation in South Asia: A Vector Autoregressive Model Approach. Asian Journal of Economics and Empirical Research, 5(2), 165-172.

Nilwala, N., Gunawardana, K., & Fernando, R. L. S. (2017). Scale for Measuring Transformational Leadership in Public Sector Organizations in Sri Lanka: With Special Reference to Ministries of Western Provincial Council.

Ohlson, J. A. (1995). Earnings, book values, and dividends in equity valuation. Contemporary Accounting Research, 11(2), 661-687.

Pacter, P. (2015). The Global Reach of IFRS is Expanding. https://www.iasplus.com/en/news/2014/01/pacter-ifrs-adoption

Procházka, D. (2017). The Unintended Consequences of Accounting Harmonization in a Transition Country: A Case Study of Management Accounting of Private Czech Companies. Contemporary Economics, 11(4), 443-457.

Radebaugh L. H. and Gray S. J. (1997). International Accounting and Multinational Enterprises. IV ed., New York: Wiley

Sadique, M. S., & Sheikh, M. A. R. (2013). Investor reaction to strategic emphasis on earnings numbers: An empirical study. Contemporary Economics, 7(3), 51-64.

Santi, M; Puspitasari, E & Ghani, E.K (2017), Analysis of unconditional conservatism and earnings quality on financial reporting practices in Indonesia upon IFRS convergence, Management and Accounting Review, 16(1), 75-87

Schipper, K., & Vincent, L. (2003). Earnings quality. Accounting Horizons, 17, 97-110.

Siala Bouaziz, S., & Jarboui, A. (2019). The moderating effect of audit quality on the relation between shareholder activism and earnings management: Evidence from France. Contemporary Economics, 13(1), 63-78.

Wysocki, P. 2004. Discussion of ultimate ownership, income management, and legal and extra-legal institutions. Journal of Accounting Research 42, 463–474.

Zandi, G., & Haseeb, M. (2019). The role of trade liberalization in carbon dioxide emission: Evidence from heterogeneous panel estimations. International Journal of Financial Research, 10 (5), 228-240.