

Information Asymmetry in the Post-IFRS Adoption Period: Evidence from Developing Countries

Juniarti,^{1*} Beatrice Marcellina,² Alvita Angela³

^{1,2,3} Petra Christian University, Jl. Siwalankerto 121-131, 60236, Surabaya, Indonesia

ABSTRACT

Objective – The adoption of IFRS aims to reduce the level of information asymmetry. Prior studies conducted in developed countries prove that the adoption of IFRS enhances transparency and diminishes information asymmetry. However, in developing countries with a low level of openness, limited regulation, and more centralized ownership, the ability of IFRS to reduce information asymmetry remains unknown. To address this issue, this study aims to investigate whether IFRS adoption will reduce information asymmetry in some developing countries in South East Asia.

Methodology/Technique – This research is applied in three developing countries: Indonesia, the Philippines and Thailand. Information asymmetry is proxied by the cost of capital using the Easton model (2004) and a bid-ask spread. Listed firms from the three countries are selected as the research sample resulting in 5.313 firm-years for the period between 2007 and 2016.

Findings – This study concludes that the adoption of the IFRS decreases information asymmetry in developing countries. These finding confirm that the benefit of the adoption is the same as in developed countries, despite the level of law enforcement in developing countries being lower. Managers, standard authorities and investors must note that the IFRS conveys benefits to the market, which increases transparency by asking lower returns and valuing company stocks appropriately.

Novelty – This study examines the benefits of the adoption of the IFRS in reducing information asymmetry in some emerging countries to enhance the generalization of the results from prior studies that are mostly conducted in developed countries.

Type of Paper: Empirical.

Keywords: Bid-Ask Spread; Cost of Capital; Information Asymmetry; IFRS Adoption.

JEL Classification: M41, M48, M49.

1. Introduction

Information disclosure plays an important role in the market as it can increase the credibility of a company (Healy and Palepu, 2001). Differences in information cause investors to lose trust in the company, and consequently, ask for higher returns (Ballesteros, et al., 2016).

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* Corresponding author: Juniarti
E-mail: yunie@petra.ac.id
Affiliation: Business Accounting, Petra Christian University, Indonesia

The adoption of the IFRS aims to reduce information asymmetry, thereby increasing competition and the efficiency of companies in capital markets and reducing the cost of capital (Covrig, et al., 2007; Daske, et al., 2008; Patro & Gupta 2014).

The relationship between the IFRS and information asymmetry has been widely studied in developed countries. It is characterized by high protection for investors and strong accounting standards supported by professionals (Leuz et al., 2003; Turki et al., 2017; Daske & Gebhardt, 2006; Chen et al., 2010). However, research on the relationship between the IFRS and information asymmetry in emerging countries is limited. According to Ball (2006), the implementation of the IFRS is heterogeneous among countries. The effect will be smaller in countries that have fewer differences between local GAAP and the IFRS. The most substantial effect is found in countries with a considerable difference between the local GAAP and the IFRS (Daske et al., 2008).

Furthermore, Indonesia and some other developing countries such as the Philippines and Thailand have identical characteristics; they have weaker and less mature capital markets (Gibson, 2003), limited regulation, and more centralized ownership (Claessens et al., 2000), all of which contribute toward higher information asymmetry.

Mandatory IFRS adoption has proven more effective than voluntary adoption. Turki et al. (2016) states that the adoption of the IFRS reduces information asymmetry. Mandatory IFRS adoption improves the quality of the information more than voluntary adoption (Horton et al., 2012). Several studies have examined the effect of voluntary IFRS adoption on the cost of capital, using an estimation of the implied capital costs for the company. Buijink (2005) examines the adoption of IFRS or non-local GAAP by European Union (EU) companies, however, that study fails to document lower capital costs for IFRS adopters. Daske and Gebhardt (2006) samples German companies with IFRS adoption for the period between 1993 and 2002, identifying higher capital costs associated to the IFRS.

The similarity of characteristics between emerging countries on the one hand and the strength of the mandatory IFRS adoption on the other hand provide an exciting opportunity to examine whether mandatory adoption provides the same benefits for developing countries as for developed countries. By using three developing countries as the research sample (Indonesia, the Philippines, and Thailand), this research aims to contribute to the empirical evidence regarding the power of the mandatory adoption of the IFRS in reducing asymmetric information.

The remainder of this paper is as follows. A review of the literature and the development of hypotheses for this study are presented in the second section. The third section describes the research methods. The fourth section presents and discusses the findings of the study, and the fifth section concludes the paper.

2. Literature Review

2.1 International Financial Accounting Standards

Changes from rule-based standards to the principle-based standards of the IFRS addresses the need for harmonization of financial information for users worldwide (Christensen et al., 2015). The International Accounting Standards Board (IASB) is an independent group tasked with coordinating national accounting standards to ensure harmonization around the world. Eight IFRS were issued by the IASB in 2006 (Kim and Shi, 2006). The IFRS is the accounting standard issued by the IASB. Changes to international standards are the most significant changes in the context of financial information for more than 100 countries (Sellami & Slimi, 2006; Daske et al., 2008). Countries in the Asia Pacific began to adopt IFRS in 2005 (Cheong et al., 2010). At present, 166 countries use the IFRS as their financial reporting standard in part or in full.

The IFRS standard demand high quality, transparent, and comparable information in financial statements and help investors in global markets and other users to make economic decisions (Turki et al., 2016). The proponents of the adoption of the IFRS state that it makes disclosure more valuable. Compared to local

accounting standards in many countries, the IFRS focuses on fair value. Therefore, the IFRS can reduce the flexibility allowed for financial reporting and incorporate the impact of economic events on a company's performance through financial statements in a more precise period (Kim & Shi, 2006).

2.2 Local GAAP in Indonesia, the Philippines and Thailand

Indonesia passed through several stages before deciding to converge with the IFRS. In 1973, based on the published standards of the American Institute of Certified Public Accountants, the Indonesia Accounting Principles Committee issued the Indonesian Accounting Principles (PAI) (Perera & Baydoun, 2007). In 1994, the committee was changed to the Financial Accounting Standards Committee, and at this point the body comprehensively revised the PAI. The new committee published interpretations of these standards in the Financial Accounting Standards (SAK) on 1 October 1994. In 1998, the Financial Accounting Committee was changed to the Financial Accounting Standards Board (DSAK) with autonomy to formulate and amend the Statement of Financial Accounting Standards (PSAK) and Interpretation of Financial Accounting Standards (ISAK). DSAK uses International Accounting Standards (IAS) as its primary reference in establishing these standards.

Beginning in 2006, Indonesia planned to integrate its standards into the IFRS. Indonesia actively revised most of its accounting standards until they fully converged with the IFRS in 2012. In a domestic setting, Indonesia continues to use local accounting standards, PSAK, despite substantial convergence to the IFRS. The capital market in Indonesia also requires all listed companies to prepare financial statements following the IFRS.

Unlike Indonesia, the adoption of the IFRS in Thailand began on 1 January 2011. Thailand requires all companies listed on the SET to report their financial statements under the IFRS (Intharaprasiti et al., 2016). The adoption of the IFRS, particularly in Thailand, is useful for reducing the manipulation of financial reporting.

Thailand implements local accounting standards known as the Thailand Accounting Standards (TAS). The Federation of Accounting Professions, the board that sets and regulates accounting standards in Thailand, formerly known as the Institute of Certified Accountants and Auditors of Thailand (ICAAT), publishes the TAS as a local accounting standard (FAP). FAP announced the timeline for the adoption of the IFRS in Thailand. In 2011, the top 50 companies were registered on the SET (Klose & Sabangban, 2011). In 2012, 100 companies listed on the SET began adopting the IFRS. The remaining companies that had not adopted the IFRS did so in 2014. Thailand adopted the IFRS in part; that standard is known as the Thai Financial Report Standards (TFRS). SET also permitted companies that have been listed on the stock market to add or adopt the IFRS, which has not been adopted as the TFRS with additional disclosures.

Before 1996, accounting standards in the Philippines were based primarily on the US GAAP issued by the FASB. However, in 1997, the ASC decided to move to IAS completely. In November 2004, the ASC approved the issuance of the new Philippine Accounting Standards (PAS) and Philippine Financial Reporting Standards (PFRS), directly following the IAS and the IFRS. The Securities and Exchange Commission (SEC) agreed to adopt international accounting standards to enforce high quality and transparent financial reporting and increase credibility and competence in the capital market.

In 2005, the ASC adopted the IFRS issued by the IASB and a revised version of the previously adopted IAS. In 2006, the Financial Reporting Standards Council (FRSC) was established as the successor of the ASC. The FRSC carried out a decision by the ASC to converge Philippine accounting standards with the IFRS standards. It took a while for companies to understand the new accounting standards (Fajardo, 2008). In a domestic setting, the Philippines maintains the use of the IFRS-based local standards, namely, the Philippine Financial Reporting Standards.

2.3 Mandatory IFRS Adoption and Cost of Capital

In economic theory, the high cost of information asymmetry translates to high capital costs, illiquid markets, and suppressed investment activities. IFRS supporters find a basis in the mandated part of the IASB goal, which requires high quality, transparency and comparable information. They argue that the IFRS will encourage the development of capital markets. The IASB has been tireless in promoting IFRS at the political level, and its efforts have paid off in matters ranging from endorsement to mandatory adoption (Ball, 2006).

The mandatory adoption of the IFRS will reduce the cost of equity capital as this standard requires increased financial information disclosure than most local accounting standards (Ashbaugh & Pincus, 2001). With appropriate implementation and empowerment, the adoption of the IFRS can reduce capital costs by improving the quality and comparability of financial statements. This is supported by the findings of many previous studies that document the increase in disclosure which is believed to reduce the cost of equity (Easley & O'Hara, 2004; Lambert et al., 2007; Armstrong et al., 2010). Based on this, the following hypothesis is proposed:

H1: Information asymmetry that is proxied by the cost of capital will reduce following the adoption of the IFRS.

2.4 Mandatory IFRS Adoption and Bid-ask Spread

Empirical studies on the effect of mandatory IFRS adoption on capital markets are inconclusive. Previous research suggests that the economic consequences of the adoption of the IFRS must increase market liquidity around the time of mandatory IFRS adoption, particularly in countries that have strong law enforcement and managerial incentives for those who disclose transparently. Daske et al. (2008) examine the economic consequences of mandatory IFRS adoption in 26 countries and found that market liquidity increases around the time of the mandatory adoption of the IFRS. The mandatory application of the IFRS in EU countries has increased the accuracy of analysts' estimates and this impact is increasingly evident in countries with strong law enforcement (Christensen, Lee & Walker, 2009; Byard, Li & Yu, 2011). Based on this, the following hypothesis is proposed:

H2: Information asymmetry that is proxied by the bid-ask spread will be narrower after the adoption of the IFRS.

3. Research Methodology

3.1 Model of Analysis

The model of analysis to test the two hypotheses of this study is shown below. Control variables that have previously been proven as the determinants of the cost of capital and bid-ask spread are used within the model.

Model 1.1

$$\text{CoC}_{i,t} = \beta_0 + \beta_1 \text{IFRS}_{i,t} + \beta_2 \text{SIZE}_{i,t} + \beta_3 \text{GROWTH}_{i,t} + \beta_4 \text{LEV}_{i,t} + \beta_5 \text{CFO}_{i,t} + \beta_6 \text{EPS}_{i,t} + \varepsilon_{i,t} \quad (1)$$

Model 1.2

$$\text{SPREAD}_{i,t} = \gamma_0 + \gamma_1 \text{IFRS}_{i,t} + \gamma_2 \text{SIZE}_{i,t} + \gamma_3 \text{GROWTH}_{i,t} + \gamma_4 \text{LEV}_{i,t} + \gamma_5 \text{CFO}_{i,t} + \gamma_6 \text{EPS}_{i,t} + \varepsilon_{i,t} \quad (2)$$

3.2 The Operationalization of Variables

This research measures information asymmetry using two proxies: cost of capital and bid-ask spread. Cost of capital is calculated according to Easton's (2004) model, which uses earnings per share data for the coming year and the following two years. Below is a regression of the cost of capital:

$$CoC_{PEGi,t} = \sqrt{\frac{E0(eps2) - E0(eps1)}{P0}} \quad (3)$$

where:

CoCPEG = Cost of capital for companies i and year t

eps1, eps2 = Earnings per share in year t and year t-1

P0 = Share price at the beginning of the year

The second proxy of information asymmetry is bid-ask spread, which is the difference between the bid price and ask price, calculated using the following formula:

$$Spread_i = \left[\sum_{t=1}^n \frac{Ask_{it} - Bid_{it}}{(Ask_{it} + Bid_{it})/2} \right] / N \quad (4)$$

where:

Spread_i = Average difference between the bid and ask during the stock trading period i

Bid_{it} = The last price offered on the day t of the stock i

Ask_{it} = The last price requested on day t of the stock i

N = Number of stock trading days in a year

3.2 Control Variables

This study includes several control variables in the model of analysis: firm size, growth, leverage, cash flow from operating, and earnings per share. **Firm size (SIZE)** is measured by the logarithm of the equity market value at the end of the year, following Chae (2005) and Lafond et al. (2007). **Sales growth (GROWTH)** refers to the annual sales growth rate of a company. Companies with higher growth opportunities are more likely to have higher information asymmetry and bear higher adverse selection costs than companies with low growth opportunities (D'Mello et al., 2008; Krishnaswami & Subramaniam, 1999; Myers & Majluf, 1984).

Leverage (LEV) is measured by total debt scaled by the total equity. This indicates the amount of debt borne through the company's capital (Nguyen & Schubler, 2013; Komala & Nugroho, 2013; Abasari et al., 2013; Kose, 2011). **Cash flow from operating (CFO)** is measured by cash flow from operating at the end of the year divided by total assets at the beginning of the year. **Earnings per share (EPS)** shows the company's net profit that is ready to be distributed to all shareholders. EPS is measured by profit or loss before extraordinary items divided by the weighted average of shares outstanding (Mgbame & Ikhatua, 2013; Menaje, 2012; Sheetaraman & Raj, 2011; Perera & Thrikawala, 2010; Zhu, 2003).

3.3 Data

Three countries are selected as the research sample: Indonesia, the Philippines and Thailand. These countries represent emerging countries with similar backgrounds prior to the adoption of the IFRS as the

mandatory standard. There are 5.313 firm-years for the period between 2007 and 2016. The data for this research is available in Bloomberg, firm websites and the respective stock exchanges.

4. Results

4.1 The Profile of Sample

Table 1, Panel A presents the profile of the variables of this study. Further, the profiles of each group of adoption, i.e., pre and post-adoption are included. Panel B shows the comparison of the cost of capital and bid-ask spreads in each group.

Table 1. Profile of the Sample

Panel A						
	mean	min	max	stddev		
CoC	0,2015	0,0000	3,0663	0,2625		
SPREAD	0,0065	0,0000	1,1603	0,1045		
CFO	0,0763	4,6740	30,4000	0,4989		
EPS	585	-	465	2.830		
SIZE	12,1300	9,6666	21,6300	0,9049		
GROWTH	0,7021	3,4680	66,1000	13,1900		
LEV	1,8020	-64,0500	12,5100	19,3600		

Panel B						
	COST OF CAPITAL			BID-ASK SPREAD		
	PRE	POST	ALL	PRE	POST	ALL
Mean	0,20939	0,19087	0,20153	0,08341	0,05259	0,06453
Min	0,00000	0,00001	0,00000	0,00000	0,00000	0,00000
Max	2,86700	3,06630	3,06630	0,81444	1,16040	1,16040
Std dev	0,25041	0,27802	0,26252	0,12266	0,00897	0,10545

Table 1, Panel B shows that the mean of the cost of capital is lower post-adoption than pre-adoption. Bid-ask spreads as another proxy of information asymmetry is narrower post-adoption compared to pre-adoption. The profile of cost of capital and bid-ask spread implies that there is a reduction of information asymmetry post-adoption. Table 2 describes the profile of the sample in each industrial sector.

Table 2. Mean of variables per Industrial Sector

Industrial Sector	COC	SPREAD	CFO	EPS	SIZE	GROWT	
						H	LEV

Consumer Goods	0.21419	0.06718	0.08145	635.8	11.96	0.2937	1.679
Infrastructure, Utilities, and Transportation	0.25401	0.05444	0.00529 6	126.4	12.15	0.7139	0.9044
Trade, Service, and Investment	0.17523	0.08172	0.07793	866	12	0.7049	1.145
Extraction	0.16601	0.02792	0.1939	439.3	12.55	3.62	6.477
Agriculture	0.28087	0.02955	0.09255	157.2	12.45	0.3789	2.44
Agro and Food Industry	0.082019	0.06141	0.08402	423.7	12.19	0.2464	1.963
Finance	0.23963	0.02294	0.02625	855.9	12.36	0.1398	2.583
Manufacturing	0.27334	0.02640	0.09059	610.2	11.7	0.1095	1.592
Resources	0.25575	0.00903	0.06923	794.2	12.64	0.1852	1.609
Technology	0.28214	0.01088	0.1226	756.9	12.32	0.08491	1.342

4.2 Hypothesis Testing

Based on Table 3, the coefficient of PREPOST is negative and significant. This means that there is a significant decrease in the cost of capital following the adoption of the IFRS. SIZE and COUNTRY act as the significant control variables that reduce the level of information asymmetry.

Table 3. Cost of Capital and IFRS Adoption

Dependent variable: COC	Coef	p-value
Const	1,20290	0,00010 ***
PREPOST	- 0,02933	0,00720 ***
CFO	- 0,00390	0,62860
EPS	- 0,00000	0,12180
SIZE	- 0,07436	0,00010 ***
GROWTH	- 0,00022	0,50410
LEV	0,00009	0,93820
COUNTRY	- 0,04632	0,00010 ***
R2	0,07283	
F	27,52470	0,00000

Consistent with the results of Hypothesis 1, the results of Hypothesis 2 show that PREPOST is also negative and significant in reducing information asymmetry (Table 4). Firm size is also consistent as a determinant of the level of information asymmetry, however, this does not differ among countries.

Table 4. Bid-ask Spreads and IFRS Adoption

Dependent variable: SPREAD	Coef	p-value
Const	0,52181	0,00010 ***

PREPOST	- 0,02933	0,00010 ***
CFO	- 0,00390	0,72370
EPS	0,00101	0,89080
SIZE	- 0,03679	0,00010 ***
GROWTH	- 0,00009	0,40730
LEV	- 0,00005	0,51250
COUNTRY	- 0,00009	0,25360
R2	0,13401	
F	51,95530	0,00000

5. Discussion

The results of this study support the argument that mandatory IFRS adoption has the same value in emerging countries as in developed countries. Mandatory IFRS adoption forces managers to comply with the standard. When adoption is mandatory, IFRS demands further and better disclosure and thus is likely to reduce information asymmetry in an imperfectly competitive equity market. This will produce a lowering effect in the cost of equity capital (Armstrong et al., 2010).

These results reinforce the findings of prior studies which state that mandatory IFRS adoption reduces information asymmetry (Turki et al. 2016; Easley & O'Hara, 2004; Lambert et al., 2007; Armstrong et al., 2010). The quality of information following mandatory IFRS adoption significantly increases (Horton et al., 2012). The proponents of IFRS state that adoption promotes high quality, transparent, and comparable information. This study supports these findings.

The IFRS demands wider disclosure of information compared to those required by previous standards (Ashbaugh & Pincus, 2001). Thus, the adoption of the IFRS encourages transparency and comparative information and reduces the cost of capital.

IFRS adoption encourages companies to provide broader disclosures that convey internal company information to the outside market. This disclosure increases the availability of information for investors. This leads to a decrease in information asymmetry (Diamond & Verrecchia, 1991; Lopatta et al., 2015). The availability of further information enables investors to value the company appropriately. Investors who have more information using the provisions of the company will determine the price according to what is requested by others. This causes a gap between bid and ask to be narrower, or the bid-ask spreads to decrease.

6. Conclusion

The objective of this study is to determine the effectiveness of mandatory IFRS adoption in reducing the level of information asymmetry. By examining three developing countries, this study confirms that mandatory IFRS adoption significantly reduces the level of information asymmetry. These findings demonstrate the strength of mandatory adoption of IFRS. The results also highlight the superiority of mandatory IFRS because it goes beyond the state aspects so it can be generally accepted.

The results of this study are of concern to the standard authorities. Mandatory adoption maintains the consistency of implementation so the benefit of this approach will be sustainable. This research does not provide sufficient detail about the relevant factors in developing countries such as governance level and investor protections that may potentially influence the benefit of mandatory IFRS adoption. The study also

fails to make a direct comparison to voluntary adoption. Therefore, future research may explore these issues further.

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